



# AN ANALYSIS OF FAMILY, SCHOOL AND COMMUNITY FACTORS ON STUDENTS' ACHIEVEMENT IN PITAGORAS SECONDARY NETWORK SCHOOLS IN JAPAN AND BRAZIL

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**AN ANALYSIS OF FAMILY, SCHOOL AND COMMUNITY  
FACTORS ON STUDENTS' ACHIEVEMENT IN PITAGORAS  
SECONDARY NETWORK SCHOOLS IN JAPAN AND  
BRAZIL**

「日本とブラジルのピタゴラス中等ネットワーク学校における  
生徒の成績に関する家庭、学校、コミュニティ要因の分析」

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## ABSTRACT

The year 2018 is the 110th anniversary of Japanese migration to Brazil, after Japan's first immigration wave in 1908 from Japan to Brazil. The number of foreigners in Japan has increased in the last ten years, with a total population of 191,362 Brazilians. Since the revised Immigration Control and Refugee Recognition Act in 1990, Japanese-Brazilian second generation (*Nisei*) enter Japan as 'Newcomers', being temporary workers or *dekasegi*. Since some of these temporary workers also came accompanied by spouses and their children, the Government of Japan assumed responsibility for the schooling of those children, including their acquisition of Japanese language, inducing acculturation. The support is for families whose children are going to Brazilian schools in Japan as well as for those enrolled in Japanese schools. These children have bilingual and bicultural inclinations, often moving from one system to another and possibly commuting between two countries. Children whose parents plan to stay in Japan need Japanese language skills and are required to enroll in Japanese schools, while children whose parents intend to return to Brazil enroll in Brazilian schools.

In Japan, Brazilian schools started in 1990 in the Tokai and Kanto regions. The Japanese Government invited the Pitagoras Network Schools (hereafter, PNS) in 1997 to support the education of Brazilian children of *dekasegi* parents. By 2008, ninety Brazilian schools were located mainly in those geographical regions schooling 7,000-8,000 children, of which six schools pertained to the PNS. The PNS have had difficulties increasing the academic level of their students. The low academic performance seems to occur more in children of families whose social capital is diminished by the migratory situation, or in children who lack daily use of the vernacular language Portuguese. Likewise, it is an issue for children with limited reading and writing in the language used both at home and at school, or in those children with limited environments for

socialization. These factors are often triggered by the lack of parental involvement in the child's school learning.

Various authors interested in describing the situation of temporary foreign workers and their children in Japan try to find explanations for children's school failure, emphasizing their limitation in knowing the characteristics of Brazilian families, their language, and understanding their lack of having a social network upon arrival in Japan, considered as elements of cultural deprivation. They also indicate the importance of the type of school in which their children are immersed. The Vestibular Simulado (VS) examination is an institutional practice of the PNS to prepare students with an optimum profile for entering the university in Brazil. This preparation has become the method-of-choice for PNS to evaluate their students. Student achievement, examined through the year-end scores and the Vestibular Simulado scores, serve as a prospect for admission to the university in Brazil. This dissertation focuses on children whose parents choose Brazilian schools in Japan because of their primary intent to return to Brazil.

Against this background, this dissertation aims to investigate four research questions. Firstly, this study examines the characteristics of the students and the family factors who attend the PNS in Japan and Brazil, and what influence these characteristics have on the student's academic achievement. Secondly, it assesses the correlation to student's academic achievement of the PNS and community factors facilitated by schools. Thirdly, this study analyzes how the student characteristics and family factors in Japan and Brazil differ in influencing the prospect of PNS students to pass the university entrance examination in Brazil. Lastly, the study evaluates the students, parents, and school practitioners expectations about the student's educational aspirations regarding their future, linked to exam results.

The significance of the study is described in terms of filling a gap in the literature and analyzing advancing theory using the case of PNS. The theoretical framework applied to this study consists of the Theory of Social Reproduction in Education and the Theory

of Social Mobility, as complementary. The Theory of Social Reproduction in Education is applied utilizing the economic, social, and cultural resources as the conceptual framework of this study, including the cultural capital of a person as their 'habitus' and their 'field', which are configured as a structure of social relations. The reproduction is understood as an intervening process where cultural capital influences family background and academic rewards of children at school. The Theory of Social Mobility attempts to explain that the opportunities for children to obtain the required skills and credentials are important factors influencing the degree of generational mobility understood as upward, horizontal, or vertical mobility.

To answer the research questions, the study utilizes two case studies with data from three cities in Brazil and three cities in Japan where a large number of *Nisei*, *Sansei* and *Yonsei* generations of Japanese-Brazilian descendant students enroll in PNS, in a comparative study. The sample of the quantitative analysis is 81-88 out of 142 students in Japan -numbers which change depending on the subjects; and 242 out of 540 students in Brazil, aged 13–19, using a primary source data of questionnaires elaborated based on the 2003 Brazilian National System for Evaluation of Basic Education (SAEB). The questionnaires incorporate the relevant information to measure adequately the explanatory constructs of students' academic achievement, that are generally conceived of as the parent's demography, economic resources, cultural resources, social resources, and parental involvement from the students' families, conducted in the cohort 2009-2011. The sample for the qualitative analysis consists of 26 teachers/principals and 43 classroom observations in Japan and Brazil. The data of the annual year-end scores of the students are used to analyze student performances by subject-area.

To evaluate the effect of student's characteristics of gender, age, race, ethnicity, and grade, on the results the student's academic achievement measured by year-end scores in both settings, this study utilizes the Hierarchical Linear Model (HLM) approach. In line with the findings of previous literature, the study confirms that the gender, age,

race, ethnicity, and grade have a significant influence on year-end exam results in PNS in both countries. The study confirms the relevance of child's characteristics on academic achievement, such as gender, indicating that boys achieve better test scores in mathematics/sciences and girls achieve better test scores in reading/literature. Female students outperform male students in Japan PNS in mathematics, literature and foreign language English, while boys do better in geography. In Brazil, boys score better on history, literature, foreign language English and geography, while in other subjects, no significant difference is noted in the performance between boys and girls. Additionally, the test scores for mathematics decline with the age of students. Caucasian descendant students and Mestizo descendants students have clearly better results than students from another race. *Nikkei* students across both countries have lower results in mathematics, history, literature, and geography.

To assess the effect of family factors of the constructs Parent's Demography, Economic Resources, Social Resources, Cultural Resources, and Parental Involvement measured by year-end scores in Section 5.1.2., the study cannot confirm the relevance that mother's years of schooling has a bigger impact on girls than on boys as previous studies suggest. Our findings suggest that parent's years of schooling are more significant on student's academic achievement, with male students being the most favored. The results show that the cluster variables Parent's Demography and Parental Involvement could explain the largest part of the variety taken as a whole. Parent's Demography was mostly positively influencing students' results in Brazil, where the link between the educational level of parents and the achievement of their children was stronger. Here some evidence of horizontal mobility was found as the correlation was significant. Social Resources and Cultural Resources only had a small influence as a cluster variable in positively influencing the results of mathematics and history year-end results respectively. Parental Involvement showed a strong positive effect on test results of several subjects in Japan, while a negative effect on test results in Brazil. When the analysis was performed

separately by individual variables within the constructs, we assumed in our research a higher level of parental involvement to produced better test scores. However, our findings suggest that Parental Involvement could be the result of lower test scores or problems that arose during the educational trajectory of a student inducing parents to pay more attention to their children's scholastics. Within the construct of Economic Resources, our findings found a strong correlation between better test results and the amount of books families kept at home. Other indications of 'wealth' through owning goods such as a television, a personal computer, a radio, a car, were correlated with better results, although the direction of the relationship cannot be determined within the frame of this study. Individual variable results within the constructs Social Resources and Cultural Resources gave ambiguous results and were not as clear-cut as to consider them strong evidence.

To evaluate the school factors on students' academic achievement, (i.e., teachers who were not overloaded with schoolwork, greater seniority in teaching, more hours of teaching, and higher income in Section 5.2), the study utilizes the HLM regression approach as an extension of the previous model. The results show that in Japan, teachers experience was significantly associated with year-end scores in mathematics, history, and foreign language English. In line with the findings of previous literature, the teacher's overload work was negatively associated with mathematics, history and foreign language English. In Brazil, the school factor teachers' salary, was found positively associated with geography and foreign language English, but negatively associated with history and literature. Surprisingly, the amount of experience had a negative correlation with results as the teachers with more years of experience had students with lower achievement. When looking at teachers income the results were less clear, but overall they were indicative of a similar tendency where the students whose teachers earned more showed lower levels of achievement.

The community factors facilitated by schools on student's academic achievement, (i.e., the usage of community library, the language used in the neighborhood, the second

language acquisition learning in community-multicultural centers, and the family's social network in Section 5.2.1 and Section 5.2.2.), demonstrated that in Japan's PNS, social network was positively associated with year-end history scores. However, other positive correlations were not substantiated in our model. In Brazil's PNS, the bonding social network, and the language used in the student's neighborhood as bridging social network positively correlated with mathematics, geography and foreign language English year-end scores.

To evaluate the differences of gender, age, race, ethnicity, and grade in affecting the prospect of PNS students to pass the university entrance examination in Brazil, the study utilizes HLM regression approach with Vestibular Simulado test scores as the dependent variables in Section 5.3. Our study found substantial differences in year-end test results through student characteristics; these differences were not as pronounced in Vestibular Simulado results. Female students performed better in Japan, but performed less in Brazil. Caucasian students achieved better results in Vestibular Simulado exams on mathematics, geography, and foreign language English in Japan, but performed less on geography and history in Brazil. Mestizo students also performed less on geography in Brazil. *Nikkei* students had worse results in mathematics, geography and history in Brazil, and better results on geography and foreign language English in Japan. Both these correlations are in line with the thesis of this dissertation, indicating that *Nikkei* students in Brazil often have difficulties reaching the same levels of the other students, given their background.

To assess family factors measured through constructs in the prospect of PNS students to pass the university entrance examination in Brazil in Section 5.3.2., the findings demonstrate that the Non-Japanese descendant students in Brazil reach a higher level of academic achievement. The individual characteristics of the *Nikkei* student group hamper the realization of their full potential and make them less competitive in their academic careers. The most remarkable difference is in the Vestibular Simulado test



scores of literature and geography. The analysis of the individual variables gives an idea of why these differences exist. With the analysis, it is clear what the consequences of these differences between the two population groups are. Thus, the group of Japanese-Brazilian descendants found in the schools studied in Brazil, have more possibilities to enter the university than the Japanese-Brazilian descent group that remain in Japan. The analysis of the HLM regressions show that academic achievement of students and their prospects in entering university are influenced by factors related to their families' socio-economic environment, the type of the schools where they study, parental involvement and their own personal perceptions.

To assess families, school practitioners and student's expectations about children/student's future linked to school achievement in Section 5.4., we utilize qualitative content analysis. Our findings show that the aspirations of the parents for their child's future is in Brazil. The motivation of teachers to teach is based on the aspirations they perceive their students have and this, in turn, motivates teachers to use more effective educational practices, further improving results, as a positive dynamic of reinforcement between teacher and student. The study demonstrates that the students in the PNS in Japan perceive their future aspirations related to the possibilities of passing the university entrance examination in Brazil. However, this expectation relates to continuing to work and study after completing high school and not just studying. This finding is partially consistent with what the parents and the school practitioners expect from the child/students who are limited to just continuing to study, although they are aware of their limitations.

Regarding the theoretical framework, our findings illustrate that both theories presented are complementary. Analyzed data from the questionnaires showed that parent's demography, economic, cultural, and social resources, and parental involvement act as mediators in the intervening process of forming the cultural capital in children at home, and as mediators in the intervening process of achieving results in school. The

findings from our interviews indicate that the students who graduated from a PNS in Japan and remain in Japan for work would reproduce the social status of their parents as *dekasegi* (horizontal mobility). Likewise, staying in Japan for two-three years would enable these young people to return to Brazil with money saved and so they could pass the entrance examination of the selected university (possible vertical ascendant mobility).

## **DEDICATION**

I dedicate this Doctoral Dissertation to my husband Mineo Sakai.

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## LIST OF ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
ANA	National Literacy Assessment
ANEB	National Assessment of Basic Education
ANRESC	National Assessment of School Performance
BE	Basic Education
BoE	Board of Education
CNE	National Education Council
CRLR	Clustering-Robust Linear Regressions
CSO	Civil Society Organizations
ECCE	Early Childhood Care and Education
EFA	Education for All
EITC	Earned Income Tax Credit
ENCCEJA	Examen Nacional Educativo acional para Certificação de Competências de Jovens e Adultos
ENEM	National Secondary School Examination
FEIV	Fixed Effect Instrumental Variables
FUNDEF	Fund for the Development of Fundamental Education and Enhancement of the Teaching
GDP	Gross Domestic Product
GER	Gross Enrollment Ratio
GIP	General Improvement Plan
GoB	Government of Brazil
HBoE	Hamamatsu Board of Education
HLM	Hierarchical Linear Model
ID	Identification Number

IDEB	Basic Education Development Index
IEA	International Association for the Evaluation of Educational Achievement
INEP	National Institute of Educational Studies and Research Anísio Teixeira
INSET	In-Service Teaching Program
JBIC	Japan Bank for International Cooperation
JR	Japan Railways
LDB	Law of Basic Tenets and Guidelines of Brazilian Education
LLECE	Latin American Laboratory for Assessment of the Quality of Education
NEP	National Education Plan (2014-2024)
NGOs	Non-Governmental Organizations
NSP	Non-State Providers
MAXQDA	MAX Qualitative Data Analysis
MEC	Brazilian Ministry of Education and Culture
MEXT	Japanese Ministry of Education, Sports, Science and Technology
MoE	Ministry of Education
MDGs	Millennium Development Goals
MSPEs	Multi-Stakeholder Partnership for Education
OECD	Organization for Economic Co-operation and Development
OIC	Officer In Charge
OREALC	Regional Office for Education in Latin America and the Caribbean
OOSC	Out-of-School Children
PE	Primary Education
PISA	Program for International Student Assessment
PNE	National Education Plan
PNS	Pitagoras Network Schools
PPP	Public-Private-Partnerships

PPPE	Public-Private Partnerships in Education
PPPNS	Public-Private-Partnership Network Schools
PSS	Continuous Selective Process
PRODEGE	Program for Education Development of Equatorial Guinea
PW	Pedagogical Work
SAEB	Basic Education Evaluation System
SDGs	Sustainable Development Goals
SERCE	Second Regional Comparative and Explanatory Study
SES	Socio-Economic Status
SITEAL	Educational Trends Information System in Latin America
SPSS	Statistical Package for the Social Sciences
STATA	Statistics and Data
TIMMS	Trends in International Mathematics and Science Study
TCPD	Teacher Continuous Professional Development
ToT	Time-on-Task
TQM	Total Quality Management
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute of Statistics
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nation's Children Fund
UMIC	Upper Middle-Income Country
USD	United States Dollars
VS	Vestibular Simulado (Entrance Examination Simulation)
QAM	Quality Assurance Mechanism
WLS	Weighted Least Squares

## **TERMINOLOGY**

### **Family**

Family refers in this study to the family types, including two-parent family, one-parent family, or one parent-one tutor family who has social responsibility to the child.

### **Public-Private Partnership in Education**

Public-Private-Partnership in Education (PPPE) is the association “in which the government guides policy and provides financing while the private sector delivers education services to students”, with different types of contract depending on the specific services provided (Patrinos, Barrera-Osorio, and Guáqueta, 2009, p. 1).

### **Public-Private-Partnerships Network Schools**

Public-Private-Partnerships Network Schools (PPPNS) is defined in this study as one type of PPP in education which involves the delivering of professional and support services, including curriculum design, teacher training, educational testing accountable for student performance as determined by test scores or some measure of quality (Rodriguez and Hovde, 2002).

### **Pitagoras Network Schools**

The Pitagoras Network Schools (PNS) is “an innovative effort by the private sector to support independent schools, both private and public, in an integrated school improvement package offering administrative and technical support to affiliated schools” (Rodriguez and Hovde, 2002, p. 19).

### **Student Achievement**



Student achievement refers in this study to the extent to which a student has achieved their short or long-term educational goals represented by cumulative Vestibular Simulado (VS) scores and year-end completion of scores in each subject of a given school year.

# CHAPTER 1

## INTRODUCTION

### 1.1. Background

The foreign nationals in Japan have been increasing in the last ten years. In accordance with the Japanese Immigration Bureau of the Ministry of Justice (2018)<sup>1</sup>, there were 2,561,848 registered foreigners in Japan in December 2017 with an increase of 179,026 compared with the end of the previous year, of which Brazilians are 191,362. In Brazil, the number of Japanese descendants has risen to 1.90 million according to the Brazilian Immigration Bureau (2017). Brazil hosts the largest Japanese diaspora. Japan and Brazil foreign immigration have a long history. The year 2018 is the 110<sup>th</sup> anniversary of Japanese migration to Brazil with 1,730,000 *Nikkei*<sup>2</sup> in Brazil (Japanese Immigration Bureau of the Ministry of Justice, 2018), after Japan's first immigration wave in 1908 from the city of Kobe in Hyogo Prefecture in Japan to the city of Santos in São Paulo State in Brazil. The migration to Brazil was a result of the United States at the time refusing Japanese immigration; and after the Japanese-Russian War, many Japanese were unemployed in Japan. Fortunately, many Japanese found work in coffee plantations in Brazil allowing them to start a new life (Tsuneyoshi, 2011).

Since the revised Immigration Control and Refugee Recognition Act in 1990, the law allowed Brazilian-Japanese second generation (*Nisei*) to enter Japan as 'Newcomers', being temporary workers or *dekasegi*<sup>3</sup>. The immigration of the second generation of Japanese descendants from Brazil to Japan started. Not all Japanese-Brazilians were

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<sup>1</sup> Japanese Immigration Bureau of the Ministry of Justice (2018). 平成29年末現在における在留外国人数について(確定値) [About the number of foreign nationals residing as of the end of Heisei 30 (final)]. Retrieved in July 2018 from: [http://www.moj.go.jp/nyuukokukanri/kouhou/nyuukokukanri04\\_00073.html](http://www.moj.go.jp/nyuukokukanri/kouhou/nyuukokukanri04_00073.html)

<sup>2</sup> Japanese Brazilian descendants –*Nikkei*.

<sup>3</sup> Temporary workers –*dekasegi*; literally in Japanese: *deru*, to go out, and *kasegu*, to earn money.

single parents but many were accompanied by their children (i.e., third generation -*Sansei*, and fourth generation -*Yonsei*)<sup>4</sup>, the Government of Japan began to take care of those children, especially for their education and acquisition of Japanese language. Among the policies implemented by the Japanese Government for this group of foreign nationals, schooling actions that supported families with Brazilian schools were included, apart from the supply of Japanese schools for Brazilian children. Brazilian schools in Japan started in 1990, in the regions of Tokai and Kanto in Honshu Island (Fujiwara, 2001, p. 241) partly schooling the 310,000 Brazilians (MEXT, 2008). The Japanese Government invited the Pitagoras Network Schools (hereafter, PNS) in 1997 to support the schooling of Brazilian children of temporary immigrant workers, while living overseas from Brazil (MEC, 2000). By 2008, over 90 Brazilian schools were located mainly in these geographical regions. Of those 90 schools, 6 schools were Pitagoras Network Schools, while other types of network schools (i.e., Positivo Network Schools, and other Brazilian schools that did not belong to any Brazilian education network) provided private school services to the Brazilian children.

According to Haino (2010), out of 26,000 Brazilian children, 7,000 to 8,000 children enrolled in Brazilian schools; 8,497 children spoke only Portuguese and needed Japanese language care; 9,000 to 10,000 children were enrolled in the Japanese schools without needing language care, and one part of those children were out of the school system. Brazilian temporary workers have a tendency to stay longer in Japan. According to Onai (2009b, 2011), sixty percent of their children go to the Japanese public schools, and around twenty to thirty percent of students who attend Brazilian schools in Japan were born in Japan. Those students have bilingual and bicultural inclinations, and either

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<sup>4</sup> According to Onai (2011), in 1989 the Japanese Government changed the law and put the status to foreigners as “staying and living” so, with this status, until *Sansei* (third generation of Japanese descendants) can enter in Japan. In addition, the last regulation of the Government of Japan of March 2018 specifies that, for Brazilians that have roots in Japan, it has begun to accept the “Visa IV” for *Yonsei* (fourth generation of Japanese descendants).

return, or commute between Japanese to Brazilians schools, between Brazil and Japan<sup>5</sup>. Children whose parents plan to stay in Japan need Japanese language skills and are required to be enroll in Japanese schools. In the communities where they settle, evening schools, associated schools, or Japanese language schools in community-multicultural associations for foreign students, allow children to immerse in the Japanese culture, inducing Japanese acculturation. Children whose parents intend to return to Brazil enroll in Brazilian schools. In Brazilian schools and with their families using the Portuguese language, their children are immersed in Brazilian culture, avoiding in part the Japanese acculturation. Parents who cannot afford the fees of private education<sup>6</sup>, or those parents in segmented assimilation (Takenoshita et al., 2013), often do not send their children to school. For this reason and as stated by various authors, a large portion of Brazilian children in Japan are considered out-of-school children (Onai and Sakai, 2001, p. 102,

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<sup>5</sup> It is worth noticing that many Japanese-Brazilians who came to Japan during the 1990s and early 2000s under special work permits lost their jobs during the 2008's financial crisis. As the Japanese labor market shrank, the economy entered a period of recession. The temporary workers were among the first to lose their jobs. The Japanese Government offered a program with cash payments of almost USD4,000 per worker in 2009-2010, to cover exit costs on the condition that recipients leave Japan permanently. This condition was subsequently modified to three years. By 2011, the population of Japanese Brazilians in Japan had decreased by approximately one third, and repatriations to Brazil surpassed arrivals to Japan in total, almost 20,000 South American citizens took the advantage of the offer. (Kingsberg, 2015, paraphrasing Tsuda, 2010, p. 630, and Sasaki, 2013b, p. 43)

<sup>6</sup> Over the last decades, private schooling (and low-private schooling) has increased and improved in quality, targeting socially and economically disadvantaged groups in developing countries. Private school enrollment has increased faster than public school enrollment. Private schools serving poor or low-income families are proliferating. (Tooley, 1999; Tooley, 2000a; Tooley 2000b; Tooley and Dixon 2002; Dixon and Tooley, 2005; Dixon, 2012; Tooley, 2015) In the elite or upper-middle income class-stratum, parents are choosing private schools instead of public schools as well (Guimarães de Castro, 2002). Legal recognition is spreading. The response of governments and international agencies to this phenomenon is thought-provoking. Authors acknowledge short-comes of official government programmes for the poor and low-income families. (Mourão and Macedo de Jesus, 2012) Parents use these schools, although there are free government alternatives available. In Brazil, schools for the elite and for the poor are spreading since the 1990s. The comparative advantage comes in terms of school management, professional and support services (input), operational services (process), and education services (outputs). In the great majority of private schools, classroom activities are active, and student's cognitive achievement is high. (Soares, 2007)

quoted by Ishikida, 2005) as one of the phenomena of the Brazilian immigration in Japan in the last thirty years.

Tsuneyoshi (2011) argues that several Brazilian schools in the districts occupied by *Nikkeijin*<sup>7</sup>, are seeing an increasing number of children attending those schools. The author states that after the local newspapers publicized that the Brazilian Government had started to license these schools so that the graduates would have the same qualifications as a graduate from their counterpart in Japan, parents sent their children to these schools. Particularly, the Brazilian schools that were invited by the Japanese Government and are administered by Brazilian educators, who educate Brazilian temporary immigrant children during their parents' time as temporary workers in Japan, became a favored choice.

The advantage of obtaining a school credential valuable in Brazil, the prestige of having graduated from a PNS, and being prepared to pass the entrance examination for the university in Brazil upon children's return to Brazil became a policy-of-choice for the Brazilian parents in Japan. Even without being able to provide their students with an education of equal or superior performance to that of their peers in Brazil, PNS in Japan is advantageous for temporary immigrant children who enroll in these types of schools. The six PNS that were established in Japan deliver education from pre-school maternal level to secondary school level.<sup>8</sup> The educational quality, the international reputation, and expertise of more than sixty years in providing educational services makes it rise above other private schools whose educational network is less known or less prestigious in Brazil and worldwide<sup>9</sup>.

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<sup>7</sup> South Americans of Japanese's descendants.

<sup>8</sup> The PNS in Brazil deliver education from pre-school maternal level to university level

<sup>9</sup> In Brazil, there are several Brazilian Network Schools, as follows: Pitágoras (<https://www.redepitagoras.com.br/>), Positivo (<http://ensinopositivo.com/>), Anglo (<http://www.sistemaanglo.com.br/Paginas/Home.aspx>), Objetivo (<https://www.objetivo.br/default.asp>), Etapa (<https://www.sistemaetapa.com.br/quemsomos/sistema>), COC (<https://www.coc.com.br/>), Maxi (<http://sistemadeensinomaxi.com.br/>), Bom Jesus (<http://bomjesus.br/>), among other chain-schools. In

Brazilian achievement in international assessments like the Programme for International Student Assessment (PISA)<sup>10</sup> (OECD, 2013) reveals that positive actions are taken to improve achievement. Currently, Brazil performs is ranked 35 out of 65 countries in the 2015 PISA test which analyses the educational attainment of students during the 2003-2015 period. As part of the Brazilian government's effort to address this situation, numerous actions were taken in response to these global trends to improve the quality of education. The Government of Brazil (GoB) has introduced evaluation systems at basic and secondary education levels. The SAEB<sup>11</sup> (since 1990), the National Secondary Education Exam -ENEM (since 1998), the VESTIBULAR (since 1996), and the Continuous Selective Process (PSS) are the non-mandatory national examinations for assessing students in basic, secondary and higher education used to generate scores for schools. As such, the Brazilian Ministry of Education and Culture (MEC) know the best and worst schools throughout the country, and how the student performance helps their prospects to take the entrance examinations in federal and private universities. A certainty

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Japan, Pitagoras Network Schools and Positivo Network School are in place, being PNS the only one network of the school invited by the Government of Japan.

<sup>10</sup> The Programme for International Student Assessment is a worldwide study by the Organisation for Economic Cooperation and Development (OCDE) in member and non-member nations intended to evaluate educational systems by measuring 15-year-old school pupils' performance on mathematics, science, and reading. Retrieved in July 2018 from <http://www.oecd.org/pisa/test/>

<sup>11</sup> The Basic Education Evaluation System -Sistema de Avaliação da Educação Básica (SAEB in Portuguese), established in 1990, is composed of a set of external evaluations and its main objective is to carry out a diagnosis of Brazilian basic education and some factors that may interfere in student performance, providing an indication of the quality of the education offered. The survey produces information that supports the formulation, reformulation and monitoring of public policies at municipal, state and federal levels, aiming to contribute to the improvement of the quality, equity and efficiency of teaching. In addition, it also seeks to provide data and indicators on factors influencing student performance in the assessed areas and years. In 2005, SAEB was restructured and began to be composed of two evaluations: (1) the National Assessment of Basic Education -Avaliação Nacional da Educação Básica (ANEB in Portuguese), which retained the characteristics, objectives and procedures of the evaluation carried out until that moment by SAEB, and (2) the National Assessment of School Performance -Avaliação Nacional do Rendimento Escolar (ANRESC in Portuguese), known as Prova Brasil, created with the objective of evaluating the quality of teaching taught in schools of public network. In 2013, the National Literacy Assessment -Avaliação Nacional da Alfabetização (ANA in Portuguese), was incorporated into SAEB to better measure levels of literacy in Portuguese (reading and writing) and mathematics. Retrieved in July 2018 from <http://portal.inep.gov.br/educacao-basica/saeb>

of private schools' significance in high quality of learning is the high rate of approval of the entrance examinations (i.e., VESTIBULAR, ENEM). In the Brazilian federal universities, students who graduated from private schools (MEC, 2013) perform better. Haino (2010) indicates that the ENEM is for all students in Brazil, resulting in this exam considered as the admission exam of the Brazilian universities. (p. 156) The ENEM exam is prohibited for Brazilian students in Japan. Many students who pass this exam are from private high schools in Brazil (i.e., schools for the elite), where most of the students belong to the middle or high class-stratum. To close the gap of the ENEM not being compulsory in Japan, and for the better preparation of the students in Japan and Brazil, the PNS implement a Simulation of Entrance Examination (named Vestibular Simulado, in Portuguese). This exam raises the level of student's performance while stimulating better performance in the real entrance examinations VESTIBULAR for students in Brazil and Japanese-Brazilian/Brazilian students returning to Brazil. Returning to Brazil increases opportunities for students to pursue higher education studies by passing the universities entrance examination (McCowan, 2007).

In this dissertation, 'achievement' addresses the PNS attainment through year-end scores and Vestibular Simulado scores, which is the preparation with trials for the university entrance examination in Brazilian universities. However, Brazilian PNS's students in Japan are low-to-average in achievement (Pitagoras Network Schools, 2009). Studies of the impact of family background on student achievement tend to approach the ways student's achievement is influenced by personal characteristics, family background, and school characteristics. The associations between family background and child academic achievements are well documented. For example, the benefits from investing in a child's education may be positively correlated with household income, because richer parents can afford educational inputs of higher quality (Behrman and Knowles, 1999; Silva, 2009). Better-educated parents might place a higher value on child education and may be able to help more and be actively involved in the education of their children. The evidence is almost uniformly consistent and indicates that students of a family where

economic, cultural and social resources are available, where there is evidence of parental involvement, during the study process, or whom are educated in a school where quality of education is promoted, reap a wide range of positive educational outcomes, including ‘achievement’, as the literature demonstrates (Post and Pong, 1998; Cummins, 2001; Fan and Chen, 2001; UNESCO, 2010).

The vision of the Japanese researchers as it relates to the problem of Brazilian children enrolled in Brazilian schools in Japan contains different perspectives. It starts with the denial of the problem (Haino, 2008, 2010), or a derogatory look ‘minority groups’ (Ishikida, 2005) and changes to a perspective of inclusion: “education of newcomers” trying to understand and describe the problem from a broader perspective, considering the difficulties in the acquisition of language, be it the native or the language of the host country, and the difficulties of the creation of social networks as social capital that builds human capital (Beltrão and Sugahara, 2009, 2006, 2005; Soares Bugarin, 2017). To what degree the economic, cultural and social resources and parental involvement in children education have a direct effect on learning outcomes, however, remains an open question. While the PNS in their mission and vision<sup>12</sup> indicate as goals the high performance of their students, achievement remains low-to-average in the case of Brazilian PNS in Japan. Another possible factor that would restrain the ability of students to perform better at school could be their expectations of the future, impeding the students in doing the necessary efforts to succeed at school, especially for those who are going to remain in Japan, thus risking being in the same socio-economic class as their parents.

## **1.2. Problem Statement**

Although the PNS mission and vision promote a high performance of its graduates, in the PNS in Japan it is observed that the performance is low to average, in comparison to the

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<sup>12</sup> For an example of the mission and vision of the “Model” chain-school units of Japan, see Appendix A-a.



students' school performance in PNS in Brazil. Likewise, reviewing the literature, there are gaps that guide this dissertation, specifically:

(1) Studies on temporary foreign workers in Japan go on to detract the existence of this group of foreign workers (naming them as 'minority groups'), to some more inclusive conceptualizations. Due to the rising number of foreigners staying in Japan for extended periods starting in the 1970's, Shimizu (2011) grouped them in three periods of time. From 1970 to 1980, mainly Philippian women, and refugees from Indochina; from 1980 to 1990, South Americans descendants of Japanese origin and foreigners of different nationalities had work visas; and from 1990 to 2008, foreigners who married Japanese nationals. In order to understand the phenomenon, it is necessary to add two new phases: from 2008 to 2013, due to the economic crisis of 2008 a period initiated of deporting *Nikkeijin* to Latin American countries; and from 2013 to present, a period of entry of foreigners with higher qualifications and re-entry of foreign nationals as temporary workers (Komatsu, 2017). Changes in conceptualizations also occur with respect to cultural identity. Japan is changing the vision or conception of a monocultural society in a multicultural Japan. This involves the way that foreigners with Japanese ancestry are perceived, going from being considered *hāfu*<sup>13</sup> to being considered 'double.' What is worrisome is that many of the studies of Japanese researchers related to multicultural education and multicultural society in the Japanese context are based on their prevalent approaches of 'assimilation' and 'integration', and are not framed within 'cultural pluralism.'

(2) According to Onai (2009), Brazilian families in the Japanese context are not described in previous studies, stating that knowing the characteristics of Brazilian families is important. This creates a gap in the studies that describe Brazilian schools in Japan due to the lack of knowledge about the Brazilian families' background. Onai

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<sup>13</sup> *Hāfu* ("half"). The concept is used in Japanese to refer to someone who is biracial, that is, ethnically half Japanese.

believed that previous studies did not acknowledge the importance of the child and parent relationship. (pg. 5) Similarly, the author indicated that these studies do not reflect the comparative point of view on the different places of settlement and in settlement time.<sup>14</sup> The study also shows the importance of family background to increase understanding of the situation of those parents and children and the impediments and/ or possibility of immersion in the Japanese communities<sup>15</sup>.

(3) Various authors interested in describing the situation of temporary foreign workers and their children as temporary students in Japan investigated the reasons for children's school failure. Some of the motives explained are cultural deprivation and the type of school where the children were immersed. Thus, cultural deprivation, insufficient language skills and lack of having a social network (cultural capital) after arriving in Japan would explain behind the child's school failure. According to Ota (2000, cited by Onai 2009), for those Brazilian students who receive schooling in Japanese schools, having classes only in the Japanese language is not enough, meaning that Brazilian children also need to take classes in their original language Portuguese for the proper acquisition of knowledge and skills. Therefore, the type of school where the children are immersed, would be another explanation behind the children's school failure, with three

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<sup>14</sup> To fill the gap, Onai (2009) conducted his study in three different places in Japan and at different times: (1) In 1998 in Ooizumi (in Gunma prefecture): 41 Brazilian families in 7 primary and secondary schools. (2) In 2006 in Toyohashi (in Aichi prefecture): 100 Brazilian families in 8 primary and secondary schools. (3) In 2007 in Hamamatsu (in Shizuoka prefecture): 107 Brazilian families in 7 primary and secondary schools (p. 5) In a second study, Onai (2011) describes the situation of the *dekasegi* as returnees in Brazil, quoting the field study held in São Paulo, Brazil in 2009. With the case studies of Fukuhaku community in Suzano City near São Paulo and in Tomeasu farm in East Amazon, the author states that in general, only 20 percent of people who have experience of *dekasegi* perceive an improvement in their life after being *dekasegi*, having many of them problems of adaptation typical of the returnees after a long stay in Japan (language, networking, social behavior).

<sup>15</sup> Onai (2011) studies the change of *dekasegi* commuting between Japan and Brazil. The author points out that the long settlement by Brazilian in Japan is increasing. There are many Brazilian who live in Japan more than ten years in some places like Toyohashi City and Ōta City. The author describes the phenomenon of "Japonisation" as "changing into non-Brazilianisation" considering the situation of the Brazilian's families and their children in Japan. This condition is described with categories: (1) satisfied (that they were *dekasegi*), (2) unsatisfied (that they were *dekasegi*), and (3) repeaters (for being *dekasegi*, returned to Brazil, and returned to Japan to continue being *dekasegi*).

different positions according to authors: education of Brazilian children in Japanese schools; education of Brazilian children in Brazilian schools run by Brazilian nationals; and education of Brazilian children in Brazilian schools run by Japanese nationals.

(4) Studies of temporary foreign workers in Japan emphasize the schooling of Brazilian children and Japanese-Brazilians descendants in Japanese schools (Onai, 2009), and in Brazilian schools (Gordon, 2005; Shimizu, 2011). In those studies, the Brazilian schools described are not specified or differentiated by name of school, location of the school (with the specific address), and number of children enrolled. These studies do not describe if the Brazilian schools are networked schools, if they have been invited by the Government of Japan for their prestige in Brazil, or if they were managed by Brazilians or Japanese administrators. These studies only describe if the Brazilian schools in Japan were accepted by the Japanese Government and which category they are recognized by the Japanese Government (i.e., miscellaneous, unrecognized, or in process to be recognized). To place them or cite them all together in a study is a subject of controversy in the literature and a criterion that should be reconsidered when describing the types of Brazilian schools in Japan.

(5) Studies of chain-schools or network schools have been described extensively in countries such as India, South Africa, Uganda, Kenya, and the United Kingdom (Tooley and Dixon, 2002; Tooley, 2008, 2018) to name just a few. Nevertheless, the Brazilian PNS are different as described under the framework of Public-Private-Partnerships and/or Public-Private-Partnerships in Education (Rodríguez and Hovde, 2002; Patrinos, Barrera-Osorio, and Guáqueta, 2009; World Bank, 2010). These studies do not provide a description of the characteristics of the PNS in detail, only attaching data referring to annual school costs/fees or teaching materials, the services that PNS provide, and/or the type of management that PNS possess.

(6) Although Japanese studies describe the educational curricula of a number of Brazilian schools in Japan, and Japanese schools providing education to ‘newcomers’ and of cultural or multi-cultural community centres (Shimizu and Shimizu, 2001; Shimizu,

2011), they do not analyze the curriculum but describe it. That are, disciplines/subjects - principally in geography and history classes- described under the “international elective curriculum” (Shimizu, 2011, pp.180-181), as well as the daily number of hours’ students are in school without specifying which schools are involved. Equally, Japanese studies do not describe the type of school (i.e., PNS or any other Brazilian network school recognized by the Ministry of Education of Brazil), who the teachers are, teachers salaries, and the characteristics of the Teachers’ Continuous Professional Development (TCPD) for the school administrators, the school coordinators, and the school principals.

(7) According to Haino (2010), another possible reason Brazilian student fail in school, is the lack of aspirations of teachers and parents about their children’s future occupation: work, study and/or work and study. The author describes four distinct career options for Brazilian students living in Japan: (1) return to Brazil, and apply for admission to an institution of higher education and build a career; (2) build a career in Japan and choose a job that does not require a higher education certificate; (3) work in a factory in Japan for a certain time period; and (4) stay in Brazil and if things do not turn out as they expected, return to Japan. (p. 215) The author proposes that both Japanese and Brazilian governments jointly examine the problem of Brazilian-Japanese children in Japan. Specifically, the author recommends introducing the common rating system as an educational policy and as a good practice for students returning from Japan to Brazil. (p. 221) The author explains that, in previous years, learning the Japanese language was an option in Brazilian schools. However, at present, learning the Japanese language in Brazilian schools becomes indispensable. (pp. 222-223)

### **1.3. Research Questions**

Given this context, this study sets out four research questions and eight sub-research questions regarding student factors, family factors, school factors, and community factors as inputs, and one output, which is academic achievement, measured by year-end scores and Vestibular Simulado scores (i.e., cumulative scores of the university entrance examination’s trials).

**Research Question 1.** What are the characteristics of the students and the family factors who attend the Pitagoras Network Schools (PNS) in Japan and Brazil, and what influence do these characteristics have on the student's academic achievement<sup>16</sup>?

More specifically,

**RQ 1.1.** What are the characteristics of the students who attend the Pitagoras Network Schools (PNS) and their families, in Japan and Brazil?

**RQ 1.2.** How do student characteristics<sup>17</sup> and family factors<sup>18</sup> correlate to the student's academic achievement in Japan and Brazil?

**Research Question 2.** How do Pitagoras Network Schools (PNS)'s and community factors (facilitated by schools) in Japan and Brazil correlate to student's academic achievement<sup>19</sup>?

More specifically,

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<sup>16</sup> Measured by **year-end scores** (i.e., year-end score mathematics, year-end score physical education, year-end score geography, year-end score history, year-end score literature, and year-end score foreign language English).

<sup>17</sup> **Single variables:** Gender, age, grade, race and ethnicity (*Nikkei* and non-Japanese descendants).

<sup>18</sup> **Constructs (indexes):** (1) Parent's Demography (i.e., student live with mother, student live with father, mother's education, father's education, see mother reading, see father reading); (2) Economic Resources (economic capital) (i.e., possessions -television, radio, car, videocassette, fridge, washing machine, vacuum cleaner, freezer with fridge, freezer without fridge, PC/laptop with internet connection, PC/laptop without internet connection, books at home-, bathroom inside the house, bedroom inside the house; (3) Social Resources (social capital) (i.e., parent listen music with his/her son/daughter, parent talk about books with his/her son/daughter, parent talk about films with his/her son/daughter, parent talk about TV broadcast programmes); (4) Cultural Resources (cultural capital) (i.e., parent talk to his/her son/daughter's school friends, parent talk to his/her son/daughter's other friends, parent talk to school director, parent attend school meeting, parent talk to his/her son/daughter's teacher); and (5) Parental Involvement (i.e., parent talk about school, parents assist their son/daughter in doing homework, parent assist their son/daughter in preparing school's exams (Vestibular Simulado, other regular tests, projects), talk on absenteeism, talk on his/her son/daughter about child's future, parent talk about school scores with their son/daughter). Constructs (namely conceptual framework) are based on the Theory of Social Reproduction in Education of Pierre Bourdieu (1977, 1985).

<sup>19</sup> Measured by **year-end scores** (i.e., year-end score mathematics, year-end score geography, year-end score history, year-end score literature, and year-end score foreign language English).

**RQ 2.1.** How do the school factors<sup>20</sup> correlate to student's academic achievement in Japan and Brazil?

**RQ 2.2.** How do the community factors<sup>21</sup> (facilitated by schools) correlate to the student's academic achievement in Japan and Brazil?

**Research Question 3.** How do student characteristics and family factors in Japan and Brazil differ in influencing the prospect of PNS students to pass the university entrance examination<sup>22</sup> in Brazil?

More specifically,

**RQ 3.1.** How do student characteristics (gender, age, grade, race, and ethnicity) in Japan and Brazil differ in affecting the prospect of PNS students to pass the university entrance examination in Brazil?

**RQ 3.2.** How do family factors (Parent's Demography, Economic Resources, Social Resources, Cultural Resources, and Parental Involvement) in Japan and Brazil differ in influencing the prospect of PNS students to pass the university entrance examination in Brazil?

**Research Question 4.** How do the students, parents, and school practitioners describe their expectations (beliefs and assumptions about what is appropriate for children/students when graduated from PNS) on the student's educational aspirations regarding future<sup>23</sup> and how are they linked to exam results?

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<sup>20</sup> i.e., **School (Teachers) Factors:** teachers experience, teacher's schoolwork, teacher's hours of teaching, teacher's income.

<sup>21</sup> **Community Factors** variables: usage of community library, language used at neighborhood, second language acquisition learning in community centers, network: contact with family/siblings and friends.

<sup>22</sup> Measured by **Vestibular Simulado scores** (i.e., Vestibular Simulado mathematics, Vestibular Simulado geography, Vestibular Simulado history, Vestibular Simulado literature, Vestibular Simulado foreign language English).

<sup>23</sup> The student's future occupational aspirations are 'continue studying', 'continue studying and working', and/or 'continue working', related to the Theory of Social Mobility.

More specifically,

**RQ4.1.** How do families, school principals and/or teachers describe their expectations about children'/student's educational aspirations regarding the future and how are they linked to school achievement?

**RQ4.2.** How do students describe their expectations in relation to their educational aspirations regarding their future, in consideration of their exam results?

#### **1.4. Objectives of the Study**

The purpose of this dissertation with two case studies was to explore student's individual, family and community factors with focus on parent's demography, social resources (social capital), cultural resources (cultural capital), economic resources (economic capital), and parental involvement as influences that may have contributed to educational outcomes in adolescents enrolled in PNS in Japan and Brazil. Examining the Brazilian-Japanese families with children enrolled in Brazilian schools in Japan, the intent is to learn about the achievement of students and their prospect for admission to the university in Brazil. The study also sought to explain why poor school performance persisted in those students with socio-demographic factors of Japanese-Brazilian descent and under conditions of temporary migration, despite the years of performing simulated Vestibular exercises as trials and the years of instruction.

The first objective of the study is to determine the characteristics of the Brazilian students attending Brazilian PNS in Japan and Brazil and their individual characteristics, family economic, social and cultural resources, level of parental involvement, and parental demographics obtained from the data of students and family questionnaires. The conceptual framework of the construct is based on the Theory of Social Reproduction in Education. The study examines the relationship between family background and student achievement. Analyzing the reasons of student's low-to-average achievement, the

researcher expect to come out with significant outcomes to make comparative analysis possible.

The second objective of the study is to investigate the extent to which the school factors affect students' achievement. For instance, through the analysis of teacher profiles, and the related community factors (i.e., language use in the neighborhood, students using community libraries, intention of learning a second language in community-multicultural centers), the researcher intends to find evidence that the school policies targeted specifically at the development of the quality of education will ultimately raise the level of the students, depending on the strength of the relationship. Economic, social and cultural resources would act as mediators in the relationship between family background and school success. For these purposes, we use data on six schools of comparable demography and grades in Japan and Brazil, through questionnaires for families and students, individual year-end test scores, and school surveys. To answer this research question, the data derived from the family and student questionnaires measured against the year-end scores as school annual achievement for FY2011.

The third objective of this study is to figure out if the education in PNS in Japan is conducive for students to survive the university entrance examination in Brazil if they return to their home country and how, eventually, the academic achievement in PNS in Japan is significant. Brazilian-Japanese heritage students (*Nikkei*) are compared to the non-Japanese descendants' students through the comparative analysis. To answer this research question, the data derived from the students, family and school practitioner's questionnaires are set against the VS cumulative scores.

The fourth objective analyses students' academic achievement and expectations (beliefs and assumptions) about their future through qualitative analyses. The researcher explores the point of view of the demand for services (parents) in academic achievement, and the future intentions of students, examining their perceptions about, after graduating, either continue working, continue studying and working, or continue studying. The point of view of the provider of services (teachers and directors) on academic achievement and



the future of students are considered through dialogue (interviews). The researcher describes settings in which PNS can be factors of transformation to increase the possibility of social mobility to students by offering instruments of social equity like VS exams, activating cultural capital and constructing social networks within the community. These points of view are comparable to the expectations (beliefs and assumptions) of the students with respect to their own future.

### **1.5. Significance of the Study**

The significance of this study is that it describes gaps in the literature. First, previous studies on the Brazilian schools in Japan focus on the condition of students as temporary students. However, there is scarce empirical evidence on students background and cognitive performance (achievement) from the local and comparative points of view (Onai, 2009; Yamanouchi, 2006; Yamanouchi, 2014). For instance, we will infer based on the study results that parent's demography, economic, social, or cultural resources, and parental involvement, increase, decrease or have no effect on the achievement levels of the students in the PNS's populations. The data utilized is primary data obtained in a field pilot study (FY2009) and two main field studies (FY2010 and FY2011) in both settings.

Second, there are very few empirical evidences on the quality of education of the PNS and the school management, in comparative perspective (Jimenez et al., 1991; Rodriguez and Hovde, 2002; LaRocque, 2008; Patrinos et al., 2009). The generation of the information of the assessment outcome is a valuable baseline used by school administrators to improve the accountability of PNS to parents in both contexts. Likewise, there are many analyses regarding the effect of the combination of school and community factors facilitated by schools on student achievement. Since in Brazil the quality of education and especially the quality of teaching and learning is an issue, this study attempts to contribute to the knowledge and implications for school standards and management. This relevance of this study is to enhance the research and evaluation capacity of the PNS as a system. Ultimately, the generation of the information of the

assessment outcomes could be used by school administrators to improve the accountability of schools to parents within the PNS in Japan and Brazil. This dissertation provides arguments in favor of PNS as an alternative to maximize an equitable and outcomes-oriented school system by showing the importance of the private sector involvement in education. Provision of quality assurance mechanisms of private schools to keep parents and communities informed, is lacking. According to Patrinos et al. (2009) “an important weakness in many countries is the lack of available consumer information on the private markets despite the rapid growth of private education and the wide variations in their prices and quality.” (p. 51) Student performance is often associated with the quality of the teachers, their professional background, their years of experience, the time teachers have been in their practice and the use of the curriculum. Provision of information on school fees, school programs (curriculum), teacher’s qualifications, teaching and learning materials used, and performance of the school, are not reported as frequently. This study produces information about PNS with an exhaustive situation analysis of school management, teacher’s conditions of work, teacher’s practices, and the curriculum alignment with the types of assessments. Students’ learning achievement as it relates to school-associated and community factors is also analyzed. The qualitative analysis supports the arguments, especially targeting the curriculum, the classroom interaction, time and space through the analysis of classroom observation, assessments and activities (Alexander, 2000; Stallings, 1970, quoted by The World Bank Group, 2015). This study is useful and could be a valuable baseline study for the PNS network as a system by indicating the strengths and weaknesses of the PNS.

Third, this study investigates the student learning outcomes to university entrance examination in Brazil contributing to the temporary immigrant’s literature, showing the analysis of schooling attainment by *Nikkei* and non-Japanese descendants students. In addition, this research also examines the effects of Brazilian PNS assisting students in their preparation to pass the university entrance examination (Vestibular exam) in Brazil. The analysis of PNS quality of learning, measured in terms of student attainment and

associated factors, and in the evaluation of student learning outcomes for the prospect of passing the university entrance examination, is estimated (Raundebush, 2003).

Finally, the perception of parents and school practitioners (i.e., school principals, school coordinators and teachers) on academic achievement is investigated extensively as referred to in literature (Trice and McClellan, 1993; Shute, Hansen, Underwood, and Razzouk, 2011; Nichols, Glass, and Berliner, 2012; Conley and Gaston, 2013). This study investigates the perception of PNS student's future from the point of view of parents, school practitioners, combined with the students own perceptions in an in-depth field research case study. Ultimately, the generation of the information of the assessment outcomes in relation to student's aspirations could be used by school administrators to improve the accountability of schools to parents within the PNS in both contexts, Japan and Brazil. The analysis utilized is qualitative through content analysis (Krippendorff, 2013).<sup>24</sup>

The significance of the study also analyzes advancing theory using the case of PNS. The intergenerational mobility tested for the population groups investigated -the *Nikkei* who returns to Brazil and the *Nikkei* who remains in Japan-, allows us to understand if the students of the PNS will have better opportunities than their parents, whether staying in Japan or returning to Brazil and, if they return, how prepared they will be for higher education.

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<sup>24</sup> Methodologically, the study is built with questionnaires and the primary database based on SAEB 2003 with additions of community context variables, parental involvement and different contexts. The variables in this database could be used for further research both by the Author as well as by third parties. The collection of this specific data allows for a unique comparison between two population groups to an extent that previously was unthinkable, as usage of three languages, two of contexts (Portuguese and Japanese) and one of communication (English), with the researcher being a native Spanish-speaker. Field work in both countries, starting in Japan and continuing in Brazil, verified what has been learned in the literature review, corroborate or reject assumptions and investigate the quality of the educational provision of PNS as chain-schools or network schools.

## **1.6. Organization of the Study**

This dissertation proceeds as follows. Chapter 2 introduces the Brazilian education system and assesses its policies, and the current situation of the Brazilian network schools in Japan and Brazil. This discussion follows and explanation of the concept and history of PNS and its implication to the schools in Japanese and Brazilian contexts, in two case studies with three schools in each one. The PNS characteristics were introduced, including schools legal regulations; the description of the teacher's official identification (ID) and the student's identification in the Brazilian education system; the school management's training; and the school's student-teacher ratio. The characteristics of teachers are described including teachers' contract, deployment, salary, profiles, qualifications, knowledge, experience, continuous professional development, instruction, and effectiveness (value-added). The curriculum was described through the written, taught, learned, and assessed curriculum, and in relation to teacher's actual practices.

In Chapter 3, the literature review adds perspectives of previous studies on characteristics of individual students, family, and school factors (including the community factors facilitated by schools) in addition to their effects on student's achievement. The arguments of parents and educators on their assumptions about the student's future aspirations complete the student's perspectives on their assumptions of their own future aspirations.

Chapter 4 displays the theoretical framework and methodological design based on previous studies related to the research objectives. Samples of six schools, three in each country, are introduced as well as the data collection which took place in a field pilot study and in a field main study during the cohort 2009-2011 is explained, considering interviews, student, family and teacher's questionnaires, and classroom observations. The data analysis procedures are introduced as mixed methods, with explanations of the quantitative methodology for answering the Research Questions 1-2-3 (through Hierarchical Linear Model regressions), and with explanations of the qualitative methodology for Research Question 4 (through content analysis). Variables and models

corresponding to descriptions of Research Questions 1-2-3. Qualitative data analysis for Research Question 4 is developed. The chapter ends with validity, reliability, and ethical considerations.

In Chapter 5, the data analysis and the findings are presented based on the research framework introduced in the preceding section. This chapter also presents the results of the econometric models and the qualitative analysis. Chapter 5 consider the premises that (1) Family characteristics of the students who attend the Brazilian PNS in Japan and Brazil vary in terms of student's individual characteristics, economic, social, and cultural resources, parent's demography, and parental involvement; this variation determines differences in student's achievement in both settings. (2) School and the community factors related to school are correlate positively to students' academic achievement. (3) The prospection of entering the university in Brazil of two different groups of students, the *Nikkei* and the non-Japanese descendants, differ. (4) The future aspirations of students described from parents, principals, teachers, and the student's own perceptions on the future mostly relate to continuing education at the university upon arrival to Brazil.

Chapter 6 presents the summary of findings and conclusions. The major findings and alternative explanations of the results observed were described and examined. The research questions under quantitative analysis are revisited, and consider relevant populations, treatment variables, dependent (outcome) variables, and the research design in view of the revisited literature. The implications and interpretations of theory, practice, or policy are considered. Above all, the contributions this comparative study makes to education, emphasizing the similar characteristics of the type of chain-school in both contexts are further explained. Moreover, the contextual differences in terms of coverage of the educational demand, the differences of serving children from low-income families in Japan and children of mid-income and/or high-income in Brazil, and the perspectives of excellence to a promising future for children of both contexts are well-thought-out.

## **CHAPTER 2**

### **BRAZILIAN EDUCATION SYSTEM AND THE PITAGORAS NETWORK SCHOOLS**

#### **2.1. Brazilian Educational System**

Brazil statistics show a GDP as PPP of 15,123.85 -current in USD- (for the year 2016), according to the World Bank National Accounts data, and the Organization for the Economic Co-operation and Development (OECD) National Accounts data files (2016). Consistent with the UNESCO Institute of Statistics (UIS, 2017), Brazilian external efficiency in education shows that public expenditure on education as a percentage of GDP is 5.95 (for 2014), and public expenditure on education as a percentage of total government expenditure is 15.72 (for 2014). Efforts towards the internal efficiency and quality of learning in Brazilian education have been made. According to the UNESCO Institute of Statistics (UIS, 2017), the youth (15-24) literacy rate is 98.93 percent. The total school life expectancy primary to tertiary level is 15.4 years (for 2015). Pupil-teacher ratio in primary education is 21.52, and pupil-teacher ratio in secondary education is 15.45 (for 2015). Primary completion rate is 106.0 (for 2005). Percentage of repeaters in the primary is 8.75 percent (for 2011). The out-of-school children of primary school age in total have increased from 454,365 (for 2009) to 771,982 (for 2015) and the out-of-school adolescents have also increased from 145,549 (for 2009) to 741,498 (for 2015), with girls being the most disadvantaged. The percentage of children who never attended school is 42.44, while children with late entry in school are 57.56 for the total of this population segment.

The 1998 Brazilian Federal Constitution defines education as “a social right of Brazilian citizens (BFC, Art. 6), and as an obligation of the state and the family (BFC, Art. 205, quoted in the National Report of Brazil -NRB, 2008, p. 8).” In addition it legislates the responsibility (BFC, Art. 24, IX) of accessibility to education (BFC, Art.

23, V) from the Federal Government and throughout the States. The Federal District and the cities will exercise “a redistributive and supplementary function” that will “guarantee the equalization of educational opportunities and a minimum quality standard for education, through technical and financial assistance to the States, to the Federal District and to the Cities” (BFC, Art. 211 Incise 1). There are three systems recognized: “(I) the Federal System; (II) the State Systems and the Federal District System; and (III) the Municipal Systems” (BFC, quoted in the National Report of Brazil -NRB, 2008, p. 9). According to the Brazil National Educational Plan (2001), the three levels of government are committed “to raise the population’s level of schooling, improve the quality of instruction, reduce social and regional inequalities and democratize the management of public education by the end of the decade” (p. 9)

Through the National Law of Education –LDB (Law N° 9394, of 20 December 1996) the mechanisms of the Brazilian Federal Constitution are operationalized. Compulsory education lasts 14 years from age 4 to age 17, with the official school ages by the level of education for pre-primary at 4-5, primary at 6-10, secondary at 11-17, and tertiary at 18-22 years old (UIS, 2017). Table 2.1. summarizes the structure of the Brazilian educational system, Early Childhood Education (ECE) which includes Nursery level for children from 0 to 1 year, Mini-Maternal for children from 1 to 2 years, Maternal for children from 2 to 3 years, Kindergarten for children from 3 to 4 years and Preschool for children from 4 to 5 years provided by the city; compulsory Elementary Education and Lower Secondary School provided by the city and the State; and Upper Secondary School with the city and the State as providers. Private schools are noted for offering Early Childhood Education (daycare and preschool).

*Table 2.1. Structure and Organization of the Education System in Brazil*

Specific Denomination	International Denomination	Grades (Years)	Ideal Age	Enrollments (2017)	Primary Authority
Early Childhood Education (Day Care and Preschool)	Initial Education (Nursery, Mini-Maternal, Maternal, and Kindergarten)	4 years	0-3	1,427,942	City
	Preschool	2 years	4-6	5,588,153	
Primary Education (Compulsory)	Elementary Education	Grades 1 to 5	6-10	18,338,600	City and State
	Lower Secondary School	Grades 6 to 9	11-14	14,944,063	
Secondary Education	Upper Secondary School	Grades 1 to 3	15-17	8,906,820	State
Special Education	Transversal to Early Childhood Education, Primary Education, Secondary Education, Youth and Adult Education, Vocational and Technological Education			700,624	City and State
Youth and Adult Education	Fundamental Level (Primary and Lower Secondary)		15 or older	3,865,629	City and State
	Secondary Level (Upper Secondary School)		18 or older	1,750,662	
Technical and Vocational Education and Training (TVET)	Secondary Level (Upper Secondary School)		15-17	744,690	State
Total Enrollments in Basic Education				55,942,047	State
Higher Education					
Tertiary	Bachelor/Licentiate		18-22	16,477,191	State
Undergraduate			22-23		State
Specialization			23-25		State
Magister			25-27		State
Doctorate					

Source: Created by the author based on MEC/INEP, School Census 2017, UIS. Retrieved from: <http://uis.unesco.org/country/BR>

Curricula of primary and secondary education have a national common base (i.e. “teaching of Portuguese language and mathematics, the structure of the physical and



natural world, and the social and political reality, especially with regards to Brazil”) with a diversified part, considering “the regional and local characteristics of society” (LDB, Art. 26, p. 22). The teaching of the Arts at different levels is also compulsory and the promotion of the cultural development of the students, as well as physical education (LDB; Law No. 10.328 of 12-12-01; Law No. 10.793 of 01-12-03). In teaching the history Brazilian it is necessary to consider “the contributions of the different cultures and ethnic groups in the formation of the Brazilian people, especially the indigenous, Africans, Asians and Europeans origins.” (LDB, Art. 26, Inc. 4 quoted in NRE, 2008, p. 22 -original in Portuguese)

The Brazilian educational system gives schools the freedom to “choose the didactic material, the elaboration of lesson plans and the training of teachers”, being one of the main objectives “to have a bigger reflection and understanding of the current realities possible”. (p. 9) Consequently, the Brazilian national curriculum guidelines highlight multicultural understanding and identity as priority topics, while special pedagogical projects at school level in Brazilian schools are developed. The legislation establishes the National Education Plan and provides for its periodic assessment by the Federal Administration, together with the states, the Federal District, municipalities and Civil Society Organizations (CSO). (p. 10) The law stipulates that a permanent evaluation process based on quantitative and qualitative data analysis and provided by the evaluation system is carried out by the Ministry of Education and Science at every level (School Census, Basic Education Assessment System –SAEB, National Secondary Education Examination –ENEM, National Course Examination –Provão, in addition to other exams) shown in the Basic Education Development Index (BEDI), which provide information on school performance to government bodies, school, parents and communities. The Federal legislative branch is also responsible for following-up the implementation of the National Education Plan that requires the participation of all the powers of the Republic to guarantee its success. (p. 9) According to OECD (2015), Brazil defined its educational goals for ten years through the National Education Plan (2014-2024). The plan outlines

20 goals and targets along with broad strategies which can be implemented and defined by states and municipalities, including funding, teachers career plans, professional development opportunities, and evaluation and assessment approaches to set targets of accountability to develop evidence-based policymaking.

In regard to the provision of private education, the following legislation (Almeida et. al. 2017; Complementary Law No. 48 of Chapecó December 1997, Art. 21) established that the “Private institutions are those held and administered by individuals or legal entities under private law, falling into the following categories: I) Private individuals in the strict sense: understood as those that are established and maintained by one or more individuals or legal entities of private law that do not have the following characteristics; II) Community: in the same way as those established by a group of natural persons or by one or more legal entities, including teachers and students cooperatives, which include representatives of the community in their organization; III) Confessional: those constituted by a group of natural persons or by one or more juridical persons which meet the specific confessional orientation and ideology and the provisions of the previous section; IV) Philanthropic, according to the law.” (Art. 21)<sup>25</sup>

The OCDE defines the percentage of private enrolment as “the number of students in primary enrolled in education institutions and not operated by a public authority but controlled and managed, whether for profit or not, by a private body (e.g., non-governmental organization, religious body, special interest group, foundation or business enterprise), and as a percentage of total number of students enrolled in primary education” (UIS/OECD Stat, 2018)<sup>26</sup> Table 2.2. displays the data in the case of Brazil. The data reveals an increment of 55 percent from 2007 to 2015 in primary education private provision of schooling. In secondary education, as a percentage of the net enrollment rate, the proportion increased from 73 percent to 81 percent, an increase of 8 percent.

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<sup>25</sup> Original in Portuguese: <https://cm-chapeco.jusbrasil.com.br/legislacao/991651/lei-complementar-48-97#art-21>

<sup>26</sup> Retrieved from: [http://data.uis.unesco.org/OECDStat\\_Metadata/](http://data.uis.unesco.org/OECDStat_Metadata/)

*Table 2.2. Brazil School Enrollment, Primary, Private (% of Total Primary) and Brazil School Enrolment, Secondary, Private (% Net) - Years 2007 to 2017*

Brazil	Brazil School Enrollment, Primary Education, Private, as Percentage of Total Primary, Both Sexes	Brazil School Enrolment, Secondary Education, Private, as Percentage of Net Enrolment Rate, Both Sexes
2007	10.67	73.18
2008	12.08	...
2009	12.81	78.80
2010	13.78	...
2011	14.69	77.96
2012	15.86	78.53
2013	16.17	81.88
2014	16.86	82.83
2015	16.59	81.35
2016	N/D	N/D
2017	N/D	N/D

Source: UNESCO Institute of Statistics (2018). *Brazil*. Montreal, Canada: United Nations Educational, Scientific, and Cultural Organization / Institute for Statistics.

## 2.2. Public-Private-Partnerships in Education

Worldwide, the legislation and regulations on Public-Private-Partnerships (PPP) in general have been improving in recent years. Countries differ in the way they define the concept of PPP in their laws (World Bank, 2012). Cases of PPP relate to different models or types. For instance, in Latin American and the Caribbean region, Chile uses the concept of providers for educational services, especially through the Chilean voucher system operated by franchised and independent private schools (Barrera-Orsorio, Patrinos and Wodon, 2009). Venezuela utilizes the concept for faith-based organizations providers in education in the case of “Fe y Alegría”, a confederation of Jesuits schools targeting disadvantaged youth, expanded in 15 Latin American countries (Allcott and Ortega, 2009). In Africa, South Africa leads as a provider of chains of schools. In Central African countries, the Program for Education Development of Equatorial Guinea (PRODEGE), a consortium of one private company, one international NGO, and the MOE of Equatorial Guinea is an example of PPP defined as the provision of educational services to improve

quality of teachers through INSET to 1,000 teachers (Fhi 360, 2012). Brazil (Law No. 11079/04) utilized the concept to define the providers of supplemental and support services in different areas, including education and health.

In Brazil, despite the legislation of PPP, there is a need for more evaluations such as Quality Assurance Management (QAM) to be at the level of other countries where legislation lasts longer (Reis and Cabral, 2017). Emerging educational partnership models between the private sector and Government of Brazil like NAVE/NATA model of PPP in Rio de Janeiro; Pitagoras Network Schools in Belo Horizonte; and Positivo Network Schools in Curitiba are only a few of the good examples that researchers are examining in recent years. According to the literature (ADB and UNICEF, 2011), PPP definitions may vary, but generally share some common characteristics “a formal relationship between partners, most often in the forms of contracts, with defined outcomes for a specific period of time” (p. 17). Regardless if non-states providers are commercially driven private chain-schools, Non-Governmental Organizations (NGOs), religious faith-based organizations, private entrepreneurs, philanthropy associations, or community-based organizations, there is always a shared risk between public and private sectors that make them attractive for investment.

In Brazil, the PPP concept is defined in the National Law No. 11079/04 as follows: “public-private partnership contract is a signed instrument between public and private entities to establish a link that obliges the parties for the implementation or management of services and activities of public interest, in which funding and responsibility for investment and exploitation incumbent in whole or in part, the authority responsible for private services, observing the following principles: (1) in missions of State compliance and efficiency in the use of the resources of the society; (2) respect for the interests and rights of recipients of services and private bodies responsible for its implementation; (3) non delegation in functions of regulation and for the exercising of power; (4) fiscal responsibility in the preparation and implementation of contracts; (5) transparency of procedures and decisions; (6) appropriation of the risks according to the capacity of the

contracting parties and economic maintenance of the partnership project management.” (quoted in Soares, 2006, original in Portuguese)

Efforts for keeping more children in school with more quality of learning outcomes were brought to the international community through the structure of Public-Private-Partnership in Education (PPPE), which entails “the public and the private sectors working together to achieve important educational, social and economic objectives” (Wang, 2000; Uribe, Murname, Willet and Sommers, 2006; LaRocque, 2008). It implies moving from a model of government delivery of public services to a wider variety of providers implementing activities as partners, through shared responsibilities and which bring alternative operators into the education system. The exploration of diverse ways of financing and providing educational services at primary and secondary school levels for governments are possibilities within PPP in education and its contracting models, contribute to achieving a country’s education goals. This dissertation contrasts with the concept of privatization in education (Levin, 2001), where the transfer of control is permanent in ownership and financing from one entity to another, whether it is a public, private, for-profit or a non-profit entity, but limited and rigid. PPP in Education implies flexibility.<sup>27</sup>

Several key studies (Alderman, Orazem, and Paterno, 2001; Hanushek 2007; Davis, Kearney, Sanders, Thomas, and Leon, 2011) specify that parents are increasingly sending children to private schools. Lassibile, Tan, and Sumra (2000), in a study of the lessons learned on the expansion of private secondary education in Tanzania, specify that “public resources for education are limited and governments have traditionally relied on private education, particularly at the post-basic levels, to meet the excess demand for education. Even when excess demand is not a major issue, advocates of private education

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<sup>27</sup> In this context, Brazil embarked on education reforms -i.e., PPP in Education Law was enacted in 2004, and was largely focused on equalizing educational opportunities as part of a broad development strategy. In Japan, the legislation allows providers of private schools to engage in the education of children of immigrant and/or temporary worker’s families. The legislation provides clear conditions in which each private school or chains of schools may provide their services (Pitagoras Network, 2018).

note that private schools can be more efficient than their public-sector counterparts, delivering more value in terms of student achievement per investment of resources.” (p. 12) The impact of privatization of schools and its different forms in developing countries emerge as a point of debate in international policy context as a counter-argument to free and universal access to education (Levin, 2001; Sommers, McEwan, and Willms, 2004; Patrinos, 2012; Tooley, 2013). Over the last decades, private schooling (and low-private schooling) has increased and improved in quality, targeting socially and economically disadvantaged groups in developing countries.

In their study, Patrinos et al. (2009) utilize a compilation of data analyzing cases of partnerships in education around the world. They start with how PPP can help countries reach the education goals (i.e., increase the access to education of good quality for all, serve as an innovative means of financing education, contribute to the diversification of the business model), in addition to emphasizing the implications for equity in cases in which public schools do not reach the poor, but moderate levels of fees targeting the non-poor can be crucial resources for the expansion of the education services.

Despite the different ways the private sector is involved in education (e.g., vouchers, subsidies, capitation grants, stipends, and/or contracts), its advantages (i.e., parental choice, school competition, accountability), and disadvantages (i.e., lack of environment for the provision of PPP at government level), the study focuses on the parental choice of high-quality schooling, school competition, and the best academic performance at a lower cost. (p. 61) The methodology applied summarized cases by showing methodologies through characterizing financing systems.<sup>28</sup> Education service delivery initiatives –like Pitagoras Network Schools in Brazil, appear as “contracting of

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<sup>28</sup> For instance, vouchers systems appear as “targeted scholarship programs.” Subsidies –like in Argentina, appear as “payments of subsidies to students of private schools.” Capitation grants –like in South Africa, appear as “funds made available to all not-for-profit schools (government, community and faith-based schools) to help supplement running costs and improve the learning environment.” Contracts to provide education services –like Escuela Nueva Foundation in Colombia, appear as “equipping and maintenance of IT laboratories.”

private schools for the delivery of education services or for delivery of specialist curricula”. The key findings show “that good design is not sufficient to ensure the success of a PPP in education. It must also be effectively and efficiently implemented.” (p. 67) “PPP can increase access and improve quality of education.” (p. 68) “Nevertheless, ensuring academic quality in this kind of education system is a challenge.” (p. 69) In this study, we conceptualize the PPP as a facilitator of making quality education accessible; especially for minority population children, as a differentiated business model especially for MICs like Brazil, and for helping to achieve the SDG’s, specifically Goal 4. This dissertation uses a unique data set of the PNS related to student learning outcomes, filling the gaps Patrinos et. al (2009) recommended in their study (i.e., quantitative performance indicators, such as standardized tests; and qualitative performance indicators, such as school and parents surveys).

Critics argues the potential risks of the PPPs are many and from various sources (Patrinos et. al 2009; UNICEF and IDB 2011; Reis and Cabral, 2017). The risks are (1) the complexity of contracting, as result of the lack of the governments’ capacity to design, implement and monitor the contract, (2) the lack of capacity of the PPP to provide education services, (3) the loss of accountability of PPP to governments, as the result of weak policy frameworks of limited government capacity. Hence, “empirical evidence suggests that education systems in which schools are publicly funded but privately operated are associated with better student performance.” (Schütz, West, and Woessmann, 2007 quoted by Patrinos et al., 2009, p. 15)

Contracts provision is the way governments deliver education, through two types. The old type of contract provision is when government funds existing private schools to increase access and to enhance quality education for poor students and by introducing school competition to promote efficiency. The recent type of contract provision occurs when governments make contracts with private schools to provide what the public sector lacks: inputs and services with which they introduce new pedagogical skills and management efficiencies. Contracts for education-related services include services and

inputs, as management, subsidies and vouchers, school construction and maintenance, and professional services (e.g., teacher training, curriculum design and textbooks provision). Outsourcing education-related services are one type of PPP, which brings high-quality education through the knowledge of effective pedagogical practices.

*Governments can contract private organizations that have had proven successes with their education methods to provide certain key services such as teacher training, curriculum design, textbook provision, and supplemental services for public or private schools educating poor students.*

Patrinos et al. (2009, p. 22)

Coincidentally, Latham (2009) found that in these capacity-building programs, private sector partners provide support to schools through a variety of areas such as curriculum and pedagogy, management and administrative training, textbook provision, teacher training, and quality assurance. (p. 4) Public operation of schools is negatively associated with student performance in mathematics, reading, and science, while public funding of schools is negatively associated with student's performance in examining the association between PPP and student achievement using student-level data for thirty-five OECD countries (Woessmann, 2003). In many countries, the provision of private education differs. Denmark and the Netherlands have a long history in their provision of private education as per-basic pupil financing. More recently, African and Asian countries are growing in their provision of low-cost private schools aimed at students who cannot pay the high tuition charged by the elite schools or who fail to meet the eligibility requirements of high-quality public or government-funded private schools (Lewin and Sayed, 2005). Evidence from the United States, Colombia, Qatar, and Brazil show that the government's contract with private partners using the franchise model is useful and takes advantage of good management and financing practices, transferring knowledge to public entities, where both parties benefit (Patrinos et al., 2009).



### **2.2.1. The Brazilian Pitagoras Network Schools**

The concept of the Brazilian Pitagoras Network Schools (PNS) is defined by Rodriguez and Hovde (2002) as a “network of primarily private schools which subscribe to programs through agreements to purchase Pitagoras textbooks for all students in all grades” (p. viii). The authors present the process of the didactic materials by the level of education coinciding with the idea of the network by sharing those materials among the PNS. However, this is not the only characteristic of the PNS, which aligns the MEC curriculum guidelines with teaching materials, pedagogical practices, sharing the management, reporting and working methods to the board of directors, with “student performance as an indicator by which schools are measured.” (p. 21). PNS is one modality of the Public-Private Partnership Network Schools (PPP-NS).

According to Tooley (1999), the ‘chain-schools’ are private schools that exhibit the following characteristics: (1) a brand name recognized by the community; (2) wide innovation, including the growth of chain-schools, application of technologies and innovative teaching and learning systems integrated vertically; (3) private schools for the poor (in some cases and countries). The education sector in developing countries is relatively small and biased towards the education of elites in all levels: primary, secondary and tertiary. However, the provision of private education is expanding rapidly, especially in those countries that have elements of innovation (p. 27). The fact that a network school is a recognized educational brand is particularly important because it helps parents and students rely on local businessmen who created the school. It is worth clarifying that certain network schools are franchises, whose quality control procedures are recognized and respected in their country of origin and worldwide, which facilitates the parental choice. In a second study, Dixon and Tooley (2003) describe the case of the schools for the poor in India. The data set consist of 15 schools in the Hyderabad School District with public and private school pupils in the cohort 2000-2001. The methodology includes descriptive statistics containing average school fees, the highest level of teacher formal qualifications, school expenditure and surplus, children satisfaction with aspects

of their schools and community factors associated to the sustainability of private schools serving low-income families. The results of the study show that quality of education in schools serving low-income families can sustain themselves and “the desirability of private sector involvement in serving the educational needs of the poor merits discussion and debate within the international development communities.” (p. 23)

Some authors distinguish between the public/private funding and public/private operation of schools. The share of public funding in privately operated schools differs across countries. According to Woessmann (2003), most privately-operated schools in Brazil do not receive funding from public sources while examining the efficacy of four types of PPP in terms of student’s outcomes across OECD PISA countries. In the case of PNS, the support is mostly with regard to the recognition of school and private funding from private companies despite the school differences in public vs. private involvement in operation and funding of schools related to student learning outcomes, suggesting that privately operated schools are more efficient in terms of student’s performance and innovative management.

In terms of recruitment, selection, and appointment of teachers, the process is competitive and carried out by the private partner. There are incentives for teachers, beginning with two-year job appointments, with the possibility of an extension. However, the extension of the job is conditional to avoid acculturation, that is, the result of a process in which a person acquires a new culture (or aspects of it), usually at the expense of its own culture and involuntarily. In the case of the Brazilians in Japan, it is expected that teachers who work more than two years in the position are removed from school due to contract termination and sent back to Brazil. Otherwise, they risk (in terms of their employers) losing their culture to the detriment of Japanese culture. To have them work only two years makes it possible for the employer to have ‘fresh’ Brazilian culture in new teachers appointed.

The pedagogical and curricular innovations relate to the social-efficiency approach to education, with a summative evaluation “to ensure conformity to scientific

procedures and to demonstrate accountability to the client, using objective instruments” (Schiro, 2008). Thus, through the utilization of teaching materials such as CD-ROMs, internet access sites, pod-casts -among other new technologies, students of the PNS get the most recent information to construct the baseline knowledge. The PNS spreads in cases where there is demand, especially offering the innovative curriculum and school management support to private schools or to municipalities’ schools. Despite the emphasis on outcome indicators such as achievement measured in test scores and accountability to parents, the authors argue that they do not sufficiently captures the quality of education. In this study, the criteria of describing the targeted schools and the models are based on (1) school history, and (2) the role of PNS as a chain of school in each of the targeted schools. In addition, the schools are utilizing the didactic materials of PNS.

