

QUALITY ASSURANCE, MONITORING AND ACCOUNTABILITY

Collection and use of data in inclusive education

European Agency for Special Needs and Inclusive Education



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COLLECTION AND USE OF DATA IN INCLUSIVE EDUCATION: SUMMARY PAPER

Introduction

As part of its Quality Assurance, Monitoring and Accountability (QAMA) activity, the European Agency for Special Needs and Inclusive Education (EASNIE) produced a [video](#) on data collection and use in inclusive education. This summary paper accompanies the video.

With education systems becoming ever more complex, each country needs a unified framework for quality assurance, monitoring and accountability. The QAMA activity seeks to identify the essential elements of a framework that brings all aspects of an education system together. Please visit the [QAMA activity web area](#) to learn more about this work.

Data collection and use have a critical role in all education systems, and, in addition to their role in the QAMA framework, are an important and relevant topic for all the [Thematic Country Cluster Activities](#) (TCCA).

Dr Verity Donnelly provides more information in the accompanying [video](#). This paper sets out key points from the video, which include:

- [reasons for data collection](#);
- [countries' data commitments](#) under European and international agreements;
- [monitoring and evaluation](#), highlighting the need for data on all learners;
- the [need for a strategic approach](#) to data collection.

The paper also presents some visual elements from the video, such as the [data ecosystem](#) and [resources from UNESCO Institute for Statistics](#), and provides a full list of [references](#).

Reasons for data collection

Data is key in shaping the formulation and implementation of education policy. In an increasingly complex education system, different types of data are needed to provide a holistic picture of both system and school development. Quantitative and qualitative data can be used in parallel within the framework for quality assurance, monitoring and accountability – with a focus on continuous improvement.

Access to high-quality data on learner outcomes, inclusive practices and the barriers faced by learners with diverse and special educational needs is crucial for monitoring progress, evaluating the impact of inclusive education policies and ensuring that school practices are continually adapted to meet the evolving needs of all learners.

Countries' data commitments

Countries already collect data as part of their commitment to, for example, the United Nations (UN) Convention on the Rights of the Child (1989), the UN Convention on the Rights of Persons with Disabilities (2006) and UN Sustainable Development Goal 4 (UNESCO, 2015). At European Union level, countries contribute to the Education and Training Monitor (data on discrimination) (European Commission, 2024a), the European Education Area (equity and inclusion, participation in early childhood education, reduction of early school leaving), the European Commission's Pathways to School Success (early school leaving, learner well-being and health) (European Commission, 2024b) and the evaluation of Erasmus+.

Quantitative and qualitative information should be disaggregated (for example, by gender, socio-economic background, migrant background, ethnic, religious or cultural minority, and regional differences) and should cover factors that have a positive or negative effect on learning outcomes (Council of the European Union, 2022).

European Agency Statistics on Inclusive Education

Through its [European Agency Statistics on Inclusive Education](#) (EASIE) activity, EASNIE collects annual data on learners with an official decision of special educational needs, based on EASNIE's operational definition, from participating member countries. This unique approach, based on active co-operation between EASNIE and its member countries, enhances comparability across countries and ensures the transparency and relevance of collected data.

EASIE offers a framework to monitor educational placement as a precondition for inclusive education. It produces educational placement indicators for individual countries and cross-country averages. This provides a database for tracking the developments in educational placements over time and across countries.

EASIE work highlights gaps that exist in data collection in a number of countries. These include the under-reporting of some educational placements in some countries, such as home-schooling and those who should be in education but are not (out-of-education data), and learners in separate educational settings within mainstream schools. In addition, not all countries report on International Standard Classification of Education levels 02 and 3.

A focus on all learners

Overall, monitoring and evaluation activities require a focus on the school and classroom level, as this is where inclusion is ultimately successfully implemented (Carrington et al., 2017; Schuelka, 2018).

If a system is inclusive, information is needed on **all** learners. The phrase 'all learners' should not only include those with the most complex needs, but also others who may be in vulnerable situations for a wide variety of reasons, but who may be invisible in the official data. This may include reflection on what progress and success look like for this group of learners, a focus on wider achievement, and other factors such as culture,

relationships, etc. Unless the progress and achievement of learners with the most complex needs can be ‘measured’, it is not possible to know whether their rights IN education are being fulfilled. Also crucial is the need to collect accurate data on learners who are out of school, whose right TO education is not being met.

Data should also examine factors that support learners (for example, ways to overcome barriers to learning for particular learners/groups). Disaggregated data on potentially vulnerable groups will inform a targeted response, enabling an understanding of strengths and areas for improvement.

