The Use of Evidence in Education Policies

Peer learning workshop #1

EU-funded Skills and Education Reform (SER) programme for Eastern Partnership countries

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What is evidence-based policy making (EBPM)?

• A “process whereby multiple sources of information, including the best available data and research evidence, are consulted before making a decision to plan, implement, and alter policies” (Langer, Tripney and Gough, 2016, p. 6).

• Through EBPM, policymakers make decisions and get results that are concrete, manageable and achievable.
Your expectations

- Learning best practices from other countries: 42.9%
- Networking with peers and experts: 7.1%
- Understanding the latest research and evidence in education policy: 21.4%
- Developing strategies to implement evidence-based policies in my country: 28.6%
- Other: 0.0%
Proposed Agenda

Session 1 – Setting the frame: the use of evidence throughout the policy cycle

Session 2 – From evidence ...to data ... and indicators

Session 3 – Education management information systems in practice

Session 4 – Governance mechanisms and tools around evidence
Session 1

Setting the frame: The use of evidence throughout the policy cycle
1.1 Using evidence throughout the policy cycle

What for?

- Clarify challenges/obstacles/ bottlenecks
- Monitor progress and impact of policies
- Identify good practices and most effective reforms
Evidence throughout the policy cycle

- **Problem Identification**
  - What is the problem? Are decision-makers aware of its extent and urgency?

- **Agenda Setting**
  - Which priority within the problem is agreed to be addressed?

- **Policy Formulation**
  - What are the suitable options and their respective cost estimates?

- **Implementation**
  - How effective is the policy? Is there documentation and communication?

- **Monitoring & Evaluation**
  - What is the experience? Challenges in implementation?
1.2 Evidence for policy making in education: state of play

Keynote speech from Johannes Peltola, Finland
Your views... on the main challenges to be documented

Which challenges affecting your country's education system would benefit from additional evidence?

- Quality and relevance of education
- Access to education
- Inclusive education
- Corruption and governance issues
- Financing of the education system
- Teacher and quality training
- Curriculum reforms
- Digital education
- Green and sustainable education
- Brain drain
- Political instability and conflict

[Bar chart showing the number of responses for each challenge, with 'Corruption and governance issues' having the highest number.]
Your views… on the stages of the policy cycle most using evidence

According to you, during which phase of the education policy cycle does your country most frequently use evidence and for which purpose?

- Agenda setting and policy formulation (identifying needs, choosing priorities and policy design) 9
- Policy adoption (convincing decision-makers) 1
- Policy implementation 4
- Monitoring and evaluation (monitoring implementation and assessing policy impact) 9
- Policy review and revision (informing stakeholders, integrating feedback, revising priorities) 3
- None of these 0
- I do not know 1
Country group discussion (30 min)

In country groups, please discuss:

1. What is the **institutional setting** for the use of evidence in your country? (*Map it on the flipchart)*;
2. What are the **main challenges and gaps** with evidence use in your country?

*Please remember to identify a rapporteur for reporting back*
Q1. Which institutions use evidence at each stage of the policy cycle?
A mapping attempt in .................
Your views... on the constraints with regards evidence use

*Which of the following constraints do you face most when using evidence?*

- Problems with data: 10
- Political constraints: 3
- Budget constraints: 5
- Governance constraints: 6
- Technical and digital constraints: 9
- Other: 0
In order to improve the use of evidence in education, what should the national efforts focus on?

- Building capacity for evidence use (1st)
- Enhancing data quality and accessibility (2nd)
- Promoting a culture of evidence use (3rd)
- Quoting more evidence in strategy and policy documents (4th)
- Just maintaining current practices (5th)
Recommendations from the research on the use of evidence in education policies

• **Promote a Culture** of Evidence-Based Decision Making
• **Ensure Access** to High-Quality Data and Research
• **Integrate** Research with Practice
• **Support** Capacity Building
• **Institutionalize** Evaluation and Feedback Mechanisms
• **Promote** the Use of **Mixed Methods**
• **Address Barriers** to Effective Use of Data
• **Ensure** **Research Relevance and Timeliness**
• **Foster a Collaborative** Research Environment

Session 2

From evidence…
…to data…
… and indicators
What is evidence?

Evidence is selected information, of multiple types, that is used to support a claim.

Evidence = data…right?

Consider:

Hypothesis: The introduction of a structured curriculum for maths will improve student performance.

Quantitative data for pilot schools:

• Average student maths test score this year (t) was 68%.
• Average maths test score last year (t-1) was 65%.

>> Hypothesis confirmed?

Evidence is more than just raw data; it has perspective and context.
Specific evidence for specific stakeholders in education

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>Quality and reputation of schools, students’ safety, well-being and ‘happiness’, curriculum details and educational philosophy, learning outcomes, extracurricular activities, costs and financial aid, opportunities for parental involvement and communication with teachers</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>Evidence</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Students</td>
<td>Curriculum options and course availability, quality and approachability of teaching staff, school resources and facilities available, support services (career guidance, psychological support), information on student life and extracurriculars, future opportunities and job prospects, financial aid and scholarships, school performance data</td>
</tr>
</tbody>
</table>
Specific evidence for specific stakeholders in education

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>Professional development opportunities and resources, curriculum guidelines, student assessment tools, best practice on teaching strategies, school policies and administrative support, collaboration opportunities with colleagues, vacancies, data on school funding, parents’ feedback, students’ feedback, students’ learning curve, children special education and support needs</td>
</tr>
</tbody>
</table>
Specific evidence for specific stakeholders in education