#### **2.2.1.1. PNS History**

In Brazil, the history of chain-schools started in 1960, with eight large chains of private schools (Tooley, 2008) – several of which go to to university levels and also serve as educational television stations. The largest, based in São Paulo, has about 500,000 students across Brazil. Each of the management members of the chain-schools is convinced that to stay ahead of its competitors, it has to invest in quality improvements and in innovation in the classroom. (p. 28)

In Japan, Brazilian basic and secondary PNS was established in 1997, invited by the Government of Japan for sustaining the education of the Brazilian-Japanese heritage children while living overseas (PNS, 2009). At least two of the 54 educational institutions established in Japan belong to private partnerships network schools. These private schools do not adhere to standards set by the Japanese Ministry of Education, Sports, Science and Technology (MEXT), but by those set by the Brazilian Ministry of Education and Culture (MEC). The homologation of Brazilian Government school’s results in a division into three categories: (1) recognized, (2) non-homologated, and (3) in the process for being

recognized (Yoshimura, 2008). Pitagoras Network Schools and Positivo Network Schools are examples of recognized network schools by the Japanese Government. By September 2009, PNS had 654 schools in total, six of them in Japan. The number of students in Higher Education is 45,000 students; in Basic Education 226,000 students, from kindergarten to university levels. As mentioned before, PNS was invited by the Japanese Government because they are renown and respected throughout Brazil and overseas for supporting the children of temporary worker parents with schooling.

#### **2.2.1.2. Key Characteristics of PNS**

Broadly speaking, chains of schools respond to key characteristics, coinciding to the ones of the charter schools, which are: autonomy for accountability; choice among public schools for families and children, innovation, competition in offering quality of education, and -in some countries and contexts-, private schools of low cost for the poor (Tooley, 1999; Levin, 2001)<sup>29</sup>. Private education in developing countries usually is associated in people's minds to high quality, expensive private schools catering predominantly to children of the elite. According to Tooley (2005, paraphrasing an IFC study, 1998) an International Finance Corporation study revealed a completely different representation. "The IFC was particularly concerned about private educational opportunities in developing countries for the poor which satisfied the following criteria: (1) they are profitable (or make a surplus); (2) they are financed totally (or almost totally) from student fee income; (3) they charge comparatively modest fees, and hence are accessible to many

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<sup>29</sup> Tooley (2009) looks at the issues of donations and endowments, for-profit versus not-for-profit, and the management of the risk of nonpayment of tuition fees. In his study on the status of India's low-cost private education, he describes the existence of private schools in the slums of Hyderabad. Between 2003 and 2005, the author explores the nature and existence of private schools in India, Ghana, Nigeria, Kenya and China, by comparing the provision of public and private schools for the poor. The outcome of the investigation indicates that, in urban areas and peripheral-urban areas (i.e., slums and shanty towns), most school-aged children are receiving schooling in low-cost private schools. Children enrolled in low-cost private schools significantly outnumber the children enrolled in public schools, after controlling for background variables and the school choice process.

socio-economic groups, not just the elite. The private schools respond to ‘the technological imperative’, the importance of brand name and certification, how they have expanded and raised capital for that expansion, and their quality control procedures.” (Tooley, 2005, p. 43)

PNS is likely to have significant success by seeking factors of profitability, educational efficacy, and equity, as follows: (1) Concerned with promoting its brand name. (2) Innovate, particularly in terms of technology. (3) Expansion into local, regional and international markets, and benefits by integrating horizontally, laterally or vertically. (4) Use of franchising for expansion, either through collecting royalties, or selling their pedagogical materials, allowing for expansion. (5) Careful management the risks of non-payment of tuition fees. (6) Deployment of successful management. (7) Ensure that all resources, including space, teachers, and technology, are used efficiently. (8) Employ innovative technology. (9) Employ dedicated researchers to increase efficiency. (10) Limited usually to a very modest start-up capital, and has funded all their expansion through self-generated cash flow.

In terms of quality of education, the PNS as a successful education business is likely to use recognized certifications, and to have vocational certificates endorsed by relevant professional bodies; be concerned with quality control, particularly for developed operational chains; and seeks to employ innovative technology, to enhance the learning process. In terms of equity and social justice, the PNS: (1) Maintains its own student loan scheme, which could be financed through donations, but self-financing in the medium term. (2) Cross-subsidies some of its student places or courses. (3) Seeks good relations with the public education sector. (4) Has a social responsibility program, helping the local or national community. Finally, it seems to be irrelevant as a successful chain school whether it: (1) has endowments or donations -although it may be that donations undermine a company’s incentives to innovate and work efficiently. (2) Is for-profit or not-for-profit. (3) Owns or leases property –this depends on local circumstances (PNS, 2008).

### 2.2.1.3. Policy and Legal Framework

The accreditation system of the private chain-schools in Japan by the Brazilian Educational System do not adhere to the standards set by the Japanese MEXT, but set by the Brazilian MEC. Hence, Pitagoras Network Schools, Positivo Network Schools<sup>30</sup>, and Corporation Systems<sup>31</sup> are examples of network schools or chain-schools. PNS is an organization created in April of 1966, emerging the Pitagoras Foundation in 1999 to enable educational projects in public and private institutions. The organization operates in all the states of Brazilian territory and in foreign countries (i.e., Angola, Canada, Egypt, Iraq, Japan, Mauritania, Paraguay, and United States), being considered a reference for Brazil outside its frontier. Its mission is to improve the management of the educational organizations contributing to the development and improvement of the quality of education (Interview, 2007; Kroton Educacional S.A., 2018).

Miscellaneous schools and schools for foreigners in Japan are characterized as schools for nationalities to which the Japanese government gives consent to open divisions. This leads to some critiques in the way these schools were established, in their obstacles for receiving funds, in the tradition and culture they promote, in the vernacular language as medium of instruction they utilize, and in the parental enrolment decision to support or neglect support to such schools (AEBJ, 2008). Schools for foreigners or miscellaneous schools in existence correlate to the minority groups who sustain them.

The status of Brazilian schools in Japan was determined by the following documents (MEC, 2011): Resolution No. 1 (1999); Resolution No. 2 (2004, revoked in 2006) on school's accreditation system based on the schools intention to be accredited

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<sup>30</sup> Positivo Network Schools was created in December of 1972 in a small classroom in downtown Curitiba. Initially, its mission was to provide a preparatory course for students who were going to take the university entrance exam. Actually, several schools in Japan are using their teaching and learning materials as the guidelines for teacher and student's practices, as in the schools in Hamamatsu city (Shizuoka Prefecture), and Minami-Alps city (Nagano Prefecture), among other school units all over Tokai region.

<sup>31</sup> Corporation Systems are founded by Japanese firms with the availability of Brazilian professors and Japanese administrative staff (Interview, 2008).

(homologated) for the Brazilian MEC, revoked in 2013. Thus, from the perspective of the Brazilian Embassy in Japan and the MEC in Brazil, Brazilian schools in Japan solicit the accreditation to the schools based on: (1) curriculum, (2) management with the provision of names of directors and teachers, (3) teacher's credentials and profiles, and (4) cadaster of students. In the educational census of 2010, the 54 schools in Japan were censused (MEC, 2010). All PNS must follow common quality control procedures, involving their version of Total Quality Management (TQM) with standardized tests and surveys of parents.<sup>32</sup> For instance, TQM workshops have been attended by over 28,744 professionals from all over Brazil and the model has been exported to the United States in 2009 (Kroton Educational S.A., 2015). The Total Quality Office has become a separate independently owned group company, the Pitagoras TEC; involved in the preparation of consultants for the implementation of TQM in education, benchmarking in schools, and problem-solving for continuous improvement.

Broadly speaking, the quality management program is based on the articulation of a school's vision and mission, with five objectives: (1) high performance for all, and improvement of institutions; (2) enhanced competence of the teaching workforce –to enable high student performance; (3) social responsibility program; (4) relations of partnership –in particular between parents and schools; and (5) TQM. These are then outlined in more detail in the General Improvement Plan (GIP), as goals, measures, and results that demonstrate whether the outcomes have been achieved. For example, the first objective of 'raising standards' is spelled out in terms of 'specific competencies'; goals such as 'each student must be able to read and understand different kinds of materials, and apply them at the level of their own study level'; 'each student must write, read, listen and use information technology to communicate', among others. These measures and results are categorized in terms of passing external examinations, Vestibular examinations, and internal evaluations.

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<sup>32</sup> See Appendix A -original in Portuguese.

Similarly, improving the competence of the workforce is formulated in terms of goals such as ‘the professionals will be involved in making decisions that most affect them’; ‘the opportunities for personal and professional development must reflect the strategic directions of the group’; ‘the evaluation tools of the professionals must provide incentives for continual improvement’. The appropriate measures and results include ‘percentage of professionals engaged in a quality improvement program’; ‘perception of professionals in own involvement in making decisions’; ‘number of opportunities in education and training which reflect the strategic directions’. The social responsibility is defined by goals such as students participating in social projects, and school leaders participating and taking the initiative. Measures and results include the number of projects and evaluation of the effectiveness of these projects, and the perceptions of the learning community. Improving relationships refers to goals such as ‘each school will involve in an active way the families to reach the highest level of skills of the students’. The measures and results include several initiatives which involve families, together with the evaluation of their effectiveness and the perceptions of all those involved. (Kroton Educacional S.A., 2008)

#### **2.2.1.4. PNS Mission and Vision**

Brazilian PNS in Japan as a model of PPPNS are originally schools that wish to create new curricula; or educational private schools of chains (Tooley, 1999). Those schools established, in part, for providing new pedagogical systems and, in the case of the Brazilians schools in Japan, for supporting the Brazilian-Japanese heritage children when living overseas from Brazil (Yanagida Nakagawa, 2005). In these type of schools, the Brazilian national standards and the pedagogical project is aligned with “The Pillars of Education” as identified by the International Commission on Education for the Twenty-First Century (Delors, 1996 -quoted in the UNESCO Universal Declaration on Cultural Diversity, 2001: (1) “learning to know”; (2) “learning to do”; (3) “learning to be together”; and (4) “learning to be.” (p. 7) It is imperative to note that each chain-school



unit differs in parts in their schools' mission and vision, especially because the population of students and families they supply, and the contextual factors of each case are different. For an example of the mission and vision of the "Model" chain-school units of Japan, see Appendix A-a.

### **2.3. PNS in Brazil**

The PNS Headquarters (hereafter PNS HQs) was inaugurated in 1972. It is located in the neighborhood Cidade Jardim in the North side of the city of Belo Horizonte, State of Minas Gerais, Brazil. The school infrastructure consists of playgrounds (3), indoor and heated swimming pool (2), sports grounds (6), multimedia rooms (3), computer rooms (2), chemistry laboratory (1), physics laboratory (1), sciences laboratory (1), biology laboratory (1), games room (1), music room, canteen with nutritional support (2), libraries (2), toilets (10), 300 seat auditorium, art gallery (1), nursery (1), number of rooms in general (49), classrooms: Grade 8 (3); Year 1 (3), Year 2 (3), and Year 3 (4).

As for 2011, the number of teachers from Grade 5 of Primary Education to Year 3 of Upper Secondary Education was forty (40): twenty-three (23) female teachers and seventeen (17) male teachers. The PNS teachers at PNS HQs are 40 years of age on average. All are graduates from recognized universities, with licentiate degrees (38/40) or master's degrees (2/40). On TCPD, the PNS teachers are able to take learning courses, in person or distance learning courses.<sup>33</sup> In the modality "Integral Education", the student remains in the PNS after the regular shift, without leaving the premises of the school, and after completing a range of activities: literary classes, home activity/tasks guidance, English as culture, interdisciplinary projects, circus, gastronomy, music, yoga, judo, swimming and ballet classes, and cultural visits. Those activities serve for the student's involvement in projects that contribute to the formation of values and training of the student as a citizen. In terms of the supply provider to parents, the PNS administrators

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<sup>33</sup> Data obtained by an interview with the Operational Coordinator of the PNS in Brazil on March 20, 2011.

believe their schools offer the best cost-benefit of the market for parents, where the child will learn, interact, and share knowledge and experiences.

The modality of PNS in Brazil is double-shifting system schooling<sup>34</sup>, one-grade classrooms. School days in PNS in Brazil are typically 4.5 hours long, which is considered as a low figure of teaching and learning hours as compared internationally (Nogueira, 2003).

#### **2.4. PNS in Japan**

Regarding the situation of the PNS in Japan, the Japanese policies towards foreign workers and the education of the foreign workers immigrant's children do not allow them to be fully immersed in schooling, as parents are only considered as 'temporary workers.' Their children are considered as 'temporary students' or "out-of-school children (OOSC)" depending on the case (Kamiya, 2008 -quoted in The Japan Times). The highly selective mechanism of the Brazilian educational system may intensify the importance of social capital and cultural capital because entering the university depends on family background, secondary school grades and national entrance examination (MEC, 2007; Mendes and Lazzaroti da Costa, 2015). Often, the family is an extension of the culture, independent of the context (UNESCO, 2009; Shapiro, 1996). For Brazilian parents, investment in children's education becomes a highly valid option in Japan. Less fortunate Brazilian families may not normally afford to school their children in the PNS in Brazil while, in Japan, this possibility becomes real.<sup>35</sup> For those parents who had desired ambitious pedagogical projects for their children, schooling them in schools under the brand of the PNS, which are considered for the elite in Brazil, is an interesting option.<sup>36</sup>

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<sup>34</sup> According to Bray (2000), double shift school is "a type of school which operates in two shifts, with one group of students in the building early in the day and a second group of students later in the day."

<sup>35</sup> From an interview to a PNS school coordinator held on September 25, 2009 in PNS B, Kariya City, Aichi Prefecture, Japan.

<sup>36</sup> Brazilian PNS monthly fee is JPY40,125 for students attending the entire day (e.g., in Pitagoras schools in Hamamatsu and Kariya cities, the time bounds from 8:30 a.m. to 3:30 p.m., while in Minami-Alps city

On the other hand, for Brazilian children of Japanese descent, having access to formal Brazilian education in Japan, is recognized as important by the Government of Brazil (GoB). As a complement to basic education in Japan, these children will be able to: (1) have access to education according to Brazilian curriculum standards and credentials; and (2) have certain rights to compete for places in public universities when they return to the mother country (Yoshimura, 2008).

Kroton Educacional S.A. is a Brazilian education private company with fifty-two years of experience, at the vanguard of educational reform, emphasizing quality, and promoting social responsibility, with different brands (PNS, 2009; Kroton Educacional, S.A., 2018). The Pitagoras Network Schools (PNS) is the most famous brand of this education company dedicated to all levels of education, from preschool to high school levels, and university. The mission of this network school is to serve persons and institutions, to attend to their educational needs, and to guarantee superior results. The school's goal is the high performance of its students.<sup>37</sup> PNS puts quality and management efficiency as its priorities and work with more than 800 associated schools in Brazil under yearly contracts. The contracted schools provide services from textbooks delivery to teacher training to PNS and are expected to take part in PNS network activities (Patrinos, 2010).

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bounds from 8:30 a.m. to 7:30 p.m.) For students who attend half day (from 8:15 a.m. to 12:30 p.m., included transportation) the monthly fee is JPY29,400. (Asahi Shimbun, October 22, 2009; Yonekura and Masana, 2011).

<sup>37</sup> In Japan, Grades 7 and 8 of Basic Education/Lower Secondary Education are grouped in a multi-grade classroom (i.e., *aulas multiseriadas* in Portuguese), due to the reduced number of students. Upper Secondary School is constituted by three years (Years 1-3) being a single multi-grade classroom with students from 15 to 17 years old. The Brazilian MEC Law N° 11.274 of February 6, 2006, extended Primary Education lasting from Grade 1 to Grade 9, incorporating 6-year-old children incepting 9 years of schooling, compulsory. However, in the case of the PNS, the modality of changing from Grades into Years has been implemented year by year since its inception in 2005. As the result, in this study, Grade 8 is still the last year of the Lower Secondary Education in the case of Japan data set. In the case of Brazil data set, Grade 9 is the last year considered for Lower Secondary Education. Since 2013, the new terminology was installed, with Grades 1 to 9 in accordance to the Brazilian MEC.

The modality of PNS in Japan is one of a shifting system schooling<sup>38</sup>, day-care, multi-grade classrooms. School days in PNS in Japan are typically 7 to 9.5 hours long - from 8:00 AM to 3:00 PM (up to 5:30-7:00 PM for students who need additional support due to the parents work hours).<sup>39</sup>

According to PNS Network (Rede Pitagoras, 2009 2018), the schools simulate the entrance examinations of the Brazilian national universities, both Vestibular exam and ENEM exam. The target is Lower Secondary School students, Grades 8-9, and Upper Secondary School students, Years 1-3. Students are offered a referential list to pass the entrance examination based on the Brazilian universities real scores of previous years' university entrance examinations. For example, in 2009, the range is from 36 percent in Arts (i.e., Music Baccalaureate - flute) to 94 percent in Production Engineering (see Table B-a, Table B-b, Table B-c and Table B-d in Appendix B.) However, taking the case of one PNS school in Japan, the students are low achievers. For instance, in 2009, students have finished the second round of the simulation of entrance examinations. The results for Year 1 show percentages ranging from 31.7 percent to 63.3 percent. For Year 2, the range was 28.3 percent to 53.3 percent. In Year 3 the range was 36.7 percent to 50.0 percent. For the first ten students in the second simulation of the entrance examinations in 2009, the results range from 45.0 percent to 63.3 percent for correct responses on the Portuguese language test (Rede Pitagoras, 2009).

Appendix B shows a series of tables with the case of PNS in Japan. In 2007, eight students graduated from PNS A and, in 2008, the number rose to 19 students. Similarly, the number of students shown to continue their enrolment in Upper Secondary School of the PNS after completion of Grade 8 of Lower Secondary School was 6 students in 2007, and 10 students in 2008. One (1) student continued to study in a Japanese Upper

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<sup>38</sup> One-shift school is a type of school which operates in the school building from early in the day until later in the day with the same group of students.

<sup>39</sup> According to Shimizu, Nakajima, and Kaji (2014, quoting Sakuma, 2006) the Brazilian schools are in charge of keeping the children in school until late. (p. 108)

Secondary School in 2008, while this did not occur in 2007. In 2007, 1 student entered Brazilian Upper Secondary School and, in 2008, there were 2 such students. Three (3) students did not continue Upper Secondary School in 2008 (drop-out or move to another school in the city). One (1) student graduated from Lower Secondary School and returned to Brazil in 2007, and 3 students returned to Brazil in 2008. Appendix B also displays the status of graduate students from the PNS (in this case, the school in Hamamatsu) as workers or as university students for 2007 and 2008, respectively. The number of PNS graduate students from Year 3 of Upper Secondary School is 9 students for 2007, and 9 students for 2008, respectively. Likewise, Table 2.3. displays the number of graduates who enter universities or are working as per the year 2007 and year 2008 in Japanese and Brazilian universities, respectively.

*Table 2.3. Number of PNS Graduates in Universities or working*

	2007	2008
Japanese University	0	0
Brazilian University	2	0
Do not have information	3	0
Working	4	4
Not Working	0	2
Returned to Brazil	0	3

Source: Pitagoras Net, PNS A Hamamatsu, Japan, September 2009.

In 2009, 22 students from the PNS A of Japan passed the entrance examinations in Brazilian and Japanese universities, as illustrated in Table 2.4. (Pitagoras Net, 2009). Those are paid examinations, while attendance at the federal universities has no tuition cost. Some of the graduated students from the PNS remain in Japan for a period of two to three years after graduation as blue-collar workers (factory workers), to save money and return to Brazil where they can afford a superior education (Interview, 2009). However, a significant number of students do not succeed. Students who enter and pass the university entrance examinations in Brazil usually do so at the University of São Paulo,

University of Brasilia, and the University of Parana. A cadre of graduates enter private universities. The career fields chosen are primarily related Social Sciences, Natural Sciences, Humanities, and Business or Administration.

*Table 2.4. Number of Students from PNS who passed the University Entrance Examination in Brazilian and Japanese Universities*

No.	Gender	Place	University/Faculty	Career
1	F	São Paulo	University of São Paulo –USP, Faculty Anhembi Morumbi	Physiotherapy
2	F	São Paulo	University of São Paulo –USP, Faculty PUC	Scenic Arts
3	F		University of Mogi das Cruzes -UMC	Nursery
4	F	São Paulo	University of São Paulo -USP	Librarian Economics
5	F	Brasília	National University of Brasília -UNB	Physics
6	F	Bauru	UNESP of Bauru	Journalism
7	F	São Paulo	UNESP of São Paulo	History
8	F	Parana	National University of Parana	International Relations
9	M	Parana	Law – Parana	Law
10	M	São Paulo	University of São Paulo –USP	Economics
11	M	Rio de Janeiro	University of Rio de Janeiro	Medicine
12	M	Maringa	UEM – Maringa	Chemistry Bachelorette
13	F	Maringa	CESUMAR – Maringa	Physical Education
14	M	São Paulo	São Judas Tadeu	Computer Sciences
15	M	São Paulo	Comercio Exterior	Business Administration
16	M	São Paulo	UFMG UNOESTE	Zoo-technical Zoo-technical
17	M	Parana	Direito – Parana	Computer Sciences
18	M	Jales	FATEC – SP, Unidade de Jales	Agreebusiness
19	M	Taubate – SP	UINTAU, Faculty of Taubate – SP	Management in Human Resources
20	F	Japan	University Sugino, Fashion College	Fashion Design
21	F		Faculty SCELISUL Registro – SP	Biology
22	F		UNIP	Pedagogy

Source: Created by the Author based on the Pitagoras Schools (2009). *Bulletin*, Hamamatsu: PNS.

## **2.5. Comparative Perspective Japan and Brazil**

For some scholars (Levin, 2001; Tooley, 2009), the PNS are considered “private schools for the poor” while, for other scholars (Nogueira, 2003; Catanni and Dos Santos Kieling, 2007), PNS are considered “schools for the elite.” The parental choice for a well-known brand like PNS is reasonable, and for Brazilian parents this brand represents a school for the elite, when they themselves are blue-collar workers in Japan. In other words, from their perspective as blue-collar workers in Japan, Brazilian parents make a decision to educate their children in a school considered elite with the reputation of being only for white-collar workers (as it is known in Brazil). Hence, parents believe that choosing this brand school for their children will allow them upward social mobility upon returning to their home country, not taking into account the actual level of the schools, but rather the brand reputation. In Japan, the choice is logical because of the chain-school PNS is accessible for them in terms of the language medium of instruction, curricula, and credentials, as well as being financially within their means.

### **2.5.1. PNS Case Studies in Japan and Brazil**

#### ***Case Study 1: The Three PNS in Japan***

The PNS in Japan is comprised of three private for-profit schools that are commercially driven<sup>40</sup> as of December 2011. They are situated in the cities of Hamamatsu (Shizuoka Prefecture), with 54 students; Kariya (Aichi Prefecture), with 144 students; and Ōta (Gunma Prefecture), with 156 students. The three PNS have shared characteristics such as that they do not own their building, they were opened approximately during the same period (end of the 1990s), and they are of similar size in terms of students’ populations.

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<sup>40</sup> Commercially driven means, in this study, private.

**School A:** School A is located in a residential neighbourhood named Tomitsuka, West of the Sanaru Lake in the City of Hamamatsu, Shizuoka Prefecture, Japan. The location is within easy reach for students residing in Hamamatsu and neighbouring cities such as Toyohashi, Iwata, Kikugawa, Kakegawa, Inasa, and Hamakita, accessible by Japan Railway (JR) train and local bus. The city of Hamamatsu has a population of about 800,000 inhabitants (PNS 2011) with large industries such as Yamaha Corporation, Kawai Musical Instruments Manufacturing Corporation Limited, Honda Motor Company Ltd., and Suzuki Motor Corporation. Fishing industries and agriculture, especially the production of the most famous Japanese tea, are the economic sectors of Shizuoka Prefecture. Brazilians work in all these industrial segments, forming the largest community of Brazilians in Japan.

School A is considered a Category II (Community School) under the legal framework of Brazilian private institutions. School A is a Homologated School (Parecer MEC/CNE/CEB No. 29/2000, homologated on October 10, 2000). School A has a School Principal (shared by the three PNS), a School Coordinator (who is, in turn, the Biology teacher), a secretary, 1 English language teacher, 1 Portuguese language teacher, 1 Japanese language teacher, 2 mathematics/physics teacher, 1 art teacher, 1 physical education teacher. Several teachers commute from one school to another. Students move from the central train station to the school and vice-versa by the school bus, for which employs two Japanese contract drivers.

**School B:** School B is located in the City of Kariya, Aichi Prefecture, near the capital city of the Prefecture, Nagoya. The population is 149,030. The Prefecture is home to leading automotive firms such as Toyota Motors Corporation, Aisin Seiki, Denso Corporation, Nissan Corporation, Mitsubishi Motors Corporation and Brother Industries, Ltd. This region is home to the largest number of Brazilians, with approximately 60,000 people. The School B is centrally located, and within three minutes walking distance from the Japan Railway (JR) Central Station and Meitetsu Nagoya Mainline Station of Kariya.



School B is considered as Category II (Community School) under the legal framework of Brazilian private institutions. It is a Homologated School (Parecer MEC/CNE/CEB No. 29/2000, homologated on October 27, 2000).

**School C:** School C is located in the City of Ōta, in Gunma Prefecture, Japan. Ōta is a modern city with industries as Subaru, Sanyo Electric Corporation, NEC Corporation and other types of manufacturing industries of parts for such industries. Tourism and agriculture are other important industries in Gunma Prefecture. School C was established in 1999. School C is considered a Category II (Community School) under the legal framework of Brazilian private institutions. School C is a Homologated School (Parecer MEC/CNE/CEB No. 8/2000, homologated on March 3, 2000).

The School C building was renovated from a Japanese factory and has 14 classrooms, a computer lab, a multi-activity room, a library, a nursery, and an indoor court. The main objective of School C is to meet the educational needs of Brazilians who reside in the region. School C offers Kindergarten, Basic Education (Cycles I and II) and Secondary School levels (Lower Secondary School and Upper Secondary School). Students are from the cities of Ōta, Oizumi, Isezaki, Tatebayashi, Gyoda, Konosu, Maebashi, Ashikaga, and Honjou. Most of the students are the children of the second and third generation Brazilians. School C works together with the Brazilian and Japanese communities, valuing the two cultures, bringing people closer together and strengthening the friendship, through exchange and commemorative activities of the two countries.

### ***Case Study 2: The Three PNS in Brazil***

The second case study includes three for-profit private schools, two of which are faith-based schools (one is Evangelical-Protestant, and one is Catholic), and one commercially driven (private individuals). The locations of the schools are School D in the City of Marilia in the State of São Paulo, with 830 students; School E in the City of Londrina in the State of Parana, with 806 students; and School F in the City of Curitiba in the State of

Parana, with 818 students. The three schools owned their buildings, differ in the market entry time and in size in terms of student population. The three schools were selected because they have a large number of Japanese descendant's students, as a proposal of the MEC/INEP, and in agreement with the school's management of the PNS Headquarters.

**School D:** School D is located in the neighbourhood of Alto Cafezal in the city of Marilia, State of São Paulo, Brazil. Marilia has about 1,500 *Nikkei* families, placing them together with Londrina, as some of the most important urban centres in Brazil. The neighbourhood where the School D is situated has a long history of *fazendas* (farms) of coffee in the region. School D was established in 1954, under Category II (Community School) of the legal framework for Brazilian private institutions. In 2004, the school opted for the PNS Teaching System. In 2007 the school inaugurated the ECD education level with the Nursery education level for children from 0 to 1 year, Mini-Maternal for children from 1 to 2 years, Maternal for children from 2 to 3 years, Kindergarten for children from 3 to 4 years and Preschool for children from 4 to 5 years. School D completes the level with primary education (basic education Cycle I and Cycle II) and secondary education (Lower Secondary School and Upper Secondary School). School D has two buildings with 36 classrooms, 2 laboratories, 1 library, 3 playgrounds, 1 canteen, 2 swimming pools, 13 toilets (7 female/6 male). The number of teachers are 13 in nursery /mini-maternal/ kindergarten, 11 teachers in basic education (Cycle I), 18 teachers in basic education (Cycle II), and 13 teachers in Upper Secondary Education. Out of 228 students Grades 8 of Lower Secondary School to Year 3 of Upper Secondary School, the number of repeaters in 2010 was one student in Grade 9 and one student in Year 1.

**School E:** School E is located in the neighbourhood of Gleba Fazenda Palhano, in the City of Londrina, State of Parana, Brazil. Gleba Fazenda Palhano is the youngest neighbourhood in Londrina, located in the South of the city. It is considered one of the most preferred neighbourhoods of the city, with more than 40 residential towers, and 15

horizontal condominiums, residency of middle to high-middle class communities. School E is a school of twenty years of antiquity, born as a family basis school with Evangelical-Protestant religious faith, school under the Category I (Private Individuals in the strict sense) and Category III (Confessional School), of the legal framework for private institutions in Brazil. Since 1998, the school offers education from preschool (maternal and kindergarten) to basic education level. The secondary education level (lower secondary school and upper secondary school) was created in 2006. Over the years, changes and innovations have brought credibility and excellence, both in teaching and in relationships with students, parents, teachers, and the entire PNS E team. Students in PNS E pass university entrance examinations (Vestibular tests) in many universities of the country. The PNS E has as infrastructure: laboratories of biology, physics, and chemistry; computer, arts and language 3D projection rooms; a library; sports courts; a nursery; and several areas of leisure. School E has utilized the PNS didactic materials since 1998. The mission and vision of School E includes education of values, concern and investment in the student as an integral person, prioritizing teacher-student relationships, promoting excellence in teaching with transparency and competence. As a result, students demonstrate a high pass rate in the country's universities entrance exams. School E is a leader in the use of advanced technologies in the classroom, offering extra-curricular activities and projects that stimulate talents, creativity and discoveries in the areas of science, arts, sports, and volunteering.

**School F:** School F is located in the neighbourhood of Pinheirinho, in the city of Curitiba, State of Parana, Brazil. Situated in the South of the city, the neighbourhood is one of the main centres of commerce, with a middle-class population, surrounded by industrial districts and the industrial area of the city. School F was inaugurated in 1963, as a Catholic religious faith school, under Category II (Confessional School), considering the legal framework of the Brazilian private institutions. The school facilities are outdoor garden area, parking, reception, chapel, science laboratories, classrooms, children's education

sector, food court, and events hall. School F offers extracurricular activities such as ballet, rhythmic gymnastics, guitar, judo, and soccer. Since 2007, the school uses the PNS didactic and pedagogical teaching and learning materials.

## **2.5.2. Institutional Analysis and Quality of Education of PNS: School Regulatory Framework, School Management, Teachers, Curriculum and Assessment**

### ***School Regulatory Framework***

The educational company is registered on the world market, as a joint-stock company [*Sociedade Anônima* in Portuguese], traded as B3:KROT3 in Ibovespa component. The revenue has increased to USD 1.6 billion in 2017, and the net income increase was USD 703.9 million in 2017. The number of employees is 36,000 (Kroton Educational S.A., 2018). The education partnership works with the mobilization of entrepreneurs (*parceiros*) to subsidize schools in which there is need of support to pedagogical and structural activities. According to the Association of Partners in Education in Brazil (APEB) in 2009, the score of students in the Grade 1 to Grade 5 of basic education Cycle I in partner schools was 6.3, 50 percent higher than the country's overall average of 4.2. Among students in Grades 6-9, the difference was 23.7 percent, and in high school, 28.6 percent. The comparison used the average grades of the 80 partner schools in 2009, and the 2007 scores of the country's public schools, measured by the Basic Education Development Index (IDEB). The partnerships involve teacher training, financial support for reforms and acquisition of school supplies, as well as activities in libraries and computer rooms.

The financial resources for these actions and activities come from voluntary contributions of private companies. Each entrepreneur allocates between R\$150,000<sup>41</sup> to R\$200,000 on average per year for the school they choose to 'adopt.' "The program

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<sup>41</sup> Between USD44,514.00 to USD59,352.00 (exchange rate as of April 2018).

invests in each school the equivalent of 10 percent of what the Brazilian state spends” (Interview, 2009). As an example in Japan, the PNS A of this study received a series of incentives from Mitsui & Co., Ltd.<sup>42</sup>, since the partnership began in 2009, with the installation of personal computers.<sup>43</sup> After a period of adoption of schools by entrepreneurs, it would be expected that the community mobilization of funds should occur, providing sustainable resources for the school. However, this transition is difficult and in most of the cases, does not happen.

The Japanese government considers Brazilian schools in Japan ‘Miscellaneous Schools’. Some authors consider Brazilian schools as ‘ethnic schools’ (Maxwell, 2008).<sup>44</sup> The first Brazilian school in Japan was a PNS (in our study is the PNSC)<sup>45</sup> inaugurated in 1999 in Japan, and by 2010 there were 78 Brazilian schools (Soares Bugarin, 2017 quoting Hatano, 2010, p. 3). Regarding the context, it is necessary to clarify the number of PNS worldwide and in Japan, with 800 schools in Brazil, of which 240 schools are a

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<sup>42</sup> Mitsui & Co., Ltd., is a Japanese multilateral business company that “ranges from product sales, worldwide logistics and financing, through to the development of major international infrastructure and other projects in the fields of iron and steel products, mineral and metal resources, infrastructure projects, mobility, chemicals, energy, food, food and retail management, healthcare and service, consumer business, IT and communication business, corporate development business.” (Mitsui & Co., Ltd., 2018, p. 17)

<sup>43</sup> According to Shimizu, Nakajima, and Koji (2014), in 2009 a Japanese law was promulgated to assist the financial problems of Brazilian schools, allowing Brazilian schools to change their status from the category of ‘Cram school’ to the category of ‘Miscellaneous School’. For the authors, the next step for the Government of Japan would be to include Brazilian schools in the school system. (pp. 23-30)

<sup>44</sup> It is worth noting that not all Brazilian schools in Japan belong to the Pitagoras network schools. For instance, Yamanouchi (2014a) describes in her study a Brazilian school called ‘HIRO School’ located in the city of Oogaki, Gifu Prefecture, which opened its doors in 2005. The school uses the textbooks of “Maxi”, published by the editorial company of textbooks of the city of Londrina, State of Paraná, Brazil. The school has foreign language Japanese and foreign language English classes, 40 hours for each subject per year. Students at the school learn with personal computers. Teachers receive distance education training courses. These distance education courses for teachers are provided by two universities: the Toukai University in Japan and the University of Mato Grosso in Brazil. In this school, all teachers have the required teacher qualification to teach.

<sup>45</sup> PNS in the City of Ōta, Gunma Prefecture, Japan.

partnership system (i.e., not necessarily belonging to the network schools, but schools that utilize the teaching materials of the PNS), 6 PNS in Japan<sup>46</sup>, and 1 PNS in Canada<sup>47</sup>.

### ***Teachers Official Identification Number (ID) –and Student ID- in the Brazilian Register***

The Brazilian MEC and the National Institute of Statistics (INEP) through the National Register are promoting the official Identification Number (ID) for teachers. Collecting the ID from the teachers is important for cadaster purposes and, in the education census of Brazil, it is obligatory for the teachers to acquire the ID. In Japan, the regulation cannot be the same as in Brazil because not all teachers receive the ID at the Brazilian Consulate and, in PNS, there are teachers who are not Brazilian. Consequently, the Brazilian MEC could not make this disclosure between the teacher and the ID, but consider it important for the MoE/INEP to have this documentation from schools in Japan. The same is applicable for students<sup>48</sup>. Hence, the GoB needs the ID as a document to avoid double registration: doing the verification, every case is verified, analyzed, and the procedure is implemented. In the first phase, the GoB registers the information of the teacher. In the second phase, the GoB takes the information of the student. The teacher informs the Register the name of the school, the school location, subject, and the level/stage of the class. Afterward, this information is disclosed to the family and the student.

### ***Schools Data in the Brazilian Register***

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<sup>46</sup> In Japan, three schools closed in 2009 because of the international economic crises. Two (2) schools closed in 2011 due to the Japanese immigration regulation of returnees to Brazil, which depicts the end of educational services provision to temporary worker's children. This dissertation focuses on the analysis of 3 schools out of 6 schools at the FY2011.

<sup>47</sup> PNS Homepage, information retrieved on July 2016.

<sup>48</sup> Through the ID, the Brazilian Ministry of Education and Culture identify the repetition students, i.e., students who have the same information and are repeated in the database. Every student in the dataset enters with a registration number. Each student has a unique identification named ID. All students entering the Brazilian Ministry of Education and Culture database have this ID, as specific code for that student.

As a request of the INEP, the first thing the administration of the school does is to complete the school data in the Register at the beginning of the school academic year. The INEP generates the school code. Every school has a code that INEP provides for and all data is linked to that code. Formerly, the school filled in all the data, which includes the school phone number, the address, data that is double-checked by the INEP in Brazil. For example, all Japanese postal codes are crossed checked with the INEP data, making the connection with the city to avoid erroneous information and provide coherence.

The INEP has a whole mechanism in place to prevent the wrong information from entering the Brazilian education system. For example, all schools in Japan were private schools, so this field is populated as private in the records. Because Japan does not have federal and state schools, there is a system default. Thus, all the schools would also have to be categorized as private, which could change the data, because the INEP does not know if it is dealing with a confessional, philanthropic, community or an individual private school. To retain this information, the INEP inserted the data as a private school, allowing the option to be changed if there are confessional, philanthropic or community schools, for-profit (commercially driven), or non-profit schools. As in Brazil, the INEP school researchers had no idea if those type of schools in Japan still exist, so they left the option open. (Interview with the INEP researchers, 2011).

### ***School Management***

#### ***Private School Financial Supporters***

Regarding the information of the categories of private schools, those categories are in relation to whether the school receives its funds from philanthropic donations, or if the school has its own resources. In this way, INEP leaves this response open to schools in Japan in order to inform if there is alternative financial support for that specific school. An important fact was a request to the INEP from the Japanese Consulate to authorize a Brazilian school in Japan, is if the school received approval by MEC of Brazil. School

administrators report if the school was approved by the MEC and if they were ratified by local authorities (MEC/INEP, 2011).

### ***School Principals and School Coordinators***

In PNS, school principals and administrators respond to contextual questionnaires, which serve as instruments for collecting information on aspects of school life, socio-economic and cultural level, professional training, pedagogical practices, and management forms.

### ***Training of School Principals and School Coordinators***

There is a belief that the PNS require the commitment of competent staff. The educators believe in themselves and in increasing their skills. School principals and teachers are evaluated throughout the entire school year as a formative assessment. Students are also evaluated throughout the entire school year. The constructive critics are perceived as positive by students. (Interviews, 2009, 2011)

### ***School Student-Teacher Ratio***

The student to teacher ratio in PNS Japan varies from 6:1 (6 students and one teacher) to 16:1 (16 students per 1 teacher) on average, due to the classrooms being multi-grade. In Brazil, student to teacher ratio, on average, is 4:1 for Nursery (4 pupils per teacher). In Maternal: Mini-Maternal: 16:2 (16 pupils per 2 teachers). Maternal: 16-1 (16 pupils per 1 teacher). Kindergarten: 16:1 (16 pupils per 1 teacher). Grade 1: 16-1 (16 pupils per 1 teacher). Basic education: there is always a teacher and an assistant in each classroom. Secondary education is 16:1 (16 students per 1 teacher): there is a teacher, and the need for an auxiliary teacher is evaluated according to the dynamics of the group (data obtained from PNS E and PNS F management, 2011).

### ***School Finances, School Income***



*Table 2.5. PNS Fees by Month and Year in Japan and Brazil (in USD)*

Courses	PNS Fees (in USD)			December to January		February
	Value of contract	October to November	November to December			
Basic Cycle I (Grade 1 to Grade 5)	Enrolment	146.00	102.88	117.32	132.06	146.80
	12 quotes	146.00				
Additional to Grade 1	Enrolment	57.16	57.16	57.16	57.16	57.16
	12 quotes	57.16				
Basic Education Cycle II (Grade 6 to Grade 9)	Enrolment	152.21	106.49	121.83	136.87	152.21
Secondary Education (Year 1 to Year 3)		182.60	127.85	145.64	163.65	182.27
PNS Learning Materials (in USD)						
Basic Cycle I (Grade 1)		10 monthly quotes of				7.81
Basic Cycle I (Grade 2 to Grade 5)		10 monthly quotes of				13.52
Basic Education Cycle II (Grade 6 to Grade 7) and Lower Secondary Education (Grade 8 to Grade 9)		10 monthly quotes of				14.72
Upper Secondary Education (Year 1)		10 monthly quotes of				20.43
Upper Secondary Education (Year 2)		10 monthly quotes of				19.53
Upper Secondary Education (Year 3)		10 monthly quotes of				23.13

Source: Created by the Author based on PNS data. Some schools would differ but still similarities are applicable in both settings, Brazil and Japan.

PNS obtained school income through the community, confessional or personal basis, Kroton stock market, and the student's fees. Table 2.5. displays the PNS monthly and yearly school fees in Japan and Brazil by the level of education. The cost of the school fees by levels of education in Japan and Brazil varies. As stated by the school principals of two of the schools consulted, the fees vary from R\$200 (USD59.35) to R\$505 (USD149.86), on average, monthly. Annually, it costs from R\$6,632.01 (USD1,967.19) in preschool education, to R\$12,387.83 (USD3,674.48) in secondary education, on average. In regard to the school fees, the parent must add an average of R\$780.00

(USD231.30) for didactic materials, transportation, and meals. In Japan, the monthly fees vary from JPY30,000 (USD280.50) to JPY40,000 (USD374.00) (Maxwell, 2008). School fees in PNS Japan include transportation and meals.

### ***Scholarships***

The PNS provides payment of the enrolment fees or the monthly fees in selected cases such as low-income families, or households lack employment.

### ***Schools Expenditures***

PNS Brazil schools included in this study own their school building. This is not the case for the PNS in Japan, who rent school buildings, or use buildings of old factories or related institutions. Payment of municipal taxes, electricity, water, and sanitation are treated as private educational institutions. Some fees for students in PNS Brazil schools are subsidized, depending on the category of the school by legislation.

### ***Teachers***

#### ***Teachers Contract***

In Japan and Brazil, teacher contracts at a PNS have a trial period of three months. Contracts are for two years, with the option of renewal for two more years.

#### ***Teachers Deployment***

In Japan, teachers are recruited from Brazil through passing a competitive based exam, and are deployed for a trial period to any of the PNS. In Brazil, teacher recruitment and deployment depend on the type of school; in other words, if the school is strictly a PNS, or if the school is a state or municipal school (public), private school, or public-private school, the recruitment process varies. Thus, if the school is state or municipal, private or public-private, recruitment depends on the teachers scale at the district level, based on

teacher profile, years of seniority, and the subject of specialization, among other requisites. In strictly private schools, a teacher is recruited on a personal and preference basis of the school's management. If the school is strictly PNS, recruitment occurs through passing competitive based examinations. Teacher deployment depends on the needs of the PNS, by region.

### ***Teachers Salaries and Conditions***

*Table 2.6. Teacher's Income*

Teacher's Income	Brazil	Japan
	<i>n</i> = 542	<i>n</i> = 142
Scale 1: Up to R\$240 = USD71.26 = JPY7,619.76	0.00	0.00
Scale 2: From R\$241 to R\$480 = USD142.52 = JPY15,239.66	0.00	0.00
Scale 3: From R\$481 to R\$960 = USD285.03 = JPY30,478.26	0.00	0.00
Scale 4: From R\$961 to R\$1,440 = USD427.55 = JPY45,717.92	0.19	0.00
Scale 5: From R\$1,441 to R\$2,160 = USD641.33 = JPY68,577.42	0.74	0.00
Scale 6: From R\$2,161 to R\$2,880 = USD855.10 = JPY91,435.84	1.29	0.00
Scale 7: From R\$2,881 to R\$3,840 = USD1,140.13 = JPY121,914.10	1.11	51.41
Scale 8: More than R\$3,840 = More than USD1,140.13 = JPY121,914.10	96.12	48.59

Source: Created by the Author based on teacher's questionnaires (Brazil 2011) and teacher's interviews (Japan 2010)

Teacher pay and conditions are analyzed by salary scales as defined in Brazil.<sup>49</sup> Accordingly, Table 2.6. illustrates that in Japan, 51.41% of the part-time teachers receive a salary Scale 7 (from R\$2,881 to R\$3,840 = USD1,140.13 = JPY121,914.10) and 48.59% of the part-time teachers receive a salary Scale 8 (above R\$2,881 to R\$3,840 = USD1,140.13 = JPY121,914.10). Considering that a minimum salary in Japan is JPY150,000<sup>50</sup>, Scale 8 is about the salary of a factory worker. In Brazil, 0.19% of the teachers receive a salary Scale 4 (from R\$961 to R\$1,440 = USD427.55 = JPY45,717.92).

<sup>49</sup> Salary scales are defined as in the SAEB 2003.

<sup>50</sup> In Japan, salaries are based on the scale determined by the Ministry of Health, Labor and Welfare. Legally, in Aichi Prefecture, the minimum wage is JPY898 per hour.

See <https://www.mhlw.go.jp/content/11200000/000347915.pdf>

Considering that 96.12% of the part-time teachers receive a salary of Scale 8 (above R\$3,840 = above USD1,140.13 = above JPY121,914.10), salaries are more equitable in Brazil than in Japan.

Teachers income (salaries) are from R\$240.00 (USD71.26) to R\$3,840.00 (USD1,140.13 or JPY121,914.10) (exchange rate as for April 2018). Teachers can become partners of the PNS, participating as investors. The partnership with Kroton Educacional S.A. as a stock-market user is stimulated among the professorship.

### ***Teachers Profiles***

The average age of PNS teachers is 40 years of age. In Japan and Brazil, the majority of the teachers are women. Table 2.7. displays the profiles of the Brazilian teachers who participated in this study in both settings.

*Table 2.7. Profiles of Teachers in Japan and Brazil*

Profiles Teachers	Gender	Specialization	Teaching subject/ Grade or Year	School	Degree	Years of Experience
Teachers in Japan						
T1	F	Biology	School Coordinator and Biology Teacher	PNSA	MA	3
T2	F	Chemistry/Biology		PNSA	BA	4
T3	F	Chemistry		PNSA	BA	5
T4	M	Mathematics	School Principal	PNSA	MA	22 years as teacher / 5 years as School Principal
T5	F	English		PNSA&PN SB	BA	6
T6	M	Portuguese		PNSA&PN SB	BA	3
T7	F	Portuguese	School Coordinator and Portuguese Language Teacher	PNSC	MA	4
T8	F	Japanese		PNSA&PN SC	BA	6
T9	M	Physics and Mathematics	School Coordinator and Physics and	PNSB	MA	20

Profiles Teachers	Gender	Specialization	Teaching subject/ Grade or Year	School	Degree	Years of Experience
Mathematics Teacher						
T10	M	English		PNSC	BA	4
A1	F	Secretary		PNSA	SE	6
Teachers in Brazil						
PNSBHCJ (HQs) School Headquarters						
D1	F	Chemistry Engineer and Mathematics	School Principal	PNSHQs	MA	22 years of experience and 10 years of experience as School Principal
T1	M		Coordinator	PNSHQs	BA	3
T2	M	Spanish	G8, Y1-Y2, Y3	PNSHQs	BA	4
T3	M	Geography	G8 Section A	PNSHQs	BA	10
T4	F	History	G8 Section B	PNSHQs	BA	6
T5	M	Mathematics	Year 3	PNSHQs	BA	7
T6	M	Portuguese	Year 3	PNSHQs	BA	9
T7	M	Written Expression	Grade 8	PNSHQs	BA	5
T8	M	English	Year 3	PNSHQs	BA	8
GC1	F		General	PNSHQs	MBA	15
Coordinator of the PNS (South Region)						
School D						
D1	F	Literature Pedagogy Management	School Principal	PNSD	BA MBA	15 years as coordinator 5 years as Principal
T1	F	Grammar	Y2	PNSD	BA	5
T2	F	Portuguese	G8 Section A	PNSD	BA	11
T3	M	Geography	G8 Section B	PNSD	BA	8
T4	M	Mathematics	G9 Section A	PNSD	BA	4
T5	M	Biology	Y3 Section A	PNSD	BA	14
T6	M	Chemistry	Y1 Section A	PNSD	BA	20
T7	F	Pedagogy	G2	PNSD	BA	25
T8	F	Music	G9 Section B	PNSD	BA	12
School E						
D1	F		School Principal	PNSE		More than 20 years of experience as teacher – 4 years as School Principal
T1	F			PNSE	BA	7
T2	F			PNSE	BA	5
T3	M	Chemistry/Maths	G8 Section A	PNSE	BA	8

Profiles Teachers	Gender	Specialization	Teaching subject/ Grade or Year	School	Degree	Years of Experience
C1	M	History	Secondary Education Coordinator	PNSE	BA	10
C2	F	Mathematics	Basic Education Coordinator	PNSE	BA	7
T4	M	History	Y3 Section A	PNSE	BA	9
T5	M	Physics	Y2 Section A	PNSE	BA	13
T6	F	Geography	Y1 Section A	PNSE	BA	7
T7	F	Portuguese	Y1	PNSE	BA	3
T8	M	Chemistry	Y1	PNSE	MA	4
T9	M	ICT	ICT Coordinator	PNSE	BA	5
T10	F	Grammar		PNSE	BA	6
T11	F	Mathematics		PNSE	BA	4
T12	M	Portuguese Literature		PNSE	BA	8
T13	M	Chemistry		PNSE	MA	9
T14	M	Biology		PNSE	BA	2
T15	F	English		PNSE	BA	3
T16	F	Natural Sciences		PNSE	BA	4
T17	F	Natural Sciences		PNSE	BA	7
T18	F	Basic Education		PNSE	BA	2
T19	M	EE		PNS E	BA	4
T20	F	Basic Education		PNS E	BA	9
T21	F	Basic Education		PNS E	BA	7
T22	F	Basic Education		PNS E	BA	6
T23	F	Basic Education		PNS E	BA	3
T24	F	Basic Education		PNS E	BA	5
T25	F	Spanish		PNS E	BA	3
T26	F	English		PNS E	BA	9
T27	F	Auxiliary		PNS E	BA	2
School F						
D1	F	School Principal		PNS F	BA	23 years of experience as Teacher - 3 years as School Principal
C1	M	Coordinator		PNS F	BA	7
T1	M	Mathematics		PNS F	BA	8
T2	F	English		PNS F	BA	3
T3	M	Biology		PNS F	BA	12
T4	F	Portuguese	G8 Section A	PNS F	BA	9
Total Number of Teachers sampled: 58 (10 teachers in Japan and 48 teachers in Brazil)						
Total Number of School Principals sampled: 5						
Total Number of School Administration Officers sampled: 1						
Total Number of General Coordinators of the PNS sampled: 1						

Note: In Brazil, the data was abstracted from the Brazilian Teachers Questionnaires. In Japan, the data was obtained through Interviews.

Source: Created by the Author, based on Teachers Questionnaire and Interviews, 2010-2011.

### ***Teachers Qualifications***

Most of the teachers in both settings completed higher education, obtaining a college degree or licentiate degree. Some of them pursued post-graduation studies (master's degrees), expecting to work in the teaching profession and not in other types of jobs. (Interviews, 2009 and 2011)

### ***Teachers Experience***

Teachers in PNS in Japan have an average of 6.9 years of teaching experience, whereas in Brazil teachers have an average of 8.6 years of teaching experience. In PNSHQs the average of teacher years of experience is 8 years. School principals in both settings have an average of 20.4 years of teaching experience, and 5 years of experience as school principals. (Interviews, 2009 and 2011)

### ***Teachers Continuous Professional Development***

Table 2.8. illustrates the teacher's CPD, where teachers have taken training during the last two years (as for 2009 to 2010). In Japan, half of the professorship interviewed received training in their specialization subjects or practical pedagogy (7 teachers out of 11 teachers). In Brazil, almost all of the respondents (27 teachers out of 31 teachers) received or participated in training of their specializations of practical pedagogy. In regard to the teachers years of teaching experience, 96.12 % of the PNS teachers in Brazil have more than 20 years of experience. In Japan, 49.29% of the teachers have between 15 to 20 years of experience and more than 45% of the teachers have more than 20 years of experience.

*Table 2.8. Teacher's CPD and Teaching Experience*

Teachers	Brazil	Japan
CPD last 2 years (2009-2010)	99.45	48.59
Yes = 1 No = 0	N = 27	N = 7
Teacher Experience	N = 27	N = 7
(1) Less than 1 year	0.00	0.00
(2) From 1 to 2 years	0.18	0.00
(3) From 3 to 5 years	0.55	0.71
(4) From 6 to 9 years	0.74	2.14
(5) From 10 to 15 years	1.29	2.86
(6) From 15 to 20 years	1.12	49.29
(7) For more than 20 years	96.12	45.00

Source: Created by the Author, based on Teacher Questionnaires.

### ***Teachers Practices - Instruction***

Schools quality of learning, as indicated through innovative curriculum and teaching methodology, was investigated very closely. Especially, in the analysis of the teaching methods and assessments teachers utilize. In the PNS Japan through systematic observations, using patterns of teaching created by Robin Alexander (2000), out of 19 classroom observations conducted, 13 classroom observations confirmed the prevalence of rote-learning. Video lessons recorded and analyzed, using the methodology of Givvin et al. (2005), give meaning to universal elements which shape teaching practice, including the physical environment, the social dynamics of classrooms (e.g., multi-grade classrooms), and the content to be learned. In the PNS in Brazil, through systematic observations, out of 24 lessons observations conducted, 10 confirmed the prevalence of rote learning (Tooley and Dixon, 2002). Therefore, in the PNS in both settings, active learning has a predominance over rote learning, evidenced in 23 of the 43 classroom lessons observed and recorded on video in both countries. The medium of instruction is the vernacular language, which is Portuguese.

PNS propose the socio-constructivist/social-reconstructionism approach to learning (Schiro, 2008; Interviews 2009, 2011), allowing teachers to be flexible. Through



classroom observations, the methodology of teaching practice in the schools of both contexts was considered in the analysis. In general, the categories of (1) instruction/demonstration/conference as direct teaching (memorization), (2) reading aloud, (3) discussion, (4) practice/exercise, (5) homework/tasks corrections, (6) emphasis on written expression, (7) kinesthetic/projects (debate, role play, use of teaching materials), and (8) coping/verbal instruction, are common practices for the majority of the subjects in Grades 8 to Year 3. These categories, taken from Stallings (1970, cited by The World Bank, 2015), reflect the interactions of teachers and students in classrooms, as seen in Table 2.9.

*Table 2.9. Teaching Methodologies through Classroom Observations*

PNS Teachers Activities	Instruction/ demonstration/ lecture Direct Teaching (rote- learning)	Reading aloud	Discussion/D ebates	Practice/ Drill	Correction of homework/t asks	Emphasis on written expression	Kinesthetic/Pr ojects (debate, role playing, use of teaching materials)	Silent Seat work	Coping/ Verbal instruction
Teachers in Japan	Assessments: in process evaluation during the lessons/ VS practices 19 classroom observations								
PNS A	X Biology MG7- 8	X Portuguese MG1-2	X	X Mathematics Chemistry MY3	X Biology	X Japanese MG7-8 Portuguese English	X English Physical education MG7-8	N/O	X English
PNS B	X Portuguese	X	X History	X Mathematics		X English MY1-2	X English	N/O	
PNS C			X Biology	X Chemistry MY2-3		X Portuguese MY2-3		N/O	X
Teachers in Brazil	Assessments: in process evaluation during the lessons/ VS practices 24 classroom observations								
PNS D	X Mathematics G8		X Chemistry G8	X Chemistry Y1		X Portuguese	X English Portuguese	N/O	X Mathematics G8 Arts G8 Biology Y3
PNS E	X Literature / Portuguese Y1	X History Y2	X Philosophy	X Chemistry Y1		X Geography Y2	X Geography Y2	N/O	X Mathematics Physics Y2
PNS F	X Biology Y3	X English Y2 Literature Y1		X Chemistry Y2	X Mathematics G8	X Literature Y1	X Mathematics G8	N/O	

Note: In Japan: MG7-8: Multigrade classroom Grades 7-8. MY1-2: Multigrade classroom Years 1-2. Lower Secondary Education in Brazil: G8: Grade 8. G9: Grade 9. Upper Secondary Education: Y1: Year 1. Y2: Year 2. Y 3: Year 3. N/O: Not Observed.

Source: Created by the Author based on the Stallings' classroom snapshot' observation system (The World Bank Group, 2015) from the 43 Classroom Observations in the 6 PNS samples (2009, 2010 and 2011, respectively).

Practices/drills are major activities in sciences (chemistry, mathematics), especially in secondary education. The category “instruction/ demonstration/ lecture / direct teaching (rote-learning)” is the common practice used by teachers of different subjects, in all areas. The category “reading aloud” is a teaching practice mostly observed in humanities (literature, Portuguese, English, and social sciences -history). The category “emphasis on written expression” is a teaching practice most frequently observed in languages and social sciences (English, Portuguese/literature, Japanese, geography). The category “silent seatwork”, understood as a quiet class with student’s participation and although it was observed, it is a teaching methodology not used in the educational practices of the PNS.

### ***Teacher Effectiveness***

The teacher effectiveness is the ability to understand the individual profiles, strengths, and weaknesses of each student in the classroom. A good teacher is the one who brings out the best of each moment and phase of the teaching-learning process, the best of each curriculum, with a focus on their professional development. This makes it possible for the student to benefit from the best-selected curriculum content, the best educational practice, the use of time-on-task in the daily practices, and to combine the work of the classroom with the support of the family through parental involvement. Likewise, getting the best out of the school-community connection and interaction, interacting with the community where the school is located. One of the objectives of the effective teachers in the PNS and adds value is to increase the social connection of students with the communities, favoring spaces for community interaction such as visits to other schools in the district, sports competitions, language and mathematics contests, drills of emergencies and/or natural disasters (i.e., earthquakes, tsunami, fires), community festivals, and language learning at cultural centers. Moreover, teachers assist students in seeing “the other”, letting them

understand cultural differences, respecting their “multiple intelligences<sup>51</sup>.” (Gardner, 1983)

### ***Students Exchange Knowledge between PNS in Japan and Brazil***

PNS in Japan conducts video conferences with students of the PNSHQs in Brazil (the central house of PNS in the world. At the same time, PNS Japan interacts with the Japanese communities where the schools are located, exchanging the physical education playgrounds with Japanese schools, conducting rehearsals for earthquakes/tsunami natural disasters in Japanese schools acting as shelter, among other community activities. There are differences among PNS in Japan and Brazil, offering different extra-curricular activities and extra-disciplinary sports or subjects as part of the suitability to have a better infrastructure. For instance, in Japan, participation in local festivals (matsuri), dance, yoga for children, theater, futsal, skating, are excellent opportunities for students to learn and understand the local culture. In Brazil, some PNS has a zoo, swimming pools, sport centers. Students participate in the National Olympics of Mathematics, a popular contest promoted by the MEC.

### ***Curriculum***

The curriculum is a framework for guiding teaching and learning. Students in Lower Secondary School level are required to take the following subjects: Portuguese, mathematics, biology, chemistry, physics, history, geography, foreign language English. Foreign language Japanese is also mandatory in Japan, while foreign language Spanish is also mandatory in Brazil. Students in Upper Secondary Education are expected to take

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<sup>51</sup> This fact was mentioned and corroborated in the interviews to the teachers who gave as referents of their teaching practices the Theory of the Multiple Intelligences of Howard Gardner. As a reference, Garner describes learning styles related to the way individuals know the world through language, logical-mathematical analysis, spatial representation, musical thinking, and the use of body as a way of understanding themselves and understanding the others. The learning styles are: visual-spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, linguistic, and logical-mathematical.

Portuguese, mathematics, physics, chemistry, biology, history, geography, foreign language English, and physical education. In Brazil, depending on the school, Spanish language is also evaluated, as well as philosophy and sociology. The PNS in both countries provide Portuguese language as the first language. The weekly time requirements for Basic Education Cycle 1 (ages 6-8) Grades 1-3 are 12 hours; for Cycle 2 (ages 8-11) Grades 4 to 6 are 30 hours; for Cycle 3 (ages 12-14) Grades 7-9 are 34 hours; and for Secondary Education (Upper Secondary School) (ages 15-17) Years 1-3 are 34 hours, as shown in Table 2.10.

*Table 2.10. Subjects and Weekly Time Requirements in PNS*

<p>Cycle 1 (Ages 6-8) Grades 1 to 3: Social Sciences: 4 hours Sciences: 4 hours Mathematics: 4 hours</p> <p>Total hours: 12</p>	<p>Cycle 2 (Ages 8-11) Grades 4 to 6: Biology: 2 hours Physics: 2 hours Geography: 2 hours History: 2 hours English: 2 hours Chemistry: 2 hours Mathematics: 6 hours Portuguese: 6 hours Japanese: 3 hours Physical Education: 3 hours</p> <p>Total hours: 30</p>	<p>Lower Secondary School (Ages 12-14) Grades 7 and 8*: Biology: 3 hours Physics: 2 hours Geography: 3 hours History: 3 hours English: 3 hours Chemistry: 3 hours Mathematics: 4 hours Portuguese: 4 hours Japanese: 3 hours Physical Education: Arts: 2 hours Informational Technologies: 2 hours Writing: 2 hours</p> <p>Total hours: 34</p>	<p>Upper Secondary School (Ages 15-17) Years 1-3: Biology: 3 hours Physics: 2 hours Geography: 3 hours History: 3 hours English: 3 hours Chemistry: 3 hours Mathematics: 4 hours Portuguese: 4 hours Japanese: 3 hours Physical Education: Arts: 2 hours Informational Technologies: 2 hours Writing: 2 hours</p> <p>Total hours: 34</p>
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Source: Created by the Author based on information provided by schools (May, 2009)

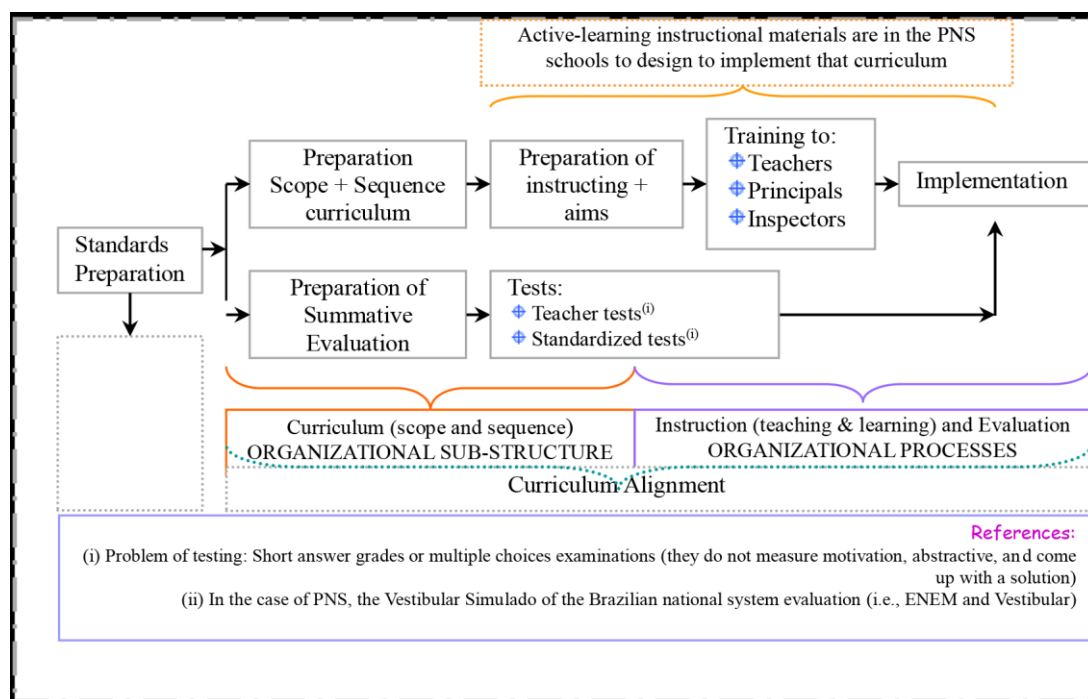
\* Note: Grades 7 and 8 in Japan correspond to the Grades 7 to 9 of the Brazilian education structure by 2009.

### ***Curriculum Alignment***

All aspects of the curriculum must be aligned with the international guidelines, the national standards, the learning materials, the teachers classroom plans and daily classroom practices, students pad notes on what they learn, and the assessments, in a

continuous feedback through the end of the school year in addition to, preparing for the following school year and addressing the needs of all learners. (Squires, 2009) This dissertation, attempts to briefly explain the written (or the intended curriculum), the taught (or the implemented curriculum), the learned and the assessed curriculum (or the evaluated or the attained curriculum), as a consideration of how PNS management and school teachers align the curriculum for the sake of better students' outcomes/achievement, with a special focus on the assessed curriculum as an indicator of the improvement of the educational quality.

*Figure 2.1. Curriculum / Instruction Design linked with Curriculum Alignment*



Source: Created by the Author based on Cohen (2009), Dimmock (2007), and the PNS in Japan and Brazil (Interviews 2009-2010-2011).

Table 2.11. displays the curriculum alignment in PNS for the steps teachers take when preparing their teaching and learning materials. The steps include (1) making time for planning; (2) keeping the curriculum simple and focused; (3) making the curriculum realistic; (4) raising awareness and keeping it raised; (5) deciding when, where, how much, and how often the contents to standards should be considered; (6) think interdisciplinary;

(7) share ideas, tips, and practices with other teachers; and (8) use testing as a tool to measure results.

*Table 2.11. Curriculum Alignment in the PNS in Japan and Brazil*

Steps in Curriculum Alignment	Procedures
(1) Make time	<p>“... Planning days scheduled before school in the fall and in-service days.” (Danielson, 2013, p. 1)</p> <p><b>In PNS in Japan, teachers more frequently base their lesson plans referring to the teacher’s manuals and textbooks.</b></p> <p><b>In PNS in Brazil, teachers more frequently prepare in advance their lesson plans.</b></p>
(2) Keep it simple and focused	<p>Provide teachers with:</p> <ol style="list-style-type: none"> <li>1. Copies of the Brazilian MEC standards for each subject and grade level in the school</li> <li>2. Follow-up activity: obtain sample items from the mastery test</li> </ol> <p><b>PNS teachers in both countries, based on the model tests of the Vestibular, prepare the simulation of entrance examinations in groups, working together with other teachers of the same subject, selecting the questions from different famous universities, and making the practices with the students at the classroom level from Grade 8 to Year 3.</b></p>
(3) Make it realistic	<ol style="list-style-type: none"> <li>1. Assemble teachers by project areas and grades (or cycles)</li> <li>2. Each teacher brings to the training: (i) copies of the teacher’s edition of textbooks they use, (ii) unit plans, and (iii) supplementary instructional materials.</li> </ol> <p><b>PNS have the project areas by grades, subjects and/or cycles. Teachers appreciate receiving training from workshops and/or conducting studies of post graduation. Especially in the schools in Brazil, teachers can show their unit and lessons plans and supplementary instructional materials, but mainly base their practices on the PNS didactic materials.</b></p>
(4) Raise awareness and keep it raised	<p>Highlight the sections of the materials (i.e., standard, topic, content) on her/his (i) lessons plans, and (ii) on the instructional materials (linking contents to standards).</p> <p><b>PNS teachers are aware of linking within the different types of curriculum at the different moment of the teaching and learning process. However, half of the teachers interviewed in both settings could explain the alignment of the curriculum in an articulated and logical manner.</b></p>
(5) Decide when, where, how much, and how often	<p>After linking contents to standards ask each group to (1) review the standards and, for each standard, (2) determine at which grade level and in which unit standards are (i) introduced, (ii) emphasized, and (iii) assessed.</p> <p><b>In Japan, PNS teachers emphasize the collaboration from the preparation of the evaluations/tests. PNS teachers in Brazil reported a high level of understanding of what standards are requested both from MEC and the</b></p>

Steps in Curriculum Alignment	Procedures
	<b>PNS, how much of those standards in contents are expected to be taught to the students, and how those contents are expected to be assessed.</b>
(6) Think interdisciplinary	<p>To seek help from teachers from other departments, thinking interdisciplinary. “Teachers highlight their teachers’ editions with another color to identify standards from other subject areas that they can reinforce in their own classes.” (Danielson, 2013, p. 4)</p> <p><b>PNS teachers reported seeking assistance with other teachers, especially from the same subjects. Working interdisciplinary in cases of returned children from Japan to Brazil was considered an important issue in PNS D and PNS E, especially for language apprenticeship and support.</b></p>
(7) Share ideas, tips and practices	<p>Contents – Assessments: share successful practices in teaching specific standard or skills.</p> <p><b>PNS teachers in both settings have reported success in sharing practices with their peers. PNS D teachers reported assistance of two teachers in one classroom for mentoring one to another.</b></p>
(8) Do not forget the test:	<p>“Teachers are asked to review all the items and identify where in the curriculum the student would have learned the material needed to be successful on each item. This helps to identify gaps as well as places where one content area can be bolstered by teaching in another subject” (Danielson, 2013, p. 5)</p> <p><b>In the PNS, each teacher has the freedom to add content the students need to accomplish their goals.</b></p>

Source: Created by the Author based on Danielson (2013, pp. 1-5), and from the 43 classrooms observations at the PNS and the interviews with teachers in Japan and Brazil (2009, 2010 and 2011, respectively).

The quality of teaching is shown through teachers’ alignment to the curriculum, based on classroom observations. In PNS in Japan, teachers base their lesson plans referring to the teacher’s manuals and textbooks, emphasizing collaboration in test preparation and assistance in multi-grade classrooms. In PNS in Brazil, teachers prepare by themselves their lesson plans, reporting a high level of understanding of what standards are requested from the Brazilian Ministry of Education and Culture and the PNS, and how standards are expected to be taught and evaluated. In cases of children that returned from Japan to Brazil, interdisciplinary work among teachers was noted especially for Portuguese language apprenticeship and support. In both settings, teachers explained the curriculum alignment in an articulated and logical manner, being aware of linking the different types of the curriculum at each moment of the teaching-learning

process. Based on the VS model, teachers prepare the exams in groups, selecting the questions from a variety of famous universities, and simulating the exams with the students at the classroom level.

### ***Written Curriculum (Intended Curriculum)***

The PNS follows standards and syllabuses as prescribed by the Brazilian government. The PNS follows their own textbooks and media literacy education provision (CD ROMs, PNS homepage with a coding password per student). The written curriculum allows teachers to be informed in the general guidelines, aligned with international guidelines and national standards on the most recent literature of each subject, as well as what is expected of them as teachers. Likewise, the written curriculum combines the theory and practice established as parameters with the methodological practice of each teacher based on their own philosophical perspectives and those accepted by the Ministry of Education of Brazil and the PNS guidelines, respectively.

### ***Taught Curriculum (Implemented Curriculum)***

The combination of the teacher classroom's plans made by the teachers for each level and classroom, and the students' notebooks (i.e., handwritten notes, iPad notes, PowerPoint presentations, or the like), constitute the "taught curriculum". The curriculum contents are ways to build students' knowledge. With a series of diversified activities, enabling reflective, dynamic, and participative classes, students can construct the knowledge through the teacher's intervention. The teacher's plan is a tool that facilitates and organizes the pedagogical process, elaborated by the teacher and oriented by the school coordinator. Teachers have the autonomy to adapt the activities of the PNS teacher's didactic manuals, used in PNS.

Since 2009, the continuous internal and external quality assessment process of teaching and learning invest in training (meetings of management of pedagogical work,



continuous training of the PNS, MBA courses for school principals, availability of journals to educators, books and equipment, post-graduation courses for teacher of the network schools), and in evaluation (PAERP, Prova Global, National Vestibular Simulado, trimestral VS, PIC -Scientific Initiation Program, councils of classrooms) for both, teachers and students. An example of the teachers' plan is shown in Table 2.12., based on the 'Scientific Initiation Program' for Year 3 of Upper Secondary Education. It explains the research development, and products that are expected to be produced from students, the different types of assessment (individual research, group work, school journal, presentations at the Evaluation committee), starting from the knowledge students bring to the classroom to build new knowledge, as a constant and permanent construct.

*Table 2.12. Example of Curriculum of Year 3 of Upper Secondary School by Phases, with Assessments (PNS F, Curitiba, Brazil)*

PHASE 1 (1st TRIMESTER): Problem, Sources, Literature, Written Production	
Research Development	Assessment:
<ul style="list-style-type: none"> <li>Starting: knowledge (students)</li> <li>Exploratory theoretical classes: orientations to research, contextualization and justification of theme and sub-themes</li> <li>Research group formation</li> <li>Preparation of the school journal "Attitude in Action" [<i>Atitude em Ação</i>]</li> <li>Individual Research</li> <li>Team product – creation of the project proposal: <ul style="list-style-type: none"> <li>Theme and problem</li> <li>Objectives (general and specifics)</li> <li>Literature review (theoretical)</li> <li>Methodology</li> <li>Action plan (empirical)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Individual research (1.0)</li> <li>Group work preparation of Research Proposal (1.0)</li> <li>School journal "Attitude in Action" [<i>Atitude em Ação</i>] (1.0)</li> <li>Presentation at the Committee of Evaluation (1.0)</li> </ul>
	Products:
	<ul style="list-style-type: none"> <li>Individual research</li> <li>Research Proposal</li> <li>School journal: "Attitude in Action" [<i>Atitude em Ação</i>]</li> <li>Presentation</li> </ul>
PHASE 2 (2nd TRIMESTER): Experimental Procedures, Data Analysis, Production	
Research Development	Evaluation:
<ul style="list-style-type: none"> <li>Draft review through the orientations and observations of the Evaluation Committee – Research Proposal</li> <li>"Attitude in Action" [<i>Atitude em Ação</i>]: journal digital version: creation of blogs, forums, etc.</li> <li>Experimental procedures (in accordance with the methodology and chronogram approved)</li> </ul>	<ul style="list-style-type: none"> <li>Individual Research Proposal (1.0)</li> <li>Group Report of the Research Project (1.0)</li> <li>"Attitude in Action" [<i>Atitude em Ação</i>]: journal and blog (2.0)</li> </ul>
	Products:

<ul style="list-style-type: none"> <li>• Individual Report of the experimental procedure made</li> <li>• Group discussion and interpretation of results (intra and inter groups)</li> <li>• Teamwork of the report of the experimental procedure</li> <li>• Registry of the School journal: “Attitude in Action” [<i>Atitude em Ação</i>]</li> </ul>	<ul style="list-style-type: none"> <li>• Report of Individual and Group Research Proposals</li> <li>• “Attitude in Action” [<i>Atitude em Ação</i>]: journal digital version</li> <li>• School journal: “Attitude in Action” [<i>Atitude em Ação</i>]</li> </ul>
PHASE 3 (3rd TRIMESTER): Final Product – written and digital, Socialization	
Research Development <ul style="list-style-type: none"> <li>• Self-evaluation</li> <li>• Elaboration of the Action Plan</li> <li>• Submission of printed and digital final work and the school journal in each class (Evaluation Committee)</li> <li>• Presentation of the research</li> <li>• 3EM: presentation of scientific article for the Evaluation Committee and school community</li> </ul>	Evaluation: <ul style="list-style-type: none"> <li>• Self-evaluation (0.5)</li> <li>• Action Plan for survey (0.5)</li> <li>• Printed and digital work and school journal (1.0)</li> <li>• Presentation of the research (2.0)</li> <li>• 3EM: Scientific article</li> </ul> <hr/> Products: <ul style="list-style-type: none"> <li>• Action Plan</li> <li>• Printed and digital final work</li> <li>• School journal to the classes</li> <li>• Scientific journal</li> </ul>

Source: PICSC (2011). *Gestão do Trabalho Pedagógico*. Programa de Formação Permanente de Educadores do Sagrado Coração. Curitiba: PICSC, 2-4. (Translated by the Author from Portuguese).

