E-Learning for Leadership:

Emerging indicators of effective practice

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NCSL National College for School Leadership

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Introduction

The practice of leadership development has a long history. E-learning, of course, is a much more recent innovation and often supports content-based training programmes. There is little research into the use of e-learning for leadership purposes. The purpose of this study is to begin to characterise effective practice in e-learning for leadership. In order to do this we need first to explore our meaning of the terms:

- leadership development
- e-learning
- effective practice

Exploring the meaning of leadership development

Although the focus of a large and proliferating body of literature, the precise meaning of leadership is difficult to pin down. Cuban (1988) cites more than 350 definitions of leadership, and the much smaller literature on leadership development is based more on belief than evidence (Bush & Glover 2003). For the purposes of this review we used a guiding framework of school leadership drawn from the 10 school leadership propositions set out by the National College for School Leadership.

Exploring the meaning of e-learning

The term 'e-learning' is used widely by a range of people, but its meaning varies. Early in our study it became evident that almost every writer defined the term for themselves. Not surprisingly, most of these definitions offer variations on a theme. All refer in some way to a combination of three core elements: content, technology and services (Henry 2001). In addition, Davis and Harden (2001) identify four major components: courseware, authoring software, virtual learning environments and learning management systems.

Exploring the idea of effective practice

Clearly the notion of effective practice is not clear cut. Whether or not a given activity represents effective practice depends on the purposes and intended outcomes of that activity, the context in which it takes place and the needs and objectives of those who are taking part. The review therefore highlights elements of programmes that were considered successful by providers and/or participants.

About this Study

Since this is a relatively new field of research the related literature is small. As a result, the review considered related, but separate, research into e-learning and leadership development and looked for potential synergies between the two fields. There were two parts to the study: first, a review of research literature which generated a list of criteria to help illuminate, describe and evaluate current practice; second, the validity and utility of these criteria were explored through four case studies of e-learning for leadership programmes in the public and private sectors. The full literature review and case study reports can be found at www.ncsl.org.uk/literaturereviews

What did we look for?

To enable us to get a sense of what effective practice might look like, and how it might be recognised, we began with a series of 11 research questions that guided both the search for relevant sources of information and the analysis and weighting of what we found.

- What motivations and aspirations apply to leadership e-learners?
- How do leadership e-learning programmes successfully recruit and retain learners?
- How is success evaluated? What application and impact is attributable?
- What factors produce satisfying learning experiences?
- What features are included in programmes deemed successful?
- What are the most effective practices for online tutoring and facilitation arrangements?
- What are the most effective features of online community collaboration for learning?
- Are cost benefits identifiable?
- How effective is e-learning as part of a blended learning experience, compared with conventional face-to-face programmes?
- Considering the programmes in use in corporate/private, public and educational settings, what similarities and differences are evident? What influences are apparent?
- How are curricula and learning processes similar and different across programmes and contexts?

What did we find?

There were some 4,500 citations relating to some aspect of the review. An initial filter reduced this to 90 with apparent relevance; 53 sources contributing significant findings are cited in the review. Not surprisingly, given the novelty of this field of enquiry, few of the sources addressed any of our starting questions directly. However much relevant evidence emerged to inform these questions, both directly and indirectly.

Key Findings

The review of research literature suggests that effective practices in e-learning for leadership include:

- adopting a learner-centred approach to the design and delivery of programmes
- ensuring a learner-to-programme alignment through a range of pre-programme diagnoses to ascertain:
  - personal goals and aspirations
  - learning style preferences
  - competences with information and communication technologies
  - time management capabilities
  - ease of access to computers
- creating programme content which accords with the cultural values of the professional learners
- taking an efficient and effective approach to programme provision
- providing opportunities for the professional learners to get to know one another prior to the commencement of programmes in order to optimise peer-to-peer and reciprocal learner-to-facilitator communications
- encouraging the professional learners to develop a group dynamic in order to promote collaborative working within the e-learning environment
- delivering leadership development by means of a blended learning structure – online and offline offerings: although the proportions of a successful blend may vary widely
- offering ongoing support to learners throughout the programme
- devising and implementing measures through which programme quality and learner satisfaction can be continuously appraised
- ensuring availability of fast and reliable internet connections

A further five indicators emerged from the case study research. These suggested:

- linking the programme directly to career advancement
- building in systems that guide/pressure learners to complete the programme
- assessing the e-learning activities so that their quality becomes an essential part of the successful completion of the programme
- ensuring that learning within work time is recognised and legitimated by employers
- ensuring that the programme has high status in the relevant community

Emergent Effective Practice

No single model of practice can guarantee the total success of an e-learning for leadership programme. Indeed there is emerging evidence that the success of a programme is culture-bound and may not, therefore, be generalised upon. However, some common factors are beginning to emerge.

