11 Evaluating an educational development unit and its work

Introduction

An evaluation framework for the main activities, products and services of a development unit is proposed.

A complementary approach, starting with the changes that lecturers make to their practice rather than with the unit, is also suggested.

The evaluation framework builds on the ideas of Kirkpatrick (1994) on the evaluation of training events, as shown in Appendix 1, here extended to embrace the variety of activities that a development unit might undertake.

Appendix 2 draws some broader implications of evaluation for development units as learning organisations.

Appendix 3 offers approaches to determining (a) the effect of a unit's activities on the lecturer and department practice and (b) the effect of changes to lecturer and department practice on student learning.

Where relevant data from previous surveys already exists, these data will be fed into this framework and into this evaluation. There is no virtue in ignoring sound existing data, and even less point in re-surveying people, which, understandably, leads to irritation.

The framework

This framework, developed from Kirkpatrick's model as explained in Appendix 1, is intended to identify the knowledge and understanding that we need in order to be able to answer, with confidence, questions such as:

- How far is the unit reaching into its intended communities?
- How do members of their community react to the unit and to particular unit activities, products and services?
- What use are people making of the unit?
- What effects is this use having on their teaching?
- What effects is this use having on student learning?

Code[1]	Topic	Possible evaluation method / question	Comments	Kirkpatrick equivalent
K0	What does the respondent know of the unit and of its activities, products and services?	"We are interested in staff knowledge about and uses of the unit. What does the unit do / produce?", and / or more specific versions – "What does the unit publish?" & etc.	Such open questions identify basic knowledge of a unit's activities, products and services. Such questions need to be asked with a degree of tact – the unit is being evaluated, not the	(None)

[1] These codes are used to show the relationships between this framework and Kirkpatrick. A more user-friendly version may be adopted if desired.

			interviewee!	
K1a	What are the respondent's reactions to the unit as a whole?	"What are your impressions of the unit?" "What relevance does it have for your own work and for the work of your colleagues?"	Again, open questions are suggested, to obtain richer responses than would closed questions. In practice, these questions would be likely to be asked and answered together. The two questions may serve as frames for analysis rather than as discrete questions.	Immediate reactions
K1b	What are the respondent's reactions to a unit's activities, products and services?	(i) For items of which the respondent was already aware, and perhaps also (ii) For items which the respondent was shown specially for the evaluation: "What do you think about it?", and supplementaries as appropriate – "What makes you say that?" & etc. Perhaps also "What do you like about it?" and "What don't you like about it?"		
K1c	What has been or is the respondent's engagement with the unit and with particular unit activities, products and services?	"Have you had any form of engagement[2] with the unit, or with any of its activities, products and services?" "Why?" Then, for items with which the respondent had had some engagement: "What engagement have you had with it?" and "When?" and, again, "Why?" And, for this and all the later questions, supplementary questions as appropriate, in this case to find out more about how they have engaged with it and how they have reacted to it. It also might be worth asking respondents who have not yet had any engagement with a unit's activities, products and services to consider how they might perhaps use them.	The answers will be valuable data in their own right. The answers will also aid interpretation of answers to the questions that follow. If there has been no significant engagement with the unit, the survey stops at this point.	(None)
K2	What have the respondents learned from the	"What ideas & etc. did you take away from your engagement with the unit's	The answers to this, and to the other questions for K3, K4	Learning

[2] With examples of possible forms of 'engagement'

	unit's activities, products and services?	activities, products and services)?"	and K5, are obviously very important for understanding the effects of the unit's work.	
K3	What if any use has the respondent made of these?	"What use did you make of the ideas & etc?" Again it might be worth asking respondents who have not yet used ideas (a) why they have not used them and (b) how they might use them.	If the idea had not been used, then go to K5.	Transfer to their practice
K4	What effects has this use had?	"What effects did this use have – on student learning or on whatever they were intended to have an effect?" and "What evidence do you have for this?"	If none, or no response, then again go to K5.	Effects of changed practice on student learning
K5	In what ways and to what effect has the respondent disseminated these ideas and practices, to immediate colleagues or more widely?	"Have you disseminated these ideas more widely?" – and, if yes, "To whom?", "How?" and then "With what effects?" (using the framework here, K1 to K5 inclusive, to structure the questioning).	Dissemination could follow immediately on any of levels K2 – K4 inclusive.	(None)

<u>Applying the framework to the work of a unit</u>

Unit activity / product:		**Comments** (K1a, reactions to the unit as a whole, does not apply)
1	Projects	The questions may need modifying, depending on what project is being evaluated and also on what relationship the interviewee had with the project - project leader or reader of project report.
2	Workshops and events	The framework fits well with these topics. Logically, the questioning will start at K1b.
3	Publications, resources & sources of information	
4	Engagement:	
4a	Recognition and celebration	
4b	Support to individual academics, departments and host institutions	
4c	Responses to queries	
4d	Networking	

4e	External relations	It is hard to see external relations as a direct service to members, although members benefit from them. It may be more appropriate to ask what such work is intended to achieve, for all parties, and then to identify both intended and unintended consequences.

