

Supporting Teachers to Implement Digital Personalised Learning in Kenyan Early Grade Classrooms

Recommendations for policymakers

- ▶ Deliver ongoing teacher training to support digital personalised learning (DPL) integration
- ▶ Co-design strategies that enhance equality of DPL access
- ▶ Conduct teacher-led research on how learners with special educational needs and disabilities can benefit from DPL

Teachers are central to the successful integration of technology in classrooms.¹ Effective teacher training to enable them to facilitate technology implementation is critical if Kenya is to reach its targets for information and

communications technology (ICT) integration at all educational levels and maximise the potential of such technologies to enhance learning outcomes.² Capacity building of teachers is, as such, a defined strategy within education reform.³

This brief for education policymakers, officials, and implementing partners aims to support evidence-based decision-making about the implementation of a specific form of education technology — digital personalised learning (DPL) — in Kenyan early grade classrooms. It presents findings from research independently evaluating the use of a DPL tool developed by EIDU in pre-primary schools in Kenya. Recommendations are offered, drawing on transferable learnings about the role of teachers in facilitating DPL implementation, the challenges they face, and opportunities for ongoing support.

Evidence from research in Kenya

The research involved:



**Design-based
research with
teachers**



**Randomised
controlled trials
(RCTs)**



**A/B/n
software
testing**

This brief reports evidence from design-based research involving teachers from pre-primary government schools in Mombasa County and low-cost private primary schools in Nairobi, conducted between 2022 and 2024.⁴

Teachers can affect equitable access to DPL

The research focused on one or two DPL tools being shared among learners during the school day, indicating that teachers tend to give the tool more frequently to those whom they define as “fast learners” — those who have finished their classwork first. In contrast, learners whom teachers term “time takers” tend to use the tool at break time. Teachers, therefore, face the challenge of ensuring that all learners have an equal number of turns on the device.

Integrating DPL into existing classroom practices requires teachers to make informed decisions

Some teachers choose to distribute the DPL tools to learners during break times to avoid disrupting whole-class teaching, while others hand them out during classroom activities to help consolidate learning. While different approaches have their advantages, teachers need to make informed decisions about the educational aim of using DPL and, therefore, what would best support learners’ development.

Teachers can use DPL tools as learning aids, alongside providing their own personalised support to learners

While DPL tools can adapt to learners’ needs or characteristics, the research also highlights that teachers personalise their own support for learners when DPL tools are used in the classroom. Some teachers support learners when they use the DPL tool, while others use the DPL to occupy

certain learners, allowing them to offer tailored support to other learners completing classwork.

Recommendations

▶ Deliver ongoing teaching training to support DPL integration

To implement DPL technology effectively, teachers need to make decisions about how to use the hardware and software to support defined learning objectives and effectively manage technology in their classrooms.

Providing teachers with the skills to make these decisions should be central to teacher professional development programmes. A flexible approach that develops teachers' transferable skills rather than a fixed approach for DPL implementation is required to enable teachers to adapt their methods to suit specific school contexts and learner needs.

▶ Co-design strategies that enhance equality of DPL access

When technology is shared between learners in a classroom, teachers face the challenge of managing equal distribution alongside other existing classroom management responsibilities. One role of early-childhood development officers could be to co-design strategies with teachers to support the device-sharing process and therefore enhance equality of DPL access.

▶ Conduct teacher-led research on how learners with special educational needs and disabilities can benefit from DPL

This is an evidence gap that requires more investigation to ensure that marginalised learners are not left behind. Any strategies to support DPL accessibility should also be included in ongoing teacher training programmes.

Other briefs in this series

- **#1: Enhancing Foundational Literacy and Numeracy in Kenya Through Digital Personalised Learning**
<https://docs.edtechhub.org/lib/FI95U3TI>
- **#3: Designing Digital Personalised Learning: Critical questions for software development**
<https://docs.edtechhub.org/lib/7CTEMKPN>
- **#4: Developing Data Dashboards for Teachers on Digital Personalised Learning Tools**
<https://docs.edtechhub.org/lib/2Z6CATR4>

About this document

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Endnotes

1. Haßler, B., Major, L., Warwick, P., Watson, S., Hennessy, S., & Nicholl, B. (2016). *A Short Guide on the Use of Technology for Learning: Perspectives and Toolkit for Discussion*. Faculty of Education, University of Cambridge. <https://www.educ.cam.ac.uk/people/staff/watson/A%20Short%20Guide%20on%20the%20Use%20of%20Technology%20in%20Learning.pdf>
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3. A Policy Framework for Reforming Education and Training for Sustainable Development in Kenya: Towards Realizing Quality, Relevant and Inclusive Education and Training for Sustainable Development, No. Sessional Paper No. 1 of 2019, Republic of Kenya, Ministry of Education. Retrieved 21 August 2025, from <https://repository.kippira.or.ke/server/api/core/bitstreams/0aaca25d-422c-46d4-b387-794f701e48e7/content>
4. All evidence below is reported in: Daltry, R., Hinks, J., Sun, C., Major, L., Otieno, M., & Otieno, K. (2025). Integrating digital personalised learning into early-grade classroom practice: A teacher–researcher design-based research partnership in Kenya. *Education Sciences*, 15(6), 698. <https://doi.org/10.3390/educsci15060698>