The example of the curriculum in PNS F, show a model or pattern of learning from the beginning of a written production (research proposal) to the end, in preparation to the university. Through the school year in three quarters, the phases differentiate the sections and processes that students will learn and results in a written product at the end of the term. In the first quarter, the problem, the sources of information to use, and the literature to review, start preparing the written production. In the second quarter, the experimental procedures, the analysis of the data and the introduction of the written text. In the third quarter, it is expected to have the final product written, digitized in addition to the socialization through reporting the written text before the class and to the peers of the school and to the school management. The plan is complete with the scores (grading) of each of the products as a benchmark for teachers and students. The digital production

can include the creation of blogs, videos, forums, school journal made by them individually and in group-teams, which informs the school community on the student's productions during the last year of the secondary school.

### ***Learned Curriculum***

Teachers in the PNS adapt the curriculum to meet the changing needs of different groups of students. Students incorporate what they can learn inside the classroom, but also interact with peers during time-breaks, schools festivals, and community activities. In PNS, teachers adapt their teaching style by allowing students to understand: (1) the “what” of learning (i.e., the multiple means of representation); (2) the “how” of learning (i.e., the means of action and expression), and (3) the “why” of learning (i.e., the means of participation). In Japan, multigrade classrooms teachers let students work in groups or alone, using the help of peers as monitors (i.e., advanced students who help those who are learn at a slower pace), or listening to the ones who are more advanced in learning and/or in a school grade/year in order to incorporate new patterns, norms, skills and knowledge. Likewise, at the school level, teachers encourage the improvement of the school climate with games at recess, playing the piano in the multipurpose room during time-breaks, sharing with students the lunch time “eating the lunch box” together. At the community level, teachers promote interaction with Japanese schools and culture, especially by learning Japanese in cultural centers participating in the festivals of each town, among other interventions.

### ***Assessed Curriculum (Evaluated or Attained Curriculum)***

The assessed curriculum includes monthly and bimonthly tests, Vestibular Simulado test, other evaluations based on competences and participation of the student, or specific school type of assessment (e.g., in confessional schools). Mainly, the assessment system innovation is the preparation for Entrance Examination (Vestibular Simulado) and the

way to evaluate this type of exam, through cumulative scores in three times (one per trimester) in a given scholar year. The achievement tests include multiple-choice questions (particularly in Vestibular Simulado), short answers (specifically in monthly/bi-monthly tests) and open-ended responses (in monthly/bi-monthly tests). The evaluation system in schools in Japan and Brazil include the regular tests, the simulation of entrance examinations (Vestibular Simulado), and the ENEM test, combined with remaining activities. The six schools practice regular monthly and bimonthly tests, combining the process and summative tests. PNS F places confessional assessments in schools with Catholic education, as explained in Table 2.13.

*Table 2.13. Models of Assessment and Types of Examinations by PNS in Japan and Brazil*

Country	Schools	Models of Assessment				Sample of Achievement Test*		
		Monthly/ Bimonthly Tests	VS (3 per year)	Other Assessments		(1) Multiple- choice	(2) Short- answer	(3) Open-ended response
				Based on: Competences, Participations	School Brand Assessment (Confessional)			
Japan	PNS A	✓	✓	✓		✓	✓	✓
	PNS B	✓	✓	✓		✓	✓	✓
	PNS C	✓	✓	✓		✓	✓	✓
Brazil	PNS D	✓	✓	✓		✓	✓	✓
	PNS E	✓	✓	✓		✓	✓	✓
	PNS F	✓	✓	✓	✓	✓	✓	✓

Source: Created by the Author based on Pilot Study in Japan (September 2009) and Fieldwork in Brazil (February to May 2011) taken from school documents and interviews. \* Definitions of the types of test-models are from the World Bank assessment studies (2007) Vols. 1, 2 and 4.

## **CHAPTER 3**

### **LITERATURE REVIEW**

#### **3.1. Student Characteristics**

According to numerous authors, child characteristics variables matter for determining school success. After reviewing and critiquing the empirical literature, Haveman and Wolfe (1995), found that child academic skills -measured as tests scores of academic achievement are often determined by three sets of variables. Child characteristics, such as gender (male) and age; family background variables, such as household income and parental education; and school quality variables, such as physical facilities and teachers' experience. These authors believe that the achievement of children depends on factors such as social and parental investment in children; and the choices children make, regarding the investments made and the opportunities available to them. These findings are similar of those of Zhao and Glewwe (2002) with child nutrition and mother's education as important factors for child's school success, and Cheng (2009) with parents' education level and child's gender as important variables for school success.

Chiswick and Deb-Burman (2003) present an analysis of adult determinants of educational achievement by American immigrants' generation. Using Current Population Survey (CPS) data, analysis of differences in educational attainment are done according to first, second, and higher older generations, and among the foreigners differentiated by country of birth and age at immigration. The findings show that second-generation American adults have the highest level of schooling, exceeding that of the foreign-born and of the native born with native-born parents. "Teenage immigration is associated with fewer years of schooling compared to those who immigrated at pre-teen or post-teen ages." (Chiswick and Deb-Burman, 2003, p. i) For the authors, generational improvement in educational attainment is key, concluding that youth who emigrated as adolescents, especially those from families from low socio-economic backgrounds, had worse

educational outcomes than native-born youth of immigrant parents and youth of native ancestry.

Other authors emphasize that gender matters in student learning outcomes. For example, gender would affect academic skills, especially in Mathematics and reading test scores, as Latin American regional student achievement outcomes (IDB, 2018; PREAL, 2008; Guimarães and Sampaio, 2007, 2008) and PISA outcomes (OECD, 2013, 2015) suggest. Data from the PISA program 2015 indicate that boys tend to have better performance in mathematics and science than girls do, while girls are better at reading and language. According to the Inter-American Development Bank (Arias Ortiz and Bornacelli, 2017), in Brazil, boys perform better than girls in mathematics. Brazil possessed one of the largest gender gaps in mathematics performance, with boys scoring 15 points higher than girls in 15-year-old students. Weis, Heikamp, and Trommsdorff (2013) investigated the relationship between gender, self-regulation, and achievement. Using a sample of 53 students of Grade 5 from 7 schools of Southwestern Germany, the authors examined student's achievement in reading and writing (German language), and mathematics, from the theoretical framework of self-regulation and achievement, and developmental perspectives. Applying academic performance tests (i.e., reading, writing, mathematics) and teachers' ratings (i.e., test scores in German language and mathematics), teachers rated children's behavior regulation using the Self-Control Scale (SCS). Children's self-reported strategies of emotion regulation were assessed by the "Questionnaire for the Measurement of Stress and Coping in Children and Adolescents." The authors used Pearson correlation and multiple mediation model. For German language achievement, the findings show the relationship with gender, mediated by the self-regulation of emotion. this relationship is not demonstrated for mathematics achievement. The authors did not believe that gender would affect academic skills, especially in reading and writing test scores, considering emotion and behavior regulation as different aspects of self-regulation.

Kunje, Selemani-Meke, and Ogawa (2009) state that child characteristics variables matter for determining school success. Through two research questions, the authors investigated the school, classroom and pupil-level factors which influence mathematics, English, and Chichewa student achievement in standard 5 and standard 7 in South Western Division in Malawi. Each test in the three subjects were administered by selected teams to 6,000 pupils in 100 primary schools. Schools were selected using a random sample of 8:1, or 88 Blantyre rural schools to 12 Blantyre urban schools. Using step-wise regression analyses at the three levels (i.e., student-level factors, school-level factors and classroom-level factors), the results indicate in standard 5, the above average achievement in English and Chichewa but below average in mathematics and, in standard 7, the results show below average achievement in mathematics and English. Greater achievement was revealed in urban schools, especially in English and better student performance was observed in schools with teacher-pupil ratios below 50 in standard 7; better pupil performance was discovered in classes with trained teachers; and better student performance in classes with textbooks in any ratio than those without textbooks.

In a study of bivariate and multivariate evidence on the availability and use of computers at home and at school, Fuchs and Wößmann (2004) utilize the Programme for International Student Assessment (PISA) 2000 test score data to conduct empirical estimates of the relationship between computers and student learning process. The authors consider that the use of home computers and school computers has an economic and educational impact on the students, shown by evidence of the pros and cons of their use in schools but in favor of their use as instructional materials. The representative random sample consists of 15-year-old students in 31 countries, including Brazil. The study focused on student achievement in mathematics and reading literacy. The database utilized is 96,855 students in mathematics and 174,227 students in reading, imputing missing values to allow larger sample size. The control variables were composed of student characteristics (with 8 dummies) which include variables of gender, age and grade; family background (with 28 dummies) including variables of parental education,

migration status of father, mother and student, family status, parents' work status, parental occupation, number of books at home, in the school's community location and GDP per capita of country; resource inputs (with 12 dummies) variables of class size in subject, educational expenditure per student of country, instructional materials, teacher education, instruction time, homework time in subject, and parental support. Institutions (with 12 dummies) include variables of external exit exams, standardized tests, school autonomy, public versus private school management, and share of government funding in school budget. (p. 10) The authors use Clustering-Robust Linear Regressions (CRLR) "to estimate standard errors that recognize this clustering of the student-level data within schools." (p. 11) To obtain nationally representative estimates within country-level, it utilized Weighted Least Squares (WLS) estimation using sampling probabilities as weights. The results show that having one computer at home has positive and strong correlation to student achievement, and leads to better performance versus students without computers at home, but was found to negatively correlate to mathematics and reading performance. The findings show that for the availability of educational software at home, or to access emails and Web pages, student performance relates positively to the use of home computers. Once the authors control for family background and school characteristics, the relationship results as negative for home computers and insignificant for school computers. (pp. 14-16)

Evidence for Brazil is much more limited and mainly focused on higher education. Soares and Murta Collares (2007) argue in their study the way in which family structure affects students' cognitive attainment. The authors argue that family influence needs to be understood as a multidimensional factor and, to capture such influences, they used four dimensions made by groups of variables as indexes or constructs. Measured through a Hierarchical Linear Model (HLM) approach, the parents' involvement acts as a mediating factor for the level of cultural resources, which in turn depends on economic resources, which have only indirect effects on students' cognitive achievement in school. The study



findings show that the amount of investment in cultural goods made by a family is attributed to parents' cultural capital.

Guimarães and Sampaio (2007) examined the factors that influence university student's performance on the entrance examination at the Federal University of Pernambuco, Brazil relating family background and individual characteristics to entrance test scores as determinants. Student background and educational resources are categorized as inputs. Hierarchical Linear Model and quantile regression estimation were the applied methodology. The findings show the parent's education and the study environment as key determinants of student achievement. As a child's characteristics, race, gender, and religion were factors positively correlated on the student's academic attainment. In particular, the estimate showed that the factors vary according to the conditional score distribution, showing differences in impact between isolated factors and among students. In addition to these factors as key determinants of student achievement, the findings showed that parental education positively impacts student scores.

### **3.2. Family Characteristics**

#### **3.2.1. Economic Resources**

The first characteristic to analyze in research about background influences on achievement is family income, viz. 'economic capital'. This is particularly important to examine in Brazil, as a country characterized with high-income inequalities. Buchman and Dalton (2002, quoted by Soares and Murta Collares, 2007) show that "scales based on the existence of consumer goods at the student's house provide good indirect measures of family income that are adequate to educational research." (p. 645)

According to McDonalds and Willms (2009), the relationship between family socio-economic status (SES) and student academic achievement appears in the literature. This is presented as two confounded ideas: "as a 'socio-economic gradient', because it is

gradual and increased through the range of SES<sup>52</sup>, or as a ‘socio-economic gap’, because it implies a gap in academic achievement or between students from high and low SES families.” (McDonalds and Willms, p. 560). Scarce literature regarding the trajectory of the gap over the course of schooling and about whether socio-economic gradients change with age and by what means were presented by the authors. The scholars examined the trajectory of the academic achievement gap of high and low SES Canadian students from children 7 years of age children to adolescents 15 years of age, focusing on mathematics academic achievement and to establish whether the achievement socio-economic gap widens with age. As control variables, the authors added gender, condition of household, mother’s age, and number of siblings in the family. The study shows that from 7 to 11 year of age the gap is stable, widening at an increasing rate from 11 to 15 years of age.

In the revised literature, it is frequently observed that in their attempt to estimate the causal effect of family income on the academic outcomes of children, many authors do not take into account fluctuation in family income. These authors also often fail to combine the effects of family income fluctuations with the effects of changes in family circumstances, such as the condition of migration, the instability of parental work, the move from one neighborhood to another, variables that can affect both family income and dynamics and parental behavior. It is also likely that children who grow up in less socio-economic fortunate families have adverse home environments or face challenges that affect their development, even if socio-economic circumstances change. An example of this is found in a study of Dhal and Lochner (2005), on the effects of family income on child achievement and used a fixed effect instrumental variables (FEIV) approach to estimate the effect of family income on children’s reading and mathematics achievement.

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<sup>52</sup> The authors explain that ‘socio-economic gradients’ can be analyzed “as the degree of inequalities in educational outcomes attributable to SES (the slope); the extent to which variation in educational outcomes is explained by SES (the R-squared), and the functional form of the relation between SES and educational outcomes (i.e., linear or curvilinear).” (McDonalds and Willms, 2009, p. 560; quoting Willms, 2002, 2003, 2006)

Using the Earned Income Tax Credit (EITC) from 1995 to 2005, the data allows us to follow families over time. A panel of 6,000 children matched to their mothers from the National Longitudinal Survey of Youth (NLSY) with income and demographic data sets was analyzed. The results indicate that income has significant effects on a children's reading and mathematics test scores, estimating that 1,000 USD dollars increase in income, raises reading test scores by 3.6 percent and mathematics test scores by 2.1 percent of a standard deviation. The findings are stronger when considering the inclusion of maternal labor, and when seeing the relationships between past income and current outcomes (Dhal and Lochner, 2005, p. 30). The authors suggest that family expectations about their future income affect outcomes for their child, and this is an issue well thought out by families.

Maternal education has a significant positive impact on years of schooling. According to Zhao and Glewwe (2006), the mothers years of schooling has a greater impact for girls than for boys. In their study in Northwest China using censored ordered probit regressions to estimate the determinants of years of schooling, the authors estimate that an additional year of mother's education keeps her child in school 0.14 years longer. Likewise, household income and child nutrition status increase the years of schooling.

In her study on the effects of parental involvement in homework on student achievement in Portugal and Luxembourg, Villas-Boas (1998), indicates that regardless of student's background, students benefit from homework. Although "a family with higher socioeconomic status is more likely to benefit from homework than students from low socio-economic backgrounds" (p. 54), studies emphasize that homework is beneficial when it is supervised either by teachers or parents, particularly for migrant children, stimulating their cultural development.

### **3.2.2. Cultural Resources**

In the words of Bourdieu (1977), cultural capital is defined as the "instruments for the appropriation of symbolic wealth socially designated as worthy of being sought and

possessed” (p. 488) In other words, combining his definition with France’s educational system of his time, “schools reward students on the basis of their cultural capital” (p. 241) (see Chapter 4). The amount of investment in cultural goods made by a family could be attributed to parents’ cultural capital (Soares and Murta Collares, 2007).

Di Maggio (1982) measures the cultural capital of high school students by using self-reports of participation in art, music, and literature, based on the Theory of Social Reproduction in Education of Pierre Bourdieu. The author proposes three hypotheses, considering the cultural reproduction model and the cultural mobility model as the prediction that measures of cultural implications should be positively correlated with one another, a prediction inherited from the definition of cultural capital as “the domain of elements of a culture of prestige.” (Di Maggio, 1982, p. 190) The analyses was conducted with data from a random sample of respondents to the Project Talent<sup>53</sup>, with variables of information, activities and cultural attitudes of twenty revised data sets. The findings show that educational attainment is an imperfect proxy for cultural capital; single measures of “cultural capital” as art attendance or participation in status cultures are not the ideal variables to investigate cultural capital. Even with these limitations, the data show that “cultural capital has an impact on high school grades that is highly significant and that, in nontechnical subjects, approaches the contribution of measured ability.” (Ibid. p. 190) Students who engage in one kind of cultural activity are more likely than others to find any other cultural activities of interest. This finding confirms the utility of the perspective but it does not insufficiently assess the impact of cultural capital on such outcomes as college quality, or educational and occupational attainment. It also compares the influence of cultural capital in different kinds of educational and occupational settings; and assesses the role cultural capital may play in the mobility strategies of different class segments.

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<sup>53</sup> In 1960, the American Institutes for Research of the United States conducted the first longitudinal study of its type with over 440,000 American high school students from 1,353 schools across the country. The data is still used in multiple fields of study, with follow-up studies with original participants.

A considerable larger set of studies recognized family cultural capital or cultural resources as an artifice to help students to achieve quality education. Examples are as follows: the level of the maternal tongue fluency among students' immigrants (Bernstein, 1977); the determinants of dominant-language fluency among immigrants and the labor market effect of this fluency on earnings. (Chiswick and Miller, 1995) Additionally, the transformative relationship between family background and student achievement is indirectly affected by the intervening cultural capital. (Bourdieu and Passeron, 1977, 1990; Katsillis and Robinson, 1990) Language is a form of cultural capital and differentiates the treatment of school children by educators. Language use in different settings (at home, at school, in the community), would be another factor associated with low to average performance. Language ability, even taking into account attendance of language courses at the community level, remains a problem. Kemppainen, Ferrin, Hite, and Hilton (2008) in their study in Estonia, Russia, Germany, and Finland on the sociocultural aspects of Russian-speaking parents' choice of language of instruction for their children have evidence of the family effects on achievement. After having surveyed 346 Russian-speaking parents in Estonia in 2001 utilizing a cross-sectional survey design, the authors, testing further Kemppainen, Hilton and Rannut's (2015) study, found that language instruction positively affects achievement in ethnic identification and school language of Russian-speaking students in Estonia.

### **3.2.3. Social Resources**

According to Coleman (1988), cultural capital transmits through interactions amid parents and children, and amid children and other adults. The child retains its cultural capital from adults by means of such interactions, known as the child social capital (social resources). In addition to the level of subsistence, family spending can be viewed as family values and cultural values. When in a family education is a priority value, which can be reflected by family spending on cultural capital and on resources that can support learning. This

expenditure can create a favorable home environment to study, as well as provide children with educational and cultural experiences.

The concept of social capital has its origins in the sociology of education according to Putnam (1993), but has been adapted to many other uses within the sociological literature. The transmission of cultural capital takes place via constant interactions among parents and children, and among children and other adults, especially in situations in which the main goal is the consumption of cultural goods retained by the child as social capital. In a more recent study, Putnam (2001) makes a distinction between two kinds of social capital: ‘bonding capital’ and ‘bridging capital’. Bonding capital occurs when people are socializing with people who are alike: same race, religion, ethnicity, and age. Bridging capital occurs when people make friends with people who are not alike, like colleagues of rival enterprises. The author argues that those two kinds of social capital, bonding and bridging, strengthen each other in order to create peaceful societies in more diverse multi-ethnic countries. Inevitably, with the decline of the bonding capital leads to declines of the bridging capital leads to greater ethnic tensions. Therefore, the bonding social capital (family, friends, and relatives) and the bridging social capital (networking) are essential role to child development, of the child in the family and in the family with the community, loops that repeat and grow throughout life. Putnam (1993) agrees with Coleman (1988) that one factor which destroys social capital in the United States is social mobility and the creation of roots that follows it. Another factor behind the decline of social capital is the demographic changes, citing the decline of real income.

This dissertation does not attempt to validate Bourdieu’s position of the educational system as a source of the dominant symbolic power of the system, as shown in his published works throughout the period of the 1970s to 1990s. We consider Bourdieu’s position of agents (individuals) and institutions (school)’s economic, cultural and social forms of capital as core factors defining positions and possibilities (as power) of the various actors in any field. (Bourdieu and Wacquant 1992, p. 76)

### **3.2.4. Parental Involvement**

Parental involvement as a positive influence on student academic achievement is studied in various ways. In his theoretical framework, Epstein (1995) considers parental involvement as a ‘form’ of social capital. The relationship between parental involvement and student achievement as empirically based studies appear under two different types of empirical findings: (1) bivariate analyses, and (2) univariate analysis. According to Fan and Chen (2001), the term parental involvement is “too ambiguous in the way it is defined and in the inconsistencies found across different and numerous studies.” (Fan and Chen, 2001, p. 2)

Cooper, Robinson, and Patall (2006) argue positive correlation between homework and school success. In their study in the United States in Grades 7-12 and Grades K-6, the authors specified that the general evidence is consistent with a positive influence of the homework on achievement. However, no strong evidence was found for an association between the achievement of standardized tests or the result of the opposition. Other authors also argue that homework, combined with parental involvement, positively affects student’s achievement (Maertens and Johnston, 1972; Villas-Boas, 1998).

Epstein (1992) characterizes the variables related to parental involvement through a typology or a conceptual model made by six types of parental involvement: parenting, communicating, volunteering, learning at home, decision making, and collaboration with the community. Hence, (1) Parenting is about the assistance that families give as support to their children as students to establish home environments including parental literacy level, home visits, and family support programs, not necessarily related to school. (2) Communicating refers to designing effective ways of home-to-school exchange about school programs and children’s progress through teachers, principals, and school administrators’ meetings with all parents at least once a year, with language translators to assist families as needed, and regular notifications through news releases, telephone calls, newsletters and other types of school-to-home communication. (3) Volunteering refers to

organization of activities where the school counts on parental support through volunteer programs in the school/classroom to help teachers, administrators, students and other parents. Additionally, through the parents' voluntary work to benefit not only the school but families, with annual surveys to identify parents with different talents, schedules and geographical location. (4) Learning at home refers to providing information to parents on how to help students at home with homework, decisions, and planning related to the curriculum, on the skills required for students in all subjects in each grade and on homework policies which instruct on how to monitor and analyze assignments. (5) Decision-making refers to including families as participants in school decisions and develop parent leaders and representatives through an active Parents and Teachers Association (PTA), advisory councils or committees for parental leadership and involvement at the school and district levels. (6) Collaboration with the community refers to the degree to which parents know and coordinate resources and services from the community for students, families, and the school, and receive services of the community, activities that link learning skills and talents for students.

In this dissertation, parental involvement is defined as a 'form' of social capital. A construct Parental Involvement (PI) is made out of parent-child communication (communicating in Epstein's typology), assistance with homework (parenting/learning at home in Epstein's typology), and educational expectations (i.e., if parents talk about child's future with child, learning at home in Epstein's typology) (Hess, Holloway, Dickson, and Price, 1984; Peng and Wright, 1994; Finn and Voelkl, 1993).

### **3.3. School and Teachers Effects on Student's Achievement**

#### **3.3.1. Teachers and Student's Achievement**

In a study conducted in 1981, 1983 and 1985, respectively, Harbison and Hanushek (1992) examined the effects of school and teachers characteristics in reading and mathematics test scores in primary school children of Northeastern Brazil. Facilities,



teacher salaries, textbooks, and writing materials, showed positive outcomes on student achievement. When taking an exam followed by another exam, students become familiar with the test models constituting an “added value” for their school performance. Thus, the achievements of disadvantaged students are considered as a lesson learned in the context of North-Eastern Brazil. A large group of studies relate family background and peer effects as a major determinant of student achievement (Coleman et al., 1966; Behrman and Knowles, 1999). Finally, school quality should also be a subject of the matter since formal education is the main channel through which children acquire academic skills.

In Japan, Kanei (2012) analyzes the recognition and thoughts of teachers who meet newcomer students in their classrooms, through interviews and classroom observations, the discourse of teachers. The author examines the problem of newcomer students with three main purposes: (1) to clarify the representation or idea of the problem when the teacher wants to accept these newcomers in the class. (2) To clarify the experience the teacher encounters when trying to solve the problems of children. (3) To clarify the experience in the process when the teacher tries to find the strategy to accept these children and employ such strategies. Yamanouchi (2013) criticizes Kanei’s book, showing that the research theme is a positive step in Japan towards analyzing the educational problem of newcomers children from the narrative discourse analysis point of view.

### **3.3.2. Curriculum and Student’s Achievement**

Studies on the curriculum that use dependent variables in programs and subjects, using the percentage of instructional time dedicated to subject areas in curricular program, have been analyzed extensively, as a factor for improving student academic achievement. According to Scheerens and Hendriks (2013), the number of class periods or hours that teachers teach and/or the Time-on-Task teachers set on activities teaching a subject is a

factor of improving students' academic achievement. The authors stated that this variable was operationalized as the number of class periods or hours that a specific subject was taught during the last years of secondary education, divided by the total number of instructional periods for all subjects in each educational program. Subjects listed in national timetables were organized into comparable categories (e.g., the national language, foreign language, mathematics, natural science, social science, history, art, and physical education) and sometimes into more detailed subject categories (e.g., moral education, religion, and geography). The analysis included only those subjects for which instruction was required, although provisions for electives or various curricular options were also recorded. The findings illustrate that electives typically account for no more than one-fifth of the official curriculum at this level.

### **3.3.3. Standards for Teaching and Student's Achievement**

According to Schiro (2008), curriculum ideologies or philosophies shape the way teachers teach and assess their students. Thus, the scholar explains four types of teaching theories or ideologies/philosophies of teachers: the academic scholar ideology/philosophy, the social efficiency ideology/philosophy, the learner-centered ideology/philosophy, and the social reconstruction ideology/philosophy. Each of them describes an approach of learning, teaching, evaluating and seeing the child. Bloom (1976) considers that the scope and sequence of instructional tasks –the curriculum- will make a difference in students performance. “The quality of instructions students receive has a demonstrable effect on their achievement and learning processes over one or more learning task.” (Bloom, 1976, p. 171)

Schmidt et. al (2001) point out that students cannot learn what has not been taught. Assessment data affect achievement and curriculum alignment. The students who have demonstrated competency on areas of the high stakes test before taking the test are likely to do better than those who do not have the prerequisite skills. Likewise, students that

understand the format of the test tend to do better than those who do not (Cohen, 1987, cited by Squires, 2009). Squires (2009) points out that “by using the formative tests as the criteria for providing additional instruction, teachers ensure that more students master the learning task. As more students master the previous learning tasks, more students are ready for the subsequent learning tasks, and the subsequent learning tasks take less time because more students have the appropriate prerequisite skills.” (Squires, 2009, p. 92)

The PNS uses the child-centered and the social reconstruction ideologies/philosophies. In evaluation, teachers under the social reconstruction philosophy use “summative student evaluation and curriculum evaluation (*which*) are inextricably tied together in the particular social environment in which students live.” (Schiro, 2008, p. 172, *italics* by the Author). Trial-error cumulative tests are the Vestibular Simulado tests in the PNS.

### **3.4. Community Factors by School as Determinants for Student’s Achievement**

Using data from the National Education Longitudinal Survey (NELS) in the United States, Glenn, Beaulieu, and Hartless (2009) investigated the influences of family and community factors on students’ learning attainment using the social capital and found that community’s social capital is more important than the family’s social capital in determining student learning. “Policies designed to promote educational achievement must extend beyond school and must strengthen social capital in the family and the community,” (Glenn, Beaulieu, and Hartless, 2009, p. 56). In the study of Henderson and Mapp (2002), support from family and community is found to help raise the performance of failing and poor students. In particular, students in secondary schools with support from parents on homework and career guidance did much better than those without the support.

Epstein and Salinas (2004) linked school-family-community partnerships in urban elementary schools to student achievement. Their study analyzes the importance of a work team composed of school practitioners, parents and community partners, linked to

the school council or the school improvement team within the community where the school is located. The family-school-community partnership's team with a clear focus on promoting student success, designs annual plans for family and community participation, implements and evaluates activities and integrates the activities carried out by other groups and individual teachers in a comprehensive partnership program to the school. The annual action plans use a framework based on Epstein's research with the six types of parental involvement: parenting, communication, volunteering, learning at home, decision-making and collaboration with the community, to focus alliances on the goals of improvement of the school. In a subsequent study on family and community partnerships, Epstein and Sheldon (2010), relate the community partnership with mathematics achievement, evidenced positive correlations between each other.

### **3.5. Educational Aspirations and Achievement**

Relatively few studies (Maxwell, 2008; Yoshimura, 2008) specifically examine whether the family characteristics of the students in Brazilian schools in Japan, have the educational benefits claimed. On examining the family characteristics of this population, most of the studies focus on children in Brazil who enter Brazilian schools in Japan in terms of parental school choices by intention to return to Brazil (Maxwell, 2008). The second group of studies focuses on the intention to find an alternative way for the future of the Brazilian students graduated from Brazilian schools in Japan to be inserted in both Japanese and Brazilian communities (Haino, 2010). The third group of studies focus on the immigrant parents of the older *Nikkeijin* children working in Japan, trapped in low-working class jobs as temporary workers (Tsuda, 2003; Haino, 2008, 2010). Tsuda (2003) explains that, because of remaining in Japan, the *Nikkeijin* children "are trapped in the low-working class jobs of their immigrant parents and are unable to improve their socio-economic position." (Tsuda, 2003, p. 393) Another group of authors focus on the transfer of remittances to support families in Brazil (Goto, 2003, 2008; IDB, 2004; Higuchi, 2009).

Yamanouchi (2002) examines the factors and background that contribute to school absenteeism among Japanese-Brazilian teenagers in Japan, using the results of in-

depth interviews with the Japanese-Brazilian teenager named “Marcia” schooled in a Japanese school. From 1995 to 2001, applying historiography from the point of view of cultural anthropology and critical pedagogy, Yamanouchi identifies reasons for school absenteeism, referred as “truancy”, among Japanese and Brazilian adolescents, namely: (1) the condition of Brazilian students as “temporary students”, who are not required to achieve the same academic level as the rest of their classmates. The author assumes that, as a result, such special treatment as a “guest” may have had the effect of excluding Marcia from the group and labeling her an ethnic and cultural “other”, having been able to contribute to her low academic performance in the Japanese educational system, where cultural assimilation pressure is high. The author assumes that this labeling of the differences could also be a factor that contributes to the adolescent having been ultimately eliminated from the Japanese education system. (2) The financial situation of the parents as unstable (referring to the fluctuating economies of Japan and Brazil) appear as factors that contributed to the teenager’s inability to develop a concrete plan for her life. This is also considered as a factor of her low academic performance. (3) The author adduces the lack of parental involvement in the school life of the adolescent as a factor attributable to school absenteeism. The parental goal to earn money to one day return to Brazil is seen by Yamanouchi as leaving no room for the attention of Marcia’s academic achievements in Japan. Parents did not expect great academic achievements in a Japanese school, but hoped she would be more successful in school in Brazil.

Yamanouchi (2002) denotes the position of cultural assimilation as the highest level of acculturation. The author assumes that not being schooled in a Japanese educational system impedes low performance of Japanese-Brazilian teenagers at school and, eventually leads to their, being eliminated from the Japanese educational system. The financial situation of parents leads to an uncertain future and the parent’s lack of motivation or parental involvement in Marcia’s education are the causal factors the author states for school absenteeism or “truancy.” She precludes “otherization” from teachers and classmates alike as “pity ness.” The author, if not full of prejudices, at least shows

assumptions. She concludes for only one case of the study that the future of the Brazilian Japanese teenager in the study is determined by school success in a Japanese school. However, one should consider the vision of parents and adolescents in relation to the future, since the expectations that both have about the future diverge and, although they are different, they are not illegitimate. The perception of the adolescent feeling oppressed by parental expectations of their parents should not be described by the author as something despicable, but rather as a different expectation about the future.

In a later study, Yamanouchi (2014) refers to schools that support trans-immigrant Brazilians, stating “the problem that Brazilian schools have, may also be our problem. Support for Brazilian schools also generates the new concept of educational study that allows us to overcome the border caused by language and culture in a global society”. (p. 294, original in Japanese) The author completes her idea in the last chapter, describing the phenomenon of transnationality of foreign schools and the problems of their educational policies, understanding transnationality as a principle of carrying out an action across national borders, to effect a more general level. (Yamanouchi, 2014, p. 360)

### **3.5.1. Educational Aspirations by Parents/Students**

Parental aspirations for their children’s academic achievement and their transmission to such aspirations to children (Bloom, 1980), or for post-secondary attainment (Fan and Chen, 2001) can be seen by some authors as a break-down of the parental involvement dimensions. Yun and Singh (2015) used the structural equation modeling approach to investigate the influence of parent’s supervision (such as home rules for doing schoolwork and watching television) and parental aspirations and expectations for children’s educational achievement on their child learning. They found that parent aspirations for children education are the strongest predictor of academic achievement among all the dimensions of parental involvement.

Hess, Holloway, Dickson, and Price (1984) examine the relationship between preschool experience and children school readiness and vocabulary and mathematics test scores of Grade 6 students. They found an excellent example of how early childhood education can act as a predictor of future academic achievement. In their study, the authors included sixty-seven families, but forty-eight families were located for follow-up and agreed to participate in the research during three to four years. The study was conducted when children (23 girls and 24 boys) were in pre-school and in Grade 6. Through interviews conducted to mothers and children at the Research Center Stanford (ages 3-5) and at home (at age 6), the study started when children were 3.8 years, being traced at 4, 5 and 6 years of age. The medium level of schooling of mothers was 13.8 years. Demographic variables of mothers included maternal ability, disciplinary strategies, and marital status, among other variables. The tests included were (1) tests for children: test of mental ability, test of school readiness; and (2) tests for mothers: maternal interview, and a maternal control instrument. Maternal predictor variables were included as measures of school achievement and expectations for achievement on the mathematics and vocabulary tests of the Iowa Tests of Basic Skills (ITBS) and in Grade 6 as outcome measures. Other predictors were strategies for controlling the child's behavior, and effective tone of mother-child interaction, and measures of maternal behavior during preschool. Predictors of achievement at preschool and at Grade 6 were shown with regression analysis taking 12 composites as independent variables. Maternal measures versus mother's SES as predictors were considered with social status and location of parents. The results were indicated by the magnitude of correlation coefficients of variables were the mother's effective relationship with the child during preschool years (positive correlated), the mother's personal authority to child (negative correlated), the efficiency of verbal communication, the expectations for achievement (negative correlated), among other correlations. The authors concluded that the mother's influence on achievement is stronger during preschool education.

Goldenberg, Gallimore, Reese, and Garnier (2001), in their study of the aspirations or expectations of formal schooling for their children of Latino immigrant parents in the achievement of children, address the issues in a longitudinal mixed method study in the United States. A sample of 81 Latino immigrant children from preschool to sixth grade and their immigrant parents, found children's school performance positively affects parents' expectations, but not vice versa.

Being temporary workers, most Brazilian parents do not want to stay in Japan for a long time. However, they end up staying anyway due to their residence determining their children schooling (Ishikawa, 2005; Chitose, 2008). This situation ends in changes in the educational aspirations of their children, an option to enroll them in Brazilian schools of which the diploma would allow them to continue being schooled in a primary, secondary school or, if completing the degree in Japan, or in a Brazilian university upon their return to Brazil. This is an interesting option for parents and gives direction to the future of their children.

### **3.5.2. Educational Aspirations by School Principals/School Coordinators/Teachers**

Punch and Sheridan (1978), using a sample of 704 students ages 16 to 17 from four urban high schools in Australia, explore the relationship between the influences of parents, teachers, and peers, and the vocational aspirations of secondary school students. Taking into account the differences in gender, mental capacity, social class, and family environment, the regression analysis indicates that two-thirds of the variance in male vocational aspirations and half of the variance in aspirations girls' vocational skills are explained by a model that uses predictors of mental ability, social class, home environment, expectations of parents and teachers, and peer aspirations. It reveals that the parental and teachers influence are more important, as intervening variables, between the contextual variables of mental capacity, social class, and the home environment, and the variable dependent on aspirations.



### 3.6. The Concept of Achievement

For the international context in terms of assessments and evaluations, it is worth noting that Brazil participates in international and national assessments to measure quality in student learning achievement. In the Program for International Student Assessment (PISA) for the Organization for the Economic Cooperation and Development (OECD) countries, of which Brazil is a member country, Brazil performed above average. Brazil also participates in the UNESCO's Laboratory for Assessment of the Quality of Education (LLECE).<sup>54</sup> According to the UNESCO's LLECE on the results of the 2006 Second Regional Comparative and Explanatory Study (SERCE) Brazil is ranked with no significant differences between its mean scores and the regional mean for third graders on Portuguese reading and mathematics tests, but ranks significantly above the mean for the region in sixth graders SERCE Portuguese reading test, 2006.<sup>55</sup>

Nationwide, Brazil has several assessment systems at basic, secondary, and university entrance levels. Since the 1990s, the use of evaluation results is incorporated as a result of public policies. The nationwide assessments are the following: SAEB gathers information every two years on pupil performance in the Grade 4 of basic education to Grade 8 of Lower Secondary School and in Year 3 of Upper Secondary School by (1) test performance. (2) Questionnaires for classroom teachers and head-teachers, and (3) evaluation forms filled in field researchers, applied as a sample of pupils, nationwide, with factors associated such as socio-economic status (SES) and cultural profile of pupils, study habits, school management, teacher profiles and parent participation, and in subject areas of mathematics, Portuguese and sciences, pupils know-what, and know-how. ENEM is a type of assessment which has five competencies used

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<sup>54</sup> TIMSS distinguishes between the intended (written), the implemented (taught), and the attained (assessed) curriculum and, in analysis, explores how they are interrelated. Argentina, Belize, and Colombia participate in the Progress in International Reading Literacy Study (PIRLS) for the region of Latin American and the Caribbean whereas Brazil does not (Greaney and Kellaghan, 2008).

<sup>55</sup> The mean score for the SERCE Test is 500.

as measure for evaluation: (1) command of subjects including Portuguese, mathematics, arts and sciences, (2) application of concepts, (3) use of data and information to make decisions in order to solve problems, (4) construction of consistent arguments, and (5) ability to develop proposals, respect for human values and taking into account Brazil's socio-cultural diversity. The modalities are an essay and a multiple-choice test. In Brazil, the examinations required for the entrance into higher education are three:

- 1) VESTIBULAR (selection/classification examination), with two phases: Phase I: Eliminary (minimum mark), and Phase II: Classificatory (order of mark). Content is cumulative among subjects. NOTE: in Grades 8 of Lower Secondary Education and Years 1-2-3 of Upper Secondary Education, respectively, students scores are cumulative to pass the VESTIBULAR at the federal universities.
- 2) PROCESSO SELETIVO SERIADO (PSS) [Continuous Selective Process]: alternative continuous examination/evaluation of student performance during the whole of Upper Secondary Education (not cumulative during the three years of Upper Secondary Education).
- 3) EXAMEN NACIONAL PARA CERTIFICACAO DE COMPETENCIAS DE JOVENS E ADULTOS (ENCCEJA): Test for completion of secondary education for youth and adults. This test is available for Brazilians residents in Brazil and for Brazilians residents overseas. ENCCEJA<sup>56</sup> exam in Japan has taken place every year in three cities in Japan (Hamamatsu, Nagoya, and Ōta) to regulate the status of Brazilians for having a basic education or secondary education certificates, guaranteeing better opportunities, especially for entering the labor market or, eventually, the university. (Onai, 2009, pp.196-197; Interviews at the MEC/INEP 2011; MEC/INEP, 2018) It is worth noting that in 2003, the Japanese

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<sup>56</sup> ENCCEJA exam costs JPY 132,725,000 (= USD1,195,481) for Brazilian Government every year. This system is only taken place in Japan, because many Brazilians send from Japan remittances to Brazil. In FY2007, 1,821 persons took this free-charged examination. (Onai 2009, p. 203)

Government gave permission to Brazilians to benefit from taking the national examinations to enter university in Japan (Onai, 2011).

There is the National Council of Education in Brazil [Conselho Nacional de Educação] (1999, 2002, 2004, 2009) which assesses the level of students in Brazilian private schools in Japan and is charged with drafting the “Estabelecimento de normas para escolas brasileiras no exterior” [Establishment of the regulations for the Brazilian schools overseas] (Resolução CNE/CEB MEC No. 1 of December 3, 2013, Art. 4, Inc. 3<sup>57</sup>). These regulations include the option to access supplementary examinations at the level of completion of elementary or secondary education at the Brazilian Ministry of Education. This includes countries that have a significant concentration of Brazilians residing in the country with which Brazil maintains diplomatic relations, like Japan (Resolução CNE/CEB MEC No. 1 of December 3, 2013, Art. 8). Haino (2010) shows concern for the Brazilian schools as regular schools in Japan, stating contradictions in introducing the consent system while focusing on limitations. The author describes student learning achievement as part of the influence of Brazilian schools for parents on the career choices of their children, affirming that Brazilian schools are orientating the career choices of the immigrant children under the risk of, ‘lurking’ in the idea of the author, of “one day I will come back home.” (p. 34)

### **3.6.1. Student Achievement Assessed**

In this study, student achievement refers to the extent to which a student has achieved their short or long-term educational goals represented by cumulative Vestibular Simulado scores and year-end completion of scores in each subject of a given school year. Student achievement is assessed differently in PNS in Japan and Brazil, although there are similarities in the type of examinations and the exams differ by level of education. In Basic Education Cycles I and II, the types and grading of examinations are:

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<sup>57</sup> Resolução CNE/CEB 1/2013, *Diário Oficial da União*, Brasília, 4 de dezembro de 2013, Seção 1, p. 13.

- 1) Three Monthly Exams: Elaborated from two main topics of study of the entire trimester and cumulative from a trimester to another one, in each subject on a specific date.
- 2) Vestibular Simulado (Simulation of Entrance Examinations): For Grade 8: Portuguese language (8 questions in Japan, 10 questions in Brazil), mathematics (8 questions in Japan, 10 questions in Brazil), science (6 questions in Japan, 8 questions in Brazil), history and geography (5 questions in Japan, 6 questions in Brazil in each subject), English (6 questions in Japan and 4 questions in Brazil), Spanish and philosophy (4 questions in Brazil in each subject, subjects which are not included in Japan) – equaling 40 questions of multiple choice in Japan and 50 questions of multiple choice in Brazil.

In Secondary Education (Years 1-2-3), the types and grading of examinations are:

- 1) Dissertation Exam: An exam elaborated from two main topics of study of the entire trimester, and cumulative scores from one trimester to another one, in each subject on a specific date. Seven to 10 questions (value: 0.7) measure the comprehension of problem-solving, its understanding and the written expression of the found solution.
- 2) Vestibular Simulado (Simulation of Entrance Examination, VS in this study): Elaborated from two main topics of study of the whole trimester and cumulative from one trimester to another; consisting of 60 multiple choice questions in Years 1-2-3 of secondary education: Portuguese language (10 questions), mathematics (8 questions), physics (7 questions), chemistry (7 questions), biology (7 questions), history (7 questions), geography (7 questions), foreign language English (7 questions). In Brazil, depending on the school, Foreign language Spanish is also evaluated, as well as philosophy and sociology (5 questions per discipline) – with a value of 0.03 each question = 3.0 (general score given equally for all the validated disciplines) (See Appendix A: Vestibular Simulado Model of Exam, and Appendix Ab: *Gabarito*/Model of Scoring or Grading). Students take the entire

battery of questions included in the test, so each student score a statistical estimation from the total results. Above all, the VS test tracks individual student growth over time.

- 3) Trimestral Exam: Elaborated from two main topics of study of the whole trimester and cumulative from one trimester to another one; with multiple choice questions and dissertation questions on the subjects: philosophy, sociology, foreign language English, foreign language Spanish and religious education. In the case of Japan, the subject 'foreign language Spanish' is replaced for the 'foreign language Japanese.'

This study measures the achievement of students in Japan and Brazil year-end scores (Y-ES) and Vestibular Simulado (VS). The year-end scores, considering the results of students' achievement at the end of the school year in each subject evaluated through the trimester exams. The Vestibular Simulado scores, considering the results of student's achievement as cumulative scores of three trimesters and prospects of grades in the preparation to the entrance examinations in Brazilian federal universities.

## **CHAPTER 4**

### **METHODS**

#### **4.1. Theoretical Framework**

##### **4.1.1. Theory of Social Reproduction in Education**

Bourdieu and Passeron (1977, 1990) set forth what appear to be a comprehensive theoretical framework about reproduction in education. Their theoretical conceptualization about reproduction theory focuses on three main sources of variation issues: (1) The effect of education in reproduction of class position depends on the definition of class. Defining class by ownership and authority relations in the workplace yields different results than when class is defined by occupational prestige or status scores (Katsillis and Robinson, 1990; Robinson and Ganier, 1985). (2) Variances are found in the effects of particular mechanisms underlying educational reproduction in different countries resulting from the extent to which they are stratified into curricular tracks (Bidwell and Friedkin, 1988). (3) The role of education in social reproduction and the effects of the mechanisms underlying educational reproduction vary by sex (DiMaggio, 1982; Robinson and Ganier, 1985).

Bourdieu and Passeron (1977) investigated the relationship between cultural capital and student's learning attainment in France in the 1960s in a conceptual manner. In a subsequent study, Bourdieu (1986) categorized capital into: (1) economic capital: economic resources (i.e., money, assets, property); (2) social capital: possession of a network of institutionalized relations of mutual knowledge and recognition; and (3) cultural capital: the education of a person (knowledge and intellectual abilities) that gives advantage to achieve a higher social status in society (Bourdieu, 1986, p. 243). The author further put cultural capital into three categories: (1) embodied capital, which comprises knowledge that is acquired consciously and passively inherited, through socialization to

culture and tradition, acquired over time, as it is printed in the person's 'habitus' (character and form of thinking), receptive to similar cultural influences. It includes linguistic cultural capital as the domain of language and its relations and the means of communication and self-presentation of the person, acquired from the national culture. (2) objectified capital, which comprises the property of the person (for example, a work of art) that can be transmitted to obtain economic benefits (purchase and sale) and to symbolically convey the possession of cultural capital by owning such things. (3) Institutionalized capital, which includes the formal recognition of an institution to the cultural capital of a person, usually academic credentials or professional qualifications where, in the labor market (a job), it allows the expression of the cultural capital collection of the person as qualitative and quantitative measures. Institutional recognition facilitates the conversion of cultural capital into economic capital. The cultural capital of a person is linked to their 'habitus' (character and inclinations) which starts with the early childhood development in the pre-school education and is subject to be modified during the life; and their 'field' (social positions), which are configured as a structure of social relations. (Ibid., pp. 244-245)

The theory of cultural capital arises in an important theory to analyze inequality in any social environment. In sociology, cultural capital consists of a person's social assets (i.e., education, intellect, clothing styles, and codes of language and/or expression) that promote social mobility in a stratified society. Cultural capital includes all the material and symbolic goods that society considers worthwhile to seek, including the accumulated cultural knowledge that confers social status and power, being an element of exchange. For Bourdieu, the 'habitus' is formed in its essence by "domestic" influences, a process of socialization that begins in the family in early ages, and then develops further through the individual's own experience to "class conditions." The transmission of cultural capital is an important part of 'habitus' formation.

Nevertheless, the theory of social reproduction in education, society and culture of Bourdieu and his notion of 'habitus' are considered, for many authors, deterministic

(Jenkins, 1982; Goldthorpe, 2007). For Jenkins (1982), Bourdieu's view of not leaving room for individual consciousness and/or individual agency, even trying to transcend the dichotomy between structure and agency, is not necessarily convincing. For Goldthorpe (2007), Bourdieu's view of the transmission of cultural capital as a key process in social reproduction is erroneous because different class conditions do not give rise to ways of routine as distinctive and permanent as Bourdieu would suppose. Goldthorpe considers that even within the most disadvantaged classes, with little access to "high culture", values that favor education may still prevail and there may be some relevant cultural resources. Hence, schools can function as important re-socialization agency. This, to subscribe and also to complement in several aspects, to compensate or even to counteract the family influences in the creation and transmission of 'cultural capital', and on a massive scale.

Bourdieu coined the concept of 'cultural capital' to describe how educators assume that students have the cultural knowledge of the dominant class in society. Understood as "high culture" by Bourdieu, educators come to expect that students have the kind of knowledge/learning styles, and language of the upper and middle classes (Postiglione, 1997 quoted by Kubow and Fossum, 2007). Consequently, "language is a form of cultural capital and functions to differentiate the treatment of school children." (p. 99) Bourdieu's (1986) definition of 'symbolic capital' refers to "capital -in whatever form- insofar as it is represented, i.e., apprehended symbolically, in a relationship of knowledge or, more precisely, of misrecognition and recognition, it presupposes the intervention of the habitus, as a socially constituted cognitive capacity." (p. 256)

Based on Katsillis and Robinson (1990), explanation of a causal ordering of the reproduction process is made as "(1) family background directly affects cultural capital - the background effect, (2) cultural capital directly affects academic rewards -the cultural capital effect, (3) family background affects academic rewards indirectly through cultural capital -the transformation relationship. The term social reproduction means that social hierarchies (class and/or status positions) are ultimately reproduced, in the sense that



children of parents with a social advantage are, in turn, receiving the same advantage.” (Katsillis and Robinson, p. 273) Empirically, educational reproduction is demonstrated in the extent to which family background affects academic achievement, regardless of the intervening processes.

The Theory of Social Reproduction in Education states that education can perpetuate itself, with undesirable meanings. According to Coleman (1988), social capital is the creation of human capital. For the author, “social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain action of actors -whether persons or corporate actors- within the structure.” (Coleman 1988, p. 98) Coleman argues about the boundaries of the relations, economic and non-economic, differentiating the concepts of human capital and social capital, defining human capital as “the skills and knowledge acquired by an individual”, and stating that social capital “exists in the *relations* among persons.” (Ibid., p. 98, *italics* in the original) Trustworthiness of social structures, information channels, and norms and effective actions are the ways Coleman explains the forms of social capital as constructs of human capital, suggesting that closure of social networks (closure of structures) in the case of norms imposed by parents on children is an inter-generational closure, with the indoor and outdoor relations of the family. The author states that family background is composed by the component’s financial capital (family income), human capital (parent’s education), and social capital (relations parents with children and with siblings). Using the variables (1) presence of the parents, (2) attention from the adults to the child, and (3) expectation of parents for children’s education, the author states that to give a child access to adults human capital, presence of adults in the family and parental involvement is necessary and that, without a strong relationship between parents and children, the result will be a lack of the child’s embeddedness in the youth community and that, ultimately, would cause lack of achievement or even drop out of the child at school.

As we mentioned in Section 3.2.2., Di Maggio (1982) utilizes the concept of cultural capital and its impact on school grades, measured through a composite of cultural capital controlling for family factors. Quoting Bourdieu (1977), Di Maggio states that “schools reward students on the basis of their cultural capital” (p. 190). In his study, four hypotheses are presented, where cultural capital mediates the relationship between family factors and student’s achievement, where rates of return are higher for high-class status families, known as “the reproduction model.” The author uses American students’ self-reports on music, literature and art activities participation, assuming that those activities are considered high-status culture, associated with cultural capital that the school does not offer. With data disaggregated by gender and by subjects, the author concluded that girls were more interested in cultural capital than boys, confirming Hypothesis of Bourdieu that socializing in early ages is critical to adult’s inclination to high culture.

According to Onai (2005), the Theory of Reproduction in Japan is related to the discussion about the inequality of the class-stratum (social class) in education through (1) the economic gap, (2) the setting of classes, and (3) the changed social status in the Japanese society. During the period of economic boom, people had the notion of “everyone in the middle class” (i.e., “100 million in the middle class”) while this was an illusion. Therefore, the discussion about the inequality of the class-stratum began to occur again in Japanese society. The reproduction theory comes from economics, sociology, and sociology of education analyzing how the reproduction of the class-stratum is important to sustain capitalism. Onai explains that there are two schools for the New Theory of Social Reproduction: (1) the necessity of the view of education and culture (i.e., sociological analysis) studied by Althusser, Bowles and Gintis, and Willis; and (2) the role of culture and education as important elements to understand the Class-Stratus Structure, studied by Bourdieu and Bernstein. (p. 6) According to the author, there is a weak point in the Theory of Reproduction, which establishes that it is necessary to discover a more historical point of view, being insufficient only to criticize it. Considering

that “social inequality = inequality of the class-stratum” is not good, the author states that it is also necessary to analyze gender and ethnicity. (pp. 7 and 8)

In the same study, Onai explains that the (1) mechanism system/system world; (2) the labor-lifeworld/personal-life world, and (3) the group-world must be changed to (i) cohabitation/coexistence of the system = inequality in sex, gender, race and ethnic origin, coming from the system (i.e., complicated in the lenses of the author); and (ii) cohabitation/coexistence of life (*Lebenswelt* -lifeworld- of Habermas) = world of work and life, coming from individual (i.e., less complicated in the lenses of the author). Thus, the scholar states that to create “cohabitation/ coexistence of community life”, it is important to overcome the cohabitation of the system. At school, this cohabitation/ coexistence of life could be exercised in the class activity (classroom interactions), one for ‘multicultural education’ and another for the ‘action for minorities.’ Then, he proposes a dual table of (1) cohabitation/ coexistence of the system + (2) cohabitation/coexistence of life, thus it will be possible to make a future design of the social (or system), dissolving the (1) cohabitation of the system (i.e., inequality in sex, gender, race, and ethnicity), coming from the attribute of based social inequality. (Onai, 2005, pp. 276-277) On ethnicity, there is a long-term study introducing the theory of cultural contact and the theory of self-esteem (Ibid., p. 277). The author discusses the position of the class-stratum structure located in social inequality and how to overcome the possibility of social inequality (grounded attribute) with a new focalization of the inequality of the class-stratum structure.

Onai referred to the dual framework. In fact, the author follows the history of sociology, proposing the notion of “cohabitation/coexistence of community life”, following and developing the idea of Habermas, as a framework: (1) cohabitation/ coexistence of the system, and (2) cohabitation/coexistence of life. However, we do not know if it is possible to break, with this method of analysis, the social inequality deeply rooted in Japan that comes from the system itself. It would be necessary to continue doing research on this point. With Hashimoto (2018), a new look of contemporary Japan tries

to shed light on the subject, explained in the following section. Consequently, the Theory of Social Reproduction in Education cannot be the only response for this dissertation in terms of the conceptual framework because PNS students are not coping or reproducing the life-stories or class status of parents, although the scenario is possible.

#### **4.1.2. Theory of Social Mobility**

The first scholar who describes Social Mobility was Pitirim Sorokin in 1927. According to Sorokin, Social Mobility might be considered in different senses, emphasizing the importance of cultural factors as essential for social conduct. The Theory of Social Mobility is understood as Upward Mobility, as “the experience of moving up into a more privileged economic position in society, associated with notions of meritocracy and equality of opportunity”, or as Horizontal Mobility, “when there is a change in the position of the individual occupation or otherwise without changing the position in the social hierarchy”; or as Vertical Mobility, “when there is a change in the position of the individual that leads to a change in the positioning in the social hierarchy.” (Reimer and Pollak, 2010) Examples of Horizontal Mobility are jobs with same prestige, even with territorial movement; and Vertical Mobility, are changes of social position either upward or downward, as any change in the occupational, economic or political status of an individual with Vertical Ascending Mobility (social climbing) or Vertical Descending Mobility (social sinking). Generalities of Social Mobility show that societies have resistances facing transitions from one social stratum to another, intensiveness differ among societies, and fluctuations are over time. For an individual, the factors which facilitate Social Mobility are motivation, achievements and failures, education, skills and training, migration, industrialization, urbanization, legislation, politicization, modernization, individual characteristics (i.e., ethnicity, race, social background) which correlate with psychological problems, facilitate or hinder individual’s chances of social

mobility.<sup>58</sup> Examples are a change in occupation and consequently change in social status, a promotion within the same occupational group, the accumulation of seniority within a given occupation, or a change in occupation from one generation to another (from father to child). Social Mobility has both positive and negative consequences.

Corak and Heisz (1999), investigated the intergenerational social mobility in Canada using longitudinal income tax data of 400,000 father-son pairs. Their findings showed that earnings mobility is much more elastic among low-income families in comparison to high-income families. Kim (2005), in his article on South Korea education, affirms that the education expansion made most Korean parents believe that, through education and hard work, their children can move upward to an income level higher than them. However, this expectation has been threatened by the reality that income inequality has widened. The increase in social polarization and increasing educational inequality among South Korean children suggested that the education system in South Korea has increased the inequalities (Kim, 2005).

Brasor and Tsubuko (The Japan Times, 2018)<sup>59</sup> explained that, in Japan, social-class divisions are widening. Quoting Hashimoto (2018), the current population can be broken down into the following five social-classes, opposing to the traditional two social classes of owner's class and workers' class: (1) the owner's class, with annual income of around JPY6 million, for a total of 2.5 million of the active population; (2) the new middle class, with average annual income of around JPY5 million, consisting out of 2.85 million of the active population; (3) the regular employee class, with around 22 million of the active population; (4) the traditional middle class, for a total of 8 million of the active population; and (5) the subclass, consisting out of 9.3 million of the active population. With the exception of women who work to supplement the family income, almost all part-

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<sup>58</sup> The nations with low Social Mobility are also found to be associated with economic stagnation.

<sup>59</sup> Brasor, P. and Tsubuko, M. (2018, May 13). Poverty in Japan: Underclass struggle to achieve upward mobility, *The Japan Times*, Tokyo. <https://www.japantimes.co.jp/news/2018/07/13/business/poverty-japan-underclass-struggles-achieve-upward-mobility/>

time workers belong to the lower class, which has expanded in size in recent decades and has become a fixed class. The biggest problem is that once a person is hired as a non-regular employee, they tend to be stuck in that position for the rest of their lives, even if they change jobs. Then, even if the economy improves, the lives of lower-class people do not. The author states that the easiest solution would be to increase the minimum wage, which varies from one region to another, but tends to be in the range of JPY800 to JPY1,000. If the minimum wage were increased to JPY1,500 per hour, someone who works full time would earn at least JPY3 million per year, enough to live comfortably. Even if both spouses only earn the minimum wage, a couple could have a family income of around JPY6 million, which would allow them to start a family.<sup>60</sup>

For many years the international academy, including Japanese academics, believed that the Theory of Social Mobility would allow societies to grow on an eternal scale. Formal education through academic success and the obtention of credentials as a principal mechanism in social mobility was and still is much appreciated in the traditional Japanese society and culture, which strongly encourage development through individual achievement (Ogbu, 1974, p. 309). According to Goldthorpe (2007), in the last decades of the twentieth century, the tendency was rising rates of upward mobility; however, in the current structural conditions, this return should not be given in the condition of changing the relative rates towards more fluidity or more equality. However, to the same extent, this would produce increasing rates of downward mobility. Consequently, it is debatable.

The study evaluates whether the Theory of Social Reproduction or the Theory of Social Mobility is dominant in the case of PNS students of Brazilian descent both in Japan

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<sup>60</sup> Japan is basically divided into two economic groups: those who can marry and afford to have children, and those who cannot. Hashimoto proposes the system of “basic income”, giving without any condition the minimum fee necessary to live in the society. To take out these causes producing the gap of income, the author proposes two solutions: (1) Raising the inheritance tax, and (2) getting the equality of chance for studying; changing into the system of scholarship providing fee instead of return-system of fee, and building a common consent that it is important to reduce the gap. (Hashimoto, 2018)

and Brazil. It reviews which elements have the greatest impact on achievement and whether they can be attributed to either one of the theories. As a possibility that both theories are complementary, further results will determine what happens in reality.

#### **4.1.3. The Comparative Education Paradigm**

The comparative education paradigm has a long history, documented by previous studies (Ginsburg and Price-Rom, 2008; Klees, 2008b; Epstein and Carroll, 2005; Psacharopoulos, 1990), authors who argued that comparative international education fields cannot only be seen through the view of education but by border crossings with other disciplines (economics, sociology, anthropology, etc.) and that those borders are not always clear (Noah, 1984). Klees (2008b), in his presidential speech at the Comparative and International Education Society (CIES) annual conference, made an analysis through the lens of history, and describes the theories, methodologies, and practices of the Comparative and International Education (CIE) field. From the 1960s, the author describes the theory in CIE into three main parts, the 1960's as characterized by the predominance of human capital theory (or neoclassical economic theory); the 1970's as the "paradigm war" between structural-functionalists (and status attainment theory) versus conflict theory; and from the 1980's onward the alternative theories (i.e., economic reproduction theory, cultural reproduction theory, World-system theory, critical pedagogy, etc.) denominated by the author as "critical theory/paradigm" or "political economy." (p. 309) The author reflects on the limitations on methods for "education doers", criticizing the regression analysis in education and offering alternative methods to do the analysis with a combination of "quantitative/positivist methods, qualitative/interpretative methods, and critical/transformative methods", with evidence. (p. 316) On his reflections on practice, the Klees argued that learning outcomes are not the only way to measure good policies while there are other factors which give better explanations, such as a strong focus on educational inputs and processes. In his critiques on practices, privatization, vouchers and charter schools which he sees as variables which cannot solve

per se the problem of improving student's achievement, when ignoring class size or qualification of teachers, which also matter. One critique which arises from the review is that any theory Klees emphasized (e.g., human capital theory, critical theories, or the like) serves as a comparative international education theory itself. However, while analyzing specific practices, such as student learning outcomes, the focus can move to comparing educational achievements.

Bradley and Epstein (2004) attempted to make discernment in trends, contours, and boundaries in comparative education. According to Postlewaite and Leung (2007), the objective of measuring achievement for comparing pupils, schools, provinces or regions within a country, and within countries while considering skill levels, benchmarks and overall scores "to know which variables are associated with variation in achievement (...) to think of what action to take to ameliorate the situation." (Postlewaite and Leung, 2007, p. 239) The authors presented a guideline to develop an effective way to explain the flow of analyzing the factors affecting achievement.

Bray and Murray Thomas (1995) put ahead what seems to be a comprehensive theoretical framework about comparative education. The authors proposed a multilevel analysis through a cube. (p. 475) In their framework, levels of analysis can be seen as geographical/location levels (i.e., level 1: World regions/continents, level 2: countries, level 3: states/provinces, level 4: districts, level 5: schools, level 6: classrooms, and level 7: individuals); non-locational demographics groups (i.e., ethnic groups, age groups, religious groups, gender groups, other groups and entire population); and aspects of education and society (i.e., curriculum, teaching methods, educational finance, management structure, political change, labor market, and other aspects). Based on Bray and Murray Thomas (1995), this dissertation proposes an analysis as a cube or multilevel analysis which involves (A) Geographical/location levels, such as level 1: World regions/continents (i.e., South America and Asia/Latin America and East Asia), level 2: countries (i.e., Japan and Brazil), level 3: provinces/states (i.e., Shizuoka, Aichi and Gunma in Japan, and São Paulo and Parana in Brazil), level 4: cities/districts (i.e.,

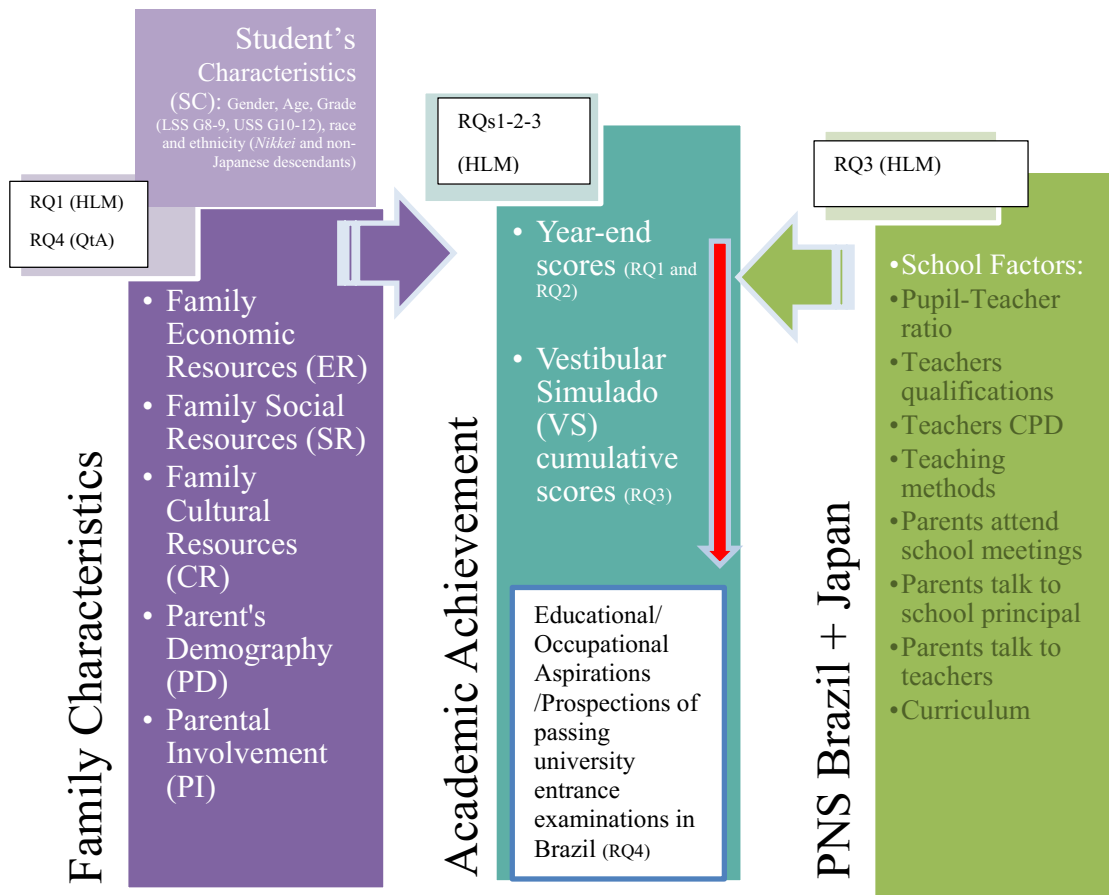


Hamamatsu, Kariya, Ōta in Japan/Marilia, Londrina and Curitiba in Brazil), level 5: schools (PNS A, B and C in Japan/PNS D, E, and F in Brazil), level 6: classrooms (Grades 8 and 9 and Years 1-2-3/various subjects), and level 7: individuals (students of the six sampled PNS); (B) Non-locational demographics groups (i.e., ethnic groups such as Japanese-Brazilian descendants students); and (C) Aspects of education and society (i.e., curriculum, teaching methods, educational finance, and management structure).

#### **4.1.4. Conceptual Framework**

The conceptual framework of the study is presented in Figure 4.1. Academic achievement and prospection to enter university entrance examinations in Brazil are explained as outcomes. Family characteristics are a function of cultural and socio-economic resources with parental involvement to acquire student skills, exposure to school factors, and cumulative scores (VS) in preparation for the test for admission to universities. Family factors include the analysis of student's individual characteristics, parents' demography, economic resources, social resources, cultural resources, and parental involvement based on the revised literature. For Student's Characteristics (SC), the authors revised and utilized are Soares and Murta Collares (2007); for Economic Resources (ER): Buchmann (2002); for Social Resources (SR): Coleman (1988); for Cultural Resources (CR): Bourdieu (1977), Di Maggio (1982), De Graaf (2000), Onai (2009); for Parent's Demography (PD): Rudner (1999); and for Parental Involvement (PI): Epstein (1992, 1994), Sui-Chu and Willms (1996), Fan and Chen (2001).

Figure 4.1. Conceptual Framework of the Study



**Source:** Created by the Author based on the literature review. For PNS: Patrinos, et. al (2009). For constructs (indexes): Student's Characteristics (SC): Soares and Murta Collares (2007); Economic Resources (ER): Buchmann (2002); Social Resources (SR): Coleman (1988); Cultural Resources (CR): Bourdieu (1977), Di Maggio (1982), De Graaf (2000), Onai (2009); Parent's Demography (PD): Rudner (1999); PI: Epstein (1992, 1994), Sui-Chu and Willms (1996), Fan and Chen (2001); Occupational Aspirations: Punch and Sheridan (1978), Trice and McClellan (1993). For Curriculum: Squires (2009). Models: For Higher Linear Model (HLM) –RQ1, RQ2 & RQ3 Raudenbush and Bryk (2002). For content analysis -RQ4: Krippendorff (2013). **References:** SE: Secondary Education. LSS: Lower Secondary School. USS: Upper Secondary School.

School factors include the analysis of educational management through the variables of the pupil to teacher ratio, teachers' qualifications, teachers CPD, teaching methods, and to teachers' parental activities with school including attendance to school meetings, and parents talk to teachers and school principals, explained in Section 2.5.2. in this dissertation (Schiro 2008; Squires 2009; Alexander, 2000; Stallings, 1970 quoted by The World Bank Group, 2015). Achievement includes the year-end scores as a determinant of student performance and the accumulated scores (named Vestibular

Simulado -VS) in preparation for the entrance examination as an indicator of the student's post-temporary migration possibilities on the destination university entrance examination in Brazil. Prospection refers to the extent to which exposure to family factors produces academic achievement sufficient for the student to pass the entrance university examinations and is related to the level of other school factors (e.g., schooling in PNS) and/or individual factors (i.e., gender, age, grade, ethnicity -Nikkei and non-Japanese descendants, and race). Educational aspirations (adolescents' occupational/educational aspirations for future) were assessed by asking school principals and teachers, parents and students to state the occupation they wished to have when they grew up across the entire framework through the analysis of 'voices'. Empirical counterparts are developed for the theoretical variables (Punch and Sheridan, 1978).

## **4.2. Analytical Framework**

### **4.2.1. Hypotheses**

This study identifies eight hypotheses corresponding to each of the eight sub-research questions outlined in Section 1.3. Related to the two sub-research questions under Research Question 1, the following two hypotheses are formulated.

**Hypothesis 1.1.** In Brazilian PNS in Japan and Brazil, the effect of student characteristics of gender, age, race, ethnicity, and grade, influenced the results of the student's academic achievement (year-end scores) in both settings.

**Hypothesis 1.2.** In Brazilian PNS in Japan and Brazil, the effect of family factors of parent's demography, economic resources, social resources, cultural resources, and parental involvement on the education of their children, influenced the results of the student's academic achievement (year-end scores) in both settings.

Hypothesis 1.1. and Hypothesis 1.2. are formulated in terms of the determinants of the student's academic achievement in the annual test scores of different subjects (i.e., mathematics, geography, history, literature and foreign language English for Japan; and mathematics, physical education, geography, history, literature, and foreign language

English for Brazil). Both hypotheses correlate the effects of demand-side factors, namely the characteristics of the child and the family factors, with student achievement. These hypotheses are basically set in order to update the previous studies on the determinants of student academic achievement but go further by examining indexes or constructs of economic, social and cultural resources associated to academic achievement, using a primary-source data set.

As reviewed in Section 3.1., Hypothesis 1.1. builds on a set of previous studies which explain the relevance of the child's characteristics on academic achievement. Various authors (Guimarães and Sampaio, 2007, 2008; PREAL, 2008; Kunje, Selemanni-Meke and Ogawa 2009; Weis, Heikamp, and Trommsdorff, 2013; Areepattamannil and Berinderjeet, 2013; IDB, 2018), and PISA outcomes (OREALC/UNESCO, 2013; OECD, 2013, 2015), generally highlighted in their findings the significant effect of gender in academic achievement, indicating that boys perform better in mathematics /sciences test scores and girls perform better in reading/literature test scores. Guimarães and Sampaio (2007) emphasized in their findings that gender and race do play a role in student's academic achievement. Zhao and Glewwe (2006) emphasized that mother's years of schooling has a bigger impact on girls than on boys.

As reviewed in Section 3.2., Hypothesis 1.2. builds on a set of previous studies which state that whatever human capital exists in parents, the child may not benefit due to a lack of social resources. For instance, demography of the parents (Rudner, 1999), parental involvement in the child's education (Maertens and Johnston, 1972; Epstein, 1991, 1995; Sui-Chu and Willms, 1996; Villas-Boas, 1998; Fan and Chen, 2001; Cooper, Robinson and Patall, 2006), family economic resources (Buchmann and Dalton, 2002; Dhal and Lochner, 2005; McDonalds and Willms, 2009), family social resources -social capital (Coleman, 1988; Putnam, 1993, 2000), and family cultural resources -cultural capital (Bourdieu, 1973, 1990, 1997, 2000; Bourdieu and Passeron, 1977, 1990; Di Maggio, 1982; De Graaf, 2000; Soares and Murta Collares, 2007; Onai, 2009), are crucial indicators of the physical, psychological and socio-cultural resources of the family

(Chiswick and Miller, 1995; Chiswick and Deb-Burman, 2003), acting as mechanisms for the academic development of children. Furthermore, those families that show more instruments such as their physical resources (goods or artefacts or ‘possessions’ -in terms of Pierre Bourdieu) and sociocultural resources stimulate their children to participate in school activities and extracurricular activities, for example, learning a second or third language (Kemppainen, Ferrin, Hite and Hilton 2008; Kemppainen, Hilton and Rannut, 2015), or attending a library outside the school. Fuchs and Wößmann (2004) emphasized in their findings the effect of computers in student’s academic achievement, indicating that the relationship becomes negative for home computers and insignificant for school personal computers.

Hypothesis 1.1. and Hypothesis 1.2. of this dissertation based on the mentioned previous studies are also consistent with the scenarios which can be explained by the conceptual model used in this study. (See Subsection 4.1.4.)

Related to the two sub-research questions under Research Question 2, the following two hypotheses are formulated.

**Hypothesis 2.1.** In PNS in Japan and Brazil, teachers with more years of teaching experience, with no overload schoolwork, with more hours of teaching, and with better income are more likely to correlate positively to student’s academic achievement.

**Hypothesis 2.2.** In Japan and Brazil, the community factors facilitated by PNS - like the usage of a community library, the language used in the neighborhood, a second language acquisition learned in community centers, and the family’s network; correlate positively to student’s academic achievement.

Hypothesis 2.1. and Hypothesis 2.2. are formulated in terms of the determinants of the students’ academic achievement in the annual test scores of different subjects (i.e., mathematics, geography, history, literature and foreign language English for Japan; and mathematics, physical education, geography, history, literature and foreign language English for Brazil). Both hypotheses correlate the effects of supply-side factors, namely

the school factors (i.e., teachers) and the community factors facilitated by school, using a primary-source dataset, with student achievement.

As reviewed in Section 3.3., Hypothesis 2.1. builds on a set of previous studies which explain the relevance of teacher's factors on academic achievement. Various authors (Harbison and Hanushek, 1992; Kanei, 2012; Yamanouchi, 2013), generally highlighted in their findings the significant effect of teacher characteristics, indicating for instance that teachers' salaries show positive impacts on student's academic achievement. Kanei (2012), in her qualitative findings, emphasized that teacher's recognition and perceptions on newcomer's students in Japan do play a vital role in student's academic achievement. For Scheerens and Hendriks (2013), the number of class periods or hours that teachers teach and/or the Time-on-Task teachers set on activities teaching a subject is a factor of improving students' academic achievement.

As reviewed in Section 3.4., Hypothesis 2.2. builds on a set of previous studies which explain the relevance of community factors facilitated by school on academic achievement. Glenn, Beaulieu, and Hartless (2009), and Henderson and Mapp (2012) underlined in their findings the significant effect of community support indicating that children at risk or with poor performance can benefit from the social capital associated with the family and the social capital of community. For Epstein and Salinas (2004), school-family-community partnerships are factors for improving students' academic achievement. Epstein and Seldom (2010), relate community partnership (especially family in community participation) with mathematics achievement, finding positive correlations between one another.

Hypothesis 2.1. and Hypothesis 2.2. of this study are set based on a group of these previous studies, including the importance of curriculum and standards for teaching on students' academic achievement. (See Subsections 3.3.2. and 3.3.3.) The hypotheses are also consistent with the scenarios which can be explained by the conceptual framework used in this study. (See Subsection 4.1.4.)

Related to the two sub-research questions under Research Question 3, the following two hypotheses are formulated.

**Hypothesis 3.1.** In PNS in Japan and Brazil, student characteristics (gender, age, grade, race, and ethnicity) differ in affecting the prospect of PNS students to pass the university entrance examination in Brazil, measured by Vestibular Simulado test scores.

**Hypothesis 3.2.** In PNS in Japan and Brazil, the family factors (Parent's Demography, Economic Resources, Social Resources, Cultural Resources, and Parental Involvement) differ in influencing the prospect of PNS students to pass the university entrance examination in Brazil, measured by Vestibular Simulado test scores.

Hypothesis 3.1. and Hypothesis 3.2. are formulated in terms of the determinants of the students' academic achievement in the Vestibular Simulado cumulative test scores of different subjects (i.e., mathematics, geography, history, and foreign language English for Japan; and mathematics, geography, history, literature, and foreign language English for Brazil). Both hypotheses correlate the effects of demand-side factors, namely the student's characteristics and family factors; and supply-side factors, namely school factors (i.e., teachers) and the community factors associated to school, using a primary-source dataset.

