The International Study of City Youth

A brief overview

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A comparative study of cities

The International Study of City Youth follows 10th Grade students in cities around the world to understand how their school experiences and achievements influence their careers and life more broadly.

All nations share a concern with how well school is preparing young people for further study, careers and life more broadly. Completion of high school is now viewed as the minimum level of educational attainment needed for successful participation of young people in further study and work. This is because in most nations high school serves as the foundation for entry to university and other education and training opportunities as well as preparation for entry into the labour market. Over time it has become more and more important in deciding how economic and other life benefits, such as good health and wellbeing, are distributed.

Despite this, nations differ in the way they approach the organization of school, particularly in the senior years, the programs they provide, and the requirements they place on graduation. Some nations offer structured programs combining academic and vocational elements in mainly comprehensive school settings, others offer differentiated streams, delivered in different types of schools, while others have a differentiated school system based on early selection with academic and terminal types of school and workplace-based vocational training.

The International Study of City Youth (ISCY) is a study designed to compare how well school systems in major cities of different countries are preparing young people for further study and careers. It aims to measure the impacts of the distinctive institutional arrangements of each system, including programs and courses, curriculum and assessment practices, types and locations of schools, and the structure of education and training opportunities beyond school. By tracking student progress over time, the study explores how students navigate the opportunities available to them as they transition to further learning, work and adult life.

ISCY provides a wider view of the work of schools, expanding the frame of reference within which schools are judged beyond cognitive achievement measures, to include the impact of schools on student outlooks, school engagement, transition and social and civic values. Important here is consideration of social and emotional skills including students' learning strategies and mindsets, skills, motivation, perseverance, and academic

behaviours as well as content knowledge and academic skills.

How good are schools in forming tomorrow's citizens? How good are they in creating thinkers, highly aspiring, highly motivated young men or women, caring people, good learners with a breadth of views and an openness to the world? Who, amongst students, fits this bill? Is it only the top achievers or do schools reach everyone? For the breadth of objectives (the range of benefits) and the depth of impact (the range of students), are all schools as good as others with a comparable intake—and not only in their own city, but internationally?

The ISCY Project brings together research teams in different countries to help answer these questions.

Background

The ideas for a comparative study of educational inequality in cities had their origins in a research proposal submitted to the Australian Research Council[1]. The project stemming from the proposal was taken up by a group of scholars from different countries who previously had been meeting regularly based on a shared interest in research on student success and failure in school and the transition pathways to college and careers. The group had met annually to present and discuss differences in how their high school systems worked and the impact on different student groups. This work initially led to a journal volume which provided outlines of educational structures in a number of countries and related estimates of flows of students through schools and programs, including differences in student progress and outcomes.[2] Attention for the group then shifted to the issue of high school dropouts, leading to the publication of an edited book with chapters from most of the participating countries.[3]

After completing this work, the city proposal emerged as the next logical step as it provided the basis for an original, international study of high school youth with common survey and assessment items that would facilitate cross-country comparisons. The study, designed as an international study of urban youth, was guided by an interest in comparing school systems in different nations and how well they prepare young people for further study and work. Titled the International Study of City Youth (ISCY), the approach taken was to study the systems through the microcosm of a major city in each country. This approach was taken because one of the key differences is how school systems are organized 'on the ground', i.e., in administrative and geographical terms. Residential differentiation is a major factor in the production of differences in the opportunities to learn available to students, but it may work more or less sharply, depending on the model of school provision. ISCY by its design provides researchers with the ability to construct a close-up view of how education structures work within a city. This is important as often comparative research on education taking whole nations can wash out the distinctive qualities within each country due to the priority given to identifying macro-level differences between nations. It is understandable that comparative research often involves analysis at an aggregated level, but this is at the same time a key limitation. Differences within a jurisdiction are pertinent particularly in countries such as Australia, Canada, and the United States where, under federal systems, school education is largely the administrative and fiscal responsibility of state and territory or provincial governments and is not managed at a national level. The unique school education design features apparent in states or provinces can be longstanding and informed by different histories established long ago.

Do opportunities and outcomes vary for young people depending on the city and the

[1] The successful proposal submitted by Richard Teese, Stephen Lamb and Andrea Reupold was titled, "A Tale of six cities: Explaining social inequality in secondary school systems—an international comparative study", Australian Research Council Discovery Project number DP1095928.

[2] The journal volume was titled "The future of learning and teaching", and part one provided an outline of educational systems in different countries. The journal was *Formazione & Insegnamento*, Volume 1/2, 2008, published in Italy, edited by Roberto Fini.

[3] Lamb, S., Markussen, E., Teese, R., Polesel, J., & Sandberg, N. (Eds.). (2011). *School dropout and completion: International comparative studies in theory and policy*. New York: Springer.

approach taken to the organization of schools and programs? Does it matter who they are, where they live, what school they attend and what stream of study they take? Which schools and school systems in which cities are the most successful in reducing social gaps yet maintaining high standards while preparing young people for further study and work?

