

PRACTICAL GUIDANCE NOTE 3

MONITORING RESULTS IN EDUCATION

1. Topic overview

This note provides guidance on monitoring and evaluation (M&E) in education. This guidance is intended to be used alongside broader EU guidance on M&E for its work across different sectors and funding modalities. EU support for education sits within the framework of its commitment to the Sustainable Development Goals (SDGs). SDG4 sets out the goal for education with its related targets and indicatorsⁱ, which form the basis for a global monitoring effort. This note has a particular focus on country-level M&E, and the role of EU Delegations, in the context of support to partner countries' education systems.

Introduction to measuring results

The main focus of M&E is to measure change, and its key functions are to ensure accountability and transparency (i.e. is the system and intervention performing as intended?), and to support evidence-based decisions and learning (i.e. what could we do to make things better?). Monitoring is a continuous process of collecting and analysing data to compare how well a project, programme or policy is being implemented against expected results.ⁱⁱ Evaluation is a systematic and objective assessment of an ongoing or completed project, programme or policy, its design, implementation and results.ⁱⁱⁱ

M&E systems should be based on a results chain or intervention logic^{iv}, and a results framework which comprises a set of indicators presented in a matrix.^v The results chain and intervention logic should present the causal sequence to reach the given policy/intervention objectives, while also noting the main assumptions. Indicators are selected to measure progress and performance and should capture both quantitative (e.g. enrolment, number

Summary

A reliable results framework is the basis for effective Monitoring and Evaluation (M&E), built around the selection of indicators which track progress and performance. Results frameworks are used for national strategies and specific interventions, including EU budget support and projects in the sector.

Three key conditions are required for an effective M&E system:

1. A coherent results framework
2. The selection of relevant indicators that can be reliably and regularly measured
3. The capacity of the organisations and staff involved to provide reliable and timely data and analysis.

M&E and results frameworks in education systems typically include indicators of access, equity and quality, as well as financing and efficiency. DG DEVCO has developed guidance on selection of education indicators.

EU programmes should contribute to the strengthening of national M&E systems, and plan for effective evaluation which contributes to country evidence.

or share of qualified teachers) as well as qualitative (e.g. perceptions, behaviour) aspects of the system or specific programmes. M&E systems also include the definition of roles and responsibilities of the various stakeholders, as well as the data-collection tools and frequency of reporting.

There can be an almost infinite number of indicators. Some are common and generic to all systems, whereas others capture specific features of the education system, its performance and specific programmes. The choice of indicators is determined by a number of factors including the specific objectives being considered, and how reliably and regularly data can be gathered. In the case of an EU-funded intervention, the selection of indicators will also depend on the expected results to which the intervention aims to contribute, or that it specifically aims to achieve. Indicators must

i See the list of SDG4 targets and indicators <https://sustainabledevelopment.un.org/sdg4>

ii OECD, Glossary of Key Terms in Evaluation and Results Based Management, 2002, p. 27-28 <http://www.oecd.org/dac/evaluation/2754804.pdf>

iii OECD, Glossary of Key Terms in Evaluation and Results Based Management, 2002, p. 21-22

iv As developed below in this PGN various terminology exists, including theory of change.

v For EU projects and budget support programmes logframe or intervention logic templates are available in Annex 1

provide the necessary information to assess progress and overall performance in achieving the expected results. However, the number of indicators used should also be ‘manageable’.

Data for education indicators come from a range of sources including the national Education Management Information Systems (EMIS), household surveys, specially designed surveys and national, as well as international, learning assessments and examination results. Data on school performance and processes may come from inspection reports. The use, and where necessary the strengthening, of existing sources of information should be prioritised. It may however be necessary to conduct tailor-made studies or surveys notably to obtain qualitative information (e.g. for capturing students’ or teachers’ perceptions or awareness of different reform results or issues) to measure the results of a specific intervention or to better understand the implementation of a policy.

The UNESCO Institute for Statistics (UIS) is responsible for reporting on high level global indicators in education from every country, using both administrative and survey data, as well as for developing new indicators. The [UIS glossary](#) contains definitions of education indicators, describes standard calculation methods and data requirements, and provides information on interpretation and limitations of the indicators. Other agencies, including the EU, UNICEF^{vi}, international NGOs, the Global Education Cluster, as well as multi and bilateral development partners also have guides for indicators^{vii} and procedures to collect, analyse, report and use the data.

