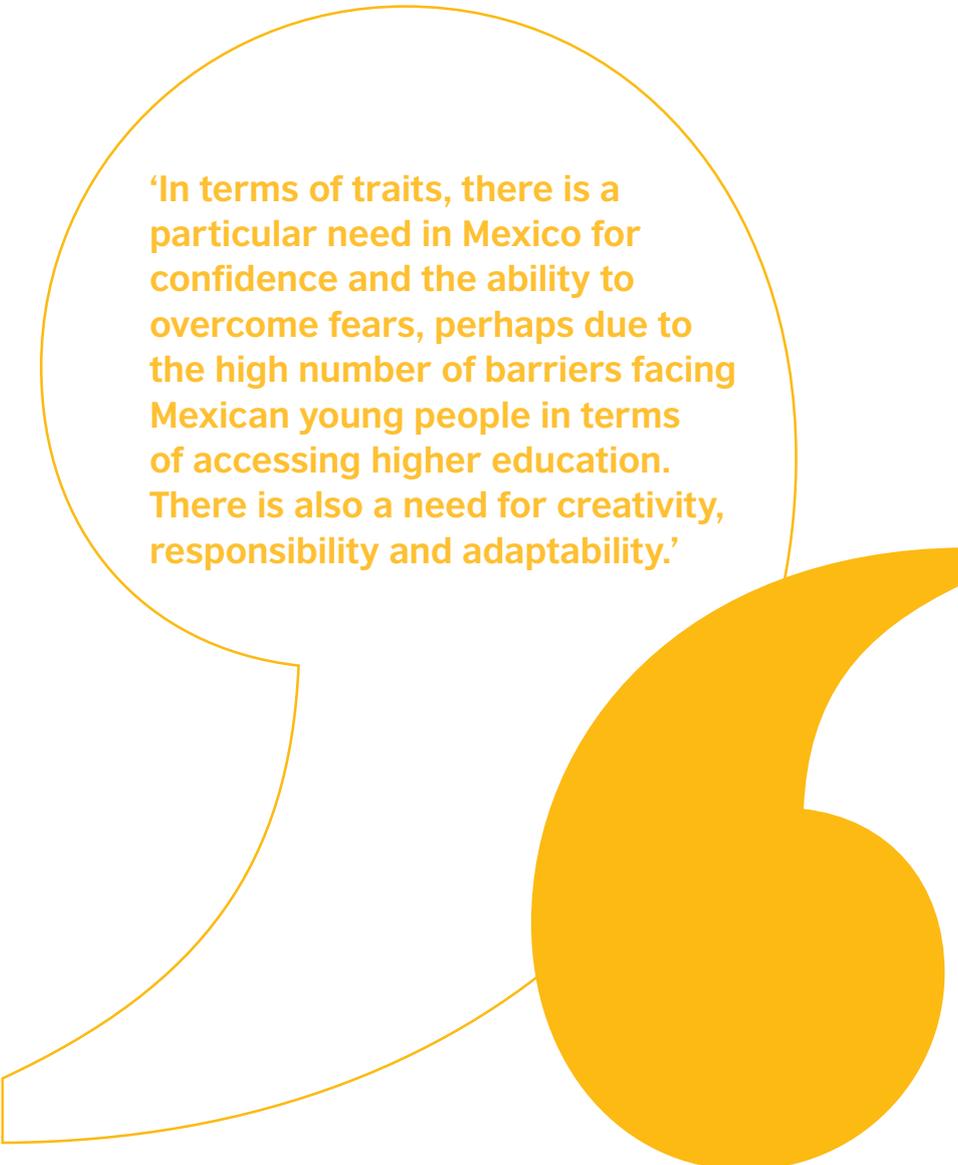




SKILLS FOR HIGHER EDUCATION IN MEXICO: EXECUTIVE SUMMARY





'In terms of traits, there is a particular need in Mexico for confidence and the ability to overcome fears, perhaps due to the high number of barriers facing Mexican young people in terms of accessing higher education. There is also a need for creativity, responsibility and adaptability.'

