Aids and barriers in lower secondary schools: representative cases in Oaxaca, Mexico

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The main challenge faced by the Mexican Education System these days is that all people aged between 12 and 15 years are obliged to attend lower secondary school, and that this educational stage has to be concluded with acceptable levels of knowledge. However, not all students of eligible age are enrolled in school and not all students who are enrolled have satisfactory academic performances in the southern State of Oaxaca, Mexico. If attention is focused on those students who are able to enroll, why do some students do well and others do not? The aim of this study is to identify the factors that make students successful or unsuccessful. As the literature suggests, there are various factors that affect children’s performance in school. Thus, family, school and contextual factors were explored through semi-structured interviews with 79 participants that included students, parents, teachers and social workers in lower secondary schools in advantaged and disadvantaged localities. From this, it was concluded that stability at home, homework support and parental encouragement (socio-economic status (SES) being a secondary factor) exert a crucial influence on educational achievement. Schools also play vital roles in students’ lives, especially teaching practices and school policies which, in many ways, seem to limit students’ educational opportunities.

Introduction and background


This study focuses on lower-secondary students from Oaxaca, Mexico. Firstly because, as the OECD (2004) reports in relation to The Programme for International Student Assessment (PISA\(^1\)) results, compulsory education is the stage at which
people acquire the basic knowledge and skills that they need in their day-to-day lives. Secondly, because in Mexico, this seems to be the stage at which students begin to cope with different determinants that may influence their remaining in or their leaving of school.

Much has been said about academic achievement and the majority of authors have concluded that achievement in school is influenced by various factors (Rumberger 1983, 2001, Ekstrom et al., 1986, Orfield, 2004). Different authors have looked into the problem of educational failure attempting to understand the factors that exert influences on academic performance. Most authors have focused on the negative factors affecting students’ lives by categorizing them as “influential factors” or “barriers”. Although this study focuses on finding the reasons why lower secondary school children struggle to conclude their compulsory education, both negative and positive aspects were explored, with the intention of making a clearer contrast of both sides of the problem.

**Academic achievement: girls versus boys**

Firstly, it is important to explore the well known fact that has been on the international political agenda in the past decades: girls are holding higher levels of academic achievement compared to that of boys. It has been demonstrated that in developed countries, where opportunities for school participation tend to be more equal, girls outperform boys (UNESCO, 2003). The learning process is an area where differences are tangible; results from PISA 2000 showed that, in most countries that participated in the study, the tendency was that girls had higher reading levels than boys. The balance was inclined on the other side for PISA 2003 where boys proved to outperform girls in mathematics.

Moreover, OECD (2004) describes clear differences between students’ areas of interest and students’ characteristics as learners that were observed in most participating countries. When it came to areas of interest, girls showed more interest in reading and boys showed more interest in mathematics, as a result of gender motivations. On the other hand, their approaches to learning varied as well; it is indicated that “Boys also have a stronger general confidence in their ability to overcome obstacles and be effective as learners, while girls report greater effort and persistence” (OECD, 2004: 13). Other trait differences are pointed out, such as their employed learning strategies, which vary from the tendency of girls to memorise material and having a more systematic approach to learning to boy’s tendency to learn by constructing new knowledge relating it to previous knowledge. One final aspect is also covered, the levels of engagement of girls and boys at school age 15. There was evidence that confirmed that their chances of having low attendance in school were generally the same. These patterns, may, however, vary depending on respective national characteristics.

Results from PISA 2006 showed that science competency amongst boys and girls were relatively the same, yet “Males outperformed females in explaining phenomena scientifically while females outperformed males in the scale identifying scientific
"issues" (OECD, 2009: 22) In six countries, Mexico included, however, males achieved significantly higher science scores than girls.

Because of the differences in gender patterns in educational achievement, it was decided that the gender perspective would be a constant category of analysis in the study. This was aimed not only at looking at disaggregated figures of school participation or dropping out trends, but also by mainstreaming this lens throughout the design of the methodology with the intention of obtaining more objective perspectives about the problem investigated.

Educational trends in Mexico

Underperformance in PISA

If we look at results for the PISA 2000, which focused on reading abilities, we can observe that Mexico was positioned ahead among Latin American nations but in penultimate place amongst the 32 participating countries\(^2\). PISA 2000’s average mean score was 500 and Mexico reached a mean score of 422.

Mexico’s mean results from PISA 2003 which focused on mathematical abilities, lowered to mean scores of 385 (400 in reading and 385 in mathematical literacy). This positioned Mexico into 35\(^{th}\) place out of the forty one participating countries, but in last place on the list of the OECD countries.

PISA results for Mexico in 2006, which focused on Science abilities, did improve to some extent. From the expected mean score of 500; Mexico attained a mean score of 410, a fact that positions it at number 49 of 57 participating countries. This mean score also positions Mexico at the bottom of the list of the OECD participating countries.

Even though Mexico’s performance in PISA leads results in Latin America, together with Chile and Brazil, the reality is that Mexican students’ performance in reading, mathematics and science are below the OECD countries’ average.

The following table illustrates Mexican students’ performance for the three assessed areas in the Programme for International Student Assessment between 2000 and 2006:

<table>
<thead>
<tr>
<th></th>
<th>Reading performance</th>
<th>Mathematical literacy</th>
<th>Scientific proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD(^3) (2000-2006)</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Mexico (2000)</td>
<td>422</td>
<td>422</td>
<td>387</td>
</tr>
<tr>
<td>Mexico (2003)</td>
<td>385</td>
<td>400</td>
<td>385</td>
</tr>
<tr>
<td>Mexico (2006)</td>
<td>410</td>
<td>410</td>
<td>406</td>
</tr>
</tbody>
</table>

Sources: OECD, 2004; OECD, 2009
In summary, a small reversal was observed in results obtained in the three of the assessed areas between 2000 and 2003 for Mexico, followed by a similar recovery for results obtained between 2003 and 2006. Thus it could be argued that Mexico has remained at a stagnated position.

*The problems of year repetition and dropping out*

The fact that the Universal Primary Education goal has been achieved by Mexico (UNESCO, 2006) is a positive indicator that points towards substantial progress in the country over the past decade. It seems that a position has been reached at which all children of required age to attend this level of education complete six years of quality schooling.

Mexico, however, faces two main problems at the lower secondary education level: the high levels of grade repeaters (students held back a year or more in school) and the high levels of (dropouts (especially amongst males).

Statistical data from 2002/2003 reveals that Mexico presented a net enrolment rate (NER) of 63 meaning that only 63 percent of the students relative to the age group to attend lower secondary school (ages between 12 and 15) enrolled in that level of education (UNESCO-UIS, 2005). This data disaggregated by gender shows a NER of 61 for males and 64 for females.

The percentage of grade repeaters in secondary education during the 2002/2003 academic year, on the other hand, represented 2 percent of those students (3 for males and 1 for females) who were enrolled in the same grade for a second or further year, regardless of age (UNESCO 2005). A small reduction of these figures was observed from 2006 data, where 1 percent of students (2 for males and 1 for females) represented the percentage of repeaters (UNESCO-UIS, 2008). The pattern, however remained the same: more boys repeat grades than girls.

Accordingly, dropout rates for lower secondary early school in 2004 was 7.4 (9.1 for males and 7.7 for females (this, expressed as a percentage of the total population in that age group) (INEE, 2006), and for the 2006/2007 academic year this rate remained at 7.4 (9 for males and 5.8 for females)

These figures do not seem ideal with respect to Mexico’s attainment of their Dakar commitment to increasing participation in secondary education; they rather show the limitations that Mexico faces towards its goal of acquiring skills that are fundamental for its social and economic development.

These figures also make it visible that Mexico faces notable challenges within its educational system that generate high rates of dropouts at the last stage of basic education, and significant rates of children who struggle with passing their academic years successfully.
Advantaged areas versus disadvantaged areas

In Mexico, like most Latin American countries, educational achievement normally has clear differences between urban and rural areas. Rural areas generally have less availability of educational resources such as physical infrastructure, teaching materials and lack of teachers (UNESCO, 1997). In addition, rural areas more often have higher proportions of indigenous population which are at the same time very likely to live in conditions of acute poverty, resulting in marked educational and social inequalities of opportunities for them.