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>School leaders</td>
<td>School performance data, budget and funding data, staffing needs, teacher qualifications, infrastructure and facility management practices, compliance with educational standards and regulations, community and parental engagement strategies, data on student demographics and needs</td>
</tr>
</tbody>
</table>
### Specific evidence for specific stakeholders in education

<table>
<thead>
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<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local authorities</strong></td>
<td>School performance data across the region/municipality, funding and resource allocation, community needs and demographics (emigration trends, etc.), vulnerable families and children at risk of dropouts, policy compliance, data on equity and access, outcomes of local educational programs and initiatives, information on partnerships with local businesses and organisations, transport and connectivity network</td>
</tr>
</tbody>
</table>
Specific evidence for specific stakeholders in education

<table>
<thead>
<tr>
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<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Education</td>
<td>National and regional education performance data, research on educational best practices and innovations, policy impact assessments and program evaluations, funding allocations and budget requirements, compliance with national and international educational standards, data on teachers, equity and access data across different demographic groups, strategic planning and long-term educational goals, digital resource needs</td>
</tr>
<tr>
<td>Specific evidence for specific education levels</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Early childhood education</strong></td>
<td></td>
</tr>
<tr>
<td>• Longitudinal studies on the impact of early</td>
<td>education on long-term educational outcomes</td>
</tr>
<tr>
<td>• Benefits of parental involvement and community engagement (incl. financial)</td>
<td></td>
</tr>
<tr>
<td>• Socio-cultural mindset on parenthood and early education goals</td>
<td></td>
</tr>
<tr>
<td>• Research on the effectiveness of different early childhood education models (e.g., Montessori, play-based, etc.)</td>
<td></td>
</tr>
<tr>
<td>• Accessibility and safety conditions</td>
<td></td>
</tr>
<tr>
<td><strong>General education</strong></td>
<td></td>
</tr>
<tr>
<td>• Research on the impact of multi-class teaching on quality</td>
<td></td>
</tr>
<tr>
<td>• Research on the impact of multi-subject teaching on quality</td>
<td></td>
</tr>
<tr>
<td>• Pilot studies on the effect of using technology in the classroom</td>
<td></td>
</tr>
<tr>
<td>• Tracing of children and students throughout the education levels (completion and dropouts)</td>
<td></td>
</tr>
<tr>
<td><strong>VET</strong></td>
<td></td>
</tr>
<tr>
<td>• Labour market data to identify in-demand skills and job sectors</td>
<td></td>
</tr>
<tr>
<td>• Labour Force Survey data</td>
<td></td>
</tr>
<tr>
<td>• Tracer studies and job placement analysis</td>
<td></td>
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<tr>
<td>• Best practices in industry partnerships and apprenticeships</td>
<td></td>
</tr>
<tr>
<td>• Data on attractiveness of the various specialties</td>
<td></td>
</tr>
<tr>
<td><strong>Higher education</strong></td>
<td></td>
</tr>
<tr>
<td>• Research on the return on investment (earnings premiums, employment rates)</td>
<td></td>
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<tr>
<td>• Best practices for innovative teaching and learning in higher education</td>
<td></td>
</tr>
<tr>
<td>• Best practices for attracting foreign students</td>
<td></td>
</tr>
<tr>
<td>• Mapping of the link between higher education institutions and research for policy</td>
<td></td>
</tr>
<tr>
<td>• Links between VET and higher education paths</td>
<td></td>
</tr>
</tbody>
</table>
**Types of evidence**

- **Data**: Education statistics, financial and qualitative information collected through systematic processes.

- **Social intelligence**: Knowledge of a place, culture, people, their needs and challenges, gained through direct experience and held by citizens and their representatives.

- **Best practice**: Knowledge gained from experience and understanding of what works and what does not in specific policy contexts. Found in institutional processes, programme documents, monitoring and evaluation mechanisms and reports.

- **Research**: Produced through a formal, comprehensive and rigorous analytical process that uses primary and secondary literature and adheres to accepted principles of quality.

Sources of evidence: who produces?  The example of EU MS

Depts. in HEIs/research agencies
Evaluation or testing agencies
National stats. and/or research departments in the ministry of education
Public and/or stakeholder consultations
Think tanks/consultants
Trade unions/employers' organisations

Left Schools
Right Higher education
Red Official arrangements
Light grey Ad hoc arrangements

Source: Eurydice.
Your views… on the relative importance of sources of evidence

Education Management Information System (EMIS) or Ministry of Education

National Statistical Office

Ministry of Finance

Other Ministries (e.g., Ministry of Labour, Ministry of Social Protection, etc.)

International organisations (e.g., UNICEF, UNESCO, World Bank, etc.)

Academic Research Institutions

Civil society (e.g., Teacher unions, local associations, etc.)

NGOs and development partners/donors

How important is each of the following sources of evidence in informing education policy?
Your views… on most useful evidence

*What evidence would be the most useful to document and analyse identified challenges?*

- Statistical data on education
- Research on best practices
- Evaluation of existing policies
- Analysis of resource allocation
- Stakeholder consultation and feedback
- Data on education outcomes and longitudinal studies
- International benchmarking
- Ad-hoc analysis on specific topics (e.g., on teacher training, equity, digital learning, etc.)
- Independent studies by NGOs
Your views… on frequency of evidence use

How frequently do you use the following types of evidence in the education policy process?