As reviewed in Section 3.6., both hypotheses build on a set of previous studies which explain the relevance of assessing students through Brazilian national examinations for entering the national universities in Brazil, like Vestibular or ENEM. According to the literature reviewed (CNE, 1999, 2002, 2004, 2009), for assessing the level of the students in Brazilian schools in Japan, there is a regulation from the National Council of Education in Brazil which include the option to access supplementary examinations at the level of completion of elementary or secondary education at the Brazilian Ministry of Education. Soares and Murta Collares (2000), investigate the determinants of individual and family factors as key indicators of student performance, finding a positive correlation with the scores of entrance tests in Brazilian universities.

Hypothesis 3.1. and Hypothesis 3.2. of this dissertation are based on a group of previous studies (Schmidt et. al 2001; Cohen, 1987 cited by Squires, 2009), including the importance of trial-error practices of cumulative examinations for students' academic results. (See Subsection 3.3.3.)

Related to the two sub-research questions under Research Question 4, the following two hypotheses are formulated, taking into consideration the qualitative nature of these two hypotheses.

**Hypothesis 4.1.** In Japan, families, school principals and/or teachers describe their expectations about children's/student's educational aspirations regarding the future, linking these expectations to school achievement.

**Hypothesis 4.2.** In Japan, students describe their expectations in relation to their educational aspirations regarding future, considering their exam results.

Hypothesis 4.1. and Hypothesis 4.2. are formulated in terms of the students' future aspirations of work, of study, or of work and study. From demand-side factors, namely the students and family beliefs and assumptions on child's future; and supply-side factors, namely school practitioner's beliefs and assumptions on students' future, this dissertation uses a primary-source dataset consisted on interviews and questionnaires.

As reviewed in Section 3.5., the perception of the school practitioners (i.e., school principals, school coordinators and teachers), parents, and students, on student's educational aspirations show that the parents who are supportive of children's educational aspirations through involving themselves in the education of their child at home, and having a positive relationship with school management and school environment, are more likely to expect better results of the child at school and aspire a bright future for the child. According to various authors (Hess, Holloway, Dickson, and Price, 1984; Finn and Voelkl, 1993; Peng and Wright, 1994; Bloom, 1980), children's educational aspirations of parents are key determinants of student's achievement, particularly mother's influence in early childhood education development. Tsuda (2003) explains that the *Nikkeijin* children remaining in Japan "are trapped in the low-working class jobs of their immigrant



parents and are unable to improve their socio-economic position.” (p. 393) Haino (2008 2010), attempted to find an alternative way for the future of the Brazilian students graduated from Brazilian schools in Japan, indicating four types of career options. (See Section 1.1.) The perceptions of the students with respect to the teaching instructions given by their teachers make us observe that this perception produces more positive results in the students’ exams as tools for the future. Teaching methods with a useful/functional approach, in turn, tend to make students aspire to a better future, especially to enter the university in Brazil. (See Section 2.)

School’s principals and coordinators are supportive of the student’s educational aspirations through the promotion of school vision and mission, favoring the preparation of the entrance examinations through practice (PNS, 2009, 2018). Yamanouchi (2002) opposes this idea, stating that the condition for Brazilian students of being “temporary students” in Japan could contribute to the student’s inability to develop a concrete plan for their future lives, with the Brazilian schools having part of the responsibility. In a subsequent study, Yamanouchi (2014) argues that the responsibility of providing a future for Brazilian students generates a new concept of educational studies, the phenomenon of transnationality, which allows students to overcome the border caused by language and culture in a global society. Teachers are supportive of the student’s educational aspirations through conducive pedagogy and by practicing the simulation of entrance examinations of the Vestibular Simulado (PNS, 2009, 2011).

Hypothesis 4.1. and Hypothesis 4.2 are consistent with the theoretical framework used in this study, which are the Theory of Social Reproduction in Education and the Theory of Social Mobility. (See Subsections 4.1.1. and 4.1.2.) Three are the categories of capital identified by Bourdieu (1986); economic capital, i.e. economic resources such as money, assets, property; social capital, i.e. possession of a network of institutionalized relations of mutual knowledge and recognition; and cultural capital, i.e. the education of a person (knowledge and intellectual abilities) that gives advantage to achieve a higher social status in society. The author established three types of cultural capital: (1)

embodied capital, i.e. knowledge, socialization to culture and tradition, and language; (2) Objectified capital, i.e. the property of the person; and (3) Institutionalized capital, i.e. academic credentials or professional qualifications. The cultural capital of a person is linked to their 'habitus' (character and inclinations) and their 'field' (social positions), which are configured as a structure of social relations. For Katsillis and Robinson (1990), explanation of a causal ordering of the reproduction process is made as "(1) family background directly affects cultural capital -the background effect, (2) cultural capital directly affects academic rewards -the cultural capital effect, (3) family background affects academic rewards indirectly through cultural capital -the transformation relationship. The term social reproduction means that social hierarchies (class and/or status positions) are ultimately reproduced, in the sense that children of parents with a social advantage are, in turn, receiving the same advantage." (Katsillis and Robinson, 1990, p. 273) Empirically, educational reproduction is demonstrated in the extent to which family background affects academic achievement, regardless of the intervening processes.

The Theory of Social Mobility described by Corak and Heisz (1999, 2006) suggests skills and credentials are the two most important factors that can enable poor children to move to an income level that is higher than their parents income level. It is worth noticing that in this dissertation we are not considering generational earning mobility as a factor for social mobility. Only the conceptual framework of the Theory of Social Mobility understood as upward mobility, or as horizontal mobility, or as vertical mobility (Reimer and Pollak, 2010), is evaluated within the specific context of PNS students in Japan and Brazil in this dissertation.

#### **4.3. Methods**

Creswell (2009) defines mixed method strategies as quantitative and qualitative data merged into one larger database, with the results reinforcing each other. The sequential mixed methods procedures selected in this study "are those in which the researcher seeks to elaborate on or expand on the findings of one method to another method." (p. 14) The

forms of data collection, analysis and interpretation are various, and the possibilities of organizing these methods give the researcher certain freedom at the time to make use of both pre-determined and emerging methods, using both open-ended and closed-ended questions, with multiple forms of data drawing, statistical and text analysis and across database interpretation.

The researcher is using complementarity (Hammersley and Atkinson, 2007; Hammersley, 1996 cited by Bryman, 2008) through two research strategies to fit different aspects of the research. The quantitative is different from the qualitative. They are different methods for different questions. However, taken together, the two components provide a greater depth of analysis. The quantitative phase provides the test or measurement of to what degree a certain quality is found in a certain phenomenon, and the qualitative phase gives context to the conclusions through the description of the characteristics of the phenomenon. Both methodologies are used to frame a more accurate idea of the topic addressed in this dissertation.

In the preliminary steps of this study (the year 2009), exploratory and descriptive research was carried out based on the qualitative method to explore the themes to be analyzed. A field pilot study in Japan was conducted in Hyogo Prefecture, Aichi Prefecture, and Shizuoka Prefecture, respectively, to get information from the Prefectural Boards of Education and to select from their views the schools that had the official recognition of the Brazilian Ministry of Education and Culture (MEC) in Japan. Schools from different well-known and prestigious Brazilian chain-schools (i.e., Positivo Network Schools, Pitagoras Network Schools) alongside with some miscellaneous schools (i.e., Brazilian schools run by Japanese administrators), were visited. The purpose was to determine the type of school that would be included in the study. Likewise, the first exploration made possible to predetermine the methods to apply in the study; first a qualitative method through interviews and videotape recording classroom's observations. The second exploration made possible the field main study, applying the quantitative

methods; while the gaps of the research were fixed with a new round of interviews, applying once more the qualitative methods.

The use of the Hierarchical Linear Model (HLM) regression due to the fact that the differences in test scores among students in the same school are smaller than the differences in test scores between different schools (Raudenbush and Bryk, 2002). The sample size is small. The total population of 684 students aged 13–19 comprised of 142 students in Japan and of 542 students in Brazil were selected purposively. The sample in Japan consists of 81 students out of 142 students nested within three schools from three Prefectures in two geographic regions of Japan.<sup>61</sup> The sample in Brazil consists of 240 out of 542 students nested within three schools from three cities in three states in three geographic regions of Brazil (Center, East, and South).<sup>62</sup> The sample was determined considering the entire number of students enrolled in Grades 8-9 of Lower Secondary School and in Years 1-2-3 of Upper Secondary School. All samples are belonging to the same Brazilian network schools. We use a p-value of 0.10 (\* $p < 0.10$ ) as the minimum level of statistical significance in factor loading. The Hierarchical Linear Model is utilized to analyze Research Questions 1-2-3, with students nested in family nested in schools while communities indicators are included in the school level.

The variables are comprised of individual students' characteristics such as the student's gender, race, ethnicity and grade, and the family background, such as the education level of their parents as well as several school characteristics, like the school's teacher indicators. All individual and family characteristics as well as the class size information stem from the student questionnaire and family questionnaire, respectively, whereas school information is provided by the questionnaire of the schools' principals. Finally, indicators reflecting the students' characteristics are used from the student questionnaire. The achievement information is obtained from the schools data,

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<sup>61</sup> Sampling method was purposive (See Table 4.4 in this Chapter 4).

<sup>62</sup> Sampling method was snowball (See Table 4.4 in this Chapter 4).

considering the test scores of the VS (Simulation of Entrance Examination) and the year-end scores.

Based on the 2003 SAEB's Student Questionnaire, we modified some of the questions to the Japanese context, creating the Student Questionnaire (see Appendix C-1). Through this questionnaire, we obtained the students' view of their family characteristics. To obtain the real family data, we utilize a second questionnaire named Family Questionnaire (see Appendix C-2), which includes parent's demography (i.e., student lives with mother, student live with father, mother's education, father's education, see mother reading, see father reading); economic resources (i.e., possessions -television, radio, car, videocassette, fridge, washing machine, vacuum cleaner, freezer with fridge, freezer without fridge, personal computer with internet connection, personal computer without internet connection, books at home-, bathroom inside the house, bedroom inside the house); parental involvement in children education (i.e., parent talk about school, parents assist their son/daughter in doing homework, parent assist their son/daughter in preparing school's exams (Vestibular Simulado, regular tests, projects), talk on absenteeism, talk on his/her son/daughter about child's future, parent talk about test results with their son/daughter), cultural resources (i.e., parent talk to his/her son/daughter's school friends, parent talk to his/her son/daughter's other friends, parent talk to school director, parent attend school meeting, parent talk to his/her son/daughter's teacher); and social resources (i.e., parent listen to music with his/her son/daughter, parent talk about books with his/her son/daughter, parent talk about films with his/her son/daughter, parent talk about television broadcast programmes). Therefore, by using this data we adopt the assumption that, although students' views may be imprecise, the information could be triangulated with the information received from families about their involvement with school although one limitation is the high number of parent's missing data.

The socio-demographic data from the individual students included in the Student Questionnaire sample, at Grade 8 of the Lower Secondary Education, and at Years 1-2-3

of the Upper Secondary Education is used. For the individual test results in the case of year-end scores, we use the data of the following subjects: mathematics, geography, history, literature, and foreign language English for Japan; and mathematics, physical education, geography, history, literature, and foreign language English for Brazil. For the individual test results in the case of VS scores, the data of the following subjects is used: mathematics, geography, history, and foreign language English for Japan; and mathematics, geography, history, literature, and foreign language English for Brazil. Information on the satisfaction of the school is taken from the Questionnaires of Families (see Appendix C-2), while school principals and teacher's profiles are taken from the analysis of interviews in Japan and Brazil, and through the Questionnaires of Teachers in Brazil and Interviews for Teachers (see Appendix C-3).

For answering Research Question 4, qualitative data collection types (semi-structured interviews with twenty participants in six urban PNS, three in Japan and three in Brazil) are used to assess evidence of parental perceptions on student's academic/occupational aspirations. The qualitative data advantages are the provision of an in-depth description of (1) challenges and successes of teacher's practices in schools required by mandate to implement the Vestibular Simulado type of assessment (see Subsections 2.5.2. and 3.6.1., and Appendix A-b); and (2) the students' educational/occupational future aspirations (see Subsection 3.5.1.). Analysis of the voices of the interviews is needed to be made, coding the segments of the interviews in patterns with variables.

#### **4.3.1. Quantitative Method**

The quantitative data analysis includes cross-tabulations of achievement data and school data and links data derived from the questionnaire with student's achievement scores correlating data of family-student-school grade. Simulation of Entrance Examinations of VS uses percent of correct answers as an index of adequacy of pupil performance. The unit of analysis is the student. Those schools that serve students from similar socio-

demographic backgrounds (descendants of Asia, that is, students of Japanese-Brazilian descent) were selected. The achievement test data is related to students' background factors. Analysis includes cross-tabulations of achievement data and school data, and linking data derived from the questionnaire with student's achievement scores.

#### 4.3.1.1 Model

##### Research Question 1: Education Production Function with Hierarchical Linear Model Regression

The Research Question 1 discusses the influences of individual and family factors on the students' performance measured by the year-end test scores. To answer this research question, the study follows Soares and Murta Collares (2007) and uses HLM model for the analysis.

$$Y_{ij} = \beta_{0j} + \beta_{1j}X_{ij} + \varepsilon_{ij}$$

Where:

$Y_{ij}$  = Year-end scores for  $i$ th student nested within the  $j$ th school,

$X_{ij}$  = Vector of the level-1 predictors that include both student and family factors,

$\beta_{0j}$  = Intercept for the  $j$ th level-2 unit,

$\beta_{1j}$  = Regression coefficient associated with  $X_{ij}$  vector, and

$\varepsilon_{ij}$  = Random error associated with the  $i$ th student level nested within the  $j$ th school level

In the context of this study, the  $X_{ij}$  vector consist of individual characteristics (*gender*, *Nikkei*, *age*, *race*, and *grade*) and family characteristics (*Parental Involvement (PI)*, *Parent's Demography (PD)*, *Social Resources (SR)*, *Cultural Resources (CR)*, and *Economic Resources (ER)*) of student  $i$  in school  $j$

Under specific terms, the operational HLM model would be as follows:

Level 1 – Family (Student) Factors:

$$Y_{ij} = \beta_{0j} + \beta_1 Gender_{ij} + \beta_2 Nikkei_{ij} + \beta_3 Age_{ij} + \beta_4 Grade_{ij} + \beta_5 Race_{ij} + \beta_6 PI_{ij} + \beta_7 PD_{ij} + \beta_8 ER_{ij} + \beta_9 SR_{ij} + \beta_{10} CR_{ij} + \varepsilon_{ij}$$

Level 2 – School:

$$\beta_{0j} = \delta_{0j} + \mu_{ij}$$

Where:

- $Y_{ij}$  is the students' year-end test scores
- $Gender$  is student's sex
- $Nikkei$  is Brazilian-Japanese heritage student
- $Age$  is the current age of student at the time of the survey
- $Grade$  is the current grade student enrolled at the time of the survey
- $Race$  is student race (Caucasian descendants, Mestizo descendants or others)
- $PI$  is parental involvement
- $PD$  is parent's demography
- $SR$  is social resources
- $CR$  is cultural resources
- $ER$  is economic resources

Each of the coefficients in the general notations keeps changing, depending on the subject.

HLM is used because education is nested in schooling. In the phenomena nested, there is



interconnection on educational data. For this, by combinations of factors through indexes, we have constructed the family nested in the school level.

### Research Question 2: Hierarchical Linear Model Regression

As an extension from the Research Question 1, school and community factors are included in the HLM model. Again, the HLM model assumes that the student is clustered within the school environment. The function using HLM techniques for year-end scores is as follow:

Level 1–Student:

$$Y_{ij} = \beta_{0j} + \beta_1 Gender_{ij} + \beta_2 Nikkei_{ij} + \beta_3 Age_{ij} + \beta_4 Grade_{ij} + \beta_5 Race_{ij} + \beta_6 PI_{ij} + \beta_7 PD_{ij} + \beta_8 ER_{ij} + \beta_9 SR_{ij} + \beta_{10} CSI_{ij} + \varepsilon_{ij}$$

Level 2 – School:

$$\beta_{0j} = \delta_{00} + \delta_{01} tyexp_j + \delta_{02} tcondwork_j + \delta_{03} ticome_j + \delta_{04} siblings_j + \delta_{05} friends_j + \mu_{0j}$$

Where

- $Y_{ij}$  is students' year-end test scores
- $Gender$  is student's sex
- $Nikkei$  is Japanese-Brazilian heritage student
- $Age$  is the current age of student at the time of the survey
- $Grade$  is the current grade student enrolled at the time of the survey
- $Race$  is student race (Caucasian descendants, Mestizo descendants or others)
- $PI$  is parental involvement
- $PD$  is parent's demography

- *SR* is social resources
- *CR* is cultural resources
- *ER* is economic resources
- *tyexp* is teacher's years of experience
- *tschwork* is the number of schools where the teacher work
- *tincome* is income level of teacher
- *network* is family relations and siblings/friends

#### Research Question 3:

For answering the Research Question 3, the study applies the same model used in the Research Question 2; however, to assess the prospect of university entrance, the study uses the Vestibular Simulado (VS) test scores instead of the year-end tests score as the dependent variables.

#### **4.3.2. Qualitative Method**

##### Research Question 4: Qualitative Data with Content Analysis

For analyzing the Research Question 4, content analysis is utilized, which serves to convert symbolic data (of behaviors, of opinions, of perceptions) in scientific data (in this study, of perceptions). The dissertation includes an appropriate combination of 20 individual interviews, 19 of which conducted face to face, and 1 conducted virtually. The individual interviews provide the necessary privacy to elicit insights such as revealing personal or unique teaching and learning experiences, for better understanding of the range of experiences of school principals, school coordinators, and teachers. Individual interviews were used to identify lessons learned, positive results, and impact. Age, gender, race, and ethnicity were considered as critical characteristics for selecting the students. A limitation of this study is that parents were not included in the interviews.

### ***Testing and adapting the Theory and Assumptions***

Preliminary data obtained in the interviews served to construct questionnaires, change visions, conceptualize, characterize content, identify codes and establish nodes within responses. Assumptions made include the switch in the focus. For instance, we utilized from multicultural education perspectives (Banks, 1993) -at the beginning of the process of collecting data; to culturally responsive pedagogies (Gay, 2000, 2010; Lopez, 2016) during the process of analyzing data.

### ***Variables***

The interviews were conducted to collect data on units and variables: (1) Family characteristics: Brazilian-Japanese families in both settings, families who returned from Japan to Brazil with Japanese heritage (data collected in Brazil); Brazilian families without Japanese heritage (data collected in Brazil). (2) School characteristics: (a) School management: Japanese/Brazilian Governments recognition of the PNS; number of teaching days per school year; students to teacher ratio; school calendar; pupil to textbook ratio. (b) School climate: relationship teacher-teacher (colleagues); relationship student-student (peers). (c) Teacher's characteristics: who are the teachers (sex, gender, ethnicity, and nationality); teachers' qualifications; teachers' experience. (d) Curriculum and methodologies: use of pedagogical materials (textbooks, CDROM, e-textbooks, blogs); curriculum alignment; culturally responsive pedagogies (CRP); and theories of teaching. (See Subsection 2.5.2.) (3) Community characteristics: relationship school-community; relationship school-parents. (4) Perceptions of the student's future: perception of school principals/coordinators/administrative staff and teachers on the student's future; student's perceptions on their own future.

The qualitative data from semi-structured interviews responses are analyzed thematically, disclosed in issues including coding and descriptive statistics. The sampling strategy is purposeful (Koro-Ljungberg et. al, 2009), and analyzed through content analysis (Krippendorff, 2013). In this study, interview transcripts and field notes were

entered into a qualitative software program, MAXQDA12<sup>63</sup>, and were analyzed using an inductive five-stage process: (1) developing categories based on the empirical data; (2) creating a guideline of the analysis; (3) coding the data: (3.1) preliminary and focus coding, (3.2) family coding, and (3.3) thematic coding; (4) setup tables and overviews; and (5) in-depth interpretation of individual cases with core themes and explanatory statement (Kuckartz, 2014, p. 35).

### ***Analysis***

Following the Research Question 4 and the sub-research questions, the content of the interviews was mapped together into clusters, creating categories at the center of the analysis considering experiences, opinions, and perceptions. Transcripts of interviews and field notes of class observations were analyzed inductively through a levered interpretative coding process that moved from the most concrete to the more abstract levels of interpretations as evaluative categories (Kuckartz, 2014, p. 41). For reliability and validity, the data was triangulated with other resources (i.e., refilling gaps with the interviewees).

### ***Categories based on the Empirical Data***

The 20 individual interviews data were intensively examined, reading through the transcripts multiple times, focusing on the prior knowledge and the Research Question 4 and the sub-research questions. It was important to address issues and aspects writing notes of concepts, understanding the respondent's statements and metaphors.

### ***Guideline of Analysis***

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<sup>63</sup> The researcher took a course-training on how to analyze qualitative data utilizing MAXQDA12 in Berlin, Germany (March 2017).

Considering Kuckartz (2014), we define and summarize the variables (or categories), creating a guideline of analysis. Criteria of measurement are:

- Each document (i.e., text document, recorded interview, transcript of interview, video) is considered as a unit of analysis
- Each segment inside a document is considered as a coded segment
- Each coded segment related to the unit of analysis is considered as a code and grouped into sets
- Each code has variables (also named categories)

In this dissertation, each of the “20 individual interviews” are the documents considered as unit of analysis (see Table 4.13. in Appendix E).

**Coded Segment: “Family”:** with two variables,

Variable 1: Families who expect to stay in Japan

Variable 2: Families who expect to return from Japan to Brazil

Variable 3: Families who returned to Brazil from Japan

**Coded Segment: “School”:** with three variables and ten categories,

Variable 1: Multi-grade classrooms

*Category 1:* Favourable to multi-grade classrooms

*Category 2:* Contrary to multi-grade classrooms

*Category 3:* Neutral to multi-grade classrooms

Variable 2: Curriculum

*Category 1:* Written curriculum (intended curriculum)

*Category 2:* Taught curriculum (implemented curriculum)

*Category 3:* Learned curriculum

*Category 4:* Assessed curriculum (evaluated or attained curriculum)

Variable 3: Assessments/Evaluations

*Category 1:* Homework

*Category 2:* Trimester evaluations

*Category 3:* Vestibular Test

### **Coded Segment “Community”:**

Variable 1: Relationship school-community

Variable 2: Relationship parents-schools and community

Variable 3: Relationship students-community

**Coded Segment “Perceptions on Student’s Future”:** with three variables and nine categories,

Variable1: Remain in Japan

*Category 1*: The position of the speaker is well defined and well documented/evidenced based.

*Category 2*: The position of the speaker is mentioned (but not well defined and taking a position).

*Category 3*: The position of the speaker is neutral.

Variable 2: Work 2-3 years saving money before returning to Brazil to pass the Vestibular.

*Category 1*: The position of the speaker is well defined and well documented/evidence based.

*Category 2*: The position of the speaker is mentioned (but not well defined and taking a position).

*Category 3*: The position of the speaker is neutral.

Variable 3: Pass a university entrance examination in Brazil.

*Category 1*: The position of the speaker is well defined and well documented/evidence based.

*Category 2*: The position of the speaker is mentioned (but not well defined and taking a position)

*Category 3*: The position of the speaker is neutral.

### ***Paraphrasing and Quotations of the Interviews***

When necessary, we use paraphrasing and quotations of the interviewees to better explain not only the Research Question 4, but also to substantiate the background, the descriptive statistics and the dissertation itself.

#### **4.4. Data**

##### **4.4.1. Data Overview**

Ideally, when conducting a statistical analysis, to limit bias and guarantee independence, a simple random sample is used for analysis with a large number of observations compared to the total study population. However, since studies have limitations, such methodology is not always possible, as was the case in this study. It was opted to construct our sample out of observations from 6 PNS in total, out of a possible 602 of PNS in the world (Kroton Educacional S.A., 2008).

The three out of six schools in Japan were selected from different geographical regions and prefectures (Shizuoka, Aichi, and Gunma). Permission was received by visiting the Hamamatsu Board of Education, the principal of schools and the school coordinators and teachers, while correspondent protocols were signed by authorities and parents<sup>64</sup>. Information related to characteristics of students, their families, schools and communities were collected from students of Grade 8 of Lower Secondary School and student's Years 1, 2 and 3 of Upper Secondary School in Japan during the period of 2009 to 2010.<sup>65</sup>

In Brazil, three PNS out of forty PNS -with the largest number of Brazilian-Japanese heritage children, were selected.<sup>66</sup> Permission was received from the Brazilian

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<sup>64</sup> The schools in Japanese sample confirmed the participation in the study on April 2007, and have signed the correspondent Protocols by September 2009 (see Appendix D-4 and Appendix D-5).

<sup>65</sup> See Table C-a in Appendix C.

<sup>66</sup> Information obtained from the EducaCenso (census data) of Brazil at the MEC, and at the INEP in Brasilia (interviews conducted with the Director of the MEC/INEP and the General Director of the MEC in February 2011), and at the PNS HQs (interview with the School Principal in February 2011).

Ministry of Education and Culture (MEC) at the National Institute of Educational Research and Study Anísio Teixeira (INEP) in the city of Brasília (Federal District), and the Headquarters of the Pitagoras Network Schools in the city of Belo Horizonte (State of Minas Gerais). Similar to the Japan data collection, information was collected from students of Grade 8-9 of Lower Secondary School and student's Years 1, 2 and 3 of Upper Secondary School in Brazil during the period of 2010 to 2011.<sup>67</sup>

### ***Criteria for Selection***

- Brazilian schools with third and fourth generations of Brazilian-Japanese ethnic heritage children.
- Franchised private PNS institutionally supported by the GoB.
- Secondary education (Grades 8-9 of Lower Secondary School and Years 1, 2 and 3 of Upper Secondary School, respectively).
- Schools with national entrance examination simulation (VS) and teacher's evaluations (as CPD).

Table 4.1. describes the collection and the production of the data. The documentation was selected according to the needs of the study, including official documents, teacher's mid-terms and final examinations (model of tests), national simulation examinations (model of tests) and schools test-scores records. The field observations were divided into surveys, compounded by a pilot study and the fieldworks in both countries and in structured observations in school classrooms.

*Table 4.1. Data Collection*

Documentation	<ul style="list-style-type: none"> <li>▪ Official documents: Laws, Resolutions, Parameters</li> <li>▪ Teacher's mid-terms and final examinations (model of tests)</li> <li>▪ National simulation examinations (model of tests)</li> <li>▪ Schools test-scores records</li> </ul>
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<sup>67</sup> See Table C-b in Appendix C.



Field Observations	Survey	<u>Pilot Study:</u> Semi-structured interviews: A. In 3 schools of the PNS: 10 teachers, 3 coordinators, 1 director. B. At the Japanese BOE*: In the Aichi Prefecture BOE (2 officers); in the Hyogo Prefecture BOE (1 officer); in the Kobe BOE (1 officer); in the Hamamatsu BOE (2 officers). C. At the Multicultural Centers in Japan: In Uchide city (1 officer); in Hamamatsu city (2 officers). D. At the Brazilian Associations in Japan: 2 officers.
		<u>Fieldwork in Japan:</u> In 3 PNS-School: A. Semi-structured interviews (10 teachers, 3 coordinators, 1 pedagogical expert); B. Self-completion questionnaires (156 students and 156 families). <u>Fieldwork in Brazil:</u> In 3 PNS (+ the PNS HQs): A. Self-completion questionnaires: schools principals (3), students (542), families (542), and teachers (20); and B. Semi-structured interviews: school principals (4), teachers (3), school coordinators (4), pedagogical state coordinator (1).
	Structured Observations	Total number of classroom observations (43), gathering field handwritten notes from observations, videotaping, and IC recording classroom groups, distributed as follows: <u>In Pilot Study &amp; Fieldwork in Japan:</u> 19 classroom observations. <u>In Fieldwork in Brazil:</u> 24 classroom observations.

Note: \*BOE (Board of Education).

Source: Created by the Author based on Cohen, L., Manion, L. & Morrison, K. (2007). *Research Methods in Education*. (6th edition). Routledge. ISBN 0-203-02905-4

It is important to note that the delivery of the questionnaires, both in the schools of Japan and Brazil, was given to students and families with the written name of each student on the cover of the questionnaire. This action facilitates coding and data entry in Excel, matching the name of the student with its corresponding score of each subject (YES or VS), before exporting to SPSS and STATA, respectively. The questionnaires were taken by the students to their homes and delivered completed in the following days. The questionnaires that were not received on time, were sent by pre-paid delivery postal service to the researcher.

We have investigated the missing data patterns, considering how many children there are per school and what proportion of children per school have complete information on the variables used in our analysis counting the number of observations per child where the response variable is not missing. We collected information from 542 students in Brazil from three schools, however, we found that only 240 students have complete information for our analysis. This means that we need to drop more than half of our observation from our sample. Similarly, we could identify 81-88 students -depending on the subjects- of 142 students in Japan from three schools, who have sufficient information for our analysis. Table 4.2. displays the observation of the students who participate in each country, disaggregated by school units.

*Table 4.2. Number of Students in the Samples*

Japan			Brazil		
School	Collected	Usable	School	Collected	Usable
PNS A (Hamamatsu)	21	15	PNS D (Marilia)	195	109
PNS B (Kariya)	66	32	PNS E (Londrina)	178	40
PNS C (Ōta)	55	34	PNS F (Curitiba)	169	91
Total	142	81		542	240

Source: Questionnaires 2010-2011.

#### **4.4.2. Variables**

The main outcome (dependent) variables in this study are the test scores from both for year-end tests as well as vestibular test, as explained in Table 4.3. As previously mentioned, the big difference between the two populations is the size of the sample. Whereas in Brazil there are 242 students within the sample for year-end scores and a bit less for each vestibular score (not all students participated in the Vestibular Simulado exams), in Japan there are only 81-88 students -depending on the subjects- in the sample, due to the fact that it is not as easy to find Japanese students with Brazilian heritage given the limitations in budget, time and scope of this study. The smaller sample might have

implications when we look at the results as this can hamper the production of statistically significant correlations. In general, it is always assumed that a larger population sample has a bigger chance to produce good results when a given research question is tried to be answered.

When looking at the mean scores for the year-end test results, the differences between the two populations are small and could be the result of randomness. The scores hover around the 70% mark, which can be seen as normal. Only in the case of Brazil, the results for the physical education exam (yescphye) are quite remarkably a lot higher. This exam is not given in Japan, so it is not as important for our comparison. The Standard Deviation in Brazil is also larger than in Japan and this seems to be related to the lower minimum scores in Brazil, where it is possible to receive a very low ‘failing’ grade, whereas in Japan no student of the sample failed their year-end exams. It seems this is due to different methods of scoring /grading used between the two countries. We also note that not all students in the Japanese sample complete the year-end exams, since some of them have dropped out during the school year-term for various reasons unknown to the researcher.

The comparative analysis gets substantially more difficult when looking at the vestibular scores, where both countries use a different maximum score. The Vestibular Simulado exam on ‘literature’ is only held in Brazil<sup>68</sup>. Remarkably so, the average test result in both countries is below the 50% mark, and even a lot lower than 50% in Brazil. While this is strange, it could be possible in the case of Japan.<sup>69</sup> The qualitative section explained these discrepancies, and the interviews with teachers.

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<sup>68</sup> The subjects ‘Portuguese’ and ‘Writing’ corresponds to Grades 8-9 of Lower Secondary School and Year 1 of Upper Secondary School. In Years 2 and 3 of Upper Secondary School changed the name of the subject to ‘literature.’ Perhaps, to obtain more solid results, it would have been convenient to codify the three subjects (i.e., Portuguese, writing and literature), together.

<sup>69</sup> In the case of Brazil, the test score results are with average results of between 5-7 on a total of 35-40 responses.

*Table 4.3. Summary Statistics of Test Scores for Japan and Brazil Data*

Variable	Brazil					Japan				
	Obs.	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max
<b>Year-end Scores</b>										
Yescmath	242	68.01	13.13	16.5	100	81	69.86	9.23	58	95
Yescphye	242	90.46	16.88	10	100					
Yescgeog	242	69.93	10.71	12.5	98.8	51	73.67	7.46	60	90
Yeschist	242	75.02	11.87	13.5	100	83	72.31	7.68	60	89
Yesclite	242	68.13	10.61	14.5	94	83	74.71	9.81	58	96
Yescflae	242	72.48	12.02	16.5	100	82	73.10	10.44	60	97
<b>Vestibular Simulado Scores</b>										
Vsmath	223	6.56	10.02	0	36	88	2.99	1.71	0	8
Vsgeo	224	6.91	10.73	0	40	88	2.91	1.68	0	7
Vshist	223	6.95	9.93	0	40	88	2.84	1.67	0	7
Vslite	208	5.81	9.47	0	35					
Vsflanen	224	6.28	10.29	0	40	88	3.01	1.47	0	7

Source: Estimated by the Author based on Japan and Brazil survey data (2010-2011).

Notes: **Year-end Scores:** Yescmath: year-end score mathematics, Yescphye: year-end score physical education, Yescgeog: year-end score geography, Yeschist: year-end score history, Yesclite: year-end score literature, Yescflae: year-end score foreign language English. **Vestibular Simulado:** Vsmath: Vestibular Simulado mathematics, Vsgeo: Vestibular Simulado geography, Vshist: Vestibular Simulado history, Vslite: Vestibular Simulado literature, Vsflanen: Vestibular Simulado foreign language English.

The explanatory variables are comprised of individual and family characteristics as well as several school characteristics related to teachers' backgrounds. All individual and family characteristics stem from the student questionnaire and family questionnaire, respectively, whereas school information is provided by the questionnaire of the schools' principals and interviews with teachers. Finally, the achievement information is obtained from the schools' data, considering the test scores of the Vestibular Simulado of each student with an order number. Explanation of the independent variables and its summary statistics can be found in Table 4.4. and Table 4.5., respectively.

Table 4.4. Definition of Independent Variables

Variable	Definition
<b>Individual Factors</b>	
Gender	A dummy variable taking the value 1 if the gender is male, otherwise 0.
<i>Nikkei</i>	A dummy variable taking the value 1 if the student is Brazilian-Japanese descendant, otherwise 0.
Age	A continue variable of student age.
Race (Base Group is other races)	
Caucasian	A dummy variable taking the value 1 if the race of the child is Caucasian descendant, otherwise 0.
Mestizo	A dummy variable taking the value 1 if the race of the child is Mestizo descendant, otherwise 0.
Grade (Base Group are Grade 7 and Grade 8/9)	
Year 1	A dummy variable taking the value 1 if the grade of the child is Upper High School Year 1, otherwise 0.
Year 2	A dummy variable taking the value 1 if the grade of the child is Upper High School Year 2, otherwise 0.
Year 3	A dummy variable taking the value 1 if the grade of the child is Upper High School Year 3, otherwise 0.
<b>Parental Involvement (PI)</b>	
talkonsc	The frequency student's parents talk with their son/daughter about what happens at school.
helphome	The frequency student's parents help child to do homework.
examhelp	The frequency student's parents help the child in preparing exams at home (i.e., Vestibular Simulado, other tests, projects, etc.)
talkabse	The frequency student's parents talk to the child on not being absent to school.
talkfutu	The frequency student's parents talk with their son/daughter about the child's future.
talkscor	The frequency student's parents talk to the child to have good scores at school.
pschmeet	The frequency student's parents attend school meetings.
<b>Parent's Demography (PD)</b>	
livewmot	A dummy variable taking the value 1 if the child lives with his/her mother, otherwise 0.
livewfat	A dummy variable taking the value 1 if the child lives with his/her father, otherwise 0.
motheduc	A continuous variable of the education level of the child's mother.
fatheduc	A continuous variable of the education level of the child's father.
seemothr	A dummy variable taking the value 1 if the child sees his/her mother's reading, otherwise 0.
seefathr	A dummy variable taking the value 1 if the child sees his/her father's reading, otherwise 0.
<b>Economic Resources (ER)</b>	
tvincolo	A dummy variable taking the value 1 if there is television in color in the child's house, otherwise 0.
radio	A dummy variable taking the value 1 if there is radio in the child's house, otherwise 0.
car	A dummy variable taking the value 1 if there is car in the child's house, otherwise 0.

videocas	A dummy variable taking the value 1 if there is video cassette in the child's house, otherwise 0.
fridge	A dummy variable taking the value 1 if there is fridge in the child's house, otherwise 0.
washmach	A dummy variable taking the value 1 if there is washing machine in the child's house, otherwise 0.
vacuum	A dummy variable taking the value 1 if there is vacuum cleaner in the child's house, otherwise 0.
bathroom	A dummy variable taking the value 1 if there is bathroom in the child's house, otherwise 0.
bedroom	A dummy variable taking the value 1 if there is bedroom in the child's house, otherwise 0.
freewfri	A dummy variable taking the value 1 if there is freezer with fridge in the child's house, otherwise 0.
freewout	A dummy variable taking the value 1 if there is freezer without fridge in the child's house, otherwise 0.
pcwithin	A dummy variable taking the value 1 if there is PC with Internet connection in the child's house, otherwise 0.
pcwithou	A dummy variable taking the value 1 if there is PC without Internet connection in the child's house, otherwise 0.
booksath	A continuous variable of books on shelf in the child's house.
<b>Cultural Resources (CR)</b>	
listmusi	The frequency student's parents listen to music with their son/daughter.
talkbook	The frequency student's parents talk about books with their son/daughter.
talkfilm	The frequency student's parents talk about films with their son/daughter.
talktv	The frequency student's parents talk about television broadcast programmes with their son/daughter.
<b>Social Resources (SR)</b>	
talkfrie	The frequency student's parents talk with their son/daughter's school friends/peers.
talkothf	The frequency student's parents talk with other friends of their son/daughter's friends of the school.
pschmeet	The frequency student's parents attend school meetings.
talkdire	The frequency student's parents talk with school principal about their son/daughter's performance.
talkteac	The frequency student's parents talk with the school teachers about their son/daughter's performance.
<b>School Teacher</b>	
tyexp	A continuous variable of teacher's years of experience.
tschwork	A continuous variable of teacher's school work.
thourteach	A continuous variable of teacher's hours of teaching.
tincome	A continuous variable of teacher's income.
<b>Community</b>	
liboutsc	A dummy variable taking the value 1 if the student always or almost always attends the library outside the school, otherwise 0.
lauseatn	A dummy variable taking the value 1 if the student always or almost always uses Japanese language in the community, otherwise 0.

inlaousc	A dummy variable taking the value 1 if the student always or almost always studies a second language in the community center/multicultural center outside the school, otherwise 0.
<b>Social Network</b>	
Family/Siblings	A dummy variable taking the value 1 if student has support of the family/siblings in Japan/Brazil.
Friends	A dummy variable taking the value 1 if a student has the support of the friends in Japan/Brazil.

Source: Created by the Author based on Fan and Chen (2001), and Soares and Murta Collares (2007).

*Table 4.5. Summary Statistics of Independent Variables for Japan and Brazil Data*

Variable	Brazil					Japan				
	Obs.	Mean	Std. Dev.	Min	Max	Obs.	Mean	Std. Dev.	Min	Max
<b>Individual Factors</b>										
Gender	242	0.48	0.50	0	1	87	0.55	0.50	0	1
<i>Nikkei</i>	240	0.10	0.31	0	1	87	0.68	0.47	0	1
Age	242	15.96	1.08	14	19	87	17.46	0.80	17	21
<b>Race (Base Group is other races)</b>										
Caucasian	242	0.74	0.44	0	1	87	0.26	0.44	0	1
Mestizo	242	0.17	0.37	0	1	87	0.08	0.27	0	1
<b>Grade (Base Group are Grade 7 and 8)</b>										
Year 1	242	0.29	0.46	0	1	87	0.33	0.47	0	1
Year 2	242	0.31	0.47	0	1	87	0.30	0.46	0	1
Year 3	242	0.26	0.44	0	1	87	0.33	0.47	0	1
<b>PI</b>										
talkonsc	242	0.87	0.33	0	1	87	0.47	0.61	0	2
helphome	242	0.46	0.50	0	1	87	0.31	0.51	0	2
examhelp	242	0.44	0.50	0	1	87	0.75	0.75	0	2
talkabse	242	0.93	0.26	0	1	87	1.44	0.79	0	2
talkfutu	242	0.97	0.18	0	1	87	1.67	0.60	0	2
talkscor	242	0.99	0.11	0	1	87	1.33	0.69	0	2
pschmeet						87	1.09	0.79	0	2
<b>PD</b>										
livewmot	242	0.94	0.23	0	1	87	0.46	0.50	0	1
livewfat	242	0.81	0.39	0	1	87	0.59	0.50	0	1

Variable	Brazil					Japan				
	Obs.	Mean	Std. Dev.	Min	Max	Obs.	Mean	Std. Dev.	Min	Max
motheduc	242	7.58	1.65	2	9	87	6.89	2.19	2	10
fatheduc	242	7.54	1.60	2	9	87	7.22	2.19	2	10
seemothr	242	0.83	0.38	0	1	87	0.82	0.39	0	1
seefathr	242	0.67	0.47	0	1	87	0.66	0.48	0	1
ER										
tvincolo	242	2.71	1.01	0	4	87	2.02	0.89	1	4
radio	242	1.67	0.88	0	4	87	0.62	0.72	0	3
car	242	1.71	0.83	0	4	87	1.37	0.61	0	3
videocas	242	0.64	0.48	0	1	87	0.59	0.50	0	1
fridge	242	1.00	0.06	0	1	87	1.17	0.38	1	2
washmach	242	0.99	0.09	0	1	87	2.16	0.50	1	3
vaccum	242	0.79	0.41	0	1	87	0.10	0.31	0	1
bathroom	242	2.23	0.78	1	3	87	0.10	0.31	0	1
bedroom	242	2.74	0.47	1	3	87	1.09	0.62	0	3
freewfri	242	0.93	0.26	0	1	87	1.02	0.21	1	3
freewout	242	0.29	0.45	0	1	87	1.91	0.36	1	3
pcwithin	242	0.96	0.20	0	1	87	1.85	0.35	1	2
pcwithou	242	0.16	0.37	0	1	87	1	0	1	1
booksath	242	1.60	0.77	0	3	87	1.54	0.92	1	4
CS										
listmusi	242	0.65	0.48	0	1	87	0.68	0.71	0	2
talkbook	242	0.48	0.50	0	1	87	0.52	0.64	0	2
talkfilm	242	0.86	0.35	0	1	87	0.79	0.72	0	2
talktv	242	0.88	0.33	0	1	87	1.15	0.67	0	2
SR										
talkfrie	242	0.75	0.44	0	1	87	0.78	0.74	0	2
talkothf	242	0.76	0.43	0	1	87	0.64	0.73	0	2
pschmeet	242	0.74	0.44	0	1	87	1.09	0.79	0	2
talkdire	242	0.64	0.48	0	1	87	0.53	0.63	0	2
talkteac	242	0.60	0.49	0	1	87	0.52	0.63	0	2
talkhaps						87	1.18	0.72	0	2
Teacher										



Variable	Brazil					Japan				
	Obs.	Mean	Std. Dev.	Min	Max	Obs.	Mean	Std. Dev.	Min	Max
tyexp	241	6.86	0.63	2	7	87	7.16	3.07	4.00	10.66
tschwork	242	2.79	1.18	1	4	87	13.45	3.95	8.42	18.00
thourteach	242	3.81	1.19	2	5	-	-	-	-	-
tincome	239	7.11	0.95	4	8	87	7.43	0.48	7.00	8.00
Community										
liboutsc	242	0.21	0.41	0	1	87	2.72	0.58	1	3
lauseatn	242	0.98	0.13	0	1	-	-	-	-	-
inlaousc	242	0.31	0.47	0	1	-	-	-	-	-
Social Network										
Family/Siblings	242	0.33	0.47	0	1					
Friends	242	0.07	0.26	0	1					

Source: Estimated by the Author based on Japan and Brazil survey data (2010-2011).

#### 4.4.3. Variables Construction

The factor analysis is used to explore the pattern data and to reduce many variables to a more manageable number of variables related to the research questions for both datasets of Japan and Brazil. The definitions of variables of constructs are explained in Table 4.6., as follows:

*Table 4.6. Summary of Variables of Constructs*

Level	Variable Description	Variable Name
Family Characteristics	<b>Parent's demography:</b> if child lives with his/her mother, if child lives with his/her father, mother's education, father's education, if child sees his/her father's reading, if child sees his/her mother's reading.	<b>PD</b> (Parent's Demography)
	<b>Economic resources:</b> television in color, radio, car, videocassette, fridge, washing machine, vacuum cleaner, freezer with fridge, freezer without fridge, PC with Internet, PC without Internet, books at home, bathroom at home, bedroom at home.	<b>ER</b> (Economic Resources)
	<b>Social resources:</b> If parents talk with student's school friends, if parents talk with other friends of the child	<b>SR</b> (Social Resources)

Level	Variable Description	Variable Name
	rather than the friends from the school, if parents attend school functions (e.g., PTA meetings), if parents talk to School Director and if parents talk to teachers about the performance of the child (e.g., Paulson, 1994a).	
	<b>Cultural resources:</b> If parents listen to music with the child, if parents talk about books with the child, if parents talk about films with the child, if parents talk about television broadcast programmes with the child.	<b>CR</b> (Cultural Resources)
	<b>Parent-child communication:</b> If parents talk about school with the child.	<b>PI</b> (Parental Involvement)
	<b>Assistance with homework:</b> If family assist child with homework, if parents help with the preparation of the child's exams (e.g., Gonzales and Blanco 1991; Peng and Wright, 1994).	
	<b>Educational expectations:</b> If parents talk about child's future (e.g., Hess, Holloway, Dickson, and Price 1984; Peng and Wright 1994; Finn and Voelkl 1993); if parents talk about child's absenteeism at school; if parents talk about child's scores.	

Source: Created by the Author based on Fan and Chen (2001), and Soares and Murta Collares (2007).

For the Research Question 2: Five (5) constructs (i.e., parent's demography, economic resources, social resources, cultural resources, and parental involvement) are used to answer the question, explained subsequently. The construct of PARENT'S DEMOGRAPHY (PD) is compounded out of 6 variables: (1) if child lives with his/her mother (livewmot), (2) if child lives with his/her father (livewfat), (3) mother's level of education (motheduc), (4) father's level of education (fatheduc), (5) if child see his/her father's reading (seefathr), and (6) if child sees his/her mother's reading (seemothr).

The construct of ECONOMIC RESOURCES (ER) is made by 14 variables: (1) the number of televisions in color at home (tv/tvincolo), (2) the number of radios at home (radio), (3) the number of cars at home (car), (4) the number of videocassettes at home (videocas/videocam), (5) the number of fridges at home (fridge), (6) the number of washing machines at home (washmach), (7) the number of vacuum cleaners (vacuum), (8) bathroom inside the house (bathroom), (9) bedrooms inside the house (bedroom), (10)

the number of freezers with fridges (freewfri), (11) the number of freezers without fridges (freewout), (12) the number of computers connected to Internet (pcwithin), (13) the number of computers without internet connection (pcwithou), and (14) the number of books student has at home (booksath).

The construct of SOCIAL RESOURCES (SR) is made by 5 variables: (1) parents talk with son/daughter's school friends/peers (talkwfri), (2) parents talk with other friends of their son/daughter's friends of the school (talkothf), (3) parents talk with school principal (talkdire), (4) parents attend school meetings (pschmeet), and (5) parents talk with the school teachers (talkteac).

The construct of CULTURAL RESOURCES (CR) is comprised of 4 variables: (1) parents listen to music with son/daughter (listmusi), (2) parents talk about books with his/her son/daughter (talkbook), (3) parents talk about films with his/her son/daughter (talkfilm), and (4) parents talk about television broadcast programmes with his/her son/daughter (talktv).

The construct of PARENTAL INVOLVEMENT (PI) is made by 7 variables: (1) parents help child to do homework (parehomw), (2) parents help the child in preparing exams at home (i.e., Vestibular Simulado, other tests, projects, etc.) (pareexam), (3) parents care if the child makes the homework at home (retolesso), (4) parents talk to the child on not being absent to school (talkabse), (5) parents talk to the child to have good scores at school (talkscor), (6) parents talk with their son/daughter about the child's future (talkfutu), and (7) parents attend school meetings (pschmeet). The variables were selected considering the reviewed literature referred in Chapter III (Epstein, 1991, 1995; Sui-Chu and Willms, 1996; Fan and Chen, 2001).

*Table 4.7. Summary Statistics of Constructed Variables for Japan and Brazil Data*

Variable	Brazil					Japan				
	Obs.	Mean	Std. Dev.	Min	Max	Obs.	Mean	Std. Dev.	Min	Max
PI	242	0.01	0.71	-2.18	0.85	87	0.07	0.89	-2.33	1.87
PD	242	0.00	0.74	-2.10	0.82	87	-0.06	0.65	-0.87	2.60
ER	242	0.00	0.86	-10.36	0.87	87	-0.08	0.09	-0.28	0.10
CS	242	-0.02	0.85	-1.81	0.83	87	0.00	0.85	-1.24	2.07
SR	242	0.00	0.69	-1.94	0.68	87	0.00	0.87	-2.02	1.31

Source: Estimated by the Author based on Japan and Brazil survey data (2010-2011).

#### **4.5 Validity and Reliability**

Internal and external validity treats (Creswell, 2009) are considered. For the former, no changes on the instruments and materials (e.g., questionnaires, observation protocols) were made while conducting fieldworks. For the latter, as this study is a case study, no generalizations are expected to be inferred. Triangulation of different data sources of information, member checking to determine the accuracy of the qualitative findings by participants, and spending prolonged time in the field to develop the in-depth understanding of the studied phenomena are utilized.<sup>70</sup> Rich and elaborative description is guaranteed with mixed method analysis, combining multilevel design with content analysis.

#### **4.6. Ethical Considerations**

Informed consent for the participants with a respective protocol was applied in all settings, distributed and authenticated with expected duration, right to decline to participate and or to withdraw (American Psychological Association, 2010). Clearly labeled names were

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<sup>70</sup> In Japan, the Researcher made more than 20 visits to Shizuoka, Aichi and Gunma Prefectures from 2007 to 2010, living in the City of Hamamatsu 1 month (September 2010). In Brazil, the Researcher stayed 4 months, around 3-4 weeks per PNS' surveyed.

used in matching family and students questionnaires with test scores (Anderson and Morgan, 2008, p. 175), allocating to each family/students an order number. The study uses an observational protocol (Creswell, *ibid.*) for recording information while observing with handwritten notes descriptive notes (accounts of teachers and students activities, description of the physical setting, dialogues, explanations of written notes on the blackboards), reflective notes (researcher's personal impressions and thoughts), and demographic information (date, place, time, and map of the place.) For avoiding omissions while taking handwritten notes, audio-typing and videotaping were added as part of the recorded information. The data recording procedures also included an interview protocol while conducting qualitative interviews, in order to avoid disorganization and impoliteness. Hence, headings (name of the interviewed, place, time), ice-breakers questions, clarification on follow-up interviews were included as needed, time-spaces between question and question for taking handwritten notes, and a final thank you statement at the end of the interview. (pp. 181-183) Confidentiality is guaranteed, through anonymity of research participants and no harm to individuals and PNS.

## CHAPTER 5

### RESULTS

#### 5.1. Student and Family Characteristics and its influences on Student's Learning Achievement

##### 5.1.1. Student Characteristics

Table 5.1. displays the population of the PNS by gender, race, and ethnicity. According to the figures, in Japan the PNS have a higher number of female students (55.63%) than male students (44.37%). In the case of Brazil, the percentage of female students is 50.39 and the percentage of male students is 49.61. Overall, female students (51.76%) outnumber male students (48.24%). In Japan, of the total student's population (N=142), 26.06% (N=37) are of Caucasian descendants, 8.45% of Mestizo descendants (N=12), 1.41% of African descendants (N=2), 38.73% of Asian descendants (N=55), and 0.70% of Indigenous (N=1). Missing data is 24.65% (N=35). In Brazil, of the total student's population (N=256), 74.22% (N=227) are of Caucasian descendants (N=190), 16.41% of Mestizo descendants (N=42), 4.30% of African descendants (N=11), 4.30% of Asian descendants (N=11), and 0.39% of Indigenous (N=1). Missing data is 0.39% (N=1).

Overall, the Caucasian descendants population (57.04%) outnumbers the Asian descendants (16.58%), followed by the Mestizo descendants population (13.57%), the African descendants population (3.27%), and the Indigenous population (0.50%), in decreasing order of the total population (N=398) in both countries. Missing data is 9.05% (N=36). However, in the case of Japan, Asian descendants (38.73%) represent the majority of the sample while, in the case of Brazil, Caucasian descendants (74.22%) are the most prevalent population in the sample, with Asian descendants being the fourth population represented (4.30%). In Brazil, finding a greater number of Caucasian descendants and Asian descendants can be interpreted by the geographical situation in which PNS are located (i.e., South of the country) having underwent the largest

immigration in the 19th and 20th centuries from Europe and Asia and having located in the States of Parana and São Paulo, respectively

*Table 5.1. Students in Comparative Perspective*

	Japan		Brazil		All	
	Obs.	Percent	Obs.	Percent	Obs.	Percent
<b>Gender</b>						
Male	63	44.37%	129	50.39%	192	48.24%
Female	79	55.63%	127	49.61%	206	51.76%
Total	142	100%	256	100%	398	100%
<b>Race</b>						
Caucasian descendants	37	26.06%	190	74.22%	227	57.04%
Mestizo descendants	12	8.45%	42	16.41%	54	13.57%
African descendants	2	1.41%	11	4.30%	13	3.27%
Asian descendants	55	38.73%	11	4.30%	66	16.58%
Indigenous	1	0.70%	1	0.39%	2	0.50%
Missing	35	24.65%	1	0.39%	36	9.05%
Total	142	100%	256	100%	398	100%
<b>Ethnicity</b>						
Without Japanese ancestry	0	0.00%	226	88.28%	226	56.78%
<i>Nisei</i> (second generation)	7	4.93%	3	1.17%	10	2.51%
<i>Sansei</i> (third generation)	72	50.70%	15	5.86%	87	21.86%
<i>Yonsei</i> (fourth generation)	22	15.49%	12	4.69%	34	8.54%
Missing	41	28.87%	0	0.00%	41	10.30%
Total	142	100%	256	100%	398	100%

Note: Race and Ethnicity are defined as the SAEB 2003.

Source: Create by the Author, based on data collection in Japan (May-June 2010) and in Brazil (April-May 2011).

According to the figures of ethnicity, in the case of schools in Japan, there are no students without Japanese ancestry (0.00%). *Sansei* (third generation of Japanese descendants) represents 50.70% (N=72) of the sampled population (N=142), followed by *Yonsei* (fourth generation of Japanese descendants) with 15.49% (N=22) of the sampled population, and by *Nisei* (second generation of Japanese descendants) with 4.93% (N=7).

Missing data is 28.87% (N=41). In Brazil, 88.28% of the sampled population (N = 226) is without Japanese ancestry, while 5.86% are *Sansei* (third generation of Japanese descendants) (N=15), 4.69% are *Yonsei* (fourth generation of Japanese descendants) (N=12), and 1.17% are *Nisei* (second generation of Japanese descendants) (N=3), in decreasing order. No missing data is registered (0.00%). Overall, in a sampled population of 398 students in both countries, 56.78% of the students (N=226) are without Japanese ancestry. However interestingly, 21.86% of the population are *Sansei* (third generation of Japanese descendants) (N=87), 8.54% are *Yonsei* (fourth generation of Japanese descendants) (N=34), and 2.51% are *Nisei* (second generation of Japanese descendants) (N=10). Missing data is 10.30% (N=41). Consequently, without considering the missing data, the number of students without the Japanese ancestry (56.78%, N=226) outnumbers the number of Japanese descendants (32.91%, N=131).

### **5.1.2. Family Characteristics**

#### ***Parental Education***

Regarding parental education, Table 5.2. displays father's education. In Japan, in a sampled population of 142 fathers, the percentage of fathers who has completed the university level of education is 15.00% (N=22). In Brazil, in a sampled population of 256 fathers, fathers have more years of schooling as the completion of university level of education show (39.00%, N=101). Vis-à-vis the percentage of fathers with completed Upper Secondary Education, the percentage of fathers in Japan with completed Upper Secondary Education is 25.00% (N=35), being lower than the percentage of fathers in Brazil with completed Upper Secondary Education (26.00%, N=67). When the percentage of fathers who only completed Lower Secondary Education (up to Grade 8) is observed, a greater number of fathers in Japan who only completed Lower Secondary Education (6.00%, N=8) is observed, to the detriment of the 5.00% of fathers in Brazil who only completed Lower Secondary Education (N=14). Fathers who do not disclose



personal information about education are 24.00% in Japan (N=34) and 9.00% in Brazil (N=23).

*Table 5.2. Father's Education in Japan and Brazil*

	Brazil		Japan		All	
	Obs.	Percent	Obs.	Percent	Obs.	Percent
Father did not complete the Grade 4 (old elementary school - <i>Primario</i> in Portuguese)	1	0%	4	3%	5	1%
Father completed Grade 4 (old elementary school - <i>Primario</i> in Portuguese)	6	2%	4	3%	10	3%
Father did not complete Grade 8 (old <i>Ginasio</i> in Portuguese)	11	4%	7	5%	18	5%
Father completed Grade 8 (old <i>Ginasio</i> in Portuguese)	14	5%	8	6%	22	6%
Father did not complete Secondary Education - <i>Ensino Medio</i> in Portuguese (old Year 2)	10	4%	10	7%	20	5%
Father completed Secondary Education - <i>Ensino Medio</i> in Portuguese (old Year 2)	67	26%	35	25%	102	26%
Father started but he did not complete the University	23	9%	18	13%	41	10%
Father completed the University	101	39%	22	15%	123	31%
Father does not know	23	9%	34	24%	57	14%
Total	256	100%	142	100%	398	100%

Source: Create by the Author, based on data collection in Japan (May-June 2010) and Brazil (April-May 2011).

The fact that fathers report higher levels of completion rate in primary education, Lower Secondary Education and/or Upper Secondary Education completion in Japan would respond, perhaps, to the fact that fewer fathers have finished university, to the detriment of more fathers who, in Brazil, have completed secondary and university education. Interestingly, the percentage of fathers who did not complete Lower Secondary Education is higher in Japan (5.00%, N=7) than in Brazil (4.00%, N=11). The percentage

of fathers who did not complete Upper Secondary Education is higher in Japan (7.00%, N=10) than in Brazil (4.00%, N=10). The percentage of fathers started university but did not complete university education is higher in Japan (13.00%, N=18) than in Brazil (9.00%, N=23)

Mother's education represents an interesting case, as displayed in Table 5.3. In a sampled population of 142 mothers in Japan, 14.00% of the mothers surveyed have completed university education (N=20). In a sampled population of 256 mothers in Brazil, 47.00% of the mothers surveyed have completed university education (N=109). Notoriously, many mothers of the Japanese group have started but not completed primary education and/or secondary education, which is not the case for the Brazilian group. The percentage of mothers who have only completed Upper Secondary Education in Japan is 30.00% (N=42), while the percentage of mothers who have only completed Upper Secondary Education in Brazil is 23.00% (N=59). The percentage of mothers in Japan who have only completed Lower Secondary Education is 8.00% (N=12), while the percentage of mothers in Brazil who have only completed Lower Secondary Education is 5.00% (N=14). Mothers who do not disclose personal information about education are 17.00% in Japan (N=24) and 6.00% in Brazil (N=16). Missing cases reported as "I do not know" can be interpreted, either not wanting to give the information to the researcher, or to the fact that the questionnaire has been answered by the head of the household, regardless of whether the respondent was the mother, the father, the guardian or the caretaker of the child. Remarkably, the percentage of mothers who did not complete Lower Secondary Education is higher in Japan (7.00%, N=19) than in Brazil (4.00%, N=9). The percentage of mothers who did not complete Upper Secondary Education is higher in Japan (30.00%, N=42) than in Brazil (23.00%, N=59). The percentage of mothers who did not complete university education is higher in Japan (11.00%, N=16) than in Brazil (10.00%, N=25).

Table 5.3. Mother's Education in Japan and Brazil

	Brazil		Japan		All	
	Obs.	Percent	Obs.	Percent	Obs.	Percent
Mother does not completed Grade 4 (old <i>Primario</i> in Portuguese)	1	0%	2	1%	3	1%
Mother completed Grade 4 (old <i>Primario</i> in Portuguese)	8	3%	5	4%	13	3%
Mother does not complete the Grade 8 (old <i>Ginasio</i> in Portuguese)	9	4%	10	7%	19	5%
Mother completed Grade 8 (old <i>Ginasio</i> in Portuguese)	14	5%	12	8%	26	7%
Mother does not complete secondary school (old Year 2)	15	6%	11	8%	26	7%
Mother completed secondary school (old Year 2)	59	23%	42	30%	101	25%
Mother started but does not completed University	25	10%	16	11%	41	10%
Mother completed the University	109	43%	20	14%	129	32%
Mother does not know	16	6%	24	17%	40	10%
Total	256	100%	142	100%	398	100%

Source: Create by the Author, based on data collection in Japan (2010) and Brazil (2011).

Comparing father's education and mother's education in both countries, the data reveal that father's education is higher than mother's education in all levels. With a completion rate of 70.00% for fathers in Brazil and a completion rate of 46.00% for fathers in Japan in all levels, and with a completion rate of 74.00% for mothers in Brazil and a completion rate of 56.00% for mothers in Japan in all levels, respectively, evidence shows that in general fathers are better educated than mothers.

### ***Socio-economic Status***

The socio-economic status of the families of the children who attend the PNS in Japan and Brazil is the focus of attention. Household possessions (personal computer with Internet connection, personal computer without Internet connection, books at home,

videocassettes)<sup>71</sup> and family activities, like parents having lunch in the house with their children, parents listening to music with their children, parents talking about books with their children, parents talking about films with their children, and parents talking about television broadcast programmes with their children are differently performed by these groups, with the parents in Brazil who perform more of these activities.

*Table 5.4. Parents in Comparative Perspective*

	Brazil		Japan		All	
	Obs.	Percent	Obs.	Percent	Obs.	Percent
<i>Frequency student's parents have lunch or eat dinner with their son/daughter</i>						
Never or almost never	4	2%	9	6%	13	3%
Sometimes	252	98%	39	66%	291	73%
Always or almost always	0	0%	94	27%	94	24%
Total	256	100%	142	100%	398	100%
<i>Frequency student's parents listen to music with their son/daughter</i>						
Never or almost never	87	34%	66	46%	153	38%
Sometimes	169	66%	60	11%	229	58%
Always or almost always	0	0%	16	42%	16	4%
Total	256	100%	142	100%	398	100%
<i>Frequency student's parents talk about books with their son/daughter</i>						
Never or almost never	131	51%	80	56%	211	53%
Sometimes	125	49%	53	6%	178	45%
Always or almost always	0	0%	9	37%	9	2%
Total	256	100%	142	100%	398	100%
<i>Frequency student's talk about films their son/daughter</i>						
Never or almost never	39	15%	49	35%	88	22%
Sometimes	217	85%	68	18%	285	72%
Always or almost always	0	0%	25	48%	25	6%
Total	256	100%	142	100%	398	100%
<i>Frequency student's parents talk about TV broadcast programs with their son/daughter</i>						

<sup>71</sup> See Tables in Appendix E.

	Brazil		Japan		All	
	Obs.	Percent	Obs.	Percent	Obs.	Percent
Never or almost never	30	12%	23	16%	53	13%
Sometimes	226	88%	74	32%	300	75%
Always or almost always	0	0%	45	52%	45	11%
Total	256	100%	142	100%	398	100%

Source: Created by the Author, based on data collection in Japan in 2010 and in Brazil in 2011

Table 5.4. displays that the percentage of parents who have lunch or eat dinner with their children is slightly higher in Brazil (98.00%, N=252) than in Japan (93.00%, N=133). This could be understood due to the children in the PNS in Japan having lunch at schools, staying at school from 8:00 AM until 4:00 PM-7: 00 PM, depending on the cases. In addition, it could be explained by the work situation of the parents, mostly factory workers (blue-collars), who are restricted in the time they can spend with their children daily. In relation to the ‘cultural artifacts’ (in Pierre Bourdieu’s words), such as listening music with their children, talking about movies with their children, talking about books with their children, among other expressions of culture that constitutes the social capital (i.e., social resources) of a family, the differences are clearly in favor of Brazil’s parents. Thus, it is observed that the percentage of parents who listen to music with their children is higher in Brazil (66.00%, N=169) than in Japan (53.00%, N=76). The percentage of parents who talk about books with their children is higher in Brazil (49.00%, N=125) than in Japan (43.00%, N=62), with more than half of the sampled population (51%, N=131) in Brazil, and more than half of the sampled population (56%, N= 80) in Japan who “never or almost never” talk about books with their children. Nevertheless, the data does not specify anything about the intellectual quality or the level of the discussions about the books read, the movies watched, and/or the music heard, being a limitation of this study given that Bourdieu only considers in his works the high cultural expressions such as listening of classical music or arts possessions, an example of social capital of the

‘elites.’ It is also observed that the percentage of parents who talk about films with their children is higher in Brazil (85.00%, N=217) than in Japan (66.00%, N=93). When observing the percentage of parents talking about television broadcast programmes with their children, again the parents in Brazil have more discussions about television broadcast programmes with their children (88.00%, N=226) than the parents in Japan (84.00%, N=119), for the categories “always or almost always” and “sometimes.”

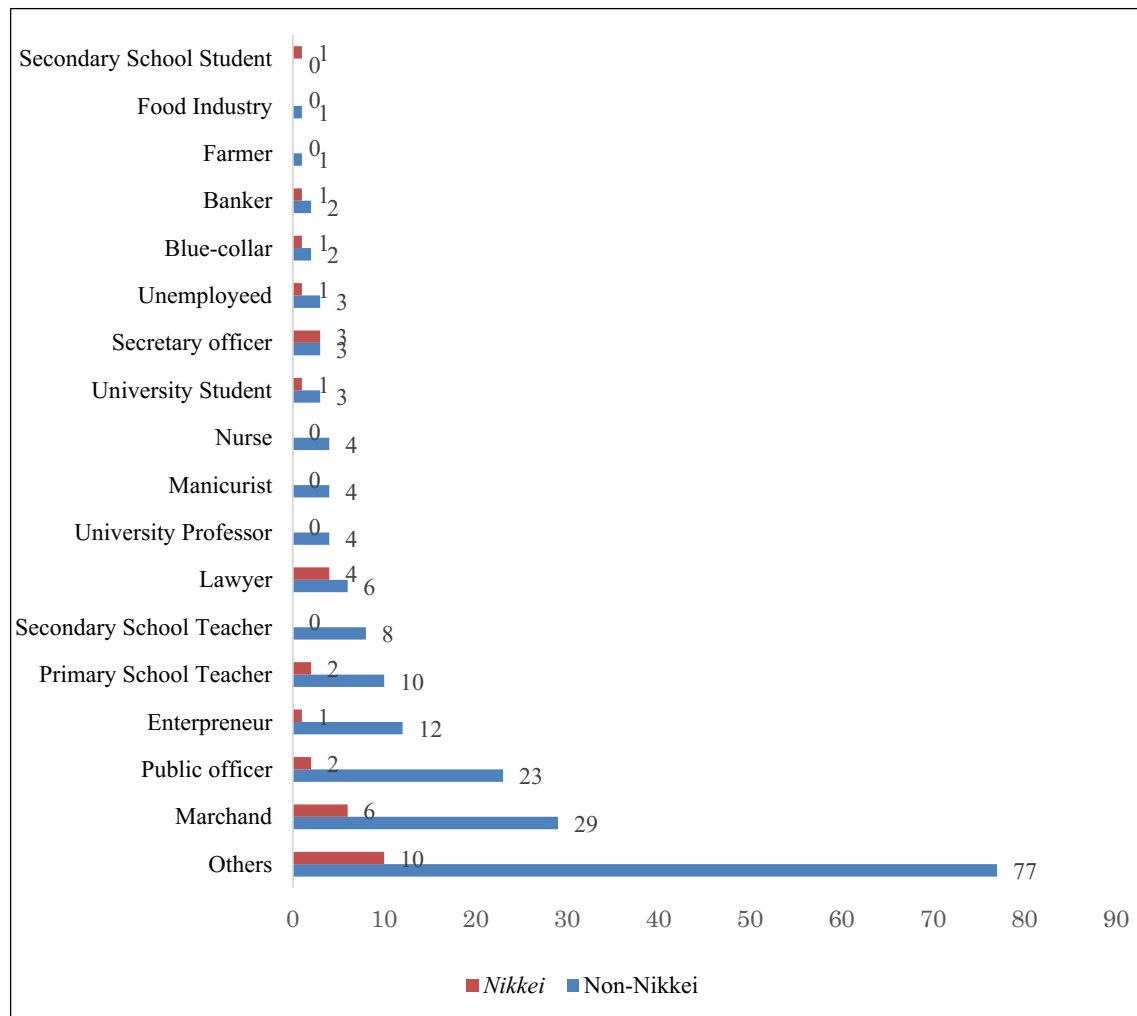
Overall, the most frequent activities parents share with their children in both countries are having lunch or dinner with their son/daughter (97.00%), talking about television broadcast programmes with their son/daughter (86.00%), talking about films with their son/daughter (78.00%), listening to music with their son/daughter (62.00%), and talking about books with their son/daughter (47.00%), in decreasing order. In other words, parents in both countries “never or almost never” do the following activities with their children: talking about books with their son/daughter (53.00%); listening to music with their son/daughter (38.00%), talking about films with their son/daughter (22.00%), talking about television broadcast programmes with their son/daughter (13.00%), and having lunch or dinner with their son/daughter (3.00%).

### ***Parents Occupational Structure***

Figure 5.1. displays the occupational structure of Brazil as per the distribution or division of the sampled population according to different occupations reported. The parental occupation before coming to Japan was disaggregated by parents of *Nikkei* and Non-*Nikkei* children. Consequently, the *Nikkei* parents have worked mainly in the secondary sector of the economy (i.e., manufacturing sector) as entrepreneur (N=1), secretary officer (N=3), blue-collar (N=1), secondary school student (N=1); in the tertiary sector of the economy (i.e., banking and services) as banker (N=1), lawyer (N=4), public officer (N=2), university student (N=1), primary school teacher (2), and marchand (N=6); in the

quaternary sector of the economy (i.e., business, ICT, government) others -referred as ICTs, government (N=10); or were unemployed (N=1), before coming to Japan.

*Figure 5.1. Parental Occupation before coming to Japan*



Source: Created by the Author, based on Japan Family Questionnaires (2010).

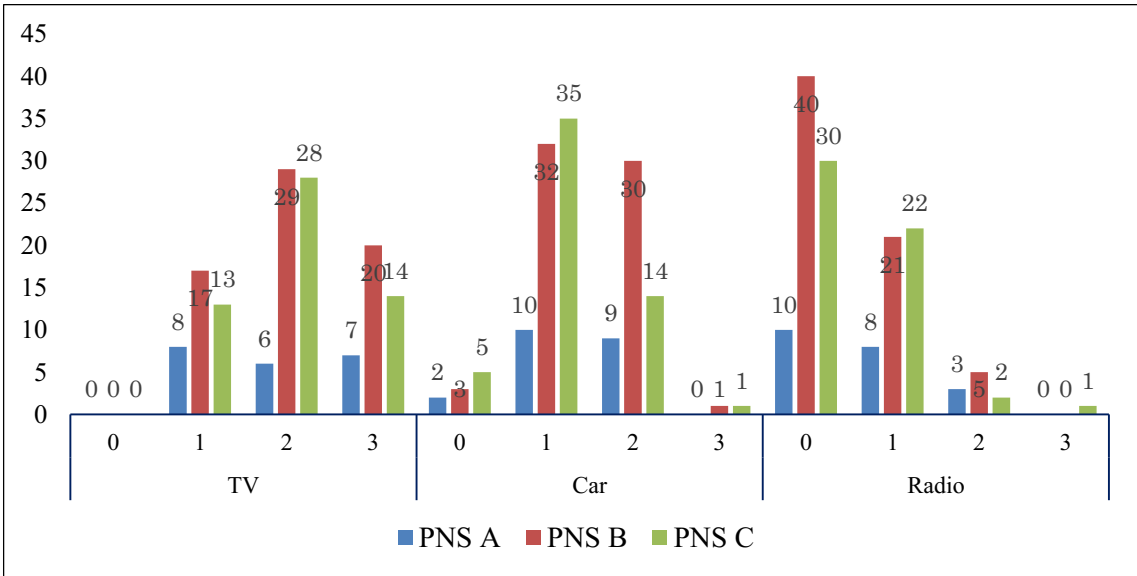
The non-*Nikkei* parents have worked mainly in the primary sector of the economy (i.e., agriculture, mining, fishery, forestry, grasing) as farmer (N=1); in the secondary sector of the economy (i.e., manufacturing sector) as entrepreneur (N=12), secretary officer (N=3), blue-collar (N=2), and food industry (N=1); in the tertiary sector of the economy (i.e., banking and services) as banker (N=2), public officer (23), university student (N=3), primary school teacher (N=10), secondary school teacher (N=8), university professor (N=4), lawyer (N=6), marchand (N=29), manicurist (4), and nurse

(N=4); in the quaternary sector of the economy (i.e., business, ICT, government) others - ICTs, government (N=77); or were unemployed (N=3), before coming to Japan. Overall, it is interesting to note that most of the non-*Nikkei* parents responded to more diversified occupations than the *Nikkei* parents. The reasons might be found in the ease of use of the Portuguese language, the labor relations favored by the social network, beyond the academic credentials. Likewise, the difference in occupational terms is notorious: in Brazil, although the parents worked in occupations of higher social status, many of the interviewees indicated that the salary was lower in Brazil to that received by a lower-ranking job in Japan.

In analyzing the socio-economic conditions of the families in terms of possessions (i.e., television, car, radio per household) disaggregated by schools, data shows that most of the families of the PNS have radio, television, and car, as display in Figure 5.2. (Japan) and Figure 5.3. (Brazil). These possessions are used as proxies for analyzing the socio-economic status of parents, due to the lack of information on household income or parents income, which were not mostly reported as being a sensitive subject. It is significant to emphasize the importance that Brazilians, in general, give to the material goods, be these means of information (possession of personal computers, books, TV, radio) and/or transport (possession of car). In general, purchases of consumer goods in Brazil are carried out in installments, favoring the consumption without distinction of social classes.

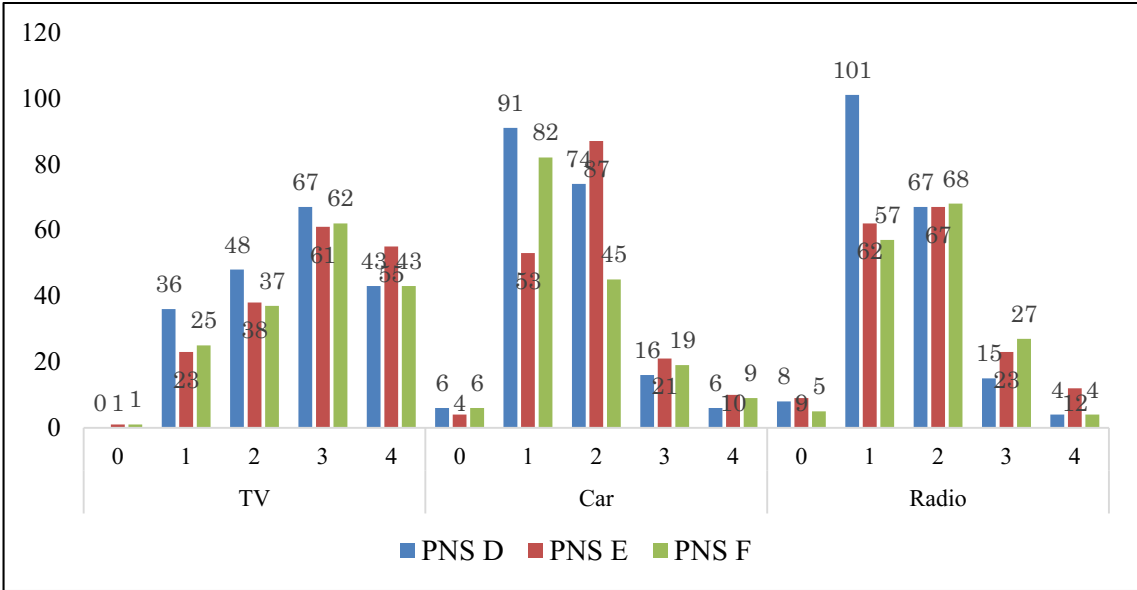


Figure 5.2. Family Socio-economic Status measured by Possessions segregated by Schools in Japan



Source: Created by the Author, based on Japan Family Questionnaires (2010).

