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Education for All Global Monitoring Report 2003/4
Gender and Education for All: The Leap to Equality

Gender parity and equality in Chile: a case study

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Introduction¹

This case study on Chile focuses on evidence of gender parity in education during the last decade (primary and secondary levels) and examines to what extent this also means that gender equality has been achieved. It centres on the variables to judge gender equality that are part of the Education for All initiative.

Gender parity is examined through the analysis of literacy rates, school enrolment, pass and dropout rates, as well as years of schooling of the population of 15 years or more. Gender equality considers achievement or learning levels as measured by national examination systems. It refers also to conditions for employability or higher education opportunities open to females in relation to males, resulting from their education. In particular, the paper looks at the situation of young people and particularly women who are not attending school. In the discussion reference is made to the effects on gender equality of poverty and belonging to ethnic minorities and in general to factors (historic, social, pedagogical and policy-related) that explain the situation described.

Chile and its Educational System.

Chile is a country of 15.2 million inhabitants of which 86.5 per cent live in urban areas (INE, 2002). The proportion of people under 15 years of age is 28.5 and of those above 65 years is 7.2 per cent (INE, 2002). The proportion of men to 100 women is 97.13. Around 6 per cent of the population is made up of three main indigenous groups², though numbers reported differ between the 1992 and 2002 census.

The country has a per capita income of US\$ 4,134. Income distribution is skewed with the 10per cent of highest income earning 38 times more than the lowest 10 per cent (MIDEPLAN, 2001). The number of people living below the poverty line in the year 2000 was around 3.8 million with another 850 thousand who are indigent. Employment is concentrated in the services area (60 per cent), industry (26 per cent) and agriculture (14 per cent). Unemployment fluctuated during the year 2002 around 9per cent³.

The Education System is structured in four levels: Pre-school, Basic General Education, Secondary or Middle Education, and Higher Education. Pre-school education covers children under six years old, with two cycles. Basic General Education extends over 8 years (ages 6 to 13) and Secondary Education extends over 4 years (ages 14 to 17). Special education is considered to be part of the Basic Education level though it is reported separately. Though not compulsory, there is an effort to extend the coverage of pre-school education to all the 4-5 age group. A law has been passed recently that makes secondary education compulsory. Higher education includes tertiary institutions and universities. Most teachers

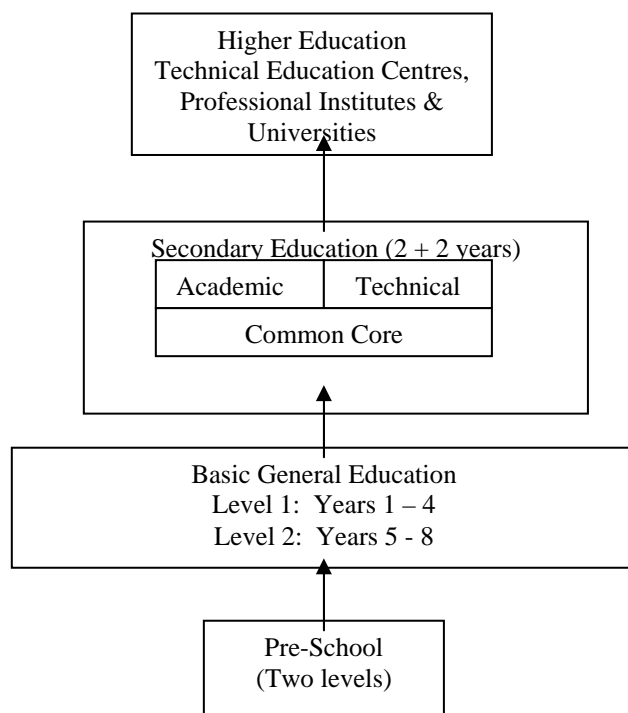
¹ I wish to thank Paulina Peña for assistance in collecting and processing information; also Lorena Mekes of the SIMCE Office of the Ministry of Education for unpublished information regarding the evaluation system.

² Mapuches, Aymaras and Polinesians in the island of Rapa Nui. The largest group are the Mapuches (86% of a total of 666,319 persons who declared themselves as being of indigenous origins, MIDEPLAN, 2000).

³ April 2003 figures show a decrease to 8,5% as reported by the National Institute of Statistics.

for all levels are prepared in universities, though a number of them are prepared in other tertiary level institutions.

Figure 1: Structure of the Chilean Education System



As noted in the above figure, the secondary level has two streams: an academic or “scientific-humanistic” and a technical stream with its specialisations. The curriculum reform that affected all levels of the system requires students to follow a common core of subjects for the first two years of the secondary school before joining the academic or technical streams according to their choice. In practice, secondary schools are organised in different ways: some are comprehensive with both streams in the same school while others are either scientific-humanistic or specifically technical schools.

Besides the curriculum reform, in the decade of the nineties a number of improvement programmes were implemented that affected rural schools and the most vulnerable primary schools (referred to hereafter as Basic schools), as well as secondary schools. These programmes involved provision of free textbooks, teaching materials, school and classroom libraries, teacher development activities, as well as improvement of school buildings. The most important and expensive programme being gradually implemented is the extension of the school day in order to do away with double shifts and increase the time for learning. All of these programmes have been directed to the publicly funded schools. These operate under two forms of management: municipal and private management of non-profit schools and are funded via a subvention based on student attendance rates. There are also around 10 per cent of private schools that are not funded by government.

Expenditure in the education system increased over the decade and currently Chile spends in education 4.4 per cent of its GDP and 18.7 per cent of its annual budget (Ministry of Education, 2002a).

Gender Parity in the Education System

Literacy.