The indigenous population registered in 2002 represented more than 12 percent of the total population in the country, and are considered as a vulnerable group, so are women, and those in extreme poverty conditions. Their usages and customs are not fully recognised and their access to good quality of education or health services is limited or null, reinforcing their own exclusion and marginalisation (Office of the High Commissioner for Human Rights, 2003).

When looking at PISA results and general educational patterns of all administrative divisions in Mexico it is evident that they correspond to those of international patterns; educational results turn out to be better in better developed states. Using the States’ Human Development Index (HDI), more advantaged divisions such as the Federal District in Mexico City, Baja California, Nuevo León, Coahuila and Chihuahua hold higher mean scores for the three assessed areas (health, knowledge and decent standard of living), and the poorest States such as Michoacán, Guerrero, Chiapas and Oaxaca held the lowest mean scores. PISA 2006 results for these entities were as follows:

Table 2. PISA 2006 Science mean scores in most advantaged and least advantaged entities in Mexico

<table>
<thead>
<tr>
<th>HDI</th>
<th>PISA 2006 Mean scores</th>
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<tbody>
<tr>
<td>Most advantaged States</td>
<td></td>
</tr>
<tr>
<td>Federal District (.88)</td>
<td>445</td>
</tr>
<tr>
<td>Baja California (.87)</td>
<td>437</td>
</tr>
<tr>
<td>Nuevo León (.85)</td>
<td>435</td>
</tr>
<tr>
<td>Chihuahua (.83)</td>
<td>421</td>
</tr>
<tr>
<td>Coahuila (.83)</td>
<td>410</td>
</tr>
<tr>
<td>Most disadvantaged States</td>
<td></td>
</tr>
<tr>
<td>Michoacán (.75)</td>
<td>398</td>
</tr>
<tr>
<td>Guerrero (.73)</td>
<td>379</td>
</tr>
<tr>
<td>Oaxaca (.73)</td>
<td>368</td>
</tr>
<tr>
<td>Chiapas (.71)</td>
<td>374</td>
</tr>
</tbody>
</table>

Source: PNUD (2007)
This data shows that advantaged areas in Mexico had mean scores for Science abilities above the national average (410), and similar to countries such as Chile, Serbia, Bulgaria or Turkey, to mention some. Disadvantaged areas, on the other hand, had mean scores below the national average and similar to countries like Indonesia, Argentina, Brazil and certainly lower than Azerbaijan.

As a result, the areas’ HDI and their index of Economic, Social and Cultural Status (ESCS) coincide; the estimated national mean score for ESCS was -0.99, and Oaxaca and Chiapas are again the farthest from the national ESCS mean score with -1.60 and -1.45 respectively.

**Oaxaca: one of the poorest States in Mexico**

At this point, it has been determined that Oaxaca, a State in southern Mexico, with a HDI of 0.73, is at the tail end of the list with it being the second lowest in the country. Its HDI, if compared with other cities or countries in the world, would put them at a similar level countries and territories such as El Salvador, The Occupied Palestinian Territories and The Maldives (PNUD, 2007). Oaxaca also has one of the lowest levels of Education Index in the country (0.77), similar to countries such as El Salvador, Belize, Cape Verde and of Botswana.

In addition, it is worth mentioning that Oaxaca is the State where the majority of indigenous population is concentrated; 18 percent of the indigenous population of Mexico (INEGI 2009) is concentrated there. Indigenous populations are distributed throughout the country, yet they are mostly concentrated in the southern states, regions where agriculture and subsistence farming are important practices in their way of living. Historically, indigenous peoples have faced human rights violations due to historic conflicts that have been taking place for many years relating to assurances over their lands. On the other hand, in some parts of Mexico, their customary laws are not fully recognised and their access to education or health services are limited or null, reinforcing their own exclusion and marginalisation (Office of the High Commissioner for Human Rights, 2003).

Furthermore, Oaxaca, not only holds the greatest educational failure rates associated to its low socio-economic conditions, but it’s regional Education System also faces significant political challenges deriving from a powerful teachers’ union. Led by this Union, teachers go on strike very frequently to express their demands over its educational needs.

*The Sindicato Nacional de Trabajadores de la Educación (SNTE)*

The Sindicato Nacional de Trabajadores de la Educación (SNTE) is considered to be the largest teachers’ union in Latin America. The Union is powerful for two main reasons, firstly, it is the only education union in Mexico, all basic education teachers in Mexico must become a member of the SNTE. Membership is not restricted to just teachers, but is also open to all other administrative staff and technicians of the public education system. The second main reason why it is powerful is because all of its
members contribute a membership fee that approximate to about 1 percent of their basic salary, giving it a large financial base. The Union does not seem to have financial accountability of its funds to its members or the general public (Santibáñez & Jarillo, 2007). Thus, due to the size of membership and financial reasons, this Union is a complex yet very powerful factor in the Mexican education system.

The union system is based on a structure of incentives that must be earned through political participation. This might involve the Union internal affairs, years of service, punctuality, among others. Teachers are then obliged to follow what the Union dictates and its policies. If teachers do not follow such structure, they become subject to its own system of punishment and rewards (Santibáñez & Jarillo, 2007) that might involve teachers being moved to other locations, or limiting them from going further in their career advancement points-system, among others.

This Union has been historically powerful and has exerted a very strong influence on both Federal and local governments by conditioning the Ministry of Education’s policies or by controlling teachers’ vacancies and the creation of those.

On several occasions, the SNTE’s intense political activities have led them to hold long periods of strike action as a way of manifesting its dissatisfaction as a tool in its technique of negotiating fulfillment of it’s demands, normally relating to salaries, working conditions, pensions and teacher training (Vaillant, 2005)

Vaillant (2005) lists the number of teachers’ protests from 18 countries in Latin America; it was estimated that between 1998 and 2003, teacher’s protests in Mexico happened 103 times. If the number of strikes by other countries were looked at within the same period of time, teachers’ protests in Uruguay, Chile and Venezuela were 3, 7 and 45 respectively. Venezuela being the country with the second highest number of protests. This not only gives an idea of the magnitude of the teachers’ political involvement, but also of the magnitude of their absences in schools, a fact that puts students at risk of not reaching their learning needs or at risk of not having quality teaching.

Many sources such as the media and especially the public have suggested the SNTE might be the major contributor to the deficient educational situation in Mexico.

It is important to mention that major political involvement by the SNTE is especially observed in States such as Oaxaca, Chiapas and Guerrero (Santibáñez, Jarillo, 2007)

The Teachers’ Union Strike in Oaxaca in 2006

On the 22nd of May of 2006, teachers of the SNTE, Section 2212 started a strike in the centre of Oaxaca City, the State Capital. Their demands included improvement of salaries and training conditions for its members. The strike continued with no classes in all publicly funded schools when, on June 14th the government security forces attempted to evict striking teachers from the city centre with the use of tear gas and other riot-control techniques.

Three days later, as the result of the Union and other organisation’s discontentment with the government, the Popular Assembly of the Peoples of Oaxaca (APPO) emerged on the 17th of June of 2006, installing barricades at different points of the
City and demanded the State Governor’s (Ulises Ruiz Ortiz) resignation. As a consequence, children of all publicly funded schools were not in school and were not able to start the new academic year in August of that year until negotiations took place and teachers decided to go back to schools at the end of October of 2006.

This represented an important event in terms of content and form for this study as the strike had just come to an end by the time the pilot started. The event left serious consequences within the schools; on one hand, the late start of the academic year of 2006 until October was expected to delay the curriculum coverage, also, the teacher-students and teacher-parents’ relationships showed signs of damage. On the other hand, there was a constant tension noticed among teachers in relation to new changes on educational policies by the Federal Government.

Lower secondary school dropout rates are higher in disadvantaged regions

*Enrolment patterns*

National statistics in Mexico show that full enrolment in basic education has been achieved in most administrative divisions in Mexico, especially in the primary level where homogeneity of access has been achieved for girls and boys.

However, a significant gap in enrolment has been observed during the transition from primary school to lower secondary school. The case of the Federal District does not present figures as alarming as those for States such as Oaxaca, Chiapas and Guerrero, as it can be observed using the following table. Because these three disadvantaged States present very similar educational figures, only data for Oaxaca will be portrayed.

Table 3. Net enrolment rates for Primary and Lower secondary school disaggregated by gender for three academic cycles.