Figure 5.3. Family Socio-economic Status measured by Possessions segregated by Schools in Brazil

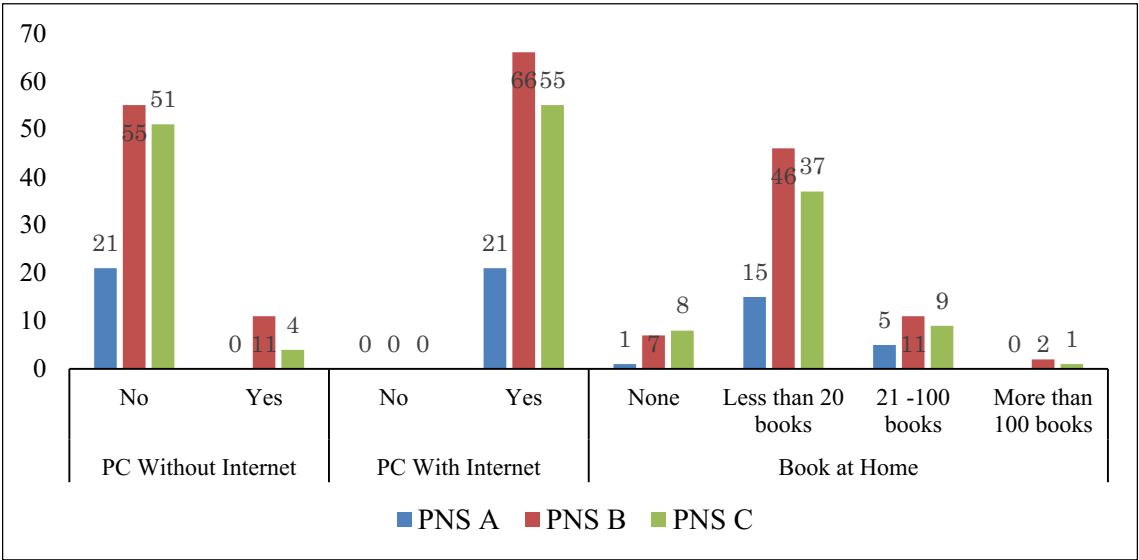


Source: Created by the Author, based on Brazil Family Questionnaires (2011).

In analyzing possessions (i.e., personal computer with Internet connection, personal computer without Internet connection, number of books per household) as variables representing the socio-economic conditions of the families disaggregated by

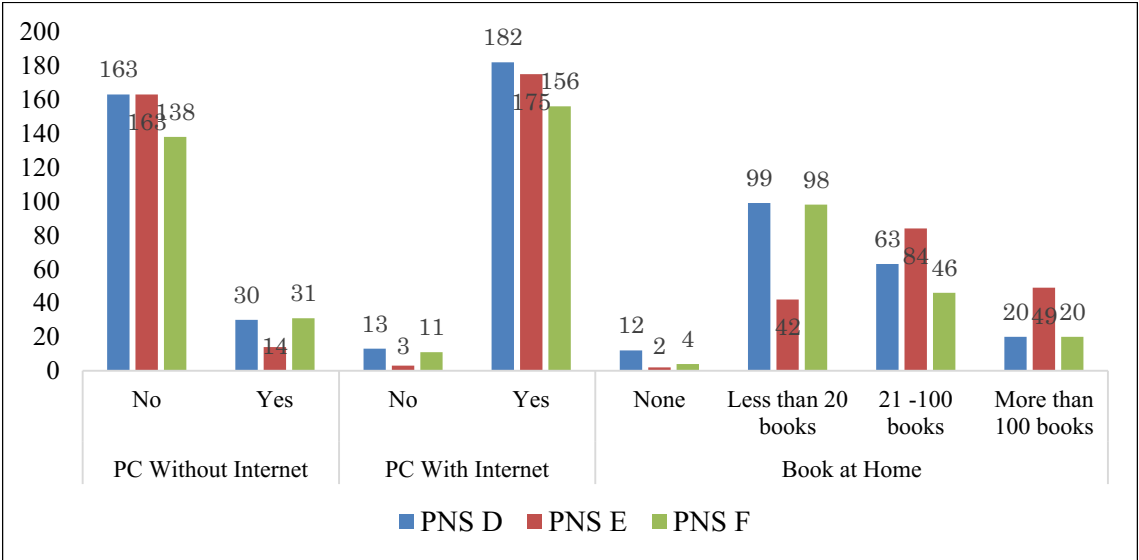
schools, data shows that most of the families of the PNS dispose of personal computers with Internet connection, as display in Figure 5.4. (Japan) and Figure 5.5. (Brazil).

*Figure 5.4. Family Socio-economic Status measured by Possessions segregated by Schools in Japan*



Source: Created by the Author, based on Japan Family Questionnaires (2010).

*Figure 5.5. Family Socio-economic Status measured by Possessions segregated by Schools in Brazil*



Source: Created by the Author, based on Brazil Family Questionnaires (2011).

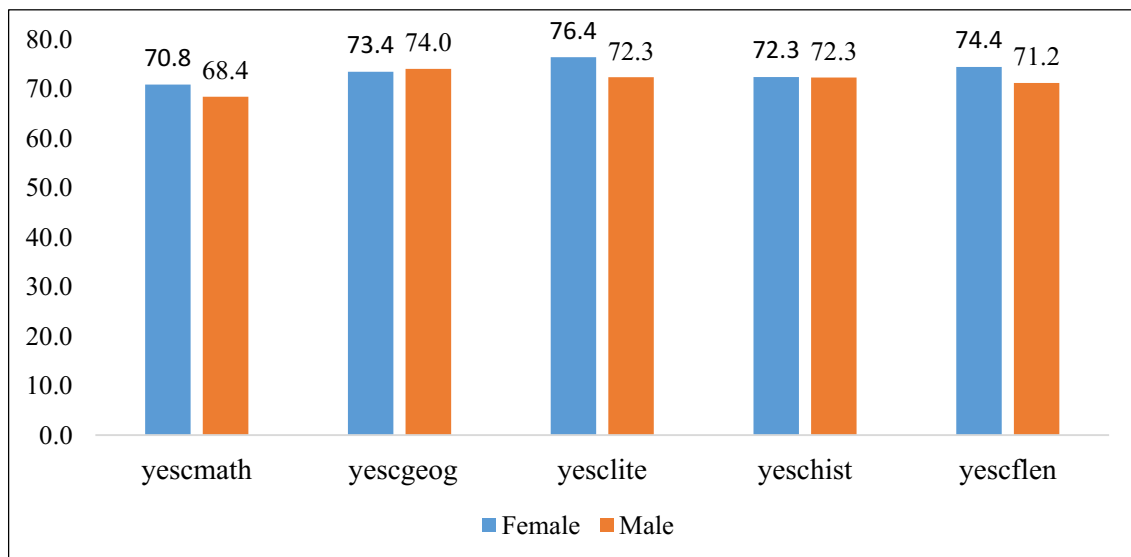
### 5.1.3. Student and Family Factors influencing Student's Achievement

Characteristics of the students who attend the Brazilian PNS in Japan and Brazil vary in terms of student's individual characteristics, and family's economic resources, social resources, cultural resources, parental involvement, and parent's demography; this variation determines differences in student's achievement. In continuation, the relationships between our constructs on the various exam results are tested to find out if Hypothesis 1.2. is valid.

#### *Student Characteristics in Japan*

Figure 5.6. and Figure 5.7. show the difference in performance by gender and ethnicity among students in Japan. Overall, female students appear to perform better in mathematics, literature and foreign language English year-end tests, although female scores are slighter lower than male students in geography year-end tests. (Figure 5.6.)

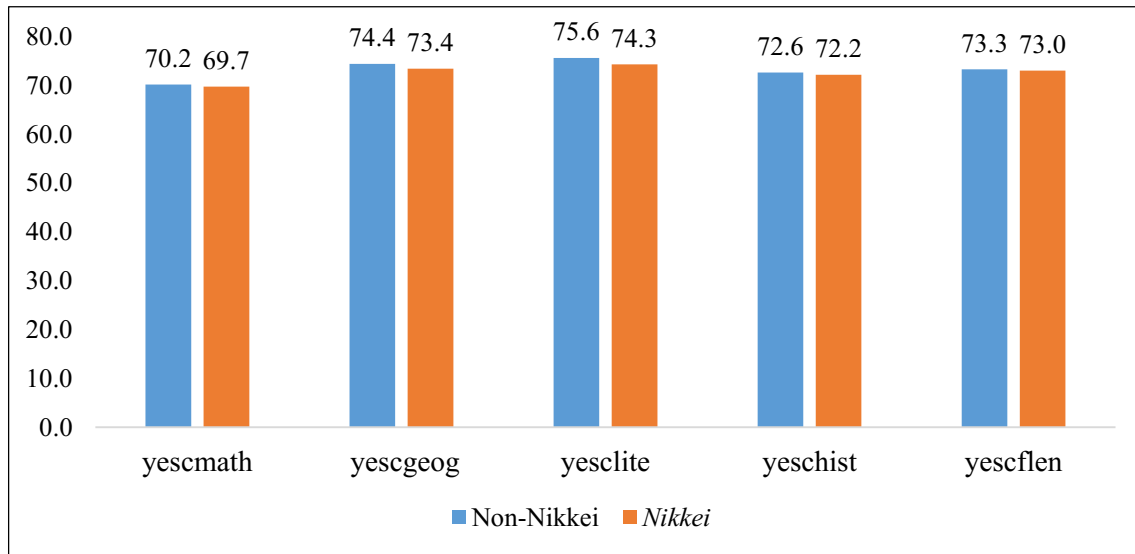
*Figure 5.6. Average Year-end Test Score by Gender in Japan*



Source: Created by the Author, based on data collection in Japan (2010).

Non-*Nikkei* students perform better than *Nikkei* student in the five year-end test scores mentioned earlier. (Figure 5.7.)

Figure 5.7. Average Year-end Test Scores by Ethnicity in Japan



Source: Created by the Author, based on data collection in Japan (2010).

For the family characteristics, the study uses the factor analysis to construct the variables of PI (Parental Involvement), PD (Parent's Demography), ER (Economic Resources), CR (Cultural Resources), and SR (Social Resources). The results of the factor loading are reported in Table 5.5.

Table 5.5. Factor Loading of Constructed Variables for Family Factors

Variable	Factor1	Uniqueness	Variable	Factor1	Uniqueness
Japan			Brazil		
PI (Parental Involvement)					
parehomw	0.429	0.816	talkonsc	0.432	0.813
pareexam	0.515	0.735	helphome	0.499	0.751
retolesso	0.584	0.660	examhelp	0.543	0.705
talkabse	0.601	0.639	talkabse	0.088	0.992
talkscor	0.634	0.598	talkfutu	0.333	0.889
talkfutu	0.532	0.717	talkscor	0.057	0.997
pschmeet	0.117	0.986			
PD (Parent's Demography)					
motheduc	0.521	0.729	livewmot	0.214	0.954
fatheduc	0.600	0.640	livewfat	0.129	0.983

mothrwj	0.149	0.978	motheduc	0.333	0.889
fathrwj	0.124	0.985	fatheduc	0.400	0.840
seemothr	0.302	0.909	seemothr	0.453	0.795
seefathr	0.078	0.994	seefathr	0.586	0.657

#### **ER (Economic Resources)**

tvincolo	0.422	0.822	tvincolo	0.442	0.805
radio	0.105	0.989	radio	0.335	0.888
car	0.354	0.875	car	0.499	0.751
videocas	0.206	0.957	videocas	0.157	0.975
bathroom	0.491	0.759	fridge	0.466	0.783
bedroom	0.562	0.684	washmach	0.470	0.779
freewout	0.288	0.917	vaccum	0.299	0.910
pcwithou	0.358	0.872	bathroom	0.515	0.735
booksath	0.001	1.000	bedroom	0.473	0.776
			freewfri	0.178	0.968
			freewout	0.289	0.917
			pcwithin	0.170	0.971
			pcwithou	-0.107	0.989
			booksath	0.293	0.914

#### **CR (Cultural Resources)**

listmusi	0.557	0.690	listmusi	0.357	0.872
talkbook	0.678	0.540	talkbook	0.515	0.735
talkfilm	0.664	0.559	talkfilm	0.486	0.764
talktv	0.551	0.697	talktv	0.415	0.828

#### **SR (Social Resources)**

talkfrie	0.681	0.537	talkfrie	0.433	0.813
talkothf	0.629	0.605	talkothf	0.340	0.885
talkhaps	0.332	0.890	pschmeet	0.407	0.834
talkdire	0.449	0.799	talkdire	0.688	0.527
talkteac	0.598	0.643	talkteac	0.706	0.501
pschmeet	0.351	0.877			

Source: Created by the Author based on data collection in Japan and Brazil

The results from HLM's estimation are reported in Table 5.6. in Japan. The results are based on a smaller research sample (between N=51 to N=82, depending on the test scores), so it is expected that there would be less statistically valid results. The results indicate that gender (being male) is not a good predictor of test scores in Japan. Although student gender is found to be positively associated with year-end score literature (yesclite) at 10% significant level; however, in other tests the relationships are not statistically significant. Student age is found to be negatively correlated with test score in mathematics (yescmath), and history (yeschist). In other words, younger students are likely to perform better in mathematics and history. Upper secondary school students (Year 1, Year 2 and Year 3) in general seem to have higher scores than the lower secondary school base group (Grade 8 and Grade 9). Year 1 students have higher scores in literature at 1% significance level and Year 2 students have higher scores in literature at 10% significance level. The gap is widening as the students advance in academic degrees.

*Table 5.6. Results of Student Characteristics and Family Factors on Year-End Scores in Japan*

VARIABLES	(1) yescmath	(2) yescgeog	(3) yeschist	(4) yesclite	(5) yescflen
<b>Student Characteristics</b>					
Gender	3.197 (1.955)	-0.449 (2.280)	-0.700 (1.745)	4.092* (2.254)	2.243 (2.308)
Age	-3.490*** (1.163)	-1.262 (1.311)	-2.057** (1.030)	-0.933 (1.328)	0.327 (1.422)
Grade (Base Group are Grade 8 and 9)					
Year 1	4.960 (5.122)		4.190 (4.561)	11.574** (5.888)	8.434 (6.080)
Year 2	6.497 (5.165)	2.406 (5.025)	4.661 (4.606)	9.799* (5.945)	4.701 (6.151)
Year 3	4.693 (5.050)	2.890 (4.900)	3.779 (4.553)	9.319 (5.882)	7.096 (6.011)
Nikkei	-2.642 (3.112)	-0.921 (3.611)	0.972 (2.790)	-0.795 (3.605)	-1.700 (3.658)
Race (Base group are other races)					
Caucasian descendants	-0.721 (3.209)	1.203 (3.588)	3.397 (2.825)	1.442 (3.643)	-0.115 (3.864)

VARIABLES	(1) yescmath	(2) yescgeog	(3) yeschist	(4) yesclite	(5) yescflen
Mestizo descendants	-3.615 (3.708)	-1.091 (4.333)	-1.691 (3.193)	-1.307 (4.123)	-5.046 (4.224)
<b>Family Factors</b>					
PI (Parental Involvement)	3.042** (1.240)	0.717 (1.487)	2.807** (1.125)	3.210** (1.454)	3.997*** (1.470)
PD (Parent's Demography)	-3.598*** (1.394)	-1.110 (1.519)	-1.804 (1.249)	-1.990 (1.613)	-1.304 (1.655)
ER (Economic Resources)	5.899 (11.861)	-6.533 (14.492)	-8.647 (10.142)	5.118 (13.097)	-10.641 (13.659)
CR (Cultural Resources)	-0.757 (1.279)	-1.006 (1.510)	-1.014 (1.154)	-1.305 (1.490)	-0.213 (1.528)
SR (Social Resources)	2.127 (1.319)	1.010 (1.392)	-0.061 (1.186)	0.750 (1.533)	0.092 (1.560)
Constant	126.404*** (21.117)	93.712*** (23.351)	102.236*** (18.635)	79.038*** (24.007)	60.799** (25.913)
<b>Random Effect</b>					
Constant Variance	1.82 (3.88)	2.7e-20 (8.1e-19)	0.098 (2.17)	1.0e-17 (3.0e-16)	10.20 (12.93)
Residual Variance	57.32*** (9.29)	49.925*** (9.88)	47.55*** (7.70)	79.44*** (12.40)	80.96*** (13.05)
AIC	584.74	374.16	581.54	623.46	622.12
Prob > chi2	0.001	0.964	0.115	0.188	0.111
Observations	80	51	82	82	81
Number of groups	3	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

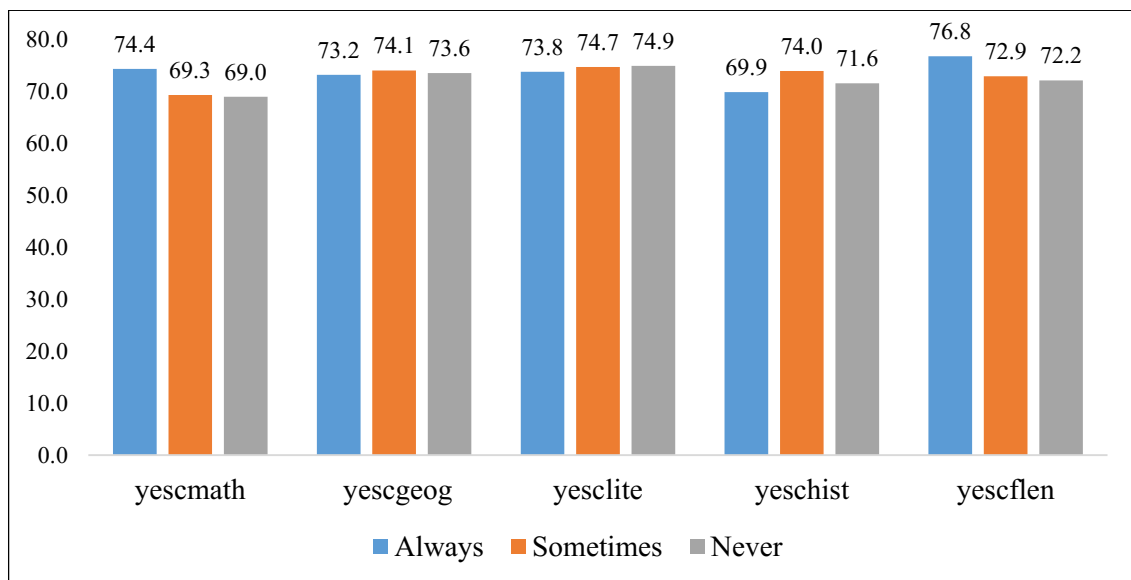
Notes: **Year-end Scores:** Yescmath: mathematics, Yescgeog: geography, Yeschist: history, Yesclite: literature, Yescflae: foreign language English.

### *Family Factors in Japan*

Figure 5.8. represents the average of year-test score by the frequency of parents' talk about child's future in Japan. The continuous parent's conversations and interactions

regarding the child's future with their son/daughter show positive effect on all the subjects, especially in foreign language English (76.80%), literature (73.80%), mathematics (74.40%), and geography (69.90%) year-end test scores. The students who never talk with their parents about their future show lower performance in literature (74.90%), geography (73.6%), foreign language English (72.20%), history (71.60%), and mathematics (69.00%). The results show the effective opportunity for students to understand how parents' interest in their progress in school and in relation to their future is applied in their own school performance.

*Figure 5.8. Average of Year-end Test Score by the Frequency of Parents' talk about Child's Future*



Source: Created by the Author, based on data collection in Japan (2010).

As shown in Table 5.6., family factors in Japan such as Parental Involvement, and Parent's Demography seem to be the constructs which have the most impact, with Parental Involvement being of greater influence. The results indicate that Parental Involvement has a positive impact on mathematics ( $p < 0.05$ ), history ( $p < 0.05$ ), literature ( $p < 0.05$ ), and on foreign language English ( $p < 0.01$ ). Parent's Demography impacts only on mathematics (yescmath) at 1% significant level through a negative correlation. When we observed the Economic Resources in terms of possessions, the results indicate that number of books at home has a positive impact on history ( $p < 0.05$ ) and literature ( $p < 0.10$ ).



Number of videocassettes at home has a negative impact on the mathematics test scores at 1% of the significance level. For observing the regression of each single variables of each construct, see Table E-a in Appendix E.

### ***Student Characteristics in Brazil***

First off, an analysis is made of the influence of our constructs on the year-end scores in Brazil, along with the impact of some other descriptive statistics shown in Subsection 5.1.1. of this Chapter 5. Table 5.7. shows that gender seems to have a certain negative impact on the test results of geography ( $p < 0.10$ ), history ( $p < 0.01$ ), literature ( $p < 0.01$ ) and Foreign language English ( $p < 0.05$ ), with female students scoring on average less than their male counterparts in Brazil. *Nikkei* students have poorer results when it comes to literature exams, showing a negative correlation at 5% of significance level ( $p < 0.05$ ).

*Table 5.7. Results on Year-End Scores in Brazil*

VARIABLES	(1) yescmath	(2) yescphe	(3) yesdgeog	(4) yeschist	(5) yesclite	(6) yesclflae
<b>Student Characteristics</b>						
Gender	-2.338 (1.695)	0.198 (2.157)	-2.387* (1.298)	-3.932*** (1.486)	-3.772*** (1.322)	-2.747** (1.395)
<i>Nikkei</i>	-2.765 (2.927)	-2.468 (3.727)	-0.263 (2.233)	-1.422 (2.561)	-4.781** (2.278)	-0.808 (2.399)
Age	-2.587* (1.489)	0.651 (1.863)	-0.449 (1.162)	-0.567 (1.324)	-0.988 (1.175)	0.909 (1.251)
Race (Base Group: Others)						
Caucasian descendants	5.910* (3.207)	-4.826 (4.085)	5.328** (2.446)	2.690 (2.805)	4.568* (2.496)	5.820** (2.627)
Mestizo descendants	6.671* (3.644)	-2.472 (4.650)	5.225* (2.773)	4.738 (3.182)	6.650** (2.832)	7.652** (2.977)
Grade (Base Group: Grade 9)						
Year 1	0.727 (3.127)	0.500 (3.828)	2.357 (2.499)	6.861** (2.831)	2.538 (2.506)	-1.033 (2.699)
Year 2	2.378 (3.972)	-4.144 (4.828)	4.811 (3.202)	8.347** (3.620)	5.938* (3.201)	-2.373 (3.461)
Year 3	6.479 (5.061)	-13.317** (6.138)	1.945 (4.091)	7.099 (4.621)	5.222 (4.085)	-1.679 (4.425)

### **Family Characteristics**

VARIABLES	(1) yescmath	(2) yescphye	(3) yescgeog	(4) yeschist	(5) yesclite	(6) yescflae
PI (Parental Involvement)	-1.075 (1.425)	1.333 (1.806)	-1.233 (1.093)	-2.058 (1.252)	-2.543** (1.113)	-1.504 (1.175)
PD (Parent's Demography)	2.098* (1.182)	0.068 (1.492)	2.577*** (0.916)	1.740* (1.046)	1.473 (0.929)	3.123*** (0.987)
ER (Economic Resources)	0.091 (0.963)	1.086 (1.228)	-0.802 (0.735)	0.052 (0.843)	0.863 (0.750)	0.905 (0.789)
SR (Social Resources)	-1.597 (1.124)	-0.767 (1.429)	-0.991 (0.859)	-0.420 (0.984)	-0.677 (0.876)	-1.391 (0.923)
CR (Cultural Resources)	0.651 (1.428)	1.699 (1.818)	1.558 (1.090)	2.363* (1.250)	1.433 (1.112)	1.058 (1.171)
Constant	102.381*** (22.003)	88.801*** (27.636)	71.207*** (17.179)	76.595*** (19.532)	77.207*** (17.335)	57.310*** (18.674)
<b>Random Effect</b>						
Constant Variance	1.892 (3.763)	1.721 2.601	15.424 13.88	2.257 3.416	1.892 3.76	40.70 35.45
Residual Variance	99.00*** (9.151)	257.04*** (23.46)	94.38*** (8.67)	123.40*** (11.34)	99.01*** (9.15)	110.86*** (10.18)
AIC	1922.28	2034.90	1802.17	1861.42	1808.63	1843.08
Prob > chi2	0.048	0.008	0.014	0.002	0.001	0.055
Observations	240	240	240	240	240	240
Number of groups	3	3	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Notes: **Year-end Scores:** Yescmath: mathematics, Yescgeog: geography, Yeschist: history, Yesclite: literature, Yescflae: foreign language English.

Student age is found to be negatively correlated with test year-end score in mathematics ( $p<0.10$ ) meaning that younger students are likely to perform better in this subject. Upper secondary school students (Year 1) found to be positively correlated with test scores in history ( $p<0.05$ ) than the Lower secondary school base group (Grade 8 and

Grade 9). Year 2 students have higher scores than the Lower secondary school base group (Grade 8 and Grade 9) in history ( $p < 0.05$ ) and in literature ( $p < 0.10$ ), through a positive correlation. Year 3 students have higher scores in physical education ( $p < 0.05$ ) than the lower secondary school base group (Grade 8 and Grade 9), through a negative correlation. The gap is widening as the students advance in academic grades.

Regarding race, Caucasian descendant students and Mestizo descendant students perform better than the race base group (others, i.e., Indigenous and Asian descendant students). Hence, Caucasian descendant students have positive correlations in year-end scores mathematics ( $p < 0.10$ ), geography ( $p < 0.05$ ), literature ( $p < 0.10$ ) and foreign language English ( $p < 0.05$ ), meaning that they perform better than the race base group (others, i.e., Indigenous and Asian descendant students). Mestizo descendant students have positive correlations in year-end scores mathematics ( $p < 0.10$ ), geography ( $p < 0.10$ ), literature ( $p < 0.05$ ) and foreign language English ( $p < 0.05$ ). More important is to look at the results of our constructs. (See Table E-a in Appendix E) Through these results in both settings, Hypothesis 1.1. on student's characteristics and achievement can be proven.

### ***Family Factors in Brazil***

The results of family factors in Brazil show only three constructs that seem to have some sort of influence: PI = 'Parental Involvement', PD = 'Parent's Demography', and CR = 'Cultural Resources'. Parent's Demography refers to the combination of the parent's education, and child seeing his/her mother or father reading. It is observed that only seeing father reading has impact on the test results of mathematics. Parental Involvement deals with the communication between parents and their child, the expectations of the parents on the child's future and if the parents assist their child with homework (Epstein, 1992). Here, the impact is only measured on literature results, but surprisingly the correlation is negative. Cultural Resources refers to if parents talk with their children about books and films and a positive correlation is seen with test results on history, which logically speaking makes sense. When we observed the Economic Resources in terms of

possessions, the results indicate that the number of books at home has a positive impact on all subjects: mathematics ( $p < 0.01$ ), physical education ( $p < 0.05$ ), geography ( $p < 0.01$ ), history ( $p < 0.01$ ), literature ( $p < 0.05$ ), and foreign language English ( $p < 0.01$ ). The personal computer without Internet (connection) has a positive impact on the mathematics test scores at 5% of significance level, and on geography test scores at 10% of significance level. (Table E-b in Appendix E) In continuation, an analysis will be made of the variables for both countries within their cluster categories.

### ***Family Factors in Both Countries***

#### ***Parental Involvement***

Parental involvement (PI) was tested with a number of variables that were designed to measure the frequency parents engage with their children in school matters as well as how the parents communicate with the school. In the end, four variables (i.e., parents help their child in doing homework, parent's talk with their child on not been absent at school, parent's talk with their child on school's scores, parents talk with their child on child's future) were found to have some impact, while others were disregarded. The researcher found that the results are ambiguous because of a twofold mechanism. Sometimes, parental involvement will have a positive effect on the student when it is a sign of care of the parent (for instance when parent-child talk about what happens at school) or when the parents talk with their child about the future. However, sometimes the parental involvement can be bigger since the student has more need of help or the parents worry about the direction their child is heading to. For instance, a student that receives more help with homework or in preparation of exams is more likely to have lower results if the additional help is due to the student having problems to learn the material and the additional assistance is not sufficient. The students that have good results already do not need any assistance from their parents. If this study would have been replicated in time revising the results of particular students with difficulties at school, the impact of these

variables could be better understood to see if the increased interaction produces an improvement in achievement of the students. When parents talk with their children about the importance of not being absent in class, this might be as a result of the children having a problem of absenteeism in the first place, which correlates with lower test results. In the same way variables of parents talking about the importance of good grades and parents often going to school meetings can be interpreted. A parent has less of a reason to mention good grades or to go to a school meeting if the student is already performing well. Hence, these variables are correlated with lower results, indicating that these things occur, since the parents identify a need to intervene in the student's education.

It is important to mention that even when all the statistical tests pass, the regressions do not prove causality. There is always the possibility that causality is reversed. This methodological point is important to be clearly announced in order to avoid a priori misinterpretation. Overall, it is necessary to understand the complexity of these variables and their interpretation in order to draw strong conclusions. The researcher gives this possible explanation as it has some logic but based on the numbers, we cannot conclude for certain that this is what is happening in reality. Based on these results, it is not possible to state that Parental Involvement has a strong impact on test results. It seems equally likely that the parent's involvement is influenced by the students results instead of vice versa. It was not possible to determine the direction of this relationship because it escapes the research question applied in this study and the model used to verify it.<sup>72</sup>

### ***Parent's Demography***

In Parent's Demography (PD), the aim is to view if the characteristics of the parents indirectly influence the results of the children at school. Many variables were found to have no measurable impact and were disregarded. A first conclusion can be drawn when

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<sup>72</sup> Parent meetings are important for PNS. In both countries, it was reported that numerous meetings are established during the school year, being compulsory, while parents have the flexibility to meet teachers and school principals as necessary.

looking at the relation between the level of education of both parents, where good differentiated results were obtained. It seems that the level of the father's education has a well-defined positive effect on the result of the children. The higher level of academic degree the father had obtained, the better the results of his/her child. Surprisingly, this same effect is not visible when looking at the mother's education. Here the results are ambiguous, with a positive effect on students year-end exams in Brazil, and no effect of students results in year-end scores in Japan. It seems that the impact of the mother's education is not as straightforward as the impact of the father's education, which would be an interesting observation that could be subject to further study. Gender studies often neglect such correlations or view them as being the result of cultural constructs or perceptions. Possibly there are also some cultural differences here which have an impact, but the researcher was not able to identify this difference clearly.

The variables asking if the student sees his/her mother and/or his/her father reading were found to have confusing results as well. In Japan seeing the mother read has a negative impact on Vestibular Simulado exam results, but seeing the father read has a positive impact on those same results. No assumptions were made based on these peculiar results. To conclude, the main observation is that the education level of the father has a defined strong impact on the exam results of the children, both in Japan and in Brazil. These results could have some explanations in the evidence that fathers in both countries are better educated than mothers, data obtained from our descriptive analysis (Table 5.3), or because fathers in both Japan and Brazil are seen as the head of the family. Other variables were not found to have a significant one directional impact.

### ***Economic Resources***

In the Economic Resources (ER) variables, the impact of the availability of material goods (possessions or artifacts) indicating a level of material wealth on student results is measured. The results are straightforward. There is a strong correlation between having more material goods at home and having better results. The most essential material goods

correlating with better school results are having one car or more, several shelves of books, one personal computer or more and one television or more. Especially the number of books and the availability of a personal computer are crucial. Most significant is if the personal computer is connected to Internet. Since these goods are directly related to access of information, it was expected that they would have a significant impact and the results confirm this assumption. Less important was having more than one bedroom and/or bathroom, having a large number of videocassettes or radios or a vacuum cleaner. (Tables E-a and Table E-b in Appendix E)

The conclusion is that material wealth within a family is an indicator of the results of their children at school. Once more, the direction of this relationship is hard to determine. It seems logical in both directions. People are wealthier, because they had more inherent qualities that indicate a higher level of intelligence and hence have acquired a higher standard of living through better-paid employment, which will correlate with the intelligence of their children, and also children who have access to information through material goods (possessions or artifacts) will have a higher possibility to get results at school.<sup>73</sup> Nevertheless, through these individual variables, interesting elements for analysis came to the foreground. (Table E-a and Table E-b in Appendix E)

### ***Cultural Resources***

The variables in Cultural Resources (CR) are intended to see if there is a direct relationship between parents talking to their children about cultural capital and their study results. The results seem to indicate that there is not a strong correlation present. Only in the case of frequency of parents talking about books with their children a strong positive correlation could be found. In the case of conversing about music, broadcast television programmes or films, the relation is not so clear.

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<sup>73</sup> Strangely enough, this construct as a whole did not produce good results, in contrast with the individual variables. Most likely, it would have been better to reduce the number of variables and then the possibility for a valid effect of the construct would have been greater.

The explanation for this observation can perhaps be found in the knowledge that books are more frequently related to the subjects studied at school, whereas music, broadcast television programmes and films are not necessarily so. Furthermore, the percentage of people that read books to learn instead of for their own relaxation is more likely to be higher than the amount of people that watch films or television programmes or listen to music to learn instead of for their own amusement and relaxation. In addition, reading books is known to have a positive influence on the language capacities of people, which play a role in achieving good results at school. Placed in a modern context, this observation is interesting given the decreasing time spend reading books observed in teenagers worldwide. A more detailed study could be made to view the specifics of this correlation, as well as to include other elements such as new forms of technology and the changing nature of reading for young people.

### ***Social Resources***

In Social Resources (SR) a couple of variables related to the social dynamics between parents and children were evaluated. It is observed that there is no real impact between student's school results and the relationship between the parents and the friends of their children. Similarly, if parents talk about what happens at school does not seem to impact results significantly. The only variables that have some effect on results within this category were whether the parents talk to the school principal and/or to the teachers of the school of their children. This correlation is slightly positive. However, the results were not that strong, so the researcher is reluctant to draw any strong conclusions. Overall, Hypothesis 1.2. for Japan and Brazil can be considered as partially confirmed, depending on which construct we base our analysis.



## 5.2 School Factors and Community Factors influencing Student's Achievement

Characteristics of the Brazilian PNS in Japan and Brazil vary in terms of teachers variables (teachers experience, teacher's school work, teacher's hours of teaching, teacher's income), and community variables (usage of community library, language used at neighborhood, second language acquisition learning in community centers, and network); this variation determines differences in student's achievement. In continuation, the impact of our constructs on the various test results is reviewed to see if Hypothesis 2.1. can be validated.<sup>74</sup>

### 5.2.1. School and Community Factors influencing Student's Achievement in Japan

Table 5.8. shows the results of school factors and community factors on year-end score in Japan. Parental Involvement is found positively associated with mathematics, history, literature and foreign language English at 5% of significant level. Parent's Demography is found negatively associated with mathematics at 5% of significant level, however there is no effects with the other factors such as Economic Resources and Cultural Resources. Social Resources is found positively correlated with mathematics ( $p < 0.10$ ).

*Table 5.8. Results of School Factors and Community Factors on Year-End Scores in Japan*

VARIABLES	(1) yescmath	(2) yescgeog	(3) yeschist	(4) yesclite	(5) yescflen
<b>Student Characteristics</b>					
Gender	3.133 (2.010)	-1.099 (2.622)	-1.949 (1.763)	4.031* (2.301)	1.905 (2.313)
Age	-3.072***	-0.816	-1.227	-0.119	0.273

<sup>74</sup> In general, the results of the regression analysis do not allow for a lot of strong conclusions to be made. In order to not lose the valuable data that was gathered, analysis was made using the single variables that constitute the constructs, to observe if there are important valid results to be seen there. It seems our dataset was not sufficiently robust and/or big enough for the constructs to be seen having a decisive impact, besides the influence described above or perhaps our theoretical model is not aligned with reality as much as we thought. Testing the results of the single variables shed more light on what behavior and characteristics do have an impact on study results. (See Tables with single variables in Appendix E)

VARIABLES	(1) yescmath	(2) yescgeog	(3) yeschist	(4) yesclite	(5) yescflen
	(1.184)	(1.423)	(1.053)	(1.374)	(1.393)
Grade (Base Group are Grade 7 and Grade 8)					
Year 1	9.871 (6.226)	-	8.894 (5.542)	16.549** (7.230)	13.769* (7.252)
Year 2	10.430* (6.053)	3.545 (6.843)	8.894* (5.400)	14.659** (7.044)	8.772 (7.064)
Year 3	8.868 (6.235)	4.856 (7.185)	8.045 (5.567)	13.849* (7.262)	12.545* (7.290)
<i>Nikkei</i>	-2.583 (3.117)	0.604 (4.141)	0.718 (2.759)	-0.886 (3.599)	-1.067 (3.613)
Race (Base Group is other races)					
Caucasian descendants	-1.712 (3.351)	0.196 (4.212)	1.792 (2.969)	-0.062 (3.873)	0.547 (3.934)
Mestizo descendants	-4.014 (3.684)	-1.534 (4.657)	-2.220 (3.127)	-2.959 (4.079)	-4.926 (4.090)
<b>Family Factors</b>					
PI (Parental Involvement)	2.630** (1.260)	0.838 (1.622)	2.693** (1.120)	3.001** (1.461)	3.736** (1.466)
PD (Parent's Demography)	-3.353** (1.378)	-1.259 (1.566)	-1.369 (1.210)	-1.999 (1.578)	-1.116 (1.597)
ER (Economic Resources)	5.934 (11.745)	-4.329 (15.351)	-9.545 (10.050)	4.500 (13.112)	-6.717 (13.436)
CS (Cultural Resources)	0.470 (1.355)	1.292 (1.643)	0.919 (1.205)	1.016 (1.571)	0.474 (1.581)
SR (Social Resources)	2.294* (1.321)	0.908 (1.485)	0.051 (1.167)	0.931 (1.522)	0.556 (1.530)
<b>School Factors (Teacher)</b>					
tyexp	-0.864* (0.446)	-0.153 (0.598)	-0.789** (0.392)	-0.102 (0.511)	-1.115** (0.513)
tcondwork	-0.185 (0.334)	0.151 (0.431)	-0.169 (0.297)	0.494 (0.388)	-1.174*** (0.390)
tincome	-	-	-	-	-
<b>Community Factors</b>					
lauseath	0.204 (2.093)	-0.753 (3.023)	-2.075 (1.833)	-3.498 (2.391)	-2.286 (2.397)
lauseats	1.815 (2.070)	3.322 (2.635)	2.522 (1.829)	3.029 (2.387)	3.665 (2.411)
<b>Network</b>					
Family/Siblings	4.334	1.335	2.790	1.687	5.967

VARIABLES	(1) yescmath	(2) yescgeog	(3) yeschist	(4) yesclite	(5) yescflen
Friends	(4.140) 1.301 (4.335)	(5.131) 5.193 (8.645)	(3.670) 7.876** (3.867)	(4.788) 3.111 (5.045)	(4.801) 5.194 (5.059)
Constant	122.230*** (22.668)	81.309*** (26.710)	91.684*** (20.196)	54.800** (26.348)	78.086*** (26.598)
<b>Random Effect</b>					
Constant Variance	1.3e-20 (3.0e-19)	1.6e-21 (3.9e-20)	9.6e-21 (2.2e-19)	2.6e-20 (7.7e-19)	2.7e-20 (7.9e-19)
Residual Variance	53.46*** (8.50)	47.79*** (9.46)	42.66*** (6.70)	72.62*** (11.41)	72.98*** (11.53)
AIC	582.54	383.94	577.89	620.97	614.24
Prob > chi2	0.000	0.987	0.044	0.162	0.005
Observations	79	51	81	81	80
Number of groups	3	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Notes: **Year-End Scores:** Yescmath: mathematics, Yescgeog: geography, Yeschist: history, Yesclite: literature, Yescflae: foreign language English. **School Factors:** tyexp: teacher years of experience, tcondwork: the number of schools where the teacher work, tincome: the income level of teachers. **Community Factors:** lausath: language children use in their house, family/siblings and friends: network.

School factors and community factors facilitated by schools are the two groups of variables being looked at to determine if we can find a specific effect of the school environment of the PNS system and/or any influence from the community around the PNS. To determine school factors, variables concerning teacher's years of experience (tyexp), the number of schools where the teacher work (i.e., "taxi-teacher", in Portuguese) (tcondwork), and their salary (tincome) were put into the regression analysis. It was expected that more experienced teachers would result in better average scores of students, and the model produces evidence of this through the questionnaire. It was found significant associated with year-end scores mathematics at 10% of significant level, and to history and foreign language English scores at 5% of significant level, but negatively

associated with geography and literature. It was expected that in more schools the teacher works would result in worse average scores of students, because a teacher who commutes from one school to other and/or moving within several cities weekly is tired, less motivated and with scarce time to prepare lesson plans and teaching practices. The evidence was found to be negatively associated with mathematics, history and foreign language English ( $p < 0.01$ ), so results are consistent with the literature.<sup>75</sup> However, the issue that students of PNS in Japan activate their acquirement of cultural capital from their teachers raise the possibility of improved opportunities to social mobility. Related to the teachers' salaries, data was not captured in the questionnaires possibly due to it being sensitive data to be reported by teachers, so no inferences can be shown in this regard.

To determine the community factors facilitated by schools, it was expected that library use outside school (liboutsc), language use in the neighborhood (lauseatn), student interest in studying languages outside schools -i.e., in community-multicultural centers (inlaousc), and network made by family and/or siblings of friends (social network), would result in better average scores of students. Results show that social network (being siblings or friends) is found positively associated with history year-end scores at 5% of significant level, but other positive correlations could not be substantiated within our model. The issue that students of PNS in Japan activate social network with the activities facilitated by the school in the community also raise the possibility of improved opportunities to social mobility.

### **5.2.2. School and Community Factors influencing Student's Achievement in Brazil**

Table 5.9. shows the results of school and community factors on year-end scores in Brazil. The school factors, with variables concerning teacher's years of experience (tyexp), the

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<sup>75</sup> Language teachers in Japan reported in interviews that the condition of being "taxi-teachers" (in Portuguese), working in several schools weekly, generated fatigue by taking time out to prepare classroom lessons and teaching practices.

teacher workload at school (tschwork), their hours of teaching (thourteach), and their salary (tincome) were put into the regression analysis. We found that the teacher work at school, teachers hours of teaching, and teacher's years of experience were not significant and have no effects on year-end scores in all subjects. Related to the teachers' salaries, it was expected that teachers who receive a higher salary would result in better average scores of students, as the evidence shows. The results found a positive association with geography and foreign language English at 10% significance level, but a negative association with history ( $p < 0.01$ ) and literature ( $p < 0.10$ ). No significant association was found with mathematics and physical education year-end scores. *Nikkei* students' score worse on literature, this might be logical because they are not as fluent in Portuguese, as compared to the non-Japanese students.

The variable second language acquisition learning in community-multicultural centers of the community factors was found positively associated with mathematics, geography and foreign language English at 1% of significant level, but negatively correlated to physical education scores. The community factors usage of community library, and language use in the student's neighborhood were found not to be correlated with year-end scores in all subjects. Family network (bonding social resources) was found to be negatively correlated with mathematics, geography and foreign language English at 5% significant level compared with the base group (no social network).

At this point of the analysis, we observe that the correlations are few and not always positive. Consequently, Hypothesis 2.2. for Japan and Brazil could only be partly confirmed with specific variables, specifically the assistance of child to community-multicultural centers to study a second language, or the family/siblings as support to child and families as an activator of social network (bonding social resources), but that the relationship appears more complex than expected. For some variables feasibility, results would be clearer through a repeated analysis over time and possibly with larger datasets.

Table 5.9. Results of School and Community Factors on Year-end Scores in Brazil

VARIABLES	(1) yescmath	(2) yescphy	(3) yescgeog	(4) yeschist	(5) yesc-lite	(6) yescflae
<b>Student Characteristics</b>						
Gender	-1.321 (1.729)	0.628 (2.215)	-1.784 (1.321)	-3.877** (1.521)	-3.995*** (1.364)	-2.195 (1.427)
Nikkei	-3.488 (2.887)	-1.467 (3.698)	-0.224 (2.207)	-1.111 (2.539)	-4.606** (2.277)	-0.880 (2.382)
Age	-3.064** (1.529)	1.071 (1.958)	-0.232 (1.169)	0.253 (1.345)	-0.391 (1.206)	1.373 (1.261)
Race (Base Group: Others)						
Caucasian descendants	5.543* (3.164)	-4.655 (4.052)	5.433** (2.418)	2.906 (2.782)	4.289* (2.495)	5.992** (2.610)
Mestizo descendants	6.733* (3.587)	-2.619 (4.594)	5.383** (2.741)	4.190 (3.154)	5.794** (2.829)	8.032*** (2.959)
Grade (Base Group: Grade 9)						
Year 1	2.166 (3.203)	-0.845 (4.102)	1.889 (2.448)	6.158** (2.816)	2.182 (2.526)	-1.760 (2.642)
Year 2	4.466 (4.114)	-6.978 (5.270)	3.619 (3.144)	6.860* (3.618)	5.198 (3.245)	-3.618 (3.394)
Year 3	9.697* (5.316)	-16.236** (6.809)	0.789 (4.063)	5.243 (4.675)	3.631 (4.193)	-3.015 (4.386)
<b>Family Factors</b>						
PI (Parental Involvement)	-1.430 (1.427)	1.412 (1.828)	-1.896* (1.091)	-2.751** (1.255)	-2.826** (1.126)	-2.269* (1.177)
PD (Parent's Demography)	1.805 (1.193)	0.465 (1.529)	2.497*** (0.912)	2.051* (1.049)	1.893** (0.941)	2.900*** (0.985)
ER (Economic Resources)	-0.072 (1.007)	1.443 (1.290)	-1.222 (0.769)	0.027 (0.885)	1.105 (0.794)	0.640 (0.831)
SR (Social Resources)	-1.344 (1.124)	-0.533 (1.439)	-0.597 (0.859)	-0.180 (0.988)	-0.793 (0.886)	-0.966 (0.927)
CR (Cultural Resources)	0.331 (1.420)	2.146 (1.819)	1.449 (1.085)	2.148* (1.249)	1.362 (1.120)	1.037 (1.172)
<b>School Factors (Teacher)</b>						
tyexp	-0.617 (1.800)	-3.318 (2.306)	-1.023 (1.376)	0.976 (1.583)	0.391 (1.420)	-1.148 (1.485)
tschwork	1.043 (2.994)	-4.014 (3.834)	-0.157 (2.288)	-2.200 (2.632)	-1.369 (2.361)	-2.319 (2.470)
thourteach	0.149 (3.113)	3.848 (3.987)	-2.218 (2.379)	4.361 (2.737)	4.019 (2.455)	-3.820 (2.568)
tincome	1.050 (1.670)	-1.017 (2.138)	5.485*** (1.276)	-4.720*** (1.468)	-2.567* (1.317)	5.786*** (1.377)

VARIABLES	(1) yescmath	(2) yescphye	(3) yescgeog	(4) yeschist	(5) yesclite	(6) yescflae
<b>Community Factors</b>						
Liboutsc	0.804 (2.203)	-2.819 (2.822)	0.222 (1.684)	2.301 (1.938)	1.308 (1.738)	0.876 (1.818)
Lauseatn	0.999 (6.453)	-4.848 (8.265)	-0.246 (4.932)	8.640 (5.675)	8.097 (5.090)	5.859 (5.324)
Inlaousc	8.864*** (2.566)	-0.576 (3.287)	5.116*** (1.961)	2.282 (2.257)	0.561 (2.024)	6.674*** (2.117)
Network (Base group: no network)						
Family/Siblings	-5.523** (2.524)	-1.354 (3.233)	-4.161** (1.929)	-3.548 (2.220)	-1.177 (1.991)	-4.673** (2.083)
Friends	-3.926 (3.863)	8.011 (4.948)	-2.000 (2.953)	-0.651 (3.397)	-2.476 (3.047)	-4.735 (3.187)
Constant	99.729*** (27.590)	115.726*** (35.339)	44.870** (21.086)	72.756*** (24.262)	65.511*** (21.762)	30.153 (22.762)
Observations	236	236	236	236	236	236
<b>Random Effect</b>						
Constant Variance	8.1e-19 (2.4e-17)	2.0e-18 (5.3e-17)	3.4e-17 (9.0e-16)	6.0e-19 (1.7e-17)	5.5e-18 (1.29e-16)	6.5e-17 (1.8e-15)
Residual Variance	151.13*** (13.91)	247.44*** (22.77)	91.08*** (8.38)	119.10*** (10.96)	97.93*** (9.01)	106.98*** (9.84)
AIC	1894.03	2010.38	1774.51	1837.82	1791.62	1812.49
Prob > chi2	0.005	0.003	0.000	0.000	0.004	0.000
Obervation	236	236	236	236	236	236
Number of groups	3	3	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

**Year-end Scores:** Yescmath: mathematics, Yescgeog: geography, Yeschist: history, Yesclite: literature, Yescflae: foreign language English. **School Factors:** tyexp: teacher years of experience, tcondwork/tschwork: the number of schools where the teacher work, thourteach: the number of hours weekly that the teacher teaches, tincome: the income level of teachers. **Community Factors:** lausatn: language students use in their neighborhood, family/siblings and friends: network, inlaousc: student interest in studying languages outside schools -i.e., in community-multicultural centers, liboutsc: library used outside the school.

### 5.3. Projections of entering the University Entrance Examination in Brazil

In this section we attempt to examine if student characteristics (gender, age, grade, race, and ethnicity) and if family factors (Parent's Demography, Economic Resources, Social Resources, Cultural Resources, and Parental Involvement) in Japan and Brazil differ in influencing the prospect of PNS students to pass the university entrance examination in Brazil, as stated in Hypotheses 3.1. and 3.2.

#### *Japan*

Table 5.10. show the results on Vestibular Simulado cumulative scores in Japan, use as prospect for entering the university entrance examination in Brazil.

*Table 5.10. Results on Vestibular Simulado Scores in Japan*

VARIABLES	(1) vsmath	(2) vsgeo	(3) vshist	(4) vsflanen
<b>Student Characteristics</b>				
Gender	0.455 (0.336)	-0.358 (0.363)	-0.415 (0.333)	0.275 (0.302)
Age	-0.644*** (0.212)	0.055 (0.229)	-0.033 (0.210)	0.225 (0.191)
Grade (Base Group are Grade 7 and Grade 8)				
Year 1	-1.514 (1.146)	3.797*** (1.238)	2.628** (1.135)	2.129** (1.029)
Year 2	-1.146 (1.107)	3.049** (1.195)	1.909* (1.096)	1.955** (0.993)
Year 3	-1.974* (1.132)	3.054** (1.223)	2.282** (1.121)	1.834* (1.016)
<i>Nikkei</i>	-0.556 (0.523)	0.988* (0.565)	0.042 (0.518)	0.900* (0.470)
<b>Race (Base Group is other races)</b>				
Caucasian descendants	0.993* (0.549)	1.308** (0.592)	0.195 (0.543)	1.180** (0.492)
Mestizo descendants	-0.179 (0.626)	-0.510 (0.676)	0.697 (0.620)	0.297 (0.562)
<b>Family Characteristics</b>				
PI (Parental Involvement)	0.465** (0.224)	0.464* (0.242)	0.242 (0.222)	0.451** (0.201)
PD (Parent's Demography)	-0.778*** (0.240)	-0.203 (0.259)	0.315 (0.237)	-0.176 (0.215)



VARIABLES	(1) vsmath	(2) vsgeo	(3) vshist	(4) vsflanen
ER (Economic Resources)	0.061 (2.044)	2.596 (2.207)	-3.801* (2.024)	-0.812 (1.835)
CR (Cultural Resources)	-0.406* (0.244)	0.273 (0.264)	-0.021 (0.242)	0.023 (0.219)
SR (Social Resources)	-0.389* (0.230)	-0.102 (0.248)	-0.088 (0.228)	0.182 (0.206)
<b>School Factors (Teacher)</b>				
Tyexp	-0.090 (0.076)	0.053 (0.083)	0.135* (0.076)	0.106 (0.069)
Tcondwork	-0.114* (0.061)	0.000 (0.066)	-0.127** (0.060)	0.011 (0.055)
	-	-	-	-
<b>Community</b>				
Lauseath	-0.402 (0.376)	-0.049 (0.406)	-0.089 (0.373)	-0.144 (0.338)
Lauseats	0.143 (0.381)	0.031 (0.411)	-0.094 (0.377)	-0.364 (0.342)
<b>Network</b>				
Family/Siblings	-0.288 (0.753)	0.937 (0.813)	0.448 (0.746)	0.554 (0.676)
Friends	-2.461*** (0.904)	-1.999** (0.977)	-0.637 (0.896)	-1.301 (0.812)
Constant	17.965*** (4.187)	-2.231 (4.521)	1.868 (4.146)	-4.571 (3.758)
<b>Random Effect</b>				
Constant Variance	1.05e-22 (2.78e-21)	9.73e-23 (2.75e-21)	2.10e-23 (5.93e-22)	6.25e-23 (1.72e-21)
Residual Variance	1.797*** (0.274)	2.096*** (0.319)	1.763*** (0.268)	1.448*** (0.220)
AIC	338.50	351.72	336.83	319.92
Prob > chi2	0.000	0.000	0.000	0.007
Observations	86	86	86	86
Number of groups	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

**Vestibular Simulado scores:** VSmath: mathematics, VSgeog: geography, VShist: history, VSflanen: Foreign language English. **School Factors:** tyexp: teacher years of experience, tcondwork/tschwork: the number of schools where the teacher work, tincome: the income level of teachers. **Community Factors:** lausats: language students use at school, lausath: language children use at home, family/siblings and friends: network.

Looking at the Vestibular Simulado results in Japan, gender has no significant impact, meaning that boys and girls have the same chance to enter university. Student age is found to be negatively associated with mathematics Vestibular Simulado results at 1% significance level; though, in other Vestibular Simulado tests the relationships are not statistically significant. In other words, younger students are likely to perform better in mathematics. Related to the students in Upper Secondary Education (Years 1-2-3), it was expected that students who are in a higher degree would result in better average cumulative scores in Vestibular Simulado exams, as result of trial-error apprenticeship from Grades 8-9 of Lower Secondary Education. Evidence is consistent with this assumption, as the gap is widening as students advance in academics grades.

Year 1 students were found positively associated with Vestibular Simulado geography ( $p < 0.01$ ), Vestibular Simulado history ( $p < 0.05$ ) and Vestibular Simulado foreign language English ( $p < 0.05$ ), meaning that Year 1 students perform better in these subjects than the Base Group (Grade 7 and Grade 8) students; however, in Vestibular Simulado mathematics the relationship was found negatively associated and not statistically significant. Year 2 students are found positively associated with Vestibular Simulado geography ( $p < 0.05$ ), Vestibular Simulado history ( $p < 0.01$ ), and Vestibular Simulado foreign language English ( $p < 0.05$ ), but show no statistical significance in Vestibular Simulado mathematics, compared with the Base Group (Grade 7 and Grade 8) students. Year 3 students are found to be positively associated with Vestibular Simulado geography scores ( $p < 0.05$ ), Vestibular Simulado history scores ( $p < 0.05$ ) and Vestibular Simulado foreign language English scores ( $p < 0.10$ ), compared with the Base Group (Grade 7 and Grade 8) students; though, negatively associated to Vestibular Simulado mathematics scores at 1% of significant level. Overall, in Japan, students of Years 1-2-3 of Upper Secondary School perform better each year of degree on Vestibular Simulado geography, Vestibular Simulado history and Vestibular Simulado foreign language English results as the p-values demonstrate.

The performance of *Nikkei* students in two out of five Vestibular Simulado test results show that the difference in the mean is significant and substantial, being geography and foreign language English at 1% of significant level. Here a conclusion can be drawn that the Non-Japanese descendant students (being Caucasian descendants) are reaching a higher level of academic achievement, especially in mathematics ( $p < 0.10$ ), geography ( $p < 0.05$ ) and foreign language English ( $p < 0.05$ ). The individual characteristics of the *Nikkei* student group hamper the realization of their full potential and make them less competitive in their academic careers. The previous analysis of the individual variables has given insight already on why these differences exist. (See Table E-c and Table E-d in Appendix E) Here it is made clear what the consequences are of these differences between the two population groups. Through these results in Japan, Hypothesis 3.1. can be partially proven.

Regarding the constructs, Parent's Demography is found to be negatively correlated with mathematics Vestibular Simulado results at 10% of significant level. Parental Involvement has influence, showing a positive correlation in Japan on results of mathematics ( $p < 0.05$ ), geography ( $p < 0.10$ ) and foreign language English ( $p < 0.05$ ). Economics Resources, although negative, is found associated with Vestibular Simulado history results. Cultural Resources is found to be negatively associated with Vestibular Simulado mathematics results at 1% of significant level. Social Resources, although negative, is found associated with Vestibular Simulado mathematics results. Through these results in Japan, Hypothesis 3.2. can be partially proven.

### ***Brazil***

Table 5.11 shows the results of Vestibular Simulado Scores in Brazil. The variable gender (being male) only has a small impact in mathematics results, at 10% significance level; though in other Vestibular Simulado tests the relationships are not statistically significant. Student *age* is found to be negatively correlated with Vestibular Simulado score in foreign language English ( $p < 0.10$ ), meaning that younger students are likely to perform better in

this subject. Related to the students in Upper Secondary Education (Years 1-2), it was expected that students who are in higher degree would result in better average cumulative scores in Vestibular Simulado exams; however, the evidence is inconsistent with this assumption. Year 2 students were found positively associated with Vestibular Simulado history ( $p<0.05$ ), and Vestibular Simulado literature ( $p<0.05$ ), but in the other Vestibular Simulado the relationships are not statistically significant compared with the Base Group (Year 1) students.

The performance of *Nikkei* students in two out of five Vestibular test results show that the difference in the mean is significant in geography ( $p<0.01$ ) (positive correlatively) and history ( $p<0.01$ ) (negatively correlated). Here a conclusion can be drawn that the Non-Japanese descendant students (being Caucasian descendants) are reaching a higher level of academic achievement, especially in Vestibular scores geography ( $p<0.10$ ) and history ( $p<0.10$ ). Answers can be found in the individual characteristics of the *Nikkei* student group as a condition of returnee in Brazil, which hamper the realization of their full potential and make them less competitive in their academic careers. At this point, it is made clear what the consequences are of these differences between the two population groups. Through these results in Brazil, Hypothesis 3.1. can be clearly proven.

*Table 5.11. Results on Vestibular Simulado Scores in Brazil*

VARIABLES	(1) vsmath	(2) vsgeo	(3) vshist	(4) vslite	(5) vsflanen
<b>Student Characteristics</b>					
Gender	-2.108* (1.236)	-0.816 (1.087)	-1.388 (1.034)	-0.078 (1.001)	0.512 (1.117)
Age	-0.701 (1.094)	0.157 (0.968)	-0.365 (0.916)	-1.468 (0.907)	1.929* (0.994)
<i>Nikkei</i>	-3.392 (2.203)	-6.229*** (1.943)	-5.938*** (1.844)	-2.401 (1.812)	-1.001 (1.995)
Race (Base Group: Others)					
Caucasian	-2.931 (2.385)	-3.689* (2.104)	-3.885* (1.996)	-0.853 (1.922)	-0.857 (2.160)
Mestizo	-2.256	-3.421	-1.771	-0.845	1.433

VARIABLES	(1) vsmath	(2) vsgeo	(3) vshist	(4) vslite	(5) vsflanen
Descendants	(2.707)	(2.388)	(2.265)	(2.161)	(2.452)
Grade (Base Group: Year 1)					
Year 2	2.186 (1.765)	0.618 (1.556)	2.935** (1.477)	3.704*** (1.404)	-1.336 (1.598)
Year 3	2.180 (2.618)	2.093 (2.310)	-0.119 (2.191)	-0.053 (2.196)	2.131 (2.372)
<b>Family Characteristics</b>					
PI (Parental Involvement)	-0.939 (0.993)	-1.542* (0.879)	-0.531 (0.831)	-0.751 (0.800)	-1.006 (0.903)
PD (Parent's Demography)	0.946 (0.845)	1.726** (0.746)	1.601** (0.707)	1.307* (0.701)	1.804** (0.767)
ER (Economic Resources)	-0.774 (0.699)	-0.748 (0.616)	-0.637 (0.585)	-0.025 (0.557)	-0.151 (0.633)
SR (Social Resources)	-0.033 (0.794)	-0.021 (0.696)	-0.008 (0.665)	-0.186 (0.668)	0.626 (0.715)
CR (Cultural Resources)	0.656 (0.989)	0.782 (0.873)	0.607 (0.828)	1.018 (0.793)	0.552 (0.896)
<b>School Factors (Teacher)</b>					
tyexp	-7.065*** (1.574)	-4.445*** (1.650)	-5.587*** (1.318)	-6.590*** (1.664)	-6.525*** (1.744)
tschwork	1.020 (2.225)	-0.868 (2.022)	1.666 (1.862)	0.404 (1.836)	0.804 (2.087)
thourteach	-2.915 (2.297)	-4.069* (2.324)	-2.336 (1.923)	-4.558** (2.208)	-4.046* (2.428)
tincome	-4.482*** (1.145)	0.384 (1.844)	-3.337*** (0.958)	-1.907 (1.845)	-1.838 (1.965)
<b>Community Factors</b>					
Liboutsc	-2.483 (1.568)	-1.627 (1.383)	-2.542* (1.312)	-2.876** (1.261)	-2.849** (1.420)
Lauseatn	8.990** (4.409)	7.883** (3.887)	13.830*** (3.690)	10.272*** (3.953)	12.028*** (3.992)
Inlaousc	1.533 (1.924)	-1.321 (1.696)	-0.516 (1.610)	-0.625 (1.573)	0.063 (1.742)
<b>Network (Base group: no network)</b>					
Family/Siblings	0.970	3.340**	3.375**	1.848	2.875

VARIABLES	(1) vsmath	(2) vsgeo	(3) vshist	(4) vslite	(5) vsflanen
	(1.931)	(1.703)	(1.616)	(1.587)	(1.749)
Friends	2.048	2.678	2.390	1.046	3.671
	(2.851)	(2.516)	(2.386)	(2.277)	(2.584)
Constant	117.059***	61.322**	87.329***	108.052***	49.257*
	(21.208)	(24.103)	(17.750)	(24.632)	(25.511)
<b>Random Effect</b>					
Constant Variance	2.5e-17	1.1e-14	1.3e-19	12.55	3.8e-21
	(5.7e-16)	(2.7e-13)	(3.0e-18)	(15.43)	(8.7e-20)
Residual Variance	69.57***	56.79***	49.59***	43.36***	59.83***
	(6.67)	(5.44)	(4.76)	(4.38)	(5.73)
AIC	1574.41	1537.26	1500.96	1381.60	1548.61
Prob > chi2	0.000	0.000	0.000	0.000	0.000
Observations	217	218	217	202	218
Number of groups	3	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

**Vestibular Simulado scores:** VSmath: mathematics, VSgeog: geography, VShist: history, VSflanen: foreign language English. **School Factors:** tyexp: teacher years of experience, tcondwork/tschwork: the number of schools where the teacher work, thourteach: teacher hours of teaching, tincome: the income level of teachers. **Community Factors:** liboutsc: library students use outside the school, lausatn: language children use in their neighborhood, inlaousc: student interest in studying languages outside schools -i.e., in community-multicultural centers, family/siblings and friends: network.

Regarding the constructs for answering Hypothesis 3.2., Parent's Demography is found to be positively correlated with almost all subjects except mathematics Vestibular Simulado results, having influence in Vestibular Simulado scores geography, history, literature at 5% of significant level, and in Vestibular Simulado scores foreign language English, at 10% of significant level. Parental Involvement shows a negative correlation on results of geography, at 1% of significant level. Economic Resources, Cultural Resources, and Social Resources show no relationships on Vestibular Simulado results. When we observed the Economic Resources in terms of possessions, the results indicate that number of books at home has a positive impact on test scores of geography ( $p<0.05$ )

and foreign language English ( $p < 0.05$ ). Personal computer with connection to Internet has a positive impact on geography ( $p < 0.05$ ), history ( $p < 0.01$ ), and literature ( $p < 0.10$ ) test scores. Personal computer without Internet connection has a positive impact on mathematics ( $p < 0.05$ ) and history ( $p < 0.10$ ) scores. (Table E-c in Appendix E) Through these results in Brazil, Hypothesis 3.2. can be partially proven.

#### **5.4. Parents, School Principals, Teachers, and Students on Student's Educational Aspirations**

The perception of the parents, school practitioners (i.e., school principals, school coordinators, and teachers), and students on student's educational/occupational aspirations are considered under Hypothesis 4.1. and 4.2. The parents who are supportive to children's educational aspirations through involving themselves in the education of their child at home, being involved at school and having a positive relationship with school management and school environment, favour their children having better results in school. According to various authors (Hess, Holloway, Dickson, and Price, 1984; Finn and Voelkl, 1993; Peng and Wright, 1994), children's educational aspirations of parents are key determinants of student's achievement. School's principals and school coordinators are supportive of the student's educational aspirations through the promotion of school vision and mission, favouring the preparation of the entrance examinations through practice. Teachers are supportive of the student's educational aspirations through conducive pedagogy and by practicing the simulation of entrance examinations. In answering Hypothesis 4.1. and 4.2., the perceptions of the students with respect to the teachings given by their teachers are shown. It is observed that this perception produces more positive results in the students' exams as tools for the future. The researcher refers to teaching with a useful/functional approach that, in turn, tends to make students aspire to a better future, especially to enter the university in Brazil. Finally, student's perception of their own future is analysed.

Clearly, some aspects lend themselves to survey data –the future aspirations of education or work amid adolescents. Therefore, the decision was made to use a survey data set to explore adolescent’s future aspirations and to concurrently conduct in-depth interviews with school principals, teachers and students in both settings. The reason was to understand how they view adolescents’ future educational aspirations and how these relate to the adolescent’s future’s decision making. In the course of the interviews, it was found that the opinions of adults with regard to adolescent’s future aspirations appear to differ substantially from other family members, school administrators and adolescents themselves. The study explains the hypotheses through qualitative data analysis, considering each of the “20 individual interviews” as units of analysis. According to the analysis, from 21 units of analysis observed, 77 codes were identified, and 29 were considered for the coding segments. Four (4) coded segments were defined, namely coded segment “Family”, coded segment “School”, coded segment “Community”, and coded segment “Perceptions on Students Future”, shown in Table 5.12.

*Table 5.12. Qualitative Data Analysis from Interviews in Japan and Brazil*

<b>Unit of Analysis:</b> each of the 20 interviews (transcripts)	Frequency	Percentage
<b>Codes:</b> 77		
<b>Coded Segment “Family”</b>		
<b>Variable 1: <i>Families who expect to stay in Japan</i></b>	N=7	100%
Reasons of Japan-Brazil families to stay in Japan	2	22%
Brazilian family who intends to stay in Japan	3	33%
Family as incentive for children who expect to stay in Japan	2	22%
<b>Variable 2: <i>Families who expect to return to Brazil</i></b>	N=9	100%
Reasons of Japan-Brazil families of returning to Brazil	3	33%
Brazilian family who intend to return to Brazil	2	22%
Family as incentive for children who return to Brazil	2	22%
Brazilian children who return from Japan/Intend to return	2	22%
<b>Variable 3: <i>Families who returned to Brazil from Japan</i></b>	N=23	100%
Brazilian children who return from Japan to Brazil	5	24%
Reasons of Japan-Brazil families returning from Japan	3	14%
Parents characteristics of students who return from Japan	6	29%
Brazilian children who return to Brazil from Japan	4	19%
Level of Portuguese of Brazilian-Japanese descendants’ children when return from Japan	3	14%



<b>Unit of Analysis:</b> each of the 20 interviews (transcripts)	Frequency	Percentage
<b>Codes: 77</b>		
<b>Coded Segment “School”</b>		
<b><i>Variable 1: Multi-grade classrooms in both settings</i></b>	N=12	100%
<i>Category 1: Favourable to multi-grade classrooms</i>	6	50%
<i>Category 2: Contrary to multi-grade classrooms</i>	4	33%
<i>Category 3: Neutral to multi-grade classrooms</i>	2	17%
<b><i>Variable 2: Curriculum</i></b>	N=25	100%
Written curriculum (Textbooks)	8	26%
Taught curriculum (Teacher classroom plans)	10	32%
Learned curriculum (Vestibular Simulado/Practice of the Vestibular)	7	23%
Assessed curriculum (Vestibular Simulado)	6	19%
<b><i>Variable 3: Assessments/Evaluations</i></b>	N=25	100%
VS model of classes (homework)	7	28%
Trimester evaluations	4	16%
Vestibular Simulado exam	10	40%
Vestibular Simulado score	4	16%
<b>Coded Segment “Community”</b>		
<b><i>Variable 1: Relationship School-community</i></b>	N=8	100%
Teacher’s apprenticeship to children who return from Japan	6	75%
Relationship students-peers-students (Japanese-Brazilian in Brazil)	2	25%
<b><i>Variable 2: Relationship Parents-Schools</i></b>	N=3	100%
Schools Council – <i>Parental Involvement (PI)</i>	2	67%
Parental Meetings – <i>Parental Involvement (PI)</i>	1	33%
<b>Coded Segment: “Perceptions on Students Future”</b>	N=14	100%
Brazilian children who intended to remain in Japan	2	14%
Brazilian children who intend to work 2-3 years saving money before returning to Brazil to pass the Vestibular (entrance examination of university)	3	22%
Brazilian children who intend to return to enter the university	2	14%
Students plan to go to the university (from the perception of teachers)	3	22%
Parental choice because of the availability of the Vestibular Simulado exams in PNS as preparation of student’s future	2	14%
Students perception on future	2	14%

Source: Created by the Author based on 20 transcripts of interviews to Brazilian MEC/INEP Government officials, PNS teachers and school principals/school coordinators in Japan and Brazil.

#### **5.4.1. Voices of Parents/Family, School Personnel and Students on Student's Future Aspirations**

##### ***Family***

The coded segment “Family” is compound by three variables: (1) Families who expect to stay in Japan, (2) Families who expect to return from Japan to Brazil, and (3) Families who have returned to Brazil from Japan. The categories for each variable show frequencies that the interviewees refer to regarding the variable. Thus, “reasons of Japanese-Brazilian families returning from Japan”, “Brazilian family who intend to return to Brazil”, “family as an incentive for children who return from Japan”, and “Brazilian children who intended to return to Brazil” appears as the most frequently mentioned categories in Japan. (See Table F-a in Appendix F)

##### ***Parents Perceptions on Student's Future***

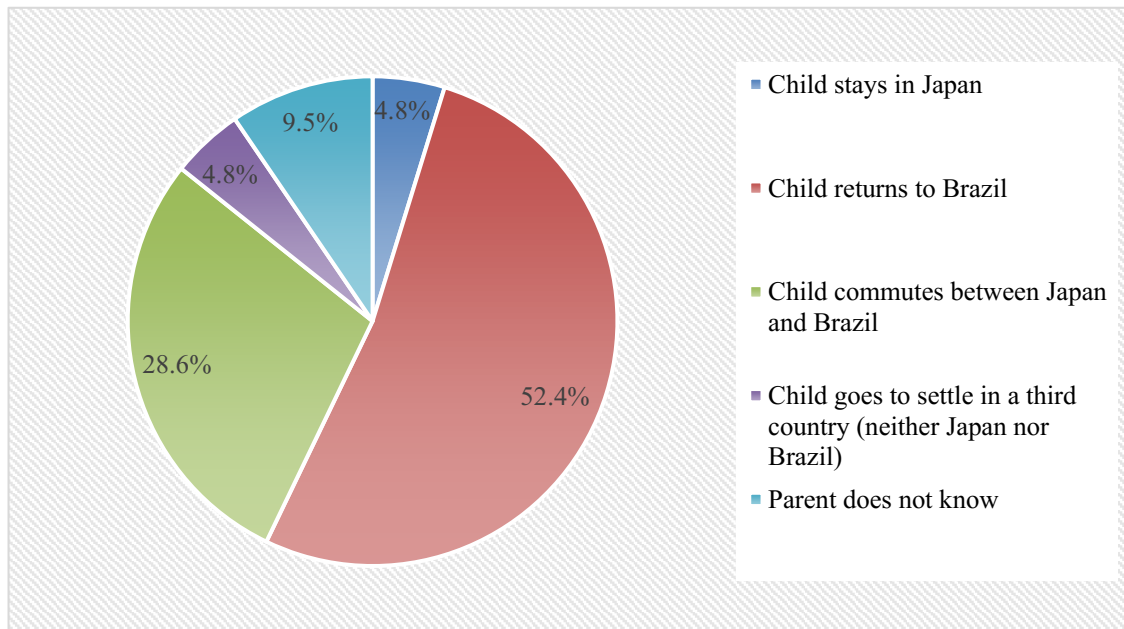
Figure 5.9. displays the parent's perceptions on the child's future in three cases: (1) if the child returns to Brazil, (2) if the child remains in Japan, and (3) if the child commutes between both countries. There is a fourth choice related to the case if the child moves to settle in a third country (neither Japan nor Brazil).<sup>76</sup> The results show that most of the parents perceive that their child's future is in Brazil (52.4%). As the second choice appears the commutation option between Japan and Brazil (28.6%). A third choice refers to parent's uncertainty of what is going to happen (9.5%), while in a coincidental fourth

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<sup>76</sup> The typology of Haino (2010) is: (1) Return to Brazil, admission to a higher education institution and make a career. (2) Build a career in Japan by choosing a job that does not require a higher education certificate. (3) For some time, work in a factory in Japan. (4) If the stay in Brazil is not as expected, return to Japan. (p. 215). In this study, Haino's typology is the main thesis. The typologies 2 and 3 are combined as “Stay in Japan”. The typology 3 is coincidental with the literature reviewed and is based on the evidence of the survey to the parents. Haino's typology 4 is not considered in this study, adding instead the case of “Settlement in a third country (neither Japan nor Brazil)” as typology 4.

place the possibilities of remaining in Japan (4.8%) or settling in a third country rather than Brazil or Japan (4.8%,) appear as options.

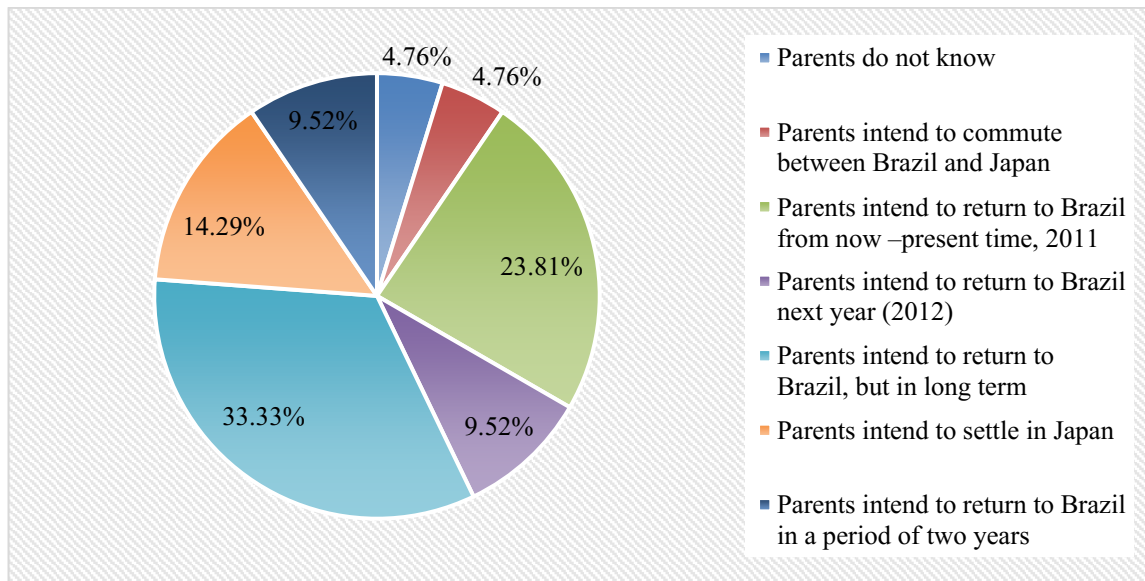
*Figure 5.9. Parents Perceptions on Child's Future if Child stay in Japan, return to Brazil or commute between Both Countries*



Source: Created by the Author based on Japan survey (2011).