Of paramount importance in the learners' assessment of a course is the extent to which it satisfies their goals and aspirations. Leadership learners want content that is challenging enough to provoke reflective thinking. Evidence drawn from the literature suggests that successful providers of online learning consider how learners' predispositions to ways of building and communicating knowledge impact on the learning process. Personal values may also be important here, although an alignment of the values of the programme with the personal values held by learners seems less important in a business context, where successful completion is linked to an acceptance of organisational aims and objectives that may also be a requirement for promotion.

Although organisational objectives may take priority for some business enterprises, placing the learner at the centre of design and delivery emerges as the most effective practice in e-learning programmes for leadership. Focusing on the learner highlights good practices associated with both the pre-programme phase and the delivery phase of programmes. Effective pre-programme practices include taking account of the learners' needs, preferences, competencies and values (in an education context) in order to inform learning design and delivery. This may take the form of an individual learner needs analysis before the programme starts, a general analysis of user needs that informs the design process, or a combination of the two. The practice of adapting programme design and distribution in response to the learner's experience of the programme is achievable through a process of continual monitoring, which utilises appropriate measures - although this is rare.

In addition to the quality of programmes and their fit with the hopes and ambitions of those engaging with them, key success factors include ICT training for learners prior to the commencement of a course. Following this initial training learners will continue to need ongoing ICT support throughout their courses together with ready access to a computer (preferably at home and in the work place) and stable internet provision delivered at broadband speed.

During the distribution of the programme it is good practice to make support available to learners as they engage with the programme – from tutors and from other learners. Effective practice also involves the provision of opportunities for learners to meet together as a group prior to embarking on the online elements of the programme. This encourages the establishment of group dynamics and facilitates subsequent communication and collaborative processes at individual and group levels. Where this occurs, high levels of comfort with online communications can result, with some headteachers then being happy for online interactions to replace routine face-to-face meetings and other contacts since they find they are too busy with operations management during school hours to engage synchronous communication, ie interacting in the same time frame. One study showed that heads preferred asynchronous email communication, ie with contributions made at different times. These heads felt that ICT released them from the tyranny of the telephone and had abandoned telephoning colleagues for information in favour of conducting their own online searches.

Accepting that individuals will have preferred approaches to their learning, and responding to this by blending an electronic learning environment with more traditional classroom-based learning provision is a successful practice. It is very noticeable that in programmes that have a leadership component within a wider management remit, it is the leadership elements that tend to be addressed face-to-face. This seems to reflect both a recognition that leadership development has both cognitive and affective elements, and a belief that affective learning may not be best pursued through online methods since in this case the development of both intrapersonal and interpersonal skills are an important element.

Finally, there are good practice implications for e-learning providers intent on remaining competitive in the developing marketplace for the products and services related to e-learning for leadership. Recommended good practice in this situation is to emulate the operations of private sector enterprises – in efficiency and effectiveness for example – while ensuring that the learning experiences on offer remain consistent with the personal needs and values of the learners.

Discussion

E-learning is a relatively new approach to learning which has only emerged with the recent development of the internet. The literature relating to e-learning is, therefore, immature and incomplete. The literature relating specifically to e-learning for leadership is very small. As a result it was not possible to find evidence relating to all of our research questions, and even those where some evidence exists were only answered partially. As a result we can see some emerging indicators, but few hard and fast rules that will ensure successful implementation of e-learning for leadership programmes.