Data is also required for accountability purposes. What are stakeholders happy to be held accountable for, in line with inclusive values? Roles and responsibilities should be clear and in line with stakeholders’ training and experience, so that accountability is ‘fair’. Also critical is an understanding in schools of the use of formative and summative data to avoid possible unintended consequences (for example, an emphasis on summative data narrowing the curriculum).

While disaggregated data is needed, it creates a dilemma – how to use labels to increase the visibility of some groups and identify potential barriers without having a negative effect on practice (such as stigmatising learners or segregating them from peers). Labels should therefore be used sensitively, also recognising that learners often face more than one challenge and could therefore receive multiple labels. Recent EASNIE work (for example, EASNIE, 2021) points to trends away from a focus only on disability and a move towards diversity and a single legislative framework for all learners, with flexibility to address intersectionality.

A balance of quantitative and qualitative data can identify themes and trends to guide teaching and learning, curriculum development, learner support and overall school improvement strategies. Feedback on these areas will ensure that learners’ rights in education are fulfilled – that they are getting reasonable adjustments and the support needed for them to make progress and achieve.

Data should also ensure that learners’ rights TO education are fulfilled – in particular, catching learners who ‘fall through the cracks’. National governments should be clear about alternative education, home schooling and other forms of education, as well as part-time attendance, unofficial exclusions, etc. The question is whether national/local authorities really know where all learners are and whether they are accessing high-quality educational experiences, and if their personal, social and academic rights, needs and expectations are met and exceeded.

A strategic approach to data collection

The complex work of data collection should be underpinned by certain assumptions:

- A vision and goals agreed with all stakeholders with a clear and widely understood definition of inclusive education
- A single legal and policy framework for all learners.

Countries should aim to establish a sustainable, ‘fit-for-purpose’ data ecosystem (that is, a holistic model of structures and processes for data collection, analysis and use) that is

embedded in an inclusive education system and linked to national education policies and priorities (UNESCO Institute for Statistics, 2023) (see [Annex A](#)). In the context of inclusive education, this will require a culture of trust and shared accountability (Looney & Kudelova, 2019) to support a continuous school improvement process (OECD, 2022).

A strategic plan for data collection and use should set out roles and responsibilities, accountability, resources, monitoring and timescales. Actions may include reviewing and consolidating existing structures and processes or setting up new ones (for example, cross-sector groups at ministry/regional levels, channels for effective communication, leadership roles), aiming to avoid excessive bureaucracy.

UNESCO Institute for Statistics (2023) points out that the main challenges are a shortage of skilled human capital, limited resources and poor communication between different stakeholders. Therefore, professional development, targeted use of technology and improved collaboration and communication will be needed to successfully implement actions.

Furthermore, UNESCO Institute for Statistics (ibid.) says that policy-makers are often unaware of the fundamental data needed in the education sector, which may include information from surveys and population censuses, learning assessments, administrative records, and finance and expenditure (**data sources**). Policy-makers should plan how data should be collected, who collects it and how often (**data production**) and recognise the need for data that is relevant, accessible and comparable for national and international education progress monitoring (**data reporting**). Finally, decision-makers need to understand how this data can inform policy design and innovations, contribute to efficient resource allocation, and ultimately improve learning outcomes (**data use**) (see [Annex B](#)). This model could potentially serve to outline key points to address in designing a holistic data ecosystem.

Data sources can be combined for higher-quality data to answer specific questions, such as learning outcomes relating to class size, school facilities, etc.; school attendance (using census data, administrative data, health/social data); effective/efficient allocation of resources to learners with the greatest needs – for example, identifying drop-out/low attainment in areas of high poverty.

Data can also inform a longer-term view – for example, funding preventative strategies and improving what is available to all learners, which may be more cost-effective than later intervention and compensation approaches.

Focused use of evidence of ‘what works’, particularly in short-term interventions, can lead to a reduction in the need for long-term (compensatory) support and further improve the quality of education available to all learners. Using data on ‘what works’ as evidence is cost-efficient. In a similar way, collecting and using data on ‘what does not work’ is also cost-efficient, and prevents the continuation of interventions which do not lead to effective outcomes.

