OpenEMIS

Better data. Better outcomes.

UNESCO
United Nations
Educational, Scientific and
Cultural Organization

CSF
Community Systems Foundation

Ministry of Education, Science and Technology

OpenEMIS Kosovo
Scoping Mission Report
November 2017

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Need and Gap Assessment Report[1]

Introduction

The Scoping Mission, comprising of a Needs Assessment and Gap Analysis, was conducted, with the Ministry of Education, Science and Technology ("The Ministry") and in conjunction with Save the Children Kosovo and Save the Children Sweden, from the 6th to the 10th of November in Pristina, The Republic of Kosovo. The initial goal of this activity was to evaluate ways in which OpenEMIS can address and streamline current processes; however, due to the recent World Bank loan accepted by the MEST to improve the Education Management Information System (EMIS), the following report will focus on describing gaps which should be filled by the new EMIS.

It is evident that The Ministry is working towards the improvement of its education sector and is committed to achieving the goals set in the new Strategic Plan. The changes being implemented and the plans forward will benefit the successful implementation of a new EMIS in Kosovo.

The new EMIS should support the Ministry through the building of a solid and reliable Education Management Information System (EMIS) and strengthening of national capacities in the management and provision of reliable information for the planning, monitoring and evaluation of education in Kosovo. The tool should be easily flexible and evolve as the education sector in Kosovo evolves, without a significant financial burden on the Ministry.

The key underlying implementation principles of any effective, efficient EMIS are:

- An evidence based approach, which uses reliable data to inform the education planning and policy-decision processes through the strengthening of existing national information systems;
- National leadership with full participation and engagement of national stakeholders in diagnosis, formulation and implementation of a plan;
- Alignment of the EMIS within the overall national education development goals and objectives;
- Support to the government in developing effective and robust information systems and data collection tools, through the use of open source, generic and cost-effective IT tools;
- Use of international standards for data exchange on education in the country for improved access to and use of information;
- Government-owned EMIS integrated with a robust education decision-support system with the management of the system transferred to key government institutions without dependencies on external technical support.

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[1] Please note this report is a shortened version of the OpenEMIS Kosovo Scoping Mission report prepared for Save the Children Sweden and Save the Children Kosovo.

Methodology

The overall methodology of the initial activity was to engage all key education stakeholders in mapping processes and needs, identifying gaps in the data collection processes in order to support improved long-term planning in the education sector. The scoping mission will plan an approach to strengthening data collection tools and strengthen the education information system, with a special focus on children with disabilities.

The team covered the following key topics:
1. Current state of EMIS
2. Plan for the development on the new EMIS based on the understanding by each unit
3. Data collection processes and tools for each unit
4. Use of additional data to fill current gaps
5. Reporting tools requirements
6. Functional and data requirements for the new EMIS.
7. Connectivity and data redundancy issues with sub and external systems

During the time in country, the OpenEMIS team had the opportunity to speak with education stakeholders from the EMIS Division, The Inspectorates, The Inclusive Education Team, Sylejman Vokshi School, Directorate of Education, Student Assembly, Ministry of Labor and Social Affairs, Statistics Division, as well as, Infrastructure and Education Facilities.

Strengths and Gaps of the current EMIS
Strengths of current system

The Ministry currently manages an EMIS system that collects aggregate level data from all public institutions in Kosovo. It is important to note the following strengths:
- Capacity within the Ministry in the use of database tools and digital data collection formats is quite advanced and will be a positive factor in the implementation of the revised tool.
- The current EMIS collects information on the name of the school, address, physical infrastructure of the school, access to drinking water and hygiene, electricity, total attendance, violence incidences and an early warning system. They also collect information on student gender, race, ethnicity, distance travelled to school, socio economic status and family composition. For staff, individual information is collected on date of birth, position, race, gender, subjects taught, qualifications and licenses. The Ministry has a separate tool that keep track of licensing process. This license number is then used in the EMIS system to track the staff.
- The Directorate of Education at district level, uses the data collected through the EMIS system in order to inform its projects and processes. The Chief is able to extract information from the system and run reports needed for this own reporting and assessments.