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<tbody>
<tr>
<td>National</td>
<td>105.1</td>
<td>101.2</td>
<td>101.4</td>
<td>77.6</td>
<td>80.0</td>
<td>81.5</td>
</tr>
<tr>
<td></td>
<td>M (100.7)</td>
<td>F (101.8)</td>
<td>M (100.8)</td>
<td>F (100.2)</td>
<td>M (77.9)</td>
<td>F (82.1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M (79.4)</td>
<td>F (83.7)</td>
</tr>
<tr>
<td>Federal District</td>
<td>112.9</td>
<td>106.0</td>
<td>107.8</td>
<td>102.6</td>
<td>99.9</td>
<td>100.9</td>
</tr>
<tr>
<td></td>
<td>M (105.3)</td>
<td>M (106.9)</td>
<td>F (108.7)</td>
<td>M (97.9)</td>
<td>M (98.6)</td>
<td>F (103.2)</td>
</tr>
<tr>
<td></td>
<td>F (106.8)</td>
<td></td>
<td></td>
<td>F (102.0)</td>
<td>F (102.0)</td>
<td></td>
</tr>
<tr>
<td>Oaxaca</td>
<td>105.5</td>
<td>103.6</td>
<td>101.5</td>
<td>66.7</td>
<td>70.2</td>
<td>73.2</td>
</tr>
<tr>
<td></td>
<td>M (103.0)</td>
<td>M (101.3)</td>
<td>F (101.7)</td>
<td>M (68.4)</td>
<td>M (71.2)</td>
<td>F (75.3)</td>
</tr>
<tr>
<td></td>
<td>F (104.3)</td>
<td></td>
<td></td>
<td>F (72.0)</td>
<td></td>
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</tr>
</tbody>
</table>
Net enrolment rates for basic levels of education provide evidence of the situation of school attendance in the country by focusing on students of eligible ages to enroll at a given educational level.

Figures from primary school net enrolment are normally above 100 percent, what suggests possible overestimation of the enrolment data obtained from the Ministry of Education’s Statistics 911\(^{13}\). This overestimation could overtake the population mean estimation carried out by the National Council of Population in Mexico (CONAPO) (INEE, 2008). It could also be given to inconsistencies between sources of information, given that the theoretical maximum value is 100 percent (INEE, 2007)

It could be argued that an education system is ideally efficient when the number of students of eligible age (to attend each level of education) coincides with the number of students who enroll such levels of education. Parting from this principle we can conclude that the Mexican education system still has its challenges in improving efficacy at the lower secondary level.

Statistics also show that parity of enrolment among genders has been achieved in basic education in general. Girls, however, are more likely to complete their academic cycles, as reported in figures of primary education completion by UNESCO (2003), and this international well-known pattern persists in higher levels of education (UNESCO, 2003; INEGI, 2007)

Lower secondary school net enrolment rates for the country are 81 percent as it can be observed on the above table, suggesting that the country still faces the challenge of achieving the goal of universal lower secondary school enrolment. It is important to point out that enrolment rates in States such as Oaxaca, Chiapas and Guerrero position these States much farther away in achieving this goal.

**Dropout rates**

Not all students who enroll for compulsory education conclude their educational levels in a timely manner, or conclude them at all. Because the world educational targets are not only about enrolment but also about ensuring that students stay in school, let us draw attention to dropout rates in lower secondary education since, as mentioned previously, this is the educational level at which students seem to struggle more to remain in school.

The National Institute for Educational Assessment and Evaluation (INEE) (2006, 2007, and 2008) in Mexico uses two types of dropout rates which are important to look at. The first one which will be named dropout rate (a) for purposes of differentiating both, refers to the estimated number of students who leave school before concluding a given school year, for every hundred students that enroll at the beginning of such school year at a given educational level, this means that this data includes repeaters or some under or over-age students. The second one, dropout rate (b) refers to the estimated number of students who do not conclude an educational
level, for every hundred that initially enrolled to primary school 5 years before and 2 years before for lower secondary school.

In summary, rate (a) looks at the number of students who did not conclude any given school cycle that they enrolled for, regardless of whether they are enrolled according to their age group. Rate (b) refers to those students who do not conclude any given educational level.

Data from three academic cycles show that, as a general rule, males in disadvantaged regions drop out more than females in all levels of basic education. Oaxaca will again represent other disadvantaged States in Mexico. The following table shows dropout rate (a) and it is possible to observe the almost steady educational patterns over the years.


<table>
<thead>
<tr>
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<tbody>
<tr>
<td>National</td>
<td>7.4</td>
<td>7.7</td>
<td>7.4</td>
</tr>
<tr>
<td>Males</td>
<td>9.1</td>
<td>9.6</td>
<td>9.0</td>
</tr>
<tr>
<td>Females</td>
<td>5.7</td>
<td>5.9</td>
<td>5.8</td>
</tr>
<tr>
<td>Federal District</td>
<td>5.1</td>
<td>10.0</td>
<td>7.4</td>
</tr>
<tr>
<td>Males</td>
<td>6.7</td>
<td>12.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Females</td>
<td>3.4</td>
<td>7.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>8.1</td>
<td>11.3</td>
<td>8.2</td>
</tr>
<tr>
<td>Males</td>
<td>9.7</td>
<td>12.3</td>
<td>10.2</td>
</tr>
<tr>
<td>Females</td>
<td>6.5</td>
<td>10.4</td>
<td>6.2</td>
</tr>
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</table>


Dropout rates have varied significantly over the years, INEE (2007, 2008) registered Colima as the State with the lowest dropout rate (a) for 2005/2006 with 4.4 percent, and Nuevo León for 2006/2006 with 4.4 percent. On the other hand, Oaxaca registered the highest dropout rate (a) for 2005/2006 with 11.3 percent but Coahuila for 2006/2007 with 11.6 percent.

Regardless of which State is top or bottom of the list, it is crucial to focus on the figures, the highest dropout rates exceed 11 percent of the student population, which means that out of every hundred enrolled students, approximately 11 of them do not enroll for the following academic year.

A very clear gender difference is observed in Oaxaca: if data is taken from the 2006/2007 educational cycle, we can conclude that 10 males out of a hundred dropout from a school year. In contrast, 6 females out of a hundred leave from a given school cycle. Furthermore, the proportion of male dropouts from lower secondary school is higher than that of primary school.

The following table shows dropout rate (b) from two academic cycles.
Table 5. Trends in dropout rate (b) in Mexico for 2005/2006 and 2006/2007 educational cycles, disaggregated by gender.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>National</td>
<td>21.8</td>
<td>21.8</td>
</tr>
<tr>
<td></td>
<td>Males (26.4)</td>
<td>Males (26.5)</td>
</tr>
<tr>
<td></td>
<td>Females (17.0)</td>
<td>Females (17.1)</td>
</tr>
<tr>
<td>Federal District</td>
<td>23.8</td>
<td>24.1</td>
</tr>
<tr>
<td></td>
<td>Males (29.9)</td>
<td>Males (30.1)</td>
</tr>
<tr>
<td></td>
<td>Females (17.3)</td>
<td>Females (17.7)</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>26.0</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>Males (29.3)</td>
<td>Males (28.3)</td>
</tr>
<tr>
<td></td>
<td>Females (22.6)</td>
<td>Females (19.8)</td>
</tr>
</tbody>
</table>

Note: Data for dropout rate (b) was included by INEE Panorama Educativo de México from 2007.

In theory, the values of this indicator should range between zero and a hundred. The table above shows that, on average, more than 21 children (out of a hundred) do not conclude lower secondary school in a timely fashion in Mexico. Also, an alarming number of 28 males (out of a hundred) get behind on their studies or leave education before concluding it in Oaxaca.

National trends generally point to the fact that males dropout of school more than females in all levels of education. In addition, the gender gap widens the higher the educational level.

Dropout rates (b) are an indication about the level of the education system’s success or failure to retain students in school and for them to conclude an educational level in a more age-standardised way (INEE 2007, 2008).

Consequently, the more students who do not conclude an educational level in a reasonable time (six and three years for primary and lower secondary school respectively) the more inefficient the education system can be inferred. Grade repeaters and dropouts exist because they are the product of the system’s failures. The identification of the factors that are causing such inefficiency, in order to suggest possible adjustments for the education system, is partly the aim of this study.

**Compulsory education in Mexico**

The General Law of Education states that the Government is obliged to provide educational opportunities and places for everybody to attend compulsory schooling. Compulsory education in Mexico lasts for 10 years and consists of pre-school,
primary and lower secondary education which, from 1993 has been declared as the final stage of compulsory education in Mexico.

