Handbook on Measuring Equity in Education

SUMMARY

Foreword

We know that education is a fundamental human right. We know that without it, our lives – and indeed our world – would be greatly diminished. The collective progress that has been made over recent decades to get millions more students into the classroom is cause for celebration. But with so many challenges remaining – from concerns about whether they are actually learning to the educational exclusion of so many disadvantaged children – there is no room for complacency.

Now, as never before, we need to track progress on education in more detail. Where are the learning gaps? Who is still missing out on an education? And very importantly, why?

The Sustainable Development Goals (SDGs) provide the mandate for a strong focus on equity in education, aiming to ensure that the most disadvantaged children and young people have the same opportunities as others. SDG 4 demands an inclusive and equitable quality education for everyone, leaving no one behind. The challenge now is to provide the robust evidence, driven by solid data, which will enable the effective monitoring of progress on educational equity. With data currently available for less than one-half of the global indicators needed to track progress towards SDG 4, it is time to rise to that challenge.

This Handbook sets out, in practical terms, how this can be achieved. Produced by the UNESCO Institute for Statistics (UIS), in collaboration with FHI 360, Oxford Policy Management and the Research for Equitable Access and Learning (REAL) Centre at the University of Cambridge, it provides all those involved in the measurement of educational equity with not only the key conceptual frameworks but also the practical tools to do the job. With countries under pressure to deliver data on an unprecedented scale, the Handbook also recognises that no country can do this alone, making a strong case for greater cooperation and support across governments, donors and civil society.

The delivery of equitable quality education underpins the world's development goals, from poverty reduction to the promotion of peaceful and inclusive societies. We hope that this Handbook will help to translate the commitments made to equitable education into tangible action to monitor progress towards this crucial global ambition.

Silvia Montoya
Director, UNESCO Institute for Statistics

Summary of the *Handbook on Measuring Equity in Education*

Equity is at the very heart of the world's development agenda, with a clear global ambition to ensure that everyone is included in the push for greater social progress.

This ambition can be clearly seen in the Sustainable Development Goal for education (SDG 4), which calls for inclusive and equitable quality education for all, spanning not only gender parity in learning but also equitable educational opportunities for people with disabilities, indigenous peoples, disadvantaged children and others who are at risk of exclusion from education. In other words, *nobody* is to be left behind.

Measuring the equity of educational progress requires data on an unprecedented scale, with countries needing solid evidence to design effective policies and approaches. To put it simply, greater equity and inclusion in education cannot be achieved without better data and analysis to monitor progress for the most marginalised populations. This is a major concern for educators, advocates and policymakers, who recognise that it is not possible to set benchmarks or measure progress without the ability to measure exclusion.

Produced by the UNESCO Institute for Statistics (UIS), in collaboration with FHI 360 Education Policy Data Centre, Oxford Policy Management and the Research for Equitable Access and Learning (REAL) Centre at the University of Cambridge, the *Handbook on Measuring Equity in Education* is intended for all those involved in the measurement and monitoring of equity in education, especially those concerned with national policymaking. It stresses the importance of producing the high-quality, disaggregated data that

are essential to ensure true equity in education. The Handbook addresses knowledge gaps, presents a conceptual framework to measure equity in learning and offers practical guidance on the calculation and interpretation of indicators.

The Handbook also examines how equity measures are addressed in 75 national education systems, providing concrete recommendations for better data coverage to target the most disadvantaged groups, and analyses the role of government spending to shed light on who benefits and how resources could be redistributed to promote equity.

Chapter 2 of the Handbook examines **what it actually means to measure equity in learning**. Given that equity itself is a political issue and a question of political choices, attempts to measure equity cannot be divorced from the surrounding context of fairness and justice.

We provide a framework for such analysis, focusing on principles that can gain traction. We present a theoretical overview of the concepts of equity and equality and how these can be applied to the measurement of equity in learning and related educational variables. First, we discuss five leading concepts for the measurement of equity in learning: meritocracy, minimum standards, impartiality, equality of condition and redistribution. The meaning of such equity measures in practice depends on what, precisely, is being measured. Therefore, we also describe the characteristics of educational variables that matter from an equity perspective and set out desirable characteristics for equity measures, depending on how they are to be used.

A snapshot of data challenges

The current picture of the scale of educational exclusion lacks detail and a great deal of work is required to fill in the blanks. According to the UIS, data are available for slightly less than one-half of the global indicators needed to monitor progress towards SDG 4. Countries face a range of challenges, including the following:

'Invisible' children and youth
Equitable approaches aim to ensure that no one is left behind by wider progress. In education, this means, inter alia, ensuring that the most disadvantaged children are not only in school but achieving the same level of learning as other students. However, excluded children are so often invisible in statistics at the national and global levels. It is therefore essential to include children in school and out of school in learning assessments.

Definitions
Many of the equity aspects that countries are required to measure are not very clearly defined. There is, for example, no universally-accepted definition of what it means to have a disability.

More data needed, from more sources
Countries are now required to produce more disaggregated indicators, which requires them to draw on a far wider range of data sources—including school censuses, learning assessments and household surveys—to meet unprecedented demand for data.