When asking the parents about the intention to return to Brazil, a number of answers appear related specifically to the time intended to stay or remain in Japan. Mostly, it comes into sight that parents intend to return to Brazil in a certain period which runs from the present time of the study (2011) to an unspecified time. Figure 5.10. shows that the majority of the parent's intent to return, but on the long-term (33.33%). The second most frequent answer shows that parents intend to return to Brazil from the present time of the study – 2011 – (23.81%), in the following year – 2012 – (9.52%), or in a period of two years (9.52%). A third choice shows a very low interest of parents in settling in Japan (14.29%). Only 4.76% of the responses are related to the possibility of parents to intent to commute between Japan and Brazil, coincidental with the uncertainty of what is going to happen (4.76%). Overall, parents intend to return to Brazil, despite the time it takes to make it happen.

Figure 5.10. Parents Intention to Return to Brazil



Source: Created by the Author based on Japan survey and interviews (2011).

Table 5.13. displays the descriptive statistics of parents perceptions on children's educational/occupational aspirations, with three categories: (1) reasons of parental PNS choice, (2) parents expectancies on son/daughter's future after completion of Year 3 of Upper Secondary Education, and (3) parents expectancies on son/daughter's future. Hence, for the category "Reasons of parental PNS choice", it is observed that in Japan sample (N=22), 40.91 percent of the parents (N=9) select PNS "Because of the teaching of foreign languages (English and Spanish in Brazil question)/(Portuguese in Japan question)" while, in Brazil sample (N=237), 59.07 percent of the parents (N=140) select PNS "Because of preparing the son/daughter for the university entrance examination." In the case of Japan, 22.73 percent of the parents (N=5) selects as second choice "Because of all the above-mentioned reasons" while, in Brazil, 14.35 percent of the parents (N=34) choose "Because of all the above-mentioned reasons" as the second choice. As the third choice, in Japan, 18.18 percent of the parents (N=4) choose to school their children in PNS "Because of other reasons" while, in Brazil, 5.49 percent of the parents (N=13) states "Because of the PNS pedagogical project." As fourth choice, in Japan, 18.20 percent of parents (N=4) choose PNS "Because of the teaching of foreign languages (English and

Spanish in Brazil question)/(Portuguese in Japan question)”, “Because of the teaching of the Brazilian culture”, “Because of preparing the son/daughter for the university entrance examination” and “Because of the prestige of the network of school” (4.55 percent, N=1, respectively) while, in Brazil, 4.64 percent of the students (N=11) state that they choose PNS to schooling their children “Because of the geographical proximity to the house.” Overall (N=255), 63.62 percent of the parents (N=141) select PNS “Because of preparing the son/daughter for the university entrance examination”, while 37.08 percent of the parents (N= 39) consider the school choice “Because of all the above-mentioned reasons”. In both countries, the percentage of parents who have other reasons when selecting a school for their son/daughter is 21.56 percent (N=12).

*Table 5.13. Descriptive Statistics of Parents Perceptions on Children’s Educational Aspirations*

	<b>Brazil</b>	<b>Japan</b>
<b>Reasons of Parental PNS Choice</b>		
Because of the teaching of foreign languages (English and Spanish in Brazil question)/Portuguese (in Japan question)	1.27% (3)	4.55% (1)
Because of the teaching of the Brazilian culture	1.69% (4)	4.55% (1)
Because of preparing the son/daughter for the university entrance examination	59.07% (140)	4.55% (1)
Because of the price	1.27% (3)	0.00% (0)
Because of the PNS teaching and learning materials	1.69% (4)	0.00% (0)
Because of the geographical proximity to the house	4.64% (11)	0.00% (0)
Because of the security	2.53% (6)	0.00% (0)
Because of the PNS pedagogical project	5.49% (13)	40.91% (9)
Because of the method to evaluate the students	2.53% (6)	0.0% (0)
Because of the prestige of the network of school	2.11% (5)	4.55% (1)
Because of all the above-mentioned reasons	14.35% (34)	22.73% (5)
Because of other reasons	3.38% (8)	18.18% (4)

	<b>Brazil</b>	<b>Japan</b>
Total	237	22
<b>Parents Expectancies on Son/Daughter's Occupational Future after Completion of Year 3 of Upper Secondary Education, without Preference of Country</b>		
The child will continue studying	54.08% (126)	50.00 (11)
The child will continue working	0.86% (2)	9.09 (2)
The child will continue studying and working	40.77% (95)	27.27 (6)
The parent does not know	4.29% (10)	13.64 (3)
Total	233	22
<b>Parents Expectancies on Son/Daughter's Occupational Future after Completion of Year 3 of Upper Secondary Education, in Japan or Brazil</b>		
The child will continue studying in Japan	0.00% (0)	4.55% (1)
The child will continue studying in Brazil	54.08% (126)	45.45% (10)
The child will continue working in Japan	0.00% (0)	4.55% (1)
The child will continue working in Brazil	0.86% (2)	4.55% (1)
The child will continue studying and working in Japan	0.00% (0)	9.09% (2)
The child will continue studying and working in Brazil	40.77% (95)	18.18% (4)
The parent does not know	4.29% (10)	13.64% (3)
Total	233	22
<b>Parents Expectancies on Son/Daughter's Future as Factors of Social Mobility</b>		
Network (Social Resources, i.e., social capital)	3.43% (8)	0.00% (0)
Completion of Higher Education (Social Resources -i.e., social capital)	15.02% (35)	0.00% (0)
Social status (Social Resources -i.e., social capital)	1.72% (4)	0.00% (0)
Dignify salary (Economic Resources)	4.29% (10)	4.55% (1)
Knowledge, skills, values (Cultural Resources, i.e., cultural capital)	10.30% (24)	4.55% (1)
A happy life (as one of the psychological factors of Social Mobility)	9.01% (21)	18.18% (4)

	<b>Brazil</b>	<b>Japan</b>
All the above-mentioned items (SR, ER, CR, a happy life)	55.37% (129)	72.72% (16)
Parent does not know	0.86% (2)	0.00% (0)
Total	233	22

N value is in brackets

Source: Created by the Author based on Japan and Brazil surveys and interviews (2010-2011).

For the category “parents expectancies on son/daughter’s occupational future after completion of Year 3 of Upper Secondary Education, without preference of country”, it is noticed that in Japan sample (N=22), 50.00 percent of the parents (N=11) choose as first choice “The child will continue studying” while, in Brazil sample (N=233), 54.08 percent of the parents (N=126) select “The child will continue studying.” In the case of Japan, 27.27 percent of the parents (N=6) select as the second choice “The child will continue studying and working” while, in Brazil, 40.77 percent of the parents (N=95) choose the same category as the second choice. As the third choice, in Japan, 13.64 percent of the parents (N=3) choose “The parent does not know” while, in Brazil, 4.29 percent of the parents (N=10) choose “The parent does not know.” As the fourth choice, in Japan, 9.09 percent of the parents (N=2) choose “The child will continue working” while, in Brazil, 0.86 percent of the parents (N=2) state that “The child will continue working.” Overall (N=255) in both settings, 104.08 percent of the parents (N=137) select “The child will continue studying” without preference of country, as their valuable expectancies for their children’s educational/occupational future, after completing Year 3 of Upper Secondary Education in the PNS. Unpredictably, parents of both countries expected a similar occupational future for their children, emphasizing study rather than work.

For the category “parents expectancies on son/daughter’s occupational future after completion of Year 3 of Upper Secondary Education, in Japan or Brazil”, it is noticed that in Japan sample (N=22), 45.45 percent of the parents (N=10) choose as first choice “The child will continue studying in Brazil” while, in Brazil sample (N=233), 54.08

percent of the parents (N=126) select “The child will continue studying in Brazil.” In the case of Japan, 18.18 percent of the parents (N=4) select as the second choice “The child will continue studying and working in Brazil” while, in Brazil, 40.77 percent of the parents (N=95) choose the same category as the second choice. As the third choice, in Japan, 13.64 percent of the parents (N=3) choose “The parent does not know” while, in Brazil, 4.29 percent of the parents (N=10) choose “The parent does not know.” As the fourth choice, in Japan, 9.09 percent of the parents (N=2) choose “The child will continue working in Japan” while, in Brazil, 0.86 percent of the parents (N=2) state that “The child will continue working in Brazil.” Overall (N=255) in both settings, 53 percent of the parents (N=136) select “The child will continue studying in Brazil” preferring the country of origin rather than the host country to pursuing superior studies after completing Year 3 of Upper Secondary Education in the PNS.

For the category “parents expectancies on son/daughter’s future as factors of Social Mobility”, it is observed that in Japan sample (N=22), 72.73 percent of the parents (N=16) choose as first choice “All the above-mentioned items (*Social Resources, Economic Resources, Cultural Resources, a happy life*)” while, in Brazil sample (N=233), 55.36 percent of the parents (N=129) select the same item as the first choice. In the case of Japan, 18.18 percent of the parents (N=4) selects as second choice “A happy life (as one of the psychological factors of Social Mobility)” while, in Brazil, 15.02 percent of the parents (N=35) choose “Completion of Higher Education (*Social Resources -i.e., social capital*)” as the second choice of parents expectancies on offspring’s future as factors of Social Mobility. As the third choice, in Japan, 9.10 percent of the parents (N=2) choose “Dignify salary (*Economic Resources*)” and “Knowledge, skills, values (*Cultural Resources, i.e., cultural capital*)” with 4.55 percent (N=1) respectively while, in Brazil, 10.30 percent of the parents (N=24) choose “Knowledge, skills, values (*Cultural Resources, i.e., cultural capital*).” Overall (N=255) in both countries, 128.09 percent of the parents (N=145) select “All the above-mentioned items (SR, ER, CR, a happy life)”,



as their valuable expectancies for their children's future, considering the education, skills and training, credentials, and happiness, as factors of Social Mobility.

### ***School***

For the coded segment "School", three variables were identified: multi-grade classrooms, curriculum and assessments/evaluations. For each of the variables, categories were identified more frequently mentioned by the respondents. Several themes emerged from the analysis of the voices of school personnel on student's future aspirations, summarized as Theme I: school personnel, evaluations, and self-assessments, Theme II: school personnel assumptions about students' future, and Theme III: school management and PNS system mandates.

#### ***Theme I: School Personnel Evaluations and Self-Evaluations***

There is a belief that the PNS needs qualified personnel, eager to improve their own competences. As stated by a school principal in one PNS related to the training of school principals and coordinators receive in Brazil:

*In the State of Paraná, there are specific meetings for the peers (teachers and school coordinators), of the 62 partners in Paraná and there is a human resources department. There is a training that is typical of the PNS, for monthly training of teachers. The semi-annual pedagogical work management is twice per year. There are courses at the level of the cities. At the school level, there is a Latin American Congress every two years. There is a training on management, to which the School Coordinator attends, with a minimum of 120 hours of continuous training. First of all, didactics and methodology are given priority during the year.<sup>77</sup>*

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<sup>77</sup> Original statement in Portuguese.

School Principal  
PNS F, Curitiba, Brazil

School Coordinator in Japan emphasizes the types of training and the frequency for TCPD. Extract:

*PNS is very exigent. It gives teachers education, training. Teachers are trained at the end of the year, at the beginning of the year, in the middle of the year. But we have several regional training throughout the year in several regions of the country (Brazil). Conferences, forums. With the profile of the school principal and also my profile, teachers are professionals with more than 20 years of PNS experience who are regional directors.*

School Coordinator (serving as OIC of the School Principal)  
PNS B, Kariya, Japan

As management board, school principals have high self-evaluation and motivation to increase their skills. The evaluation includes a self-evaluation and peer-evaluation. Teachers are evaluated by school principals. Students are evaluated by teachers. Both teachers and students are evaluated during the entire school year and perceive the constructive criticism as positive. The school principals stated that teachers might be courageous to be evaluated, avoiding the peers-relationships as a way to be well evaluated.

### ***Theme II: School Personnel Assumptions about Students' Future***

Throughout our interviews and classroom observations, the school personnel showed shared perceptions about the aspirations of students after completing high school. Embedded in interviews, observations of classes, and meetings there was explicit and implicit assumptions regarding the reasons of school performance and responsiveness of children to the environment and their future aspirations. The findings are discussed in the

context of the system change principle: engaging personnel's moral purpose. This section is organized into three main aspects: (1) students' academic performance, (2) students families/cultures, and (3) the assumptions of the students' ability and their future aspirations.

### ***Perceptions about Students Ability and their Future Aspirations***

From the perspective of the teachers, student's aspirations are related to their own personal experiences, as follows:

*(...) For example, my Mother sent JPY200,000 at the time to stitch our life for me and for the brothers, to do the university. So, I came back here with a different posture. I do not work in the factory. I am a descendant, dekasegi, but I came here to seek the labor market of my profession. Then, it is from there that happens to students, with teachers. Here, a 17 years old student working in a factory gets JPY200,000 (R\$4,000). To get R\$4,000 in Brazil, you need to have a good profession, have a master's degree, or pursue a doctorate.*

Chemistry and Biology Teacher

PNS A, Hamamatsu, Japan

Table 5.14. shows the descriptive statistics of school principals/coordinators and teachers about perceptions on student's educational aspirations, obtained from the surveys. According to the data, in Japan, the categories "few students" (52.11%) and "few more than the half of the students" (42.96%) are the ones chosen by school practitioners. In Brazil, the categories "almost all the students" (63.28%) and "a few less than the half of the students" (35.24%) are the main choices of school principal/coordinator/teacher regarding student's educational aspirations.

*Table 5.14. Descriptive Statistics of School Principals/Coordinators and Teacher's Perceptions on Student's Educational Aspirations*

	<b>Brazil</b>	<b>Japan</b>
<b>School Principals/Coordinators and Teachers Aspirations for Student's Educational Aspirations</b>		
<i>Number of Students that School Principal/Coordinator/Teacher perceives are going to enter the University</i>		
Almost all the students	63.28 (343)	0.00 (0)
A few more than the half of the students	1.29 (7)	42.96 (61)
A few less than the half of the students	35.24 (191)	4.93 (7)
Few students	0.0 (0)	52.11 (74)
School Principal/Coordinator/Teacher does not know	0.18 (1)	0.00 (0)
Total	542	142

N value is in brackets

Source: Created by the Author based on Japan and Brazil surveys (2010-2011).

However, when analyzing the data obtained in the interviews, school principals, school coordinators and teachers refer as “students are already thinking about their future” (2 respondents), or “students plan to enter university” (2 respondents). (See Table F-a in Appendix F) Some teachers perceive difficulties for the Brazilian students in entering the university when completing the secondary education school. Excerpts:

*I find that it will be very difficult for the students to enter the universities if they return to Brazil. Also, money is a problem. Many of them remain in Japan after completing the Year 3 of secondary education and entering a factory. They can obtain JPY200,000 per month, money they save for the time to return to Brazil, to continue the studies there.*

Teacher of Physics

PNS A, Hamamatsu, Japan

### ***Theme III: School Management and PNS System Mandates***

### Quality of Education – School Principals and Teachers

School principals complete specific training requirements in Brazil. School principals request that teachers have to receive training on some specific subjects, possess the required content knowledge, and must be able to utilize schools' material and resources effectively. Excerpts from a teacher recruited by the PNS in Brazil to serve as teacher in PNS Japan:

*I worked as an English teacher in English culture for two years before coming to Japan and also teaching other foreign language courses. Then, it showed up the opportunity to make a selection to come here to Japan. I am not a Japanese descendant. Then, I did the selection tests. Process took six months of selection. After that, I gave some demonstrative classes and get in the recruitment process and passed. I got here in December 2007. Now in December (Note of Researcher: 2009) I am going back to Brazil.*

Literature Teacher (Portuguese, English and German)

PNS A, Hamamatsu, Japan

Data shows that teachers have high level of qualifications, with several of them holding master's degrees, especially in Brazil PNS. (See Subsection 2.5.2)

### Quality of Education: Curriculum and Minimum Level of Content Knowledge

According to the teachers of the PNS, the pedagogical model is constructivist. The PNS model also follows Theory of Multiple Intelligences of Howard Gardner (Gardner, 1983). Many of the interviewed teachers feel comfortable with the theories and methodologies applied at classroom level, and those stated in the learning materials (textbooks and CDROM) that students use. As mentioned by one of the school coordinators interviewed:

*The proposal of the school follows the socio-constructivist / socio-interactionist pedagogy. We need children to participate a lot. And for the child to participate,*

*the teacher needs to be diversifying their pedagogical practices. So, the teacher does not have problems of not being flexible. The teacher must be flexible, and the more he/she brings activities that motivate students, the better, because this flexibility comes to help the teacher himself/herself and the students as well.*

School Coordinator and Portuguese Language Teacher

PNS C, Ōta, Japan

### Alternative Courses of Studies

Classes where bilingual Japanese-Portuguese students are taught in Portuguese and other subjects through generally recognized methodologies permitted under limited circumstances in Brazilian schools to improve the performance through alternative courses of study. Excerpts:

*The students who return from Japan talk well but write bad. They doubt when they talk. In front of a sentence they read, but they do not interpret.*

Teacher of Lower Secondary School

PNS D, Marilia, Brazil

Regarding the families who have returned from Japan, PNS in Brazil welcome children, taking them care methodologically and psychologically, making a diagnosis on which level the student is in accordance to his/her year of age and apprenticeship with reinforcing the student's abilities with classes and coaching.

*The school team first makes a diagnosis to see what the child knows. Then, the child stays in the classroom with his/her age group, and then it is worked out with the child to try to reach the contents. Parallel to reinforcement classes, we work on parenting support, and support emotionally. We have our psychologist that guide students emotionally.*

Teacher of Lower Secondary School

PNS F, Londrina, Brazil

Assessed Curriculum

The importance for parents to enroll their children in a PNS school in Japan is reflected in the excerpts below:

*Brazil is interesting. When a father puts a boy of two years of age in the maternal school he will ask: “What is the index of the approval of the university entrance examination?” If his little boy has two years of age and he knows that this school is going to prepare the child to enter the university, it is because, in Brazil, the best universities are the federal ones. And they are universities of a very great competition to enter. Some private but expensive schools usually do not reach the level of federal universities. So, parents prefer a school which is preparing the child to enter a federal university.*

School Principal

PNS A, B & C, Hamamatsu, Kariya and Ōta, Japan

Excerpts from the voices of teachers and school principals, as follows:

*Years 1 and 2 have a difference with the Year 3. Years 1 and 2 have two bimonthly exams who value 40 points each, from zero to one hundred. These tests are made 50 percent of open questions and 50 percent of closed questions. Objective and subjective. 20 percent of the grade, which is the remaining 20 points, are activities. Homework, research papers, seminars, bibliographic research, blogs, video production, theater. And those two tests are also flexible. For example, I will give the work that will involve reading a literature book “The payer of promises” so I can take a test. The teacher has this freedom, to*

*substitute a test for an activity that goes to theater for example, or attends a seminar, this happens always.*

Portuguese Language Teacher

PNS D, Marilia, Brazil

*Evaluation system in this school? We go with the simulated (the Vestibular), with the ENEM, and the normal test.*

School Coordinator

PNS E, Londrina, Brazil

There has been some training in each field on the use of the Curriculum Framework. However, it is important that the Curriculum Framework is owned by all education staff, and that the different roles of responsibility (field subject and school) are understood. Ownership can be developed through involving the school practitioners and giving them responsibilities to include parents in the process. One possibility is given the participation, among the teachers and the students (both at teacher-ship and at student-ship), of the contents to be included in the curriculum. Or in the case of teachers through communicating with other schools' teachers (school-to-school practices). The approach for improving ownership at school level and community level is the community-based approach, where the accountability is to parents in terms of achievement and participation. For students, individual ownership or learning commitment are far more important. Although teachers direct the classroom lessons, it is the students themselves who needs to work hard without instruction from teachers. Other approaches could be promoting coaching, parents-teacher's partnerships, school-culture where the elder students help the younger students, and training teachers in techniques of ownership.

### ***Community***

The coded segment "Community" evolves three variables: (1) Relationship school-community, (2) Relationship parents-schools and community, and (3) Relationship



students-community. According to the patterns observed in the interviews, Relationship school-community is related to teacher's apprenticeship to children who return from Japan and to the relationship between students-peers, especially for the Japanese-Brazilian descendants' students in Brazil. Regarding the 'Relationship parents-schools', we observe two patterns of responses, related to Schools Council and Parental Meetings, who in turn are connected to parental involvement. For 'Relationship students-community', it seems that the interviewees do not show strong relations between the students' future aspirations and achievement.

The teachers emphasize the added value of relating the school with the community, particularly in the PNS in Japan, as indicated by a school coordinator:

*In our pedagogical project, the teachers are based on working students socially. Before learning physics, mathematics, geography, history we care and value each student to learn how to live, as considering 'the other.' From there, respecting the "multiple intelligences", respecting the individual condition of each one, people are going to hold here (NoR: at the PNS) what will have meaning in their lives.*

School Coordinator

PNS B, Kariya, Japan

### ***Relationship Parents-Schools (Parental Involvement)***

An excerpt from a Portuguese Language Teacher in Japan, shows the relationship between parents and schools:

*We have three parents meetings every year. The parents after the meetings cope the teacher, so I should be myself available to them in every meeting and if they have something to say they say it, but if not... To make them have a kind of safety feeling, like their kids are learning to make them think they are paying closer relationship. In the beginning it was like teaching. I get along very well.*

Portuguese Language Teacher

PNS A, Hamamatsu, Japan

On the characteristics of the parents who are sending their children to PNS school, school principals described the parent's social capital as middle-class parents, with whom the teachers can interact and receive support, through trust and engagement. Excerpts:

*Parents are middle class parents who value the study for their children a lot and who are with us in decisions and trust in our work. (...) We exchange with parents through meetings, meeting with teachers or individual attendance, and when needed.*

School Principal

PNS D, Marilia, Brazil

About the characteristics of the students who attend PNS, the school principals describe them as middle-class students.

*Students are, as we speak here, with “foot on the floor”, more realistic students who are not consumerists. Students who are middle-class, middle-class families; welcoming students has no problem of prejudices. We have Asian descendant students, Mestizo descendant students, African descendant students, Caucasian descendant students, do not have this problem of prejudice; little bullying.*

School Principal

PNS D, Marilia, Brazil

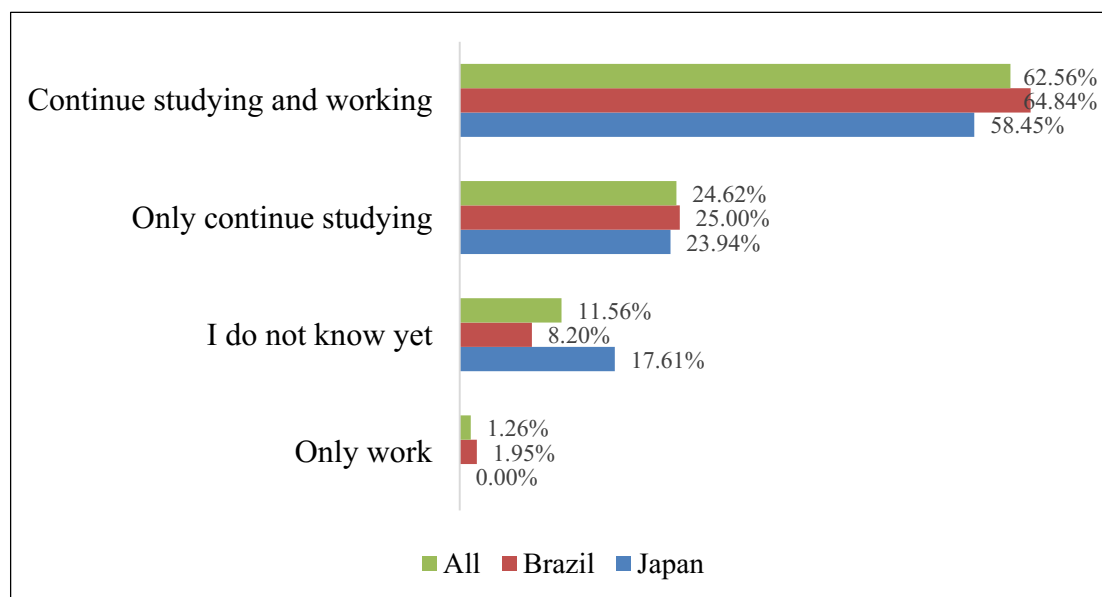
### ***Students***

For the Coded Segment “Perceptions on Student's Future”, compounded by three variables: (1) Remain in Japan, (2) Work 2-3 years saving money before returning to Brazil to pass the Vestibular, and (3) Pass a university entrance examination in Brazil, interesting patterns are observed. The results indicated that the position of the speaker

(teachers voices) is well defined and well documented/evidence based in the case of Variable 3: Pass a university entrance examination in Brazil. The position of the speaker is mentioned (but not well defined and taking a position) in the case of Variable 1: Remain in Japan. Mostly, it appears associated to the position of the speaker as neutral in the case of Variable 2: Work 2-3 years saving money before returning to Brazil to pass the Vestibular. Two other patterns appear related to the Variable 3, which are “Parental choice of PNS because of Vestibular Simulado”, and the positive perception teachers and administrators have related to the “students positive perception on future.”

Figure 5.11. represents the student’s future expectancies in Japan and Brazil for the options: (1) continue studying and working, (2) only working, (3) only continue studying, and (4) do not decided (at time 2011).

*Figure 5.11. Student’s Future Expectancies in Japan and Brazil*



Source: Created by the Author based on Japan and Brazil survey and interviews (2011).

Thus, it is observed that in Japan sample (N=142), 58.45 percent of the students (N=83) are going to “continue studying or working” while, in Brazil sample (N=256), 64.84 percent of the students (N=166) expect to “continue studying or working”. In the case of Japan, 23.94 percent of the students (N=34) choose as second choice “only continue studying” while, in Brazil 25.00 percent of the students (N=64) will “only

continue studying”. As third choice, in Japan, 17.61 percent of the students (N=25) do not decided what to do in the future while, in Brazil, 8.20 percent of the students (N=21) states that response. As fourth choice, in Japan, none of the students (0.00%, N=0) have as future expectancies “only work” while, in Brazil, only 1.95 percent of the students (N=5) state that they will “only work”. Overall (N=398), 62.56 percent of the students (N=249) will “continue studying and working”, while 24.62 percent of the students (N=98) will “only continue studying”. In both countries, the percentage of the students who do not yet know which decision will make is 11.56 percent (N=46), and the percentage of the students who will “only work” is 1.26 percent (N=5). See Figure 5.6. in the Subsection 5.1.2. in this Chapter, to refer to the cross-data analysis of the parent’s conversations with child’s future and their relationship with test scores.

## CHAPTER 6

### DISCUSSION AND CONCLUSION

#### 6.1. Discussion on Results

##### 6.1.1. Student Characteristics on Achievement

In Hypothesis 1.1., we assume that in Brazilian PNS in Japan and Brazil, the effect of student characteristics of gender (being male), race (Asian descendants), ethnicity (*Nikkei*), and grade, influenced positively the results of the student's academic achievement (year-end scores) in both settings. Child characteristics such as gender (being male) and age are important variables for child's school success (Haveman and Wolfe, 1995; Zhao and Glewwe, 2002; Cheng, 2009). Some studies show that girls are doing better in reading and literature while boys perform better in mathematics and sciences. The findings support these statements in PNS in Brazil, where boys are performing better in mathematics. However, for girls year-end scores show that female students do worse on literature, foreign language English, history and geography.

According to Chiswick and Deb-Burman (2003), school attainment improves generation by generation. In our findings, age is negatively associated with the year-end scores. In Brazil, year-end scores show that, with age, test scores for mathematics decline. The variable student age shows that students who are not on their correct age level will have fewer possibilities to enter the university, as measured through the Vestibular Simulado test results. Nevertheless, through the analysis of the *Nikkei* students, the importance age can have in the development and prospect of children was observed.

For ethnicity, in the sample population of students in both countries, the number of students without Japanese ancestry outnumbers the number of Japanese descendants, with *Sansei* (third generation of Japanese descendants), and *Yonsei* (fourth generation of Japanese descendants) being the biggest categories represented, and have better results in

Literature year-end scores in the Brazil sample. The possible reasons of these results can be found in the training that teachers give to *Nikkei* students when they return to Brazil to stimulate the learning and practice of the Portuguese language, and not to let the *Nikkei* students fall behind in relation to their classroom peers, as indicated by the teachers in their interviews. Caucasian descendants and Mestizo descendants students have clearly better results than students from other race groups, including Asian descendants.

### **6.1.2 Effect of Family Factors on Student's Achievement**

In Hypothesis 1.2., we assume that in Brazilian PNS in Japan and Brazil, the effect of family factors of parent's demography (student live with mother, student live with father, mother's education, father's education, see mother reading, see father reading), economic resources (parent's occupations before coming to Japan, possessions such as television, car, radio, books at home, personal computer without connection to the Internet, personal computer with connection to the Internet), social resources (social networks, language acquisition at the community cultural centers), cultural resources (parents talk on books, films and television broadcast programmes), and parental involvement (parents assisting children in doing homework, parents talking with their children on not to be absent at school, on school scores) on the education of their children, influenced positively the results of the student's academic achievement (year-end scores) in both settings.

With regards to family characteristics, it is possible to understand the impact in the context of our research through the above-mentioned construct variables. We need to understand the dynamics in the relationship between children and the physical and conceptual tools in their family environment, including the relationship between students and their learning environment (classroom, community). It also includes the goods or artifacts that society considers worth seeking (e.g., possessions, credentials), and the relationship between students and other people in their environment (e.g., bridging social network). As a social relationship within a system of exchange, cultural resources (cultural capital) functions as including the accumulated cultural knowledge that confers

social status and power. For Bourdieu (1986), the ‘habitus’ is formed in its essence by “domestic” influences, a process of socialization that begins in the family in early ages, and then develops further through the individual’s own experience to “class conditions.” The transmission of cultural capital is an important part of the habitus formation thus, in the case of this dissertation, the child’s apprenticeship of doing homework at home or of preparing exams at home with their parents as variables of the parental involvement construct appear as the ‘habitus’ and increases with age.

Data in the findings of Parent’s Demography reveal that, related to parental education and comparing father’s education in both countries, father’s education is higher on all levels than mother’s education. Descriptive statistics show that parents education is mid-to-high in the Brazil PNS setting. Fathers are clearly higher educated in Brazil on all levels. However, this is interesting given further results of how this indicator influences students achievement. (See Table 5.3.) The revised literature indicates that in Parent’s Demography, the mother’s education is more relevant to the child than the father’s education. Zhao and Glewwe (2006) pointed out that the mothers’ years of schooling have a positive and meaningful impact, being greater for girls than for boys. Nonetheless, our findings are not in line with the authors. For mother’s education, the tendency is observed with even higher discrepancies, showing clearly the differences in socio-demographic categories between parents of PNS students in Japan and Brazil. (See Table 5.4.)

Parental Involvement as a positive influence on student academic achievement is studied in many ways considered by Epstein (1995) as a ‘form’ of social capital. Nonetheless, for Fan and Chen (2001), the term parental involvement is too ambiguous in the way it is defined and in the inconsistencies found across different and numerous studies. (p. 2) In this dissertation, parental involvement is considered a ‘form’ of social capital. A construct Parental Involvement is made out of parent-child communication (‘communicating’ in Epstein’s typology), assistance with homework (‘parenting/learning at home’ in Epstein’s typology), and educational expectations (i.e., if parents talk about

child's future with child, 'learning at home' in Epstein's typology) (Hess, Holloway, Dickson, and Price, 1984; Peng and Wright, 1994; Finn and Voelkl, 1993). One of our findings on Parental Involvement, the activity 'eating with son/daughter' either lunch or dinner, reveals that in Japan there are more parents who always eat with their children and a few more who never eat with their children. In Brazil, almost all the responses are 'sometimes.' As observed in all the categories, Japan has the extremes in the responses. (See Table 5.2.)

Buchman and Dalton (2002, quoted by Soares and Murta Collares, 2007) indicated that the existence of consumer goods (possessions) in the student's home are adequate indirect measures of family income for educational research. Our findings in Economic Resources show that the economic level of the PNS student sample in Japan was lower than that of the Brazilian sample. The data indicates that in the Japan's population the Economic Resources are a crucial factor in understanding their lower performance in comparison with the Brazilian student's sample. Once the economic level is higher, as was the case in our Brazilian sample, other factors such as Social Resources and Cultural Resources become more important in explaining why some students achieve and why others do not. Our database would allow to further test these assumptions through other models and by looking at the variables one by one. (See Tables in Appendix E)

Villas-Boas (1998), indicates that regardless of student's background, student can benefit from doing homework, affirming that although "a family with higher socio-economic status is more likely to benefit from homework than students from low socio-economic backgrounds" (p. 54), studies emphasize that homework is beneficial when it is supervised either by teachers or parents, particularly for migrant children, benefitting with homework their cultural development. Our findings in Brazil show that assisting children in doing homework has a significant effect on mathematics and geography in Vestibular Simulado scores but other positive correlations could not be substantiated within our model for year-end scores. Parent's demography has a positive impact on



mathematics, geography, history, and foreign language English. Cultural Resources have a positive impact on history results. (See Table 5.7.)

It is worth noticing that the models were able to identify clearly how these elements of family characteristics matter and have influence on how a child performs and the chances the child will have later in life to enter the university. For some of the constructs this was estimated directly through the regression analysis. For the construct Parent's Demography, the answer was given by demonstrating how children with a temporary migratory background differ from the rest. The heritage and social economical level of the parents is implied within that difference. In Japan, Parental Involvement, Parent's Demography and Economic Resources were the most important determinants for future results out of our constructs. In Brazil, Parent's Demography came out in our model to have the biggest influence on study results.

### **6.1.3 Effect of School Factors (Teachers) on Student's Achievement**

In Hypothesis 1.2., we assume that in PNS in Japan and Brazil, teachers with more years of teaching experience, with no overload school work, with more hours of teaching, and with better income are more likely to correlate positive to student's academic achievement. In the discussion of educational policy about the family-school relationship and student's achievement there is a tendency to generate dichotomies that end up being perceive as antagonistic alternatives. According to the literature, it is not the school or the family: it is the interactions between the two that generate these gaps, and those interactions can make differences playing in favor or against each group. At home, the education of mothers is a good indicator of the academic results of their children. The evidence in literature also suggests that their professional development will affect both the career decisions that their daughters take, and the partner decisions and the involvement in the home their sons have. However, according to our results, this is not the case. In the school, the quality of the educational institution is related to differences

in performance, and the role of the teacher is key. According to the interviews, PNS needs qualified personnel that is eager to improve their own competences through CPD. School principals have self-evaluations to increase their skills and with peers-evaluations to improve performance and to maintain PNS standards of quality. Teachers are evaluated by school principals to measure competence level and advancement process. Students are evaluated by teachers to rate proficiency and learning skills. Teachers are evaluated by students to rate their teaching skills. Both teachers and students are evaluated during the entire school year and perceive the constructive criticism as positive. (Interviews)

Culture matters in making school a better place and environment for learners to acquire knowledge and relate to the community. In the view of Onai (2005) for creating “cohabitation/coexistence of community life”, it is important to overcome the cohabitation of the school system. At school, this cohabitation/coexistence of life could be exercised in the class activity (i.e., classroom interactions, hidden curriculum), one for ‘multicultural education’ and another for the ‘action for minorities’ (i.e., through curriculum and school environment), making a design of the future social system, dissolving the cohabitation of the system (i.e., inequality in sex, gender, race and ethnicity). (pp. 276-277)

In Brazil, the PNS school factors of teachers influence student’s achievement (year-end scores) with a correlation that is slightly positive, so the researcher is reluctant to draw any strong conclusions. Nevertheless, as seen in the qualitative analysis, the communication between parents and schools is crucial for determining the wide possibilities their children will have in later life education. In the school model of the PNS, in the case of Brazil, such communication is part of the methodology and is strongly encouraged. In Japan, the PNS operate differently and the interaction between the parents and the school principals and teachers is not as frequent. These differences have an impact on the development of the child and their prospects to enter the university. It is elements

like this that make the brand of the PNS weaker, as such regional differences are not part of their ideology.

In Japan, student to teacher ratio in PNS secondary education varies from 6:1 (6 students per 1 teacher) to 16:1 (sixteen students per 1 teacher), due to the classrooms being multi-grade. In Brazil, students to teacher ratio in PNS secondary education is 16:1. Quality of teachers is reflected in their profiles and qualifications, having finished higher education, a college degree or a licentiate degree. Teachers in PNS in Japan have an average of 6.9 years of teaching experience, whereas in Brazil teachers have an average of 8.6 years of teaching experience. School principals have teaching experience of more than 20 years, being a school director for an average of 4 years. (Interviews)

The researcher observed different classrooms in the six schools investigated and found that teachers at PNS D and at PNS E were more likely to encourage *Nikkei* students for participating, especially in language classes (literature and foreign language English). The explanation was that *Nikkei* students who returned from Japan to Brazil had good performance in mathematics but an average performance in foreign language English. This explanation given by the teachers in Brazil contrasted with the results of our study, observing that the *Nikkei* students perform better in literature in PNS in Brazil (See Table 5.7.), and in foreign language English in PNS in Japan. (See Table 5.10.) The correlation was negative for literature and slightly positive for foreign language English, that means that *Nikkei* students do worse in literature in Brazil and perform a bit better in English. These results would make sense, as many students cannot communicate fluently in Japanese in their neighborhoods in Japan and have limited access to communicate in Portuguese. They are students that grew up in Japan and at the time of returning to Brazil do worse in literature because they are not used to read/write exhaustively in Portuguese. Possibly students might do a little bit better in English since English as a foreign language

is more studied in Japan than in Brazil, although differences are small. (See Table 5.7., Table 5.9., and Table 5.10.)

Related to teachers alignment to curriculum, based on the analysis of the forty-three classroom observations, in PNS in Japan, teachers more frequently make their lesson plans with references to the teacher's manuals and textbooks. In PNS in Brazil, teachers more frequently prepare in advance their lesson plans. PNS teachers in both countries, based on the model tests of the real university's VESTIBULAR tests, prepare the simulation of entrance examinations (Vestibular Simulado) in groups, working together with other teachers of the same subject, selecting the questions from different famous universities, and making the practices with the students at the classroom level from Grade 8 to Year 3. PNS teachers are aware of the need to link with different types of curriculum at different moments of the teaching and learning process.

In line with the expectations, half of the teachers interviewed in both settings could explain the alignment of the curriculum in an articulated and logical manner. PNS teachers in Brazil reported high level of understanding of what standards are requested both from Brazilian Ministry of Education and Culture and the PNS, how much of those standards in contents are expected to be taught to the students, and how those contents are expected to be assessed. In Japan, PNS teachers emphasized the collaboration from the preparation of the examinations/tests. PNS teachers reported seeking assistance with other teachers, especially from the same subjects. Working interdisciplinary in cases of returned children from Japan to Brazil was identified as an important issue in PNS D and PNS E, especially for language apprenticeship and support. PNS teachers in both settings have reported success in sharing practices with their peers. In PNS D teachers reported assistance of two teachers in one classroom for mentoring one to other. In the PNS, teachers have the freedom to add the contents the students need to accomplish their goals.

Regarding school factors on student's year-end scores in Japan, evidence shows that the more years of experience the teachers have the less the results are in mathematics, history, and foreign language English. Teacher's conditions of work have a negative impact on foreign language English, referring to the number of schools where a teacher works. These findings are consistent with what we have hypothesized: that teachers working in different schools within the week in different schools situated in different communities as "taxi-teachers", are impeded to provide high-quality teaching practices to their students. Social network, having family/siblings or friends as supporters, has a positive impact on history. (See Table 5.8.)

For school factors on student's year-end scores in Brazil, the evidence show that higher paid teachers get better student results on geography and foreign language English but worse results on literature and history. Students with interest in learning other languages have clearly better results in mathematics, geography and foreign language English. These findings are in accordance of the premises and the literature reviewed. (See Table 5.9.)

In addition to the family, school and teachers are determinants in the lives of children, as they also affect their cognitive and emotional development in school time and, eventually, adulthood. The PNS are instrumental in conducting diagnostic, training and summative evaluations that enable such development, in the case of Japan and Brazil, or in the differential instruction for students in the case of multi-grade classrooms in Japan. The PNS school as a system promotes the continuous professional development of teachers, giving them the tools to have better control of the classroom and promoting a more balanced participation, to ensure that all students benefit from a quality education that improves their talents. Improving the quality of interactions in and out of the classroom is key to combating prejudices and inconsistencies related to the connection of

learning to the student context, including the use of language, and the relational trust-building with parents, schools and communities.

#### **6.1.4 Effect of Community Factors associated to Schools on Student's Achievement**

In Hypothesis 2.2., we assume that in Japan and Brazil, the community factors facilitated by PNS -like the usage of a community library, the language used in the neighborhood, second language acquisition learning in community-multicultural centers, and the family's network; correlate positively to student's academic achievement. As Putnam (1993) suggests, the bonding social capital (family, relatives, friends), and the bridging social capital (social networking, relation with the community) play an essential role in the development of the child in the family and in the family with the community, loops that are repeated and enlarged throughout life.

Glenn, Beaulieu, and Hartless (2009) considered social capital as a framework for examining the influence of family and community in promoting achievement among school students. The role of community social capital in influencing educational performance beyond that attributed to family social capital are key factors affecting high school students' achievement. "Policies designed to promote educational achievement must extend beyond the school and must seek to strengthen social capital in the family and the community." (Glenn, Beaulieu, and Hartless, p. 56) In their study, Henderson and Mapp (2002) stated strong evidence that children at risk of failure or poor performance can profit from the extra support that engaged families and communities provide. Especially students in secondary education, would benefit if schools supported parents in helping children at home and in guiding their educational career. In our findings for the Community Factors, the data reveal that library use outside of school has a negative effect on literature, foreign language English and history, results which were not as expected.

Language students use in their neighborhood has a positive impact on all subjects. (See Table 5.11.)

#### **6.1.5 Effects of the Child Characteristics and Family Factors on the Students' Projections of passing the University Entrance Examination (through Vestibular Simulado Achievement)**

In Hypothesis 3.1., we assume that in the PNS in Japan and Brazil, student characteristics (gender, age, grade, race, and ethnicity) differ in affecting the prospect of PNS students to pass the university entrance examination in Brazil, measured by Vestibular Simulado test scores. We observed that there is a significant difference in achievement between the group with *Nikkei* students and the group without this heritage. Achievement was tested by running a regression in their projection to enter the university entrance examination (educational aspirations) using Vestibular Simulado test scores. In all the subjects tested, Japanese-Brazilian descendants (*Nikkei*) perform lower than the non-Japanese descendants. Literature indicates that the first and second generations perform less, while improvements are seen by each consequent generation (Ogbu, 1974; Willis, 1977; Chiswick and Deb-Burman, 2003). However, the regression indicates the opposite, that each further *Nikkei* generation has less achievement. That these results are due to the condition of being temporary students, is still a condition open to debate. The results lead to the perceptions of parents and students in their future educational aspirations.

Results on Vestibular Simulado test scores in Japan reveal that mathematics scores get worse with age. *Nikkei* students have better results on geography and foreign language English. Parental Involvement influences mathematics, geography and foreign language English test scores. Parent's Demography negatively influences mathematics. Economic Resources negatively influences history. Social Resources and Cultural Resources negatively influences mathematics. Teachers years of experience positively influences History. Teachers conditions of work negatively influence mathematics and History.

Having siblings as a factor for social capital or condition of social mobility negatively influences mathematics and geography. (See Table 5.10.)

Results on Vestibular Simulado test scores in Brazil show that female students do worse on mathematics, results which are in accordance with data from the OECD PISA program which indicates that boys tend to have better performance in mathematics and science than girls, while girls are better at reading and language. According to the Inter-American Development Bank (Arias Ortiz and Bornacelli, 2017), Brazil possessed one of the larger gender gaps in mathematics performance, with boys scoring 15 points higher than girls in 15-year-old students. These gaps in academic results can be explained by differences in preferences, interests, and talents, or in socio-cultural factors such as conditions of temporary students or language acquisition. However, there are at least two problems with this interpretation: (1) the results in reading and language, and to some extent the results in mathematics, predict the future performance in the labor market; (2) the differences between boys and girls are virtually non-existent when they enter school and the gap is widening as they advance in academic degrees. In PNS in Brazil, the evidence points out that boys tend to have better performance in mathematics than girls, and that the gap is widening as they advance in academic degrees (Year 3). (See Table 5.11.) English results get better with age. Caucasian descendant students have worse results in geography and history.

In Hypothesis 3.2., we assume that in PNS in Japan and Brazil, the family factors (Parent's Demography, Economic Resources, Social Resources, Cultural Resources, and Parental Involvement) differ in influencing the prospect of PNS students to pass the university entrance examination in Brazil, measured by Vestibular Simulado test scores. The findings show these differences, stating that Parental Involvement has a negative influence on geography. Parent's Demography has a positive influence on geography, history, literature and foreign language English. For the school factors, teacher's years of experience has a negative influence on all subjects. Teachers hours of teaching has a negative influence on geography, literature and foreign language English Vestibular



Simulado test scores. Teachers income has a negative impact on history and mathematics Vestibular Simulado test scores.

### **6.1.5 School Principals, Teachers, Parents and Students on Students' Educational Aspirations**

In Hypothesis 4.1., we assume that in Japan, families, school principals and/or teachers describe their expectations about children's/student's aspirations regarding the future favoring education rather than other occupational activities, linking these expectations to school achievement. The school personnel displayed shared perceptions about the aspirations of students after completing high school, with explicit and implicit assumptions regarding the reasons of school performance and responsiveness of children to the environment and their future aspirations. The expectations of teachers and their perception of student skills are related to how the students see themselves and how those perceptions can affect academic performance, and their career decisions and, eventually, future income. (See Table 5.14.)

The results reveal that most of the parents perceive that their child's future is in Brazil. As a second thought appears the commutation option between Japan and Brazil. A third choice refers to parent's uncertainty of what is going to happen, while in a coincidental fourth place appears the possibility of remaining in Japan or settling in a third country rather than Brazil or Japan. (See Figure 5.1.)

In Hypothesis 4.2., we assume that in Japan, students describe their expectations in relation to their educational aspirations regarding future, considering their exam results. For students, the option to "continue studying or working" appear as the first option with more than half of student's responses, being similar to the results in Brazil. As the second option for both countries, "only continue studying" appears as valid. As the third choice, the students do not decide what to do in the future in both settings. As the fourth choice,

“only work” appears as future expectancies. (See Figure 5.2.) In comparison with school directors, coordinators and teacher’s perceptions on their own future, students prefer to continue studying or working rather than only studying, as their parents and teachers expect.

### ***Discussion on Results based on the Theory of Social Reproduction in Education and the Theory of Social Mobility***

Schools act as important resocialization agencies, that not always and not necessarily reproduce social mobility. When school practices generate a socialization process that is instituted systematically, students are able to enjoy strategies and resources without distinction of classes. Language is a form of cultural capital combined with knowledge acquired at home and at school. Educators expect students to have high culture of knowledge, learning styles and language skills (Bourdieu and Passeron 1977, Bourdieu 1990). Through the interviews, in PNS in Brazil it was observed more emphatically that teachers play the role of intervening in the process of the acquisition of the language. In PNS in Japan, teachers offer an educational environment playing a role that usually is played by parents of elite students -informing students about the advantages of learning a second language in community-multicultural centers, intervening on their behalf with administrators or teachers advocating for financial aid, actively constructing opportunities to embed their students in productive social networks and opportunities to learn. That is, PNS teachers are constructing opportunities in ways Bourdieu conceives are “typically” reserved for elite families, being the cultural capital (knowledge and skills) and social capital (social networks) offered by the PNS, a motor to increase the possibility of social mobility for the students. However, Brazilian parent’s individual own experiences are limited or conditioned by the “class-status condition” of being temporary workers in

Japan. Even after returning to Brazil this condition persists, with limitations of the use of Portuguese language at school.

If based on Katsillis and Robinson (1990) we take as valid the explanation of a causal ordering of the reproduction process as “(1) family background directly affects cultural capital -the background effect, (2) cultural capital directly affects academic rewards -the cultural capital effect, (3) family background affects academic rewards indirectly through cultural capital -the transformation relationship. The term social reproduction means that social hierarchies (class and/or status positions) are ultimately reproduced, in the sense that children of parents with a social advantage are, in turn, receiving the same advantage.” (p. 273) Empirically, educational reproduction is demonstrated to the extent that the family background affects the student’s academic performance, regardless of the intervening processes. However, if the “intervening processes” are hampered by the lack of parental involvement in the development of children both at home and at school, how do Brazilian parents of children in Japan limit their actions as intermediaries in the “intervening processes” regarding the future situation of children, taking into account that their educational, economic, social and cultural characteristics would be determinants for the development of the child on the basis of a lack of parental involvement?

If, for Coleman (1988), social capital is defined by its action with the elements of structure and actions of actors within the structure favoring/enabling the creation of human capital, again, how can this singularity possible occur if the actions of Brazilian families are limited in terms of status as foreign nationals working as temporary workers (*dekasegi*), or the lack of socialization and networking in Japan, or limited in terms of the condition of ‘returnees’ and the use of broken Portuguese language used by their children in Brazil. The answers can be found in the studies of Japanese scholars such as Onai

(2005) or Hashimoto (2018), in the evidence of the interviews carried out in the framework of this dissertation, and in future studies that allow to shed light on the topic. As stated by Onai (2005), the possible responses for Brazilians in Japan are the complementarity of the “cohabitation/ coexistence of life” plus the “cohabitation/ coexistence of the system”, understood as a “living together system” to the dissolution of the inequalities of sex, gender, race and ethnicity through the design and implementation of policies that integrate foreign nationals as permanent residents. This intention, although theoretically possible, is difficult.<sup>78</sup>

The situation of temporary workers in Japan means that they need to send their children to schools that, if they are of good reputation in Brazil, enable a better future for their children. A certificate (the ‘institutional capital’ in the words of Bourdieu) which shall be valid within their country of origin enables these children, at the end of high school; increases their chances to enter a university in Brazil. The PNS are schools with a pedagogic project that includes multiple theories (i.e., scholar academic, child-centered, social reconstructionism), ideologies/philosophies of teaching and new pedagogies as applied methodology. The learner-centered educators of the PNS attempt to use evaluations for the benefit of the child or the curriculum evaluated. These results are

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<sup>78</sup> The latest regulation of the Government of Japan specifies that, for Brazilians who have roots in Japan has begun to provide the ‘Visa IV’ to the fourth generation of Japanese descendants (*Yonsei*) from March 2008. Although it was expected that 4,000 *Yonsei* arrived in Japan in 2018, the visa has only been granted to 2 *Yonsei* at the time of submission of this dissertation, due to the requirements imposed by its processing. There are few applicants to obtain the ‘Visa IV’ because the Japanese regulations are too strict for *Yonsei*. Although the ‘Visa IV’ allows the fourth generation Brazilian-Japanese to remain in Japan for up to five years and to be able to work freely under the qualification of “specific activities”, the requirements to obtain the ‘Visa IV’ are no less than limiting for the applicants, as follows: (1) acquisition of the Japanese language that needs to be improved each year from the five-year work visa in Japan; (2) to be between 18 and 30 years of age, to be single, and without family, (3) to extend the ‘Visa IV’ status each year during the five years of permanency in Japan, and (4) to be introduced and supported by a sponsor (either family, company, broker agency, etc.) It should be noted that until August 2018 it was not possible for the *Yonsei* to work in Japan because they were under the financial support of the *Sansei* (third generation of Japanese descendants).

consistent with what Schiro (2009) states for the ideologies /philosophies views or perspectives regarding teaching and evaluation, and with the findings in the mission and vision of the PNS and in the classrooms observations in both settings. The social reconstructionist educators of the PNS also attempt to use evaluation of curricula and students in relation to the social situations in which they exist, using subjective evaluation, seeing evaluation “not as a simple comparison of expected outcomes to achieved outcomes, but rather as a comparison of the evaluatee -whether curriculum or student- to both expectations” (Schiro, 2009, p. 172). In the case of curriculum evaluation, teachers were taking into account the social environment in which the curriculum is examined. In the case of student evaluation, teachers were considering “both the student’s performance and the student’s ability to perform” (ibid.). As the words of Schiro (2009) “summative student evaluation and curriculum evaluation are inextricably tied together in the particular social environment in which the student lives.” (Schiro, 2009, p. 172) Children of temporary immigrant parents in Japan are schooled in the PNS receiving an instruction that responds to a methodology of work and this cumulative assessment allows children, upon graduating from high school, to be able to prepare to pass the entrance examination to the selected university in Brazil.

The Theory of Social Reproduction in Education (society and culture) is related in the conceptual framework of this study, i.e. the concepts of social resources (social capital), cultural resources (cultural capital), economic resources (economic capital), habitus (through parental involvement) and field (social status). In this study, the Theory of Social Mobility is related to social roles in individuals (Brazilians) who must constantly adapt to socially unfamiliar situations such as new norms, new values, and new social

class.<sup>79</sup> We assume that social mobility is a process occurring over time, as a result of social interaction of individuals in a context (society) with changing series of social roles. In sum, if the factors of social mobility such as motivation, achievements and failures, education, skills and training, migration, industrialization, urbanization, legislation, politicization (lobbying), modernization, individual characteristics, social mobility in an open society would be fulfilled. In the case of this study it is not possible to disclose that such conditions are given in full, facilitating or hindering individual's chances of Social Mobility. However, after the analysis made, certain aspects can be distinguished which explained the factors of Brazilian workers and their families for Social Mobility, namely: (1) Migration legislation in Japan still has conditions characterized by a closed society, with a strong cultural tradition, impeding a temporary worker from being an immigrant in Japan with permanent work. (2) The advocacy/lobbyism, which allows the theme to be installed in the Japanese society as a priority, indicates that greater efforts must be made in this regard. (3) Incentives, such as training for temporary workers and work experience. (4) Formal education, by obtaining credentials through ENCCEJA exam for parents. (5) Achievements. (6) Motivation for a better life. Generally, an open society that offers quality work conditions motivates people to work hard. (7) Psychological issues, such as the fact of combining better wages, better working conditions, education for their children, which allows a more comfortable life, but not necessarily happier.

In this study, the motivation of parents to educate their children in PNS obtaining credentials (secondary education) of a recognized school, and the future expectation of engage in higher education (university) are results obtained from the qualitative analysis. As a result, analyzed data from interviews indicate that the young student who graduated from PNS school in Japan and stays for a while working in Japan would reproduce the

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<sup>79</sup> In other words, a closed society does not give talented people from the lower strata an opportunity to advance into positions of leadership, or at least not for the group of temporary workers population in Japan.

social status of their parents as factory (blue-collar) workers (horizontal mobility). Likewise, to remain in Japan for two or three years (as indicated by the respondents) would allow that, in the future, these young people will return to Brazil with money saved and so can intent to pass the entrance examination to the selected university (vertical ascendant mobility). These results indicate an intention of Social Mobility in the future. However, the data analyzed per se do not prove that there is Social Mobility, showing the intention that Social Mobility will materialize in the generation of their children (Intergenerational Mobility).

For Social Mobility, factors such as the condition of temporary workers, motivation, education and psychological effects were observed in the Brazilians families in Japan, in relation to their children's future analyzed from the point of view of parents and school practitioners expectations, either occupational children's future (continue studying, continue working, and continue working and studying) or contextual children's future (happiness, cultural capital, social capital). Thus, it is observed that young people who stay in Japan for two-three years after finishing their secondary education studies at PNS, who would work in Japan and then, in turn, frequently return to Brazil to enter a university. Additionally, it is understood that the students who graduate from PNS in the case of Brazil, will not reproduce the educational parent's status upon entering a university in Brazil. In both settings, there is a reproduction of education status (situation) of their parents; but it implies the Theory of Social Mobility in practice. The Theory of Social Mobility is considered in this dissertation for the following reasons: upward mobility, in the case of the PNS students that graduate passing the entrance exam at the university; or it may be a horizontal mobility if the PNS graduates remain in Japan for two-three years to work and raise money. Eventually, it would be a vertical upward mobility as well if these young people, at the end of two-three years, return to Brazil to continue their university studies.

## **6.2. Limitations of the Study**

At the start of this analysis of private chains-schools serving low-income families, few authors had written about it (Tooley, 2000a; Tooley, 2000b; Tooley and Dixon, 2003). In the words of James Tooley (2015), “when I began writing about this phenomenon, it was hard getting anyone to take it seriously” believing that the authors were “plowing in a lonely furrow” (Watkins 2004, p.11, quoted by Tooley 2015, p. 22). At the time of submitting this dissertation (August 2018), many other sources/literature corroborate the existence of these type of schools and explore their impact for development, but more research is still needed to understand the scope of their potential role.

The shortfall of the study is the limited number of observations, in particular in the case of Japan, in assessing the effects of the family and school factors on the students’ academic achievement. Although 156 students in Japan and 542 students in Brazil returned the questionnaires, information on some important variables were missing. Only around 81-88 students in Japan and 242 students in Brazil have fully completed the required information for our analysis. With this small number of observations, our estimators are likely to be less efficient.

The test scores used in our comparative analysis in the two countries are not identical. The sampled schools in Japan and Brazil conducted the both Year-End tests and VS tests of the same subjects, however the contents of the tests are not the same. In addition, the vestibular scores of two countries have different maximum scores, meaning they use different scaling to measure the student performing. Without adjusting the scales, it is impossible to compare the scores of between the two countries.

## **6.3. Conclusion**

The conceptual framework elaborated in this study, based on sociocultural and socio-economic perspectives and illustrated via practice, shows how evidence of learning achievement in PNS is used to address different kinds of questions at different levels of scale and how these questions are fundamentally about what does and does not work to



support student's learning. This study provides important information to understand the schooling of Brazilian children in a destination country with a view to achieving an optimal academic performance when returning to their country of origin.

Concerning Research Question 1, 'Student Characteristics and Family Factors' have a determined influence on exam results. Both can determine part of the variance in student results within the two countries studied. Sometimes cluster variables had an impact only on certain results from specific disciplines. In concordance with the theoretical model, higher scores on the individual variables result in better overall achievement of the student. Several characteristics of the students such as age and ethnicity, and their families such as parents education and family possessions or family network were found to be of influence on the academic achievement of the students. Often, it was not as clear-cut to determine in what way the observed variables had an impact, but what is important is to understand that many of them do influence academic achievement significantly. It is clear that for example, the educational level of the father is an indicator of academic achievement of his children. The level of material wealth in terms of possessions also has an important influence. Whether parents are very involved with their children and are in dialogue with the school can have some effects on student's academic achievement as well.

From the summary statistics, it was observed that the students within the PNS in Japan overall come from lower class families, where the parents (more often than not) have not achieved higher degrees. Their level of material wealth in terms of goods/possessions is lower in comparison with the average PNS student's family in Brazil and frequently the parents do not have strong communication with the school, since they work long hours and the children are sent to boarding schools, creating a physical distance between the parents and the schools. The continuous parent's conversations and interactions regarding the child's future with their son/daughter show positive effect on all the subjects. The results show the effective opportunity for students to understand how parents' interest in their progress in school and in relation to their future is applied in their

own school performance. Here we stressed how the communication from parents to the child ensures coherence between parent's expectancies on child's future with the child's own expectancies about the future, showing child's agency in the process of obtaining good results at secondary school.

The results for this first research question give insight into how the characteristics of the two populations can have explanatory power in predicting the future academic achievement of the students as our first hypothesis indicated. The analysis of these characteristics of children and families reveals the common feature that learning occurs when students have access to appropriate resources, such as books at home, technology, support from parents in the daily activities and study-work.

Regarding Research Question 2, specific 'School Characteristics' from the PNS system were shown to have a clear positive effect on the possibility that students will enter and pass the university entry exams. However, the regression results for the specific school and teacher-related variables of teacher's years of experience and teacher's income end up having statistical significance in the model but are negative, further complicating the certainty that the individual variables had a real impact on the dependent variables (exam results) and are not the result of random variance. The conclusion is then that the data cannot provide statistically sound estimates that specific elements of the teachers within the PNS system have impacted the probability of the students to pass the end of year exams, but taken as a whole, as seen by the associated community factors to schools, are positive and statistically significant.

From the PNS institutional analysis and quality of education, the quality of teaching is seen in teachers' alignment to the curriculum, based on classroom observations. In PNS in Japan, teachers base their lesson plans referring to the teacher's manuals and textbooks, emphasizing collaboration in test preparation and assistance in multi-grade classrooms. In PNS in Brazil, teachers prepare by themselves their lesson plans, reporting high level of understanding of what standards are requested both from the Brazilian Ministry of Education and Culture and the PNS, and how standards are

expected to be taught and evaluated. In cases of children that returned from Japan to Brazil, interdisciplinary work among teachers was identified especially for Portuguese language apprenticeship and support. In both settings, teachers explained the curriculum alignment in an articulated and logical manner, being aware of linking the different types of curriculum at each moment of the teaching-learning process. Based on the real VESTIBULAR exams models, teachers prepare the Vestibular Simulado exams in groups, selecting the questions from different famous universities, and simulating the exams with the students Grades 8-12 at the classroom level as unique characteristic of the PNS.

The analysis of the school and the community factors facilitated by schools reveals several common features of PNS in both settings: PNS and school practitioners act collectively in an explicit method to generate students' socialization process that produces some sorts of strategies and resources deployed without advantages within students. Proof of these strategies and resources deployed are the preparation for the Vestibular Simulado exam, the extracurricular activities propitiated, the delivery of financial aid for the less favored students, the constant stimulus for access to cultural capital with well-prepared teachers, the well-designed and aligned curricula, the provision of sufficient and current laboratory equipment, the access to books and technology, and the promotion of the social capital, reinforcing the social networks.

Vis-à-vis the Research Question 3, teacher and school characteristics differences between the two countries strongly influence the prospect of students with Brazilian Japanese heritage to pass the University entry exams. This was demonstrated by showing how Brazilian-Japanese students have better prospects of entering university the longer they have integrated themselves in a PNS school in Brazil and by providing certainties of the fact that Brazilian-Japanese students have clearly smaller opportunities to enter university at a later age. This is partly the result of socio-economic differences between students in the PNS system in Japan and Brazil and partly because of the quality of school and teachers of the PNS in Japan. Qualitative data from interviews with teachers in both settings indicate that children at the PNS in Japan have scarce or limited daily use of the

vernacular language Portuguese, both written and through oral expressions, especially in the communities they are immersed in and, sometimes, at home and this is considered a strong determinant influencing performance at schools, combined with the lack of socialization, making it very difficult for the child to achieve good results in school, as explained by the teachers in both settings. The practice of inducing children to take extra classes of Portuguese language upon their return to Brazil is observed as a positive factor for activating the cultural capital of the students, since teachers explained children difficulties to write and speak, with the exception of mathematics where they stand out or are at the same level than their classmates.

It is worth noticing that this study combines the quality of education/learning of the PNS as student's achievement when analysing the factors not only of school achievement but also the situation of teachers in relation to educational practices. The quality of teaching practices is observed in teachers' alignment to the curriculum, based on classroom observations. In PNS in Japan, teachers base their lesson plans referring to the teacher's manuals and textbooks, emphasizing collaboration in test preparation and assistance in multi-grade classrooms. In PNS in Brazil, teachers prepare by themselves their lesson plans, reporting high level of understanding of what standards are requested both from the Brazilian Ministry of Education and Culture and the PNS, and how standards are expected to be taught and evaluated. In cases of children that returned from Japan to Brazil, interdisciplinary work among teachers was identified especially for Portuguese language apprenticeship and support. In both settings, teachers explained the curriculum alignment in an articulated and logical manner, being aware of linking the different types of curriculum at each moment of the teaching-learning process. Based on the VS model, teachers prepare the exams in groups, selecting the questions from different famous universities, and simulating the exams with the students at the classroom level.

Related to Research Question 4, the quality of education of the PNS as student's achievement and the situation of teachers in relation to educational practices infer that the motivation of teachers to teach is based on the aspirations they perceive in their students.

The aspirations of the students motivate teachers to use more effective educational practices, further improving results, as a positive dynamic of reinforcement teacher to student. The students in the PNS in Japan perceive that their future aspirations are related to the possibilities to pass the entrance examination to the university in Brazil, being consistent with what the parents and the school practitioners expect of them, although they are aware of their limitations. Many students will work in Japan before returning to Brazil within two-three years to save money and enter university. The analysis of the models shows that academic achievement of students and their prospects in entering university are influenced by factors related to their families' socio-economic environment, the nature of the schools where they study, the parental involvement and their own personal perceptions.

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## ANNEX

### APPENDIX A: PNS School Mission and Vision, and Model of Scoring

#### APPENDIX A-a PNS School Mission and Vision “Model” PNS in Japan

**Vision:** PNS are recognized as an entrepreneur reference in the educational sector, looking for the vanguard of changes, emphasizing a quality in the relationship with the persons to whom PNS are serving, and fulfilling our social responsibility.

**Mission:** To serve persons and institutions, attending their educational necessities, guaranteeing superior results.

#### Goal: High Performance of Students

The PNS in Japan provide conditions for what their students develop in the following competences:

1. To read with autonomy different types of texts, comprehending a lecture in its dimensions: as a task, as a necessity and as a pleasure of read.	2. To write different types of text, adapting them to the circumstances, formalities and objectives of interaction with the reader.	3. To calculate with agility, utilizing the personal and the conventional strategies, distinguishing the situations that required exact or approximate results, proving them through procedures of verification.	4. To express orally in function to the intention of the speaker, the characteristics of the receptor, the exigencies of the situation, and the established objectives.	5. To resolve critically daily situations, elaborating procedures of solution, comparing its results and validating the strategies.	6. To interact with the others, developing a perception of interdependencies in the accomplishment of common projects, be preparing to manage conflicts, strengthening their identities, and respecting the others, considering values and pluralism of mutual comprehension, and searching for peace.	7. To use a foreign language for attainment information and knowledge, from real linguistic situations, and expressing, orally or written, on daily situations.	8. To utilize new technologies as a tool of information for the acquisition and construction of knowledge.	9. To be responsible for the own learning, autonomy of study, executing properly the schools tasks and looking to improve their studies.
a) ENEM: Competence I % of students with minimum performance of 75% b) Validation of Periods: Test of Portuguese,	a) ENEM: Competence I to V of written expression % of students with minimum performance of 75% b) Validation of	a) Validation of Periods: Test of Portuguese, applied three times/year % of students with media b) PAERP: Program of External Validation of	a) **PEE/Teachers: Degree of perception of teachers related to the performance of student's oral expression	a) ENEM: Competence I to V of written expression % of students with minimum performance of 75%	a) Number of disciplinary occurrences involving conflicts between the students  b) Number of families set in motion for the school to deal with problems of relationships between	a) PAERP: Test of own or recognize foreign language % of students with media	a)% of students who present school works in applicatory Office type  b) % of students using the Internet to make	a) % of students that attend the lessons  b) % of carried school tasks, and deliver in day  c) % of disciplinary occurrences, involving

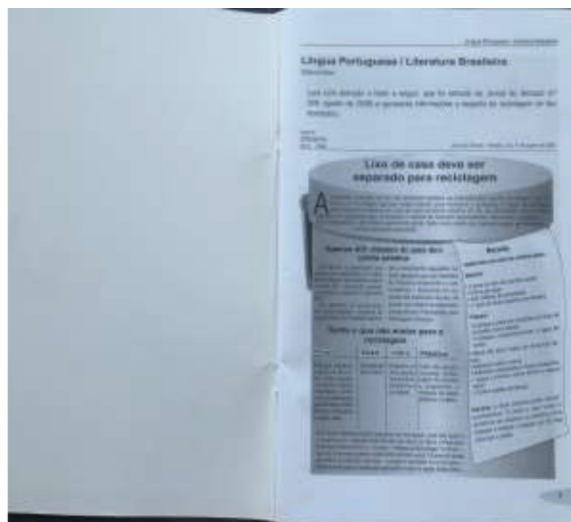
applied 3 times/year % of students with media  c) PAERP: Program of External Validation of Pitagoras Net (Programa de Avaliacao Externa de Rede Pitagoras) % of students with media	Periods: Test of Portuguese, applied three times/year % of students with media c) PAERP: Program of External Validation of Pitagoras Net (Programa de Avaliacao Externa de Rede Pitagoras) % of students with media	Pitagoras Net (Programa de Avaliacao Externa de Rede Pitagoras) % of students with average		b) **PEE/Teachers and Parents  c) Degree of perception of teachers and parents, regarding to the capacity of students to solve daily problem-situations	students		school research	pedagogical questions  d) PEE/Parents: Degree of the parent's perception related to the level of autonomy of their children in the studies
<b>Strategies: The Strategies will Support the Learning Goals</b>								
<b>Efficient and Efficient Operation</b>		<b>Competences (Abilities) of the Teams</b>		<b>Relations of Partnership</b>		<b>Use of External Evaluation</b>		
10. The schools will guarantee the accomplishment of the lessons and programmed activities	% of frequency of the professors in the lessons  Number of cancelled or postponed activities	15. The programming of activities of education & training must reflect the goals of the high performance (goals 1-9)	Number of activities carried through % of participants in the carried through activities Half hour of activities by professional PEE/Professors: Degree of perception of the professors regarding the impact of the education & training opportunities, in its work with the goals 1-9.	18. The families will actively become involved to help to make possible the high performance of the students (goals 1-9)	Number of initiatives, in progress, of engagement of the families, directed for the high straightening of the students PEE/Parents: Degree of perception of the parents regarding its active engagement to help the children in the goals of high performance.	21. The schools will promote the participation of the students in the ENEM and will participate actively in the PAERP	% of students of 3er year of Secondary School who annually participate of the ENEM % of participant schools of the PAERP that attended to all the requirements of efficient participation, defined by the Direction of Evaluation.	
11. The schools will provide a safe environment and appropriate to the learning	% of cases of transference motivated by unreliability or indiscipline PEE/Parents PEE/Professors PEE/Students Degree of perception of parents, professors and students related to disciplines and security of the school	16. The professionals will become involved themselves in the improvement of the main administrative/teaching processes in a cooperative way.	% of professionals in teams or groups of work	19. The pupils will work cooperatively	% of students acting in a cooperative way PEE/Students: Degree of perception of the students related to their practice of cooperative work in the school activity	22. As escolas usarão os resultados do PAERP, ENEM e processos seletivos do Ensino Superior para melhorar seus processos.	Number of days passed between the "submission" of the reports and the beginning of planned actions of improvement  Index of satisfaction of the leaderships of the schools with the quality (objectives,	

12. The schools will guarantee the conditions so that the pupils have resulted pertaining to school raised	Quarterly research with parents Degree of perception of the parents regarding the adequacy of the volume of for-house (homework) of the children % of approval per grade/year % of pupils "in domain" (bigger/lower 75% of the points of the stage) % of approvals in selective processes of Higher Education	17. The evaluation of the performance of the professionals must be guided for its continuing improvement	System of evaluation in progress, aligned with the professional improvement  Number of individual plans of improvement of the performance evaluation				utility, quickness of delivery, etc.) of the data and constant information of the report of the PAERP.
13. The schools will use the system of integrated management	Number of schools with Plans of Improvement in progress, especially the plans of action of priority goals % of professors and employees implementing plans of action, staffs and of team, the Systems check % of groups working with Goals of the Classroom			20. The schools will act in social projects	Number of social projects in progress Number of social projects in progress, carried through in partnership with other institutions % of impact people who evaluate each project as relevant % of students who make volunteering work as an individual action		
14. The schools will generate financial results that make possible investments in the quality and innovation	% of operational result % of monthly and annual insolvency % of enroll of inexperienced pupils % of register-again of students approved and with						

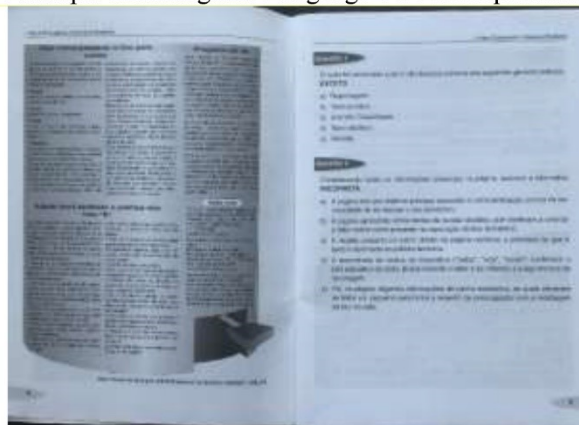
Source: PNSA, Hamamatsu, Japan, September 2009 (translation made by the Author) .



## APPENDIX A-b Vestibular Simulado Model of Exam



Example of Portuguese Language VS Exam questions



- VS1 (First Trimester) Year 2 SE, 64 pages
- Ten subjects: Portuguese (10 Qs), Mathematics (10 Qs), Physics (10 Qs), Chemistry (10 Qs), Biology (10 Qs), History (10 Qs), Geography (10 Qs), English (10 Qs), Spanish (10 Qs)
- Each subject of the VS Exam contains texts, followed by multiple-choice questions
- Each group of questions was elaborated by different teachers, which change every school year, based on previous Vestibular exams offered in the entrance examinations of the Universities in Brazil
- Model 2, PNS D, VS Exam Y1 SE (2011), Maths.
- The exercises are based on FUVEST, UEL, UF-UBERLANDIA, UNIFOR, PUC, FGV models of questions, among other universities models of questions.
- The cover shows the instructions, based on 62 questions. Students have 5 hours to finalized the exam. The minimum time to finalized the exam is 3 hours. Answers should be written in ballpen blue or black.



