LTSN Subject Centres for The Built Environment (CEBE), Education (ESCALATE) Art, Design and Communications, and Bioscience

Improving student learning through departmental student feedback self-studies



Project Position Paper

(Personal views from John Cowan)

Our rationale for formative evaluation

We take "formative" to describe a process which identifies scope for enhancement, and possibly generates suggestions about how that enhancement might be brought about. We have decided to concentrate in this project upon that type of student feedback which goes beyond the formulation and reporting of judgements about the students' learning, and their learning experiences, and which formatively informs those who teach, about the experiences of those who learn.

The project outline expressed this intention when it stated that "Student feedback refers to the process by which students are asked to reflect upon the learning process that they are experiencing or have experienced in order to assist in the further development of our teaching and their learning." It continued by making the simple point that "Recent discussions on quality enhancement within the LTSN have demonstrated how essential student feedback is to enable HE teachers to understand whether their attempts to improve student learning and educational experience are actually leading to improvement." This is our starting point.

Present practice

It is common in UK institutions of higher education to issue end of module or course questionnaires, and to report the analyses of these returns in due course to course team or other review meetings, where the review process may also be supplemented by notes of points raised in staff/student meetings, and in course team meetings. This practice has a number of weaknesses:

- It seldom leads to changes before the learning experience of a cohort of students twice removed from the cohort who provided the feedback
- It relies heavily upon opinions, which are seldom corroborated
- It may derive from superficial feedback from a minority of students, the remainder suffering from questionnaire fatigue
- Much of the survey data is often not put to use

In our project, we should plan from the outset to obtain and use data timeously.

Use of findings

Professor John Heywood, the author of a major text on Assessment (Heywood, 2000) which contains much of the theory on which evaluation is founded, often advises those who are inclined to devise and/or use questionnaires that they should not ask students to answer questions, unless they have decided the use to which they will put the answers to these questions. That advice, extended, might well constitute a maxim for our work on this project.

In our project, we should plan from the outset to obtain data which we intend to use.

The formative evaluations which groups will undertake within this project may justifiably have a range of purposes. They may seek to confirm as well as enhance programme provision, by identifying;

• The nature of the student learning experience, in relation to the planned learning outcomes

- The ultimate student learning, in relation to the planned learning outcomes
- Aspects of the student learning experience which merit closer scrutiny, possibly leading to change
- Aspects of the student learning experience which merit closer scrutiny, since they appear to be particularly effective for the learners and can possibly be built upon further
- Aspects of the programme wherein teacher expectations differ from the reality of the student learning experience mismatches which may profit from further enquiry and consideration

As in any investigation, formative evaluations should be designed so that the necessary data should be obtained.

In our project, we should plan or select our method of enquiry with our purpose for the data it will generate clearly in mind

What sources and examples can we draw upon?

If we wish to devise and use questionnaires, there are wide range of publications from which we can take advice, or even borrow or adapt examples (with permission, in some cases, and merely acknowledgement in others). Some general advice about the art (for such it is) of designing questionnaires, which is worth bearing in mind (Robson, 1993) is to:

- Use specific questions rather than general ones
- Prefer closed to open questions, except when not enough is known to enable us to write adequate response categories
- Offer a no-opinion option (and perhaps the opportunity to add comments if the questions and options do not allow the respondent to convey what they wish to convey)
- Omit the middle option in any scale, and measure the intensity of the response opinions
- Prefer forced choice to "agree/disagree" statements, where appropriate
- Consider question order carefully; the preceding question may influence the response to the current question
- Try to use more than one question when hoping to assemble a finding; the wording of one solitary question can strongly affect the response.

Beyond questionnaires, however, there are a great many options. Sadly, the literature on this topic is still somewhat sparse. The authorities in the field, if we consider publications from both sides of the Atlantic, are Cross and Angelo. They have published in that order (Cross and Angelo, 1988) and, more recently, as Angelo and Cross (1993), Both volumes are titled "Classroom Assessment Techniques" The much revised and expanded second edition offers a self-contained self-assessment device for teachers, which they have called the Teaching Goals Inventory. Having identified and clarified what they call instructional goals, and which we in the UK would nowadays term learning outcomes, they offer 50 suggestions for use by the teachers themselves. These techniques have been collected and assembled in the belief that teachers themselves "are the closest observers of learning as it takes place in their classrooms". Therefore, in the main, they are designed for self-use, together with a class. Some are for use when we wish to know how well our students are learning; others when instead we wonder how effectively we are teaching.

We should also note a follow-up text, which may be of more interest to those on this project as they emerge from the project and wonder "What next?" This is the book by Cross and Steadman (1996), who move on from Angelo and Cross's offer of a set of research tools to enable university teachers to discover what is working, and what is not working, and progress to detailing collaborative processes for examining teaching and learning issues. This progression virtually involves teachers in becoming researchers within their classrooms. Engagement in this type of activity would take us into the realm of action research related to our teaching and our students' learning, which is beyond the scope of the current project, but is presumably a likely next step for some of us.

In the UK, George and Cowan (1999) have published a little handbook which does not concentrate much on the identification of the students' learning on conclusion of the programme, but prefers to dwell more on the nature and usefulness of the learning experience, and on the

immediate learning during the learning and teaching activity. Several of their suggestions have been used in the worksheets for the workshop with which this project opens.

How should we select our approach?