Recent trends

The increased need to demonstrate more clearly the results from investments in education has meant a greater demand for data and has focussed attention on strengthening the M&E function within education national systems. Many countries will need to strengthen their capacity to provide timely data for their EMIS as well as SDG-specific reporting.^{viii} Education Strategic Plans with their results frameworks at country level are prepared within this global framework. Recent tools developed by UIS, such as an [SDG4 data explorer](#) and [SDG4 country profiles](#), and a [quick guide to education indicators](#), provide very useful insights on SDG4 indicators and their reporting. Development partners often provide technical support to strengthening national data systems, through capacity development, training and equipment. There

vi UNICEF Multiple Indicators Clusters Surveys (MICS) <http://mics.unicef.org/surveys>

vii A specific Guidance on Results and Indicators for Education was prepared by DG DEVCO (further details provided later in this PGN): https://ec.europa.eu/europeaid/devcos-results-framework_en

viii See TMS Reference Document (Part 1) for information regarding SDG 4, which frames the international agenda for education and the monitoring of progress towards its achievement.

is a continuing increase in the use of digital platforms and online software applications to facilitate quicker and stronger data collection, limit errors and enable analysis and dissemination.

Strengthened M&E systems that yield timely and reliable data are also linked to external financing. There are a variety of instruments used by different agencies which can be grouped under the generic name of Results-Based Financing (RBF), all with a common principle of linking disbursement of aid to performance targets agreed during the design of the programme.^{ix} This is the case with EU budget support or Global Partnership for Education (GPE) variable tranches, for instance.

There has been increased attention on improving and measuring learning.^x Regular assessments provide a range of valuable data on learning that can promote evidence-based decisions around targeting resources, design of specific programmes and initiating reforms to improve learning. The [Global Alliance to Monitor Learning \(GAML\)](#), which was established by UIS, supports national strategies for learning assessments and developing internationally comparable indicators and methodological tools to measure progress towards key targets of SDG4.

2. Key issues

Getting the M&E system right is dependent on three basic conditions:

1. Having a coherent results framework in place that is explicitly linked to the objectives and strategies adopted by the policy, programme or project, and presented in the results chain and intervention logic.
2. Choosing the right indicators that can be reliably and regularly reported on to track progress and performance against key education results.
3. Having a reliable system – the capacity of national and sub-national organisations, with skilled people and effective processes, an EMIS in place to effectively capture, analyse and report data which is then used for decision-making.

Results frameworks

Results frameworks are generally presented in the format of a table or matrix comprising the various levels of indicators that will be used for monitoring and reporting on progress in achieving results against the objectives set. There are different results frameworks used by development partners as well as national ministries of education, but all share

ix World Bank Results in Education for All Children (REACH) provides useful resources and research on RBF in education <https://www.worldbank.org/en/programs/reach>

x See PGN 11: Learning Assessment for more information

common principles and logic. They can be applied nationally and cover the whole sector when linked to the national Education Sector Plan (ESP). They may also be developed for specific programmes or projects – large and small – but the same logic and principles apply.

The results framework is a living tool used to assess progress, identify obstacles, review and adjust plans, measure results, report on policy implementation, and to account for the use of funds. The outputs, indicators and targets set might need to be adjusted during the implementation of the programme or project. The results framework provides a rational ‘roadmap’ to monitor progress in achieving programme (or project) outputs and outcomes. The templates used by the EU – the logframe template and the budget support logic of intervention table – are presented in annex for easy reference.

An important consideration when designing a results framework for an externally financed programme, is to align with the national results framework, usually included in ESPs, along with M&E mechanisms and tools. The European Union Delegations (EUDs) should have the opportunity to engage with the ministry(ies) in charge of education during the preparation of these sector strategies and plans. Alignment to these frameworks avoids establishing wasteful parallel systems and duplicating effort. The EU’s budget support guidelines provide guidance regarding alignment of programme indicators with national results frameworks.^{xi}

In many countries with significant external support to the sector, an annual joint sector review is conducted, playing a central role in the performance monitoring and review process. Such exercises vary but should be government led, and provide an opportunity for a range of partners to engage and discuss the implications of performance against the results framework.