To date, one of the main objectives of the Mexican education system is to ensure that all children aged between 12 and 15 attend this level of education and that they receive a good quality education.

**Organisation of the Mexican Education System**

Essentially, the Mexican education system is governed by its Ministry of Education, Secretaría de Educación Pública (SEP). The Ministry administers all public and private schools in Mexico. Most people attend public education (Federal, State or Municipal schools), and private schools’ programs have to be accredited by the SEP.

The educational system in Mexico is obliged, on Constitutional grounds, to provide free and secular basic education for all. These services are mostly provided from the Government, thus, around 90 percent of the students enrolled in a schooling system are in publicly funded education.

Basic or compulsory education in Mexico consists of pre-school, primary school and lower secondary school. Pre-school (3 years) aims to stimulate children’s development of habits and to widen their learning abilities; primary school (6 years) aims to develop basic mathematical and linguistic (reading and writing) abilities, so as to introduce children to scientific and artistic knowledge. Ideally, children start this level of education at age 6 and conclude it at age 11. Finally, lower secondary school (3 years), provides students with more advanced knowledge that would allow them to continue upper secondary school or to prepare students for employment (INEE, 2008).

The levels of education that follow basic education are upper secondary education and higher education. Upper education, aims to prepare students for a choice between the two main strands of higher education. These are the bachillerato and the profesional técnico (technical professional.) (INEE, 2008).
Table 6. Illustration of the Mexican School System by educational levels.

<table>
<thead>
<tr>
<th>Educational Branches</th>
<th>School Stage</th>
<th>Type of School modality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Education</td>
<td>Pre-School (2-5 years old)</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indigenous</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community</td>
</tr>
<tr>
<td></td>
<td>Primary School (6-12 years old)</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indigenous</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community</td>
</tr>
<tr>
<td></td>
<td>Lower-Secondary School (13-15 years old)</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Telesecundaria (Educational Television System)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Night school (For workers)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community</td>
</tr>
<tr>
<td>Upper Secondary Education</td>
<td>Technical professional</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td>Upper-Secondary School</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technological</td>
</tr>
<tr>
<td>Higher Education</td>
<td>Skilled technician</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bachelor’s degree</td>
<td>Teaching School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>University/Technological degree</td>
</tr>
<tr>
<td></td>
<td>Postgraduate degree</td>
<td>Diploma course</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Masters degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Doctoral studies</td>
</tr>
</tbody>
</table>

Source: INEE (2008)

If, at present, statistics for lower secondary education indicate that not all eligible
children are enrolled in school, and if not all enrolled children complete a full course satisfactorily, what is causing this to happen? What are the factors affecting students’ academic performances at this level of education?

**The aims and scope of the study**

The main purpose of the study was to identify the determinants that influence secondary school students’ failure in concluding this level of education. Additionally, it was considered imperative to find out the determinants that influenced those students with better outcomes.

Therefore, based on all the variables that have been suggested by international literature, different sections of variables such as family, school, individual characteristics and geographical location were explored in Oaxaca, Mexico. Moreover, detailed indicators such as parental socio-economic status, relationships with peers and language spoken, among others, were explored in addition to the main variables.

Given the claims that the contextual conditions affect students’ lives, it was considered equally pertinent to compare results from advantaged and disadvantaged locations in Oaxaca. The place thought to be ideal to represent the benefits of an advantaged location was Oaxaca City, the capital of the State of Oaxaca; disadvantaged locations were other three localities with much a much lower HDI.

In essence, the aims of this study were to find out (a) the factors that influence secondary school girls and boys’ failure in this level of education, (b) the factors that enhance their academic success and, finally, (c) what extent these factors vary if coming from a socio-economically advantaged or disadvantaged background.

It is hoped that the results of this study will shed light not only onto the educational situation of Oaxaca but also indicate the situation for most other regions in Mexico. The Country, whose average HDI is 0.80, has 18 advantaged and 14 less advantaged administrative divisions (PNUD, 2007). At the same time, administrative divisions are sub-divided into municipalities (in the 31 States) and delegaciones (in the Federal District).

Respective municipalities’ Human Development Indices (HDI) range from 0.95 (Benito Juárez in the Federal District) and 0.43 (Chochoapa el Grande in Guerrero); this represents similar HDI differences to those existing between Sweden and Angola.

Within Oaxaca State itself we can observe such variances; this State is located in penultimate place in the country in relation to its HDI. However, it has a municipality that, by itself, is placed third amongst the other municipalities in Mexico. But, the 20 municipalities registered with the lowest Human and Educational Indices belong to the States of Oaxaca and Chiapas.

Based on the previous statements, it is expected that the factors discovered as being crucial in affecting students’ outcomes may provide meaningful insights into the educational challenges that the Mexican educational system faces.

Such factors are highlighted in this article and are presented in a diagram to make them easier on the eye, showing only their main elements.
Main factors associated to school failure

The revision of literature was mainly focused on studies that looked at the issues of underachievement and dropping out. Although there are different interpretations on the actual definitions of these concepts, both are understood to be related to low school marks, grade repetition or the non-completion of an educational level for the latter one. Underachievement is most classically associated to the following definition: “school performance, usually measured by grades, that is substantially below what would be predicted on the basis of the students’ mental ability, typically measured by intelligence or standardised academic tests” (McCall et al., 1992, p. 54 in Smith, 2003, p. 576-577).

Some studies of dropouts in the United States refer to different methods to measure the dropout rates and to the difficulty to integrate a concept for it (Rumberger 1987; Kominski, 1990). For the purposes of this study, a concept will be introduced based on the dropout rates\(^{16}\) (a) and (b) (described previously) employed by the Ministry of Education in Mexico. A dropout will be that student who stopped attending school (for reasons other than being transferred to a different school), that is, that student who is not able to conclude a specific school year or an academic level and who does not continue to be enrolled in school.

Literature on dropouts in Mexico is mostly on educational statistic results and a description of their interpretation, via publications and mainly produced by the (The National Institute for Educational Assessment and Evaluation (INEE). Books that described the dropping out phenomenon at the lower secondary school level in the country were non-existent up to the time of the fieldwork in 2007. For this reason, most of the literature consulted was on international studies and mostly on dropouts in high school and further education.

Such international research on the dropping out problem represented a tremendous contribution due to their more in-depth analysis of the causes and effects of the problem (in particular Rumberger 1983, 1987, 2001; Finn, 1983; Orfield, 2004; Gorard & Rees, 2002; and Smith, 2003, 2005).

Educational failure, a term that might be used frequently in this paper, will include all types of educational aspects related to underachievement and dropping out. These could be, for example, grade repetition, low marks and exam reprobation and so they are concepts that move away from the ideals of school achievement.

Causes and effects of educational failure

Most studies associate school failure to gender, class and ethnicity. Different ways to put it, such as socio-economic background or minority groups, (Rumberger 1987) only indicates that, indeed, socio-economic status might be significant in peoples’ lives as is belonging to a disadvantaged group. However, as Gillborn and Mirza (2000) indicate, there is more to underachievement than that; “children’s potential to achieve is not innately limited by their gender, class or ethnicity” (Gillborn and
As the majority of the literature suggests, the problem of school failure may arise from more than one point. Ekstrom (1986) acknowledged socio-economic status as being a major factor that influences students’ academic attainment, together with ethnic background and gender. Rumberger (1983, 1987, and 2001) also pointed out the variance in academic achievement amongst different social groups. These include those with a low socio-economic status or belonging to minority groups and indicate evidence of those that seem to be most affected. Other individual aspects such as gender and age are believed to be determinants as well.

Similarly, the Organisation for Economic Cooperation and Development (OECD) identifies socio-economic status as the most significant factor associated with students’ performances on The Programme for International Student Assessment (PISA, 2000, 2003 and 2006).

These factors that trigger educational failure have been analysed in depth by different authors and classified as influential factors or barriers. Rumberger, (1987) for instance, originally grouped these factors in the following categories: demographic, family background and structure, peer, school practices and policies, and individual or inherent characteristics of the students. In 2001 he described these factors as being individual, family and school related, and the context where students live. At the same time, he categorised these factors in a set of two groups; the external factors (susceptible for changing) such as school policies, geographical location, and the internal factors or those inherent to the individual (demographic characteristics).