Annex A: A holistic model, showing the interaction between system levels to support system improvement and improve the quality of education for ALL learners

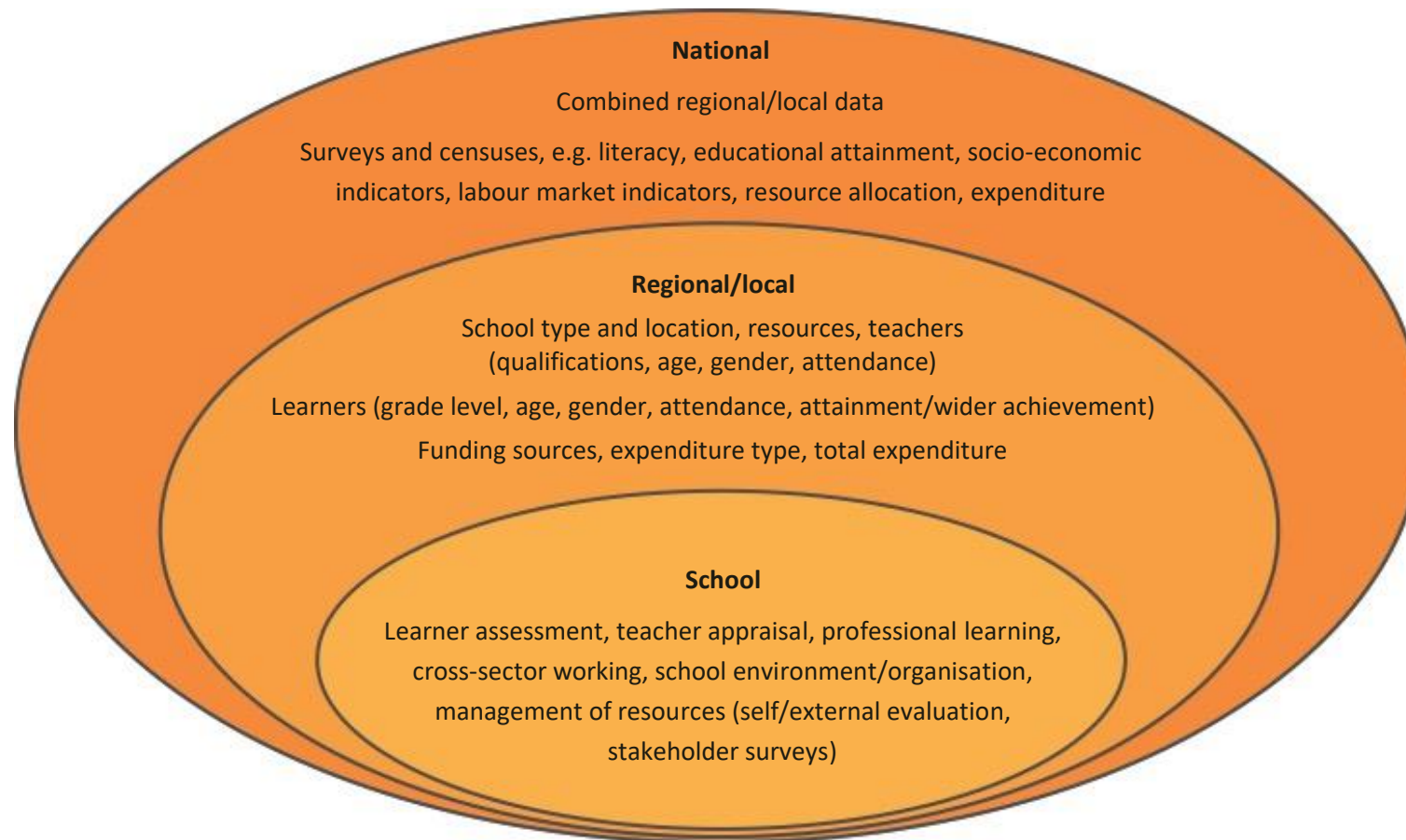


Figure 1. Data ecosystem

Annex B: Education data sources and quality checklist





















WHAT?	WHO?	WHY?
<p> Administrative Records</p> <p>Schools</p> <ul style="list-style-type: none"> ✓ Infrastructure ✓ Location ✓ Schools materials ✓ Type (public/private/NGO) <p>Teachers</p> <ul style="list-style-type: none"> ✓ Number of teachers ✓ Gender ✓ Age ✓ Qualifications ✓ Teacher attendance ✓ Teaching grade level <p>Students</p> <ul style="list-style-type: none"> ✓ Number of teachers ✓ Gender ✓ Age ✓ Grade level ✓ Attendance 	<p> Ministry of Education</p> <hr/> <p> Ministry of Finance</p>	<p> Monitoring & Evaluation</p> <p> 19 SDG4 Indicators</p>
<p> Financial & Expenditure</p> <p>Resources</p> <ul style="list-style-type: none"> ✓ Sources of funding ✓ Total Expenditure ✓ Expenditure type 	<p> Ministry of Education</p> <hr/> <p> Ministry of Finance</p>	<p> Budget allocation</p> <p> Efficiency of resources</p> <p> 5 SDG4 Indicators</p>
<p> Surveys & Population Censuses</p> <ul style="list-style-type: none"> ✓ Literacy ✓ Educational attainment ✓ Expenditure and consumption patterns ✓ Household and individual level socioeconomic indicators ✓ Labor market indicators 	<p> National Statistics office</p>	<p> Context / Socioeconomic factors</p> <p> Data on those outside the formal education system</p> <p> 13 SDG4 Indicators</p>
<p> Learning Assessments</p> <ul style="list-style-type: none"> ✓ National school-based assessments ✓ Test scores ✓ Student socioeconomic ✓ Characteristics assessments ✓ Teacher / parent surveys ✓ International assessments 	<p> Ministry of Education International Agencies</p>	<p> Insights on quality and equity of education</p> <p> 10 SDG4 Indicators</p>

Figure 2. Education data sources (source: UNESCO Institute for Statistics, 2023, p. 24)




IS THE DATA...		
RELEVANT	COMPARABLE	ACCESSIBLE
 Does the data source include the required information?	... over time?	... to all users/open access?
 Is the data available for the groups of interest (i.e., school, student, teacher, private and/or public schools etc.)?	... across countries?	... in a user-friendly format?
 When was the data published (latest year available)?		... in a timely manner?
Is it interoperable with other data sources via a common identifier?		

Figure 3. Data quality checklist (source: UNESCO Institute for Statistics, 2023, p. 30)

References