Introduction

This project was commissioned by the British Council to explore the need to link secondary school learning outcomes to higher education needs in Mexico, as well as possible mechanisms to accomplish this. It aims to address the following research question: what skills or abilities are necessary for students to be adequately prepared for higher education and how can they acquire these? Evidence for the findings has been drawn from international literature and case studies, with special reference to the experience and context of the UK.

This summary report contains findings from the main stages of the research: an international desk review and four in-depth country case studies (Finland, Japan, Poland and Slovakia) selected on the basis of findings from a quantitative analysis of education data pertaining to OECD countries; a desk review of areas of effective practice and existing policies and initiatives in the United Kingdom, plus expert interviews and focus groups with students; and a review of relevant policy and practice in Mexico, comprising a desk review, expert interviews and focus groups with students.

For the purpose of this study, we include the following components as being particularly important for successful transition to higher education:

- Students' pre-university academic achievements, including cognitive and non-cognitive skills, and subsequent ability to adapt to the nature of university work.
- The extent to which students are capable of entering, persisting, and graduating from university.

The breadth of the research question has led to challenges in keeping the research within scope. We have had, necessarily, to focus the areas of our enquiry and this may have led to important omissions. It should also be noted that there is substantial crossover with other literature, for example on what makes an effective schools system and what supports good educational outcomes among students. Systemic, structural and school level influences on student outcomes are complex, making them difficult to unpick. Easy solutions are unlikely, particularly within the Mexican environment where high levels of variation between and within districts are significant, systemic change is often viewed with suspicion and the influence of teaching unions is high.

Preparedness for higher education

Skills for higher education

The skills required for university preparedness differ both between and within countries. In Mexico, there is less of a need for essay writing and research skills than in the UK; in some institutions, these skills are not required at an undergraduate level. Communication skills are key in Mexico, as are analytical and critical thinking skills, teamwork and interpersonal skills, time management and the ability to self-teach. In terms of traits, there is a particular need in Mexico for confidence and the ability to overcome fears, perhaps due to the high number of barriers facing Mexican young people in terms of accessing higher education. There is also a need for creativity, responsibility and adaptability.

Both cognitive and non-cognitive skills are important predictors of success in higher education, and many cognitive skills – such as basic literacy and numeracy – are most effectively developed in the early school years. There are entrenched difficulties in elementary education in Mexico; enrolment is high, but quality is low. This issue persists into secondary education, with a high proportion of young people lacking basic academic skills.

Another key issue for Mexico is the high level of dropout rates between lower and upper secondary levels; only around half the age group is enrolled at upper secondary levels. Identified skills gaps are therefore irrelevant for a large group of potential learners, as they do not have the means to access higher education. The potential skills and abilities of a large group of young people in Mexico are therefore being missed.

Completion rates

One factor consistently mentioned in the international literature is the importance of students' prior academic achievement or level of higher education preparedness in determining the likelihood of them completing a university course. Any policy solution based on this evidence should be considered carefully. First, the relative roles of causation and correlation in admission standards have not been fully established: it is not clear whether introducing tighter admission standards would cause students who would have otherwise dropped out not to do so.

Influences on higher education preparedness

Education expenditure

International literature shows a complex relationship between education expenditure, and academic performance and university preparedness. Our analysis suggests that the benefits of increased expenditure may decrease after reaching certain levels of quality within an education system. Mexico has low per pupil expenditure below higher education levels, and increasing investment at these levels may have a positive effect on outcomes.

Curriculum and subject area

Further academic research is needed on the relationship between curriculum structure and subject mix on the one hand, and educational outcomes and university preparedness on the other. It is possible that there is no one ideal mix, and that ideal structures vary by education system and by culture. Testing this further, and internationally, would be useful.

Streaming and ability setting

While streaming can improve outcomes for higher ability students, it tends to entrench socio-economic differences; streaming tends to increase the gap between low and high achieving students, and students from poor backgrounds are more likely to be in lower streams.