Extracting information relevant to e-learning for professional development revealed seven clusters, or fields, within the relevant literature:

1. Learner characteristics and preferences
2. Subject characteristics
3. Learning process characteristics
4. Content and structure characteristics
5. The medium's characteristics
6. The technologies' characteristics
7. Ethical issues

1. Learner characteristics and preferences

Effective practice in e-learning for leadership seems to rely on a degree of empathy with and between learners and tutors or facilitators. The provision of processes whereby learner to learner and learner to tutor communication can be used to build and express such empathy can support the successful completion of a programme. A learner-centred standpoint connects readily with the many factors which combine to determine whether an e-learning for leadership programme is more, or less, effective. For example, a focus on learners suggests a recognition that a programme must start from where the learner is, and signals that their competencies prior to starting the programme should not be taken for granted. Some assessment of learners' related skills, such as ICT skills and facility with time management, and the range of support they may require should be undertaken prior to enrolment. Programme providers should not make assumptions about the ease with which learners can access computers, nor should they assume that there is an internet connection that is reliable, or fast, unless such provision is made in the workplace, and time is set aside to use the connected computer(s).

What emerges most strongly from the literature is that the preference of learners and the choice for providers is not between e-learning and other forms of learning. The evidence is that the most effective learning is delivered by a combination of online and offline offerings to give blended learning. A blended learning structure offers traditional learning processes combined with the delivery of learning via electronic means. Such a structure could reconcile the preferences for interactions which are simultaneous and ordered - such as a series of seminars - expressed by some professional learners, with other learners who prefer their learning experiences to be mediated by non-contiguous and asynchronous transactions often characterised as 'anytime, anywhere' communication. The latter allows learners more time to respond, and to do this when they find it convenient. Consideration of which elements of a programme are best dealt with through which medium is also important here.

If the value of person-to-person communication and its enhancement of learning is accepted, then some kind of pre-course event can provide an opportunity for groups of learners to socialise and be introduced to one another. This might reduce the reluctance of some learners to share aspects of their learning experience and make them more comfortable with meeting other learners in online learning environments, removing a commonly reported barrier to participation. Some providers have successfully implemented such ice-breaker activities online.

In addition to the dynamics of relationships within groups of learners and the context within which learning occurs, learners also have their own learning styles. Learning style preferences are sometimes overlooked in the design and development of e-learning programmes. The argument is that in order to cater for different learning styles a variety of pathways through learning content needs to be provided thereby enabling all participants to achieve desired learning outcomes. This view, though, is contested by other writers, who take the countervailing position that learners are not sophisticated enough to be able to make choices between competing pathways. This may be particularly problematic when some pathways are unfamiliar, for example those with no experience of online learning may avoid it, but once they have tried it there is evidence that many change their minds. An openness to new approaches to learning is an important learner attribute in these cases.

One source of strong learner motivation springs from a close alignment of learning objectives and the individual's goals. Thus e-learning designers and providers should seek to align learning outputs with the personal ambitions of the learners in their programmes. This kind of alignment makes the learner the central focus of e-learning programmes. This, however, is not always the case in the private sector. In this context there is some evidence that learners are displaced as the focus of e-learning provision by business goals. The alignment is thus between learning outputs and business outcomes. This does not seem to compromise the effectiveness of the programmes when learners accept that personal success depends on an acceptance of this realignment with organisational culture.

Motivating e-learners emerges as one of the key issues in e-learning for leadership and other developmental goals. Some professional learners are self-motivating and so not discouraged from engagement with programmes despite the characteristics of the ICT associated with them; others require a more supportive and responsive programme. Clear links between successful completion of the programme and personal advancement are important to learner motivation in the business sector.

Key References

Learner Focus (Alexander, 2001); Professional Learning (McCabe, 2001); Contiguity (McCabe, 2001; Rzoska, 2001; Haughey, 2001); Holistic Preferences (Henry, 2001); Communication (Ng, 2001; Davis, 2001); Barriers (Zimmerman, 2001); Learning Modes (Henry, 2001); Learning Styles (Gunasekaran, 2002; Henry, 2001); Learning Objects (Sparrow, 2000); Success Measures (Galagan, 2001); Blended Learning (Voci, 2001).

A more detailed exploration of these references can be found in the associated literature review on the NCSL website at www.ncsl.org.uk/literaturereviews

2. Subject characteristics

Discourses in the literature are explicit in stating that leadership has to be clearly differentiated from both management and administration. Studies in the UK demonstrate how much time headteachers devote to the operational matters of management and administration at the expense of leadership. Most commentators now assert that leadership within a school is not just confined to the headteacher role. Leadership can also be distributed throughout a school and delegated to teachers at other levels within the institution. At levels below the headteacher distributed leadership can sometimes lead to confusion between subject leadership and managerial leadership. Measures need to be taken to ensure that this kind of role confusion does not arise within a leadership development programme.