A ministry of education will select a range of indicators to monitor the implementation and performance of their sector strategy, including some at a ‘higher’ level of outcomes. In monitoring specific interventions that contribute to achieving wider sector objectives, the sector indicators used by the ministry should be useful for monitoring progress at impact and outcome levels. Specific output-level indicators may need to be agreed to monitor the direct results of EU-funded interventions. Whenever possible, these programme indicators should feed into the ministry’s ‘higher’ level indicators, and contribute to

aggregated results at national level. Good alignment enables effective joint monitoring and reporting. It is, however, recognised that it can be more challenging in contexts of fragility or crisis where there might not be readily available sector strategies with robust results frameworks.^{xii}

The EU requires the development of different types of results frameworks for different the financing modalities used: logframe matrices are prepared for projects and an intervention logic table has to be prepared for budget support programmes (see Annex 1). When working with international organisations, the EU can accept other types of presentation of the intervention logic such as a Theory of Change, coupled with a results matrix, which should align with OECD DAC terminology in terms of hierarchy of results.^{xiii} The level of the impact or outcome expected from each intervention will depend on the specific project or programme objective.

Formulating strong results statements and choosing the right indicators

Several well-known guidance criteria exist to judge the quality of indicators, including that they should be SMART (Specific, Measurable, Achievable, Relevant and Timebound), or RACER (Relevant, Accepted, Credible, Easy, Robust). The EU budget support guidelines provide useful guidance with a list of aspects to consider when assessing a performance indicator.^{xiv}

In formulating EU support to the sector, it is important to ensure that indicators are defined appropriately for the given result level:

- At output level, indicators should measure the direct results of the Action (goods/services or benefits delivered). For budget support programmes, indicators have to be chosen which capture direct outputs (measuring the goods/services or benefits delivered by the Action) and induced outputs (measuring the results that the government aims to deliver and to which EU support contributes).
- At outcome (Specific Objective) level, indicators should measure the short or medium-term change to which the Action will directly contribute. These indicators will include the change in behaviour change that is anticipated as the result of the outputs of the Action.
- At impact (Overall Objective) level, indicators should measure long-term changes to which the Action will contribute in the target country/region or sector.

xi See notably Annex 8 of the DG DEVCO Tools and Methods Series No: 7 - Budget Support Guidelines, 2017

xii See also the PGN 5: Coordination and Policy Dialogue for more on alignment to country strategies and plans

xiii Referring to outputs, outcomes and impact, see <https://www.oecd.org/dac/results-development/what-are-results.htm>

xiv Annex 8 of the DG DEVCO Tools and Methods Series No: 7 - Budget Support Guidelines, 2017, https://ec.europa.eu/europeaid/budget-support-guidelines_en

Common indicators of education results

Objectives in the education sector tend to be grouped into three broad categories: Access, Equity and Quality. Additional objectives might be set in terms of governance of the sector (which may include internal efficiency and financing, set out below).

Access indicators measure participation in the education sector through intake, enrolment, and transition rates, and at a more complex level can also capture characteristics such as cohort flows including repetition, promotion and dropout (which are also measures of internal efficiency of the system). Enrolment data may mask the reality of who is really in school. Regular monitoring of attendance provides a much more accurate picture of how many enrolled students are actually there. It is also a valuable predictor for school success. However, regular and reliable reporting on school attendance is problematic and costly and often relies on periodic sampling through surveys. In the past decade, more focus has been given to completion, recognising that enrolment in itself does not represent meaningful access. Tracking the performance of completion, drop out and repetition rates provides useful information that can highlight access-related challenges, at particular grades or in specific areas or regions for example. Effective EMIS systems generally have this information.

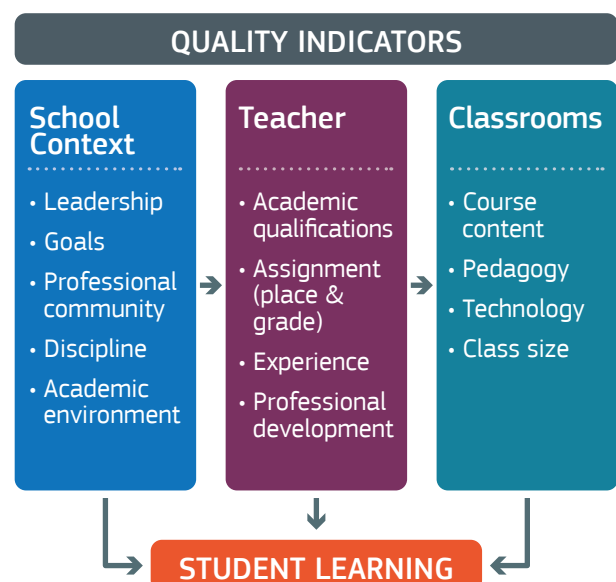
Equity indicators measure the experience of different groups within education, particularly by presenting disaggregated data. Most obviously, the difference between males and females is shown through sex-disaggregation. However, data should be disaggregated to provide the necessary information regarding other groups including people with disability, those in conflict or natural disaster-affected areas, as well as urban and rural areas, or differences in economic status. Disaggregated data will form a basis for interventions and enable the monitoring of progress in reducing inequalities in access and/or quality of education. The Education Sector Analysis^{xv} should provide useful insights on national equity dimensions, in particular the variations in accessing education and learning outcomes between various groups.^{xvi} See the Nepal Case Study in Section 4, as an example of how equity can be measured.