As reported in the National Census (INE, 2002), Chile has high literacy rates among the population aged 15 or more. Overall, the rates are 95.7 with men showing 96.3 per cent and women 95.6 per cent. However, younger women (in the 10-14 age group) have slightly higher rates than males. In rural populations (15 + age group) women's literacy rates are slightly lower as shown below:

Table 1: Literacy rates for the 15+ population by sex and urban/rural residence (%)

	Urban	Rural	Total
Females	52.1	45.9	5,509,540
Males	47.9	54.1	5,235,904
Literate Population	9,425,839	1,319,605	10,745,444

Source: 2002 National Census (INE, 2002)

Enrolment and Years of Schooling.

Over the decade of the nineties the greatest increase in enrolment as reported in Ministry of Education statistics was at secondary level, where coverage of the age group moved from 77 per cent to 85 per cent. Rates in Basic Education for the same period increased less (95 to 97 per cent) because coverage was already high in the early nineties (See: Ministry of Education Statistics, 2001).

In Basic Education published figures on enrolment of girls compared to boys remained around 1.4 per cent lower. In secondary education, on the other hand, female enrolment during the nineties was consistently about 1 per cent higher than for males⁴. However, gender distribution in the two streams of secondary education was not equal. In the technical vocational stream male enrolment was higher while the opposite was true of the academic stream.

The figure below illustrates the enrolment trends in Basic and Secondary Education during the last decade using the Gender Parity Index (ratio of females to males).

[Figure 2: Enrolment. Gender Parity Index (1992-2001) around here]

Over the decade of the nineties schooling of the population increased from 9 to 9.8 years though maintaining differences between urban and rural locations. Gender disparities throughout the decade favoured women in rural locations and men in the urban locations as shown in the next figure:

[Figure 3: Years of schooling by sex and place of residence (1990-2000) around here]

⁴ Ministry of Education figures for "coverage" are calculated on the basis of numbers of enrolled pupils in the relevant school level divided by the adjusted population. Net enrolment rates (NER) as published in ECLAC's Selected Gender-Sensitive Indicators for Latin America and the Caribbean (2002) are somewhat lower. Male NER in Primary decreases from 90% in 1991 to 88% in 1998 and female NER from 88% to 87% in the same period. In the case of secondary education, the contrary was true. Male NER increased from 53% in 1991 to 69% in 1998. Female enrolment increased from 57% to 72% in the same period. Personal calculations based on the 2000 Census figures show a net enrolment in primary for males at 86.4% and for females at 86.2. In secondary the rates are 72% for males and 71.6% for females.

Pass and drop out rates.

Pass and failure rates refer to the proportion of students who are or not promoted to the next year. Failure rates may indicate repetition except for the first four years of Basic Education where there is automatic promotion⁵. Dropout rates are calculated on the basis of the number of students in any year who leave the system altogether compared to the total number of students in that year.

Pass rates in Basic Education fluctuated around 90 to 95 per cent with girls having a slightly higher rate. Conversely, failure rates were lower for girls and so were dropout rates that in general decreased from around 3 per cent in 1990 to 1.3 per cent in 2001. Females also had higher pass rates in secondary education throughout the decade. In fact, these increased from 88.4 per cent in 1990 to 91.8 per cent in 2001 (see tables 2, 3 and 4 in Appendix).

The figure below presents the parity index (proportion of females over males) in pass rates for Basic and Secondary education.

[Figure 4: Gender Parity Index for Pass Rates in Basic and Secondary Education (1990-2001) around here]

Gender Equality.

In terms of gender parity, the preceding presentation of available data shows a good performance as judged by those indicators that concern Education for All. But does parity also mean gender equality? In this section, we take a closer look at some critical areas that show both advances and delays in the achievement of gender equality. They refer first to the effects of poverty on school attendance of males and females as well as to the reasons and aspirations of those who are not in school; and secondly to schooling, learning and their effect on future studies and employment.

The effects of poverty on gender equality

All available evidence shows that children and young people who belong to lower income groups do not get an education of equal quality compared to higher income groups. But, are there other indications of gender inequities for the poor? Available information (ECLAC, 2002) that examines poor and non-poor populations in three age groups by urban/rural residence area and by school attendance rates provide some evidence of inequities particularly in the 13 to 24 age groups (see table 5 in appendix). The greatest disparities occur in the urban group aged 13 to 19. Thus school attendance is 8.6 points higher among non-poor females than poor ones; and 9.2 points higher among non-poor males. But also there are differences within the urban and rural populations that are gender related as shown in the figure below, with female attendance being higher among non-poor rural women and lower than males in all other groups.

⁵ This situation will change from 2004 onwards, allowing repetition in certain cases.

Figure 5: School attendance (percentages) of population aged 13-19 by area of residence, sex and poverty status (1998) around here

We now look at the other side of the coin, that is, young people who never attended school or who currently are out of school.

According to the 2002 Census figures (INE, 2002) the numbers of those “who never attended school” vary by age group but in all cases, women in this situation are slightly less than men.⁶ More specifically, the Casen household survey (MIDEPLAN, 2001) focuses on young people who having attended school at other times report “not being in school at the moment” of the survey. In this situation, the largest percentage are in the 14–17 age group (9.9 per cent), though compared to 1990 they are less than half. There are also more young people not in school in rural areas compared to urban ones, and in these rural areas there is a slightly higher proportion of women compared to men (20.8 per cent for men and 21.6 per cent for women). This gender difference is not found in the urban group⁷.

Poverty levels are associated with being out of school in all age groups, girls and boys, and rural-urban location. When asked why they are not in school those in the 7-13 age group give as main reasons having some form of sickness or disability and needing to attend a special education institution, economic difficulties, family problems and poor behaviour. In the age group 14-17, males and females provide different reasons according to gender. As shown below among women pregnancy or motherhood is a most important reason followed by economic difficulties, while problems related to school such as learning difficulties or lack of interest are important reasons among males.