Carrington, S., Pillay, H., Tones, M., Nickerson, J., Duke, J., Esibaea, B., Malefoasi, A. and Fa'asala, C. J., 2017. 'A case study of culturally informed disability-inclusive education policy development in the Solomon Islands' *International Journal of Inclusive Education*, 21 (5), 495–506. doi.org/10.1080/13603116.2016.1218952 (Last accessed October 2023)

Council of the European Union, 2022. *Annex to the Annex. Council recommendation on Pathways to School Success and replacing the Council Recommendation of 28 June 2011 on policies to reduce early school leaving.* (2022/0206) 28.11.2022. www.consilium.europa.eu/media/60390/st14981-en22.pdf (Last accessed August 2025)

European Agency for Special Needs and Inclusive Education, 2021. *Key Principles – Supporting policy development and implementation for inclusive education.* (V. J. Donnelly and A. Watkins, eds.). Odense, Denmark. www.european-agency.org/resources/publications/key-principles-supporting-policy-development-implementation (Last accessed August 2025)

European Commission, 2024a. *Education and training monitor 2024: Comparative report.* Luxembourg: Publications Office of the European Union

European Commission, 2024b. *Roadmap for ensuring school success for all – A practical 'living' guide for the implementation of the Council Recommendation on Pathways to School Success – Thematic Report.* Luxembourg: Publications Office of the European Union

Looney, J. and Kudelova, D., 2019. *Stakeholder engagement in quality assurance processes.* Interim report by the Education and Training 2020 Working Group Schools. European Commission DG Education, Youth, Sport and Culture. Luxembourg: Publications Office of the European Union

OECD, 2022. 'How to select indicators that support the implementation of education policies', *OECD Education Spotlights*, No. 1. Paris: OECD Publishing. doi.org/10.1787/d1ec8007-en (Last accessed October 2023)

Schuelka, M.J., 2018. *Implementing Inclusive Education.* K4D Helpdesk Report. Brighton, United Kingdom: Institute of Development Studies. www.gov.uk/research-for-development-outputs/implementing-inclusive-education (Last accessed October 2023)

UNESCO, 2015. *Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.* Paris: UNESCO. unesdoc.unesco.org/ark:/48223/pf0000245656.locale=en (Last accessed August 2025)

UNESCO Institute for Statistics, 2023. *Data for Education: A Guide for Policymakers to Leverage Education Data.* Montreal: UNESCO Institute for Statistics. unesdoc.unesco.org/ark:/48223/pf0000388634 (Last accessed August 2025)

United Nations, 1989. *Convention on the Rights of the Child.* Paris: United Nations

United Nations, 2006. *Convention on the Rights of Persons with Disabilities.* Paris: United Nations