

6. DOS AND DON'TS IN MONITORING AND EVALUATION

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Executive Summary

- This concluding chapter provides a checklist of recommendations relating to the practical monitoring and evaluation of ICTE initiatives in the form of a series of 'Dos' and 'Don'ts'.
- It is intended explicitly for a range of practitioners, from government officials, policy makers and planners, to teachers and learners in a variety of types of educational establishment.

This chapter draws together the key recommendations of the previous chapters. It is designed to be accessible to policy makers, program managers, implementers and evaluators, as well lay users, at the international and national levels. Not only does it reiterate some themes from the previous chapters (identified in parentheses after each sub-heading, where possible), but it also seeks to identify less evident issues, especially those that are of longer-term benefit and impact.

Of course, *dos* and *don'ts* are often merely different sides of the same coin. However, we are also conscious that there are things that we can practically *do* that can make a real difference to the success of technology enhanced learning programs, as well as traps that we all too often fall into if we do not consciously think about things we should *not do!* The following sections are organised accordingly. Moreover, there are some issues that are of such importance that we have decided to discuss them from different angles in each of the two main sections.

6.1 DOS

In this section, we summarize the most important issues that practitioners should actively *do* to appropriately introduce and use monitoring and evaluation techniques in implementing any initiative aimed at ICT enhanced learning.

Things to do...

1. ***Do include monitoring and evaluation at all stages in educational programs (3.4).***

This *Handbook* has emphasized throughout the importance of creating a virtuous cycle of improvement in education through the use of monitoring and evaluation techniques as integral components of all ICT4E activities from their inception. Thus, teachers and learners are encouraged to both monitor their progress and think of ways in which they could enhance what they have been doing in a system of continual self-evaluation and quality enhancement. There should then be opportunities for this to be fed back into systemic aspects of educational provision through regular evaluation. Monitoring and evaluation should not therefore be treated as one-off exercises, but should rather be embedded across all aspects of educational provision. Finally, practitioners should clearly distinguish monitoring activities from the formative and summative evaluation of performance criteria as well as from any subsequent research.

2. ***Do recognize that although monitoring and evaluation have significant cost, time and human resource implications, they are essential for successful programs (2; 3.11).***

The temptation to avoid these additional costs until the later stages of any ICT4E initiative should be resisted. Instead, appropriate monitoring and evaluation processes for a particular initiative should be identified (as described in chapters 2 and 3), and the associated overhead costs should be estimated up front. It is then essential to ensure that management personnel and donor agencies understand and are fully committed to these overheads, as well as being committed to take forward the recommendations

resulting from monitoring and evaluation. We estimate that about 5-10 percent of any ICT4E project should be set aside for monitoring and evaluation, depending on the scope and scale of the project.

3. ***Do ensure that those involved in the monitoring and evaluation are appropriately trained and understand the importance of monitoring and evaluation (2; 3.3).***

It is essential that the implementers understand the methods and reasoning behind the monitoring and evaluation techniques that they are employing. Depending on the initiative, different levels of implementer may be needed, with accordingly different types of monitoring and evaluation training. It is equally important that program implementers accept responsibility for the processes used, are fully committed to them, and feel empowered to convince all other stakeholders (including the inevitable sceptics) of their short and long-term benefits. Monitoring and evaluation is not an exercise that can be safely left to paid consultants from the “head office”.

4. ***Do involve as many stakeholders as possible in monitoring and evaluation (2; 3.10).***

We are not dealing with an exact science. The best results are as dependent on involving a broad range of appropriate stakeholders as they are on identifying the most suitable and pragmatic monitoring and evaluation techniques. This requires significant effort at an initiative’s inception in identifying who the key target groups will be in the implementation, as well as understanding what anticipated outcomes are desired for each of these groups. In addition to improving quality and the likelihood of sustainability, this approach creates awareness and helps to build capacity.

5. ***Do involve the learners in any evaluation process (2; 3.10).***

It is remarkable how few studies actually take into consideration or report the attitudes and opinions of the end-beneficiaries of ICT-based educational initiatives. Our experience in Africa is that despite children being the beneficiaries of much well-intentioned support from civil society organisations, and the recipients of visits from many foreign observers, they are seldom, if ever, asked for their opinions. Consequently, the educational initiatives that they were ‘subjected to’ may not necessarily be meeting their main needs and priorities. Learners should therefore be involved from the earliest planning stages in the implementation of educational ICT programs. They should be included in the identification of targets, in the design of the monitoring and evaluation processes, and in the reporting and dissemination phases. Remember too, that everyone is a learner! Teachers are just as much learners as pupils, especially in the early stages of the implementation of technology-enhanced educational initiatives.