School accountability and quality assurance

The introduction of standardised testing can drive up standards and improve educational outcomes, and – by extension – preparedness for higher education. There are limitations attached to standardised testing, however, and caution should also be exercised over the potential for inequities in terms of university access for students in regions where poverty is rife and school attainment is low. The effectiveness of school inspections on student performance is widely disputed in the academic literature and there is no common consensus. However, it is our view that a school inspection regime may be more useful in countries which have not yet met international education quality benchmarks.

Teacher quality

Teacher performance is key to the development of students' soft and academic skills, and therefore to preparedness for higher education. Recent reforms in Mexico have yet to see a widespread change in teaching style, which tends to be didactic and outdated. A high proportion of teachers have not taken any kind of education-specific degree or training, meaning that pedagogical skills are lacking. This gap has not, as yet, been addressed by continuing professional development (CPD) programmes – at least not on the required scale.

Class size

Mexico has some of the highest class sizes in the OECD. While there is some contradiction in the evidence relating to the effects of class size on student achievement, the majority conclusion seems to be that smaller class sizes lead to better outcomes.

Interventions and incentives

Interventions – whether socio-emotional or academic – can be a useful way of ensuring that the most vulnerable young people have the skills necessary to benefit from school-level education, and later from higher education. Cash transfer programmes, where the poorest families are financially rewarded for keeping their children in school rather than moving them into work at upper secondary level, can reduce dropout rates and ensure that the potential skills and abilities of the most vulnerable students do not go to waste.

Extracurricular activities

The two principal benefits of extracurricular activities cited in our qualitative research were the development of teamwork and communication skills. Other benefits included a sense of confidence or resilience that was useful when applied to academic work; and the development of leadership, social and time management skills.

Recommendations

Policy priorities

Priorities for policy makers include improving the quality of early school education and, at an upper secondary level, building on the REIMS (Reforma Integral de la Educación Media Superior) reforms to increase the level of basic academic skills in students. Upper secondary enrolment rates should also be addressed through support, mentoring and early intervention programmes. We recommend that the incidence of intervention programmes in Mexico is increased, in order to reduce some of the huge disparities in skills gaps between rich and poor students; and also that they are run at a much earlier age – possibly before joining the formal education system – in order to maximise impact.

A particular focus in CPD should be given to pedagogy, focusing on ways of teaching generic competencies through existing subjects in order to raise performance. Attention must also be given to targeting training in the REIMS reforms at teachers who have not already participated in such training; and at CPD for (a) those lacking teacher-specific training and (b) those lacking a higher education qualification. Professional teacher development should also be supported through local clusters of teachers and/or directors and sharing of best practice.

A priority to drive quality in schools is to build on the existing evaluation framework in order to develop a country-wide school inspection framework with common standards; it is our view that education quality needs to be at a certain level before school autonomy can have positive effects, as teachers and school managers must have the necessary skills and abilities from which to use this autonomy to good effect in driving up school standards and educational

outcomes. This requires a well-managed and well-funded inspection system, with highly trained inspectors who have the necessary skills and experience to advise schools effectively.

Per pupil spending at elementary and secondary levels (lower and upper) should be increased as soon as budgets allow. Allocations of any increased budgets will need to be carefully considered, but within the context of this research and raising student preparedness, increased allocations would be useful in teacher CPD, particularly around pedagogy; training and hiring more teachers in order to reduce class sizes; interventions and cash transfer programmes to reduce upper secondary dropout rates, including early intervention programmes for very young children; financial support for networks of teachers to collaborate and share best practice; and funding greater administrative support for teachers (perhaps in the form of teaching assistants) in order to allow them to spend more time teaching.

Other recommendations

Greater provision of extracurricular provision in Mexican schools would be hugely beneficial in helping students to develop the skills and abilities needed for higher education. In particular, it would help to fill a key gap highlighted in Mexico: students' confidence and resilience.

Gaining support of unions for the implementation of reforms to policy and teaching practice is likely to be essential.

We recommend widening the use of test-hired teachers and extending the use of contingent pay bargaining, focusing on teachers' upgrading of pedagogical skills.

It would be useful to run a full external process and impact evaluation of the Servicio Profesional Docente, with provisions updated accordingly.