- KAS plays an important role in providing a complete picture of education in Kosovo, since they are the only unit that collects data from the Serbian Schools and the universities.
- The Infrastructure unit has their own Access database that they use to keep information on the structure and composition of all the institutions
- There is a solid team available to carry forward the implementation of a new EMIS.
- Schools are well equipped with the hardware necessary to support OpenEMIS including internet connection.
- Principals are well equipped to carry out the activities related to the EMIS.
- Due to the success of the current EMIS system and protocols, Kosovo MEST is well positioned to take on data collection for individual students and staff.

Challenges in current system

The use of the current system is encouraging for the above mentioned reasons; however, there are limitations to the system which should be considered. Among them:
- Currently, digital access is available for recent education data at an aggregate level; however, there is no access to data on an individual level. Data is available at the aggregate level in the EMIS office and other units (name…) within the Ministry have their own unique database, but there is no robust learner level data management system.
- Different units and ministries have different databases and data collection processes.
- There is little communication between units and Ministries in regard to data sharing.
- The current system does not provide comprehensive relevant information to the Ministry in regards to priority areas, including but not limited to, individual attendance and behavior, the state of literacy, examinations, repetition and dropout rates, textbooks as well as assessments that outline in the Education Sector Plan.
- The currently EMIS was developed by a Macedonian company in 2011 and they began using it in 2013. The tool is a proprietary tool developed specifically for Kosovo. Not all members of the Ministry have access to the tool and the service agreement with the company has now expired, so access cannot be given anymore.
- The inspectorates are responsible for the supervision of schools as it pertains to curriculum, infrastructure, data collection, registrations, staff, and overall delivery of quality services. After each field visit education inspector compiles a charge sheet in which the factual state is presented and proposes measures for avoiding failures. The reports compiled by the inspectorate are shared in paper copy thus makes is cumbersome to track information and follow up.
- Schools have a thorough data collection process for their institutions; however, this data is being kept in several different books and the process is quite tedious for both the teachers and the principals.
- Requests for only aggregate data provides little incentive for principals to collect data at the individual level.

Reporting on CWD

Kosovo Education Strategic Plan defines Inclusive Education as its first objective. The creation of an integrated system for the collection, processing and use of data which will also enable monitoring of children with disabilities, dropout and never enrolled is key for realization of this objective.

Challenges:
- Related to Inclusive Education the only information gathered through the EMIS related to this topic is total number of children with disabilities.
- The infrastructure unit does not collect information on CWD, although they do collect information on whether the institution has ramps, bathroom facilities and classrooms that are accessible. Essentially, they collect information on whether a building is accessible or not; however, it was unclear from our conversations what it means for a building to be accessible.
- As it relates to CWD, the MEST is solely responsible for collecting data on CWD. The last time KAS conducted a survey on this topic was in 2011.
- In order for this objective to be met it is imperative that the Inclusive Education team play an important role in the development of the TOR which will define the parameters for the new EMIS system. At the time of the scoping mission, it was unclear what was included in the TOR and how the requirements of this unit were to be included.
- The Inspectorate does not collect any data on Inclusive Education nor are there special inspections as it pertains to accessibility or services provided for children with disabilities.
- Due to lack of proper information on CWD there are instances where disabilities are being over reported; for example, due to improper definitions children with eye glasses were being reported as having a disability.
- Lack of diagnosis of the child disability or impairment
- The total number of CWD is only reliable for Resource Centres since the IE team oversees the data collection. It is difficult to have a total number of CWD is all of Kosovo
- In many municipalities they do not have the total number of CWD that require transportation nor the number of beneficiaries from transportation programs.
- They are currently missing the information of the education plan of CWD.