[Figure 6: Reasons provided for not attending school by sex, around here]

When asked what they were planning to do the next year, the out-of-school group of the 4 to 17 year olds provided answers that also showed gender differences. More than half of males hoped to be working (67.5 per cent) compared to 32.5 per cent of women. On the other hand, 52.8 per cent of women hoped to get back to school compared to 47.2 per cent of males. Similarly, slightly more women expect they will be able to combine work and study than do men, even though this preference is also a high one on their list. In the older age group of 18 to 24 compared to men who hope to work, women expect to get back to school (MIDEPLAN, 2001).

There is not much information on the educational situation of indigenous groups by gender. However, the Casen household survey reports that on several indicators children and young people perform at a lower level compared to non-indigenous groups. While in Basic Education coverage rates are not very

⁶ Amongst the 6-14 “out-of-school” age group (10,616 altogether) 47% are girls. Numbers for both men and women are much smaller in the 15-19 and 20-24 age groups, indicating that they may try to catch up with schooling.

⁷ This information supplements the figures in the ECLAC indicators for school attendance and show that even though the age groups have a slightly different configuration and the information refers to the 1998 household survey, the trends are the same.

different to the national situation, at higher levels indigenous students have lower rates of enrolment and within this group girls have even lower ones, as shown in the table below:

Table 2: School enrolment by ethnic group and sex.

School Level	Males		Females		All	
	Indigenous	National	Indigenous	National	Indigenous	National
Basic	97.4	98.7	97.4	98.5	97.4	98.6
Secondary	84.6	90.0	82.0	90.4	83.3	90.2
Higher	28.0	33.5	16.6	30.0	23.1	31.8

Source: Casen Survey 2000, MIDEPLAN (2000)

Indigenous young people differ significantly from the national population in the reasons they give for not being in school (MIDEPLAN, 2000). First, compared to the national group a high proportion of indigenous young people say they left school on account of behaviour problems. Secondly, pregnancies and maternity is not a major problem for indigenous girls as it for the national population. Only half of the indigenous women report this as a reason for not being in school compared to the national group. On the other hand “having to help at home” is a reason provided by double the number of indigenous women compared to the national population.

Learning Outcomes

An important concern of Chilean society is not just to ensure that all children and young people are enrolled and complete what will now be 12 years of compulsory schooling. More important for social and economic development, as recently noted (Brunner and Elacqua, 2003), is the quality of learning that is achieved through this education. There are two national instruments that provide information in this respect. The first one is the System of Measurement of Educational Quality (SIMCE) that is administered twice to Basic Education students (fourth and eighth year) and once to Secondary students in their second year on a census basis, that is, to all students⁸. The second instrument is the Academic Aptitude Test (PAA) intended to select for university studies.

In general, results of both these examinations show the effect on results of social origin and of type of school (Ministry of Education, 2002b, 2003). Students in the low middle and low-income groups who also attend the publicly subsidised municipal schools tend to perform behind their counterparts in higher income levels and private schools. However, when gender is considered, there are differences in results beyond those of social class and type of schools, although with some differences by geographical region (Ministry of Education, 2002b). Girls perform better in the language component of the SIMCE tests than do their male counterparts and in mathematics they perform below males and this occurs both in the tests for Basic and for Secondary Education⁹. The SIMCE tests were changed two years ago making comparability difficult with former applications. Two recent analytical studies of the SIMCE tests (Ministry of Education, 2003 and 2002b) administered to 4th year Basic Education students (2002) and 2nd year Secondary students (2001) report similar trends:

⁸ Exceptions are schools with less than 10 students or located in geographically isolated areas.

⁹ This is also evident in international studies such as UNESCO’s regional project to evaluate the quality of education (UNESCO, 2001) that showed girls in 8 Latin American countries performing significantly higher in language tests as compared to boys, and in four countries performing significantly lower in mathematics. In both cases, Chile was included.

Table 3: Performance of females in relation to males (difference in points)*

4 th Year Basic Education		2 nd . Year Secondary Education ¹⁰	
Language	9 +	Language	8 +
Mathematics	4 -	Mathematics	10 -
Science & Social Studies	4 -		

*Average in points: 250

While there are more girls enrolled in secondary education with similar pass and retention rates as males, and while a slightly higher number of women take the PAA university entrance examination their results are not equal. Thus, women are outnumbered by men in achieving the higher score levels which are crucial for being admitted into high-demand university programmes (See table 6 in Appendix and the figure 7 below).

[Figure 7: Male and Female Performance in PAA (1992 and 2001) by Scoring Level (1=low; 6=high) around here.]

The above situation means that fewer women compared to men enter higher education institutions and are less represented in certain types of university studies (related to law, medicine, science, economics, engineering) (MINEDUC, 2000).

What happens in secondary education is also noteworthy. Year by year the number of students enrolled in secondary technical education increases as it affords greater chances of employment at the end of studies than does the academic stream. Yet the number of girls who enrol in the technical stream is smaller than that of boys, and those who enrol do so in the traditional feminine specialisations (commercial, secretarial) rather than the male oriented industrial specialisations. According to the 2002 Census reports 82.2 per cent of females versus 33.8 per cent of males were enrolled in commercial specialisations while 58.5 per cent males versus 13.1 per cent females were enrolled in industry specialisations (INE, 2002). What it means in practical terms is that most of women who are employed (80 per cent) do so in the services and commercial activity areas. Women with secondary education or less are employed mostly in domestic work, as office workers, and in diminishing numbers in the textile industry (MIDEPLAN, 2002). Men with secondary education or less are employed in industry, building, vehicle driving, agriculture, forestry and fishing activities¹¹.