ISCY was designed to explore these questions. It is concerned with how young people relate to school and society. It is an investigation of their achievement, engagement, attitudes and their experiences during school. How young people relate to the social world and how well schools equip them with the capital and the ethos to participate well in this world are linked with a variety of individual, family, and school factors. These include prior educational achievement, family and school SES, migration experience, race, ethnicity, gender and locality. However, the extent to which these factors differentiate student attitudes, achievement and progress may well be influenced by the structure of the school system in which they are located. Different types of schools and courses, different rules and procedures, different linkages between schools, vocational training and higher education may accentuate or moderate the effects of individual and group factors on student outcomes.

ISCY compares how well school systems in major cities in Europe, North America, South America, Asia and Australia are preparing young people for further study and work.

Aims

Among other things, the study compares the following across the participating cities:

- patterns of school provision and program options
- the main pathways taken by students through the program options (vocational general, academic) in the final years of school
- choices for students from different backgrounds and families
- student perceptions and attitudes towards school and community
- differences in the extent to which young people from comparable backgrounds achieve their educational and career goals
- academic skills as well as in social and emotional skills
- student perceptions and attitudes over the final years of school, taking into account the economic and social environments within different education and training contexts
- aspirations for education and career, quality of instructional experience, quality of relationships to teachers and other students, confidence as a learner and confidence in schools and communities to support creating a good life
- range of supports, programs and activities which schools offer so that all learners can complete school successfully

ISCY is important in presenting a new and fertile approach to important questions which stand in need of better research. Do school systems prepare young people equally well for further study, for careers and for active engagement in community life? International evidence of educational inequality has grown substantially in recent decades through PISA, PIRLS and TIMSS. These assessment programs have helped improve our understanding of how school systems function, the extent to which inequalities persist and why gaps differ between countries with comparable social structures. The promise of international testing—to improve the performance of school systems by understanding them better—has been developing, partly through the efforts of schemes such as PISA. But we need to build on these efforts. Why one country provides stronger student outcomes or is more equitable than another and whether this comes at the price

of quality, remain elusive questions as does change in the rank of a country on such measures. Can we use the tools of international assessment to better illuminate how systems work and how inequality is generated and why the forms and intensity differ between countries? This depends on how good we are at theory-building and creating good analytical tools to compare school systems in terms of social processes and student outcomes.

The project is innovative in several ways. Firstly, it tests the strength of a conceptual framework for comparing how different institutional arrangements work and for whom they work best, in different countries. Secondly it uses the tools of international student assessment to examine the impact of these arrangements on students of similar measured ability. Thirdly it uses a broad concept of student outcome, taking into account academic and non-academic skills, that enables impact to be measured in a consistent way across different national systems. The research provides one of the few studies to measure the effects of different systems of school organization, program structures and graduation pathways on student progress and outcomes, using similarly selected samples of students in a longitudinal study design.

The cities

Researchers and research teams from 14 cities in Europe, North and South America, Asia and Australia are participating in ISCY. The cities are:

- Barcelona
- Bergen
- Bordeaux
- Ghent
- Hong Kong
- Montreal
- Melbourne
- Reykjavik
- Sacramento
- San Diego
- Santiago
- Tijuana
- Turku
- Wroclaw

Comparisons across cities provide us with a clearer understanding of the way systems and schools contribute to student outcomes.

To capture the way schools and school context can influence progress and outcomes, it was important to have a large enough sample of schools to obtain reliable estimates of the impact of school context and quality of learning.

Method

One aim of ISCY was to generate "city" estimates of student performance and perspectives. Initially, research teams from different cities were invited to participate in the study. In the 14 cities which agreed to take part, respective research teams used a two-stage sampling process to select a sample of students that first involved selecting a representative sample of schools within each city and then selecting representative samples of students within schools. Such a design facilitates estimating school effects on student outcomes.

Rather than an age-group, such as 15-year-olds as in PISA, ISCY was based on samples of 10th Grade students in each city. The idea was to select students at the end of junior high school, or the beginning of the senior secondary years depending on the school system, who would be drawn from a single Grade at a similar point in the schooling cycle and able to capture a full cohort of students not yet that affected by school dropout. The study was initially designed as a longitudinal study to measure the longer-term school and initial post-school outcomes of a cohort of young people drawn from a similar point in school. Tracking 10th Grade students would enable an examination of skills and school experiences for a whole cohort of students in each city and relationships with program choices and pathways in school and beyond. The study design was chosen in order to provide comparisons and insights into the structures of opportunities and alternative pathways that high school provides in each city.

Researchers in each participating city were responsible for recruiting schools. In smaller cities, all schools were recruited. Schools were given the option to have all tenth-grade students participate or to work with the researcher to select a representative sample of students. Most schools surveyed all students.

The base year data collection was completed in eight of the cities during the 2013-14 school year and during the 2014-15 school year for the remaining six cities. A total of more than 40,000 students were surveyed from more than 400 schools in 14 cities.

Key Constructs

Baseline survey data were collected from principals, 10th Grade teachers and 10th Grade students in participating schools. The student survey solicits information about family and educational backgrounds, educational and occupational aspirations, interest and engagement in school and a set of social-emotional skills shown to be predictive of college and career readiness, including conscientiousness, hope and the ability to work and get along with others. Contact and administrative information was collected so that students could be re-surveyed in future years. The teacher survey measures teacher attitudes about their school and their students and gathers information on teaching practices, professional development and professional aspirations. The school questionnaire explores school initiatives to raise student achievement, available resources and the practices linked to school decision-making. All the surveys were conducted online.