Observations and Recommendations

During the in-country mission and the numerous meetings with The Ministry stakeholders the OpenEMIS team can make the following observations and recommendations.

Observations
- The Ministry of Labor is currently developing a beneficiary database that will allow them to collect the necessary data to improve their projects and that is connected seamlessly from the national level to the Municipality providing an easier data

collection and reporting mechanism.

- The Ministry is making significant investments towards the improvement of the education sector. Ministry officials are committed to improving education data in the hope of formulating evidence-based policies.
- The Ministry has secured a loan from the World Bank in order to re-develop their EMIS.

Recommendations
- The success of the new EMIS system will depend on the process and capacity of The Ministry to *clearly define the requirements and needs of each unit for the new tool*. Data processes and needs must be sound and clearly defined and staff must possess the knowledge and skills to execute their assigned roles within these mechanisms.
- As the MEST moves to a new financing formula, the resources allotted to IE will be based on the number of CWD needing services. If CWD remain uncounted and marginalized the resources allocated by the MEST will never be sufficient to cover the needs of these children.
- As the Ministry of Labor works to develop their new database it is highly encouraged that a clear link and cooperation protocol is established between the Ministry of Labor and the MEST. The Ministry of Labor will be a good entry and identification point for CWD, since it is very likely that families with children with disabilities will apply for financial support. It is often the case that most families will request money from social affairs but will not send the children to school by linking the two databases the MEST will be able to identify children that
- If the MEST is looking to keep track on performance and improvements, it will be helpful for the EMIS system to integrate with examination and allow for the MEST to conduct deeper analysis into the status of education in Kosovo.
- The Inclusive Education team would like to collect data on the following:
    - Name and Last name
    - Level of education
    - Total number of children with a disability
    - Type of disability per child and severity
    - Services provided by the school
    - Services provided by the municipality
    - Transportation services and the beneficiaries
    - Teacher qualifications, especially those that have qualifications for teaching CWD
    - Students receiving individual learning plans
    - Data from Municipalities on the Evaluations Teams and how many students the evaluate and the reports
    - Data from Itinerant teachers
    - Children out of school
    - Transition rates from resource centers to regular schools
    - Dropout rates and retention rates

- o Teacher training – being able to identify teachers who have receive IE training
- o Accessibility of schools
- **Involving communities** in the process of identifying out of school children and CWD has proven successful in many contexts. During meeting with Children Council in Metrovica South it was evident that children organizations can play a signification role in Kosovo to identifying CWD and reporting the issues they encounter and identifying the factors that keep children out of school.
- **Technological solution** as example a mobile app that can provide platform to children for sending information to relevant stakeholders regarding OOSC or problems towards inclusion of CWDs in regular schools can use children as valuable resource in process of reforms towards inclusion.

Government-owned EMIS integrated with a robust education decision-support system with the management of the system transferred to key government institutions without dependencies on external technical support.

OpenEMIS Jordan Case Study

An example of successful EMIS implementation at the national level is the Jordanian experience, where the OpenEMIS technology is used by the Ministry of Education to manage educational records nationwide.

The system was launched in August 2016 with the financial support from the EU and the technical assistance from UNESCO. It is now used by all 7,000 public and private schools in the country, from kindergarten to end of secondary institutions, to manage infrastructure data, teaching and non-teaching staff careers, and to track more than two million learners registered in schools.

The OpenEMIS solution in Jordan consists in a set of inter-linked web-based applications providing EMIS services ranging from data collection to data management, data analysis and reporting for schools, central and regional offices of the Ministry of Education.

For further information about OpenEMIS in Jordan, please visit:
- https://www.youtube.com/watch?v=pHC4dgTcDkk or
- https://news.openemis.org/2016/08/openemis-marks-a-new-era-of-education-planning-in-jordan/
- http://www.unesco.org/new/en/amman/projects/education/technical-assistance-to-enhance-accessibility-use-of-the-jordanian-moe-education-management-information-system-emis-for-evidence-based-policy-formulation/