Source: Created by Author based on the Vestibular Examination 2011, PNS Brazil

## APPENDIX A-c Gabarito/Model of Scoring or Grading

### Gabarito 1: PNS – Schools Japan – I Vestibular Simulado – First Quarter 2010

	Portuguese Language and Literature										Math								Biology							Chemistry						
Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Y1	B	A	D	B	A	E	B	A	C	D	B	A	B	A	C	A	D	C	E	D	C	D	B	D	E	B	C	E	B	D	B	D
Y2	E	C	E	C	C	C	E	D	C	E	C	B	D	D	E	A	B	A	C	D	D	C	E	C	D	B	A	B	D	E	B	A
Y3	C	E	E	D	B	E	C	A	C	D	B	D	C	C	A	B	B	D	D	B	E	C	A	D	B	D	D	C	D	E	C	E

	Physics							History							Geography							English						
Question	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Y1	A	D	A	B	C	C	E	D	E	D	E	E	E	D	C	A	A	A	B	D	D	C	D	E	E	B	D	C
Y2	C	A	C	E	C	C	E	A	B	E	C	A	C	A	E	A	B	C	E	D	A	A	E	B	B	D	B	C
Y3	C	D	B	B	E	A	B	E	A	B	D	A	A	A	D	C	A	A	D	D	A	A	E	D	E	A	B	C

### Gabarito 2: PNS – Schools Japan – II Vestibular Simulado – Second Quarter 2010

	Question	Y1	Y2	Y3
Portuguesa & Literature Language	1	A	B	B
	2	C	E	D
	3	B	D	B
	4	B	D	D
	5	C	E	B
	6	C	C	C
	7	A	B	C
	8	C	B	E
	9	B	A	A
	10	D	D	E
Mathematics	11	A	C	A
	12	C	C	A
	13	E	E	D
	14	E	D	C
	15	C	B	E
	16	E	C	A
	17	B	E	A
Biology	18	B	B	B
	19	C	E	B
	20	D	B	E
	21	E	B	A
	22	C	D	E
	23	C	C	E
	24	C	E	D
Chemistry	25	E	B	C
	26	B	A	E
	27	C	A	D
	28	D	B	B
	29	C	D	B
	30	D	D	C
	31	C	D	A
Physics	32	A	C	E
	33	E	B	A
	34	A	C	B
	35	B	B	A
	36	D	E	D
	37	C	A	A
	38	C	C	E
History	39	C	A	D
	40	C	D	D
	41	A	C	D
	42	A	D	D
	43	C	A	A
	44	E	D	C
	45	B	A	D
Geography	46	E	E	E
	47	A	D	C
	48	B	C	A
	49	D	E	C
	50	C	A	B
	51	D	C	C
	52	A	A	A
English	53	E	A	E
	54	A	B	A
	55	E	D	E
	56	B	C	C
	57	D	A	D
	58	D	C	D
	59	C	E	C
	60	E	D	E

	QUESTION	G8
Portuguese Language	1	D
	2	E
	3	C
	4	A
	5	E
	6	A
	7	D
	8	D
Mathematics	9	C
	10	C
	11	D
	12	D
	13	B
	14	C
	15	E
	16	A
Sciences	17	D
	18	C
	19	D
	20	D
	21	A
	22	A
History	23	B
	24	E
	25	A
	26	D
	27	E
	28	C
Geography	29	D
	30	E
	31	C
	32	D
	33	B
	34	A
English	35	D
	36	B
	37	C
	38	D
	39	C
	40	E

**Gabarito 3: PNS Japan – III Vestibular Simulado – Third Quarter 2010**

	QUESTION	Y1	Y2	Y3
Portuguese & Literature Language	1	C	E	D
	2	C	C	B
	3	E	A	A
	4	D	E	A
	5	C	D	B
	6	A	B	C
	7	D	C	E
	8	B	D	A
	9	C	C	E
	10	D	A	E
Mathematics	11	E	A	D
	12	A	E	B
	13	B	A	B
	14	D	C	D
	15	B	B	E
	16	C	B	C
	17	D	B	C
	18	C	C	B
Biology	19	C	C	B
	20	B	A	C
	21	B	D	C
	22	D	D	D
	23	B	B	B
	24	C	D	D
	25	A	A	D
Chemistry	26	B	A	B
	27	B	A	B
	28	B	D	C
	29	E	D	C
	30	E	A	E
	31	E	D	A
	32	C	D	C
Physics	33	B	A	C
	34	E	A	A
	35	B	B	D
	36	D	C	B
	37	B	D	B
	38	E	A	D
	39	E	A	B
History	40	C	D	A
	41	A	C	B
	42	C	A	E
	43	D	A	A
	44	E	E	C
	45	A	E	A
	46	C	D	C
Geography	47	D	D	B
	48	C	E	B
	49	C	E	B
	50	E	A	B
	51	A	B	B
	52	E	E	D
	53	A	B	C
English	54	B	B	A
	55	E	C	C
	56	D	A	D
	57	C	B	A
	58	C	C	E
	59	B	E	B
	60	E	B	A

	QUESTION	G8
Portuguese Language	1	B
	2	E
	3	A
	4	A
	5	C
	6	B
	7	C
	8	A
Mathematics	9	B
	10	C
	11	D
	12	D
	13	D
	14	B
	15	B
Sciences	16	B
	17	E
	18	A
	19	D
	20	A
	21	C
	22	B
History	23	D
	24	C
	25	A
	26	B
	27	A
	28	E
Geography	29	B
	30	C
	31	D
	32	C
	33	B
	34	A
English	35	A
	36	D
	37	A
	38	C
	39	D
	40	C

## APPENDIX B: Vestibular Simulado (Entrance Examination): Generalities

*Table B-a Vestibular Simulado (Entrance Examination Simulation) Minimum and Maximum Scores – First Period (2009)*

Course	First Period	
	Min %	Max %
Administration Morning	60	86
Administration Night	60	88
Architecture and Urbanism	60	91
Arts Scenic	44	86
Belle-Arts	53	83
Librarian Economics Morning	43	71
Librarian Economics Night	45	78
ICT Sciences	68	89
Nutrition Sciences	60	83
Sciences Law	58	82
Biological Sciences Night (Licentiate)	60	79
Biological Sciences Morning	68	88
Account Sciences Night	55	88
Economic Sciences	60	89
Social Sciences	60	88
Social Communication	65	91
Law Morning	63	93
Law Night	63	88
Physical Education	58	83
Nursery	60	80
Agricultural Engineering – MC	44	83
Engineering of Control and Automatic	64	92
Civil Engineering	50	88
Engineering of Mines	56	80
Engineering of Production	63	94
Electrical Engineering	60	88
Mechanical Engineering Morning	60	88
Mechanical Engineering Night	60	88
Metallurgic Engineering	58	78
Chemical Engineering	68	88
Statistics	54	86
Pharmacy	62	86
Philosophy	51	83
Physics Morning (Bachelorette)	60	91
Physics Nights (Licentiate)	57	82
Physiotherapist	61	84
Phono-audiologist	56	80
Geography Morning	58	79
Geography Night (Licentiate)	53	83

Geology	60	85
History Morning	60	84
History Night (Licentiate)	55	86
Medicine	78	96
Medicine Veterinaria	60	85
Music Bachelorette (Sing)	56	63
Music Bachelorette (Composition)	54	76
Music Bachelorette (Fagot)	42	42
Music Bachelorette (Flute)	36	62
Music Bachelorette (Percussion)	62	68
Music Bachelorette (Piano)	51	73
Music Bachelorette (Regency)	58	73
Music Bachelorette (Saxophone)	39	55
Music Bachelorette (Trombone)	42	43
Music Bachelorette (Trumpet)	48	75
Music Bachelorette (Viola)	55	60
Music Bachelorette (Violon)	53	68
Music Bachelorette (Violin)	41	62
Music Bachelorette (Violoncello)	55	55
Music Licentiate	52	74
Dentistry	59	83
Pedagogy Morning	45	73
Pedagogy Night	45	73
Psychology	58	85
Chemistry Morning	60	83
Chemistry Night (Licentiate)	58	86
Occupational Therapist	53	79
Tourism	54	78
Informational System Night	59	84
Zoogenic – MC	41	73

Source: Pitagoras School Hamamatsu, Administration, Hamamatsu, September 2009.

*Table B-b Results – II Entrance Examination Simulation Unit: PNS A (Hamamatsu), Year 1, Senior High School - Secondary Education*

Pitagoras Network of School - Japan												
Result – II Vestibular Simulado (Entrance Examination Simulation) – 27/08/2009											Value	Value
Unit: PNS A (Hamamatsu) SHS Year 1												
	Number of Questions per Subject								Total		Test	Test
	10	8	7	7	7	7	7	7	60		7	7
Gender*	PORT	MATH	BIO	CHEM	PHY	HIS	GEO	ENG	Media	%	Score	Score
Male	3	4	4	2	3	2	1	0	19	31.7	2	2
Male	5	7	2	3	3	5	2	2	29	48.3	3	3
Female	10	3	4	4	1	4	6	6	38	63.3	4	4
Male	5	2	3	2	1	5	4	1	23	38.3	3	3
Female	4	6	0	4	3	4	3	1	25	41.7	3	3
Male	4	8	4	6	3	4	3	3	35	58.3	4	4
Male	2	6	4	5	4	4	2	1	28	46.7	3	3

Female	4	4	3	2	0	3	3	1	20	33.3	2	2
Female	5	4	2	2	2	4	4	4	27	45.0	3	3
Female	3	2	4	2	3	4	5	1	24	40.0	3	3
Media of rightness per student	2	2	1	1	1	2	1	1				
Percentage of rightness per subject	19	24	18	19	14	23	20	12				

\*Note: Name of the students in the original.

Source: Pitagoras School Hamamatsu, Administration, Hamamatsu, September 2009.

*Table B-c Results – II Entrance Examination Simulation, Unit: PNS A (Hamamatsu), Year 2, Senior High School - Secondary Education*

Pitagoras School – Japan												
Result – II Vestibular Simulado (Entrance Examination Simulation) – 27/08/2009											Value	Value
Unit: PNS A (Hamamatsu) SHS Year 2												
	Number of Questions per Subject								Total		Test	Test
	10	8	7	7	7	7	7	7	60		7	7
Gender*	PORT	MATH	BIO	CHEM	PHY	HIS	GEO	ENG	Media	%	Score	Score
Male	5	1	1	2	5	4	2	3	23	38.3	3	3
Female	9	3	4	1	3	3	1	7	31	51.7	4	4
Female	7	5	4	2	2	5	2	5	32	53.3	4	4
Female	2	3	2	1	6	4	2	1	21	35.0	2	2
Female	6	3	2	3	3	4	4	4	29	48.3	3	3
Female	6	3	3	3	4	3	4	6	32	53.3	4	4
Male	6	2	1	2	3	4	4	2	24	40.0	3	3
Male	3	1	2	1	2	3	1	4	17	28.3	2	2
Female	7	4	0	2	3	7	2	1	26	43.3	3	3
Media of rightness per student	3	2	1	1	2	2	1	2				
Percentage of rightness per subject	34	21	18	16	30	35	21	31				

\*Note: Name of the students in the original.

Source: Pitagoras School Hamamatsu, Administration, Hamamatsu, September 2009.

*Table B-d Result – II Entrance Examination Simulation, Unit: PNS A (Hamamatsu), Year 3, Senior High School – Secondary Education*

Pitagoras Network Schools – Japan												
Result – II Vestibular Simulado (Entrance Examination Simulation) – 27/08/2009											Value	Value
Unit: PNS A (Hamamatsu) SHS Year 3												
	Number of Questions per Subject								Total		Test	Test
	10	8	7	7	7	7	7	7	60		7	7
Gender*	PORT	MATH	BIO	CHEM	PHY	HIS	GEO	ENG	Media	%	Score	Score
Female	4	4	2	4	2	3	2	1	22	36.7	3	3
Male	6	4	4	1	4	4	4	3	30	50.0	4	4
Male	2	2	5	2	4	3	3	5	26	43.3	3	3
Male									0	0	0	0

Male	7	1	4	4	2	5	1	1	25	41.7	3	3
Media of rightness per student	2	1	2	1	2	2	1	1				
Percentage of rightness per subject	24	17	27	20	21	27	18	18				

\*Note: Name of the students in the original.

Source: Pitagoras School Hamamatsu, Administration, Hamamatsu, September 2009.

*Table B-e First Ten Students in the II Simulation of Entrance Examinations 2009*

No of Order	Gender*	Percentage of Rightness	IP
1	Female	63.3	
2	Male	58.3	
3	Female	53.3	7
4	Female	53.3	6
5	Female	51.7	
6	Male	50.0	
7	Female	48.3	6
8	Male	48.3	5
9	Male	46.7	
10	Female	45.0	

\*Note of the Author: Name of the students in the original.

Note: The settle of matter criterion was adopted from the greater numbers of rightness in Portuguese language.

Source: PNS A, Administration, Hamamatsu, September 2009.

*Table B-f Number of Graduates from Grade 8 (2007-8)*

	2007	2008
Number of Graduate from Grade 8	8	19

Source: Pitagoras Net, September 2009.

*Table B-g Number of Students who continue enroll in Upper Secondary School (2007-8)*

Number of Students who continued the USS	2007	2008
In Pitagoras School Hamamatsu	6	10
In Japanese School	0	1
In Brazilian School	1	2
Do not study	0	3

Source: Pitagoras Net, September 2009.

*Table B-h Number of Graduates from the Year 3 of Upper Secondary School*

Number of Graduated Students from the Y3	2007	2008
	9	9

Source: Pitagoras Net, PNS A Hamamatsu, September 2009.



## APPENDIX C: Japanese and Brazilian Samples

*Table C-a Number of Students in Japanese Sample*

Geographical Location		Two PNS School of the Southern School-Units		One PNS School of the Northern School-Units
Level/Schools		Sample 1 (PNS A): Hamamatsu City - Shizuoka Prefecture	Sample 2 (PNS B): Kariya City - Aichi Prefecture	Sample 3 (PNS C): Ōta City - Gunma Prefecture
ECE	N	0	0	6
	M	1	5	11
	1P	0	3	1
	2P	1	11	8
	S-Total	2	19	26
BE &	G-1	5	8	3
LSE M-	G-2	3	9	8
GC	G-3	2	7	6
	G-4	2	7	10
	G-5	3	5	8
	G-5	6	14	
	G-6	5	12	15
	G-7	0	13	11
	G-8	7	15	13
	S-Total	33	90	74
USE	Y-1	3	17	22
M-GC	Y-2	9	11	20
	Y-3	7	7	14
	S-Total	19	35	56
Sub-Total		54	144	156
Total Number				
Students of the				
Three Schools		354 students		
Total JPN Sample		156 students (out of 165 students G7-8 and Y1-2-3)		

ECE: Early Childhood Education/N: Nursery/M: Maternal /1P: First Period/ 2P: Second Period. BE: Basic Education (Grades 1-6). LSE: Lower Secondary Education (Grades 7-8). USE: Upper Secondary Education (Y1-3). M-GC: Multi-Grade Classrooms.

Source: Created by the Author based on interviews to the administration officers of the Southern School Units of the PNS chain-schools (updated to December 7, 2011).

*Table C-b Number of Students in Brazilian Sample*

Geographical Location		Headquarter of the PNS (HQs), Belo Horizonte City, State of Minas Gerais – Not considered as sample Three PNS of the Southern Region		
Level/Schools		Sample 4 (PNS D): Marília City – State of São Paulo	Sample 5 (PNS E) Londrina City – State of Parana	Sample 6 (PNS F): Curitiba City – State of Parana
ECE	B-N	BI-07/B2-18 A18/B19	39	38
	M	A15/B12/C13/D12	35	31
	1P	A15/B15/C20	40	42
	2P	A26/B22	52	54
	S-Total	212	127	165
BE & LSE S-GC	G-1	A17/B17/C24	48	52
	G-2	A16/C21	52	54
	G-3	A31/C 15	69	67
	G-4	A22/C16	73	71
	G-5	A20/B17/C20	33	96
	G-5		62	
	G-6	A29/B31/C3	52	69
	G-7	A26/B26/C2	57	78
	G-8-9	8A32B32/ 9A27B29	A30/B30	A39/B37
	S-Total	511	506	447
USE	Y-1	53	A29/B23	48
SYC	Y-2	35	A27/B28	35
	Y-3	19	27	27
	S-Total	107	134	110
Sub-Total		227	194	186
Total Number of Students in the Three Schools		830	806	818
Total BRZ Sample		542 students (out of 611 students G8-9 and Y1-2-3)		

ECE: Early Childhood Education/N: Nursery/M: Maternal /1P: First Period/ 2P: Second Period/BE: Basic Education/LSE: Lower Secondary Education /S-GC: Single-Grade Classroom/S-YC: Single-Year Classroom. Staff: Sample 4 (School D): 20 Teachers, 2 Coordinators, 1 Principal. Sample E: 23 Teachers, 2 Coordinators, 2 Principals. Sample F: 17 Teachers, 2 Coordinators, 1 Principal.

Source: Created by the Author based on data provided from the administration officers of the three School Units of the PNS chain-school in Brazil (updated to December 2011).

## APPENDIX D: Questionnaires, Interviews, Protocols and Consents

### APPENDIX D-1a Student Questionnaire Grade 8 Lower Secondary Education based on SAEB 2003 Japan (June 2010)

#### QUESTIONÁRIO 1

ALUNO No \_\_\_\_

ALUNO/A 8a Série EF

Data: .... / .... /2010

Tempo: .....: .... AM/PM

**Ao Estudante**

**Cara/o Estudante,**

Estas são algumas perguntas que eu preciso de responder para verifico ou fazer introduções escondidas relevantes da pesquisa. Responda que vontade lhe tomam 10-15 minutos.  
Muito Obrigada!

**Mariana Coolican**

Pesquisadora

Universidade de Kobe

Japão, Junho 2010.

#### 0. ESCOLA:

- (A) PNS A
- (B) PNS B
- (C) PNS C
- (D) Outra PNS

---

#### 1. SEXO:

- (A) Masculino.
- (B) Feminino.

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#### 2. COMO VOCÊ SE CONSIDERA?

- (A) Branco(a).
- (B) Pardo(a).
- (C) Preto(a).
- (D) Amarelo(a).
- (D.1) Nisei
- (D.2) Sansei
- (D.3) Yonsei
- (E) Indígena.

---

#### 3. QUAL É O MÊS DO SEU ANIVERSÁRIO?

- (A) Janeiro.
- (B) Fevereiro.
- (C) Março.
- (D) Abril.
- (E) Maio.
- (F) Junho.

- (G) Julho.  
 (H) Agosto.  
 (I) Setembro.  
 (J) Outubro.  
 (K) Novembro.  
 (L) Dezembro.

---

**4. QUAL É O ANO DO SEU NASCIMENTO?**

(A) 1990 (B) 1991 (C) 1992 (D) 1993 (E) 1994 (F) 1995 (G) 1996 (H) 1997 ou depois

---

**NA SUA CASA TEM:**

**(Marque apenas UMA alternativa em cada linha.)**

	Sim, 1	Sim, 2	Sim, 3	Sim, 4 ou mais	Não tem
5. Televisão em cores?	(A)	(B)	(C)	(D)	(E)
6. Rádio?	(A)	(B)	(C)	(D)	(E)
7. Automóvel/carro?	(A)	(B)	(C)	(D)	(E)

---

**NA SUA CASA TEM:**

**(Marque apenas UMA alternativa em cada linha.)**

	Sim	Não tem
8. Videocassete?	(A)	(B)
9. Geladeira?	(A)	(B)
10. Máquina de lavar roupa?	(A)	(B)
11. Aspirador de pó?	(A)	(B)

---

**12. DENTRO DA SUA CASA TEM BANHEIRO ?**

- (A) Sim, um.  
 (B) Sim, dois.  
 (C) Sim, três ou mais.  
 (D) Não tem.
- 

**13. NA SUA CASA TEM QUARTOS PARA DORMIR?**

- (A) Sim, um.  
 (B) Sim, dois.  
 (C) Sim, três ou mais.  
 (D) Não tem.
- 

**14. NA SUA CASA TEM FREEZER JUNTO A GELADEIRA?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.
- 

**15. NA SUA CASA TEM FREEZER SEPARADO DA GELADEIRA?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.
- 

**16. NA SUA CASA TEM COMPUTADOR COM INTERNET?**

- (A) Sim.  
 (B) Não.

(C) Não sei.

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**17. NA SUA CASA TEM COMPUTADOR SEM INTERNET?**

- (A) Sim.  
(B) Não.  
(C) Não sei.

---

**18. ALÉM DOS LIVROS ESCOLARES, QUANTOS LIVROS HÁ EM SUA CASA?**

- (A) O bastante para encher uma prateleira (1 a 20 livros).  
(B) O bastante para encher uma estante (21 a 100).  
(C) O bastante para encher várias estantes (mais de 100 livros).  
(D) Nenhum.

---

**ONDE VOCÊ MORA:**

**(Marque SIM ou NÃO em cada linha.)**

	Sim	Não
19. Existe eletricidade?	(A)	(B)
20. Chega água pela torneira?	(A)	(B)

---

**21. NA SUA CASA É?**

- (A) Casa  
(B) Apartamento  
(C) Mansão  
(D) Outro

---

**22. QUANTAS PESSOAS MORAM COM VOCÊ?**

- (A) 0 (B) 1 (C) 2 (D) 3 (E) 4 (F) 5 (G) 6 (H) 7 (I) 8 (J) 9 (K) 10 ou mais.

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**23. VOCÊ MORA COM SUA MÃE?**

- (A) Sim.  
(B) Não.  
(C) Não. Moro com outra mulher responsável por mim.

---

**24. SUA MÃE SABE LER E ESCREVER PORTUGUES?**

- (A) Sim.  
(B) Não.  
(C) Não sei.

---

**24.1 SUA MÃE SABE LER E ESCREVER JAPONES?**

- (A) Sim.  
(B) Não.  
(C) Não sei.

---

**25. ATÉ QUE SÉRIE SUA MÃE ESTUDOU?**

- (A) Nunca estudou.  
(B) Não completou a 4ª série (antigo primário).  
(C) Completou a 4ª série (antigo primário).  
(D) Não completou a 8ª série (antigo ginásio).  
(E) Completou a 8ª série (antigo ginásio).  
(F) Não completou o Ensino Médio (antigo 2º grau).  
(G) Completou o Ensino Médio (antigo 2º grau).  
(H) Começou mas não completou a faculdade.

- (I) Completou a faculdade.  
(J) Não sei.

<b>26. VOCÊ VÊ A SUA MÃE LENDO?</b> (A) Sim. (B) Não.	<b>31. QUEM É A PESSOA QUE ACOMPANHA MAIS DE PERTO SUA VIDA ESCOLAR?</b> <b>(Marque apenas uma alternativa)</b> (A) Minha mãe. (B) Outra mulher da minha família. (C) Meu pai. (D) Outro homem da minha família. (E) Empregada. (F) Ninguém.
<b>27. VOCÊ MORA COM SEU PAI?</b> (A) Sim. (B) Não. (C) Não. Moro com outro homem responsável por mim.	
<b>28. SEU PAI SABE LER E ESCREVER PORTUGUES?</b> (A) Sim. (B) Não. (C) Não sei.	
<b>28.1 SEU PAI SABE LER E ESCREVER JAPONES?</b> (A) Sim. (B) Não. (C) Não sei.	<b>32. QUAL A ESCOLARIDADE DA PESSOA INDICADA ACIMA?</b> (A) Nunca estudou (B) Não completou a 4a série (antigo primário). (C) Completou a 4a série (antigo primário). (D) Não completou a 8a série (antigo ginásio). (E) Completou a 8a série (antigo ginásio). (F) Não completou o Ensino Médio (antigo 2o grau). (G) Completou o Ensino Médio (antigo 2o grau). (H) Começou mas não completou a Faculdade. (I) Completou a Faculdade. (J) Não sei.
<b>29. ATÉ QUE SÉRIE SEU PAI ESTUDOU?</b> (A) Nunca estudou. (B) Não completou a 4a série (antigo primário). (C) Completou a 4a série (antigo primário). (D) Não completou a 8a série (antigo ginásio). (E) Completou a 8a série (antigo ginásio). (F) Não completou o Ensino Médio (antigo 2º grau). (G) Completou o Ensino Médio (antigo 2o grau). (H) Começou mas não completou a faculdade. (I) Completou a faculdade. (J) Não sei.	<b>33. NA SUA CASA CHEGA JORNAL PARA LER?</b> (A) Sim, todos os dias. (B) Sim, pelo menos uma vez por semana. (C) Não.
<b>30. VOCÊ VÊ O SEU PAI LENDO?</b> (A) Sim. (B) Não.	

**34. NA SUA CASA CHEGAM REVISTAS DE INFORMAÇÃO GERAL (Veja, Isto É, Época, etc.)?**

- (A) Sempre ou quase sempre.  
(B) De vez em quando.  
(C) Nunca ou quase nunca.

**VOCÊ LÊ:**

(Marque UMA alternativa em cada linha.)

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
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35. Revistas em quadrinhos?	(A)	(B)	(C)
36. Livros de literatura, como romance, ficção, etc?	(A)	(B)	(C)
37. Jornais?	(A)	(B)	(C)
37.1 Jornais de informação geral de Brasileiros em Japão ( <i>Tudo Bem, International Press, etc.</i> )?	(A)	(B)	(C)
38. Revistas de informação geral (Veja, Isto É, Época, etc.)?	(A)	(B)	(C)
38.1 Free papers ( <i>Alternativa, Gambare!, Vitrine, Mais Brasil, Acha Fácil, Folha E, Meu Carro, etc.</i> )?	(A)	(B)	(C)

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**38.2 Que língua você usa em casa?**

- (A) Sempre japonês  
 (B) Sempre português  
 (C) Um misturado de ambas  
 (D) Outra língua

---

**38.3 Que língua você usa na escola?**

- (A) Sempre japonês  
 (B) Sempre português  
 (C) Um misturado de ambas  
 (D) Outra língua

---

**38.4 Que língua você se usa em seu vizinhança**

- (A) Sempre japonês  
 (B) Sempre português  
 (C) Um misturado de ambas  
 (D) Outra língua

---

**38.5 De que a nacionalidade seus amigos/as é?**

- (A) Japonês  
 (B) Brasileiro  
 (C) Outra nacionalidade

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**39. VOCÊ LÊ OU FAZ CONSULTA NA BIBLIOTECA DA ESCOLA?**

- (A) Sempre ou quase sempre.  
 (B) De vez em quando.  
 (C) Nunca ou quase nunca.

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**40. VOCÊ LÊ OU FAZ CONSULTA EM BIBLIOTECA FORA DA ESCOLA?**

- (A) Sempre ou quase sempre.  
 (B) De vez em quando.  
 (C) Nunca ou quase nunca.

---

**VOCÊ COSTUMA IR:**

(Marque UMA alternativa em cada linha.)

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
41. Ao teatro?	(A)	(B)	(C)
42. Ao cinema?	(A)	(B)	(C)
43. A shows de música?	(A)	(B)	(C)
44. A exposições?	(A)	(B)	(C)

**EM DIA DE AULA, QUANTO TEMPO VOCÊ GASTA:****(Marque o número de horas correspondente a cada item.)**

	Até 1 hora	2 horas	3 horas	4 horas ou mais	Não realizo esta atividade
45. Assistindo TV?	(A)	(B)	(C)	(D)	(E)
46. Estudando ou fazendo lição de casa?	(A)	(B)	(C)	(D)	(E)
47. Fazendo trabalhos domésticos em casa?	(A)	(B)	(C)	(D)	(E)

**48. EM DIA DE AULA, QUANTO TEMPO VOCÊ TRABALHA FORA DE CASA?**

(A) Até 4 horas.

(B) De 5 a 6 horas.

(C) Mais de 6 horas.

(D) Não trabalho fora de casa.

**49. QUANDO VOCÊ TERMINAR A 8ª SÉRIE, VOCÊ PRETENDE:**

(A) Somente continuar estudando.

(B) Somente trabalhar.

(C) Continuar estudando e trabalhar.

(D) Ainda não sei.

**COM QUE FREQUÊNCIA SEUS PAIS OU RESPONSÁVEIS:****(Marque apenas UMA opção em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
50. Almoçam ou jantam com você?	(A)	(B)	(C)
51. Ouvem música com você?	(A)	(B)	(C)
52. Conversam sobre livros com você?	(A)	(B)	(C)
53. Conversam sobre filmes com você?	(A)	(B)	(C)
54. Conversam sobre programas de TV com você?	(A)	(B)	(C)
55. Conversam com seus amigos/colegas da escola?	(A)	(B)	(C)
56. Conversam com outros amigos seus?	(A)	(B)	(C)
57. Conversam com o Diretor da sua escola?	(A)	(B)	(C)
58. Conversam com seus professores?	(A)	(B)	(C)
59. Conversam sobre o que acontece na escola com você?	(A)	(B)	(C)
60. Ajudam você a fazer a lição de casa?	(A)	(B)	(C)
60.1 Ajudam você a preparar em casa exames (exemplo, vestibular simulado, provas, projectos)?	(A)	(B)	(C)
61. Cobram se você fez a lição de casa?	(A)	(B)	(C)
62. Falam para você não faltar à escola?	(A)	(B)	(C)
63. Falam para você tirar boas notas?	(A)	(B)	(C)
63.1 Ajudam você em preparar os exames?	(A)	(B)	(C)
63.2 Falam com você sobre seu futuro?	(A)	(B)	(C)

**64. COM QUE FREQUÊNCIA SEUS PAIS OU RESPONSÁVEIS VÃO À REUNIÃO DE PAIS?**

(A) Sempre ou quase sempre.

(B) De vez em quando.

(C) Nunca ou quase nunca.

(D) Não sei

Muito obrigada para sua amável colaboração!

Mariana Coolican  
 Pesquisadora  
 Universidade de Kobe, Japão, Junho 2010.



**APPENDIX D-1b Student Questionnaire Years 1-2-3 Secondary Education based on SAEB 2003 Japan (June 2010)**

**QUESTIONÁRIO 2**

**ALUNO No** \_\_\_\_

**ALUNO/A**  
**1º ANO EM**  
**2º ANO EM**  
**3º ANO EM**

**Data:** .... / .... /2010  
**Tempo:** .....: .... AM/PM

**Ao Estudante**

**Cara/o Estudante,**

Estas são algumas perguntas que eu preciso para verificar ou fazer introduções relevantes da pesquisa. Responda por favor! Deve tomar um tempo de 10-15 minutos. Muito Obrigada!

**Mariana Coolican**

Pesquisadora

Universidade de Kobe

Japão, Junho 2010.

**0. ESCOLA:**

- (A) PNS A  
(B) PNS B  
(C) PNS C  
(D) Outra PNS

**1. SEXO:**

- (A) Masculino.  
(B) Feminino.

**2. COMO VOCÊ SE CONSIDERA?**

- (A) Branco(a).  
(B) Pardo(a).  
(C) Preto(a).  
(D) Amarelo(a).  
(D.1) Nisei  
(D.2) Sansei  
(D.3) Yonsei  
(E) Indígena.

**3. QUAL É O MÊS DO SEU ANIVERSÁRIO?**

- (A) Janeiro. (B) Fevereiro. (C) Março. (D) Abril. (E) Maio. (F) Junho. (G) Julho. (H) Agosto. (I) Setembro. (J) Outubro. (K) Novembro. (L) Dezembro.

**4. QUAL É O ANO DO SEU NASCIMENTO?**

- (A) 1987 (B) 1988 (C) 1989 (D) 1990 (E) 1991 (F) 1992 (G) 1993 (H) 1994 ou depois

**NA SUA CASA TEM: (Marque apenas UMA alternativa em cada linha.)**

	Sim, 1	Sim, 2	Sim, 3	Sim, 4 ou	Não tem
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				mais	
5. Televisão em cores?	(A)	(B)	(C)	(D)	(E)
6. Rádio?	(A)	(B)	(C)	(D)	(E)
7. Automóvel/carro?	(A)	(B)	(C)	(D)	(E)

**NA SUA CASA TEM: (Marque apenas UMA alternativa em cada linha.)**

	Sim	Não tem
8. Videocassete?	(A)	(B)
9. Geladeira?	(A)	(B)
10. Máquina de lavar roupa?	(A)	(B)
11. Aspirador de pó?	(A)	(B)

**12. DENTRO DA SUA CASA TEM BANHEIRO ?**

- (A) Sim, um.  
 (B) Sim, dois.  
 (C) Sim, três ou mais.  
 (D) Não tem.

**13. NA SUA CASA TEM QUARTOS PARA DORMIR?**

- (A) Sim, um.  
 (B) Sim, dois.  
 (C) Sim, três ou mais.  
 (D) Não tem.

**14. NA SUA CASA TEM FREEZER JUNTO A GELADEIRA?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.

**15. NA SUA CASA TEM FREEZER SEPARADO DA GELADEIRA?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.

**16. NA SUA CASA TEM COMPUTADOR COM INTERNET?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.

**17. NA SUA CASA TEM COMPUTADOR SEM INTERNET?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.

**18. ALÉM DOS LIVROS ESCOLARES, QUANTOS LIVROS HÁ EM SUA CASA?**

- (A) O bastante para encher uma prateleira (1 a 20 livros).  
 (B) O bastante para encher uma estante (21 a 100).  
 (C) O bastante para encher várias estantes (mais de 100 livros).  
 (D) Nenhum.

**ONDE VOCÊ MORA:**

**(Marque SIM ou NÃO em cada linha.)**

	Sim	Não
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19. Existe eletricidade?	(A)	(B)
20. Chega água pela torneira?	(A)	(B)

**21. A SUA RESIDÊNCIA É?**

- (A) Casa  
(B) Apartamento  
(C) Mansão  
(D) Outro

**22. QUANTAS PESSOAS MORAM COM VOCÊ?**

- (A) 0 (B) 1 (C) 2 (D) 3 (E) 4 (F) 5 (G) 6 (H) 7 (I) 8 (J) 9 (K) 10 ou mais.

**23. VOCÊ MORA COM SUA MÃE?**

- (A) Sim.  
(B) Não.  
(C) Não. Moro com outra mulher responsável por mim.

**24. SUA MÃE SABE LER E ESCREVER PORTUGUÊS?**

- (A) Sim.  
(B) Não.  
(C) Não sei.

**24.1 SUA MÃE SABE LER E ESCREVER JAPONÊS?**

- (A) Sim.  
(B) Não.  
(C) Não sei.

**25. ATÉ QUE SÉRIE SUA MÃE ESTUDOU?**

- (A) Nunca estudou.  
(B) Não completou a 4a série (antigo primário).  
(C) Completou a 4a série (antigo primário).  
(D) Não completou a 8a série (antigo ginásio).  
(E) Completou a 8a série (antigo ginásio).  
(F) Não completou o Ensino Médio (antigo 2o grau).  
(G) Completou o Ensino Médio (antigo 2o grau).  
(H) Começou mas não completou a faculdade.  
(I) Completou a faculdade.  
(J) Não sei.

<b>26. VOCÊ VÊ A SUA MÃE LENDO?</b> (A) Sim. (B) Não.	<b>31. QUEM É A PESSOA QUE ACOMPANHA MAIS DE PERTO SUA VIDA ESCOLAR?</b> (Marque apenas uma alternativa) (A) Minha mãe. (B) Outra mulher da minha família. (C) Meu pai. (D) Outro homem da minha família. (E) Empregada. (F) Ninguém.
<b>27. VOCÊ MORA COM SEU PAI?</b> (A) Sim. (B) Não. (C) Não. Moro com outro homem responsável por mim.	
<b>28. SEU PAI SABE LER E ESCREVER PORTUGUÊS?</b> (A) Sim. (B) Não. (C) Não sei.	
<b>28.1 SEU PAI SABE LER E ESCREVER</b>	<b>32. QUAL A ESCOLARIDADE DA PESSOA</b>

<b>JAPONÊS?</b> (A) Sim. (B) Não. (C) Não sei.	<b>INDICADA ACIMA?</b> (A) Nunca estudou (B) Não completou a 4a série (antigo primário). (C) Completou a 4a série (antigo primário). (D) Não completou a 8a série (antigo ginásio). (E) Completou a 8a série (antigo ginásio). (F) Não completou o Ensino Médio (antigo 2o grau). (G) Completou o Ensino Médio (antigo 2o grau). (H) Começou mas não completou a Faculdade. (I) Completou a Faculdade. (J) Não sei.
<b>29. ATÉ QUE SÉRIE SEU PAI ESTUDOU?</b> (A) Nunca estudou. (B) Não completou a 4a série (antigo primário). (C) Completou a 4a série (antigo primário). (D) Não completou a 8a série (antigo ginásio). (E) Completou a 8a série (antigo ginásio). (F) Não completou o Ensino Médio (antigo 2o grau). (G) Completou o Ensino Médio (antigo 2o grau). (H) Começou mas não completou a faculdade. (I) Completou a faculdade. (J) Não sei.	
<b>30. VOCÊ VÊ O SEU PAI LENDO?</b> (A) Sim. (B) Não.	<b>33. NA SUA CASA CHEGA JORNAL PARA LER?</b> (A) Sim, todos os dias. (B) Sim, pelo menos uma vez por semana. (C) Não.

**34. NA SUA CASA CHEGAM REVISTAS DE INFORMAÇÃO GERAL** (Veja, Isto É, Época, etc.)?

- (A) Sempre ou quase sempre.  
 (B) De vez em quando.  
 (C) Nunca ou quase nunca.

**VOCÊ LÊ: (Marque UMA alternativa em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
35. Revistas em quadrinhos?	(A)	(B)	(C)
36. Livros de literatura, como romance, ficção, etc?	(A)	(B)	(C)
37. Jornais?	(A)	(B)	(C)
37.1 Jornais de informação geral de Brasileiros em Japão (Tudo Bem, International Press, etc.)?	(A)	(B)	(C)
38. Revistas de informação geral (Veja, Isto É, Época, etc.)?	(A)	(B)	(C)
38.1 Free papers (Alternativa, Gambare!, Vitrine, Mais Brasil, Acha Fácil, Folha E, Meu Carro, etc.)?	(A)	(B)	(C)

**38.2 Que língua você usa em casa?**

- (A) Sempre japonês  
 (B) Sempre português  
 (C) Uma mistura de ambas  
 (D) Outra língua

**38.3 Que língua você usa na escola?**

- (A) Sempre japonês  
 (B) Sempre português  
 (C) Uma mistura de ambas  
 (D) Outra língua

**38.4 Que língua você se usa na sua vizinhança**

- (A) Sempre japonês  
 (B) Sempre português  
 (C) Uma mistura de ambas  
 (D) Outra língua

**38.5 De que a nacionalidade seus amigos/as é?**

- (A) Japonês  
 (B) Brasileiro  
 (C) Outra nacionalidade

**39. VOCÊ LÊ OU FAZ CONSULTA NA BIBLIOTECA DA ESCOLA?**

- (A) Sempre ou quase sempre.  
 (B) De vez em quando.  
 (C) Nunca ou quase nunca.

**40. VOCÊ LÊ OU FAZ CONSULTA EM BIBLIOTECA FORA DA ESCOLA?**

- (A) Sempre ou quase sempre.  
 (B) De vez em quando.  
 (C) Nunca ou quase nunca.

**VOCÊ COSTUMA IR: (Marque UMA alternativa em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
41. Ao teatro?	(A)	(B)	(C)
42. Ao cinema?	(A)	(B)	(C)
43. A shows de música?	(A)	(B)	(C)
44. A exposições?	(A)	(B)	(C)

**EM DIA DE AULA (DURANTE A SEMANA), QUANTO TEMPO VOCÊ GASTA:****(Marque o número de horas correspondente a cada item.)**

	Até 1 hora	2 horas	3 horas	4 horas ou mais	Não realizo esta atividade
45. Assistindo TV?	(A)	(B)	(C)	(D)	(E)
46. Estudando ou fazendo lição de casa?	(A)	(B)	(C)	(D)	(E)
47. Fazendo trabalhos domésticos em casa?	(A)	(B)	(C)	(D)	(E)

**48. EM DIA DE AULA, QUANTO TEMPO VOCÊ TRABALHA FORA DE CASA?**

- (A) Até 4 horas.  
 (B) De 5 a 6 horas.  
 (C) Mais de 6 horas.  
 (D) Não trabalho fora de casa.

**49. QUANDO VOCÊ TERMINAR A 3º ANO DO EM, VOCÊ PRETENDE:**

- (A) Somente continuar estudando.  
 (B) Somente trabalhar.

(C) Continuar estudando e trabalhar.

(D) Ainda não sei.

**COM QUE FREQUÊNCIA SEUS PAIS OU RESPONSÁVEIS: (Marque apenas UMA opção em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
50. Almoçam ou jantam com você?	(A)	(B)	(C)
51. Ouvem música com você?	(A)	(B)	(C)
52. Conversam sobre livros com você?	(A)	(B)	(C)
53. Conversam sobre filmes com você?	(A)	(B)	(C)
54. Conversam sobre programas de TV com você?	(A)	(B)	(C)
55. Conversam com seus amigos/colegas da escola?	(A)	(B)	(C)
56. Conversam com outros amigos seus?	(A)	(B)	(C)
57. Conversam com o Diretor da sua escola?	(A)	(B)	(C)
58. Conversam com seus professores?	(A)	(B)	(C)
59. Conversam sobre o que acontece na escola com você?	(A)	(B)	(C)
60. Ajudam você a fazer a lição de casa?	(A)	(B)	(C)
60.1 Ajudam você a preparar em casa exames (exemplo, vestibular simulado, provas, projetos)?	(A)	(B)	(C)
61. Cobram se você fez a lição de casa?	(A)	(B)	(C)
62. Falam para você não faltar à escola?	(A)	(B)	(C)
63. Falam para você tirar boas notas?	(A)	(B)	(C)
63.1 Ajudam você em preparar os exames?	(A)	(B)	(C)
63.2 Falam com você sobre seu futuro?	(A)	(B)	(C)

**64. COM QUE FREQUÊNCIA SEUS PAIS OU RESPONSÁVEIS VÃO À REUNIÃO DE PAIS?**

(A) Sempre ou quase sempre.

(B) De vez em quando.

(C) Nunca ou quase nunca.

(D) Não sei

**65. QUAL FÊZ O RESULTADO DE SEU VESTIBULAR SIMULADO O ANO PASSADO (2009)?**

(A) Acima da média

(B) Média

(C) Abaixo da média

(D) Não passe

(E) Não sei

---

Muito obrigada pela sua colaboração!

Mariana Coolican (Pesquisadora, Universidade de Kobe, Japan, Junho 2010)

**APPENDIX D-1c Student Questionnaire Year 3 Secondary Education based on  
SAEB 2003 Japan (June 2010)**

**QUESTIONÁRIO 1**

**ALUNO/A 3er ANO EM**

**ALUNO No \_\_\_\_\_**

**Data:** .... / .... /2010

**Tempo:** .....: .... AM/PM

**Ao Estudante**

**Cara/o Estudante,**

Estas são algumas perguntas que eu preciso de responder para verifico ou fazer introduções escondidas relevantes da pesquisa. Responda que vontade lhe tomam 10-15 minutos.  
Muito Obrigada!

**Mariana Coolican**

Pesquisadora

Universidade de Kobe

Japão, Junho 2010.

**0. ESCOLA:**

- (A) PNS A.
- (B) PNS B.
- (C) PNS C.
- (D) Outra PNS.

---

**1. SEXO:**

- (A) Masculino.
- (B) Feminino.

---

**2. COMO VOCÊ SE CONSIDERA?**

- (A) Branco(a).
- (B) Pardo(a).
- (C) Preto(a).
- (D) Amarelo(a).
- (D.1) Nisei.
- (D.2) Sansei.
- (D.3) Yonsei.
- (E) Indígena.

---

**3. QUAL É O MÊS DO SEU ANIVERSÁRIO?**

- (A) Janeiro.
- (B) Fevereiro.
- (C) Março.
- (D) Abril.
- (E) Maio.
- (F) Junho.
- (G) Julho.
- (H) Agosto.
- (I) Setembro.
- (J) Outubro.

- (K) Novembro.  
(L) Dezembro.

---

**4. QUAL É O ANO DO SEU NASCIMENTO?**

- (A) 1987 (B) 1988 (C) 1989 (D) 1990 (E) 1991 (F) 1992 (G) 1993 (H) 1994 ou depois
- 

**NA SUA CASA TEM:**

(Marque apenas UMA alternativa em cada linha.)

	Sim, 1	Sim, 2	Sim, 3	Sim, 4 ou mais	Não tem
5. Televisão em cores?	(A)	(B)	(C)	(D)	(E)
6. Rádio?	(A)	(B)	(C)	(D)	(E)
7. Automóvel/carro?	(A)	(B)	(C)	(D)	(E)

---

**NA SUA CASA TEM:**

(Marque apenas UMA alternativa em cada linha.)

	Sim	Não tem
8. Videocassete?	(A)	(B)
9. Geladeira?	(A)	(B)
10. Máquina de lavar roupa?	(A)	(B)
11. Aspirador de pó?	(A)	(B)

---

**12. DENTRO DA SUA CASA TEM BANHEIRO ?**

- (A) Sim, um.  
(B) Sim, dois.  
(C) Sim, três ou mais.  
(D) Não tem.
- 

**13. NA SUA CASA TEM QUARTOS PARA DORMIR?**

- (A) Sim, um.  
(B) Sim, dois.  
(C) Sim, três ou mais.  
(D) Não tem.
- 

**14. NA SUA CASA TEM FREEZER JUNTO A GELADEIRA?**

- (A) Sim.  
(B) Não.  
(C) Não sei.
- 

**15. NA SUA CASA TEM FREEZER SEPARADO DA GELADEIRA?**

- (A) Sim.  
(B) Não.  
(C) Não sei.
- 

**16. NA SUA CASA TEM COMPUTADOR COM INTERNET?**

- (A) Sim.  
(B) Não.  
(C) Não sei.
- 

**17. NA SUA CASA TEM COMPUTADOR SEM INTERNET?**

- (A) Sim.



- (B) Não.  
(C) Não sei.

---

**18. ALÉM DOS LIVROS ESCOLARES, QUANTOS LIVROS HÁ EM SUA CASA?**

- (A) O bastante para encher uma prateleira (1 a 20 livros).  
(B) O bastante para encher uma estante (21 a 100).  
(C) O bastante para encher várias estantes (mais de 100 livros).  
(D) Nenhum.
- 

**ONDE VOCÊ MORA:**

(Marque SIM ou NÃO em cada linha.)

	Sim	Não
19. Existe eletricidade?	(A)	(B)
20. Chega água pela torneira?	(A)	(B)

---

**21. NA SUA CASA É?**

- (A) Casa  
(B) Apartamento  
(C) Mansão  
(D) Outro
- 

**22. QUANTAS PESSOAS MORAM COM VOCÊ?**

- (A) 0 (B) 1 (C) 2 (D) 3 (E) 4 (F) 5 (G) 6 (H) 7 (I) 8 (J) 9 (K) 10 ou mais.
- 

**23. VOCÊ MORA COM SUA MÃE?**

- (A) Sim.  
(B) Não.  
(C) Não. Moro com outra mulher responsável por mim.
- 

**24. SUA MÃE SABE LER E ESCRIVER PORTUGUES?**

- (A) Sim.  
(B) Não.  
(C) Não sei.
- 

**24.1 SUA MÃE SABE LER E ESCRIVER JAPONES?**

- (A) Sim.  
(B) Não.  
(C) Não sei.
- 

**25. ATÉ QUE SÉRIE SUA MÃE ESTUDOU?**

- (A) Nunca estudou.  
(B) Não completou a 4a série (antigo primário).  
(C) Completou a 4a série (antigo primário).  
(D) Não completou a 8a série (antigo ginásio).  
(E) Completou a 8a série (antigo ginásio).  
(F) Não completou o Ensino Médio (antigo 2o grau).  
(G) Completou o Ensino Médio (antigo 2o grau).  
(H) Começou mas não completou a faculdade.  
(I) Completou a faculdade.  
(J) Não sei.
-

<b>26. VOCÊ VÊ A SUA MÃE LENDO?</b> (A) Sim. (B) Não.	<b>31. QUEM É A PESSOA QUE ACOMPANHA MAIS DE PERTO SUA VIDA ESCOLAR?</b> <b>(Marque apenas uma alternativa)</b> (A) Minha mãe. (B) Outra mulher da minha família. (C) Meu pai. (D) Outro homem da minha família. (E) Empregada. (F) Ninguém.
<b>27. VOCÊ MORA COM SEU PAI?</b> (A) Sim. (B) Não. (C) Não. Moro com outro homem responsável por mim.	
<b>28. SEU PAI SABE LER E ESCREVER PORTUGUES?</b> (A) Sim. (B) Não. (C) Não sei.	
<b>28.1 SEU PAI SABE LER E ESCREVER JAPONES?</b> (A) Sim. (B) Não. (C) Não sei.	
<b>29. ATÉ QUE SÉRIE SEU PAI ESTUDOU?</b> (A) Nunca estudou. (B) Não completou a 4a série (antigo primário). (C) Completou a 4a série (antigo primário). (D) Não completou a 8a série (antigo ginásio). (E) Completou a 8a série (antigo ginásio). (F) Não completou o Ensino Médio (antigo 2º grau). (G) Completou o Ensino Médio (antigo 2º grau). (H) Começou mas não completou a faculdade. (I) Completou a faculdade. (J) Não sei.	<b>32. QUAL A ESCOLARIDADE DA PESSOA INDICADA ACIMA?</b> (A) Nunca estudou (B) Não completou a 4a série (antigo primário). (C) Completou a 4a série (antigo primário). (D) Não completou a 8a série (antigo ginásio). (E) Completou a 8a série (antigo ginásio). (F) Não completou o Ensino Médio (antigo 2º grau). (G) Completou o Ensino Médio (antigo 2º grau). (H) Começou mas não completou a Faculdade. (I) Completou a Faculdade. (J) Não sei.
<b>30. VOCÊ VÊ O SEU PAI LENDO?</b> (A) Sim. (B) Não.	<b>33. NA SUA CASA CHEGA JORNAL PARA LER?</b> (A) Sim, todos os dias. (B) Sim, pelo menos uma vez por semana. (C) Não.

**34. NA SUA CASA CHEGAM REVISTAS DE INFORMAÇÃO GERAL (Veja, Isto É, Época, etc.)?**

- (A) Sempre ou quase sempre.  
 (B) De vez em quando.  
 (C) Nunca ou quase nunca.

**VOCÊ LÊ:**

**(Marque UMA alternativa em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
35. Revistas em quadrinhos?	(A)	(B)	(C)

36. Livros de literatura, como romance, ficção, etc?	(A)	(B)	(C)
37. Jornais?	(A)	(B)	(C)
37.1 Jornais de informação geral de Brasileiros em Japão ( <i>Tudo Bem, International Press, etc.</i> )?	(A)	(B)	(C)
38. Revistas de informação geral (Veja, Isto É, Época, etc.)?	(A)	(B)	(C)
38.1 <i>Free papers</i> ( <i>Alternativa, Gambare!, Vitrine, Mais Brasil, Acha Fácil, Folha E, Meu Carro, etc.</i> )?	(A)	(B)	(C)

---

**38.2 Que língua você usa em casa?**

- (A) Sempre japonês  
 (B) Sempre português  
 (C) Um misturado de ambas  
 (D) Outra língua

---

**38.3 Que língua você usa na escola?**

- (A) Sempre japonês  
 (B) Sempre português  
 (C) Um misturado de ambas  
 (D) Outra língua

---

**38.4 Que língua você se usa em seu vizinhança**

- (A) Sempre japonês  
 (B) Sempre português  
 (C) Um misturado de ambas  
 (D) Outra língua

---

**38.5 De que a nacionalidade seus amigos/as é?**

- (A) Japonês  
 (B) Brasileiro  
 (C) Outra nacionalidade

---

**39. VOCÊ LÊ OU FAZ CONSULTA NA BIBLIOTECA DA ESCOLA?**

- (A) Sempre ou quase sempre.  
 (B) De vez em quando.  
 (C) Nunca ou quase nunca.

---

**40. VOCÊ LÊ OU FAZ CONSULTA EM BIBLIOTECA FORA DA ESCOLA?**

- (A) Sempre ou quase sempre.  
 (B) De vez em quando.  
 (C) Nunca ou quase nunca.

---

**VOCÊ COSTUMA IR:**

(Marque UMA alternativa em cada linha.)

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
41. Ao teatro?	(A)	(B)	(C)
42. Ao cinema?	(A)	(B)	(C)
43. A shows de música?	(A)	(B)	(C)
44. A exposições?	(A)	(B)	(C)

---

**EM DIA DE AULA, QUANTO TEMPO VOCÊ GASTA:**

**(Marque o número de horas correspondente a cada item.)**

	Até 1 hora	2 horas	3 horas	4 horas ou mais	Não realizo esta atividade
45. Assistindo TV?	(A)	(B)	(C)	(D)	(E)
46. Estudando ou fazendo lição de casa?	(A)	(B)	(C)	(D)	(E)
47. Fazendo trabalhos domésticos em casa?	(A)	(B)	(C)	(D)	(E)

**48. EM DIA DE AULA, QUANTO TEMPO VOCÊ TRABALHA FORA DE CASA?**

- (A) Até 4 horas.  
 (B) De 5 a 6 horas.  
 (C) Mais de 6 horas.  
 (D) Não trabalho fora de casa.

**49. QUANDO VOCÊ TERMINAR A 3er ANO, VOCÊ PRETENDE:**

- (A) Somente continuar estudando.  
 (B) Somente trabalhar.  
 (C) Continuar estudando e trabalhar.  
 (D) Ainda não sei.

**COM QUE FREQUÊNCIA SEUS PAIS OU RESPONSÁVEIS:**

**(Marque apenas UMA opção em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
50. Almoçam ou jantam com você?	(A)	(B)	(C)
51. Ouvem música com você?	(A)	(B)	(C)
52. Conversam sobre livros com você?	(A)	(B)	(C)
53. Conversam sobre filmes com você?	(A)	(B)	(C)
54. Conversam sobre programas de TV com você?	(A)	(B)	(C)
55. Conversam com seus amigos/colegas da escola?	(A)	(B)	(C)
56. Conversam com outros amigos seus?	(A)	(B)	(C)
57. Conversam com o Diretor da sua escola?	(A)	(B)	(C)
58. Conversam com seus professores?	(A)	(B)	(C)
59. Conversam sobre o que acontece na escola com você?	(A)	(B)	(C)
60. Ajudam você a fazer a lição de casa?	(A)	(B)	(C)
60.1 Ajudam você a preparar em casa exames (exemplo, vestibular simulado, probas, projectos)?	(A)	(B)	(C)
61. Cobram se você fez a lição de casa?	(A)	(B)	(C)
62. Falam para você não faltar à escola?	(A)	(B)	(C)
63. Falam para você tirar boas notas?	(A)	(B)	(C)
63.1 Ajudam você em preparar os exames?	(A)	(B)	(C)
63.2 Falam com você sobre seu futuro?	(A)	(B)	(C)

**64. COM QUE FREQUÊNCIA SEUS PAIS OU RESPONSÁVEIS VÃO À REUNIÃO DE PAIS?**

- (A) Sempre ou quase sempre.  
 (B) De vez em quando.  
 (C) Nunca ou quase nunca.  
 (D) Não sei

Muito obrigada para sua amável colaboração!

Mariana Coolican  
 Pesquisadora  
 Universidade de Kobe, Japão, Junho 2010.

**APPENDIX D-1d Student Questionnaire Grades 8-9 and Years 1-2-3 based on  
SAEB 2003 Brazil (May 2011)**

**QUESTIONÁRIO 1**

**ALUNO No. \_\_\_\_**

**ALUNO/A**  
**8ª Série EF**  
**9ª Série EF**  
**1er ano**  
**2do ano**  
**3er ano**

**Data: .... / .... /2011**

**Ao Estudante**

**Cara/o Estudante,**

Estas são algumas perguntas que eu preciso para verificar ou fazer introduções relevantes da pesquisa. Responda por favor! Deve tomar um tempo de 10-15 minutos. Muito Obrigada!

**Mariana Coolican**

Pesquisadora  
Universidade de Kobe  
Brasil, maio 2011

**0. COLEGIO:**

- (A) PNS D (Marília, SP).  
(B) PNS E (Londrina, PR).  
(C) PNS D (Curitiba, PR).

**1. SEXO:**

- (A) Masculino.  
(B) Feminino.

**2. COMO VOCÊ SE CONSIDERA?**

- (A) Branco(a).  
(B) Pardo(a).  
(C) Preto(a).  
(D) Amarelo(a).

**2.1.**

- (D.1) Nisei  
(D.2) Sansei  
(D.3) Yonsei  
(E) Indígena.

**3. QUAL É O MÊS DO SEU ANIVERSÁRIO?**

- (A) Janeiro. (B) Fevereiro. (C) Março. (D) Abril. (E) Maio. (F) Junho. (G) Julho. (H) Agosto. (I) Setembro. (J) Outubro. (K) Novembro. (L) Dezembro.

**4. QUAL É O ANO DO SEU NASCIMENTO?**

- (A) 1987 (B) 1988 (C) 1989 (D) 1990 (E) 1991 (F) 1992 (G) 1993 (H) 1994 ou depois

**NA SUA CASA TEM: (Marque apenas UMA alternativa em cada linha.)**

	Sim, 1	Sim, 2	Sim, 3	Sim, 4 ou mais	Não tem
--	--------	--------	--------	----------------	---------

5. Televisão em cores?	(A)	(B)	(C)	(D)	(E)
6. Rádio?	(A)	(B)	(C)	(D)	(E)
7. Automóvel/carro?	(A)	(B)	(C)	(D)	(E)

**NA SUA CASA TEM: (Marque apenas UMA alternativa em cada linha.)**

	Sim	Não tem
8. Videocassete?	(A)	(B)
9. Geladeira?	(A)	(B)
10. Máquina de lavar roupa?	(A)	(B)
11. Aspirador de pó?	(A)	(B)

**12. DENTRO DA SUA CASA TEM BANHEIRO ?**

- (A) Sim, um.  
 (B) Sim, dois.  
 (C) Sim, três ou mais.  
 (D) Não tem.

**13. NA SUA CASA TEM QUARTOS PARA DORMIR?**

- (A) Sim, um.  
 (B) Sim, dois.  
 (C) Sim, três ou mais.  
 (D) Não tem.

**14. NA SUA CASA TEM FREEZER JUNTO A GELADEIRA?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.

**15. NA SUA CASA TEM FREEZER SEPARADO DA GELADEIRA?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.

**16. NA SUA CASA TEM COMPUTADOR COM INTERNET?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.

**17. NA SUA CASA TEM COMPUTADOR SEM INTERNET?**

- (A) Sim.  
 (B) Não.  
 (C) Não sei.

**18. ALÉM DOS LIVROS ESCOLARES, QUANTOS LIVROS HÁ EM SUA CASA?**

- (A) O bastante para encher uma prateleira (1 a 20 livros).  
 (B) O bastante para encher uma estante (21 a 100).  
 (C) O bastante para encher várias estantes (mais de 100 livros).  
 (D) Nenhum.

**ONDE VOCÊ MORA:**

**(Marque SIM ou NÃO em cada linha.)**

	Sim	Não
19. Existe eletricidade?	(A)	(B)

20. Chega água pela torneira?	(A)	(B)
-------------------------------	-----	-----

**21. A SUA RESIDÊNCIA É?**

- (A) Casa  
(B) Apartamento  
(C) Mansão  
(D) Outro

**22. QUANTAS PESSOAS MORAM COM VOCÊ?**

- (A) 0 (B) 1 (C) 2 (D) 3 (E) 4 (F) 5 (G) 6 (H) 7 (I) 8 (J) 9 (K) 10 ou mais.

**23. VOCÊ MORA COM SUA MÃE?**

- (A) Sim.  
(B) Não.  
(C) Não. Moro com outra mulher responsável por mim.

**24. SUA MÃE SABE LER E ESCREVER PORTUGUÊS?**

- (A) Sim.  
(B) Não.  
(C) Não sei.

**25. ATÉ QUE SÉRIE SUA MÃE ESTUDOU?**

- (A) Nunca estudou.  
(B) Não completou a 4a série (antigo primário).  
(C) Completou a 4a série (antigo primário).  
(D) Não completou a 8a série (antigo ginásio).  
(E) Completou a 8a série (antigo ginásio).  
(F) Não completou o Ensino Médio (antigo 2o grau).  
(G) Completou o Ensino Médio (antigo 2o grau).  
(H) Começou mas não completou a faculdade.  
(I) Completou a faculdade.  
(J) Não sei.

<b>26. VOCÊ VÊ A SUA MÃE LENDO?</b> (A) Sim. (B) Não.	<b>31. QUEM É A PESSOA QUE ACOMPANHA MAIS DE PERTO SUA VIDA ESCOLAR?</b> (Marque apenas uma alternativa) (A) Minha mãe. (B) Outra mulher da minha família. (C) Meu pai. (D) Outro homem da minha família. (E) Empregada. (F) Ninguém.
<b>27. VOCÊ MORA COM SEU PAI?</b> (A) Sim. (B) Não. (C) Não. Moro com outro homem responsável por mim.	
<b>28. SEU PAI SABE LER E ESCREVER PORTUGUÊS?</b> (A) Sim. (B) Não. (C) Não sei.	
<b>29. ATÉ QUE SÉRIE SEU PAI ESTUDOU?</b> (A) Nunca estudou. (B) Não completou a 4a série (antigo primário). (C) Completou a 4a série (antigo primário).	
	<b>32. QUAL A ESCOLARIDADE DA PESSOA INDICADA ACIMA?</b> (A) Nunca estudou (B) Não completou a 4a série (antigo primário). (C) Completou a 4a série (antigo primário). (D) Não completou a 8a série (antigo ginásio). (E) Completou a 8a série (antigo ginásio).

(D) Não completou a 8a série (antigo ginásio). (E) Completou a 8a série (antigo ginásio). (F) Não completou o Ensino Médio (antigo 2º grau). (G) Completou o Ensino Médio (antigo 2o grau). (H) Começou mas não completou a faculdade. (I) Completou a faculdade. (J) Não sei.	(F) Não completou o Ensino Médio (antigo 2o grau). (G) Completou o Ensino Médio (antigo 2o grau). (H) Começou mas não completou a Faculdade. (I) Completou a Faculdade. (J) Não sei.
<b>30. VOCÊ VÊ O SEU PAI LENDO?</b> (A) Sim. (B) Não.	<hr/> <b>33. NA SUA CASA CHEGA JORNAL PARA LER?</b> (A) Sim, todos os dias. (B) Sim, pelo menos uma vez por semana. (C) Não.

**34. NA SUA CASA CHEGAM REVISTAS DE INFORMAÇÃO GERAL** (Veja, Isto É, Época, etc.)?

- (A) Sempre ou quase sempre.  
(B) De vez em quando.  
(C) Nunca ou quase nunca.

**VOCÊ LÊ: (Marque UMA alternativa em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
35. Revistas em quadrinhos?	(A)	(B)	(C)
36. Livros de literatura, como romance, ficção, etc?	(A)	(B)	(C)
37. Jornais?	(A)	(B)	(C)
37.1 Jornais de informação geral de Brasileiros em Japão (Tudo Bem, International Press, etc.)?	(A)	(B)	(C)
38. Revistas de informação geral (Veja, Isto É, Época, etc.)?	(A)	(B)	(C)
38.1 Free papers (Alternativa, Gambare!, Vitrine, Mais Brasil, Acha Fácil, Folha E, Meu Carro, etc.)?	(A)	(B)	(C)

**38.2 Que língua você usa em casa?**

- (A) Sempre japonês  
(B) Sempre português  
(C) Uma mistura de ambas  
(D) Outra língua

**38.3 Que língua você usa na escola?**

- (A) Sempre japonês  
(B) Sempre português  
(C) Uma mistura de ambas  
(D) Outra língua

**38.4 Que língua você se usa na sua vizinhança**

- (A) Sempre japonês  
(B) Sempre português  
(C) Uma mistura de ambas



(D) Outra língua

---

**38.5 De que a nacionalidade seus amigos/as é?**

- (A) Japonês  
(B) Brasileiro  
(C) Outra nacionalidade

---

**39. VOCÊ LÊ OU FAZ CONSULTA NA BIBLIOTECA DA ESCOLA?**

- (A) Sempre ou quase sempre.  
(B) De vez em quando.  
(C) Nunca ou quase nunca.

---

**40. VOCÊ LÊ OU FAZ CONSULTA EM BIBLIOTECA FORA DA ESCOLA?**

- (A) Sempre ou quase sempre.  
(B) De vez em quando.  
(C) Nunca ou quase nunca.

---

**VOCÊ COSTUMA IR: (Marque UMA alternativa em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
41. Ao teatro?	(A)	(B)	(C)
42. Ao cinema?	(A)	(B)	(C)
43. A shows de música?	(A)	(B)	(C)
44. A exposições?	(A)	(B)	(C)

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**EM DIA DE AULA (DURANTE A SEMANA), QUANTO TEMPO VOCÊ GASTA:  
(Marque o número de horas correspondente a cada item.)**

	Até 1 hora	2 horas	3 horas	4 horas ou mais	Não realizo esta atividade
45. Assistindo TV?	(A)	(B)	(C)	(D)	(E)
46. Estudando ou fazendo lição de casa?	(A)	(B)	(C)	(D)	(E)
47. Fazendo trabalhos domésticos em casa?	(A)	(B)	(C)	(D)	(E)

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**48. EM DIA DE AULA, QUANTO TEMPO VOCÊ TRABALHA FORA DE CASA?**

- (A) Até 4 horas.  
(B) De 5 a 6 horas.  
(C) Mais de 6 horas.  
(D) Não trabalho fora de casa.

---

**49. QUANDO VOCÊ TERMINAR A 8ª Série DO EF, VOCÊ PRETENDE:**

- (A) Somente continuar estudando.  
(B) Somente trabalhar.  
(C) Continuar estudando e trabalhar.  
(D) Ainda não sei.

---

**COM QUE FREQUÊNCIA SEUS PAIS OU RESPONSÁVEIS: (Marque apenas UMA opção em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
50. Almoçam ou jantam com você?	(A)	(B)	(C)

51. Ouvem música com você?	(A)	(B)	(C)
52. Conversam sobre livros com você?	(A)	(B)	(C)
53. Conversam sobre filmes com você?	(A)	(B)	(C)
54. Conversam sobre programas de TV com você?	(A)	(B)	(C)
55. Conversam com seus amigos/colegas da escola?	(A)	(B)	(C)
56. Conversam com outros amigos seus?	(A)	(B)	(C)
57. Conversam com o Diretor da sua escola?	(A)	(B)	(C)
58. Conversam com seus professores?	(A)	(B)	(C)
59. Conversam sobre o que acontece na escola com você?	(A)	(B)	(C)
60. Ajudam você a fazer a lição de casa?	(A)	(B)	(C)
60.1 Ajudam você a preparar em casa exames (exemplo, vestibular simulado, provas, projetos)?	(A)	(B)	(C)
61. Cobram se você fez a lição de casa?	(A)	(B)	(C)
62. Falam para você não faltar à escola?	(A)	(B)	(C)
63. Falam para você tirar boas notas?	(A)	(B)	(C)
63.1 Ajudam você em preparar os exames?	(A)	(B)	(C)
63.2 Falam com você sobre seu futuro?	(A)	(B)	(C)

**64. COM QUE FREQUÊNCIA SEUS PAIS OU RESPONSÁVEIS VÃO À REUNIÃO DE PAIS?**

- (A) Sempre ou quase sempre.
- (B) De vez em quando.
- (C) Nunca ou quase nunca.
- (D) Não sei

**65. QUAL FÊZ O RESULTADO DE SEU VESTIBULAR SIMULADO O ANO PASSADO (2010)?**

- (A) Acima da média
- (B) Média
- (C) Abaixo da média
- (D) Não passe
- (E) Não sei

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Muito obrigada pela sua colaboração!  
Mariana Coolican (Pesquisadora, Universidade de Kobe, Japan, maio 2011)

**APPENDIX D-2 Model of Family Questionnaire for Brazil**  
**QUESTIONÁRIO FAMILIA**  
**FAMILIA ALUNO/A**

**FAMILIA No** \_\_\_\_\_

<b>7ª Serie EF</b>	<b>1º ANO EM</b>
<b>8ª Serie EF</b>	<b>2º ANO EM</b>
	<b>3º ANO EM</b>

**Data:** .... / .... /2010

**Tempo:** ..... AM/PM

**Ao Familia**

**Cara/o Mai ou Pai,**

Estas são algumas perguntas que eu preciso para verificar ou fazer introduções relevantes da pesquisa. Responda por favor! Deve tomar um tempo de 10-15 minutos. Muito Obrigada!

**Mariana Coolican**

Pesquisadora

Universidade de Kobe

Japão, Junho 2010.

**0. ESCOLA:**

- (A) PNS A
- (B) PNS B
- (C) PNS C
- (D) Outra PNS

<p><b>1. SEXO:</b></p> <p>(A) Masculino.</p> <p>(B) Feminino.</p>	<p><b>8. QUAL é SUA SITUAÇÃO DENTRO DA POSIÇÃO NO MERCADO DE TRABALHO DO JAPÃO?</b></p> <p>(A) Trabalhou.</p> <p>(B) Trabalhou e afazeres domésticos.</p> <p>(C) Trabalhou e estudou.</p> <p>(D) Ferias e licenças.</p> <p>(E) Desempregado.</p> <p>(F) Afazeres domesticos.</p> <p>(G) Estudando.</p> <p>(H) Nem trabalha nem estuda.</p>
<p><b>2. IDADE:</b></p> <p>(A) Até 24 anos.</p> <p>(B) De 25 a 29 anos.</p> <p>(C) De 30 a 34 anos.</p> <p>(D) De 35 a 39 anos.</p> <p>(E) De 40 a 44 anos.</p> <p>(F) De 45 a 49 anos.</p> <p>(G) De 50 a 54 anos.</p> <p>(H) 55 anos ou mais.</p>	<p><b>9. QUAL é SUA SITUAÇÃO DENTRO DO TIPO DE INSERÇÃO NO MERCADO DE TRABALHO POR RAMO DE ATIVIDADE?</b></p> <p>(A) Produção.</p> <p>(B) Ocupação técnica e especial.</p> <p>(C) Serviços e vendas.</p> <p>(D) Serviços de limpeza.</p> <p>(E) Serviços e escritórios.</p> <p>(F) Transportes e comunicações.</p> <p>(G) Outro.</p>
<p><b>3. COMO VOCÊ SE CONSIDERA?</b></p> <p>(A) Branco(a).</p> <p>(B) Pardo(a).</p> <p>(C) Preto(a).</p> <p>(D) Amarelo(a).</p> <p>(E) Indígena.</p>	<p><b>10. QUAL O SEU SALÁRIO BRUTO (COM ADICIONAIS, SE HOVER)? (Soma de tudo o que você ganha como trabalhador(a).)</b></p> <p>(A) Até JPY 150,000.</p>
<p><b>4. EM TERMOS DE descendência, VOCÊ É:</b></p> <p>(A) Descendente de japoneses por parte de pai e mãe.</p> <p>(B) Descendente de japoneses por parte de só um deles.</p> <p>(C) Não são descendente.</p> <p>(D) Casados com japones/a.</p> <p>(E) Seu casado com descendentes japoneses.</p> <p><b>E VOCÊ É DESCENDENTE DE JAPONESES, PASSE PARA A</b></p>	

<b>PERGUNTA 5.</b>	(B) De JPY 150,000 a JPY 200,000. (C) De JPY 200,000 a JPY 250,000. (D) De JPY 250,000 a JPY 350,000. (E) De JPY 350,000 a JPY 450,000. (F) De JPY 450,000 a JPY 550,000. (G) De JPY 550,000 a JPY 650,000. (H) Mais de JPY 650,000.
<b>5. COMO VOCÊ SE CONSIDERA?</b> (A) <i>Nisei</i> . (B) <i>Sansei</i> . (C) <i>Yonsei</i> .	<hr/> <b>11. ALÉM DA SUA TRABALHO, VOCÊ EXERCE OUTRA ATIVIDADE REMUNERADA? (Considere também atividades sem vínculo empregatício.)</b> (A) Sim. (B) Não. <b>(Passe para a questão 13.)</b>
<b>6. VOCÊ ARRIBEU A JAPÃO:</b> (A) Sozinho/a (B) Acompanhado com esposo(a)/companheiro(a) (C) Acompanhado com esposo(a) e filhos, (D) Acompanhado com os pais, irmãos, amigos (E) Outros	
<b>7. VOCÊ É:</b> (A) Casada/o. (B) Solteira/o. (C) Vive junto a sua pareja (união consensual) (D) Divorciada/o. (E) Viúva/o.	

**12. QUAL A SUA RENDA BRUTA (A SOMA DE TODOS OS SEUS RENDIMENTOS)?**

- (A) Até JPY 150,000.  
 (B) De JPY 150,000 a JPY 200,000.  
 (C) De JPY 200,000 a JPY 250,000.  
 (D) De JPY 250,000 a JPY 350,000.  
 (E) De JPY 350,000 a JPY 450,000.  
 (F) De JPY 450,000 a JPY 550,000.  
 (G) De JPY 550,000 a JPY 650,000.  
 (H) Mais de JPY 650,000.

**13. QUAL É A RENDA BRUTA FAMILIAR?**

- (A) Até JPY 150,000.  
 (B) De JPY 150,000 a JPY 200,000.  
 (C) De JPY 200,000 a JPY 250,000.  
 (D) De JPY 250,000 a JPY 350,000.  
 (E) De JPY 350,000 a JPY 450,000.  
 (F) De JPY 450,000 a JPY 550,000.  
 (G) De JPY 550,000 a JPY 650,000.  
 (H) Mais de JPY 650,000.

**14. DAS OPÇÕES ABAIXO, ASSINALE A QUE MELHOR DESCREVE O SEU NÍVEL MÁXIMO DE ESCOLARIDADE.**

- (A) Não completei o Ensino Fundamental (antigo 1º Grau).  
 (B) Ensino Fundamental (antigo 1º Grau).  
 (C) Ensino Médio – Magistério (antigo 2º Grau).  
 (D) Ensino Médio – outros (antigo 2o Grau).  
 (E) Ensino Superior – Pedagogia.

- (F) Ensino Superior – Outros.  
 (G) Ensino Superior – Licenciatura.  
 (H) Ensino Superior – Outros.

**15. HÁ QUANTOS ANOS VOCÊ OBTVEU O NÍVEL DE ESCOLARIDADE ASSINALADO NO ITEM ANTERIOR?**

- (A) Até 3 anos.  
 (B) De 4 a 7 anos.  
 (C) De 8 a 14 anos.  
 (D) De 15 a 20 anos.  
 (E) Há mais de 20 anos.

**Ê NÃO FEZ CURSO SUPERIOR, PASSE PARA A PERGUNTA 19.**

**16. DE QUE FORMA VOCÊ REALIZOU O CURSO SUPERIOR?**

- (A) Presencial.  
 (B) Semi-presencial.  
 (C) A distância.

**17. ENTRE AS MODALIDADES DE CURSOS DE PÓSGRADUAÇÃO LISTADAS ABAIXO, ASSINALE A OPÇÃO QUE CORRESPONDE AO CURSO DE MAIS ALTA TITULAÇÃO QUE VOCÊ COMPLETOU OU ESTÁ CURSANDO:**

- (A) Não fiz ou ainda não completei curso de pósgraduação.  
 (B) Aperfeiçoamento (mínimo de 180 horas).  
 (C) Especialização (mínimo de 360 horas).  
 (D) Mestrado Profissionalizante.  
 (E) Mestrado Acadêmico.  
 (F) Doutorado.

<b>18. ÁREA TEMÁTICA DO CURSO DE PÓS-GRADUAÇÃO:</b> (A) Educação (B) Engenharia (C) Ciências econômicas (D) Arquiteto (E) Arte (F) Medicina (G) Outros.	<b>21. QUANTOS COLEGAS FAZEM USO DOS CONHECIMENTOS ADQUIRIDOS NAS ATIVIDADES DE FORMAÇÃO CONTINUADA PROMOVIDAS POR SUO EMPREGADOR/A?</b> (A) Poucos. (B) Menos da metade. (C) Mais da metade. (D) Quase todos.
<b>19. VOCÊ PROMOVEU ALGUMA ATIVIDADE DE FORMAÇÃO CONTINUADA (ATUALIZAÇÃO, TREINAMENTO, CAPACITAÇÃO, ETC.) EN SEU TRABALHO?</b> (A) Sim. (B) Não.	<b>22. QUE laços são IMPORTANTES COMO REDES SOCIAIS PARA você?</b> (A) Família (pais, crianças, e irmãos). (B) Parentes (tias, tios, sobrinha, sobrinho, e primos). (C) Amigos do pre-migração (aqueles diferentes da família e dos parentes com quem você era familiar em Brasil antes da migração). (D) Amigos do post-migração (Brasileiros encontrados em Japão após a migração). (E) Amigos japoneses e conhecidos.
<b>20. QUAL FOI A PROPORÇÃO DE TRABALHADORES DA SUA COMPANHIA QUE PARTICIPOU DAS ATIVIDADES DE FORMAÇÃO CONTINUADA PROMOVIDAS POR SUO EMPREGADOR/A NOS ÚLTIMOS DOIS ANOS?</b>	

- |   |  |
|---|--|
| (A) Menos de 10%.<br>(B) Entre 11% e 30%.<br>(C) Entre 31% e 50%.<br>(D) Mais de 51%.<br>(E) Não sei. |  |
|---|--|

**23. VOCÊ SABE LER E ESCREVER JAPONÊS?**

- (A) Sim.  
(B) Não.  
(C) Não sei.

**24. ATÉ QUE SÉRIE VOCÊ COMPLETOU SU NÍVEL DE JAPONÊS?**

- (A) Nunca estudou.  
(B) Não completou o nível básico.  
(C) Completou a nível básico.  
(D) Não completou o nível intermediário.  
(E) Completou o nível intermediário.  
(F) Não completou o nível superior.  
(G) Completou o nível superior.  
(H) Começou a estudar japonês em Brasil.  
(I) Começou a estudar japonês em Japão.  
(J) Não sei.

**25. Conhecimento da língua japonesa**

**Expressão oral:**

- (A) Não fala nada o japonês.  
(B) Fala um pouco o japonês.  
(C) Fala bem o japonês.  
(D) Fala de forma regular.  
(E) Não respondeu.