- Never
- Rarely
- Sometimes
- Often
- Always

Administrative records (e.g., school data, student data, etc.)

Survey results (e.g., PISA, MICS, Labour Force Survey, etc.)

Qualitative evidence (e.g., focus groups, expert opinions, etc.)

Secondary literature (e.g., reports from donors, NGOs, international organisations, etc.)

Pilot projects and/or case studies
2.2 - Zooming in… on data

**Qualitative data** describes the nature of evidence in terms of descriptive attributes that cannot be expressed numerically. It provides insights into underlying reasons, opinions, and motivations.


For example, focus groups with parents and interviews with CSOs collect qualitative data.

**Quantitative data** is numerical and can be measured. It provides information that can be counted or compared on a numerical scale.

It answers ‘what’, ‘how many’, ‘how much’, ‘when’ and ‘how often’ questions.

For example, EMIS forms given to schools for administrative record-keeping collect quantitative data.

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**Sources:**
Types of data: national vs international

**National sources:**

1. EMIS and Ministry of Education
2. National agencies under the Ministry of Education
3. National Statistical Office
4. Ministry of Finance
5. Other ministries (Labour, Social Affairs/Protection, etc.)
6. Civil society organisations

**International sources:**

1. UNESCO Institute for Statistics (UIS): [Education Data](#)
2. Global Partnership for Education (GPE): [Results Framework](#)
3. UNICEF: [Multiple Indicator Cluster Surveys (MICS)](#)
4. World Bank: [EDStats](#)
5. OECD: Programme for International Student Assessment ([PISA Data](#); [PIAAC](#) (adult skills))
6. IEA: [PIRLS](#) (4th graders); [TIMSS](#) (4th and 8th graders)
Considering the data management cycle

Collection → Storage → Processing → Analysis → Reporting → Utilisation

Data governance

Thematic group work (30 min)

- **Group 1**: list the **data and their sources** that you use in your daily work, with their advantages and the difficulties they raise

- **Groups 2 and 3**: share your respective **channels/mechanisms** for data management and identify/discuss the **missing links/bottlenecks**

- **Group 4 (DG NEAR and EU MS)**: what **type of evidence and data** do you give priority to define your support (or your policies) for MS?

  - Please remember to identify a rapporteur for reporting back
<table>
<thead>
<tr>
<th><strong>Issues with data sources G1</strong></th>
<th><strong>Missing links and bottlenecks within the data management chain G2/3</strong></th>
<th><strong>Eu priority data G4</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Georgia:</strong> Collect <strong>admin.</strong> data, survey data, PISA data, secondary data and pilot data.</td>
<td><strong>Moldova:</strong> Storage- EMIS/SIME Analysis – agencies under the Ministry Reporting - from the Ministry to the government Apart from EMIS, the National Bureau of Statistics publishes some data.</td>
<td>Several sources are used we use for the education data (e.g., OECD, EU Barometer, Erasmus +, Eurostat, etc.). Cooperation with international institutions (i.e., OECD, etc.) is key. Legislation framework is very important.</td>
</tr>
<tr>
<td>• Survey data is often not enough to inform decisions and there are limited resources to implement surveys</td>
<td>• Short time</td>
<td>Categories of the sources:</td>
</tr>
<tr>
<td>• Pilot projects are good evidence in terms of quality, but they are costly (money and time)</td>
<td>• Lack of human resources (skills and time)</td>
<td>• Data on <strong>access</strong> to education incl. inclusive education data</td>
</tr>
<tr>
<td><strong>Armenia:</strong></td>
<td>• Long time from the collection of data to the utilisation of data.</td>
<td>• Teacher’s data (i.e., TALIS)</td>
</tr>
<tr>
<td>• Definition of the indicators is a problem</td>
<td><strong>Georgia:</strong> Cloud-based storage Data is coordinated with different entities and ministries. Mobile application Biometric systems have been activated Different web Portals for the students and electronic journals, studies from development partners – pre-mapping of the schools</td>
<td>• Data that refer to students’ intermobility</td>
</tr>
<tr>
<td>• Not clearly defined which data to be collected for decision-making</td>
<td>• Lack of standardized data and terms</td>
<td>• Evidence of the benefits and efficiency of <strong>investments in education</strong></td>
</tr>
<tr>
<td>• Limited disaggregated data</td>
<td>• Errors in data entry</td>
<td>• Structural characteristics of the education system</td>
</tr>
<tr>
<td><strong>Moldova:</strong></td>
<td>• Data security (cyberattack)</td>
<td>• Financing of the system</td>
</tr>
<tr>
<td>• Problem of interoperability of data systems and inconsistencies among data sources</td>
<td>• Connectivity and infrastructure (i.e., internet)</td>
<td>• Outputs of educational institutions</td>
</tr>
<tr>
<td><strong>Azerbaijan:</strong></td>
<td>• Proper data analysis</td>
<td></td>
</tr>
<tr>
<td>• No cooperation between institutions, no clear division of responsibilities</td>
<td>• Resource allocation</td>
<td></td>
</tr>
<tr>
<td>• No data available at a disaggregated level (i.e., regional data, etc.)</td>
<td>• Missing legal and ethical considerations during the surveys</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Transparency</td>
<td></td>
</tr>
</tbody>
</table>
Issues with data (1/2)

- **Lack of Standardization**
  - Inconsistent data formats
  - Non-uniform data collection methods

- **Inadequate Infrastructure**
  - Outdated Technology
  - Insufficient Bandwidth