Using the evaluation framework

This framework provides a basis both for reviews of evaluation data already held by a unit and for fresh surveys and interviews, as well as for future routine monitoring and evaluation practice. It will need to be selected from and adapted according to what exactly is being evaluated.

Ideally (from an evaluator's perspective, that is) everything should be evaluated, or more specifically every use of everything. This is rarely feasible. But, where 100% is not possible, there needs to be a reason for the particular figure chosen, and for where the effort is applied. For example - and this example may or may not be practicable - there may be scope for asking (of course with permission) just one question of someone who downloads a resource from the website. We may want from them the answers to 3 or 4 questions. But the questions can be rotated, each respondent being asked the next question in the sequence. This is less than ideal, but better than nothing.

Open questions are suggested, certainly as part of early pilot surveys and interviews. The results of these pilot surveys and interviews can then be used to produce a more structured on-line survey for wider scale use. This should increase the response rate of the cost of less rich data.

Certainly at pilot stage, the questions should be preceded by the collection of information about the respondent and their work – name, institution, department, particular subject specialism(s), programme(s) and course(s) taught, and main activities – teaching, course or programme leadership, research, management and administration, consultancy, work with professional associations. For wider scale online survey work, it will be necessary to decide which the most important data to collect are.

Possible groups of interviewees for this pilot survey are lecturers, programme leaders, Heads of Department, Deans, administrators and managers, policymakers, funding agencies and staff and educational developers. It is not currently suggested that students should be surveyed; although the ultimate goal of the work of a unit includes improve student learning, it is probably not of central importance to the work of a unit that students know that particular educational innovations came from the unit when the unit is directly supporting the academic and only indirectly supporting the student.

The list of questions does not quite form a linear sequence. It may be that, for example, in talking about their knowledge of the unit, a respondent may go straight into giving their reactions to the unit or to describing particular engagements with the unit. The questions should thus also be treated as a prompt or checklist. Also, K1a, b and c might be addressed in any order.

Some of the survey work might appropriately be done on behalf of the unit, with support – one aim of this evaluation is to increase the evaluation capacity of the unit.

If the surveys were to be undertaken on a large scale, interviewees might be selected from the target community at random. If the survey were smaller in scale, participants should probably be selected, on criteria such as length of experience as an academic, the proportion of time committed to teaching, and known interest in the development of educational practice.

A complementary approach

A difficulty with the approach outlined until now is that it starts from the unit. The academic being interviewed or surveyed knows that the survey is about the unit. The questions make this clear. It is unit-centric, not interviewee-centric

Let's look at evaluation from a different direction. The unit works in the wider environment of educational change. It would be useful for the unit to know more about this wider environment.

So another, complementary, approach starts at the other end. It starts by asking (different) lecturers questions including "What changes have you made to your curriculum, to the design of your program, course or module, to the ways in which you teach, support learning, give feedback, assess student work?" And then "Why did you make these changes? ", "How effective were the changes?", and of course "How do you know?", and "From what sources did you discover or develop these new approaches?", and maybe also "What other possible changes did you consider making?"

Answers to such questions will enable the unit to see a richer picture of the environment of educational change in which the unit is working. The answers will also enable the unit to locate itself and its influence in this wider change environment. The answers may also suggest ways in which the unit might reprioritise its work. The answers may also give clues as to why people do and do not engage with the unit.

Appendix 1 – Rationale for the revised evaluation framework

The need to evaluate a wider range of evaluands than just training events makes some adaptation of the original Kirkpatrick model necessary.

The original four Kirkpatrick levels are immediate reactions to the training events (here called K1), learning from the training (K2), transfer of learning from the training event to participants' practice (K3) and the effects on output or performance of implementing this learning in practice (K4).

Three levels are added here. A lower level, knowledge of the existence and nature of the evaluand (K0). Between an initial response to the evaluand and having learned from it, some degree of engagement with it is surely necessary (K1a). And, beyond having used the evaluand in practice and having found it effective, further dissemination of it (K5) may occur, and is of value. (This extension to the Kirkpatrick model also includes a framework for considering levels of dissemination from Fincher (2000), an earlier version of which is used in Baume (1997).)