An examination of government spending in education and how resources are distributed to promote equity provides useful information regarding who benefits and who misses out. This type of analysis of government spending in education demonstrates that

equal funding is not the same as equity of funding, as equity would require funding allocations based on an assessment of disparities and differences of needs. The allocation of resources to promote equity is a significant challenge, particularly in fragile and crisis environments. Support for this type of issue (which is often a focus of budget support programmes) can be accompanied by useful indicators or targets (e.g. gradual reallocation of the school funding formula in favour of poorer served or performing areas, or prioritisation of funding towards basic education).

Quality indicators measure the extent to which teaching and learning is taking place, as opposed to children simply being enrolled in school. The quality of education is defined by a number of dimensions, including the learning environment, the teaching and learning processes, and learning outcomes (as illustrated in the figure below). The monitoring of the quality of education is complex, and we often rely on proxy indicators such as class-size, pupil-to-teacher ratios, teacher qualifications and textbook availability as measures of education quality.

These measures are often problematic. They may lack specificity, reliability or validity, and causal links to learning may be weak. However, research over the past two decades has provided considerable evidence about the factors that contribute to the quality of teaching and learning inside and outside of the classroom. The figure here illustrates the evidence-based characteristics of effective schools, classrooms and teachers to improve the quality of learning. The right indicators can therefore help measure progress towards learning outcomes based on a sound, evidence based intervention logic. There is also increasing interest in the use of systematic classroom observation tools as a means to monitor change in the practice of teachers.



^{xv} See PGN 1: Education Sector Analysis

^{xvi} UNESCO Institute for Statistics, Handbook on Measuring Equity in Education, 2018 <http://uis.unesco.org/sites/default/files/documents/handbook-measuring-equity-education-2018-en.pdf>

Whilst the use of national learning assessments should be promoted, there are a number of challenges that can be faced when using national assessment results as an indicator of quality. Firstly, the development of standardised national learning assessments is still ongoing in many countries and results may not be sufficiently reliable or comparable over time. Secondly, national assessments are rarely carried out annually, so may not be suitable for monitoring short term programmes. Finally, changes to learning outcomes may be gradual, even at times of substantial investment in quality initiatives (e.g. textbooks, teacher training). However, national assessments should provide valuable information regarding learning, complementing the information provided by other indicators, which taken together help show progress and performance and identify possible adjustments to interventions. Learning assessment can be used at project level, though it is important to limit the use of parallel assessments that may divert resources from the development of the national assessment system.^{xvii} With the increasing availability of learning data, it is possible to conduct analysis of learning results that show specific equity challenges at this key outcome level.

Internal efficiency indicators show the ratio of inputs to outputs. It focuses on the process and importance given to the ‘means’ of doing things, the inputs required to meet outcomes. Traditional indicators for measuring internal efficiency include repetition, drop-out, survival rate by grade and completion rates. The longer it takes for a child to complete a cycle of education, due to repetition or drop-out, the less efficient the system. This is a potential waste of resources that could be better spent and demonstrates that current resources (be they financial, human, books and other investments) are not being well utilised.

Education financing indicators include: public expenditure for education as share of GDP or as share of the overall budget; distribution of education budget by level (pre-primary, primary, secondary, tertiary); and funding for recurrent costs (e.g. teacher salaries, teacher professional development, textbooks and other learning resources, etc.) and the remaining share of the budget for investments in quality or equity (e.g. teaching and learning materials, construction of safe and resilient schools, improved access to technology, electricity and water). It is also important to monitor progress in spending, i.e. the execution of the budget, at central and/or sub-national (down to school) levels.^{xviii}

^{xvii} See PGN 11: Learning Assessment for more information on assessments that can be used to measure progress in learning
^{xviii} See PGN 2: Education Budgeting and Financial Management for more detailed guidance on finance indicators

Sector guidance on results and indicators for EU-funded interventions

Specific Guidance on Results and Indicators for Education^{xix} was prepared by DG DEVCO as part of a series of sector brochures on results and indicators for development in 2018. It provides examples of education indicators at the various levels of results (output, outcomes and impact). This guidance is structured around a results chain for EU development interventions (see Annex 2), reflecting EU policy priorities and commitments. It provides an overview of the various possible contributions to education outcomes (in terms of access, equity, quality and system governance). Results chains and intervention logics of EU funded interventions are of course further defined and adapted to the local context.

