

Clear evidence, better decisions, more learning.

Session 5: How can I ensure that students are provided with quality educational content at the right level?

November 2022







About this document

Recommended citation

Mazari, H., & Kaye, T. (2022, November 7). Session 5: How can I use EdTech to ensure that students are provided with quality educational content at the right level? [EdTech Hub Presentation]. https://doi.org/10.53832/edtechhub.0139. Available at https://docs.edtechhub.org/lib/PPRW2NTQ. Available under Creative Commons Attribution 4.0 International, https://creativecommons.org/licenses/by/4.0/.

License

Creative Commons Attribution 4.0 International https://creativecommons.org/licenses/by/4.0/.

You are free to share (copy and redistribute the material in any medium or format) and adapt (remix, transform, and build upon the material) for any purpose, even commercially. You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

Notes

EdTech Hub is supported by UK aid (Foreign, Commonwealth and Development Office), Bill & Melinda Gates Foundation, World Bank, and UNICEF. The views expressed in this document do not necessarily reflect the views of UK aid (Foreign, Commonwealth and Development Office), Bill & Melinda Gates Foundation, World Bank, and UNICEF.

Background

The Strategic Choices for Education Reform workshop held in Zimbabwe in November 2022 aimed to provide a forum for senior government officials to reflect and consider the strategic reform options for their countries. The objective was to convene officials in key positions in the ministries of education, higher education, finance, and planning to learn about important issues and approaches in education; exchange experiences and lessons; develop an understanding of what is necessary to reconstruct better and more resilient education systems; and to transform the large potential of young people, through human capital investments, into development and prosperity.

EdTech Hub was invited to facilitate the day of the workshop focused on harnessing ICT for better teaching and learning. This presentation is one of several used in the workshop to promote learning, discussion, and problem solving among the participants. We have published four presentations. Details are on the next slide.

Published presentations from the workshop

We have published four presentations from the workshop, you can access these in our Evidence Library using the following links

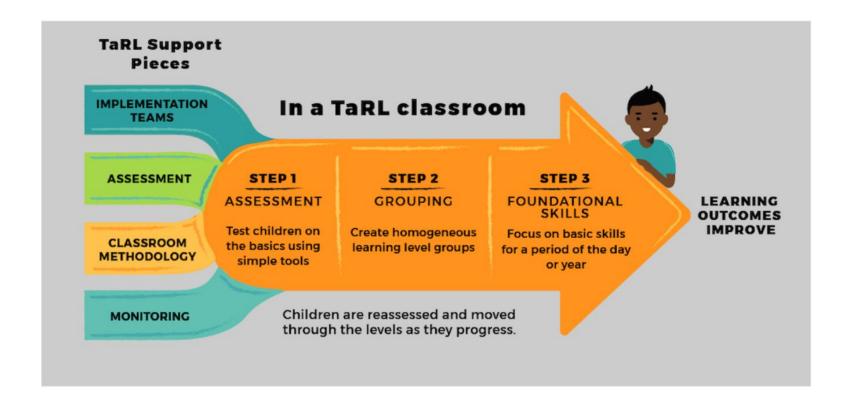
- Session 3: How can I develop an aligned and actionable EdTech strategy
- Session 4: How can I rapidly upskill my large teacher workforce?
- Session 5: How can I use EdTech to ensure that students are provided with quality educational content, at the right level?
- Session 6: How do I ensure my EdTech investments are cost effective

Addressing the global learning crisis through student-centred instruction

Teaching at the Right Level (TaRL) has been proven to improve learning outcomes through a range of implementation models that can:

- range from short bursts of activities or for an hour a day over a longer period.
- be facilitated by community volunteers or teachers.
- be organised during or outside of school (i.e., remedial pull-out programmes, summer camps, or after-school reading camps).

How does TaRL work?



Delivering TaRL can put pressure on teachers









Barriers to TaRL at the school level include:

- resource constraints
- high levels of student-to-teacher ratios
- gaps in pedagogical skills
- demands of regular workload and meeting curricular objectives

Curriculum-aligned content can support TaRL delivery

Content should be developed through a process of identifying and mapping

- Define and identify suitable content based on these questions:
 - 1. Can this content help the learner and is it better than having no content?
 - 2. Does this content contain anything that disqualifies it?
- Align content to sub-topics rather than to each specific skill
- Curate rather than create where possible, while also fostering a culture of open licensing for all content
- Develop a content library that is as comprehensive as possible to ensure users are confident that the resources can meet their needs

Define criteria and identify suitable content

Source content

Prepare and map content

Publish open licensed content

Source: (†Groeneveld et al., 2022)

Using technology to support content delivery

	Curriculum-aligned learning content can be delivered in multiple ways		
	Teacher-enhanced delivery	Learning Management System (LMS)	Digital Personalised Learning (DPL)
How is it used?	Teachers use content to support their instruction through blended or distance learning.	Software is used to create, manage, and deliver online courses, and can be used to track student usage and progress.	Learning pathways are developed in response to a student's grasp of content and learning level.
How can this support remedial learning?	Content can address gaps in pedagogical skills and subject-matter knowledge, making more time for teachers to support struggling students.	Teachers and school administrators can use an LMS to identify students who are falling behind and prescribe remedial interventions.	Instruction is provided at the student's right level and can address learning gaps as they emerge.
How can data help determine what content students should engage with?	Paper-based formative assignments can be used to identify struggling students.	Data from an LMS can be used to quickly identify learning gaps on specific lesson topics or skills. Teachers can prescribe plans for remedial learning.	Technology uses data to adapt the content students engage with. Teachers can support learning by cultivating critical thinking, collaboration, and socio-emotional learning