**26. Conhecimento da língua lida:**

- (A) Nenhum.  
(B) Le pouco japonês.  
(C) Le regular japonês.  
(D) Le alto nível do japonês.  
(E) Le muito alto nível de japonês.  
(F) Não respondeu.

**27. Entendimento da língua japonesa:**

- (A) Nenhum.  
(B) Entende pouco japonês.  
(C) Entende regular japonês.  
(D) Entende alto japonês.  
(E) Entende muito alto japonês.  
(F) Não respondeu.

**28. Conhecimento da língua escrita:**

- (A) Nenhum.  
(B) Escreve pouco japonês.  
(C) Escreve regular japonês.  
(D) Escreve alto japonês.  
(E) Escreve muito alto japonês.

(F) Não respondeu.

---

**29. VOCE SABE LER E ESCREVER PORTUGUÊS?**

- (A) Sim.  
(B) Não.  
(C) Não sei.
- 

**NA SUA CASA TEM: (Marque apenas UMA alternativa em cada linha.)**

	Sim, 1	Sim, 2	Sim, 3	Sim, 4 ou mais	Não tem
30. Televisão em cores?	(A)	(B)	(C)	(D)	(E)
31. Rádio?	(A)	(B)	(C)	(D)	(E)
32. Automóvel/carro?	(A)	(B)	(C)	(D)	(E)

**NA SUA CASA TEM: (Marque apenas UMA alternativa em cada linha.)**

	Sim	Não tem
33. Videocassete?	(A)	(B)
34. Geladeira?	(A)	(B)
35. Máquina de lavar roupa?	(A)	(B)
36. Aspirador de pó?	(A)	(B)

**37. DENTRO DA SUA CASA TEM BANHEIRO ?**

- (A) Sim, um.  
(B) Sim, dois.  
(C) Sim, três ou mais.  
(D) Não tem.
- 

**38. NA SUA CASA TEM QUARTOS PARA DORMIR?**

- (A) Sim, um.  
(B) Sim, dois.  
(C) Sim, três ou mais.  
(D) Não tem.
- 

**39. NA SUA CASA TEM FREEZER JUNTO A GELADEIRA?**

- (A) Sim.  
(B) Não.  
(C) Não sei.
- 

**40. NA SUA CASA TEM FREEZER SEPARADO DA GELADEIRA?**

- (A) Sim.  
(B) Não.  
(C) Não sei.
- 

**41. NA SUA CASA TEM COMPUTADOR COM INTERNET?**

- (A) Sim.  
(B) Não.  
(C) Não sei.
- 

**42. NA SUA CASA TEM COMPUTADOR SEM INTERNET?**

- (A) Sim.  
(B) Não.  
(C) Não sei.

**43. ALÉM DOS LIVROS ESCOLARES, QUANTOS LIVROS HÁ EM SUA CASA?**

- (A) O bastante para encher uma prateleira (1 a 20 livros).  
(B) O bastante para encher uma estante (21 a 100).  
(C) O bastante para encher várias estantes (mais de 100 livros).  
(D) Nenhum.

---

**ONDE VOCÊ MORA:****(Marque SIM ou NÃO em cada linha.)**

	Sim	Não
44. Existe eletricidade?	(A)	(B)
45. Chega água pela torneira?	(A)	(B)

---

**46. SEU TIPO DE MORADIA É:**

- (A) Propia.  
(B) Alugada pelo governo local.  
(C) Alugada por empresa.  
(D) Alugada por particular.  
(E) Alugada pelo empregador.  
(F) Quartos.  
(G) Coabitação.

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**47. A SUA RESIDÊNCIA É?**

- (A) Casa.  
(B) Apartamento.  
(C) Mansão.  
(D) Outro.

---

**48. QUANTAS PESSOAS MORAM COM VOCÊ?**

- (A) 0 (B) 1 (C) 2 (D) 3 (E) 4 (F) 5 (G) 6 (H) 7 (I) 8 (J) 9 (K) 10 ou mais.

---

**49. VOCÊ MORA COM SU FILHO/A?**

- (A) Sim.  
(B) Não.  
(C) Não. Meu filho/a mora com outra mulher responsável por mim.

---

**VOCÊ LÊ:****(Marque UMA alternativa em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
50. Revistas em quadrinhos?	(A)	(B)	(C)
51. Livros de literatura, como romance, ficção, etc?	(A)	(B)	(C)
52. Jornais?	(A)	(B)	(C)
53.1 Jornais de informação geral de Brasileiros em Japão ( <i>Tudo Bem, International Press, etc.</i> )?	(A)	(B)	(C)
54. Revistas de informação geral (Veja, Isto É, Época, etc.)?	(A)	(B)	(C)
55.1 Free papers ( <i>Alternativa, Gambare!, Vitrine, Mais Brasil, Acha Fácil, Folha E, Meu Carro, etc.</i> )?	(A)	(B)	(C)

---

**56. QUE língua você USA EM CASA?**



- (A) Sempre japonês.
- (B) Sempre português.
- (C) Uma mistura de ambas.
- (D) Outra língua.

**57. QUE língua você USA NO TRABALHO?**

- (A) Sempre japonês.
- (B) Sempre português.
- (C) Uma mistura de ambas.
- (D) Outra língua.

**58. QUE língua você USA NA SUA vizinhança?**

- (A) Sempre japonês.
- (B) Sempre português.
- (C) Uma mistura de ambas.
- (D) Outra língua.

**VOCÊ COSTUMA IR:**

(Marque UMA alternativa em cada linha.)

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
59. Ao teatro?	(A)	(B)	(C)
60. Ao cinema?	(A)	(B)	(C)
61. A shows de música?	(A)	(B)	(C)
62. A exposições?	(A)	(B)	(C)

**EM DIA DE TRABALHO (DURANTE A SEMANA), QUANTO TEMPO VOCÊ GASTA:**

(Marque o número de horas correspondente a cada item.)

	Até 1 hora	2 horas	3 horas	4 horas ou mais	Não realizo esta atividade
63. Assistindo TV?	(A)	(B)	(C)	(D)	(E)
64. Leindo ou trabalhando em casa?	(A)	(B)	(C)	(D)	(E)
65. Fazendo trabalhos domésticos em casa?	(A)	(B)	(C)	(D)	(E)

**66. Que tipo do visto você tem?**

- (A) Visto permanente.
- (B) Visto do estudante universitário.
- (C) Visto do trabalhador temporário (dekassegui).
- (D) Outro.

**67. Para qual das razões abaixo mencionadas você não escolhe uma escola (pública) japonesa para seu filho/a?**

- (A) Por el costo de os uniformes, utiles escolares, transporte, gastos da escola em geral.
- (B) Por constrangimentos na hora da matricula.
- (C) Por nao conseguir-me relacionar com os professores e com outros pais.
- (D) Por considerar que nao poido auxiliar os filhos nas tarefas de casa.
- (E) Por temor a perder o contato com as crianças caso elas viessem a substituir o portugues pelo japonese como lingua de uso cotidiano.
- (F) Nao sei.

**68. Qual dos problemas abaixo mencionados você pensa que seu filho/a teria se permanecesse em Japão?**

- (A) Incorpore o mesmo trabalho que eu faço.
- (B) Faça um trabalho no-qualificado.
- (C) Abandono de estudos superiores.
- (D) Não-sucesso na vida.
- (E) Dificuldades para continuar estudos superiores em Japão.
- (F) Perda da identidade brasileira.
- (G) Perda da língua portuguesa.
- (H) Outros.

**69. POR QUE MOTIVOS VOCÊ ESCOLHE UMA ESCOLA BRASILEIRA...**

- (A) Por e o domínio da língua brasileira
- (B) Por e calendario escolar brasileiro
- (C) Por el precio
- (D) Por o conveniente de os horarios
- (E) Por a cercania a su hogar
- (F) Por seguridad
- (G) Por el sistema educativo
- (H) Por el modo de avaliacao
- (I) Por todo lo anteriormente mencionado
- (J) Por outros motivos

**COM QUE FREQUÊNCIA VOCÊ OU RESPONSÁVEL: (Marque apenas UMA opção em cada linha.)**

	Sempre ou quase sempre	De vez em quando	Nunca ou quase nunca
70. Almoça ou janta com seu filho/a?	(A)	(B)	(C)
71. Ouve música com seu filho/a?	(A)	(B)	(C)
72. Conversa sobre livros com seu filho/a?	(A)	(B)	(C)
73. Conversa sobre filmes com seu filho/a?	(A)	(B)	(C)
74. Conversa sobre programas de TV com seu filho/a?	(A)	(B)	(C)
75. Conversa com seus amigos/colegas da trabalho/compania/fabrica?	(A)	(B)	(C)
76. Conversam com outros amigos do seu filho/a?	(A)	(B)	(C)
77. Conversam com o Diretor da escola do seu filho/a?	(A)	(B)	(C)
78. Conversam com os professores do seu filho/a?	(A)	(B)	(C)
79. Conversam sobre o que acontece na escola com seu filho/a?	(A)	(B)	(C)
80. Ajuda você a fazer a lição de casa a seu filho/a?	(A)	(B)	(C)
80.1 Ajuda você a preparar em casa exames (exemplo, vestibular simulado, provas, projetos) de seu filho/a?	(A)	(B)	(C)
81. Cobra você fez a lição de casa a seu filho/a?	(A)	(B)	(C)
82. Fala você a seu filho/a para não faltar à escola?	(A)	(B)	(C)
83. Fala você a seu filho/a para tirar boas	(A)	(B)	(C)

notas?			
83.1 Ajuda você a seu filho/a em preparar os exames/provas?	(A)	(B)	(C)
83.2 Fala você com seu filho sobre seu futuro?	(A)	(B)	(C)

**84. QUAL FÊZ O RESULTADO DE SEU FILHO/A EM VESTIBULAR SIMULADO O ANO PASSADO (2009)?**

- (A) Acima da média.
- (B) Média.
- (C) Abaixo da média.
- (D) Não passe.
- (E) Não sei.

**85. FAZ A CULTURA DA ESCOLA (calendário, UNIFORME, ATIVIDADES EXTRA-CURRICULARES, ACOPLAMENTO DA COMUNIDADE, ESPORTES, currículo) REFLETE...**

- (A) Os valores você promove em sua família?
- (B) Alguns elementos da cultura brasileira?
- (C) Alguns elementos da cultura japonesa?
- (d) Um misturado de ambas as culturas?
- (E) Não sei.

**86. COM QUE FREQUÊNCIA VOCÊ VÃO À REUNIÃO DE PAIS DA ESCOLA?**

- (A) Sempre ou quase sempre.
- (B) De vez em quando.
- (C) Nunca ou quase nunca.
- (D) Não sei

**87. COM QUE FREQUÊNCIA VOCÊ PARTICIPA DA DISCUSSÃO DE PROFESSORES DA ESCOLA?**

- (A) Sempre ou quase sempre.
- (B) De vez em quando.
- (C) Nunca ou quase nunca.
- (D) Não sei.

---

**88. SEU FILHO/A TEN DISPONIBILIDADE DE TEMPO/INTERESSE EM frequentar CURSOS DE língua FORA DA ESCOLA?**

- (A) Nem tempo nem interesse.
  - (B) Tempo, mas nao interesse.
  - (C) Gostaria, mas nao sabe como.
  - (D) Ja frequenta.
  - (E) Sem Resposta.
- 

**89. SEU FILHO/A TEN DISPONIBILIDADE DE TEMPO/INTERESSE EM frequentar CURSOS DE CULTURA FORA DA ESCOLA (CERAMICA, DANZA, ESCULTURA, MUSICA, PINTURA, OUTRA)?**

- (A) Nem tempo nem interesse.
  - (B) Tempo, mas nao interesse.
  - (C) Gostaria, mas nao sabe como.
  - (D) Ja frequenta.
  - (E) Sem Resposta.
-

**90. Intenção DE RETORNO AO BRASIL. Voce...**

- (A) Pretende fixar-se no Japão?
  - (B) Pretende retornar no próximo ano?
  - (C) Pretende retornar em 3 anos a partir de agora?
  - (D) Pretende retornar em um prazo de até 10 anos?
  - (E) Pretende retornar, mas a longo prazo e sem prazo definido?
  - (F) Pretende mover-se entre o Brasil e o Japão?
  - (G) Não sei.
- 

**91. É SEU FILHO/A...?**

- (A) Retornara a Brasil após ter terminado o 3ro ano de ensino medio?
- (B) Permanecera em Japão após ter terminado o 3ro ano de ensino medio?
- (C) Depende de meus trabalho/contrato.
- (D) Depende da decisão da minho/a filho/a.
- (E) Não sei.

**92. DEPOIS DE TERMINAR O 3RO ANO DE ENSINO MEDIO, SUA FILHO/A vão CONTINUAR...**

- (A) Estudando em Japão?
  - (B) Trabalhando em Japão?
  - (C) Estudando e trabalhando em Japão?
  - (D) Estudando em Brasil?
  - (E) Trabalhando em Brasil?
  - (F) Estudando e trabalhando em Brasil?
  - (G) Não sei.
- 

**93. BASEADO EM SUA experiência, você ACREDITA QUE SEU FILHO/A terá UM MELHOR FUTURO DO QUE você TER, SE...**

- (a) Permanece em Japão?
  - (b) Retorna a Brasil?
  - (c) Mueve-se entre Japão e Brasil?
  - (d) Vai a um tercer país (nenhum Japão nenhum Brasil)?
  - (e) Não sei.
- 

**94. O QUE você ESPERA PARA O FUTURO DE SEU FILHO/A?**

- (A) Conexiones a rede sociais (capital social)?
  - (B) Elevada instrução?
  - (C) Posição social?
  - (D) Salário digno?
  - (E) Capital cultural?
  - (F) Todo o acima mencionado.
  - (G) Não sei.
- 

Muito obrigada pela sua colaboração!  
Mariana Coolican (Pesquisadora, Universidade de Kobe,  
Japan, Junho 2010)

## APPENDIX D-3 Interview for Teachers with the Protocol (Pilot Study)

### APPENDIX D-3 教師へのインタビュー（パイロット スタディ）

### APENDICE D-3 Entrevista para Professores com o Protocolo (Estudo Piloto)

Kobe University 神戸大学 Universidade de Kobe Graduate School of International Cooperation Studies (GSICS) 国際協力研究科 Escola de Pós-Graduação em Estudos de Cooperação Internacional (GSICS) Researcher: Mariana Coolican 研究者: マリアナ・クーリカン Investigador: Mariana Coolican Theme: “Data Collection for Doctoral Dissertation: Pilot Study” テーマ: 「博士論文に向けたデータ収集: パイロット・スタディ」 Tema: “Dissertação Doutoral do Levantamento de Dados: Estudo Piloto” Interview for Teachers 教師へのインタビュー Entrevista para Professores												
Name of School: ..... 学校名..... Nome da Escola: .....												
District: 地区: Distrito: North South												
Grade: ..... 学年: ..... Classe: .....												
Teacher: ..... 教員: .....												
Professor: .....												
<table><tr><td>Arts</td><td>Chemistry</td><td>Information Technologies</td><td>History</td><td>Mathematics</td><td>Portuguese Language</td></tr><tr><td>Biology</td><td>English</td><td>Geography</td><td>Japanese</td><td>Physical Education</td><td>Sciences</td></tr></table>	Arts	Chemistry	Information Technologies	History	Mathematics	Portuguese Language	Biology	English	Geography	Japanese	Physical Education	Sciences
Arts	Chemistry	Information Technologies	History	Mathematics	Portuguese Language							
Biology	English	Geography	Japanese	Physical Education	Sciences							
Nationality: 国籍: Nacionalidade: Brazilian Japanese Japanese descendant? Nisei Sansei Yonsei												
Years of Schooling: 学年: Anos de educação: 3 years 4 years More than 4 years												
Degree: 学位:												

**Diploma:**

Technical  
 Bachelorette in teaching  
 Licentiate degree  
 Master  
 Doctorate  
 Post-doctorate

**Years of Teaching Experience:**

教育指導経験年数:

**Anos de experiência de ensino:**

1-5  
 6-10  
 11-15  
 16-20  
 21-25  
 More than 25

Date: .../.../....

日付: .../.../....

Data: .../.../....

Time: .....AM/PM

時間: .....午前/午後

Tempo: ..... AM/PM

To Ms./Mr. Teacher

Dear Madam/Sir:

ご回答していただく先生方、

À Senhora/Sr. Professor

Caro Senhora/Senhor:

Thank you for helping me by participating in this interview which will take no more than one hour. Your answers will help me better understand how your school relates to the education system.

本調査にご協力して頂き、ありがとうございます。インタビューは一時間弱を予定しております。

回答結果は、学校の教育制度への関わりについての博士論文研究にのみ使用させていただきます。

Estas são algumas perguntas que eu preciso de responder para verific ou fazer introduções escondidas relevantes da pesquisa. Respondido lhes a vontade toma-lhe 45-60 minutos. Muito Obrigada!

**Questions:**

質問:

Perguntas:

**I. About the Education System:****I. 教育制度について:****I. Sobre o sistema de instrução:**

1.1 What does your school have to do to align the Brazilian Education Systems?

1.1 1 ブラジルの教育制度に沿うため、学校はどのようにするべきだと考えますか。

1.1 Que sua escola tem que fazer para fazer o alinhamento entre o sistema de instrução japonês e o sistema de instrução brasileiro?

.....

.....

1.2 How should the Brazilian government construct its education system in Japan?

1.2 ブラジル政府は、どのように日本の教育システムに携わるべきだと考えますか。

1.2 Como o Governo Brasileiro deve fazer o sistema da instrução em Japão?

.....

.....

1.3 Hidden curriculum:

1.3 潜在カリキュラムについて:

1.3 Currículo escondido:

1.3.1 What things related to policies do you think students are learning from the school environment?

1.3.1 学校環境において生徒は、どのような政策に関する事項を学習すると考えますか。

1.3.1 Quais são as coisas relacionadas às políticas educacionais que você acha que os alunos estão aprendendo no ambiente escolar??

.....

1.3.2 What things related to practices do you think students are learning from the school environment?  
1.3.2 学校環境において生徒は、どのような実践に関する事項を学習すると考えますか。  
1.3.2 Quais coisas relacionadas a práticas você acha que os alunos estão aprendendo no ambiente escolar?

1.4 Excluded curriculum:  
1.4 カリキュラムの欠陥について:  
1.4 Currículo excluído:

1.4.1 What do you think been left out from the curriculum (either intentionally or unintentionally)?  
1.4.1 カリキュラムはどのような点が意図的に、あるいは偶発的に、欠如していると思いますか。  
1.4.1 De seus critérios: Que foi deixado para fora do currículo (intencionalmente ou involuntariamente)?

1.5 Recommended curriculum (by Education Specialists):  
1.5 推奨されているカリキュラムについて:  
1.5 Currículo recomendado (por especialistas em educação):

1.5.1 Please briefly describe the curriculum advocated by experts in the subject fields.  
1.5.1 担当科目の中で専門家に推奨されているカリキュラムがあれば教えてください。  
1.5.1 Que é o currículo advogado por peritos nos campos temáticos?

## II. Teacher Education (Training and Teaching): II. 教師教育について

### II. Instrução do professor (treinamento e ensino):

2.1 Have you ever received any training in education for cultural differences (e.g., intercultural education, multicultural education, bilingual education, intercultural communication)? If the answer is “yes”: Please describe it briefly  
2.1 文化の違いに関する教育（多文化教育、異文化コミュニケーションなど）の研修を受けたことはありますか。受けたことがあれば、具体的に教えてください。  
2.1 Você recebeu nunca algum treinamento na instrução para diferenças culturais (por exemplo, instrução intercultural, instrução multicultural, instrução bilingüe, uma comunicação intercultural)? Se a resposta é “sim”: Como era?

2.2 How do you prepare your lesson plan?  
2.2 あなたはどのように授業計画を行いますか。  
2.2 Como você prepara sua planta de lição?

2.3 How does the curriculum designed in the school meet the requirements outlined in the:  
2.3 以下の項目は、学校で用いられているカリキュラムにどの程度反映されていますか。  
2.3 Como faz o currículo projetado na escola cumprir as exigências esboçadas no:

2.3.1 Brazilian curriculum standards?  
2.3.1 ブラジルの標準的カリキュラムについて  
2.3.1 Padrões do currículo brasileiros?  
1. Very closely  
2. Closely  
3. Somewhat  
4. Hardly at all  
5. Not at all  
6. Other (please use the blank space to add more information, if needed):

2.3.2 Japanese community needs?

2.3.2 日本のコミュニティからの要請について  
 2.3.2 Necessidades da comunidade japonesa?  
 1 Very closely  
 2 Closely  
 3 Somewhat  
 4 Hardly at all  
 5 Not at all  
 6 Other (please use the blank space to add more information, if needed):  
 .....  
 .....

2.3.3 Brazilian community needs?  
 2.3.3 ブラジルのコミュニティからの要請について  
 2.3.3 Necessidades da comunidade brasileira?  
 1 Very closely  
 2 Closely  
 3 Somewhat  
 4 Hardly at all  
 5 Not at all  
 6 Other (please use the blank space to add more information, if needed):  
 .....  
 .....

2.4 Written curriculum  
 2.4 文書化されたカリキュラムについて  
 2.4 Currículo redigido:

2.4.1 To what extent do you follow the document(s) written/produced by the Brazilian school system specifying what is to be taught? (Please choose the one answer that best represents yours views by placing a tick in the appropriate response)  
 2.4.1 ブラジルの教育制度における指導要領にどの程度従っていますか。最も当てはまる項目を選択して下さい。  
 2.4.1 A que extensão você segue os originais redigidos/produziu-os pelo sistema escolar (sistema escolar brasileiro e/ou japonês) que especifica o que deve ser ensinado?  
 1 Very Closely  
 2 Closely  
 3 Somewhat  
 4 Hardly at all  
 5 Not at all  
 6 Other (please use the blank space to add more information, if needed):  
 .....  
 .....

2.4.2 To what extent do you follow the document(s) produced by your school specifying what is to be taught? (Please choose the one answer that best represents yours views by placing a tick in the appropriate response)  
 2.4.2 学校の指導要領にどの程度従っていますか。最も当てはまる項目を選択して下さい。  
 2.4.2 A que extensão você segue os originais produziu por sua especificação da escola o que deve ser ensinado?  
 1 Very closely  
 2 Closely  
 3 Somewhat  
 4 Hardly at all  
 5 Not at all  
 6 Other (please use the blank space to add more information, if needed):  
 .....  
 .....

2.4.3 To what extent do you follow the document(s) produced by the classroom teacher (i.e., you), and/or the group of teachers specifying what is to be taught?  
 2.4.3 教員が作成した指導計画（自身のを含む）にどの程度従っていますか。最も当てはまる項目を選択して下さい。  
 2.4.3 A que extensão você segue os originais produziu pelo professor da sala de aula (isto é, você), e/ou pelo grupo de especificação dos professores o que deve ser ensinado?  
 1 Very closely  
 2 Closely  
 3 Somewhat  
 4 Hardly at all  
 5 Not at all  
 6 Other (please use the blank space to add more information, if needed):  
 .....  
 .....



2.5 In which subjects does the topic of “culture” appear in the curriculum?  
 (Please choose all answers that represent your views by placing a tick in the appropriate box)  
 2.5 「文化」については、どの教科カリキュラムに含まれていますか。当てはまる項目を全て選択して下さい。  
 2.5 Em que assunto o tópico da “cultura” aparece no currículo?  
 Arts  
 Biology  
 Chemistry  
 English  
 Information Technologies  
 Geography  
 History  
 Japanese Language  
 Mathematics  
 Physical Education  
 Portuguese Language  
 Sciences

2.6 How do you treat the topic of “culture” in your classes?  
 2.6 あなたは「文化」についてどのように授業内で扱っていますか。  
 2.6 Como você trata o tópico da “cultura” em suas classes?

2.7 How do you treat the topic of “cultural differences” in your classes?  
 2.7 あなたは「文化の差異」についてどのように授業内で扱っていますか。  
 2.7 Como você trata o tópico de “diferenças culturais” em suas classes?

2.8 Which kind of topics or contents related to culture are covered by the taught curriculum (lesson plan)?  
 2.8 どのような文化に関する事例や内容が、授業にて扱われていますか。

2.8 Que tipo dos tópicos ou dos temas se relacionou para cultura ensinadas do currículo (planta de lição)?

2.9 Which kind of topics or contents related to culture are covered by the assessed curriculum (tested curriculum)?  
 2.9 生徒を評価する際に、どのような文化に関する内容が、テストなどで扱われていますか。  
 2.9 Que tipos de tópicos ou conteúdos relacionados à cultura são cobertos pelo currículo avaliado (currículo testado)

2.10 How frequently do you cover the topic “identity” in your practices?  
 2.10 授業内で、「アイデンティティ」についてどの程度扱いますか。  
 2.10 Como frequentemente você cobre o tópico “identidade” em suas práticas?  
 1 Very often  
 2 Often  
 3 Sometimes  
 4 Rarely  
 5 Never  
 6 Other (please use the blank space to add more information, if needed):

2.11 My regard for the school’s program is:  
 2.11 学校の教育プログラムに対するあなたの評価は：  
 2.11 Que é sua percepção sobre o programa da suas escola sustentações?

1 Very high  
 2 High  
 3 Neutral  
 4 Low  
 5 Very low  
 6 Other (please use the blank space to add more information, if needed):

2.12 My regard about the curriculum that my school supports is:  
2.12 学校の推奨するカリキュムに対するあなたの評価は：  
2.12 Que é sua percepção sobre o currículo suas sustentações da escola?

- 1 Very high
- 2 High
- 3 Neutral
- 4 Low
- 5 Very low
- 6 Other (please use the blank space to add more information, if needed):

.....

.....

.....

2.13 How do you feel with the standardized (written and supportive) curriculum?  
2.13 カリキュラムの標準化について、あなたはどのように考えますか。  
2.13 Você sente confortável com o currículo (redigido e de suporte) estandardizado?

- 1 Very comfortable
- 2 Comfortable
- 3 Neutral
- 4 Not so comfortable
- 5 Not comfortable at all
- 6 Other (please use the blank space to add more information, if needed):

.....

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.....

2.14 If the answer is No: What are three ways you might improve it?  
2.14 いいえの場合、どのようにしてカリキュラムを改善しますか。  
2.14 Se a resposta for Não: Quais são as três maneiras de melhorar isso?

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2.15 How does the system limit the amount of time that Japanese teachers can devote to a given topic (in this case, cultural issue)?  
2.15 日本人教員が文化に関する内容を教えることに対して、教育システムはどのような制約になっていますか。  
2.15 Que forças sistemáticas (por exemplo exames nacionais, reunião de classe infrequente, e brevidade da hora preparatória para classes) limitam a quantidade de tempo dos professores japoneses podem dedicar a um tópico dado (neste caso, edição cultural)?

.....

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2.16 What systematic forces (e.g. National exams, infrequent class meeting, and brevity of preparatory time for classes) limit the amount of time that Brazilian teachers can devote to a given topic (in this case, cultural issue)?  
2.16 ブラジル人教員が文化に関する内容を教えることに対して、教育システムはどのような制約になっていますか。  
2.16 Que forças sistemáticas (por exemplo exames nacionais, reunião de classe infrequente, e brevidade da hora preparatória para classes) limitam a quantidade de tempo dos professores brasileiros podem dedicar a um tópico dado (neste caso, edição cultural)?

.....

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2.17 Taught curriculum:  
2.17 教師の教えるカリキュラムについて:  
2.17 Currículo ensinado:

2.18 How do you produce and deliver your own curriculum?  
(I mean the one which is enacted and/or put into operation in the class).  
2.18 あなたはどのようにカリキュラムを作成し、実践していますか。  
2.18 Como você produz e entrega seu próprio currículo? (Eu significo esse que é decretado e/ou pôr na operação na classe).

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**About Teaching Materials:**  
**教材について:**  
Sobre materiais de ensino:

Supported curriculum:

教材を用いたカリキュラム:

Currículo suportado:

Which kind/type of supportive teaching materials do you use?

どのような教材を授業で用いていますか。

Que tipo/tipo de materiais de ensino de suporte você usa?

.....  
.....  
.....

To what extent do you follow the curriculum that appears in textbooks?

あなたはどの程度、教科書に扱われているカリキュラムに従っていますか。

A que extensão você segue o currículo que aparece nos livros de texto?

.....  
.....  
.....

To what extent do you follow the curriculum that appears in software?

あなたはどの程度、ソフトウェア教材のカリキュラムに従っていますか。

A que extensão você segue o currículo que aparece no software?

.....  
.....  
.....

To what extent do you follow the curriculum that appears in multimedia materials?

あなたはどの程度、マルチメディア教材のカリキュラムに従っていますか。

A que extensão você segue o currículo que aparece em materiais de multimédios?

.....  
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.....

**About School Management:**

**学校運営について:**

**Sobre a gerência da Escola:**

Which issues or problems related to culture do you face in everyday school life with:

学校運営の中で、どのような文化に関連する問題に直面しますか。

Que problemas se relacionaram à cultura você enfrenta na vida cotidiana com:

- Educational System?
- 教育制度に関して
- Sistema educativo?

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.....  
.....

- Management Staff?
- 管理職員に関して
- Equipe de funcionários da gerência?

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.....  
.....

- Administrative Staff?
- 事務職員に関して
- Equipe de funcionários administrativa?

.....  
.....  
.....

- School Colleagues?
- 教師に関して
- Colegas da escola?

.....  
.....  
.....

- Brazilian Students?
- ブラジル人生徒に関して
- Estudantes brasileiros?

.....  
.....  
.....

- Parents?
- 保護者に関して
- Pais?

.....  
.....  
.....

What aspects of everyday school life would you change?

学校環境において、変えたいことはありますか。

Que coisas você deseja mudar na vida cotidiana da escola?

In which aspects of everyday school life do you feel successful?

学校環境において、成功していると感じることはありますか。

Em que aspectos do cotidiano escolar você se sente bem-sucedido?

Which challenges do you face in everyday school life?

学校環境において、直面している課題はありますか。

Que desafios você enfrenta na vida diária da escola?

How do you manage the school calendar to prepare the topic/units contents related to cultural issues?

文化に関する問題を扱っている内容の授業計画にあたり、あなたはどの様に学校スケジュールを活用していますか。

Como você controla o calendário da escola preparar o tópico/índices das unidades relativos às edições culturais?

#### Assessment:

評価について:

Avaliação:

Tested curriculum:

テストカリキュラムについて:

Currículo testado:

To what extent do you consider the curriculum embodied in state (national) tests, school system tests, and teacher-made tests (either standardized tests, competency tests, school system tests, and/or performance tests)?

国や県レベルでの統一テスト、校内テスト、教師の作成するテストの中に含まれるカリキュラムを、どの程度重視していますか。

A que estende você considera o currículo personificado em testes (nacionais) do Estado, o sistema escolar testa, e testes professor-feitos (ou testes estandarizados, testes da competência, testes do sistema escolar, e/ou testes de desempenho)?

To what extent is the tested curriculum useful for planning your classes?

テストカリキュラムは、どの程度授業計画に有効ですか。

A que extensão o currículo testado é útil para o planejamento sua classes?

To what extent is the tested curriculum useful for students for understanding cultural issues?

生徒が文化的な問題を理解するために、テストカリキュラムはどの程度有効ですか。

A que extensão o currículo testado é útil para que os estudantes compreendam o tópico/tópicos dados (neste caso, edições culturais)?

Learned curriculum:

生徒が学んだカリキュラムについて:

Currículo instruído:

How can you refer to the learned curriculum?

生徒が学んだカリキュラムについてどのように考えますか。

Como pode você referir o currículo instruído?

.....

.....

.....

To what extend is the learned curriculum relevant for a student's development around cultural issues?  
 文化的な問題への生徒の理解は、生徒が学んだカリキュラムと、どの程度関連していますか。  
 A o que estendem o currículo instruído é relevante para o desenvolvimento em todo o tópico dado (neste caso, edições culturais) do estudante?

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.....

.....

How do you assess your own practice?  
 自身の指導法をどのように評価しますか。  
 Como você avalia sua própria prática?

.....

.....

.....

Do your students have an opportunity to assess your lesson?  
 生徒が、あなたの授業を評価する機会がありますか。

Seus estudantes têm uma oportunidade de avaliar sua lição?

.....

.....

.....

If students have such opportunity: How do you interpret their assessment?  
 生徒に授業評価の機会がある場合、あなたはどのようにその評価を受け止めますか。  
 Se os estudantes têm tal oportunidade: Como você interpreta sua avaliação?

.....

.....

.....

Thank you very much for your time and kind attention to answer these questions!  
 本調査にご協力して頂きありがとうございました。  
 Muito obrigada para suas hora e amável atenção para responde a estas perguntas!

## APPENDIX D-4 Protocol of Acceptance (for Teachers)

### Anexo D-4: Protocolo da Aceitação (para Professores)

**Kobe University**  
**Universidade de Kobe**  
**Graduate School of International Cooperation Studies (GSICS)**  
Kobe, Japan  
Kobe, Japão

**Informed Consent (For Teachers)**  
**Consentimento informado (para professores)**

**Theme:** Brazilian Network Schools in Japan and Brazil

**Researcher:** Mariana Coolican (Ph.D. Student)/Investigador: Mariana Coolican (Doutoranda)

**Telephone (Mobile):** (Researcher telephone)

**E-mail:** E-mail: (Researcher email address)

To the Teacher

Dear Madam or Sir,

Ao Professor

Cara Senhora ou Senhor,

You are invited to participate in an investigation which aims to describe the education on cultural education offered and learned at the ..... School, ..... City, Japan.

Você é convidado a participar em uma investigação que os alvos para descrever a instrução cultural ofereçam e aprendam no a Escola ....., Cidade de ....., Japão.

The research will involve you in letting the researcher to make observations in your class, tape-recorded some of yours lessons, search in your files and let them to be photocopied, take notes on the observation, and to answer interviews related to cultural education, if you consent to participate.

A pesquisa envolvê-lo-á em deixar o Investigador fazer observações em sua classe, tape-recorded alguma de seus as lições, busca em suas limas e deixá-las-á ser fotocopiada, tomá-la-á notas na observação, e responder às entrevistas relativas à instrução cultural, se você consente participar.

The interview questions are related to your teaching practices regarding cultural issues, your perceptions about Brazilian-Japanese-heritage children, and opinions, basically regarding school instruction, culture perception and school culture on cultural education at lower and senior high school.

As perguntas da entrevista são relacionadas a suas práticas de ensino a respeito das edições culturais, suas percepções sobre crianças da Brasileiro-Japanese-herança, e opiniões, basicamente a respeito da instrução da escola, da percepção da cultura e cultura escolar na instrução cultural em uma escola de ensino fundamental e medio.

Your indirect benefit of participating in this research relies on the possibility that the study will provide insights into the alignment of curriculum with what is actually happening in the classroom, having implications for better understanding of your own practices on cultural issues, Brazilian-Japanese-heritage students, and school culture.

Seu benefício indireto da participação nesta pesquisa confia na possibilidade que o estudo fornecerá introspecções no alinhamento do currículo e em sua fidelidade da execução com o que está acontecendo realmente na sala de aula, ter implicações para a melhor compreensão de suas próprias práticas em assuntos culturais, em estudantes da Brasileiro-Japone-herança e na cultura escolar.

The interview will be held during September 2009 and April 2010. It will takes between 45-60 minutes, depending on the information you want to provide. The lessons observation and tape-recorded of classes will be held during September 2009 and eventually during April 2010. A workshop with teachers will be possibly held during September 2009 (to be confirmed).

A entrevista será prendida durante setembro 2009 e abril 2010. Tomadas entre 45-60 minutos, dependendo da informação que você quer fornecer. A observação das lições e tape-recorded das classes será prendida durante setembro 2010 e eventualmente a abril 2010. O Workshop com Professores será prendido possível durante setembro 2009 (a confirmar).

All information you and will be provide will be kept it strictly confidential. The results of this study would be presented at academic conferences, be published in academic journals, and/or be published as part of the Researcher's Doctoral Dissertation. However, your personal information and any other identification information you provide will be not be revealed.

Toda a informação você e será fornece lhe será mantido estritamente confidencial. Os resultados deste estudo seriam apresentados em conferências acadêmicos, sejam publicados em jornais acadêmicos, e/ou publicados como parte da Dissertação Doutoral do Investigador. Entretanto, sua informação pessoal e toda a outra informação que da identificação você fornecer deverão não revelado.

If you would like to participate and consent with the above mentioned enquiries, please sign at the bottom of this form and returned it back to School.

Se você gostaria de participar e consentir com os inquéritos acima mencionados assine, por favor, na parte inferior deste formulário e retornada lhe de volta à escola.

If you have any enquiry about this study, please feel free to contact directly to the Researcher Ms. Mariana Coolican, either by telephone or by e-mail. Thank you very much!

Se você tem qualquer inquérito sobre este estudo, sinta-se livre, por favor, contatar diretamente à do Investigador Senhora Mariana Coolican, pelo telefone ou pelo email Muito Obrigada!

.....  
**Agreement to Participate in the Research of Cultural Education**

**Acordo participar na pesquisa da instrução cultural**

I have read the above information and have had an opportunity to ask questions getting satisfactory answers.

Eu li a informação acima e tive uma oportunidade de fazer as perguntas que começ respostas satisfatórias

I give my permission to let the researcher to make observations in my class, tape-recorded some of my lessons, search in my files and let them be photocopied, take notes on the observation, and to answer interviews related to cultural education at ..... School in ..... city, Japan.

Eu dou minha permissão deixar o investigador fazer observações em minha classe, tape-recorded algumas de minhas lições, busca em minhas limas e deixe-as seja fotocopiado, tomam notas na observação, participar em Workshop com Professores, e para responder às entrevistas relativas à instrução cultural em Escola ....., Cidade de ....., Japão.

.....  
Teacher Name

.....  
Alien Registration Number/Passport Number

Nome do Professor

Número de registo estrangeiro/Número do passaporte

Place and Date:.....

Lugar e data: .....

.....  
Sorry, I do not give you my permission because

Disculpe, Eu nao dou minha permissão por que.....

.....  
Teacher Name

.....  
Alien Registration Number/Passport Number

Nome do Professor

Número de registo estrangeiro/Número do passaporte

Place and Date:.....

Lugar e data: .....

## APPENDIX D-5 Informed Consent (Parents for Students)

**Kobe University**  
**Graduate School of International Cooperation Studies (GSICS)**  
Kobe, Japan  
**Informed Consent (Parents for Students)**

**Theme:** “Data Collection Doctoral Dissertation: Pilot Study”

**Researcher:** Mariana Coolican (Ph.D. Student)

**Telephone number (house):** (Researcher telephone)

**E-mail:** (Researcher email address)

To the Mother, Father, Tutor or Legal Guardian

Dear Madam or dear Sir,

You and your son or daughter are invited to participate in an investigation which aims to describe the education on cultural issues and perception of this education offered and learns at the ..... School, ..... City, Japan.

The research will involve your son or daughter in answering a face to face interview, if he/she consents to participate. The interview questions are related to the student's understandings and opinions regarding cultural issues, basically school instruction, culture perception and family engagement on cultural education at lower and higher secondary school.

Your indirect benefit of participating in this research relies on the possibility that the study will provide insights into the alignment of parents' expectations with what is actually happening in the classroom, and will have implications for educational accountability.

The interview will be held during November, 2009 on days to be confirmed. It will takes between 45-60 minutes, depending on the information your son or daughter wants to provide.

All information you and your son or daughter will be provide will be kept it strictly confidential. The results of this study would be presented at academic conferences, be published in academic journals, and/or be published as part of the researcher's Doctoral Dissertation. However, your personal information and any other identification information will be not be reveled.

On the other hand, a Table with the parental affiliation is endorsing with this Informed Consent, in order to clarify your Brazilian-Japanese heritage, if any.

If you would like to participate and your son or daughter consent to be interviewed, please sign at the bottom of this form and returned it back to School with him/her.

If you have any enquiry about this study, please feel free to contact directly to the researcher Ms. Mariana Coolican, either by telephone or by e-mail. Thank you very much!

.....  
**Agreement to Participate in the Research of Cultural Education**

I have read the above information and have had an opportunity to ask questions getting satisfactory answers.

I give my permission to my son or daughter to participate in an interview related to cultural education at ..... School in ..... city, Japan.

.....  
Student's Name  
Number

.....  
Alien Registration Number/Passport

.....  
Father, Mother, Tutor or Legal Guardian  
Number

.....  
Alien Registration Number/Passport

Place and Date: .....



**Universidade de Kobe**  
**Escola dos Estudos da Cooperação Internacional (GSICS)**  
**Kobe, Japão**  
**Consentimento Informado (de Pais para Estudantes)**

**Tema:** “Dissertação doutoral - Levantamento de Dados: Estudo Piloto”

Investigadora: Mariana Coolican (Estudante do Ph.D.)

**Número de telefone (casa):**

**Email:**

À Mãe, ao Pai, ao Tutor ou ao Guardião legal

Cara Senhora ou caro Senhor,

Você e seu filho ou filha são convidados a participar em uma investigação que os alvos para descrever a instrução em edições e na percepção culturais desta instrução ofereçam e aprendam ..... na escola, cidade de....., Japão.

A pesquisa envolverá seu filho ou filha em responder uma entrevista frente a frente, se consente participar. As perguntas da entrevista são relacionadas às compreensões e às opiniões do estudante a respeito das edições culturais, basicamente instrução da escola, percepção da cultura e acoplamento da família na instrução cultural em uma mais baixa e escola secundária mais elevada.

Seu benefício indireto da participação nesta pesquisa confia na possibilidade que o estudo fornecerá introspecções no alinhamento de expectativas dos pais com o que está acontecendo realmente na sala de aula, e terá implicações para a responsabilidade educacional.

A entrevista será prendida durante novembro, 2009 nos dias a ser confirmados. Tomadas entre 45-60 minutos, dependendo da informação seu filho ou a filha quer fornecer.

Toda a informação você e seu filho ou filha serão fornecem lhe serão mantidos estritamente confidenciais. Os resultados deste estudo seriam apresentados em conferências acadêmicos, sejam publicados em jornais acadêmicos, e/ou publicados como parte da dissertação doutoral do investigador. Entretanto, sua informação pessoal e toda a outra informação da identificação deverão não reveladas.

De um lado, uma tabela com a afiliação parental está endossando com este consentimento informado, a fim esclarecer sua herança Brasileiro-Japonesa, se existirem.

Se você gostaria de participar e seu consentimento do filho ou da filha a ser entrevistado, assine, por favor, na parte inferior deste formulário e retornada lhe de volta à escola com ele/ela.

Se você tem qualquer inquérito sobre este estudo, sinta, por favor, livre contatar diretamente à Senhora Mariana Coolican da investigadora, pelo telefone ou pelo email. Muito Obrigada!

.....  
Eu acordo participar na pesquisa da instrução cultural li a informação acima e tive uma oportunidade de fazer as perguntas que começa respostas satisfatórias. Eu dou minha permissão a minha filho ou filha participar em uma entrevista relativa à instrução cultural ..... na escola ..... na cidade, Japão.

Nome do estudante  
do passaporte

Número de registro estrangeiro/número

.....  
Pai, Mãe, Tutor ou Guardião Legal  
estrangeiro/número do passaporte

.....  
Número de registro

.....  
Lugar e data: .....

## APPENDIX E: Tables with Single Variables

### Year End Scores Japan – Single Variables

Table E-a Year End Scores Japan – Single Variables

VARIABLES	(1) yescmath	(2) yeschist	(3) yesclite	(4) yescflen
Gender	6.513*** (1.873)	-1.146 (1.834)	6.280*** (2.349)	5.021** (2.345)
Age	-3.378*** (1.141)	-1.401 (1.115)	-1.727 (1.335)	0.948 (1.445)
Grade (Base Group are Grade 7 and 8)				
Year 1	6.541 (4.892)	4.457 (4.857)	8.920 (5.915)	13.829** (6.200)
Year 2	7.622 (5.175)	6.009 (5.122)	8.942 (6.214)	11.458* (6.534)
Year 3	7.210 (4.904)	4.041 (4.880)	8.225 (6.037)	15.050** (6.237)
Nikkei	-2.023 (2.684)	2.722 (2.661)	1.357 (3.410)	2.469 (3.403)
Race (Base Group is other races)				
Caucasian descendants	-0.145 (2.643)	5.101** (2.602)	3.850 (3.215)	4.639 (3.359)
Mestizo descendants	-1.816 (3.255)	-0.599 (3.095)	-1.633 (3.960)	-0.047 (3.970)
PI (Parental Involvement)				
parehomw	-4.787*** (1.682)	-5.938*** (1.647)	-6.409*** (2.086)	-5.477*** (2.109)
pareexam	1.381 (1.857)	1.277 (1.860)	0.309 (2.383)	0.043 (2.379)
retolesso	-0.994 (1.211)	-1.415 (1.182)	-0.200 (1.507)	1.272 (1.532)
talkabse	-1.362 (1.208)	-3.168*** (1.204)	-4.585*** (1.543)	-4.106*** (1.543)
talkscor	-0.868 (1.813)	3.075* (1.803)	0.769 (2.282)	-0.283 (2.316)
talkfutu	3.039* (1.813)	1.715 (1.803)	6.835*** (2.282)	4.190* (2.316)

	(1.727)	(1.637)	(2.093)	(2.139)
pschmeet	0.207	0.220	1.852	1.271
	(1.114)	(1.091)	(1.397)	(1.408)
PD (Parent's Demography)				
motheduc	-0.270	0.578	0.590	-0.167
	(0.432)	(0.431)	(0.552)	(0.577)
fatheduc	0.166	-0.231	-0.078	0.336
	(0.425)	(0.411)	(0.524)	(0.526)
mothwrj	1.686	0.159	-1.345	0.239
	(1.558)	(1.560)	(1.983)	(2.047)
fathwrj	1.612	1.038	0.915	0.957
	(1.572)	(1.552)	(1.989)	(1.996)
seemothr	-3.701	0.044	-2.908	-0.456
	(2.576)	(2.579)	(3.260)	(3.296)
seefathr	8.612***	3.321	4.023	4.195
	(2.118)	(2.063)	(2.579)	(2.636)
ER (Economic Resources)				
tvincolo	2.930***	-0.852	0.547	0.174
	(1.076)	(1.069)	(1.294)	(1.437)
radio	-3.097**	0.911	3.651**	1.204
	(1.351)	(1.351)	(1.732)	(1.756)
car	2.270	2.343	2.508	5.449***
	(1.591)	(1.430)	(1.780)	(1.901)
videocas	-4.499**	-2.768	-2.247	-1.493
	(1.899)	(1.757)	(2.192)	(2.244)
bathroom	0.472	0.503	-4.646	0.845
	(2.375)	(2.323)	(2.929)	(3.076)
bedroom	0.798	-1.007	3.513	3.309
	(2.382)	(2.045)	(2.597)	(2.708)
freewout	-3.062	-5.869**	-6.153*	-7.401**
	(2.756)	(2.758)	(3.512)	(3.529)
pcwithou	3.110	-1.734	-3.902	-3.930
	(2.902)	(2.874)	(3.577)	(3.728)
booksath	0.552	2.660**	2.568*	1.282
	(1.178)	(1.176)	(1.506)	(1.512)
CR (Cultural Resources)				
listmusi	2.422	1.777	0.721	4.189**
	(1.632)	(1.549)	(1.948)	(1.991)

talkbook	2.720 (1.706)	1.544 (1.600)	4.377** (2.013)	4.820** (2.061)
talkfilm	-2.126 (1.422)	-2.128 (1.338)	-3.605** (1.708)	-5.016*** (1.712)
talktv	-3.791*** (1.368)	-0.802 (1.310)	-2.887* (1.672)	-4.257** (1.679)
SR (Social Resources)				
talkfrie	-2.359 (1.527)	-0.179 (1.462)	-2.084 (1.867)	-0.892 (1.875)
talkothf	-3.464** (1.473)	-1.392 (1.417)	-1.156 (1.807)	-2.205 (1.821)
talkhaps	-2.523* (1.323)	0.480 (1.301)	-0.681 (1.638)	-2.397 (1.670)
talkdire	2.916* (1.618)	2.858* (1.583)	0.722 (2.029)	1.966 (2.031)
talkteac	0.743 (1.668)	-1.425 (1.662)	-0.449 (2.122)	-1.774 (2.282)
Constant	119.659*** (23.435)	84.745*** (22.791)	82.105*** (27.142)	28.102 (29.207)
Observations	80	82	82	81
Number of groups	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Notes: **Year-end Scores:** Yescmath: mathematics, Yeschist: history, Yesclite: literature, Yesclflae: foreign language English

## Year End Scores Brazil – Single Variables

Table E-b Year End Scores Brazil – Single Variables

VARIABLES	(1) yescmath	(2) yescphye	(3) yescgeog	(4) yeschist	(5) yesclite	(6) yescflae
Gender	-1.303 (1.630)	-0.704 (2.149)	-1.190 (1.247)	-3.430** (1.485)	-2.579** (1.263)	-1.586 (1.344)
<i>Nikkei</i>	-4.053 (2.846)	-4.758 (3.749)	-0.851 (2.177)	-2.046 (2.593)	-5.742*** (2.205)	-1.653 (2.345)
age	-2.951** (1.448)	0.404 (1.860)	-0.271 (1.104)	-0.103 (1.322)	-0.931 (1.125)	1.073 (1.199)
Race (Base Group: Others)						
Caucasian descendants	4.052 (3.077)	-4.437 (4.078)	4.462* (2.356)	1.317 (2.801)	2.739 (2.382)	4.739* (2.533)
Mestizo descendants	5.638 (3.481)	-1.515 (4.619)	4.307 (2.666)	3.528 (3.169)	6.051** (2.694)	7.649*** (2.864)
Grade (Base Group: Grade 9)						
Year 1	-0.055 (3.208)	-0.808 (3.893)	0.148 (2.430)	5.386* (2.942)	0.770 (2.508)	-3.091 (2.684)
Year 2	1.723 (4.144)	-5.286 (4.937)	0.600 (3.133)	6.176 (3.805)	4.121 (3.245)	-6.053* (3.475)
Year 3	5.473 (5.138)	-14.817** (6.203)	-2.676 (3.890)	3.378 (4.713)	3.187 (4.018)	-5.676 (4.300)
PI (Parental Involvement)						
talkonsc	2.094 (2.715)	-1.863 (3.565)	4.740** (2.076)	0.807 (2.474)	1.095 (2.105)	1.849 (2.240)
helphome	-4.211** (1.849)	-1.223 (2.428)	-4.336*** (1.414)	-3.664** (1.685)	-4.910*** (1.433)	-2.865* (1.525)
examhelp	-1.249 (1.869)	4.975** (2.462)	-2.585* (1.429)	-1.436 (1.702)	-0.163 (1.447)	-2.072 (1.540)
talkabse	4.836 (3.108)	-9.054** (4.061)	3.103 (2.374)	0.448 (2.834)	-2.243 (2.410)	-0.337 (2.567)
talkfutu	2.562 (4.773)	4.157 (6.334)	-1.634 (3.655)	-1.957 (4.345)	-6.642* (3.694)	-4.513 (3.927)
talkscor	-15.997** (7.235)	-3.671 (9.523)	-13.969** (5.532)	-7.973 (6.593)	-8.244 (5.607)	-11.692* (5.968)
PD (Parent's Demography)						

livemot	-1.842 (3.845)	-3.466 (5.085)	0.967 (2.942)	1.904 (3.501)	1.641 (2.977)	5.018 (3.166)
livewfat	2.948 (2.237)	-0.218 (2.942)	0.674 (1.711)	0.978 (2.038)	-0.352 (1.733)	2.651 (1.844)
motheduc	1.008* (0.557)	0.316 (0.733)	1.011** (0.426)	0.778 (0.508)	0.702 (0.432)	1.147** (0.459)
fatheduc	1.313** (0.564)	0.537 (0.738)	0.806* (0.431)	0.885* (0.515)	1.189*** (0.438)	0.746 (0.466)
seemothr	-3.644 (2.564)	1.628 (3.398)	-1.155 (1.963)	-3.675 (2.335)	0.342 (1.985)	-1.779 (2.111)
seefathr	-2.354 (1.963)	-2.256 (2.605)	-1.270 (1.503)	-0.375 (1.787)	-3.430** (1.520)	-0.962 (1.616)
ER (Economic Resources)						
tvincolo	0.502 (0.916)	3.190*** (1.206)	0.338 (0.700)	1.095 (0.834)	0.944 (0.709)	-0.074 (0.755)
radio	0.524 (0.976)	-0.468 (1.284)	1.328* (0.746)	0.699 (0.889)	1.322* (0.756)	0.875 (0.804)
car	-0.169 (1.103)	0.946 (1.458)	-0.046 (0.844)	-0.960 (1.005)	-1.097 (0.854)	-0.678 (0.909)
videocas	0.716 (1.677)	-3.296 (2.221)	-1.455 (1.283)	0.017 (1.526)	3.399*** (1.298)	-1.261 (1.380)
fridge	9.021 (17.144)	7.141 (22.744)	-12.326 (13.127)	5.021 (15.607)	14.235 (13.268)	-8.189 (14.107)
washmach	-3.321 (12.276)	1.599 (16.278)	0.669 (9.399)	1.947 (11.176)	-6.788 (9.501)	5.526 (10.102)
vaccum	-1.729 (2.106)	-3.009 (2.743)	-1.610 (1.608)	-0.949 (1.920)	-1.507 (1.634)	-0.886 (1.740)
bathroom	-1.932 (1.230)	-1.419 (1.603)	-1.191 (0.939)	-2.303** (1.122)	-1.256 (0.954)	-0.011 (1.017)
bedroom	-0.927 (1.892)	-2.152 (2.507)	-1.736 (1.449)	-2.630 (1.723)	-0.620 (1.465)	0.052 (1.557)
freewfri	-2.148 (3.243)	-4.058 (4.282)	-1.188 (2.481)	-0.597 (2.954)	-2.089 (2.511)	0.354 (2.671)
freewout	-3.323* (1.908)	5.965** (2.511)	-1.098 (1.459)	-0.301 (1.738)	-0.274 (1.478)	-0.922 (1.572)
pcwithin	4.701 (4.525)	-3.403 (5.984)	3.979 (3.463)	4.087 (4.120)	4.209 (3.503)	2.305 (3.726)
pcwithou	4.811**	1.045	3.265*	2.441	1.581	2.673

	(2.354)	(3.123)	(1.803)	(2.143)	(1.822)	(1.937)
booksath	4.026***	3.496**	3.883***	3.059***	2.228**	3.867***
	(1.179)	(1.550)	(0.901)	(1.075)	(0.914)	(0.973)
CR (Cultural Resources)						
listmusi	-2.187	1.310	0.076	-0.829	-0.037	-1.747
	(1.790)	(2.366)	(1.370)	(1.630)	(1.386)	(1.474)
talkbook	1.661	-2.204	0.774	1.846	2.601*	0.414
	(1.884)	(2.486)	(1.441)	(1.717)	(1.460)	(1.553)
talkfilm	0.782	2.122	1.426	1.901	-0.725	3.446
	(2.615)	(3.440)	(2.000)	(2.383)	(2.027)	(2.157)
talktv	3.750	1.496	3.699*	5.885**	3.503*	1.994
	(2.628)	(3.477)	(2.012)	(2.394)	(2.035)	(2.165)
SR (Social Resources)						
talkfrie	-0.874	-1.200	-1.748	-1.155	-0.672	2.612
	(2.373)	(3.130)	(1.815)	(2.162)	(1.838)	(1.956)
talkothf	-0.921	0.828	0.436	-0.884	-1.088	-1.456
	(2.288)	(3.018)	(1.751)	(2.085)	(1.773)	(1.886)
talkdire	0.517	0.595	-1.080	1.016	-1.319	0.261
	(2.036)	(2.683)	(1.558)	(1.855)	(1.577)	(1.678)
pschmeet	-3.931*	0.611	-0.912	0.256	-0.714	-3.014*
	(2.167)	(2.845)	(1.656)	(1.975)	(1.680)	(1.788)
talkteac	1.164	0.065	1.590	0.113	0.533	0.202
	(2.297)	(3.010)	(1.756)	(2.094)	(1.781)	(1.895)
Constant	96.038***	90.712**	75.009***	59.639**	69.097***	47.138**
	(27.639)	(35.676)	(21.076)	(25.247)	(21.494)	(22.959)
Observations	240	240	240	240	240	240
Number of groups	3	3	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Notes: **Year-end Scores:** Yescmath: mathematics, Yescphy: physical education, Yescgeog: geography, Yeschist: history, Yesclite: literature, Yescflae: foreign language English

## Vestibular Scores Japan – Individual Variables

*Table E-c Vestibular Scores Japan – Individual Variables*

VARIABLES	(1) vsmath	(2) vsgeo	(3) vshist	(4) vsflanen
Gender	0.933** (0.372)	-0.461 (0.365)	-0.444 (0.376)	0.312 (0.325)
Age	-0.428* (0.219)	0.404** (0.204)	0.079 (0.224)	0.331* (0.182)
Grade (Base Group are Grade 7 and 8)				
Year 1	0.278 (1.035)	1.611 (0.987)	1.603 (1.057)	1.641* (0.878)
Year 2	1.105 (1.072)	0.654 (1.013)	0.943 (1.098)	1.476 (0.902)
Year 3	0.102 (1.030)	1.144 (0.995)	1.378 (1.048)	1.120 (0.885)
Nikkei	-0.344 (0.501)	0.946* (0.492)	0.686 (0.507)	1.201*** (0.437)
Race (Base Group is other races)				
Caucasian descendants	0.853* (0.498)	1.012** (0.478)	0.486 (0.507)	0.985** (0.425)
Mestizo descendants	0.109 (0.642)	-0.177 (0.628)	0.326 (0.650)	0.003 (0.559)
PI (Parental Involvement)				
parehomw	-0.625* (0.327)	-0.400 (0.320)	-0.506 (0.331)	-0.564** (0.284)
pareexam	-0.854** (0.407)	-1.165*** (0.399)	-0.245 (0.411)	-0.696** (0.355)
talkabse	-0.577** (0.261)	-0.836*** (0.255)	-0.348 (0.265)	-0.075 (0.227)
talkscor	0.142 (0.346)	0.509 (0.335)	-0.079 (0.351)	-0.419 (0.298)
talkfutu	-0.299 (0.308)	0.884*** (0.302)	0.649** (0.312)	0.310 (0.268)
pschmeet	-0.260 (0.214)	-0.019 (0.209)	0.161 (0.216)	0.303 (0.186)
PD (Parent's Demography)				



motheduc	-0.068 (0.082)	-0.268*** (0.080)	-0.186** (0.083)	-0.024 (0.071)
fatheduc	0.217*** (0.083)	-0.069 (0.081)	0.034 (0.084)	0.017 (0.072)
mothwrj	0.026 (0.321)	0.265 (0.312)	0.054 (0.326)	0.111 (0.277)
fathwrj	0.188 (0.325)	0.303 (0.318)	0.360 (0.329)	0.079 (0.283)
seemothr	-0.458 (0.507)	-0.918* (0.493)	-1.003* (0.515)	-0.224 (0.438)
seefathr	0.761* (0.409)	0.682* (0.396)	0.225 (0.415)	0.030 (0.353)
ER (Economic Resources)				
tvincolo	0.634*** (0.219)	0.455** (0.204)	-0.211 (0.224)	0.007 (0.181)
radio	-0.221 (0.285)	-0.462* (0.279)	0.346 (0.288)	0.295 (0.248)
car	-0.302 (0.283)	-0.283 (0.273)	0.440 (0.288)	-0.384 (0.243)
videocas	-0.530 (0.359)	0.622* (0.346)	-0.261 (0.365)	-0.738** (0.308)
bathroom	0.617 (0.481)	0.399 (0.469)	0.473 (0.488)	-0.230 (0.417)
bedroom	-0.174 (0.450)	-0.464 (0.435)	-0.396 (0.458)	0.728* (0.387)
freewout	-1.302** (0.540)	-0.731 (0.526)	-1.481*** (0.548)	-1.269*** (0.468)
pcwithou	0.776 (0.592)	0.876 (0.571)	0.110 (0.602)	0.346 (0.508)
booksath	-0.121 (0.260)	0.340 (0.254)	0.352 (0.263)	0.588*** (0.226)
CR (Cultural Resources)				
listmusi	0.215 (0.301)	0.271 (0.293)	-0.091 (0.305)	-0.247 (0.260)
talkbook	0.171 (0.330)	0.438 (0.322)	0.285 (0.335)	0.568** (0.287)
talkfilm	-0.703** (0.293)	-0.131 (0.287)	-0.438 (0.297)	-0.402 (0.256)

talktv	-0.274 (0.280)	-0.536** (0.273)	0.187 (0.284)	0.156 (0.243)
SR (Social Resources)				
talkfrie	0.051 (0.346)	0.375 (0.338)	-0.325 (0.351)	-0.591** (0.301)
talkothf	0.061 (0.295)	-0.230 (0.287)	0.229 (0.299)	0.218 (0.256)
talkhaps	0.359 (0.252)	0.208 (0.243)	-0.126 (0.256)	-0.257 (0.216)
talkdire	0.475 (0.345)	0.287 (0.338)	-0.026 (0.349)	-0.396 (0.301)
talkteac	0.858** (0.367)	0.264 (0.360)	0.046 (0.372)	0.612* (0.321)
Constant	8.506** (4.336)	-4.459 (4.012)	1.395 (4.458)	-5.260 (3.569)
Observations	87	87	87	87
Number of groups	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Notes: **Vestibular Simulado Scores:** VSmath: mathematics, VSgeo: geography, VShist: history, VSflanen: foreign language English

## Vestibular Scores Brazil – Individual Variables

Table E-d Vestibular Scores Brazil – Individual Variables

VARIABLES	(1) vsmath	(2) vsgeo	(3) vshist	(4) vslite	(5) vsflanen
Gender	-2.036* (1.189)	-0.798 (1.057)	-1.192 (1.027)	0.269 (0.974)	0.688 (1.069)
Nikkei	-3.968* (2.272)	-6.296*** (2.030)	-5.846*** (1.963)	-1.566 (1.891)	-1.627 (2.054)
Age	-0.799 (1.065)	-0.129 (0.951)	-0.594 (0.920)	-1.837** (0.892)	1.954** (0.962)
Race (Base Group: Others)					
Caucasian descendants	-1.777 (2.504)	-5.902*** (2.235)	-6.038*** (2.164)	-2.335 (2.052)	-2.089 (2.262)
Mestizo descendants	-0.970 (2.765)	-5.509** (2.468)	-2.733 (2.389)	-1.496 (2.246)	-0.000 (2.497)
Grade (Base Group: Year 1)					
Year 2	2.482 (1.732)	0.566 (1.548)	3.683** (1.495)	4.498*** (1.404)	-1.076 (1.566)
Year 3	2.004 (2.502)	1.642 (2.237)	0.236 (2.159)	0.249 (2.118)	1.735 (2.263)
PI (Parental Involvement)					
talkonsc	3.429 (2.320)	4.496** (2.072)	3.238 (2.004)	1.988 (1.990)	3.431 (2.097)
helphome	-2.535* (1.403)	-3.613*** (1.251)	-0.863 (1.211)	-1.569 (1.147)	-1.540 (1.265)
examhelp	-0.972 (1.393)	-0.941 (1.230)	0.018 (1.204)	-0.001 (1.117)	-0.962 (1.244)
talkabse	3.070 (2.349)	2.268 (2.099)	0.773 (2.029)	-4.405** (2.078)	0.032 (2.124)
talkfutu	-1.257 (3.353)	-0.095 (2.995)	-1.761 (2.897)	-1.214 (2.709)	-4.821 (3.030)
talkscor	-13.609*** (5.181)	-0.122 (4.624)	-4.534 (4.475)	4.086 (5.110)	-7.932* (4.678)
PD (Parent's Demography)					
livewmot	-2.476	0.123	1.792	2.515	2.629

	(2.682)	(2.394)	(2.317)	(2.136)	(2.422)
livewfat	0.142	-0.517	-0.526	-0.772	-0.847
	(1.689)	(1.509)	(1.460)	(1.411)	(1.527)
motheduc	0.096	0.173	-0.138	-0.409	0.095
	(0.424)	(0.379)	(0.366)	(0.363)	(0.383)
fatheduc	0.643	0.428	0.676*	0.566*	0.856**
	(0.411)	(0.367)	(0.355)	(0.335)	(0.371)
seemothr	-3.299*	-2.998*	-3.790**	-3.640**	-2.220
	(1.914)	(1.710)	(1.654)	(1.630)	(1.730)
seefathr	1.308	2.237*	1.558	2.613**	0.844
	(1.430)	(1.277)	(1.236)	(1.194)	(1.292)
ER (Economic Resources)					
tvincolo	0.084	0.379	0.305	-0.595	1.537**
	(0.668)	(0.594)	(0.577)	(0.545)	(0.601)
radio	0.669	0.575	-0.087	0.151	0.267
	(0.718)	(0.637)	(0.620)	(0.588)	(0.645)
car	0.599	-1.281*	-1.064	-0.752	-1.395**
	(0.786)	(0.701)	(0.679)	(0.638)	(0.710)
videocas	-0.195	2.570**	4.050***	3.308***	-1.501
	(1.270)	(1.128)	(1.097)	(1.039)	(1.141)
fridge	-1.487	-10.490	-10.223	-2.636	-4.394
	(12.115)	(10.821)	(10.470)	(9.637)	(10.949)
washmach	-3.696	0.585	-2.397	0.350	2.723
	(8.773)	(7.838)	(7.582)	(6.989)	(7.930)
vaccum	-0.778	-1.466	-2.372*	-0.900	-1.298
	(1.595)	(1.425)	(1.377)	(1.346)	(1.442)
bathroom	-0.593	-1.097	-0.452	-0.179	-1.215
	(0.928)	(0.829)	(0.801)	(0.764)	(0.839)
bedroom	-1.415	-1.065	-0.868	-0.124	-1.626
	(1.423)	(1.271)	(1.230)	(1.191)	(1.286)
freewfri	-1.784	-0.124	-2.063	0.660	-0.380
	(2.405)	(2.146)	(2.079)	(1.991)	(2.171)
freewout	-0.755	-0.571	-0.589	-1.625	-1.297
	(1.314)	(1.171)	(1.135)	(1.078)	(1.185)
pcwithin	0.365	6.583*	9.327***	5.444*	2.909
	(3.842)	(3.431)	(3.321)	(3.068)	(3.471)
pcwithout	4.264**	1.222	2.900*	1.069	1.370
	(1.781)	(1.590)	(1.539)	(1.441)	(1.609)

booksath	1.193 (0.854)	1.784** (0.762)	1.150 (0.738)	0.957 (0.703)	1.879** (0.771)
CR (Cultural Resources)					
listmusi	-0.280 (1.327)	-0.624 (1.185)	-1.603 (1.147)	0.158 (1.081)	-3.834*** (1.199)
talkbook	1.606 (1.346)	0.218 (1.200)	1.609 (1.163)	-0.170 (1.098)	1.272 (1.214)
talkfilm	1.094 (1.831)	1.992 (1.635)	-0.556 (1.582)	0.851 (1.493)	2.906* (1.655)
talktv	0.352 (1.938)	-1.471 (1.729)	0.154 (1.675)	0.071 (1.615)	0.139 (1.749)
SR (Social Resources)					
talkfrie	-0.030 (1.750)	-1.506 (1.563)	0.993 (1.512)	-1.295 (1.465)	1.525 (1.581)
talkothf	-1.162 (1.674)	1.146 (1.495)	-0.875 (1.446)	0.586 (1.353)	-0.376 (1.513)
talkdire	-0.208 (1.507)	-0.603 (1.344)	0.760 (1.302)	-1.150 (1.235)	2.941** (1.360)
pschmeet	2.126 (1.738)	-1.303 (1.547)	-0.955 (1.501)	1.736 (1.466)	-0.729 (1.565)
talkteac	-1.599 (1.718)	0.900 (1.535)	-0.487 (1.484)	-1.320 (1.454)	-0.283 (1.554)
Constant	53.466** (21.105)	31.270* (18.964)	47.702*** (18.117)	46.580** (18.121)	-4.732 (19.218)
Observations	221	222	221	206	222
Number of groups	3	3	3	3	3

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Notes: **Vestibular Simulado Scores:** VSmath: mathematics, VSgeo: geography, VShist: history, VSlite: literature, VSflanen: foreign language English

*Table E-e Testing for Mean Difference in Achievement as a Measure of Prospects to pass  
University Entrance Examinations*

Subject	Mean Value		Difference in Means	t-statistic	P-value of
	Non-Nikkei	Nikkei			
Vsmath	24.111 (0.772)	19.841 (2.008)	4.27* (2.416)	1.767	0.078
N	199	22			
Vsgeo	24.25 (0.735)	17.386 (2.114)	6.864*** (2.325)	2.951	0.003
N	200	22			
Vshist	26.131 (0.617)	20.477 (1.833)	5.653*** (1.955)	2.892	0.004
N	199	22			
Vslite	21.882 (0.848)	16.816 (2.07)	5.067* (2.743)	1.847	0.066
N	187	19			
Vsflanen	22.835 (0.789)	19.795 (2.251)	3.04 (2.494)	1.219	0.224
N	200	22			

Standard errors are indicated in parenthesis. \*\*\*p< 0.01, \*\*p< 0.05, \*p<0.1

Source: Created by the Author based on survey data (2010-2011).

## APPENDIX F: Qualitative Analysis

*Table F-a Units of Analysis (Issues) in Qualitative Data / Coded Segments*

	Coded segments of all documents (transcripts)	Coded segments of documents (transcripts)	% Coded segments of all documents (transcripts)	Number of documents (transcripts) which refer to each specific unit of analysis
<b>Brazilian Ministry of Education and Culture (MEC) and National Institute of Statistics (INEP)</b>				
<i>Brazilian National School Census</i>				
• Brazilian School Census implemented in all Brazilian schools in Japan	6	6	2.58	3
• Analysis of the Census school's data and IDs school's data by the INEP	5	5	2.16	2
<i>Brazilian School's Identity Numbers</i>				
• Identity Numbers (IDs) of the Brazilian schools in the MoE/INEP System in Brazil	2	2	0.86	2
• IDs of schools: data of Brazilian schools infrastructure in Japan	6	6	2.58	4
• IDs of schools: information of Grades/Years by modalities in Japan	2	2	0.86	2
• IDs of schools: data of Brazilian schools' principals in Japan	6	6	2.15	5
• IDs of Schools: data of teachers	5	5	2.16	4
• IDs of Brazilian student's in Japan and Brazil, issued by the Brazilian MoE	9	9	3.87	6
<i>Brazilian Ministry of Education and Culture assistance to Brazilian Temporary Workers in Japan: Provision of Primary Education and Secondary Education's Credentials</i>				
• Placement of the ENCCEJA exam since 2006 in Japan	3	3	1.29	1
<i>Brazilian Ministry of Education and Culture assistance to Brazilian Schools in Japan</i>				
• Assistance through PPP in education with enterprises/services	3	3	1.29	2
• Assistance to PNS with the provision of textbooks	2	2	0.86	1
• Perception of school management fears to answer the Brazilian School Census	2	2	0.86	2
• MoE/INEP acknowledge that some of the Brazilian schools closed their doors in Japan	4	4	1.72	4
<b>Schools</b>				
<i>Schools Regulatory Framework</i>				
• Number of homologated Brazilian schools in Japan	2	2	0.86	2

• History of Pitagoras Network Schools (PNS)	2	2	0.86	2
• Traditional school vs. PNS	2	2	0.86	2
• The four pillars of learning: learning to know, learning to do, learning to live together, and learning to be (UNESCO Delors Report, 2004) - Alignment of PNS's School Project to the international guidelines/framework	1	1	0.43	1
• Reference to the Education Law No. 91324 of December 1996 - Alignment of PNS's School Project to the national guidelines/framework	2	2	0.86	2
• PNS as educational system	2	2	0.86	2
• PNS as Pedagogical Project	1	1	0.43	1
• Multi-grade classrooms (in favour position, not in favour position, neutral position)	12	12	5.16	12
• Utility of the Vestibular Simulado (VS) Test in PNS	3	3	1.29	3
• VS Test's model of classes (i.e., specific school subject for practicing the VS Tests)	10	10	4.31	6
<i>PNS Financial Supporters</i>				
• Private sector assistance to PNS	1	1	0.43	1
• PNS fees	2	2	0.86	2
<i>PNS Curriculum</i>				
• Written/intended curriculum (textbooks)	8	8	3.45	2
• Taught/implemented curriculum (school classroom's plans)	10	10	4.31	2
• Learned curriculum (practices of VS)	7	7	3.01	7
• Assessed/evaluated/attained curriculum (different types of tests, including VS)	5	5	2.16	2
<i>Types of Assessments</i>				
• Vestibular Simulado (VS) Test	12	12	5.18	8
• Trimestral tests	3	3	1.29	2
<b>Teachers</b>				
<i>Teacher's recruitment in Brazil</i>	1	1	0.43	1
<i>Teacher's contract - duration</i>	1	1	0.43	1
<i>Teacher's Practices - Instruction</i>				
• Practices of the Vestibular Simulado (through trial-error and homework)	7	7	3.02	4



• Socio-constructivist, socio-interactionist philosophies for teaching	4	4	1.72	2
• Methodology uses when schooling Japanese-Brazilian children in PNS in Brazil	4	4	1.72	2
• Teachers must be flexible, bringing new activities to classroom practices	1	1	0.43	1
• Teachers need to diversify their pedagogical practices	2	2	0.86	2
• Discussions teachers-to-teachers on VS and student's achievement	2	2	0.86	2
• Difficulties observed by teachers in evaluation/assessments	2	2	0.86	2
<i>Assessments/Evaluations</i>				
• Vestibular Simulado Test	4	4	1.72	4
• Trimester evaluations (provas)	4	4	1.72	3
• Vestibular Simulado Test scores	6	6	2.58	5
<i>Parental Involvement</i>				
• Parents participation in school's Council -Parents Teachers Association (PTA)	2	2	0.86	2
<i>Perception of Teachers on Student's Future</i>				
• Perception of teachers on student's future	1	1	0.43	1
• Dialogue teacher-to-teacher on Japanese-Brazilian students	2	2	0.86	2
• Perceptions of assisting Japanese-Brazilian children	2	2	0.86	2
<i>Relationship School-Community</i>				
• Teacher's apprenticeship to children who return from Japan	6	6	2.59	2
<b>Family/Parents</b>				
<i>Parents who expect to stay in Japan</i>				
• Parents intention to stay in Japan	2	2	0.86	2
• Time students pass/stay with parents at home	1	1	0.43	1
• Parental meetings at school – <i>Parental Involvement (PI)</i>	1	1	0.43	1
<i>Parents who expect to return to Brazil</i>				
• Parents intention to return to Brazil	4	4	1.72	4
• Reasons of Brazilian families of returning from Japan to Brazil	3	3	1.29	3
• Condition of being temporary worker (foreign national worker) in Japan	2	2	0.86	2

• Parental school method-of-choice because of the advantage of practicing VS preparation to university entrance examination	2	2	0.86	2
<i>Parents who have returned from Japan to Brazil</i>				
• Characteristics of parents who have returned from Japan to Brazil	6	6	2.59	2
• Brazilian children who have returned from Japan to Brazil	4	4	1.72	2
<b>Students</b>				
<i>Students in Japan</i>				
• Time student pass/stay at school	1	1	0.43	1
• Interaction Brazilian children with Japanese children	3	3	1.29	1
• Relationship student-teacher in Japan	2	2	0.86	2
• Students are already thinking on their future	2	2	0.86	2
• Students plan to attend university	3	3	1.29	2
<i>Students in Brazil</i>				
• Japanese-Brazilian children who return from Japan to Brazil	5	5	2.16	2
• Family/siblings ties as incentive for children who return from Japan to Brazil	2	2	0.86	2
• Level of Portuguese language of Japanese-Brazilian children when return from Japan to Brazil	3	3	1.29	2
• Japanese-Brazilian children's behaviour	2	2	0.86	2
• Relationship Japanese-Brazilian students-other students	2	2	0.86	2
• Adaptation Japanese-Brazilian students in Brazil (after returning from Japan)	2	2	0.86	2

Source: Created by the Author based on 252 coded segments from 20 documents (interview's transcripts). Interviewers are Brazilian MEC/INEP Officials/Education Specialists, school principals, school coordinators, and teachers.