6. ***Do assess student learning (2).***

In many programs or projects, the most important outcome is an increase in student learning. It is important to measure this as directly as is possible and affordable. Learning achievement indicators should be linked to the goals of the project and the ways ICT are used. To the extent appropriate, the full range of student learning outcomes should be measured: school subject learning, ICT skills, and 21st century skills. Often this requires the design of learning measures that are customized to a particular program or project.

7. ***Do make sure that all monitoring, evaluation and assessment instruments are carefully pilot tested (1; 3.6).***

It is crucial to ensure that the chosen instruments do indeed measure what they are intended to measure in the circumstances within which the measurements are to be made. This includes the development of appropriate indicators to monitor outputs and outcomes, as well as ensuring that the data that you collect is really relevant and that you know what you will do with the data once you have collected it. When it is important to establish causality, use experimental and quasi-experimental evaluation designs. For example, to establish that an educational improvement is due to the use of ICT, it is necessary to have some schools or classrooms use ICT while other equivalent schools or classrooms do not use it. However, the introduction of ICT is often accompanied by such changes as teacher training, new curriculum, or new pedagogical approaches. Indeed, we recommend this. In these cases, all these interventions should be considered as a package, and only combined impact can be measured.

8. ***Do ensure that you promote the idea that monitoring and evaluation is about learning from the experiences of a program (3.12; 4).***

The establishment of a culture of monitoring and evaluation is important—where all stakeholders appreciate the short and long-term benefits, and accept the additional costs and effort involved. No

matter how sceptical some may become when confronted with the near-term difficulties of M&E (costs, time, training, etc.), it is important to emphasize the cumulative impact of the learning and associated research that this effort will stimulate, and the improved probability of genuinely sustainable development that will result. The approach should be flexible and innovative, geared to the needs of the stakeholders rather than a recipe book (or this Handbook)! One must incorporate a range of different approaches to M&E, and be prepared to make adaptations as the project evolves.

9. Do disseminate your findings so that others can benefit from your experiences (3.10-12, 4).

It is all too easy once an evaluation has been undertaken for it to be filed away and forgotten. Apart from minimising any practical impact on the learning environment, it will also prevent others (e.g., direct stakeholders or those interested in undertaking a similar program in the future) from learning from the successes and mistakes recorded. Moreover, this dissemination needs to be in as diverse media as possible to provide access to many different groups of people. Publishing excellent reports in obscure academic journals is not good enough! Nor are simplistic press releases with senior officers pronouncing on the 'good works' accomplished! Monitoring and evaluation reports should be made accessible to all major stakeholders at built in checkpoints and milestones, and presented in formats appropriate for the key stakeholders, using computer-based tools and electronic reporting where appropriate.

10. Do remember to keep the MDGs in mind, and the need to prioritize the most excluded (7).

A focus on the poor within MDG goals does not automatically happen when working on digital divide problems. Not all gaps are created equal, so to speak. Some have more valence than others. While there are many ways that can help varying groups of individuals, helping promote ICTs in peri-urban Indian high schools in English is not the same thing as helping girls who have dropped out of primary school get back into class.

11. Do try to create M&E tools that allow the possibility of supporting not only the MDG goals, but also effective strategies that work (5).

Using internationally developed M&E tools can provide important ways to compare and contrast results of ICT for education worldwide; but they made also mask important ways in which locally developed tools can provide greater precision for project implementation.

6.2. DON'TS

In advocating the importance of disseminating good practice in monitoring and evaluation, the authors of this handbook have always tried to be positive in their suggestions. We have thus sought to *encourage* people to be innovative, to *build* on examples of successful initiatives elsewhere, and to *develop* monitoring and evaluation practices that are integral to the entire education process. This section of the *Handbook* is rather different in approach. We have tried here to provide a summary of some of the things that tend to go wrong in the practical delivery of monitoring and evaluation activities. We raise them primarily to serve as a checklist – intended to limit the chance of someone accidentally slipping up despite having followed the good precepts (hopefully) identified previously! The material is presented in three distinct sections: first, the 'active don'ts', where we focus on the most important things that you should *not* do when initiating monitoring and evaluation activities associated with technology enhanced learning; second, we summarize things that it is all too easy to forget; and then there is a short final section – for those who make it that far.