The examples of indicators provided in the EU sector guidance on results and indicators provide a useful starting point for EUDs (notably on the hierarchy of results and identifying education indicators). However, any programme should also ensure alignment to the partner country’s ESP and results framework. Existing education information systems and learning assessments at country level should be the main source of information to assess progress.

Further resources are included in Section 4 below, including for defining and identifying education indicators, the measurement of learning and equity in education, and the strengthening of education M&E systems and EMIS.

M&E system capacity and reliability

The effectiveness and legitimacy of an M&E system relies heavily on the capacity of the individuals who implement them and the organisations (departments, units) in which they work. M&E processes demand the participation of a wide range of actors and are as dependent on the incentives and motivation to engage constructively as on technical capability. Where the information produced through the M&E system is used to allocate resources (e.g. under an RBF process or in the case of school capitation grants being based on enrolment) there may be perverse incentives to misreport. In order to align with national education M&E systems, understanding the capacity and needs of these systems is crucial for the EU and other partners. Some key considerations and possible responses are set out in Table 1, below.

^{xix} European Commission Directorate-General for International Cooperation and Development, Results and Indicators for Development: Education, <http://indicators.developmentresults.eu/common/pdf/sectorpresentation8.pdf>

TABLE 1: CAPACITY DEVELOPMENT OF M&E SYSTEMS

Dimension	Issues to consider	Possible response
Utility of and demand for data and evidence	To leverage change, the production of data and reports needs to meet the needs of policy makers, technical departments, planners and local or school-level managers. For example, if analysis identifies gaps in teacher supply in remote areas, but this is not considered in the planning and budget cycle then no change will take place.	Policy dialogue and capacity development should focus on the use of M&E data and analysis. This may vary whether for policy level, annual review processes, or more operational-level use.
Coordination and coherence	Data for the results framework may come from different sources and at different times, with potential mismatches between geographical areas, age groups as well as the times the data are available and the periods they refer to. Learning assessment data of a specific grade will only be available every few years. Data on education efficiency (e.g. drop-out rates) will only be available after the school year ends, enrolment data should be available soon after it starts.	Sources of verification of the data should be clear, as well as timeframes for the availability of the data to feed into regular M&E processes. Data availability, specifying for which year, should be confirmed when agreeing indicator targets.
Data reliability	Results frameworks are dependent on the ministry of education's own data systems and the annual school census, which need to be reliable, timely and accurate. Lack of resources may constrain adequate checking of school level reporting. Where the initial reporting from school is through a paper-based questionnaire, there is opportunity for data entry error when this is digitalised at district or national level. Enumerator capacity may undermine the reliability of learning assessment or survey data.	The monitoring system should regularly test the fidelity of processes, including through third-party validation and cross-checking data from different sources. If necessary, capacity development support be provided to further strengthen the EMIS and other systems, at all levels as appropriate.
Quantitative and qualitative data	Numbers tell a very important story. However, quantitative data will also need to be complemented with qualitative information, for example to understand specific barriers to change faced by marginalised groups.	Promote and fund selective use of qualitative research within M&E systems. This may draw on local research organisations.
Digitalisation	Increased digitalisation of M&E can help to improve accuracy, timeliness and reduce workloads, but it cannot compensate for basic deficiencies and weak integrity. Mobile and internet-based systems, particularly for EMIS, are evolving rapidly and provide opportunities for more real time, usable data to meet the needs of different users.	Support to EMIS and other M&E tools should consider the appropriate use of digital technology.
Lack of available data	In some country or sub-national contexts there may be no large-scale reliable data available. This can necessitate a rapid data-collection activity and/or surveys. Although the sample size needs to be large enough to be representative, it also needs to be manageable and allow for a quick turn-around from collection to reporting. Data on children with disability and other marginalised groups is likely to be lacking.	EU can finance specific sample surveys or research, ideally conducted by or with appropriate authorities. Another option is to develop a proxy indicator with available data. Data availability, data sources and data-collection options should be identified at the time of project or programme design, to assess option. Specific support should target data gaps for marginalised groups.