History, Social Attitudes and Pedagogy.

The assessment of women's participation in education in Chile over the decade of the nineties is a good one. In terms of years of schooling, enrolment rates and especially retention both at Basic and Secondary levels of education females do well and even better than males. In general their school performance is equal to that of males, though as measured by the SIMCE test consistently they perform below in mathematics. Women in the low socio-economic groups and indigenous women have lower rates of enrolment in both basic and secondary education, but so do males. The most important reason for not

¹⁰ Published scores from the 1998 application of the SIMCE test to the 2nd. Year Secondary show the differences to be lower: 6+ in Language and 5- in Mathematics for females compared to males.

¹¹ Despite these differences, the gap has diminished in the last ten years according the most recent household survey (MIDEPLAN, 2002).

being in school for adolescent females is pregnancy and motherhood; while need for money and work is the explanation of male absenteeism from school. Most probably, more girls will go back to school compared to boys as shown by their responses to the question posed by the household survey.

Yet, what appear as existing problems in the midst of a generally good picture are really important issues given that gender parity in Basic and Secondary education is not an achievement of the nineties but came much earlier (Rossetti, 1988). In fact throughout the twentieth century and especially from the fifties onwards an increasing concern on the part of governments to expand educational opportunities for all led to the achievement of the parity condition we witness today.

The gradual opening of educational opportunities to women¹²

There was practically no formal education for women in colonial times even though they received instruction at home (including indigenous homes) to enable them to perform domestic tasks and participate in the socialisation of their children¹³. In the early years of independence governments attended to the establishment of schools, but it was not until the middle of the nineteenth century that the situation for women began to change. Thus, by 1853 around 25 per cent of girls were enrolled in schools (Escobar, 2001). A year later due to the influence of Sarmiento, an Argentine educator, a Normal School was established to prepare female teachers for the primary schools. Around 1870 the influence of European liberalism on enlightened individuals in Chile produced a movement of thought that supported the opening of secondary and university education to girls. Though the secondary education system had developed as an offspring of the University of Chile (established in 1847) women were not allowed into the public secondary schools or *Liceos*, and further into university until 1877. The fact that in 1888 the first technical school for girls was opened shows how the tide was turning for women by this time. But it was not until well into the twentieth century that educational provisions began to expand.

Free compulsory primary education (six years) became effective in 1929 with equal rights for girls and boys. Even though by 1935 (first year that statistics are kept) only half of the age population was in school, there were little differences in the enrolment of girls and boys. In the coming years, enrolment in primary education grew so that by the seventies it covered practically all the age group.

Secondary education developed at a slower pace. In 1935 coverage among the 15 to 19 age group was around 3.5 to 4.1 per cent; and slightly more males than females. By 1955 coverage reached 10 per cent but women had overtaken their male counterparts in numbers. This trend continued until 1981 when differences favouring females reached its highest point (7.8 per cent). The economic crisis that occurred during the military government of the time probably forced young men into employment. Gradually, differences diminished and by 1985 the ratio of females to males reached a position from which it has hardly changed (51.6 per cent to 48.4 per cent). In the nineties the expansion of secondary education increased to around 85 per cent enrolment of the age group.

¹² For much of the historical analysis that follows I am indebted to Rossetti's (1988) study of gender equality in education.

¹³ In her historical study of women development Veneros (2001) estimates that 10% of women were able to read and 8% able to write.

Alongside traditional academic secondary education, technical schools developed towards the latter part of the nineteenth century. As noted earlier a technical school for women was established in 1888, but it was only in 1933 that the first women were allowed to enrol in the commercial branch of an all male technical school. Changes in social outlook produced by the Second World War and the move to an industrial substitute economy influenced the growth of technical education between 1938 and 1955. But women's increased enrolment in these schools was mainly to prepare them for traditionally female occupations. The biggest change in this respect took place with the 1965 educational reform that required industrial and agricultural technical schools to become coeducational. An interesting note of the times (Rossetti, 1988) was the signing of an agreement with UNESCO in 1968 to implement an experimental project designed to stimulate women's access to technical specialisations, offer equal opportunities to both sexes and allow women to participate in the social and economic development of the country.

One might be tempted to conclude that this gradual process of bringing women into the educational system and enabling parity to occur sooner than perhaps in other Latin American countries, could have been influenced by the efforts of the feminist movements in the early part of the twentieth century that eventually led to winning full voting rights in 1948. Veneros (2001) contends, however, that most educational gains for women were due to social changes as for example the influence of liberal ideas in the nineteenth century, the first wave of modernisation of the twenties and thirties and the later waves produced by the Second World War with the shift from an agricultural to an industrial economy. From the perspective of how most of males and many females saw the role of women, their entry into education was more of a necessary development rather than a desirable one: "*We should recognise all women's rights, but not emancipate them from any of their duties*"¹⁴. This view of society helps to explain in part the lack of parity in higher education and the fact that for the last twenty years there has not been much change in the proportion of women compared to men that elect to study non-traditionally female careers. It also explains that women's participation in the non-female specialisations in technical education is still small.

Social attitudes and pedagogy: Why do women under-perform in mathematics and university selection tests?

This question might have a simple answer if it were not a consistent pattern that has remained over time. There are in fact two arguments provided as hypothetical explanations though with some degree of empirical basis. One has to do with the pervading social view of women's role that has carried over from colonial times: The other, not unrelated to the first one, refers to the pedagogical treatment of women in school through the curriculum and the materials used to teach them. In fact, women may be convinced throughout their years of schooling (as well as socialisation at home) that their aspirations need to be kept low not because of lesser intelligence or capacity but because of the nature of their employment opportunities (what society allows them to do) and the demands of their role as mothers and housewives.