Things not to do...

1. Don't simply monitor and evaluate for the sake of it; don't measure for the sake of measuring (3.6).

It is easy to get into the habit of evaluating and monitoring for the sake of it, without any real purpose for so doing. Even worse can be the situation where an external donor or agency supporting an educational initiative insists that there should be an M&E process in place, without anyone involved really knowing why. Such initiatives, while satisfying the interests of the donors, may have little or no real benefit for the intended beneficiaries. For example, it is much more important to know whether the methods used have actually enhanced the experiences of learners than it is to know whether a school has acquired a targeted number of computers. This also highlights the need for such evaluations

to focus primarily on outputs, rather than simply measuring the inputs into a program. For monitoring to be part of an ongoing process of educational enhancement it is crucial that all involved in the process know why they are engaged in it.

2. *Don't impose a punitive management structure that seeks to use monitoring and evaluation as a way of negatively criticizing performance* (3.12).

Monitoring and evaluation procedures are sometimes imposed in a top-down manner on unwilling educators who fear that it is being used merely as a means to criticize their performance. The introduction of new technologies into learning contexts can be threatening, and in order to minimize such threats it is essential that teachers are closely involved in the design and implementation of the relevant procedures. The use of ICT may transform the role of a teacher into that of a facilitator, and can subtly shift the power relationships within a learning environment away from the teacher and towards the learner. This need not be seen as threat, because learners invariably retain their respect and admiration for teachers who actually help them to learn. Managers should nevertheless make it clear from the outset that they are not using monitoring and evaluation processes to criticize individual teacher performances, but rather as part of a package of activities designed to achieve an overall increase in educational attainment at several levels.

3. *Don't embark on monitoring and evaluation unless sufficient funding is in place.*

Successful monitoring and evaluation must build on appropriate and relevant baseline studies that provide the basis for comparative accounts of the impact that any initiative has had. This cannot be done after the event, and neither can it necessarily be done cheaply. It is therefore essential for sufficient funding to be in place at the start of any such initiative so that a comprehensive M&E program can be incorporated from the very beginning. The allocation of funding is also an indication that those supporting or proposing the initiative are also really committed to seeing it through effectively, and if necessary to change aspects of delivery on the way in response to the comments of teachers and learners. Given the difficulty and complexity of implementing technology-enhanced learning activities, often with limited resources, it is also simply not feasible to expect those involved to spend their time chasing additional resources to undertake the monitoring activities that should have been in place at the start! Such effort is highly likely to detract from the actual implementation of the proposed activities themselves. Another aspect of this issue is that if funding gets tight towards the end of the program, don't simply save costs by cutting the monitoring and evaluation.

4. *Don't try to rush the implementation of ICT for education initiatives* (2; 3.12; 4).

Successful and sustainable programs designed to enhance education through the use of new technologies cannot be implemented overnight (see Chile Box 4.4). There is a great deal of desire to implement rapid changes designed to transform educational systems in poor countries overnight, but this is usually unfeasible and unrealistic. We need to plan systemic changes over at least a decade, and not merely concentrate on things that can be done in the short term. It also takes time for the results of regular monitoring to be clear, and for these then to be incorporated into changes in the educational system under consideration. Before a great deal is said about the influence of ICT on learning, we need to have undertaken sufficient longitudinal studies to enable reliable conclusions to be drawn about their real costs and benefits.

5. *Don't focus exclusively on the technology* (1).

It is tempting in monitoring and evaluating the role of new technologies in education programs to focus exclusively on the technology. However, it may be, for example, that the key success factor in a particular ICT-based program is the increased attention given to teachers and their training, rather than their actual use of the technology itself. We must be sure that we concentrate primarily on the educational objectives, and explore a sufficiently wide range of causal variables before firm conclusions are reached.

6. *Don't allow self-reporting to be the only way to ascertain learning in a target population; and don't only use external people for monitoring and evaluation* (3.3).