- **Data Quality Issues**
  - Incomplete Data Entry
  - Errors in Data Entry

- **Security and Privacy Concerns**
  - Weak Security Protocols
  - Privacy Compliance Issues

- **Integration Challenges**
  - Fragmented Systems
  - Lack of Interoperability
## Issues with data (2/2)

<table>
<thead>
<tr>
<th>Category</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity and Training Gaps</td>
<td>Lack of Skilled Personnel, Inadequate Training Programs</td>
</tr>
<tr>
<td>Policy and Governance Issues</td>
<td>Weak Data Governance, Inconsistent Implementation</td>
</tr>
<tr>
<td>Funding Constraints</td>
<td>Limited Financial Resources, Prioritization Issues</td>
</tr>
<tr>
<td>Stakeholder Engagement</td>
<td>Low Buy-In, Communication Gaps</td>
</tr>
</tbody>
</table>
Recommendations for effective data management

Collection:
- Student data
- Teacher and management staff data
- School data
- Qualitative data

Storage:
- Centralised database
- Data security measures
- Backup and recovery

Processing:
- Validation and cleaning
- Integration
- Standardisation

Utilisation:
- Throughout the policy cycle
- Resource allocation

Data governance:
- Reports
- Factsheets
- Policy briefs
- Data dashboards
- Infographics

Analysis:
- Descriptive and inferential statistics
- Causal analysis
- Cost-benefit analysis
- Qualitative analysis

Reporting:
- Student data
- Teacher and management staff data
- School data
- Qualitative data

Your views... on issues in data management

According to you, what are the main difficulties, missing links and/or bottlenecks in the data management chain (from data collection to data utilisation) in the education system?

- Lack of standardisation: 7
- Inadequate infrastructure: 2
- Data quality issues: 8
- Security and privacy concerns: 1
- Integration challenges: 2
- Capacity and training gaps: 7
- Policy and governance issues: 3
- Funding constraints: 5
- Stakeholder engagement: 3
- Other: 1
Your views... on solutions to data issues

What solutions are implemented to address data management issues?

- Audits on data quality
- Training programs for data management staff
- Upgrades of data management systems
- Protocols on data-sharing, security and privacy
- Outsourcing to external experts
2.3 From data to indicators

Keynote speech from Robert Rakocevic, France
### General Objectives:

1. **Link education to** labor market requirements and needs from a sustainable development perspective by restructuring human capital development mechanisms.
2. Ensure **access** to quality lifelong education for all.
3. Provide the educational system of all levels and forms of education with qualified, competent, motivated and competitive teaching/scientific-didactic and managerial staff.
4. Strengthen the **socio-educational cohesion** for quality education by bringing together the efforts of all actors of the educational process.
5. Create new, effective and motivating **lifelong** development and learning environments for all.
6. Improve the functionality of the education system through the effective implementation of **digital technologies** to ensure education quality and sustainability.
7. Ensure lifelong learning and education opportunities for all in a **formal, non-formal and informal** context.
8. Promote **innovation** and change in education through **research development**.
9. Enhance the performance of the education sector by streamlining the network, upgrading the infrastructure and strengthening the managerial capacity and quality culture at all levels of the education system.

### Main goals:

1. To create a universally inclusive, learner-centered educational environment.
2. To raise the effectiveness and efficiency of education.
3. To internationalize and export education services and products.

Each goal further described with lists of steps towards the attainment of all three strategic goals.

### Sectoral priorities:

I. Quality and relevance
II. Equality, inclusion, and diversity
III. Governance, financing, and accountability

### Strategic priorities by 2027:

1. Early Childhood and Preschool Education
2. «New Ukrainian School» Reform
3. Modern Out-of-School Education
4. Transformation of Vocational Education and Training
5. Quality Higher Education
6. Development of Science and Innovation
7. European integration of Ukraine in education and science
8. Digital Transformation of Education and Science
9. Support and assistance for individuals with special educational needs

Each priority then declined in strategic and operational objectives.
Education strategies in EaP countries

Comparing strategies? **Difficult.**

Although the strategies have a different structure (goals, priorities, objectives,…), they share similar objectives:

- Quality Improvement,
- Access and Inclusion/Equity,
- Curriculum Modernization,
- Teacher Professional Development,
- Infrastructure Development,
- …

…and they are linked to **monitoring indicators** that may fall into these categories.
2.3 From data to indicators

The smart secret of indicators
Your views... on influencing factors in the choice of indicators

What criteria do you think play a greater role when setting targets for the indicators of the education policy?

- Feasibility based on past and current trends
- Alignment with national development goals
- Alignment with international education benchmarks
- Stakeholder input and expectations
- Resource availability
- Political stakes
- Donor interventions
- Other
Your views... on the characteristics of good indicators

Considering your own field of work, do you think that the indicators you are expected to follow:

- Have a clear and specific definition
- Tap into well-identified data sources
- Are quantifiable (easily measurable)
- Have a reliable baseline
- Are assigned a realistic target (compared to the past trends)
- Are produced in a timely manner (e.g., according to a pre-defined timeframe)
Being SMART

Specific

Measurable

Achievable

Relevant

Timed
Is it clear exactly what is being measured? Does the indicator capture the essence of the desired result?

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Source</th>
<th>Baseline, 2021</th>
<th>Intermediate target for 2025</th>
<th>Final target for 2030</th>
</tr>
</thead>
</table>

**Objective**: Enhance the performance of the Education sector by streamlining the network, upgrading the infrastructure and strengthening the managerial capacity and quality culture at all levels of the education system.

