Guidance Note 12 Ensuring rigorous monitoring and evaluation of initiatives using digital technologies in education for the most marginalised

From the Report: Education for the most marginalised post-COVID-19: Guidance for governments on the use of digital technologies in education

ACT THREE (OF THREE): GUIDANCE NOTES

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EdTech Hub
Clear evidence, better decisions, more learning.

Guidance Note: Ensuring rigorous monitoring and evaluation of initiatives using digital technologies in education for the most marginalised[1]

Context

It is widely agreed that 'monitoring and evaluation' are essential for effective improvement and quality assurance in the use of digital technologies in education systems, but almost equal agreement that insufficient good quality monitoring and evaluation is actually done.[2] This was one of the underlying reasons for DFID (Department for International Development) and the World Bank creating the EdTech Hub initiative, to bring together better understandings of how digital technologies can be used to support education outcomes across the economically poorer countries of the world.[3]

The first step that governments need to take in implementing effective review systems pertaining to the use of digital technologies in education is to differentiate clearly between *monitoring* and *evaluation*:

- Monitoring is the continuing, ongoing process through which participants (teachers, learners, administrators, and partners) in any initiative reflect on all aspects of its progress, and seek to implement improvements that will result in better educational outcomes.
- Evaluation is usually seen as an 'end of project' assessment of delivery against a set of original goals, and is usually undertaken by external evaluators (consultants) at the behest of a funder (donor or government) to indicate whether or not value for money was achieved, and also hopefully to share good practices more widely through the system (although this rarely happens).

In many ways, it is actually the regular monitoring by those involved in the education system itself that is of most importance in practically improving delivery for the teachers/facilitators and learners on the ground. All too often, though, it is the evaluation on which most effort and resources are expended, since such projects are frequently funded by

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1   Lead author Tim Unwin. This guidance note builds heavily on material in Wagner, D.A., Day, B., James, T., Kozma, R.B., Miller, J., and Unwin, T. (2005) *The impact of ICTs in education for development: A monitoring and evaluation handbook*, Washington DC: infoDev, http://www.infodev.org/infodev-files/resource/InfodevDocuments_9.pdf.

2   This is despite repeated emphasis of the point over many years. See for example, the work of Education Impact at the WISE Summit in 2010, 'Monitoring and evaluation of ICT in education initiatives: Reflections from WISE', https://unwin.wordpress.com/2010/12/08/monitoring-and-evaluation-of-ict-in-education-initiatives-reflections-from-wise/.

3   https://edtechhub.org.

donors in some form or another, and they need to prove to their stakeholders that money has been spent wisely.

To improve both monitoring and evaluation, it is important to learn from previous initiatives, and for governments not to make the same mistakes that others have made in the past. The following lists of things not to do and things not to forget are helpful reminders of this.

Things *not* to do

- Don't embark on monitoring and evaluation unless the appropriate funding is in place (this should be at least 10% of a project budget).
- Don't try to rush the implementation of ICT for education initiatives, and forget to include monitoring and evaluation; both monitoring and evaluation need to be built in from the very beginning, and not done as an afterthought.
- Don't simply monitor and evaluate for the sake of it; don't measure for the sake of measuring.
- Don't impose a punitive management structure that seeks to use monitoring and evaluation primarily as a way of negatively criticising performance (of individuals and of institutions).
- Don't focus exclusively on the digital technology; remember that it is the learning outcomes that are of most importance.
- Don't allow self-reporting to be the only way to evaluate learning in a target population; and don't only use external people for monitoring and evaluation.
- Don't just focus on the evaluation, and forget about the all-important monitoring and self-improvement.
- Don't just use one method or approach; remember that quantitative and qualitative methods provide different explanations and understandings of a process.
- Don't try and cut costs by using inexperienced evaluators who don't have appropriate experience in monitoring and evaluating the use of digital technologies for education.

Things *not* to forget

- Don't forget that 'culture is local' and both monitoring and evaluation therefore need to be designed within their local geographical and cultural contexts.
- Don't forget to consider the unintended results of an initiative or programme; these may be the most important outcomes, so they need to be specifically sought out.
- Don't forget the diversity of digital technologies — they are not just tablets or mobile phones.
- Don't forget to manage the buy-in process with the key stakeholders involved.

The guidance below builds on some of these reminders to suggest positive things that governments can do to ensure that initiatives that use digital technologies to improve learning by the most marginalised focus on improvement through self-reflection (monitoring), and effectively share good practices and experience (evaluation).

▌Guidance

The following ten points serve as a key reminder of the most important things that governments should address in designing and promoting effective monitoring and evaluation of digital technology for education initiatives, especially those concerned with the interests of the most marginalised:

1. **Monitoring and evaluation should be included at all stages** in the development of digital technology for education programmes and initiatives.
2. Understand and allow for the fact that **although monitoring and evaluation have significant cost, time and human resource implications, they are essential** for the development of successful programmes and initiatives.
3. Ensure that **those involved in the monitoring and evaluation are appropriately trained and understand the importance of both monitoring and evaluation.**
4. **Involve as many stakeholders as possible** in monitoring and evaluation, and especially the most marginalised.
5. **Involve the learners** in any evaluation process (see also *Guidance Note on involving learners*).
6. **Assess real student learning and educational outcomes** in the context of the curriculum, and don't just focus on the technological inputs.
7. Make sure that **all monitoring, evaluation and assessment instruments are carefully pilot tested** and appropriate to the context in which they are to be used.
8. Ensure that you promote the idea that **monitoring and evaluation is about learning from the experience of a programme** so that it can be improved and lessons shared more widely.
9. **Disseminate your findings openly and freely** so that others can benefit from your experiences.
10. Remember to focus on **equity issues and how digital technologies have improved relevant learning outcomes for the most marginalised.**

▌Examples

Examples of interesting monitoring and evaluation activities include:

- Fundación Omar Dengo, Investigación y Evalucaión, Informática Educativa, http://www.fod.ac.cr/index.php?option=com_content&view=article&id=1&Itemid=161.
- Jigsaw Consult (2014) MBRSLP research 2013–2014, https://www.pdffiller.com/299517646-MBRSLP-research-2013-2014pdf-Jigsaw-Consult-Document-Mohammed-Bin-Rashid-Smart-Learning-smartlearning-gov-Various-Fillable-Forms.
- UNICEF, EduTrac in Uganda, https://www.unicef.org/uganda/what-we-do/edutrac.

▌Suggested further reading

- Newman, D., Jaciw, A.P. and Lazarev, V. (2017) *Guidelines for conducting and reporting EdTech impact research in U.S. K-12 schools*, Palo Alto: Empirical Education and ETIN.
- UNESCO (2016) *Designing effective monitoring and evaluation of education systems for 2030: A global synthesis of policies and practices*, Draft document,

http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/me-report.pdf.

- Unwin, T. (2018) *Why we don't really know very much about the influence of ICTs on learning and education*, https://unwin.wordpress.com/2018/07/16/why-we-dont-really-know-very-much-about-the-influence-of-icts-on-learning-and-education/.
- Wagner, D.A., Day, B., James, T., Kozma, R.B., Miller, J., and Unwin, T. (2005) *The impact of ICTs in education for development: A monitoring and evaluation handbook*, Washington DC: infoDev, http://www.infodev.org/infodev-files/resource/InfodevDocuments_9.pdf.

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