Similarly, Finn (1993) makes a comparison between the prediction of cardiovascular disease (CVD) and the prediction for a student who might be at risk of dropping out. Two categories of risk are defined: first, those static characteristics attached to the individual, such as ethnicity, family socio-economic status and, second, those behaviours that students might present at their early school years, and which parents or school members are more likely to track. The latter factors thus are susceptible to alteration and variation.

Gorard and Rees (2002) opt for the use of barriers to education and refer to Harrison’s categorisation of barriers to adult learning, (applicable likewise to lower secondary or any other level of education). The first barrier is defined as situational, which includes ethnicity, parental educational and occupational backgrounds and socio-economic status of the home. Aspects associated to the level of acquisitive power parents may have, as well as associated to the capability that they may have to cover expenses that are inherent when children attend school, or with the capability of providing informative materials at home, such as encyclopaedias, newspapers, internet access, for example. Situational factors are greatly considered to be unchangeable characteristics that are part of the life of the individual. The second barrier is categorised as institutional, which includes principles, policies and procedures that exert a strong influence on people’s behaviour and decisions in the educational field. For example, the provision of scholarships, school academic standards, a supportive learning environment, efficient guidance and support, high levels of communication and collaboration, demand of parental involvement, security and order, etc. They also direct attention to a third category, the dispositional barriers
linked to the effects the educational system might exert on people, such as feelings of alienation or lack of motivation that could lead them to poor educational performances or to drop out. This barrier could be the result of a correlation between situational and institutional effects, as other authors like Rumberger (1987, 2001) and Finn (1993) address.

Whatever the classification, there seems to be a range of diverse factors that may exert an influence on students’ permanence in school, and which can be summarised using the following categories: family socio-economic status, age, sex, ethnographic characteristics, and the school system.

It is important to bear in mind that these factors are not believed to be the ones that cause the students to drop out. For example, neither poverty nor coming from a single parent home in isolation will be the cause for a student to quit school, they are merely factors that may, singularly or in combination, predict a student’s likelihood of dropping out.

Now, the effects of educational failure are mostly economy related (Rumberger, 1987, Orfield, 2004) and that educational failure and especially dropping out may have negative effects to the individuals and to Society. At an individual level, those students who drop out from high school are “far more likely than graduates to be unemployed, in prison […] and living in poverty” (Orfield, 2004:1). Moreover, these early school leavers might be significantly less likely to find stable employment or to provide their families with the basic supplies to live.

The disadvantages are obvious when people leave basic education part way through or without concluding it. These students may have fewer possibilities to retake their studies in the future or to achieve proficient academic skills to assure a good job, particularly when prerequisites to apply for a job become more strict (and specific) nowadays (Rumberger, 2003). In addition, female dropouts are at a greater disadvantage since they are more likely to have lower salaries than males who dropout.

**Methods**

This study involved semi-structured interviews with 79 participants. Because it was intended to control for advantaged and less advantaged areas, 4 schools were selected at different areas of the City of Oaxaca. These schools therefore were considered as coming from advantaged areas. The other 5 schools were located in other localities within the State of Oaxaca whose HDI were significantly low. The types of schools where the research work took place were as follow: 5 technical schools, 2 general schools and 2 Telesecundarias. It is worthy to mention that some disadvantaged localities rely on a technical school only, a fact that occurs due to the technical skills required for the population of the locality due to their respective local economies. For example, such skills may relate to agriculture, livestock breeding or fishing. For this reason, more technical schools participated in this study than any other type of school.

Upon requests to Heads of the Schools, students were selected by either academic
coordinators or social workers to be interviewed. These selections were based on three pre-defined academic statuses; these being high achievers (with high marks and good behaviour), students at risk of dropping out (due to very low marks and/or excessive misbehaviour) and dropouts (those students who left school without concluding their lower secondary education level). Parents of high achievers, at risk students and dropouts were also interviewed, as well as teachers and social workers. All participants were contacted via the schools.

During the interviews, participants were asked about aspects that related to their home, the school and other contextual and geographical factors.

Home aspects included information such as the number of people living at home, socio-economic status of the parents, support for homework, availability of educational resources, communication at home, religion, as well as aspects regarding the community such as transportation, paved streets, libraries, water and sanitary services. School aspects included school facilities, perception of teachers’ knowledge, relationship with teachers and peers, classroom practices, school workload, general situations of violence or harassment and school rules and policies when children misbehave, to mention some. The individual aspects explored included gender, language, school year, recreational activities, possible gang involvement, dream jobs and their priorities.

These factors were broken down into more detailed elements which emerged from the relevant literature review and which resulted in 100 codes during the computer assisted qualitative data analysis.

Findings

As predicted, the findings of the study showed that there is indeed an extensive range of factors that intertwine in students’ educational outcomes. At the same time, results turned out to be unique due to the discovery of two sets of factors that, if existent in the lives of students, might a) put them at risk of underachieving and b) make them dropout.

The home, the school and the community characteristics are the main categories that might generate either positive or negative influence in the lives of students and therefore, lead them to either a path of academic success or a path of academic failure.

The positive influences will be called aids because if present, they are very likely to enhance not only students’ academic performance but also positive attitudes in their day to day lives, and their expectations for the future. Exactly the opposite happens with the existence of the negative influences which will be called barriers; they are very likely to restrict students’ academic outcomes and to adversely affect their personal behaviours and discourage them from having better aspirations for the future. What is more, they put students at a greater risk of leaving their studies. In the worst scenario, say, if all of the crucial barriers are present in the life of a student, he or she is almost certainly likely to dropout of school.

So, through the use of simple conditional formulae similar to the ones used on
ordinary spreadsheet computer applications, a type of predictor has been suggested to determine the likelihood of students’ success or failure in lower secondary schools in Oaxaca, Mexico.

These conditional formulae are grammatically compound sentences with logical connectives able to predict students’ educational outcomes. First, a more general compound sentence with all general factors that could be an aid to a student being a high achiever will be presented. A second compound sentence will follow and which contains the indispensable factors that makes a student, a high achiever. The same procedure applies for barriers that either make a student very likely to underachieve, or the ones that are crucial for a student to be a dropout. See diagrams in following pages.
Predictor for high achievers (if these factors exist, it’s very likely that a student will be a HIGH ACHIEVER)

IF

High SES

AND

Educational resources at home

AND

Sibling who is/has been in school

AND

Good environment at home

AND

Effective parental support for homework

AND

Parental encouragement

AND

Sufficient school facilities

THEN

HIGH ACHIEVER

Predictor with indispensable factors for HIGH ACHIEVERS

IF

Good environment at home

AND

Access to educational resources

AND

Parental encouragement

AND

Effective parental support for homework

OR

THEN

HIGH ACHIEVER
Predictor for underachievers and dropouts (if these factors exist, it’s very likely that a student will be a UNDERACHIEVER AND DROPOUTS)

IF

- Low SES

AND

- Lack of educational resources at home

AND

- No sibling who is/has been in school

AND

- Poor environment at home

AND

- Lack of parental support for homework

AND

- Lack of parental encouragement

AND

- Insufficient school facilities

THEN

- Uncommitted teachers

- Boyfriend/girlfriend

- Drug or gang involvement

- Lack of parental encouragement

- Uncommitted teachers

- Lack of access to educational resources

- Drug or gang involvement

Predictor with indispensable factors for UNDERACHIEVERS AND EVENTUALLY, DROPOUTS

IF

- Poor environment at home

AND

- Lack of access to educational resources

AND

- Lack of parental encouragement

AND

- Uncommitted teachers

OR

- Lack of parental support for homework

AND

- Drug or gang involvement

THEN

- UNDER-ACHIEVER/DROPOUT

- UNDER-ACHIEVER

AND

EVENTUALLY

- DROPOUT
Aids and barriers

Although a lot has been said about the association of parental socio-economic status and students’ performance in school (OECD, 2002; Ekstrom, 1986), results in this study confirm that there is indeed an association between the two. However, the findings also showed that, contrary to what is normally expected, parental educational background, as well as occupational status, is not necessarily proportional to students’ academic performance.

What is true is that parents of a higher socio-economic position are more likely to add additional values to their home. These values can be in terms of cultural capital in its three forms: the embodied state (culture, habits, traditions, etc.); the objectified state (with assets such as dictionaries, encyclopaedias, book collections, etc.) and the institutionalised state (academic qualifications) (Richardson, 1986). Therefore, the more cultural capital there is in the home, the more likely it is that there will be other informative assets, such as computers, access to the World Wide Web or other types of digital learning facilities. This certainly might put students at a more academic advantage compared to those students with less or none cultural capital at home.