It is not easy to get the balance right between self-monitoring and external evaluation. However, it is very important that all such processes include not only the relevant stakeholders, but also experienced people from 'outside' who can bring a different perspective, and ask the difficult questions that could so

easily be ignored in a purely self-reporting environment. In so doing, though, it is important that people with practical experience and cultural sensitivity are chosen actually to work with these communities to identify how best to enhance learning outcomes.

Things not to forget...

7. *Don't forget that "culture is local" (5).*

Be aware of the anthropological dimension of all interventions, especially those in multicultural societies. No technology is culture-neutral, nor is any implementation that uses multimedia, linguistic and other educational content. When designing monitoring and evaluation tools, these must not be simply dropped in from other studies carried out elsewhere. They need to be refined to suit local needs and cultures.

8. *Don't forget to consider the unintended results of programs (chap 1; 3.4).*

Programs have both intended and unintended results. Evaluations focus mainly on intended results, because that is what they are usually specifically set up to do. Post-project evaluation reviews, desired by many donors, typically measure whether a project has delivered on its targets. Rarely do they seek to explore other impacts that they may have had along the way. It could be, for example, that the introduction of ICT into a learning environment has little effect on the formal educational processes as measured by traditional examination systems, whereas learners may have gained a wealth of other skills and knowledge through using such facilities. This learning impact could be missed entirely by an evaluation that concentrated only on the effects of the changes on examination performance (See Namibia, Box 3.1).

9. *Don't forget that ICT covers a wide variety of technologies – not just computers (1; 3.7).*

With all of the emphasis on the use of computers and the Internet (see Khanya Project Box 3.3), it is very important that other technologies are not ignored. Basic technologies such as radio and television have many uses in the enhancement of education, as do recent technologies such as the use of mobile telephones and other hand-held devices. The ways in which all of these different technologies enhance both information transfer and communication need to be fully investigated before any convincing conclusions are drawn.

10. *Don't forget to manage the buy-in process with key stakeholders (3.10; 4).*

The importance of learners in the processes of monitoring and evaluation has already been stressed. However, it is important that other groups are also not forgotten. Precisely who these stakeholders are will vary depending on the circumstances, but the list of stakeholders (see Box 4.1) provides a quick check on some of the most important people who should always be included. It is all too easy, for example, to forget to involve parents, employers and even government departments in undertaking monitoring and evaluation processes. Failure to include them will not only give rise to a partial set of conclusions, but more importantly it will also mean that it will be much less easy to implement any consequent recommendations. If people feel that they have been involved in the process, they are much more likely to be positive about its proposed action plan.

11. *Don't forget the importance of contextual and geographical variation (1; 3.7; 5).*

The actual places where monitoring and evaluation are undertaken are crucial factors influencing the results obtained. Focusing on a group of urban schools with access to electricity and the internet may be important if one wants to show what is potentially feasible in poor countries. However, if one wants to obtain a wider picture of the role of technology in educational programs across Africa, for example, it is equally important to monitor their uses in some of the most marginalized and poorly served communities across the continent. It is therefore essential that one does not forget to incorporate appropriate sampling strategies in monitoring and evaluation activities (5).

And finally...

12. *Don't worry if you don't get it right the first time (ALL chapters)!*

There is no definitively correct way to undertake monitoring and evaluation of technology enhanced learning programs. This Handbook has tried to provide users with a range of ideas and a set of possible tools that they might use in the particular circumstances in which they find themselves. There are no

absolutely right or wrong answers in how to go about this. Taking risks and making mistakes is how progress is made.

13. ***Don't leave your ICT implementation strategy talks without having monitoring and evaluation as a funded component of the process.*** Learning from our mistakes, and yes, successes, is the only way (a la Margaret Mead cited in Chapter 5) that we will be able to change how things are done.

6.3. CONCLUSION

We hope that readers are by now convinced that appropriate monitoring and evaluation is essential for the successful implementation of any kind of ICT4E initiative, and that they will also have an understanding of the type of process most relevant to their needs. Cross-references have been provided, where appropriate, to evidence from case studies in the various chapters. There are also a variety of in-depth tools and case information provided in the Annexes. The present document is necessarily a 'work in progress', and we trust that others will be able to build on the present material so that some later compilation will be able to extend further our collective ability to be more certain of investments in ICT4E.