The EU and other partners can make an important contribution to strengthening national M&E systems while meeting their own agency reporting requirements. Wherever possible, it is important to avoid parallel reporting and data-collection systems. The only sustainable way to improve this process is to strengthen the capacity of those in charge of M&E tasks at all levels, from ministry departments, to districts and schools. Human resource capacities and M&E processes can be the focus of capacity development support, but finances are also needed at all levels to be able to undertake regular monitoring roles and responsibilities as planned (e.g. transportation to schools, data gathering and entry, and ICT). This might be an area of support to be accompanied by dialogue, as funding for routine monitoring activities should be a recurrent cost.

The EU conducts evaluations of its contribution to education sector development. These take place at two levels: programme evaluations (managed by country

delegations) and strategic evaluations (managed by the central Evaluation Unit). Further guidance and support is available to EUDs in this work. Some key considerations to ensure the EU optimises its evaluation work to contribute to the evidence base and its own programme effectiveness include:

- The importance of planning for evaluation in programme design, including the collection of robust baseline, midline and endline data.
- The timing of evaluative work to best contribute to programme design, ongoing policy dialogue and country planning processes in the sector.
- The scope and methods of evaluation, data collection and field work to capture change in the sector, whether this is the use of learning assessment data, school and community surveys, etc.
- The specific needs of the sector to meet gaps in the evidence, e.g. for the provision to specific groups, regions or new teaching approaches.

Specific EU result framework

The EU results framework^{xx} was revised in 2018 to align it with the EU and the international policy framework for cooperation and development.^{xxi} This framework serves the purpose of fulfilling the EU's own reporting and accountability requirements at a global level.

THE INDICATORS RETAINED FOR EDUCATION AND REPORTED UPON ANNUALLY ARE AS FOLLOWS:

Sustainable Development Goals	Results statement	Level 1 Development progress in EU partner countries	Level 2 Outputs and outcomes from EU interventions
SDG4	Support inclusive lifelong learning and equitable quality education	Literacy rate of 15-24 year-olds <i>Data source: international statistics (World Bank World Development Indicators)</i>	Number of students enrolled in education with EU support: a) primary education, b) secondary education <i>Data source: collected from intervention monitoring and reporting system</i>

During an annual results reporting exercise, data is collected from interventions managed by DG DEVCO to report against Level 2 of the results framework. The relevant indicator for education is 'Number of students enrolled in education with EU support: a) primary education, b) secondary education'. Since 2018, the exercise covers both completed and ongoing interventions.

3. Case study

Measuring equity in Nepal

Source	Juan Jose Casanova Arasa, EU Delegation to Nepal, with information drawn from project, government and other partner documents
Programme	EU budget support programme (Sector Reform Contract) <i>Supporting Nepal's School Sector (SuNSS) programme.</i>
Context and challenges	Nepal's education development has to be seen in the context of the new constitution of 2015, with a move to federalism and increased powers to local government, as well as the devastating earthquakes of 2015 which inflicted an estimated USD 300 million damage on education infrastructure. The School Sector Development Plan (SSDP) [FY2016/17– FY2020/21] is a five-year strategic plan to increase the participation of all children in quality school education. The SSDP focuses on strategic interventions and new reform initiatives to improve equitable access, quality, efficiency, governance, management and resilience of the education system. The SSDP recognises the substantial disparities within education and articulates the sector's response within an equity strategy that was prepared in 2014 for the school education sector, and is reflected in the SSDP. The objectives, with regard to equity, are to ensure that the education system is inclusive and equitable in terms of access, participation and learning outcomes, with a special focus on reducing disparities among and between groups having the lowest levels of access, participation and learning outcomes. Eight domains on equity are noted including gender, socio-economic status, location and ethnicity/caste. The EU provides sector budget support for education. The variable tranche is dependent on performance against three Disbursement Linked Indicators (DLI) attached to quality, equity and disaster preparedness. The focus of this case study is on equity.
Action taken	<ul style="list-style-type: none"> In order to be able to effectively measure differences, monitor change in equity and target resources, the government of Nepal has developed, as part of the implementation of its Equity Strategy, an <i>Equity Index</i> (EI) that captures differences across three educational outcomes: access, participation [survival] and learning. It is based on the World Bank's <i>Human Opportunity Index</i>. Very simply, it takes the average performance for a given outcome across a district and reduces this by the disparity noted for particular population groups. This EI makes it possible to correlate resource allocations to access, participation and learning outcomes, and make informed decisions on how to best target support. The EI is not complex and demonstrates the importance of investing resources in technical aspects of data collection to be able to measure the things that we want to change. The EI is used primarily to target interventions to reduce the number of out-of-school children. The <i>Equity Index</i> enables a detailed analysis of local-level performance against the three outcomes and is able to identify the key drivers of inequity. Ethnicity is the main driver of inequity in 10 of Nepal's 15 worst performing districts. Basic data is generated through the Education Management Information System (EMIS) and the application of the EI, which is now being integrated in the EMIS. Reports provided by the Department of Education^{xxii} are further verified by an Independent Verification Agent (IVA). This shows the importance of having reliable data, particularly where resources are attached to results and possible incentives for misreporting. Some limitations are reported in how widely this information is shared and used. A lack of effective communication across the three levels of government – national, regional and local – has been reported. Development Partners (DPs), including CSOs use the equity index to target their equity interventions. However, many NGOs still do not have access to the EI data, so are unable to use it in planning and targeting.