<table>
<thead>
<tr>
<th>Share of beneficiaries involved in consultation and decision-making in education, %</th>
<th>MoE</th>
<th>20</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
</table>
Is it clear exactly what is being measured? Does the indicator capture the essence of the desired result?

Ultimate Goal:
*Participants in the educational process, scientists, and education managers use modern technologies in an accessible digital environment.*

Performance indicators:

1. The number of participants in the educational process using computer equipment
2. The number of users of electronic information collection and processing systems in the field of education.
3. The number of authorized users of the National Electronic Scientific Information System
Does the indicator have the capacity to be counted, observed, analyzed, tested, or challenged?

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Source</th>
<th>Baseline, 2021</th>
<th>Intermediate target for 2025</th>
<th>Final target for 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing the number of awarded research projects with the participation of universities in national and international competitions, %</td>
<td>MoE</td>
<td>-</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>
Does the indicator have the capacity to be counted, observed, analyzed, tested, or challenged?

<table>
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<th>Baseline, 2021</th>
<th>Intermediate target for 2025</th>
<th>Final target for 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved position in the Higher Education Institute's international ranking indices</td>
<td>Websites with published international indices</td>
<td>-</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>
Is the target attached to the indicator achievable, as assessed against past trends or the policy measures foreseen?

<table>
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<th>Indicator</th>
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<th>Baseline, 2021</th>
<th>Intermediate target for 2025</th>
<th>Final target for 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of pupils in final year of secondary school with minimum knowledge in Mathematics, %</td>
<td>OECD</td>
<td>49.7</td>
<td>70</td>
<td>80</td>
</tr>
</tbody>
</table>

+25.8 p.p within 2025 (one round of PISA) +35.8 p.p. within 2030 (2 rounds)

In PISA history the record of improvement within 2 round of surveys is +18.3 p.p (Albania between 2012 and 2018)
Is the target attached to the indicator achievable, as assessed against past trends or the policy measures foreseen?

<table>
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<tr>
<th>Indicator</th>
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<th>Baseline, 2021</th>
<th>Intermediate target for 2024</th>
<th>Intermediate target for 2027</th>
<th>Final target for 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remuneration of educators-pedagogues of early and preschool educational institutions</td>
<td>Ministry of Education and Science data</td>
<td>336 € (national average 844 €)</td>
<td>An increase of at least 10% of the average monthly salary</td>
<td>An increase of at least 20% of the average monthly salary</td>
<td>Equal to the national average monthly salary</td>
</tr>
</tbody>
</table>

- From 2027 to 2030: +340 €

\[
336 + 84 = 420 \text{ €} \\
420 + 84 = 504 \text{ €}
\]
Is the indicator a valid measure of the desired result/outcome and is it documented through research and professional expertise?

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Source</th>
<th>Baseline, 2021</th>
<th>Intermediate target for 2025</th>
<th>Final target for 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupil teacher ratio</td>
<td>Education 2020</td>
<td>12</td>
<td>12.5</td>
<td>13</td>
</tr>
<tr>
<td>School dropout rate, %</td>
<td>MER</td>
<td>0.083</td>
<td>0.06</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Objective: **Ensure access to quality lifelong education for all**
Does the monitoring system allow progress to be tracked in a cost-effective manner at the desired frequency for a set period?

PISA surveys: 2018, 2022 (data available in 2023), 2025 (data available in 2026), 2029 (data available in 2030)

The share of disadvantaged pupils in the top attainment level (top quartile)

Source: OECD

Baseline, 2018: 12.3%
Intermediate target for 2025: 20%
Final target for 2030: 30%

Another intermediate target for 2022 (2023) could have been added without additional monitoring costs.
Does the monitoring system allow progress to be tracked in a cost-effective manner at the desired frequency for a set period?

Considering your own field of work, do you think that the indicators you are expected to follow:

Are produced in a timely manner (e.g., according to a pre-defined timeframe)
### How to use indicators for analysis

1. By disaggregating them
2. By monitoring trends
3. By comparing inputs/outputs
4. By combining data sources
5. Through benchmarking
6. By exploring reasons behind numbers
7. By combining indicators
8. By exploring data channels (and mechanisms)
(1) Disaggregating indicators for analysis

Example: from macro to micro
Multiple shifts in Kosovo, and rural-urban disparities (from RED Kosovo 2022)