One of the aims of the project is to compare the "starting positions" and the "trajectories" of young people of similar measured prior achievement. Controlling for prior achievement enables investigation of the impact of different institutional arrangements on student outcomes. It also helps identify "similar" students in achievement for international comparisons. This requires tests designed to transcend the particular structures of each national system. For this reason, student achievement was measured in the baseline data collection using a 40-minute, online assessment. The student assessments were administered online. The assessments were based on test items from the 2012 (math) and 2009 (reading) PISA in order to yield internationally comparable achievement scores in reading and math.

Each city is contributing longitudinal data in subsequent years of the project, either from follow-up surveys of students or matched administrative data, to track student progress and pathways each year.

In addition to the primary data collected through the ISCY project, researchers in some cities had access to selected administrative data and data from prior research, which can be used to add further richness and detail to an understanding of the education systems in those cities. In Barcelona, for example, test results in

mathematics and the Catalan language (similar to PISA) from the Catalan Education Authority were obtained to create a measure of student achievement. Researchers in some cities included sets of additional questions in their student surveys to capture information on topics of particular interest for them. For example, researchers in Santiago, Chile, added questions on social cohesion and civic trust, while researchers in Montreal included additional questions on vocational education.

Study of skills and related factors influencing student achievement

Given the growing interest in the topic of social and emotional skills and their importance to the success of young people in school and beyond, among the topics of initial interest for comparative work of researchers in ISCY was developing an understanding and comparison of the levels of social and emotional skills of students in different cities as well as the influences on student achievement of related factors such as attitudes to school and student engagement in school.

The aim is to undertake analysis in each city to examine the distributions of skill levels, for both cognitive and social and emotional skills, of students across city schools and across different groups of students. Student engagement in school and dispositions towards school and learning are related constructs measured in ISCY.

Research Questions

The first phase of the project was to analyze base-year data from ICSY to address the following types of questions:

1. How do 10th Grade students in schools and cities in ISCY perform on global standardized reading and math assessments and on measures of social and emotional skills?
2. What are the sizes of the gaps in cognitive and social and emotional skills between students from different backgrounds?
3. What are the sizes of the gaps in skills within cities and across cities?
4. To what extent do differences in family, school and neighbourhood contexts affect city differences?
5. What programs or features of school organization in participating cities help reduce social gaps in cognitive skills and social and emotional skills?

Tracking students over time

The aim of the longitudinal study is to follow the directions the participants take throughout their subsequent schooling and on to further study and employment. At each contact, information is gathered on the place within the school curriculum or in vocational training or employment that young people occupy. They are asked about turning points and decisions, about changes in circumstances, and about how well they are coping with the demands made upon them as learners, apprentices and workers.

Questions to be considered include:

- To what extent do their views change—views about economic chances, study and training opportunities, social and community involvement?
- How well do they make progress in terms of economic integration—the nature of the jobs they have, their attachment to their jobs, including working on their own account or in partnership with others?
- Which students and school systems better prepare students for further study and careers beyond secondary school?

The teacher perspective

The study also generates an international perspective of schools and education systems from the standpoint of teachers. The teacher survey canvassed views about:

- school context, including intake and policies
- student characteristics
- pedagogical and behavioural challenges
- teaching practice and professional aspirations.

It was designed for a sample of teachers in each school, representative of the teachers in touch with the relevant group of students. This

information help the researchers see each school in the context of other schools serving the city, and from a classroom rather than school administrator's perspective.

The school perspective

In the first year of the study, school principals (or their nominees) completed a survey designed to build up a picture of the school. The survey gathered information about:

- the structure and organisation of the school (e.g. grade levels in the school, main sources of funding)
- the student body (e.g. family background)
- the teachers (e.g. qualifications) and the school's resources (e.g. access to qualified teachers and instructional resources)
- curriculum and assessment practices (e.g. specific measures which schools take to assist weaker learners or to challenge and extend stronger ones)
- the school climate, decision making practices and school policies (e.g. for admitting students)
- school initiatives and strategies such as those designed to raise student achievement, or address the needs of students at risk of failing or dropping out of school.

The project uses this information to consider the impact of school policies and processes on student outcomes and pathways.

Administrative data

Where possible, researchers also use other data to explore the links between the social, economic and cultural context of schools and school communities, and student pathways and outcomes. Most countries administer a census which can provide important social, demographic, economic and cultural data on local areas and neighbourhoods, making it possible to study different school neighbourhoods in participating cities, particularly their social, economic, organisational, political, and cultural structures. Other government and non-government survey data may also be used, such as community and labour force surveys as well as the school census. In some cities, there is also the opportunity to link the student data with administrative data.

For example, in some cities, the researchers aim to connect the student data records to administrative data in order to obtain educational histories of young people to better understand origins and destinations. Where feasible, this also promotes richer comparisons across cities.