Management and administration are both said to be concerned with operations, while leadership is concerned with envisioning an organisational future and developing and implementing strategies to achieve it. A number of authors also argue for the inclusion of affective elements in school leadership development. The cognitive/affective dichotomy may point to a potential limitation of e-learning and its application to leadership. There is ample evidence in the e-learning literature to demonstrate that distributed learning of this kind can be successfully applied to the acquisition of knowledge and technical skills, but there is a noticeable lack of such evidence when it comes to the development of interpersonal skills through the medium of electronic learning. It is noticeable that many programmes that combine elements of management and leadership in a blended delivery model, do tend to offer sessions relating specifically to leadership in a face-to-face mode.

Key References

Leadership, or Management and Administration? (Haughey, 2001; Neil, 2001); Cognitive vs Affective Leadership (Barker, 2001; James, 2001; Beatty, 2001)

3. Learning process characteristics

Some of the literature is evangelistic about e-learning and the opportunities it offers for the development of dynamic learning models. The authors claim that e-learning enhances knowledge, skills and performance and that ICT, the technologies which enable e-learning, will deliver a range of benefits including:

- an improved quality of learning
- easier access to education and training
- reduced costs of education
- improved cost-effectiveness of education

The web-enabled environment in which e-learning is offered is characterised by interactive, self-paced multimedia instruction, the assessment of knowledge and skills, the availability of performance support materials and online communication with tutors and peers. But learners do not automatically engage with this environment and require staged facilitation to help them. Salmon identified the following five stages in the development of e-learning as an enabler of learning processes:

1. Access and motivation
2. Forming online relationships
3. Information exchange
4. Knowledge construction
5. Development

This assumes that there is a group communication element to successful programmes; they are not simply content delivery systems where learners are left alone to work through structured material. Dialogue models and dialogue games are important elements in the learning process and therefore e-learning needs to provide opportunities for collaborative, argumentative and reflective talk and discussion between learners and with tutors.

The provision of online learning requires content and this may be frequently updated and extended. The economies and efficiencies deliverable from the creation of re-usable 'learning objects' - independent elements of teaching resource - are achieving increasing recognition. The advent of repositories of such content objects extends the opportunity to learners to create their own courses although this approach may be fraught with difficulties. Among these are contentions by some observers that learners will not be able to construct their own courses because they are not sufficiently well informed about learning processes. This echoes the debate visited above about learners being offered learning pathway choices.

Key References

Learning is Dynamic (Gunasekaran, 2002); Effective E-learning (Sloman, 2001); Learning Objects (Davis, 2001); What Learning Resources? (Jones, 2001); Changing Teaching (Galagan, 2001); Linking Practice to Theory (Ravenscroft, 2001).

4. Programme content and structure characteristics

In the corporate sector there is a dichotomy. Some business enterprises take control of content and structure to ensure that programmes align with business aims. Other businesses advocate a learner-centred approach to programme content and structure rather than a business-centred one. In the literature this latter approach seems to be prevalent among commercial e-learning providers.

E-learning content is usually modular, and can in theory offer alternative routes through the material and even different ways to approach the same material (although actual examples of this are rare). Choices may be left to the learners. Online learning represents a paradigm shift in training provision. Organisations need a strategy to shift learners to it and therefore cannot abrogate responsibility for content and structure because learner choice is inhibited by a lack of knowledge about different approaches to learning.

Content must offer sufficient cognitive challenges and be structured in such a way that it contains no barriers to the extraction of information by learners. Some authors contend that the content of developmental programmes for school leadership should have a significant school-based element so that there is doing as well as understanding. The importance of vision as a focus for leadership is also highlighted. Authors also argue that the development of competencies is the most important aspect of courseware content. One thread of discourse in the literature develops the proposition that a major advantage of an e-learning community resides in the asynchronicity of online forums because this aspect of ICT allows reflective cognition which is of a higher quality than the reactive thinking that occurs in the instant of a conventional classroom-style synchronous interaction.

In addition to programmes being intellectually appropriate there is debate in the literature suggesting that effective web-based instruction also depends on culturally appropriate design. Thus content and structure will need to consider learner values, student perceptions and styles of communication in pursuit of the desired learning outcomes.