Areas for further consideration

Policy makers should consider the potential effects of redistributing a portion of the education budget away from higher education and towards earlier levels. The current distribution framework is inequitable and underpins poor quality at school levels. It is arguable that higher education budgets may need to be partially restricted until systemic problems in schools can be overcome, although this needs to be considered within the political landscape and likely opposition from universities; and also balanced against the higher skills needed to support Mexico's economy.

The effects of tightening admission standards at a higher education level to reduce dropout rates (and increase preparedness among the student profile) merits further research and exploration by Mexican policy makers, but this must be balanced against equity considerations in terms of raising further barriers among the most vulnerable students.

Further standardised testing is worth considering for Mexico in order to drive up standards; the vast number of structures and significant regional variation in both educational systems and attainment may make it difficult to implement, however. Again, caution should also be exercised over the potential for inequities in terms of university access for students in regions where poverty is rife and school attainment is low.

The situation in the UK

Skills for higher education

The most frequently discussed skills for higher education among UK interviewees and focus group participants were writing skills, quantitative/numerical skills, independent learning skills, time-management skills, and other study skills, such as note-taking and referencing.

Strengths

Low drop-out rates: The UK has one of the lowest reported higher education dropout rates in Europe: 16 per cent of adults between the age of 20 and 65 have dropped out of university. Factors contributing to the low drop-out rate include the prevalence of university-provided accommodation, a highly selective admissions system, short degree courses and transition support facilities – such as study workshops and student mentoring – at higher education institutions.

Standardised testing approaches:

Students at both the Roehampton and Bristol focus groups said that they had found standardised testing useful in terms of university preparation. Revision periods helped students to develop skills for working strategically and managing time and regular testing allowed them to feel more comfortable with assessment practices at university. Some students, however, questioned the value of frequent examinations, with one student saying that it caused students to be more interested in exam technique rather than fully focusing on the content of their studies.

Teacher recruitment focus: The recruitment of school teachers in the UK – teacher quality being an area we identified as central to young people's preparedness for higher education – is frequently highlighted as an area of particular success. As a result of teaching campaigns introduced in the early 2000s, teaching went from being the 92nd career choice for young people to the top career choice in just five years.

Transition initiatives: Initiatives to support the transition from secondary school to university and to reduce drop-out are seen as being particularly effective in the UK. Such initiatives have been adopted primarily at the higher education level and are characterised by an effort to retain students that are recruited, as opposed to recruiting students that can be retained. Many universities have special facilities in place in order to support the transition from secondary education to university; study skills courses, induction courses, workshops, mentoring and advice services.

Extracurricular activities: Nearly all students participating in the UK focus groups had engaged in some kind of extracurricular activity, with teamwork and communication skills as the most frequently discussed benefits. Students also commented that extracurricular activities, regardless of type, provided a sense of confidence or resilience that was useful when applied to academic work. Programmes such as Young Enterprise, the Duke of Edinburgh's Award and the National Citizens Service can lead to development of useful skills, such as teamwork, communication, problem solving, self-management, resilience and employment skills.

Challenges

Student streaming: The education system in the UK is characterised by higher levels of grouping according to academic ability compared to many other countries. While ability grouping has been defended on the basis that it allows for teaching to be tailored to the individual needs of students, it can also increase the gap between high and low achieving pupils and tends to deepen socio-economic differences.

Focus on narrow outcomes:

School inspections and accountability policies have come at a cost of a focus on narrow outcomes. For example, schools have had an incentive to focus resources on students on the borderline between achieving a C or a D grade, since schools are measured by the number of students achieving A* to C grades. Such incentive structures have meant that curriculum areas not directly related to examinations, but nevertheless important for students' long-term development, are often squeezed out.

High levels of subject

specialisation: Upper secondary education in the UK is characterised by higher levels of specialisation in key subjects in comparison to many other countries, with the majority of upper secondary school students completing only three to four subjects. Although the narrow curriculum may allow for a greater depth of study, it has been identified as a potential cause of gaps in preparedness, with some students experiencing limited exposure to extended essays and independent projects.