There are three major factors which should feature in our selection process. These are the nature of the information which we seek; the context within which we can, or hope to, use a technique; and the possibilities that we have or can arrange for triangulation or corroboration of our data, when we obtain it.

We should be aware of the desirability of obtaining data directly. This means that if we are interested in the nature of the learning experience, it will be more reliable to obtain data from observation or reporting of learning as it happens, than thereafter; and if we judge that we can only ask learners to report *after* the event, then the sooner the better. Similarly, if we are primarily interested in immediate learning, it is more reliable to find ways in which that learning can be demonstrated at the time, then merely reported. Angelo and Cross give many examples of classroom activities of short duration which enable immediate learning to be identified and so reported. The secret here is to integrate such activities in our programmes as "rehearsal" of knowledge, so that they become part of the weft and weave of teaching and learning and thus strengthen the learning. In our project proposals, we shall much strengthen our approaches if we build in to our routine teaching such ways of identifying, by revisiting, immediate learning.

These requirements are easier to state than to fulfil. Meeting the full demands of evaluation can make claims upon the time which both learners and teachers can , and would wish to, devote to this activity. Most of us will have to operate in contexts where the time and possibilities for evaluation are limited. Additionally, frequent evaluative interventions will affect the situation which they set out to evaluate. Frequent testing may tell us the state of learning at a given point in a sequence; it will also have affected the nature of that sequence, as a learning activity –if we have found ourselves able to spare the time for such testing.

Finally, to be rigorous, the evaluative process should generate results or data which can be corroborated or triangulated. This makes acute demands upon both our time, and our ingenuity. Maybe the best that some of us will manage will be to repeat a process with a second sample; that solution, of course, does not overcome the possibility that the process itself may be suspect.

How then should we select? With care, appreciation of the requirements, and thoughtfulness about the possible implications.

The ingredients of success

Angelo and Cross suggest that we should try to follow certain principles (which I have paraphrased and augmented slightly) when we embark upon formatively evaluating:

- Concentrate on enquiries where you can obtain the relevant data
- Concentrate on variables which it is within your power to change
- Design for success in some measure!
- Start small
- Involve the students actively; it's *their* learning
- Set limits on the time you and they will devote to the evaluation, and stick to them
- Be flexible in your teaching, and genuinely willing to change
- Devote some time to helping the students to learn how to give meaningful and useful feedback and then allow them to practice doing so, before you rely upon it
- Enjoy what you are doing, revel in the risks, wonder with interest at the surprises and enthuse when you are told or discover something useful

They also suggest a checklist for avoiding problems, which I have reworded below for our purposes.

A checklist

About the outcomes we seek; are they:

- Manageable, in terms of size?
- Precisely stated?
- Reasonably easy to evaluate?
- Worth evaluating?
- Something for which we are responsible?

About the technique we mean to use; is it:

- Compatible with the outcome we desire?
- Readily integrated with normal class activity?
- Fairly straightforward?
- [A contribution to learning, of itself?]

When using the technique; have we:

- Tried it ourself?
- Run it through with a colleague?
- Made the purpose clear to our students? And checked that they understand?
- Made the process clear to our students? And checked that they understand?
- Given them the opportunity to practice?
- Allowed enough time for the technique to be followed through, thoroughly?

When we analyse the data which the technique produces: will we:

- Use all of the data we generate?
- Follow a plan which we thought through at the outset, before we knew the precise nature of the data?
- Check that we have sufficient data to justify conclusions but not too much, swamping us?
- Use a reasonably simple method of analysis?
- Schedule enough time for our analysing?

In responding to the findings; will we:

- Work to a predetermined plan?
- Make the feedback explicit to our students?
- Present our response, whatever it should be, in appropriate terms?
- Relate the response to the programme plan for the class?
- Present both the positive and negative findings, for us and for the students?
- Try to bring about reasonable changes with minimal delay, and preferably to the benefit of the current cohort?
- Allow time to do all of the above?

The further active engagement of the students

There is one noteworthy difference between most enquiries involving human subjects, and formative evaluation enquiries. In formative evaluation we are, by definition, seeking ways to enhance student learning, and the student learning experience – without asking students to work harder, or to be more intelligent. We seek to improve their lot. If that is apparent, both in the way we introduce a formative evaluation activity and, more importantly, in the way we are seen to respond constructively to what we learn from it, then students will come to appreciate that we really want to know – about what works for them, and why, and what does not work for them. They will also soon learn that our responses can be to their advantage.

A frequent consequence of activity in the form of truly formative and relatively immediate evaluation is that students realise that we want to know what works for them, and why – and so they begin to report to us, outwith any formal structures which we set up for formative evaluations. Instead of receiving volunteered praise (or criticism) in general terms – "That was a

really good(bad) lecture this morning" - we will find that some students at last begin to report in such helpful and detailed terms as "I find it makes a really good lecture for me, when you do because it"

It is some time since Weedon (2000) carried out the work in which she reported how much more useful students find feedback which explains how we formulate our judgements, summative or formative. What is sauce for the goose is surely sauce for the gander. Surely the same principle applies to the possible enrichment of the feedback which *we* receive upon our *teaching*, and is something we can convey to our students, to their advantage as well as ours?

In our project, we should encourage and welcome feedback in which students explain as well as report why they learn, do not learn, and why they favour or criticise certain aspects of their learning experience

References

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