xx European Commission, *Staff Working Document: A Revised EU International Cooperation and Development Results Framework in line with the Sustainable Development Goals of the 2030 Agenda for Sustainable Development and the New European Consensus on Development*, 2018
<https://ec.europa.eu/transparency/rectdoc/rep/10102/2018/EN/SWD-2018-444-F1-EN-MAIN-PART-1.PDF>

xxi At the same time, the European Consensus on Development also advocates the use of joint EU and Member States results frameworks as part of joint programming documents – see Chapter 6 in the DG DEVCO Tools and Methods Series Guidelines No.8: Joint Programming Guidance

xxii Following the last reform the DoE has been replaced by the Center for Human Resource and Development (CEHRD).

Action taken <i>continued</i>	<ul style="list-style-type: none"> The EU works in close coordination with other DPs active in the education sector as part of the Local Education Group. A number of DPs are providing budget support for the implementation of the SSDP. Policy dialogue is supported by a sub-working group, set up to focus on equity and inclusion in education. DPs provided support to the preparation of the equity strategy and the equity index. The budget support DLI selected for equity is aligned to the government SSDP results framework, and shared with other DPs (GPE and Finland) which also provide RBF. Joint sector assessments are organised twice a year to monitor overall progress using the SSDP results framework. <p>The EU DLIs in the Financing Agreement align with the SSDP results framework and focus on Nepal's 15 worst performing districts and look at performance in access, measured by a 20% reduction in out of school children in year three.</p>
Lessons learned	<ul style="list-style-type: none"> As noted by the draft report of the SSP Mid-term Review (2019), the selection of DLIs by DPs have raised the attention on these areas of work, which can be assessed as positive, but with the related risk of less attention on other policy priority areas. Shifting the focus from national averages to focus on the poorest performing areas is an effective way to address equity – but it requires regular and reliable data. In this case, the equity index and the regular monitoring of change that it has prompted has proven to be a very useful tool and process to be able to encourage progress on equity issues, with an effective targeting mechanism and monitoring processes that allows for a close follow up on remaining inequalities between districts. Key interventions have been identified with the Ministry of Education as necessary to achieve the targets set for each of the budget support DLIs, the progress on these is regularly monitored and part of the dialogue with the Ministry. Targets for equity are set at outcome level, the follow up on these interventions (accompanied by technical support when required) is considered very useful.
Further information	<p>Nepal School Sector Development Plan https://www.globalpartnership.org/sites/default/files/2019-05-nepal-education-sector-plan.pdf</p> <p>Consolidated Equity Strategy for the School Education Sector in Nepal, 2014 http://www.doe.gov.np/assets/uploads/files/47441f6a3f1e62dedb7bb91655b8df92.pdf</p>

4. References and Further Reading

EU guidance on results frameworks and indicators

European Commission Directorate-General for International Cooperation and Development, *Tools and Methods Series Guidelines No: 7 - Budget Support Guidelines*, 2017
https://ec.europa.eu/europeaid/budget-support-guidelines_en

European Commission Directorate-General for International Cooperation and Development, *Tools and Methods Series Guidelines No: 8 – Join Programming*, 2018 <https://europa.eu/capacity4dev/t-and-m-series/documents/guidelines-ndeg8-joint-programming-guidance>

European Commission Directorate-General for International Cooperation and Development, *Guidance on Results and Indicators for Development*, with specific guidance on selection of education indicators
<http://indicators.developmentresults.eu/>

European Commission, *Staff Working Document: A Revised EU International Cooperation and Development Results Framework in line with the Sustainable Development Goals of the 2030 Agenda for Sustainable Development and the New European Consensus on Development*, 2018
<https://ec.europa.eu/transparency/regdoc/rep/10102/2018/EN/SWD-2018-444-F1-EN-MAIN-PART-1.PDF>

Guidance on indicators, measuring learning and equity

LMTF (Learning Metrics Task Force), *Toward Universal Learning: Recommendations from the Learning Metrics Task Force*. UNESCO Institute for Statistics and Center for Universal Education at the Brookings Institution: Montreal and Washington, D. C., 2013. www.brookings.edu/research/reports/2013/09/learning-metrics-task-force-universal-learning

OECD, *Glossary of Key Terms in Evaluation and Results Based Management*, 2002.