So, in summary, we now have:

Code[3]	Label	Question	Kirkpatrick equivalent
K0	Awareness & knowledge	What does the respondent know of the unit and of its activities, products and services?	(None)
K1a	Reactions	What are the respondent's reactions to the unit as a whole?	Immediate reactions
K1b		What are the respondent's reactions to the unit's activities, products and services?	
K1c	Engagement	What has been or is the respondent's engagement with the unit and with particular unit activities, products and services?	(None)
K2	Learning from	What have the respondents learned from these particular unit activities, products and services?	Learning
K3	Using the learning	What if any use has the respondent made of these?	Transfer to practice
K4	Effects on student learning	What effects has this use had?	Effectiveness of changed practice
K5	Further dissemination	In what ways and to what effect has the respondent disseminated these ideas and practices, to immediate colleagues or more widely?	(None)

[3] These codes may be simplified for the surveys proper. The current labelling is used to show the relationships with the original Kirkpatrick model.

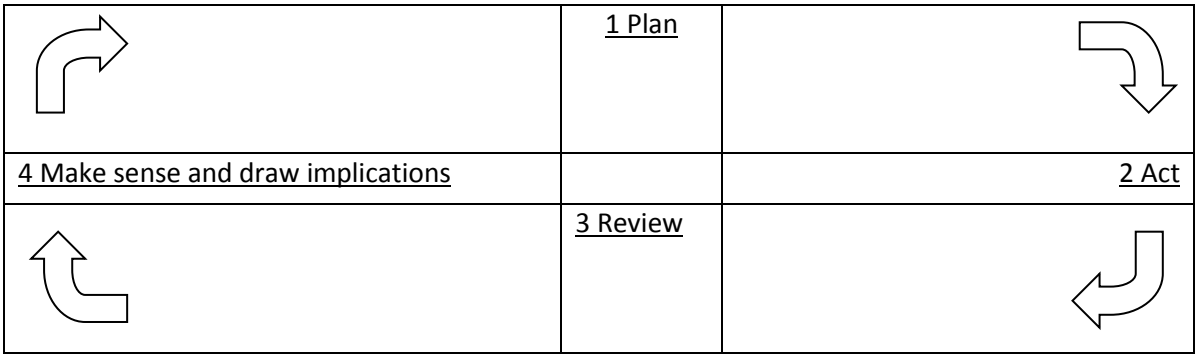
Appendix 2 – Evaluation and its role in an academic unit as a learning organisation

The academic unit as learning organisation

Organisations as well as individuals learn. Here are two, complementary, models of organisational learning, from Kolb (1984) and from Nonaka (1994). Both models consider a particular kind of learning – learning as the generation of new knowledge, rather than learning as the receiving of some more or less fixed knowledge from another person or organisation. In relation to an academic unit, this knowledge is typically knowledge about how the subjects are taught and learned and assessed, and also knowledge about how an academic unit can function most effectively. These are not intended to be models of how knowledge in, for example, maths or engineering or science is created.

Kolb's starting question was – how does a person learn from experience?

Here is a version of Kolb's model of learning from experience. The process of learning can start anywhere in the cycle. Learning results from going round the cycle rather than from staying at any one point on the cycle:



Relating this to the work of the unit and to the role of evaluation:

- There are two main dimensions to Planning.
    - Planning what is to be achieved, that is planning (including negotiating with stakeholder groups) the intended outcomes; and
    - Planning (which again includes negotiating) what will be done and what will be produced in order to achieve these intended outcomes.
- Acting of course means implementing the plan
- Reviewing means asking 'did we achieve what we intended to achieve?', and similar questions, as a first step in evaluation.
- Making sense of the review data and drawing implications, for future outcomes and for future actions, is a second step in evaluation.

This is of course a spiral; hopefully an upward spiral; rather than a flat cycle. The sense is made and the implications are drawn in order to inform future planning and practice. The point of a learning organisation is not simply that it learns. The point rather is that it uses what it has learned to do even better. This can mean both defining and negotiating more appropriate goals, and also achieving its goals both more effectively and through making more efficient use of its resources.

This cyclical model of learning applies at all levels, from the overall mission and purpose of the unit and a activity or product. And there are connections between the small and the larger cycles. The

intended outcomes of particular unit's activities or products should demonstrably contribute to the overall intended outcomes of the work of the unit, and thereby to the strategic goals of the unit. Evaluation of particular activities or products should show how this contribution is being made.

