

Knowledge hub Collection of best practices

Summary of the best practice

1.	Title	Fitle of the best practice (e.g. name of policy, programme, project, etc.) *	
		ablishment of Information Management Systems for primary, secondary and higher ucation	
2.	. Country or countries where the practice is implemented *		
	Bos	snia and Herzegovina	
3. Please select the most relevant Action Track(s) the best practice applies to *			
		Action Track 1. Inclusive, equitable, safe, and healthy schools	
		Action Track 2. Learning and skills for life, work, and sustainable development	
		Action Track 3. Teachers, teaching and the teaching profession	
		Action Track 4. Digital learning and transformation	
		Action Track 5. Financing of education	

4. Implementation lead/partner organization(s) *

UNESCO and UNICEF

5. Key words (5-15 words): Please add key descriptive words around aims, modalities, target groups etc. *

digitalization, education planning, informed policy-decision, monitoring, education management, teachers, students, parents

6. What makes it a best practice? *

caregivers, school administration and relevant education authorities. Integration of Information management systems in Una-Sana Canton proved to be beneficial for several reasons: through the data inserted/collected this system provides comprehensive overview to the Ministry of Education of the education process as well as real-time monitoring of the educational activities; IMS provides up-to-date info on curricula, budget, students and teachers, thus enables quality assessment of educational needs and provides basis for an informed policy-decisioning. Moreover, this IMS integrated Office 365 A1 package as a distance learning platform-to be used in regular teaching process as well as during extraordinary circumstances (pandemics, natural disasters, etc.)

Description of the best practice

7. Introduction (350-400 words)

This section should ideally provide the context of, and justification for, the practice and address the following issues:

- i) Which population was affected?
- ii) What was the problem that needed to be addressed?
- iii) Which approach was taken and what objectives were achieved? *

Una-Sana Canton was one among the hardest hit regions in Bosnia and Herzegovina by the COVID-19 disruption of the education (large number of both students and teachers did not have access to e-learning, which was introduced following the onset of the COVID-19). Even before the pandemic, this region was affected by serious economic and social crises (budget cuts and massive flows of refugees-among large number of school children and migrants-using this region as a transiting country to enter the EU). COVID-19 proved that education system in Una-Sana canton should be reinforced through quality assessment of needs and informed budgeting and policy planning. For that reason, UNESCO supported the education authorities to establish Information management system called "E-skole" for primary and secondary education levels. This systems has two layers: 1. collection of administrative and statistical data; 2. providing distance learning platform for primary and secondary students. These systems aim towards a more efficient data collection to ensure real-time monitoring of the education process, needs assessment and more informed budget planning and investing. On other hand, through integration of Office 365, supported through UNESCO Global Edu Coalition, this system provides distance learning platform and learning repository to be used in all times, not only during pandemic. Since its inception in September 2021, the system has managed to accumulate info on school programmes of more than 70 primary and secondary schools and this year, graduating students will receive their diplomas issued electronically by the use of this IMS.

8. Implementation (350-450 words)

Please describe the implementation modalities or processes, where possible in relation to:

- i) What are the main activities carried out?
- ii) When and where the activities were carried out (including the start date and whether it is ongoing)?
- iii) Who were the key implementation actors and collaborators? (civil society organizations, private sector, foundations, coalitions, networks etc.)?
- iv) What were the resources needed (budget and sources) for the implementation?

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This IMS is being implemented since June 2021 (and is still ongoing) by the IT company Breakpoint from Bosnia and Herzegovina, specialized in development of digital learning resources and financially supported by UNESCO in Bosnia and Herzegovina. The implementation process included following steps: 1. identification of needs in education sector in Una-Sana Canton; 2. Contracting the IT company; 3. IMS setup on cloud; 4. Establishment of server infrastructure in Una-Sana Canton (purchase of server equipment); 5. appointment and training of IMS administrators from the ministry and schools for the use of the IMS; 6. training of teachers for the use of IMS; 7. integration of Office 365 A1 to IMS and creation of distance learning platform; 8. maintenance of the IMS.

- 9. Results outputs and outcomes (250-350 words)

 To the extent possible, please reply to the questions below:
 - i) How was the practice identified as transformative? (e.g., impact on policies, impact on management processes, impact on delivery arrangements or education monitoring, impact on teachers, learners and beneficiary communities etc.);
 - ii) What were the concrete results achieved with regard to outputs and outcomes?
 - iii) Has an assessment of the practice been carried out? If yes, what were the results? *

Installation of the IMS in Una-Sana Canton has impacted the reasoning of education as sector that will never go back to "business as usual", meaning education could not resist to the global digitalization trends. Moreover, IMS proved to be easy-to-use, time-saver and extraordinary real-time monitoring and planning tool that can be accessed from any device and at any time/place. From the policy point of view, data collected providing an excellent overview of the trends and needs in the education sector serve education authorities to advocate for more efficient budgeting, investing and educational planning. For example, based on the data collected on number of ICT devices available at schools, ministry identified need for purchasing 700 laptops for schools and dedicated 1mil BAM in order to purchase this equipment. With this, each classroom in Una-Sana Canton will be equipped by laptops. the main aim of this intervention is to raise the quality of learning and to gradually digitalize the education process in that region of Bosnia and Herzegovina.

10. Lessons learnt (300 words)

To the extent possible, please reply to the following questions:

- i) What were the key triggers for transformation?
- ii) What worked really well what facilitated this?
- iii) What did not work why did it not work? *

The main trigger for this transformation was the raised conscience among education authorities and teaachers that actions should be taken to make the system more accessible and resilient to future shocks.

11. Conclusions (250 words)

Please describe why may this intervention be considered a "best practice". What recommendations can be made for those intending to adopt the documented "best practice" or how can it help people working on the same issue(s)? *

The establishment of IMS in education should be considered as best practice as it both provides long-term solution for systematic transformation of the education system(s) in times of crisis, and beyond. IMS provides quality data base, which is foundation for any kind of education planning, monitoring and evaluation of learning achievements. On the other side, when accompanied by some type of distance learning platform it enables easy access to learning in times of crisis, preventing learning losses and ensuring real-time communication between students, teachers, care-givers and parents.

12. Further reading

Please provide a list and URLs of key reference documents for additional information on the "best practice" for those who may be interested in knowing how the results benefited the beneficiary group/s. *

https://bosniaherzegovina.un.org/en/165282-digital-learning-look-future