### % Public schools (preschool to upper secondary)

<table>
<thead>
<tr>
<th>Municipality</th>
<th>1 shift (%)</th>
<th>2 shifts (%)</th>
<th>3 shifts (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deçan</td>
<td>41.7</td>
<td>58.3</td>
<td>0</td>
</tr>
<tr>
<td>Dragash</td>
<td>43.3</td>
<td>53.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Ferizaj</td>
<td>23.7</td>
<td>76.3</td>
<td>0</td>
</tr>
<tr>
<td>Fushë Kosovë</td>
<td>29.4</td>
<td>70.6</td>
<td>0</td>
</tr>
<tr>
<td>Gjakovë</td>
<td>28.1</td>
<td>71.9</td>
<td>0</td>
</tr>
<tr>
<td>Gjilan</td>
<td>24.4</td>
<td>71.1</td>
<td>4.4</td>
</tr>
<tr>
<td>Glogoc</td>
<td>6.1</td>
<td>93.9</td>
<td>0</td>
</tr>
<tr>
<td>Hani i Elezit</td>
<td>71.4</td>
<td>28.6</td>
<td>0</td>
</tr>
<tr>
<td>Istog</td>
<td>56.2</td>
<td>43.8</td>
<td>0</td>
</tr>
<tr>
<td>Junik</td>
<td>50</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Kaçanik</td>
<td>21.7</td>
<td>78.3</td>
<td>0</td>
</tr>
<tr>
<td>Kamenicë</td>
<td>84.3</td>
<td>35.7</td>
<td>0</td>
</tr>
<tr>
<td>Klinë</td>
<td>51.7</td>
<td>48.3</td>
<td>0</td>
</tr>
<tr>
<td>Kllokot*</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Leposaviq*</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lipjan</td>
<td>20.8</td>
<td>77.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Malishevë</td>
<td>26.2</td>
<td>73.8</td>
<td>0</td>
</tr>
<tr>
<td>Mamushë</td>
<td>86.7</td>
<td>33.3</td>
<td>0</td>
</tr>
<tr>
<td>Mitrovicë Jugore</td>
<td>39</td>
<td>61</td>
<td>0</td>
</tr>
<tr>
<td>Mitrovicë Veriøre*</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Novobërëde*</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Obiliq</td>
<td>50</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Pejë</td>
<td>31.1</td>
<td>68.9</td>
<td>0</td>
</tr>
<tr>
<td>Podujevë</td>
<td>13.8</td>
<td>84.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Prishtinë</td>
<td>35.2</td>
<td>62</td>
<td>2.8</td>
</tr>
<tr>
<td>Prizren</td>
<td>38.4</td>
<td>60.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Rahovec</td>
<td>27</td>
<td>73</td>
<td>0</td>
</tr>
<tr>
<td>Shërpëcë*</td>
<td>25</td>
<td>75</td>
<td>0</td>
</tr>
<tr>
<td>Shhtime</td>
<td>23.8</td>
<td>76.2</td>
<td>0</td>
</tr>
<tr>
<td>Skënderaj</td>
<td>43.6</td>
<td>56.4</td>
<td>0</td>
</tr>
<tr>
<td>Suharekë</td>
<td>66.7</td>
<td>33.3</td>
<td>0</td>
</tr>
<tr>
<td>Viti</td>
<td>23.7</td>
<td>76.3</td>
<td>0</td>
</tr>
<tr>
<td>Vushtrri</td>
<td>16.3</td>
<td>83.7</td>
<td>0</td>
</tr>
<tr>
<td>Zubin Potok*</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Zveçan*</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Kosovo</strong></td>
<td><strong>34</strong></td>
<td><strong>65.2</strong></td>
<td><strong>0.8</strong></td>
</tr>
</tbody>
</table>

*serb municipality: data unreliable/incomplete
(2) Monitoring trends
(3) Comparing inputs/outputs

Budget composition and enrolment rates per level
(from EDA/RED Lebanon 2021)

Distribution of total enrolled students in public education by education level – 2019/20*

(4) Combining data sources
(5) Benchmarking

Total government expenditure in education, 2020 (% of GDP)

- Armenia: 2.7
- Azerbaijan: 4.3
- Georgia: 3.9
- Moldova: 6.4
- Ukraine: 5.4
- EU: 5.1

(6) Exploring reasons behind figures

...but how far does this indicator speak?

- Which share of private sector and/or households in total funding for education?
- What are the budgets of regional councils?
- How is this GDP share distributed across the various levels of education?
- How do these expenses compare with the number of students? To learning outcomes?

>> What about the efficiency of these expenses?

(7) Combining indicators

(5) through benchmarking
Example: more money in education?

Mathematics performance and spending on education

✓ Money matters, up to a point
✓ Efficient allocation of educational resources is crucial

Source: OECD, 2022. PISA Database, Volume I Tables I.B1.2.1 and I.B3.2.2.
...(7) By exploring data channels (and mechanisms)

Responsibilities and coordination mechanisms in a decentralised system: missing links
Session 3

The Education Management Information System (EMIS) in practice
"My drawing was not a picture of a hat. It was a picture of a boa constrictor digesting an elephant."

Focus on the issue of (qualified) teacher shortages

"Then I drew the inside of the boa constrictor, so the grown-ups could understand. They always need explanations."

Your views... on EMIS in general

To what extent do you agree with the following statements about EMIS?

- EMIS data is critical for effective policymaking
- The EMIS is regularly updated with the latest education data
- I trust the data provided by the EMIS
- The EMIS system is user-friendly
- There is adequate training provided on how to use the EMIS
- Technical support for the EMIS is readily available

[Bar charts showing agreement levels for each statement]
Your views… on EMIS coverage

Which education levels is the EMIS of your country currently operational on?

- Early childhood education
- General education (primary and secondary)
- VET
- Higher education
- Other
Your views… on access to EMIS

What mechanisms are in place in your organisation for accessing EMIS data?

- Online EMIS portal
- Regular data reports and publications
- Exchange or direct data requests to EMIS staff
- Guidance through training sessions, EMIS user manuals, etc.
Your views… on EMIS gaps

What specific data would you like to find in EMIS that are currently not included? Please be as concrete as possible.