In their study of women and education from a historical perspective, Veneros (2001) and Escobar (2001) cite comments from women's magazines of the fifties, a time when education for women was expanding greatly. These quotes supported the notion that women must be educated in tune with the demands of a

¹⁴ Statement cited by Veneros (2001) from leading woman's magazine in 1949.

modern society, without forgetting their “feminine roles”: “*Teach her all a woman should know about. Even though she may consider a profession or working in an office, she should know how to keep her house and how to sew*” (Escobar, p. 145). Though today nobody would overtly voice these opinions, they continue to underpin the existing concept of gender relationships as noted in legislative restrictions, in employment opportunities, in the limited access to leadership and political positions prevailing still in Chile (SERNAM, 2000; Veneros, 2001, UNDP, 2002). In her pioneering study of women and education in the eighties Rossetti (1988) suggests that there are links between schooling and these attitudes. In school women learn to restrict their outlook to the kinds of activities that are easily attainable by women such as teaching or nursing and have no wish to take over those others that are owned by males. In her study on the pedagogy used in coeducational schools, Rossetti (1989) found a subtle different way of dealing with girls and boys that suggests greater approval of male outlook and attitudes. The behaviour of boys and girls also mirrors the relationships in society, where boys take over conversations or organise the mode in which girls should act in given circumstances. In their study on secondary schools in Chile Edwards et al (1994) noted that agricultural technical schools (where women students are a minority) are particularly biased in their view of opportunities for women in the agricultural field even though they increasingly work in the fruit area of production. But also, overall in the different classrooms observed by Edwards *et al* they found that in the eyes of teachers girls seemed to be “transparent” or “invisible”, as other authors have also noted (Messina, 2001). Often the classroom is organised in separate rows for girls and for boys with teachers mostly addressing the boys. Most of the teachers of maths in these schools were males while most of the language teachers were females. Perhaps this explains in part the different results in these two curriculum subjects¹⁵.

There are more technical explanations of why women do not perform as well as men in the university selection test despite having achieved better secondary school results. One of these already advanced by Rossetti in her study (1988) is that the structure of the test is at fault. Bravo and Manzi (2002) in a piece of research comparing the cohort of students that took the school SIMCE test in 1998 and their achievement in the university selection test (PAA) in 2002 found that the low results of women in the PAA do not bear relationship to their school achievement. They hold that the nature of the university entrance test, which is based on aptitudes as the American Scholastic Aptitude Test rather than on knowledge gained through the school curriculum, is to blame. Twelve years earlier Rossetti (1988) also suggested that an explanation for women’s lower results could be found in the nature of the test. But, she linked this to a motivation factor. Males are more concerned to make sure they get the scores needed to enter university prestigious programmes and so take crash courses to prepare for the test. Women, who aspire to university studies that are less demanding in terms of selection scores (teaching, nursing, social work) do not bother in the same way to prepare for the mechanics of the tests¹⁶.

¹⁵ A recent analysis of the SIMCE examination results in mathematics, without specifically addressing gender differences, noted that results are largely explained by within-classroom factors: differences between students and treatment provided by teachers in the light of these differences (Ramírez, 2003).

¹⁶ For example, more women take university entrance tests in Chemistry (53.9%) and Biology (62.4) compared to men. But fewer apply to take the mathematics (38,7%) and physics (22.7%) in line with the information about their capabilities communicated by results in the secondary school examinations.

Perhaps young school female leavers would aspire to other kinds of occupations if they sensed that employment opportunities are equally open to them. But that is not the case in contemporary Chile. The Equal Opportunity Plan for Women and Men, 2000-2010 (SERNAM, 2000) notes as a fact that women do not reach leadership roles in the numbers expected, are mostly employed in traditionally female occupations and receive lower salaries for equal duties and tasks. The 2000 Casen Household Survey supports this view when it reports that women in employment are concentrated in occupations such as office workers, commercial clerks, domestic service, and are over-represented in occupations such as teaching, office and tasks dealing with attention to the public. As university students, most women are enrolled in careers such as teaching, social work and nursing. The survey also notes that income determines the number of women in employment. Even though compared to 1990 more women in lower groups are working, there still is a gap of women economically active between 52.1 per cent in the highest income groups compared to 24.8 per cent in the lowest. One possible explanation, given that it is the poorest women who when they work contribute to bringing their families out of extreme poverty, is that their education has not prepared them to be active in employment marked by higher technology and changed production structures (MIDEPLAN, 2002).

What Is Being Done and What Could Be Done? Reforms and Policies.

Reform actions

In the course of the educational reform programmes undertaken by the Ministry of Education a specific concern has been to address the pedagogical aspects acknowledged as contributing to discriminate against women. These include gender sensitivity in the writing of the new curriculum for primary and secondary education and in the production of textbooks. The inclusion of cross-curricular themes within the school curriculum provides scope for dealing with gender discrimination issues. Also bidding processes to write and publish textbooks include as of 1994 a gender equality factor, which in turn is taken into account when deciding which textbooks to adopt for distribution in schools¹⁷.

Teacher education programmes are also becoming more gender sensitive. Amongst some reported initiatives are inclusion of such themes in the curriculum (Luque and Rojas, 2001) and specifically in the preparation of pre-school teachers (Narbona, 2001; Araneda, 2001) as well as studies of gender attitudes among teacher educators (Vergara, 2001). The Distance In-Service programme run by the National Centre for In-Service Training of the Ministry Education produced a course for teachers in association with the National Women's Service (SERNAM) dealing with gender equity issues and suggestions on how to consider these in their interpretation of the curriculum, use of textbooks and relationships with students (Ministerio de Educación and SERNAM, 2000).