<http://www.oecd.org/dac/evaluation/2754804.pdf>

UNESCO Institute for Statistics Glossary, Useful tool for definitions and calculations formulas for indicators and sources: <http://glossary.uis.unesco.org/glossary/en/home>

UNESCO Institute for Statistics, *SDG 4 data tools*, <http://uis.unesco.org/en/news/sdg-4-data-your-fingertips-new-tools-uis>

UNESCO Institute for Statistics, *Handbook on Measuring Equity in Education*, 2018 <http://uis.unesco.org/sites/default/files/documents/handbook-measuring-equity-education-2018-en.pdf>

Reports and guidance on monitoring systems:

Global Alliance to Monitor Learning (GAML), <http://gaml.uis.unesco.org/>

Global Education Monitoring Report: global level reporting against SDG4 indicators, with useful national and thematic level analysis <https://en.unesco.org/gem-report/allreports>

IIEP Learning Portal, <https://learningportal.iiep.unesco.org/en/issue-briefs/monitor-learning> includes useful information on different aspects of monitoring education systems for learning

World Bank SABER Education Management Information Systems, <http://saber.worldbank.org/index.cfm?indx=8&pd=2&sub=0>

Annex 1: Results framework templates used by the EU

The following table shows the logframe template used by the EU^{xxiii} for project modality. The first column identifies long and medium-term strategic objectives as well as the means to achieve objectives and the timeframe in which results will be achieved.

Logframe matrix (project modality)	Indicators	Baselines	Targets	Sources of verification	Assumptions and risks
IMPACT Overall Objectives Long-term change	May have several sub-indicators that track different aspects of the expected impact	For each indicator there is a baseline value that measures the status at or before the start of the programme	The intended final value of each indicator	Describes briefly where the data will come from for each indicator. Can be a range of sources including administrative, sample survey or special research sources	N/A
OUTCOMES Specific Objectives Medium-term changes under the control of the target group	Each outcome may have several sub-indicators that track different aspects	Same as above	Usually at annual intervals, though may be longer where data is not likely to be readily available or feasible to collect	Same as above	The key factors that are assumed to be in place for progress to be achieved, or the identified risks to expected progress.
OUTPUTS Change in services/goods or benefits delivered directly by the EU-funded intervention Short-term changes	Each output may have several sub-indicators that track different aspects	Same as above	Same as above	Same as above	The key factors that are assumed to be in place for progress to be achieved, or the identified risks to expected progress.

For the EU budget support modality programmes, the logframe is replaced by an intervention logic table (a results matrix reflecting the intervention logic narrative) which differs in two key ways: (1) outputs are divided into direct outputs (outlining what the EU-funded action will directly deliver) and induced outputs (specifying the results we expect the government to achieve), and (2) there is no column for assumptions (they are provided separately).

Result matrix (budget support modality intervention logic presented in the format of a result matrix)	Indicators	Baselines	Targets	Sources of verification
IMPACT Overall Objectives Long-term change				
OUTCOMES Specific Objectives Medium-term changes				
INDUCED OUTPUTS Results the government is expected to deliver Short-term changes				
DIRECT OUTPUTS Results the EU-funded action will directly deliver Short-term changes				

xxiii The standard template for logframe is provided for grants applicants at: <http://ec.europa.eu/europeaid/prag/document.do?isAnnexes=true> Action documents, a necessary step for preparing and adopting a financing decision: the template, including a logframe/intervention logic table with instructions, is available to DEVCO staff in the DEVCO Companion, Chapter 6 annexes: <https://ec.europa.eu/europeaid/companion/welcome.do?locale=en> PCM guidance (2004, under revision): https://ec.europa.eu/europeaid/project-and-programme-cycle-management-guidance_en Guidelines for Budget Support (2017): https://ec.europa.eu/europeaid/budget-support-guidelines_en.

Annex 2: Guidance on Results and Indicators for Education: Results Chain