This might look rather closed. It is not intended to, in at least three ways.

- The work of the unit will have serendipitous, unintended outcomes. These too need to be identified and understood, and implications drawn for possible action.
- There is scope for productive conversations about evaluation between the unit and its parent organisation, for example in relation to the organisation's overall strategies.
- Also, around this cycle, there is, or should be, an outer cycle loop of learning. This asks, not "Were the intended outcomes achieved?", but rather "Are the intended outcomes still appropriate?" The intended outcomes for a particular unit's activities can be compared with the overall mission and goals of the organisation. The overall mission and goals of the unit are subject to review, for example against the mission and goals of the organisation, and also against emergent priorities from bodies including government and the professional and subject associations. The strategic goals of the organisations themselves are also subject to review, on some longer timescale. The unit should contribute to this process.

Nonaka's model, like Kolb's, is cyclical, indeed spiral. But it takes a very different form. His starting question was – how do organisations and the people within them generate knowledge? He considers two kinds of knowledge – tacit and explicit. He considers how these two kinds of knowledge are converted into each other, and how organisational knowledge is thereby created, made visible, tested, extended and put into practice.

Tacit knowledge can take the form of know-how, beliefs, images, common practices, 'how things are done around here'. Such tacit knowledge is often shared as people work together, through what people do and how they do it rather than through words. Some knowledge about teaching is, on this account, tacit knowledge. Nonaka calls this process of sharing tacit knowledge 'socialisation'.

Such tacit knowledge can be represented in, for example, words (written or spoken), diagrams or numbers. Academics normally do this early in the process of generating knowledge. This often happens in, or through, or following, conversation. Once the knowledge is made explicit, it can be shared. Reasonably enough, Nonaka calls this process of making tacit knowledge explicit 'externalisation'.

Once made explicit and shared, knowledge can be shared and tested and edited and added to and criticised and shared and transferred. Nonaka calls this stage 'combination.' Such debate and criticism and improvement are fundamental, and very familiar, academic processes.

In time, shared and tested explicit knowledge becomes, again, tacit, part of our model of the world, a shared belied or value, a revised, hopefully improved, 'how we do things around here'. Nonaka quite reasonably calls this 'internalisation'.

This newly internalised tacit knowledge can feed the next stage of the spiral.

How does this account relate to the work of a unit, and to the role of evaluation?

When academics get together in a unit's gathering about teaching, they talk about their teaching. In Nonaka's terms they externalise their previously (in part at least) tacit knowledge. They tell stories of success and failure. Within these stories lie tacit views, theories and models about teaching and

learning. In a supportive forum, and with good facilitation, academics will combine, share and test, first their increasingly externalised knowledge, and then the theories and models which underpin their practice. They will thus generate new knowledge about teaching and learning, knowledge which they may then internalise into their beliefs and hence their practice. And so on round the spiral again. This account still allows the unit to undertake some staff development, or to put it more directly some teaching of pedagogic theory and practice. But Nonaka shows this teaching to be part of a larger process of individual and group learning and development, a process that values what participants bring and makes sense of how they learn as well as teaching them new ideas.

Evaluation plays at least two roles here. The encouragement of a constructively self-critical, self-evaluative approach, informed by evidence and by theory, will help academics to make explicit and test their previously tacit knowledge and beliefs, enabling academics either to confirm or to change their beliefs and practices as appropriate. And a unit, working with other units, can similarly continue to share their current tacit knowledge, in conversation and through reflection, make it explicit, share it, test it, enhance it, and use this improved knowledge and understanding to improve their practice; in other words to evaluate and improve and increase the evidence base of their practice.

Implications of the academic unit as a learning organisation

If reviewing, making sense and drawing implications for future action – collectively, 'evaluation' – is/are essential practices for a learning organisation, do these evaluation activities also have implications for the planning and for the activities that the unit undertakes?

Implications for planning

Evaluation, it is suggested, means finding out and understanding whether and how the activities of the unit have achieved what they were intended to achieve. Logically, such evaluation cannot be undertaken unless the intended outcomes of the unit activities have been made explicit. This is one direct implication of the idea of the unit as a learning organisation – the need for explicit and evaluable intended outcomes.