What is more, there seem to be other factors that are stronger influences such as effective homework support and good environment at home.

Homework support and socio-economic status

The General Law of Education and the State Law of Education in Oaxaca establishes the evaluation of students’ academic achievement as an individual measurement of students’ knowledge, abilities and skills. In addition, it conceives the evaluation as a process of measuring the achievement of the pre-established objectives of educational programs (IEEPO, 2009). Thus, the education system in Mexico institutes not only exams to give a student in Lower-Secondary School a mark, but also, homework, notebook appearance, class attendance and class behaviour (Sandoval, 2002)

In addition, it has been proved that “doing homework is associated with achievement gains” (Trautwein, 2007:372), homework therefore counts significantly towards the final marks, together with the exams. For this reason, having effective homework assistance seems to be a key element that impacts on students’ performance in school.

According to the findings, for a child to have effective homework assistance refers to the factual support that the student may receive at home. That is, even though a parent might not possess the knowledge to help their children directly, if a parent or parents monitor their children’s needs and make sure they get the assistance needed, they are indeed, assisting. On the other hand, asking “Have you done your homework?” (Only asking and not going further), for example, might not represent real help.

The following example depicts how parents sometimes believe that asking their children “Have you done your homework?” Or telling them “Do your homework” is a way of supervising or guiding their children. Ignacio, a 14 year-old is the oldest child and a student who had been reporting continuous achievement and behavioural
problems at school, and thus, a student at risk of dropping out. His mother was a housewife and worked informally and his stepfather also did informal work. Both of them finished lower secondary school.

Q: [...] and what do they [parents] tell you at home about the importance of education, about studying, about you coming to school?

Ignacio: Nothing, they’re telling me “try hard”, “you’ll be a thick head”, like that, but it’s just words, I would... I would like to count on my mum [...] I’d like her to sit with me, that she’d tell me “let’s do your homework” or that she helped me but, neither the man who is never home, and... she doesn’t know, none of them know and I... I mean, algebra, you see cross products, x, y, and all those things you see in algebra, and first-degree equations, lineal... all those things, none of them know how to do it, who can I ask for help?, even though they tell me “sit down...” and they sit next to me to watch, there’s no point that she’s just sitting there... what’s the point? It would be ideal that someone came, someone with a profession who could be able to help you, that... if you have a question, if you didn’t understand your teacher, they could assist you. How then? They won’t help me; they don’t know anything about it [...]
since… since [laughs] there’s the bunch of books and things […] and “Come on, let’s try to find it here, I think there’s this and this” and that’s it, we search, we investigate or we go out and turn to…

Q: Another source
Sonia: Yes, until we find it

Indeed, having someone at home, such as a parent or sibling that is able to assist with school work seem to be a great advantage for students. However, if human or cultural capital is not available at home, this does not seem to restrict them from carrying out their homework assignments, nor does restrict parents from providing effective support by encouraging students to get support elsewhere. This example may also be taken as a summary of many others from the fieldwork and which deconstructed the spread idea of students performing better when they come from so called nuclear families.

Before changing topics to the family environment, it is worthy to show the following example which illustrates a typical situation of a high achieving student with limited resources at home. Alina, a 14 year-old, is the oldest of two siblings and with no dictionary, television or landline telephone at home. Her family speaks both the native Zapoteco language and Spanish. Her mother did not go to school and her main source of support for homework is her father, who worked as a carpenter and whose education consisted of four years of primary school.

Q: And for example, when you have homework… who helps you at home?
Alina: No one, if I’m in doubt, because my dad is the one who studied more, I ask my dad and he gives me answers, but if I’m in doubt and none of them don’t know [sic] well I have to go to another… I ask for permission to download it from another place [sic], so someone explains it to me with more clarity so I can do it myself

Q: So, if you ask someone to explain it to you, who is this person, friends, relatives, who do you go to?
Alina: Well, I have some relatives who are teachers and I go there, and if I can’t, then I go [sic] to the Internet; it’s easier for me to download the information.

It is important to point out that there seems to be particular personality traits that high achievers, regardless of their gender, develop within the family environment that orientate them towards being self-sufficient or proactive when it comes to homework completion; they normally solve it or try to solve it by themselves.

High achievers normally turn to someone else for help only when they were not able to do it on their own, find what they are looking for in books or other didactic resources at home. By and large, it seems that parents of high achievers encourage their children to try hard in school, yet provide them with general support. These parents may help them directly with the homework or in case of them not being able
to help, they would direct their children to public libraries; they would even go with them to call on someone who would be able to help, such as a relative or neighbour. In addition, and in spite of having economic struggles at home, these parents also do their best to ensure their children can count on the school materials requested by the schools.

Environment at home
It was observed that high achieving students, regardless of their home socio-economic status or family composition, tend to have good relationships with other family members and, generally, they thought their home environments were stable. Moreover, communication with their parents appeared, in essence, positive.

Felicia is a 14 year-old high achiever from a disadvantaged area; her mother did not finish primary school and her father finished primary school and works as a bricklayer.

Q: And how do you get along at home with your siblings, parents?
Felicia: Pretty well although there are times when there are problems but we do… we communicate with each other. If something is happening, we speak it out; we do not hide anything from each other.

Q: You mean you tell your parents or you mean you communicate it with each other [siblings]?
Felicia: Yes, there are times when it is done among us [siblings] and when it is big [the situation]... we don’t know what to do, then we tell our parents

Q: What would something big be, for example?
Felicia: For example when we have problems at school, right? And we don’t want to tell my mum, we go and share it with a sister, but then this sister does not know how to give us an advice… then that’s when she tells us “Better tell mum… tell dad and see what they say” and then we tell our parents.

The fact that some families of this group of high achieving students had been, or were, going through difficult situations did not necessarily mean instability in school for them. Both male and female high achievers said that their parents were open and discussed the facts with them and asked them to try not to let family matters affect them with their performance at school.

Most underachievers and dropouts said their home environment was unstable. The most common reason that would affect children’s emotional stability was going through parental separation or a divorce, along with episodes of domestic violence, which seems to create a feeling of fear within children. Consequentially, these problems also seem to distract them from paying attention in class or make them experience the “it’s in my head all day” syndrome, a phrase that was heard several times by students whose parents’ problems overtook their minds.
Alex, a 13 year-old female underachiever from a disadvantaged area, will illustrate this. Her mother did not go to school and her father did not finish primary school, they were going through a separation and she was presenting behavioural problems as well as very low marks that were putting her at a serious risk of dropping out from school.

Alex: Like my dad, now… has a problem with my mum… he rarely is in the house
Q: Um-hm
Alex: He goes with a bar… there is a woman there, serving, they say… is his lover
Q: Umm… That is the problem you mentioned at home… with your mum?
Alex: Yes, all of the guys sitting outside [classmates] all of them knew it, and they are telling me and… like that woman wears some transparent glasses and this ones are coloured [sunglasses] they tell me “Oh, what, are they your stepmother’s? they tell me, “no, what the hell a stepmother” I told them… we’re there saying things
Q: Um-hm
Alex: but they are always telling me “your stepmother” this and that, that… oh, gosh, I don’t know, I don’t know... Because of them [parents] I am in school like this… I am just thinking about problems from home with my dad or my mum, I don’t feel like listening to the teachers any more, this problem is already in my head, I cannot take it off my mind…

The other side of the coin is represented by Larisa, a 14 year-old female high achiever from a disadvantaged area. Her father has an administrative job and her mother is a pre-school teacher. She acknowledged the impact the positive communication with her parents has had on her performance at school.

Q: You were telling me that… you just now mentioned something that called my attention; you said that despite the problems at home eh… you can go on… like… what sort of problems?
Larisa: Well… there have been problems between my parents… that they have… well, family problems that… there was a time in which… I was going to suffer their separation… because…. For problems they had, for example, it’s what people say and all that, it’s what they tell my dad… because my dad is rarely with us, well, you can’t say he is with us all day and well, the family problems they had, that my mum had… another man with whom she was living… and that was going to be the cause of their separation, and because of that, well, yes, some times we… those problems make us… make us don’t want to think about the school because you’re thinking about the problems at home and that… but […] now the problems have been solved […] and despite
all that, they do ask us that… that if one day they end up separating, that… we shouldn’t quit our studies and that we should go on and well, we have overcome that and thank God we are doing well at school.