Lack of comparable data
Because many countries do not have regular standardised national assessments of learning, it is difficult to establish comparisons both within and between countries. In addition, public examination results do not always provide comparable data in a way that allows progress to be tracked over time.

In Chapter 3, the Handbook examines **how these two concepts can be applied in practice: impartiality and equality of condition.** They are closely related and are often sufficient for reporting on key education indicators. However, there is one important distinction between the two, with the first focusing solely on the state of being 'equal' in terms of a particular input, characteristic or outcome, while the second also considers the wider social and economic context, as well as issues of fairness. While perfect *equality* may not be possible, greater *equity* would distribute education outcomes independently of the socioeconomic or other characteristics of students or their schools. It can, therefore, be seen as a route to greater equality for those outcomes.

We guide the reader through a common process to identify equity considerations and provide the technical and operational framing for some common equity metrics that can be applied to education indicators. The Handbook introduces visualisation and measurement techniques to represent both impartiality and equality of condition, the requirements for the use of underlying data to measure both, and the advantages and disadvantages of each technique for generating insights into the magnitude and nature of any inequality.

Chapter 4 provides **useful information for policymakers on what to consider when selecting indicators to track progress in education participation, completion and learning**, presenting evidence on the extent to which different indicators already included in national education plans take account of equity. Equity measures are fairly common in indicators related to education access at the primary level, but few national education plans include indicators on disparities in learning and those that do tend to focus on gender inequality. Where measures of equity are included, they are often associated with impartiality: tracking separate sub-groups of the population or assessing parity across them.

We highlight positive country examples of tracking progress towards equity in access and learning, before highlighting the importance of including a wider range of dimensions of disadvantage in education plans. We discuss the data to be collected and propose methods to track changes in inequalities over time.

Finally, in Chapter 5, the Handbook examines **government spending on education as a tool to address inequality**. In many countries, children and young people who are the hardest to reach are often the last to benefit from government investment in education. It is simply more expensive to ensure a quality education for children disadvantaged by household income, gender, location, ethnic origin or disability than for other children, given the cost of measures to tackle the root causes of their disadvantage.

While equal funding means the same amount of money for each student or school, equitable funding means additional resources for the most disadvantaged children to ensure that every child can enjoy the same educational opportunities. We examine ways to identify who benefits from government education spending, including the use of National Education Accounts as a way to monitor whether resources promote equitable outcomes in education.

From an equity perspective, progress towards SDG 4 demands the equitable redistribution of resources within education systems, with the most disadvantaged receiving the largest share of government resources and paying the smallest share from their own pockets. National Education Accounts are an important way to track progress, and funding formulae are being used across a number of countries for the redistribution of education resources.

Making the case for cooperation

This Handbook is not only a resource for analysis but also articulates why this analysis matters. It makes the case for greater cooperation among organizations that produce data and offers strategies to disaggregate data that can shed light on those who are currently missing from education and learning statistics. Given that the production of equity data requires collaboration and formal partnerships between governments, donors and civil society, the Handbook aims to pave the way for greater collaboration among stakeholders.

Our world continues to be marked by stark social, economic and structural inequalities. Significant progress towards the SDGs and the Education 2030 Framework for Action is unlikely without a strong commitment by UN Member States, global actors and key stakeholders in the education sector to promote and deliver equitable quality education. This Handbook is inspired by the need to position educational equity at the heart of global, national and local agendas to promote access and learning for all children, young people and adults.

The UNESCO Institute for Statistics (UIS) is the official source of cross-nationally-comparable data used to monitor progress towards the Sustainable Development Goal for education (SDG 4) and key targets related to science and culture. As confirmed in the Education 2030 Framework for Action, the UIS has the mandate to "work with partners to develop new indicators, statistical approaches and monitoring tools to better assess progress across targets related to UNESCO's mandate". Visit our website for data and more information at **uis.unesco.org**.

FHI 360 is a non-profit human development organization dedicated to improving lives in lasting ways by advancing integrated, locally-driven solutions. The FHI 360 Education Policy and Data Center (**www.epdc.org**) is a public resource of data on school participation, learning and workforce transition from multiple sources around the world. This contribution is made through the Education Equity Research Initiative, a collaborative partnership focused on creating stronger data and evidence around equity in education (**www.educationequity2030.org**).

Oxford Policy Management (OPM) is an international development consultancy committed to helping low- and middle-income countries achieve growth and reduce poverty and disadvantage through public policy reform. We help our partners achieve this by providing a unique combination of high-quality analysis and decades of practical experience gained in over 100 countries. OPM is headquartered in Oxford, United Kingdom and has a growing network of offices worldwide.

The Research for Equitable Access and Learning (REAL) Centre at the Faculty of Education, University of Cambridge pioneers research into overcoming barriers to education, such as related to poverty, gender, ethnicity, language and disability, particularly in countries in sub-Saharan Africa and South Asia. Further information about the Centre's research can be found here: **http://www.educ.cam.ac.uk/centres/real/**

See the full report at **http://on.unesco.org/equityguide2018**