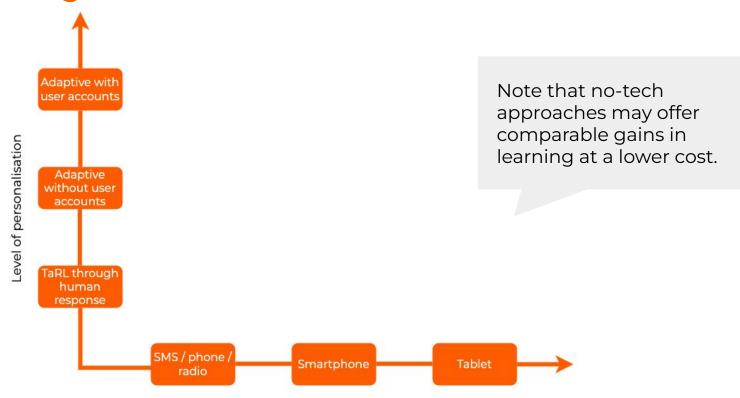
DPL has a positive impact on learning

Out of these delivery methods, DPL has a statistically significant positive impact on learning by:

- complementing TaRL approaches with adapted content delivery
- closing educational gaps through adaptive remedial instruction
- performing routine tasks to free up teachers to spend more time on aspects of education where they have comparative advantages over technology



DPL can encompass various approaches and technologies



Lower tech (lower cost) -- Level of technology -- Higher tech (higher cost)

Low-tech initiatives being studied by EdTech Hub



Pakistan (with SDPI)

Initiative: Researching the effectiveness of TaRL delivered over WhatsApp to learners from a disadvantaged district.



Kenya (with M-Shule)

Initiative: Researching whether existing SMS-based DPL implementation for primary grades can improve learning for girls.

High-tech initiatives being studied by EdTech Hub



Malawi (with onebillion)

Initiative: Deploying low-cost tablets with DPL to explore scalability and cost effectiveness.



Kenya (with EIDU)

Initiative: A DPL platform is being deployed on low-cost Android phones and is being aligned with a structural pedagogy programme

DPL is proven to be impactful, but we need to learn more

DPL seems to have potential for low-attaining groups	Low-attaining learners may have more learning gains from DPL than high-attaining learners, which creates opportunities for learners returning to school after a disruption or for low-performing populations.	
Teaching at the Right Level (TaRL) seems to be most effective	An approach that adjusts the intervention to the learner's level seems more effective than approaches that have learners determine their own path, or which rely heavily on assessments.	
DPL does not have to be continuous or integrated to be effective	Short-term interventions of low intensity might have positive effects that are similar to longer-term interventions	
Research shows promise but we don't know enough about scale	Although research in DPL shows that DPL tools are promising, the body of research is not as robust, particularly around cost-effectiveness and scalability.	

Key takeaways

What is DPL?

Technology that enables or supports learning **based on learner characteristics**.

Includes adaptive learning paths, individualised learning paths, Teaching at the Right Level (TaRL), and others.

Is targeted at the learner's proximal level of learning.

What do we know about it?

Research on DPL shows promising findings, but isn't as robust as other areas.

Adjusting to learner's level seems to be most effective.

Doesn't need to be continuous or integrated to be effective.

DPL should prioritise **lower-attaining learners** and consider cost and scale.

References

These references are available digitally in our evidence library at https://docs.edtechhub.org/lib/PPRW2NTQ

Chuang, R., & Proctor, J. (2022). Session 6: How do I ensure my EdTech investments are cost effective [EdTech Hub Presentation]. EdTech Hub. https://doi.org/10.53832/edtechhub.0140. Available from https://docs.edtechhub.org/lib/CWKPJR8R. Available under Creative Commons Attribution 4.0 International. (details)

Groeneveld, C., Michels, G., & Kaye, T. (2022). *Developing a Proof of Concept for a Regional Learning Hub for Eastern and Southern Africa Part 5: Final report* [Technical Report]. EdTech Hub. https://doi.org/10.53832/edtechhub.0079. Available from https://docs.edtechhub.org/lib/5XBMPDX6. Available under Creative Commons Attribution 4.0 International. (details)

Koomar, S., & Proctor, J. (2022). Session 4: How can I rapidly upskill my large teacher workforce? [EdTech Hub Presentation]. EdTech Hub. https://doi.org/10.53832/edtechhub.0138. Available from https://docs.edtechhub.org/lib/E7C9MN3V. Available under Creative Commons Attribution 4.0 International. (details)

References

Mazari, H., & Kaye, T. (2022). Session 5: How can I use EdTech to ensure that students are provided with quality educational content, at the right level? [EdTech Hub Presentation]. EdTech Hub. https://doi.org/10.53832/edtechhub.0139. Available from https://docs.edtechhub.org/lib/PPRW2NTQ. Available under Creative Commons Attribution 4.0 International. (details)

Wyss, N., Mbugua, W., & Kaye, T. (2022). Session 3: How can I develop an aligned and actionable EdTech strategy [EdTech Hub Presentation]. EdTech Hub. https://doi.org/10.53832/edtechhub.0137. Available from https://docs.edtechhub.org/lib/VVT2BI9M. Available under Creative Commons Attribution 4.0 International. (details)