Recognising that Pre-school Education is a key factor in the improvement of learning levels in Basic education, the Ministry of Education has increased the budget allocated to this sector in order to open pre-

¹⁷ An example of work in this direction is the production of a Handbook to assist in the production of non-sexist textbooks commissioned by the Ministry of Education and SERNAM (Araneda, Guerra and Rodríguez, 1997).

school opportunities for children of the low-income groups. Growth between 1992 and 2002 was around 11 per cent and girls make up almost half of the pre-school population (49.2 per cent).

The issue of pregnant adolescent girls led the Ministry of Education and the Women's National Service (SERNAM) to establish in 1996 a programme addressed to the secondary school communities (teachers, parents and young students) focused on conversations about sexuality and related issues, known as JOCAS (Solar, 2000). Initially, conservative groups and the Catholic Church attacked the programme. However, with some adjustments to satisfy these groups, it continued until recently with a good deal of success. A specific school-based sex education programme has now replaced it. Besides this preventive activity, schools were issued with a decree in 1991 instructing them not to expel pregnant girls and to continue to enrol them once they have become mothers. Some schools have established nursery facilities for girls to leave their babies, but they are still very few.

Most women not in secondary school belong to the lower income groups (including indigenous groups). In order to make sure they do not have to yield their place to other siblings, the government has established a scholarship programme for the poorest schools that consists in a sum of money paid to parents to make sure their children are in school. Of longer standing, is a government scholarship that is also available for secondary school students (*Beca Presidente de la República*). Monitoring of how this scholarship has been allocated showed that over the nineties on average 60 per cent of female applicants compared to males have been recipients of this award (Valdés, 2001).

Finally, it is possible that the new selection system for universities to be implemented late in 2003 may provide better opportunities for women as it focuses more on school knowledge than aptitude testing (Bravo and Manzi, 2002).

Policies.

One of the important issues brought out by the analysis of data on gender equality in education and specifically on women's participation in higher education, employment, and leadership positions, is the importance of visibility. Unless problems are seen solutions will continue to escape and the country will lose the important contribution of its women. Perhaps the main difference between the situation at the end of the eighties and beginning of the 21st century is that there is more recognition and more information on these issues. In this, the social sector ministries have had a key role to play. Particularly important has been the Women's National Service (SERNAM) in its efforts to highlight problems and to work out and produce solutions with the other ministries. A key instrument in this respect is SERNAM's *Equal Opportunities Plan 2000-2010* (2000). The Plan sets out the issues in each one of the key areas related to women such as legal rights, participation, economic independence, daily welfare and quality of life, outlining for each of these areas what has been achieved and what is still needed. Education improvement is touched almost in all of them. Among the most important policy indications provided are those directed to lower income, rural, indigenous and illiterate women as well as girls of pre-school age. For all these groups flexible education opportunities should be made available at all levels of the system. In order to keep track of achievement of these policies, the Plan calls for maintaining an up-to-date system of indicators. These should include gender equality contents in the school, university and other tertiary level curriculum, maintaining a gender equality index for tertiary level enrolment and for the

numbers of women enrolled in traditionally “male” careers and of males in enrolled in female careers, as well as women’s participation in public positions by using the UNDP gender empowerment index. The policy also indicates the need to keep watch of drop-out rates by education level, sex and type of family as usually provided in the Casen household survey, to monitor the proportion of pregnant girls who continue their education, and to present SIMCE school evaluation results by sex.

Another measure destined to monitor improvements in gender equality in line with commitments made by Chile in international gatherings and to institutions of which the country is a member¹⁸, is the Index of Fulfilled Commitments referred to earlier in this work. Several NGOs concerned with women issues under the institutional leadership of the Latin American Faculty of Social Sciences (FLACSO) have been involved in the production of this index. The index has two indicators that concern education: the number of women in proportion to men who are awarded secondary school scholarships and sex education programmes for young people in public secondary schools. It also monitors the proportion of women in relation to males who have public leadership positions.

Conclusion

While Chile achieved gender parity in basic and secondary school enrolment by the middle of the twentieth century and in pass and retention rates by the eighties, opportunities for women today after completion of secondary education are not adequate. Awareness of this situation has impelled both those who are studious of women’s affairs as well as policy makers in the social ministries to examine the factors that impinge on this situation. Not all of these factors are equally clear. There are the tenuous ones that point to discriminatory attitudes embedded in the social fabric and that have persisted over time despite the modernising economic and social changes occurring in the latter part of the twentieth century. There are factors related to poverty that affect in particular the availability of those educational opportunities needed for productive employment. There are also structural and pedagogical factors embedded in the system, both in the teaching strategies but more importantly it seems in the assessment procedures, that stop potentially capable women from entering traditionally male professions and occupations and contributing their intelligence in these areas. And finally, there are factors anchored in women themselves, that lead them to curtail their aspirations and fall in line with what is expected of them.

Much of this is documented, but it continues to be a matter for discussion amongst the interested groups in Chile. It needs to be made an issue for wider public discussion. Perhaps, the most important policy initiative set out by SERNAM and other organisations is the monitoring of key indicators related to gender equity. It is not enough to rest content with the achievements of a long time ago; it is important to carry out changes that will correct the newly recognised inequities. In this sense, the case of Chile may be taken as exemplifying issues that all developing countries face to some extent when they overcome the crudity of basic gender disparities in enrolment and retention, and find they must tackle other forms of

¹⁸ Amongst these are the Convention on the Elimination of All Forms of Discrimination of against Girls and Women and the Beijing Women’s World Conference.

discrimination as with the poorest people, indigenous groups or in relation to public leadership recognition for women¹⁹.