Teaching, classroom practices and school policies

There were divided perceptions as to whether teachers’ knowledge was good. Although some teachers were appreciated for delivering their subjects very well and for being caring towards their students, a more general concern was that some teachers do not explain their subjects well; some students reported teachers as not being confident or well prepared to deliver their assigned subjects, especially English (as a second language), mathematics and physics. General views from students and teachers themselves were that some of them were not properly qualified teachers.

Attention was drawn particularly towards English teachers; most students found the English class difficult to understand or to achieve good marks on it. The majority of students were critical and judged English teachers as not being able to deliver their subject efficiently.

The following is Felicia’s (who we have mentioned earlier) opinion, and which encapsulates the general views towards English teachers.

Q: How do you perceive your teachers? Do you think they know their subjects well? Do they show their concern about you all?

Felicia: There are teachers who do […] but there are some others who do not precisely know their subject

Q: Like which module, for example?

Felicia: Like English, there are times when we ask him… there is this classmate whose parents are teachers and well, he attends private English classes and sometimes he asks these questions and the teacher does not know how to answer them. And well, there are times… we… if we are asked something in English, we don’t know because he like… he teaches us Spanish rather than English and when we present the exam we don’t know what to do. We ask him and er… and he gives us the answers: “you will do this and that” but then this way we will not learn anything and this year we are already worried because we will go to Upper-Secondary, we will get there and we don’t know anything, we will struggle.

Other students, however, thought it had more to do with their own ability to understand the subjects. However, that could lead to the question of whether students know the parameters to evaluate how good a teacher is.

One of the most common classroom practices is removing a student from class as a
way of punishment for being disruptive, or to avoid the rest of the class from getting distracted. Another less common practice, but that is still carried out, is to exert violence on students. Oscar, a 12 year-old with very low marks at school (and whose father hits him when he is unable to complete his homework) shared a story of a day in which he was about to leave school for good.

Oscar: [...] and then he told me “you go outside” he said
Q: Just like that?
Oscar: Mh-hm… he got me out
Q: But with no reason… at all?
Oscar: Because he said that I was making impressions on him until he [unintelligible] came… someone helped me [unintelligible]… I told him “I’m going” I was going to ask for my papers and go home, I was not going to come back because of him, because what’s the point of not coming to a module and now the Ethic’s teacher is starting[…] Teacher Valentino [Maths teacher] he just speaks bad words, he gets the book and hits him in his head
Q: To the students?
Oscar: To a little boy
Q: And why does he hit him?
Oscar: Because instead of paying attention he is talking to this other kid
Q: Does he hit anyone or just him?
Oscar: Well… to those who do not understand the subject
Q: With the book?
Oscar: With the book or with whatever he has at hand… with his fingers like this [he snaps his fingers] on the head, like this [snaps his fingers against the table to exemplify]

Teachers also had their say; there was a shared view from teachers about their desire to get parents more involved with the students’ learning processes. Most teachers also thought that parents believe that their responsibility is limited to sending their children to school. Teachers also believed that parents seem to “wash their hands” of any school-related responsibilities after they have enrolled their children in school.

Finally, school policies, which are intended to regulate the school environment, seem to limit children’s opportunities to develop their potential in school. Policies such as not allowing students in school because their appearance is not appropriate (i.e. wearing long hair, wearing “inappropriate” accessories or make up, or not wearing their sports shoes) might trigger a process of disengagement from school; missing one class will restrict them to understand the next class, and thus, restrict them to complete their homework, and eventually fail their exams. Some students might break these policies deliberately in order to get sent back and be able to take a stroll or to get
involved in felonious behaviors.

The policy that probably sets apart from the Education for All goal of commitment to gender equality in education is to expel a female student from school if she gets married or if she becomes pregnant. Teachers shared a general view that having a pregnant student in school might incite students to follow the same steps. Pilar, a social worker from an advantaged area, mentioned what other teachers had mentioned as well; that married or pregnant girls are expected to leave the standard school system and move to the Secundaria para trabajadores (lower secondary school for workers).

Q: And do you know how the school rules or policies justify that a girl who gets married or becomes pregnant cannot continue coming to school?

Pilar: Well, it is our type of school, we… mmm… I was telling you, it’s obvious isn’t it? Because of the type of activities, we wouldn’t be able to justify one thing or another, won’t we? Don’t we? Mmm… all of these students attend a regular school curriculum

Q: Aha…

Pilar: Don’t they? And there is a restriction regarding… students’ age; when they are older than 15 they have to go to Secundaria para trabajadores… the open school, um-hm?, yes, it is a night school. Like, all of them have the same type of activities, don’t they? At least here in the State of Oaxaca there are regions where girls get married at a very early age, don’t they?, at a very young age… but here in the city that’s not so common.

According to what teachers and social workers said, it appears that school policies are not specified in formal documents. They also said that if the school faced difficult situation that would involve the expulsion of a student due to behavioural problems, or marks, drug dealing, marriage or pregnancy, most of the times these decisions were made via a voting system by the Head of the School, teachers and the school’s Parents’ Committee.

Discussion and conclusions

The focus of this research is on the reasons behind children in Oaxaca, Mexico not completing their lower secondary school or their last stage of compulsory education. The literature has suggested three main areas that could affect children’s academic performance: a) the family (including demographic characteristics), b) the school and c) the community characteristics. Analysis of the data obtained from publicly funded lower secondary schools, revealed that those three main areas contain crucial factors that can enhance or limit their school performance.

In other words, to generate a high achiever, the crucial factors are having a positive
environment at home, access to educational resources (at home, public libraries, Internet Cafés, etc.), committed teachers, parental encouragement for the future, as well as effective parental support for homework.

Because homework constitutes an important element in a student's performance, effective support for homework is a term that implies going beyond parents simply asking whether homework has been completed or expecting the student to complete the work even if he or she has struggled to understand the fundamental concepts in class if the teaching was of bad quality or otherwise. Providing effective assistance might mean to explain the topic to the student, or to turn to a relative, neighbour or the Internet for help.

Contrarily, the lack of these essential elements would create underachievers and eventually, dropouts.

It seems like an endless cycle sometimes. A student who has unqualified teachers (or teachers who spend considerable time involved in political activities) and who is not able to understand the class comes home with homework that he or she is unable to complete. If parents know the subject and are able to assist, the problem of the unqualified teacher is solved. However, if parents are not able to help, and at the same time are not able to encourage their children to find help somewhere else, then two crucial elements become patent in the lives of students: bad quality of teaching and lack of academic support at home. If added to this, the home has instability e.g. parental problems; this may lead to a student feeling isolated or misplaced and subsequently the need to look for 'alternative groups'. This may potentially encourage anti-social behaviours or substance abuse. Then, the student will have all of the crucial elements that would make him or her, a dropout.

In addition, this might probably shed some light on the common association of dropouts and disadvantaged households; we must be asking ourselves to what extent more educated parents are able to compensate for uncommitted teachers over what less educated parents are able to.

So what now?

Changes are needed in the Education System in Mexico. Three important areas need attention and adjustment: Improving of teaching techniques (this comes with teacher training); school policies regarding expulsion of students; and school policies regarding homework and examinations.

Improvement of teaching techniques will result in better educational outcomes for students. When students are unable to understand the class, this might not necessarily mean they are incompetent. Views should turn to teachers and their teaching practices. Are they fulfilling the quality standards required for students to learn? Are they making sure the knowledge is being transferred effectively? On the other hand, the same way we cannot put the total blame on students for their low academic outcomes, we cannot expect all teachers who have been exercising the same teaching practices for 17 or 30 years to be aware of the most up to date teaching techniques.
Most teachers complained about their limited opportunities to receive training. However, as much as they would ideally be entitled to formal training from the Ministry of Education, they could also show initiative and find out what is new on teaching methods and what new technologies are being used today. And by looking at improvement we do not mean we expect schools to transform the classrooms into a state-of-the-art space with computers or interactive plasma screens; we need more committed teachers with the willingness to transfer quality knowledge to students, as one devoted teacher said referring to technology and creativity: “We could teach underneath a tree and still perform miracles”.

On the other hand, school policies regarding expulsion of students, the schools could look at the impact that these punitive policies have on the national dropout rates. For example, having a student expelled because they have been achieving low marks for a long time could be modified to providing more academic support in order to “save” the student. Also, giving homework less values or even reducing the number of homework to a minimum could contribute to students’ marks to go up. More resolution of exercises in class could then allow teachers to identify which areas the students are finding the most difficulties with, and also to identify which students are facing these difficulties. Perhaps if students get engaged in their learning process more, other problems could be targeted as well, such as anti-social behaviour and youth pregnancy problems.