- Concrete tools and methodologies for involving students in the data collection process.
- Indicators that will ensure data quality monitoring - truthfulness and operability.
- All needs are discussed with the technical team, and the system is constantly improved/developed.
- Currently I can’t consider any specific data to find in EMIS that are not included.
- Annual financial reports.
- Financial data.
- Analytical, forecasting tools for stakeholders.
- More detailed data and different kinds of reports.
- The quality level of the institution and the educational offer.
- Information platform for the private sector for VET purposes.
- Longitudinal tracking of student progress; post-graduation outcomes; inclusive education data.
- Overall information on a person’s education/career path (e.g. education passport).
Your views… on EMIS for teacher management

Focusing on the issue of (qualified) teacher shortages as a concrete example that we will dig into during the workshop, does your country’s EMIS system collect data on:

- Teacher personal characteristics (age, gender, family status, location of residence, etc.)
- Teacher records within the education system (type of contract, seniority, previous positions, etc.)
- Qualifications
- Teaching subjects
- In-service training courses attended
- Teacher vacancies by territory, subject
Thematic group discussion (35 min)

- **Group 1, the idealists:** which data about teachers should be collected and which indicators related to teachers should be chosen and monitored?

- **Group 2, the engineers:** what is done with the data on teachers currently available in EMIS systems? What are the gaps and the challenges?

- **Group 3, the mediators:** who decides about EMIS content and outputs? What are vs what should be the mechanisms to process and use the data? Who should be involved in the topic of teacher shortages?

• Please remember to identify a rapporteur for reporting back
### Ideal teacher data and indicators (G1)

The ideal EMIS would comprise **many different data on teachers**, including:

- Personal characteristics of teachers
- Disaggregated teacher data (territory, subject)
- Subjects taught
- Qualifications
- Vacancies
- Teacher training (pre-service, in-service)
- Professional development opportunities
- Salaries

### Teacher data operative in EMIS, gaps and challenges (G2)

**Teacher data operative** in EMIS (GEO):

- Personal data per teacher
- Demographic data of teachers
- Didactic norm
- Finance data (salaries)
- Professional development tracking
- Vacancies (interoperable)

**Gaps from teachers’ perspective:**

- Time-consuming data entry for the teachers/admin. overload
- Insufficient training and support
- Data privacy and security concerns

**Gaps in teacher data use:**

- Analysis for shortages, inefficiencies in allocation

### Stakeholders and mechanisms around EMIS (G3)

**Who decides** about EMIS content and outputs:

- Ministry of Education/policymakers
- Other stakeholders and international bodies can make their wishes and probably be taken into consideration by the Ministry of Education.

**What:** in AM, e.g., everyone has access to the data. However, there is a need for more unique legislation that well defines the data (definition of data) and a specification of institution responsibilities for data input.

**Who should** be involved in the topic of teacher shortages:

- Ministry of education
- School leaders, pedagogical institutions, teachers, parents, pupils.
The ideal teacher data

- **Personal information** (age, gender, nationality, ethnicity)
- **Academic** (degrees obtained, fields of study) and **professional qualifications** (teaching certifications and licenses, specialisations and subject endorsements, professional development courses and certifications)
- **Employment details** (current and past positions, contract, years of experience, salary scale and grade, additional bonuses, benefits)
- **Teaching assignment** (subjects taught, grade levels taught, teaching shifts, total hours per week)
- **Non-teaching assignments** (admin roles, extracurricular activities, mentorship, total hours per week)
- **Performance evaluations** (annual performance reviews, student performance and feedback, peer reviews and feedback)
- **Professional development** (participation in in-service training, workshops, seminars, and conferences attended, continuing education courses, subjects and topics of professional development, impact of professional development on teaching practices)
- **Teacher feedback** (surveys on job satisfaction, feedback on school management and policies)
- **Compliance** (with certification renewal requirements, participation in mandatory training sessions)
- **Mobility** (vacancies, by territory, subject taught)
An example of using teacher data for recruitment plans

Distribution of teachers by type of contract and by age
(from EDA/RED Lebanon 2021)

- **Number of teachers**
  - **Type of contract**
  - **Age:**

  “Many teachers with stable/indefinite-term contracts will retire in the next years”
3.2 An EU MS Perspective on EMIS

Keynote speech from Marcin Nowak, Poland
Some recommendations for an effective EMIS

Standardization
- Regular audits
- Real-time data entry

Improve user accessibility and usability
- User-friendly interface
- Mobile compatibility
- Multi-lingual support

Robust security measures
- Compliance with regulations
- Regular security audits

Enhance data quality and accuracy
- Advanced analytics
- Customizable dashboards
- Automated reporting

Strengthen data security and privacy
- Comprehensive training programs
- User manuals and tutorials
- Ongoing support/hotline

Facilitate integration with other systems
- Performance monitoring
- Upscaling plans

Interoperability
- Feedback mechanisms
- Collaborative development

Training and support
- Optimise performance and scalability
- Pilot programmes
- Research and development

Encourage stakeholder engagement
- Promote data-driven decision-making
- Foster innovation

Enhance reporting and analytics capabilities
- Data literacy programs
- Policy alignment
- Ongoing support/hotline

User-friendly interface
- Mobile compatibility
- Multi-lingual support

User-friendly interface
- Mobile compatibility
- Multi-lingual support

User-friendly interface
- Mobile compatibility
- Multi-lingual support

User-friendly interface
- Mobile compatibility
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- Multi-lingual support

User-friendly interface
- Mobile compatibility
- Multi-lingual support

User-friendly interface
- Mobile compatibility
- Multi-lingual support
3.3 International and EU standards

EU accession process and chapter 26 requirements

Simone Rave, DGNEAR, European Commission
Your views… on international indicator frameworks

Which of the following indicator frameworks is more influential when defining your country’s education objectives? (Please rank from 1 = most important, 4 = least important)

- Global Partnership for Education (GPE) Results Framework
- OECD Education at a glance (including PISA)
- EU Education and Training (ET) 2030
- UNESCO Education 2030 Framework for Action (SDG 4)
Your views… on alignment challenges

What are the primary challenges in aligning your country's education policies with international and EU frameworks?