For learners, the e-learning experience must fit tactically and strategically with their goals and aspirations. This means courseware has to be appropriately structured and offer compelling content in order to be appealing, valuable and productive.

Some commentators argue that e-learning providers sometimes confuse provision that is appropriate to the needs of learners with the advanced possibilities offered by innovations in the technology and the medium. What may be possible in practice should not prevail over the needs of learners and what is known about learning. This also implies that the theoretical models underpinning the design of e-learning experiences may need to be extended. Ultimately the developing field of e-learning is going to be subject to regulation and this is already beginning to happen with the intervention of the American Society for Training and Development (ASTD) in the USA and the proposed introduction of SCORM (Sharable Content Object Reference Model) standards for web-enabled distributed learning as well as for virtual learning environments and learning management systems. In the UK the introduction of guidelines for e-learning quality assurance based on QAA guidelines is advocated. It is not clear whether such guidelines will go beyond their current emphasis on technical standards, that support resource sharing, to address content and style.

Whatever the origins of alignments between learning objectives and intrinsic, or extrinsic, goals, there are frequent claims in the literature for e-learning as an emergent paradigm which is providing a new grammar for teaching and training. One element in this new grammar is the release from the classroom, but this is not to be taken as an argument in favour of abandoning the real classroom in favour of the virtual one. Real classrooms and groups of learners remain an important feature in the provision of blended learning. Arguably, evidence of the greatest paradigm shift resides in the change from more passive to more active modes of learning, which some evidence suggests is a more informed strategy for the successful design of professional development programmes.

Key References

Imagination = Vision+Values (Jones, 2000); Style Preferences Approach (Lewis, 2000); SCORM & LMS (Davis, 2001); Standards & Processes (Galagan, 2001); Cognitive Challenges (Harrod, 1998); Understanding & Doing (Creissen & Ellison, 1998); Situated Cognition (McCabe, 2001); Content & Culture (McLoughlin, 1999); Aspirational Goals (Gunasekaran, 2001); LPSH Workshops Success (Parsons, 2000).

5. The medium's characteristics

Some of the multiple definitions of e-learning in the literature regard the distribution of learning via online networks such as the internet, or an intranet, as the crucial feature that differentiates e-learning from other modes of technology-enabled learning. Competing definitions take a broader view and consider e-learning as learning supported by electronically delivered content thereby allowing the inclusion of additional off-line information and communication technologies such as DVD and CD-Rom.

Some of those involved with electronic learning believe that it has generated a paradigm shift in the education and training domains, but just as there is no exact agreement about what constitutes e-learning, there is little agreement about whether its technologies are neutral in their impact on users. There are multiple claims for the benefits of e-learning which revolve predominantly around the improved quality of the learning experience compared to traditional learning. It is claimed that through electronic learning, access to education and training is made easier, the barrier of geographical distance is removed and costs to learners and providers are reduced.

Among the characteristics of this electronic medium are synchronicity and asynchronicity of communication. The views of users about these two properties are mixed. Some users also have reservations about posting material into a shared e-learning environment when they are uncertain about who will be reading it, although some users report finding electronic communication liberating. Gender may be a factor in how learners use online exchanges, but not whether they adopt the practice.

The web and its facilitation of email communications can combine to eliminate time and distance barriers. By these means time zones and geographical separation may have been overcome, but the availability of time to interact with e-learning has emerged as a new constraint. If going online has a perceived time penalty and the experience is comparatively unproductive then users cease to engage with the technology. In this sense time has become the new distance.

Further advantages and disadvantages bound up with the properties of the medium and its associated distribution channels include staff being able to learn at their own pace and in their own time. Online learning has been described as being convenient, flexible, easy to use and available to a wide audience. The disadvantages reported included:

- learning being impersonal with no interaction with teachers or peers
- no offering of personal feedback
- not being suitable for all subjects
- requiring a measure of ICT literacy before commencing

Key References

User Interface (Jones, 2001); Synchronicity/Asynchronicity (Beatty and Robertson, 2001); Advantages and Disadvantages (Baldwin, 2002); Time and Distance Barriers (Gunasekaran, 2002); Bandwidth Matters (Honey, 2001); Pass Rates (Galagan, 2001).