References

- Araneda, P. (2001). Incorporación de la perspectiva de género en la formación de educadoras de párvulos en la UMCE. . In Escobar, Flores and Veneros (Eds.), *Investigaciones Red Nacional Universitaria Interdisciplinaria de Estudios de Género*. Santiago: SERNAM.
- Araneda, P., Guerra, J. and Rodríguez, M. (1997). *Lo Femenino Visible. Manual para la Producción de Textos Escolares No Sexistas*. Santiago: MINEDUC & SERNAM.
- Bravo, D. and Manzi, J. (2002). Equidad y resultados educacionales: SIMCE y PAA. Unpublished article part of ongoing research. Correspondence. Escuela de psicología, P. Universidad Católica de Chile, Santiago or jmanzi@puc.cl
- Brunner, J. J. and Elacqua, G. (2003). *Informe Capital Humano en Chile*. Santiago: Universidad Adolfo Ibáñez. See www.uai.cl
- ECLAC (2002). Latin America and the Caribbean: Selected Gender-Sensitive Indicators. *Demographic Bulletin*, 70, July.
- Escobar (2001). Perspectivas históricas en torno al desarrollo de la educación de las mujeres en Chile, 1938-1952. . In Escobar, Flores and Veneros (Eds.), *Investigaciones Red Nacional Universitaria Interdisciplinaria de Estudios de Género*. Santiago: SERNAM.
- INE (2002). *Resultados generales Censo 2002*. Santiago: Instituto Nacional de Estadísticas.
- Luque, M. and Rojas; P. (2001). La perspectiva de género como eje transversal en el curriculum del Programa de Fortalecimiento de la Formación Inicial Docente (PROFIDO) en la Universidad de Tarapacá. . In Escobar, Flores and Veneros (Eds.), *Investigaciones Red Nacional Universitaria Interdisciplinaria de Estudios de Género*. Santiago: SERNAM.
- Messina, G. (2001). *Igualdad de Género en la Educación Básica de América Latina y el Caribe*. Santiago: UNESCO.
- MIDEPLAN (2000). Etnias y pobreza en Chile. Documento 14: Análisis de la VIII Encuesta de Caracterización Socioeconómica nacional (Casen 2000).
- MIDEPLAN (2001). Pobreza, crecimiento y distribución del ingreso en Chile en los noventa. Doc. 24, (Resultado de la VII Encuesta de Caracterización Socioeconómica Nacional – CASEN, 1998). Santiago: July. See: www.mideplan.cl
- MIDEPLAN (2002). La situación de la mujer y las brechas de género: Análisis de la información de la Encuesta Casen 1990 y 2000. Santiago; December.
- Ministry of Education (1992-2000). *Estadísticas de la Educación*. Santiago: MINEDUC.
- Ministry of Education (2000). *Sistema de Educación Superior. Compendio Estadístico 1997-1999*. Santiago: División de Educación Superior.
- Ministry of Education (2001). *Estadísticas de la Educación Año 2000*. Santiago: Ministry of Education.
- Ministry of Education (2002a). *Estadísticas de la Educación Año 2001*. Santiago: MINEDUC.
- Ministry of Education (2002b). Prueba SIMCE 2º Medio 2001. Análisis de Resultados. Santiago: División de Planificación y Presupuesto, Departamento de Estudios y Estadísticas, December.
- Ministry of Education (2003). Prueba SIMCE 4º Básico. Análisis de Resultados. Santiago: División de Planificación y Presupuesto, Departamento de Estudios y Estadísticas. May.

¹⁹ Messina's (2001) study on gender equality in Basic Education in Latin America points out that gender equality in access shown by the enrolment figures of most countries is still inserted in contexts where there is inequity in jobs for women, social and political participation as well as in wealth distribution.

- Ministry of Education and SERNAM. (2000). *Hombre=Mujer ¿Y en Oportunidades?* Santiago: CEPEI-Ministerio de Educación. Edwards, V., Calvo, C., Cerda, A.M., Gómez, M.V. and Inostroza, G. (1994). *El Liceo por Dentro. Estudio Etnográfico sobre Prácticas de Trabajo en Educación Media*. Santiago: Ministerio de Educación, Programa MECE.
- Narbona, G. (2001). ¿Cómo se aborda el género en la cotidianidad educativa del nivel terminal de la educación parvularia? . In Escobar, Flores and Veneros (Eds.), *Investigaciones Red Nacional Universitaria Interdisciplinaria de Estudios de Género*. Santiago: SERNAM.
- Ramírez, M. J. (2003). The distribution of mathematics knowledge among Chilean fourth graders and related explanatory factors. Unpublished paper. Correspondence to: International Study Center, Lynch School of Education, Boston College or ramiremb@bc.edu
- Rossetti, J. (1989). Chile. In Gail P. Kelly (editor). *International Handbook of Women's Education*. New York: Greenwood Press.
- Rossetti, J., Cardemil, C., Rojas, A., Latorre, M. and Quilodrán, M.T. (1989). Educación: La igualdad aparente entre los géneros. Santiago: CIDE (Unpublished research report)
- SERNAM (2000). *Plan de Igualdad de Oportunidades Entre Mujeres y Hombres 2000 – 2010*. Santiago: SERNAM
- SERNAM & INE (2001). *Mujeres chilenas. Estadísticas para el nuevo siglo*. Santiago: SERNAM & INE, July.
- Solar, R. (2000). La situación de la niña adolescente en Chile. In; *Realidad de la Niña Adolescente en Chile Hoy*. Santiago; UNESCO and FMNYP.
- UNESCO (2001). First International Comparative Study of Language, Mathematics and Associated Factors in Third and Fourth Grades. Technical Report. Santiago: UNESCO/OREALC.
- UNDP (2002). *Desarrollo Humano en Chile. Nosotros los Chilenos un Desafío Cultural*. Santiago: PNUD.
- Valdés, T. (Ed.) (2001). *El Índice de Compromiso Cumplido-ICC. Una Estrategia para el Control Ciudadano de la Equidad de Género*. Santiago: FLACSO.
- Veneros, D. (2001). Siglo XX, *Cambalache*. Breve reseña histórica de los avances de la mujer en Chile. In Escobar, Flores and Veneros (Eds.), *Investigaciones Red Nacional Universitaria Interdisciplinaria de Estudios de Género*. Santiago: SERNAM.
- Vergara, X. (2001). Percepción sobre las conductas de género en los académicos y académicas de la UMCE. . In Escobar, Flores and Veneros (Eds.), *Investigaciones Red Nacional Universitaria Interdisciplinaria de Estudios de Género*. Santiago: SERNAM.