Finally, a reflection on what is now believed to be the myth of the broken families. The following quotation from (Rumberger, 2003) summarises what most authors have said, and what most teachers suggested during the interviews: “children from broken families - where one or both parents are absent- may be less likely to find the support and encouragement needed to keep them in school” (p. 202) It is important to highlight that analysing the family environment of my participants turned out to be a milestone for this study; rather than coming from “integrated” families or “nuclear” families, high achievers came from happy families. That is, from a single parent happy family or from a two parent happy family. Underachievers and dropouts, on the other hands, came from unhappy families or families going through distress. The environment at home thus, proved to be of great influence on the lives of students. For this reason, adjustments in educational policies are suggested; they are more feasible to achieve (than to modifying household policies).

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### Glossary

**Dropout rates a)**
Estimated number of students who leave school between subsequent academic school years, before concluding their educational level, for every hundred students that enrol at the beginning of an academic year. Definition based on INEE (2008)

**Dropout rates b)**
Estimated number of students who do not conclude an educational level, for every hundred that started primary school 5 years ago, or 2 years ago for lower secondary school.

**General lower secondary school**
It can be located in urban and rural areas. It is equipped with workshops and laboratories to and each module is taught by a specialist teacher.

**Gross Enrolment Ratio (GER)**
The number of pupils or students enrolled in a given level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education. For the tertiary level, the population used is the 5-year age group following on from the secondary school leaving age. UNESCO UIS (2009:255)

**Lower secondary school for workers**
It has duration of 3 years of schooling for workers aged 15 or older who finished their primary education. Classes are generally held during the evening in general lower secondary schools. The curriculum does not contain technological activities or workshops.

**Net Enrolment Rate (NER)**
The number of pupils or students in the theoretical age group for a given level of education enrolled in that level, expressed as a percentage of the total population in that age group. UNESCO UIS (2009:256)

**Net Enrolment Rate for Mexico**
*Tasa Neta de Cobertura.* The number of students of eligible age enrolled at a given educational level at the beginning of the school year, for every hundred students of the same age group. (INEE, 2007)
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Percentage of repeaters</td>
<td>Number of pupils or students who are enrolled in the same school grade (or level) as the previous year, expressed as a percentage of the total enrolment in the given grade (or level) of education (UNESCO-UIS, 2008)</td>
</tr>
<tr>
<td>Repeaters</td>
<td>Pupils enrolled in the same grade for a second or further year.</td>
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<tr>
<td>Technical lower secondary school</td>
<td>It offers general subjects to students and each module is taught by a specialist teacher. Technological or more skilled education is emphasised, according to the most relevant economic characteristics of a given area. This can be farming, fishing, forestry or services oriented. It can be located in both, rural and urban communities.</td>
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<tr>
<td><em>Telesecundaria</em> (Satellite-based)</td>
<td>It was originally designed to cover rural communities with less than 2,500 inhabitants, where it is impossible to locate general or technical secondary schools given to the limited number of students who finish primary education. Due to its success and to the growth of school participation, these schools are also located on the outskirts of large cities as well.</td>
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**Acronyms**

CONAPO

*Consejo Nacional de Población - México.* (The Nacional Council of Population - Mexico)

INEE

*Instituto Nacional para la evaluación de la Educación.* (The National Institute for Educational Assessment and Evaluation.) Created on August 2002 by Presidential decree in order to provide educational authorities and the private sector with tools suitable for the evaluation of educational systems regarding compulsory education (Pre-School Primary, Lower-Secondary) and Upper-Secondary Education. Its function involves carrying out reliable and transparent assessments of the Mexican Education System as well as their diffusion.

PNUD

*Programa de las Naciones Unidas para el Desarrollo* (The United Nations Development Programme)

SNTE

*Sindicato Nacional de Trabajadores de la Educación* (National Union of Education Workers)

UPE

Universal Primary Education
Notes

1 The Program for International Student Assessment (PISA) is a three yearly survey that measures 15 year old students’ knowledge in reading, mathematics, science and problem solving abilities. It is coordinated by the Organisation for Economic Cooperation and Development (OECD)

2 32 countries participated in the assessment in 2000, 28 OECD countries being Mexico one of them, and four more: Russia, Lithuania, Liechtenstein and Brazil. 11 more countries applied the test in 2002 making a total of 43 countries. However, for technical reasons, results for Holland (should actually be “The Netherlands”) and Romania were not included in the reports.

3 Organisation for Economic Co-operation and Development

4 In relation to the Dakar Framework for Action, adopted by the 1,100 participants of the World Education Forum and their commitment to achieving Education for All by the year 2015

5 Mexico or the United Mexican States comprises thirty-one states and a Federal District, including the capital, Mexico City.

6 “Human Development Index (HDI) is computed by the procedure internationally established by UNDP.” INFORME SOBRE DESARROLLO HUMANO MÉXICO 2006-2007 (PNUD, 2007:9)

HDI – human development index – is a summary composite index that measures a country’s average achievements in three basic aspects of human development: health, knowledge, and a decent standard of living. Health is measured by life expectancy at birth; knowledge is measured by a combination of the adult literacy rate and the combined primary, secondary, and tertiary gross enrolment ratio; and standard of living by GDP per capita (PPP US$). Human Development Reports. What is the human development index (HDI)? http://hdr.undp.org/en/statistics/indices/hdi/question,68,en.html (accessed on 13 August 2009)

7 “The Programme for International Student Assessment (PISA) index of economic, social and cultural status was created on the basis of the following variables: the International Socio-Economic Index of Occupational Status (ISEI); the highest level of education of the student’s parents, converted into years of schooling; the PISA index of family wealth; the PISA index of home educational resources; and the PISA index of possessions related to “classical” culture in the family home.”


None of the entities in Mexico had an ESCS index above that of the OECD, Mexico produced its own ESCD mean score (-0.99),which allows to identify those entities or assessment modalities that are above or below that mean score. (INEE, 2007)

8 Official name taken from the Foreign & Commonwealth Office (FCO).

9 Education Index is “One of the three indices on which the human development index is built. It is based on the adult literacy rate and the combined gross enrolment ratio for primary, secondary and tertiary schools” (UNDP, 2007)

10 Education Indexes obtained from UNDP (2007)

11 A so called Organización Única de los Maestros (Unique Organisation for Teachers) and legally recognised since 1944.

12 The SNTE was conformed by 55 Sections that were distributed throughout the country. Section 22 corresponds to Oaxaca. A new Section was created in December 2006, following the massive teachers’ strike that year with the intention to mitigate Section 22’s hegemonic position. These sections would then compete for the membership of about 55 thousand education workers in Oaxaca.

13 Statistics taken from Questionnaires 911 that obtain statistic information from schools at the beginning and end of each school cycle. This information related to students, teachers, schools and classes of the National Education System at all educational levels and educational services.

14 Dropout rate (b) was not included in the 2006 national education system indicators by INEE (2006)

15 Similar to what is called baccalaureate, a qualification with more theoretical rather than practical; hands-on knowledge – i.e., politics, history, etc, compared to electronics, plumbing and other technical areas.
36 See Dropout rates in Glossary.

37 Types of schools are: general, technical and satellite. School for workers was not included in the study because their student populations are normally older than 15 years of age. See description on Glossary.

38 The home, household and family are used indistinguishably in this study and will strictly refer to the actual definition of “household” by Longman (1998): “all the people living together in a house” (p.646) and all actions “concerned with the management of a house” (p. 646). The reason to choose the definition of household instead of that of family was because the latter concept might convey the idea of the traditional “nuclear” family relating to a mother, a father and their children. Given that nowadays there are increasingly more single-parent families, to a degree because of separation, divorce, and also because more women in this day and age decide to have children without getting married (Longman, 1998) it was decided to use the word household when referring to the group of people living together in one home.

39 Socio-economic status for this study represents the combination of parental educational background, occupational status and domestic appliances within the household. Due to the type of methods used, it was thought that asking a parent to reveal their wages would be regarded as being too personal. As their cooperation was needed within a relaxed environment during the interview, a different way of ‘asking’ that question was to enquire whether the household incomes were sufficient to cover their basic needs.

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