

Article

Mastering Digital Learning

Lessons for creating effective teacher training programmes from Bosnia and Herzegovina

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How can education systems best prepare and support teachers to effectively leverage technology in the classroom? Evidence from implementation of the [Akelius digital learning application](#) (Akelius app) in Bosnia and Herzegovina suggests that practical teacher training programmes -- which connect theory with practice through hands-on learning -- hold promise to support the scale-up of digital learning programmes in the region and beyond.

Since 2019, UNICEF Bosnia and Herzegovina has partnered with the Akelius Foundation to enhance students' language learning (English and German) with the Akelius app. The app provides a gamified learning environment with interactive content to help students learn languages while having fun. Teachers typically access the app through tablets and use a blended learning approach -- combining digital and non-digital activities within the same lesson.

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To facilitate the scale-up of the Akelius app, UNICEF and the Institute of Pre-University Education organized a practical teacher training programme which brought together 76 English and German language teachers for two days. The programme incorporated three main features to encourage hands-on learning connected to real classroom examples.

1. **Peer modeling:** School teachers who took part in the pilot implementation of the Akelius app in 2022/2023 were invited to lead demonstration sessions incorporating the Akelius app. These mock sessions allowed teachers participating in the training to observe different strategies for incorporating the Akelius app as part of their teaching. After each session, teachers had the opportunity to reflect critically, comparing the Akelius app with other digital tools and discussing strategies for using it in their own classrooms.
2. **Flipped classrooms:** On the second day of training, teachers formed groups to prepare and deliver mock lessons incorporating the Akelius app with a specific learning goal. Teachers delivered interactive lessons, combining the Akelius app with non-digital materials. After each practice lesson, reflection sessions were organized to discuss challenges and strategies for incorporating technology to achieve curricular goals.
3. **Structured lesson plans:** Teachers were provided with a manual containing structured lesson plans, which outlined a series of steps and transitions to combine Akelius app activities with non-digital activities to achieve learning goals. This guidance allowed teachers to rapidly identify different ways in which the Akelius app could be leveraged to meet curriculum goals. Teachers were also encouraged to join an online support group on Viber where they could share ideas, best practices, and experiences.

AKELIUS

TEACHER'S MANUAL FOR THE ENGLISH LANGUAGE



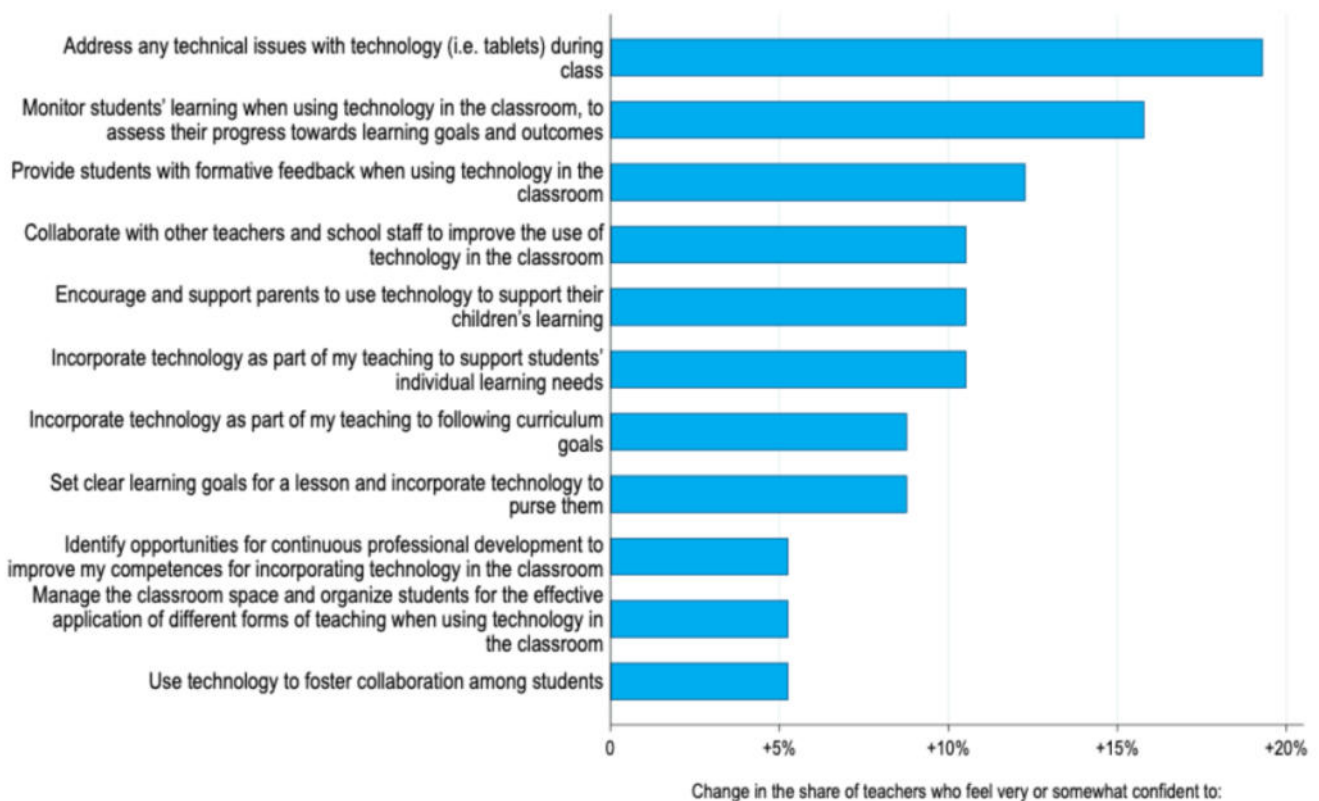
This teacher training initiative aligns with evidence from the [Global Education Evidence Advisor Panel](#), which suggests that providing teachers with a combination of practical teacher training, scripted lesson plans, and mentoring support is one of the most cost-effective interventions to enhance learning outcomes (Banerjee et al. 2023).

The teacher training was met with strong positive feedback from teachers.

When asked about the helpfulness of the programme, teachers gave an average rating of 9.5, out of 10. More than half of teachers (57 per cent) reported that

practical exercises for using the Akelius app were the most useful part of training, followed by peer modelling sessions (39 per cent of teachers).

Results from the pre and post teacher questionnaires suggested that the training programme was associated with increased teachers' confidence for incorporating technology in the classroom. There was an increase in the share of teachers who reported feeling "somewhat confident" or "very confident" to perform key aspects of digital learning, including addressing any technical issues with technology during class (+22 per cent) or monitoring students' learning when using technology in the classroom (+15 per cent).



Note: Only includes results from teachers that completed both pre and post teacher questionnaires (n=28)

In the Western Balkans, evidence is critical to understand what works to support teachers and leverage digital learning.

Teacher training programs in the region are often organized at the municipal or school level with no standardized quality, and often struggle to encourage student-centered teaching practices (OECD, 2020). As a result, teachers in the Western

Balkans are unlikely to update their pedagogical approaches after teacher training (Ibid). This is particularly true for teacher training programs on digital learning, which were rapidly organized in an ad-hoc manner by schools or municipalities during the COVID-19 pandemic.

Throughout the semester, teachers will incorporate the Akelius app within their lessons and share monthly feedback before receiving a training certification. UNICEF will leverage teacher feedback data to generate additional evidence on the effectiveness of the training programme and the implementation of the Akelius app. [Follow along](#) the progress of this research as we test, iterate, learn and document a path to deliver digital learning at scale in the region and beyond.



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