Appendices

1. Enrolment figures (1990-2001) by level of education and sex*

Years	General Basic Education		Secondary or Middle Education			
	All	% Female	Academic Stream		Technical- Vocational	
			All	% Female	All	% Female
1992	2,066,046	48,6	410,896	53,6	264,177	47,2
1993	2,034,839	48,9	391,457	53,7	261,358	47,5
1994	2,088,508	48,8	387,272	54,2	277,226	46,6
1995	2,114,205	48,7	388,117	54,1	291,048	48,0
1996	2,205,092	48,6	415,919	54,1	323,397	47,1
1997	2,234,248	48,6	421,132	53,9	332,118	47,3
1998	2,253,171	48,6	424,892	53,6	349,142	47,5
1999	2,305,459	48,6	444,281	53,3	359,551	47,4
2000	2,355,594	48,6	456,246	52,9	366,700	47,0
2001	2,361,721	48,6	474,641	52,7	376,072	47,2

* Excludes Special Education

Source: MINEDUC *Compendio de Información Estadística* Años 1992-2001. Santiago: Ministry of Education.

2. Pass rates (1990-2001) by level of education and sex (%)*

Year	Basic Education		Secondary Education	
	Male	Female	Male	Female
1990	88.3	91.6	78.6	81.9
1992	89.2	92.5	79.3	83.4
1993	92.7	94.3	78.4	81.4
1994	92.0	94.0	77.7	80.9
1995	90.8	93.8	78.5	83.0
1996	91.2	93.8	80.6	85.1
1997	92.9	95.2	83.0	87.3
1998	94.1	96.0	85.2	89.1
1999	95.1	96.7	87.9	91.3
2000	94.9	96.6	87.5	91.3
2001	95.1	96.7	88.4	91.8

*Information presented for 1991 is not consistent in form and has been excluded.

Source: MINEDUC *Compendio de Información Estadística* (2002)

3. Failure rates (1990-2001) by level of education and sex (%)*

Year	Basic Education		Secondary Education	
	Male	Female	Male	Female
1990	9.2	6.3	13.0	11.7
1992	8.6	5.8	13.4	11.1
1993	5.6	4.0	12.8	11.4
1994	6.6	4.5	15.4	13.5
1995	7.1	4.8	13.8	11.1
1996	6.8	4.6	12.1	9.6
1997	5.3	3.4	10.2	7.9
1998	4.3	2.7	9.1	6.8
1999	3.4	2.1	7.2	4.9
2000	3.6	2.1	7.8	5.3
2001	3.5	2.1	7.1	4.8

*Information presented for 1991 is not consistent in form and has been excluded.

Source: MINEDUC *Compendio de Información Estadística* (2002)

4. Dropout rates (1990-2001) by level of education and sex (%)*

Year	Basic Education		Secondary Education	
	Male	Female	Male	Female
1990	2.5	2.1	8.4	6.4
1992	2.1	1.7	7.2	5.5
1993	1.7	1.7	8.8	7.3
1994	1.4	1.5	6.9	5.6
1995	2.1	1.4	7.7	6.0
1996	2.0	1.6	7.3	5.3
1997	1.8	1.4	6.8	4.9
1998	1.6	1.3	5.6	4.2
1999	1.5	1.2	4.9	3.7
2000	1.5	1.2	4.7	3.4
2001	1.4	1.2	4.5	3.4

*Information presented for 1991 is not consistent in form and has been excluded.

Source: MINEDUC *Compendio de Información Estadística* (2002)

Table 5. School attendance in Chile of the population aged 6-24 by area of residence, age groups, sex and poverty status in percentages(1998).

Population group	Urban			
	Poor		Non-Poor	
	Male	Female	Male	Female
6-12	97.4	98.7	99.3	99.3
13-19	74.9	74.3	84.1	82.9
20-24	15.6	10.7	33.3	33.0
	Rural			
6-12	93.1	96.0	97.3	96.2
13-19	70.7	67.2	64.9	69.1
20-24	8.3	5	8.3	13.0

Source: ECLAC, 2002

Table 6. Women taking the Academic Aptitude Test (PAA) by results (2000 and 2001)

Scoring levels	1992		2001	
	All	% Female	All	% Female
1. 1-400	21701	63	36598	59.8
2. 400.5-500	45655	56	35591	54.7
3. 500.5-600	35218	49	22368	50.6
4. 600.5-700	24398	42	15485	44.7
5. 700.5-800	5759	35	5644	38.1
6. 800 +	21	24	38	22.5
Total	132752	53	115724	53.7

Source: MINEDUC, *Compendio de Información Estadística* 1992 and 2001. Santiago: Ministry of Education.