Implications for action

The immediate intended outcomes of the unit and of its activities will of course take many particular forms. However, these intended outcomes will often include academics, individually or collectively, doing different things, or doing things in different ways. Such changes to practice are more likely to 'stick' when, among other conditions, the academic enacting the change:

- Has some, preferably evidence-based, confidence in the change
- Makes connections between their changed practice and some explicit and plausible account, model or theory of student learning
- Obtains the support, or at any rate avoids the downright hostility, of colleagues; and
- Holds clear criteria against which they will establish the success of this changed practice, and thus has methods for evaluating its success.

Each of these conditions for successful innovation has implications for the design of the events at which academics will learn about, explore how they may implement, and plan to implement, innovations. These conditions also have implications for the media and resources offered in support

of innovation. These implications are not drawn here. Many of these implications are already embodied in a unit's practice – action planning at the end of the workshop, as an obvious but still important example. But we see how the idea of the unit as a learning organisation, and the embedding of evaluation that this idea requires, also has direct implications for the planning and for the actions of the unit. Good evaluation affects everything, in productive ways.

Implications for sharing practice

The processes of socialisation and externalisation – talking and writing about what the unit do – can be made more effective by explicit use of Nonaka's account. Questions including "Why do we do that?" and "What implicit theories or beliefs about improving curriculum and teaching and learning and assessment underpin our practice?" can be asked and answered. The reasons we do what we do, thus made explicit, can be examined and tested. Notice that the first question, "Why do we do that?", drives us back to ask, again, "What are we trying to achieve?", or "What are our intended outcomes?" There is no escape from this question.

Appendix 3 – Identifying the effects (a) of unit's activities on lecturer and department practice and (b) of changed lecturer and department practice on student learning

Introduction

Ideally we should like to understand how a particular unit's activities affect lecturer and department practice and then how the resultant changed lecturer and department practices affect student learning. It would be difficult, certainly within a short time period, to achieve this understanding. The suggested approach is to separate out the two questions.

- "How does a unit's activities and products affect lecturer and department behaviour?" (An equivalent, and perhaps more comfortable, question might be "How do lecturers and departments make use of a unit's activities and products in their teaching?")
- "How do changed lecturer and department practices affect student learning?" It is assumed here that unit-funded projects are likely to have the most direct and measurable effects on student learning, hence the particular attention given to these projects.

Approaches to answering these two questions are here presented side-by-side, to suggest the commonalities as well as the differences in the two investigations.

	(a) Identifying how unit activities and products affect lecturer and department behaviour	**(b) Identifying how changed lecturer and department practices affect student learning**
1 - History	Existing unit reports and evaluations can be analysed for evidence of effects on lecturer and department behaviour / of how lecturers and departments have made use of these activities and products.	Existing unit reports and evaluations, and in particular reports of unit-funded projects within Universities, can be analysed for evidence of the effects of lecturer and department behaviour on student learning.
2 – Current	Where reviews of current and past unit activities and products are currently under way, these reviews can be supported and encouraged to include attention to effects on lecturer and department behaviour.	Where reviews of unit-funded projects are under way, these can be supported and encouraged to include attention to the effects on student learning. Where unit-funded projects are under way within universities, the grant holders should, where possible, be supported and encouraged to give attention to the effects of their work on student learning,
3 - Next	Where new or revised unit activities and products are being planned, those planning them can similarly be supported and encouraged to give attention to effects on lecturer and department behaviour.	Current project briefs and invitations to apply for project grants can be reviewed to see how far they require a focus on effects on student learning. Where necessary, suggestions can be made to strengthen this emphasis on the effects on student learning.
4 - Future	Where necessary, recommendations can be made to ensure that future unit activities and products (a) are explicit about the intended effects on staff and departmental behaviour and (b) monitor and evaluate their effects on staff and department behaviour as a routine part of their practice.	Where necessary, recommendations can be made to ensure that future funded projects (a) are explicit about intended effects on student learning and (b) monitor and evaluate the effect on student learning as a routine part of their practice.

5 - Overview	Suggestions can be made on the broader review of unit projects to extract higher-level learning about factors affecting staff and departmental behaviour / the way lecturers and departments make use of a unit's activities and products in their teaching.	Suggestions can be made on the broader review of unit projects to extract higher-level learning about the effects of changed staff and departmental behaviour on student learning.

It obviously then makes sense to bring the results of these two strands of the study back together, to produce an integrated account of the effects of the work of the unit on student learning. When resources are becoming tighter, units will be in a stronger position if they can demonstrate the impact of their work.

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Meta data

The following table describes information about this resource (meta data) which is also used to locate the resource using search tools. Please note the terms and conditions of use under the Creative Commons licence associated with the use of this resource.

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