- Lack of alignment with national priorities
- Insufficient funding to implement framework recommendations
- Complexity of the frameworks
- Lack of capacity or expertise
- Political resistance
- Insufficient data
- Other
(other) international indicators frameworks

UNESCO's Education 2030 Framework for Action (FFA):
  • SDG4

OECD:
  • Education at a Glance
  • PISA

World Bank:
  • Education Statistics (EdStats)
  • Human Capital Index (HCI)

European Union:
  • Education and training monitor

IEA:
  • TIMSS
  • PIRLS

Global Partnership for Education (GPE) Results Framework

UNICEF:
  • MICS

UNESCO Institute for Statistics (UIS):
  • Global Education Indicators (GEI)
For the record: The EU ET 2030 indicators

1. Low-achieving 15-year-olds in basic skills (reading, mathematics, science) should be less than 15% by 2030.

2. Low-achieving eighth-graders in digital skills should be less than 15% by 2030.

3. Participation in early childhood education and care should be at least 96% by 2030.

4. Early leavers from education and training should be less than 9% by 2030.

5. Tertiary level attainment among the 25-34 year-olds should be at least 45% by 2030.

6. Exposure of VET graduates to work-based learning should be at least 60% by 2025.

7. Participation of adults aged 25-64 in learning should be at least 47% by 2025.
Session 4

Governance mechanisms and tools around evidence
Who is primarily responsible for analysing education evidence in your country?

- Internal research team within the organization: 6
- Individual policymakers: 0
- Dedicated data analysis agency: 4
- External consultants: 0
- Academic institutions (in collaboration): 2
- Other: 2
Your views… on frequency of analysis

How often is evidence processed and analysed to inform policy decisions in education?

- Annually: 3
- Semi-annually: 1
- Quarterly: 0
- Monthly: 0
- Continuously: 6
- On an ad-hoc basis: 4
Your views... on analytical products

What types of analytical tools are regularly produced? (Select all that apply)

- Comprehensive reports
- Policy briefs
- Factsheets
- Data dashboards
- Infographics
- Case studies
- Evaluation reports
- Research articles
Your views… on policy monitoring

How is policy monitoring typically conducted in your country?

- Regular progress reports: 13
- Site visits and observations: 8
- Surveys, questionnaires, interviews or focus groups: 9
- Joint sector reviews, coordination meetings and/or formal policy dialogue with donors: 12
- Other: 0
Your views… on the evidence-based policy-making process

To what extent do you agree with the following statements about your country’s evidence-based policymaking process in education?

- Our data analysis methods are up-to-date with current best practices
- The monitoring process effectively tracks policy implementation and outcomes, including impact evaluations
- Monitoring reports are produced regularly and broadly shared
- Stakeholder feedback is regularly incorporated into the policymaking process
- The education policy is regularly updated based on new evidence
Plenary discussion

1. **Outputs**: What obstacles do you face with the production of different analytical products?

2. **Dissemination**: What challenges do you face with the dissemination and effective use of these analytical products?

3. **Incentivising frameworks**: To what extent do the international and EU policy frameworks provide an incentive for the best use of evidence in education policies?
Recommendations from the research

Analytical products:
• Enhance relevance and customisation
• Strengthen/prioritise institutional capacity for analysis

Dissemination:
• Improve accessibility and communication
• Facilitate exchanges between research institutions/agencies and policymakers through advisory bodies, and mechanisms, calls for evidence, evidence services within the government
• Foster partnerships and networks between education stakeholders who produce and use evidence

International and EU frameworks:
• Advocate for evidence-based policymaking in education following international and EU frameworks
• Promote coordination through participation in regional and global hubs
• Recognise and reward good practices

Source: UNESCO, 2024. *Improving the use of evidence for education policy, planning and implementation: strategic review.* Online.
Session 4.2 What could be next?
Country group reflection (1h)

- **Key takeaways from this workshop**: Wrap up interesting ideas/practices to take back to improve the use of evidence in education policies (30 min).

- **Next steps and recommendations**: agreement on content and/or deadlines for feedback on the country snapshots, for sending inputs for RED (pillar 1) and Capacity Building (pillar 2) (30 min).

- Please remember to identify a rapporteur for reporting back
Your views... on incentives from international partners

What specific supports or resources provided by international, including EU partners are most beneficial for using evidence in education policies? (Please select at most 3 options)

- Technical assistance and expertise
- Training and capacity-building programs
- Access to research and data
- Networking and collaboration opportunities
- Financial support and grants
- Policy guidelines and recommendations
- Monitoring and evaluation tools
- Other
For further reference, from the research on the use of evidence in education policies

- OECD. (2024). Yes Minister, Yes Evidence
- OECD. (2023). Who Really Cares about Using Education Research in Policy and Practice?
- UNESCO. (2024). Improving the use of evidence for education policy, planning and implementation: strategic review
Other interesting references for evidence-based education policies


THANK YOU FOR YOUR ATTENTION

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