6. The technologies' characteristics

The relationship between learners and the ICT deployed to meet their needs is portrayed in the literature as a complex one and is not yet fully understood. For some professional learners the technology through which they are offered learning opportunities appears to be capable of influencing motivation. The comparative stability and speed of internet connections, for example, can influence their enthusiasm for continuing with a programme. Where the connection is unreliable and communication via the online network is slow, the evidence suggests that learners become discouraged and cease to engage with the technology, which has become a barrier to their learning.

Studies rarely elaborate on the design of the software used for the delivery of a programme – or the quality of learner connectivity. However, it is clear that the quality of both of these factors will affect the success of a programme. The absence of analysis of content or interface design means that is it impossible to offer any clear indicators to designers, except to say that extensive user testing is likely to be an important stage of course design.

At least one investigator has recognised this relationship as an opportunity and calls for the development of a particular science, which can subsequently be applied to the developing field of e-learning. This discipline could study the interactions between learners, technologies, systems, processes, outputs and outcomes. Subsequently this science would be applied to the management of electronic learning. Such a science might assist in joining up the development of key online learning components such as learning portals, virtual learning environments and learning management systems. A science of this kind might also increase the probability of successful learning outcomes by exploring the possibilities and constraints associated with factors like ease of programme access, pre-programme training, learner motivation, learner support provision and the standard of internet connections.

Key References

E-learning Defined (Training Press Releases, 2002); Key Components (Jones, 2001); Needs a Science (Ravenscroft, 2001); Critical Success Factors (Rzoska, 2001); Alignment Needs (Alexander, 2001); New Learning Paradigm (Harrod, 1998).

7. Ethical issues

There is evidence of concern from some school-based users of leadership development programmes developed for a business context that they represent a model of the world and a value system that may be incompatible with the ethics of education. An example of this is the privileging of the quantifiable above the qualitative when it comes to monitoring success.

The availability of e-learning from both private and public sector providers is leading to increasing market competition in this sector of national economies. In the UK some commentators argue that this places higher education institutions (HEIs) in competition not only with one another, but also with business enterprises. Others propose that this is not the case and that the business market and the HEI market are distinct. However, the modelling of the education and professional development sectors as businesses, with e-learning promoted as cost-effective for distance and distributed learning, carries with it a particular set of ethical and moral perspectives.

Key References

Is ICT Neutral? (Wright, 2001); Compatible Values (Parsons, 2000); Quality Standards (Roffe, 2002); Setting Standards (Davis, 2001); Market Competition (Lewis, 2002).

Conclusion

A caution

The literature concerned with e-learning for leadership is fragmented and therefore offers only snapshots rather than a clear and complete picture of what might constitute effective practices in e-learning for leadership. It is noteworthy that no meta-analysis or previous reviews are available, which is almost certainly a result of the immaturity of the field. However, successive searches of the literature have surfaced several examples of e-learning for leadership and e-learning applied to other developmental goals, which demonstrate partial good practice.

Cross-national comparisons of Canadian and New Zealand studies of headteachers as professional learners suggests that some findings may be bound to a particular culture or context. Additionally, the findings from the business sector, where motivations to complete may be very different, may also be highly contextual. This may mean that these research outcomes are not capable of generalisation to populations of professionals, or to professionals in other countries.

Complex interactions

Formulating effective practice indicators in the field of e-learning for leadership needs to be informed by the contents of the seven information clusters above. These clusters frame potential connections between learner characteristics and preferences and the remaining six categories. So, in the design and implementation of e-learning for leadership, consideration must be given to how the characteristics and preferences of learners might interact with the subject, learning processes, content and structure, the medium, information and communication technologies and ethical considerations.

Next steps

There are clear gaps in the existing literature, not least in relation to recruitment and retention of professional learners and cost benefits of e-learning programmes in this area. The influence of the preparation and training for e-learning facilitators is another area for further consideration. Few systematic evaluations of any programme yet exist, so it is not surprising that there are no meta-analyses comparing different programmes. Neither are there many empirical studies of e-learning programmes compared to traditional courses. In order to better understand what constitutes effective practice, designers will need to build in systematic and objective evaluation of any programme, ensure this is adequately resourced and allow capacity for iteration of the implementation so that feedback can influence delivery. In the meantime, the indicators that emerge from this study offer a starting point to inform effective practice, although they should be used with caution and sensitivity to local factors, such as the needs, aspirations and preferences of the target learner group, and the characteristics of the subject being studied.

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