Towards outcomes-based assessment: an unfinished story of triangulation and transformation

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Towards Outcomes-Based Assessment: an unfinished story of triangulation and transformation

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Abstract
Over the past ten years Higher Education in the United Kingdom (UK) has changed in many ways, mainly influenced by the recommendations of the Dearing Report (published in 1997). One paragraph in the report instigated a fundamental re-orientation in the articulation within higher education of teaching, learning and assessment in terms of learning outcomes. Subsequent quality assurance initiatives have reinforced this approach.

For the last ten years, the Centre for Outcomes-Based Education (COBE) in the UK Open University (UK OU) has been leading the transformation of the OU curriculum into an outcomes-based approach. The key to this process has been the ‘triangulation’ between curriculum, staff and student development.

Throughout the process, our main concern has been to describe, develop and implement an appropriate way to assess learning outcomes both at course and award level. This paper re-views the process and poses some fundamental questions about an outcomes-based approach to the design and delivery of the curriculum and to the development of staff and students.

Introduction
In this paper we want to tell a story – an unfinished story - based on our experience in the UK OU. Although this can be seen as a story about institutional change, the main focus of this paper is about curriculum change. We want to describe, analyse and critique the process of curriculum change by focussing on the interface between teaching and learning and on the role of assessment. We are concerned to explore not just the assessment of learning but the role of assessment as learning. (Coats 1998).

Over the past six years the UK OU, in common with all higher education institutions (HEIs) in the UK, has been experiencing a period of curriculum development and
change. Following the Dearing Report (1997) and the creation of the Quality Assurance Agency (QAA), we moved into a period of unprecedented 'quality assurance' measures across the HE sector, many aspects of which were driven by the move towards an outcomes-based approach to both the design and delivery of the curriculum. All HEIs have been affected by this and have responded in different ways. It presented a particular challenge to the UK OU with its open, flexible approach to course and programme production and presentation. The size of the institution and its distance teaching mode means that changes in design and delivery take time to implement and involve a transformation in the work of all faculties, requiring a customised response to academic development needs both centrally and throughout our regional structure.

Within the university, the Centre for Outcomes-Based Education (COBE) was asked to lead the work and we resolved that we would try to transform what was essentially a process driven by quality assurance into one of quality enhancement through what became known as the Learning Outcomes and Their Assessment (LOTA) project.

The UK Open University: implications of an outcomes-based approach

Working with academic staff in all faculties to transform curriculum design and delivery throughout the university into an outcomes-based approach was a massive academic task in an institution that offers almost 200 undergraduate courses to over 200,000 students, plus a range of post-graduate provision. The students of the UK OU are all adults, studying part-time through distance learning, supported by local part-time tutors who are all part of a regional network staffed by both academics and administrators. The programmes of study towards UK OU awards (certificates, diplomas and degrees) are compiled from the accumulation of credit through studying different courses. Course teams of academics, based mainly at the central campus in Milton Keynes, plan and produce the courses which are delivered directly to students by way of written and electronic course materials but their learning is mediated and supported by their tutors through tutorials, individual contact and, most importantly, though the marking and feedback on assignments. Any curriculum change that involves the specification and the assessment of learning outcomes is going to affect those involved in the design, as well as those responsible for the delivery, of the curriculum.

The intended learning outcomes for all courses and all programmes of study have now been documented in course and programme specifications. Currently the
challenge is to ensure that assessment strategies and assessment methods support the development of the stated outcomes and enable them to be appropriately assessed. The LOTA Project has always seen assessment as part of the learning process through both formative and summative assignments and the role of the tutor is crucial in this.

Although the QAA have provided guidelines and exemplars about how learning outcomes are to be presented, HEIs have been allowed to define their own outcomes for both individual courses and awards. Nationally there have been no directives or indeed advice about the assessment of those outcomes, except where QAA audits questioned the process in a particular institution and subsequent reports identified the strengths and weaknesses about the assessment practice in the HEI concerned. In terms of learning outcomes, the main issue for the UK OU arises from the choices we offer our students and the flexibility of our awards. Apart from those awards that have to meet external requirements in professional areas such as teaching, nursing and social work, students can choose their own entry point and pathway to an award as long as certain requirements regarding the number of credit points and levels of study are met. This means that it is difficult to articulate and guarantee award outcomes unless these are mapped against the outcomes of the contributing courses. We also offer some flexibility within courses to accommodate the other demands on our part-time adult students so that, for example, some assignments are substitutable. Designing appropriate assessment therefore becomes of great importance in ensuring that the stated outcomes of courses and programmes are taught, developed and demonstrated through the assignments.

At the start of the work on LOTA we decided not to follow a competency route where designated outcomes were recorded as ‘achieved’ or ‘not achieved’ by each individual student. We argued that this approach was not compatible with grading individual assignments or in classifying awards attained and that this would lead to endless checklists and record keeping as individual students followed their chosen route. However our objections were not based on practical considerations; we already do have complex systems to record the grades of our 200,000 students. Our main reservations about a competence approach is that complex learning in an HE environment cannot be reduced to a limited number of outcomes that can then be recorded as ‘achieved’ (or not) by every student without reducing the complexity of that learning to a number of behavioural statements. Nor were we persuaded by the practice adopted by colleagues in a number of other HEIs of using a matrix of four
grades or levels for each outcome. Competency and grading are incompatible and, if
assessment is an integral part of learning, more than a pass/fail result is required.
(See Atkins 1993 for a considered comment the use of learning outcomes in HE).

Our claim to the QAA and to our students is that, whatever route they take to an
award, they will have the opportunity to ‘develop and demonstrate’ the stated
outcomes of each individual course and that, by careful mapping, they will also
therefore have had the opportunity to ‘develop and demonstrate’ the outcomes of the
award.

Our focus on an outcomes-based curriculum, and especially on the assessment of
learning outcomes, has been driven not only by quality assurance requirements but
also by a determination that the curriculum change involved will also lead to quality
enhancement. This is the driver for what we hope will be the transformation of a top
down curriculum designed by centrally based academics and delivered by part-time
tutors to receptive students in the regions, into a more interactive model where
students engage both with the stated learning outcomes and their own personal
outcomes through the process of a more transparent triangulated curriculum.

To help us understand the process of curriculum change, we have used the two
concepts of 'triangulation' and 'transformation'. Triangulation refers to the relationship
between curriculum development, staff (or professional) development and the
development of the learner. These relationships, and the changes to them, are one of
the main themes in our story.

![Fig.1. Relationships between curriculum, learner and staff development]

The triangle remains equilateral if the interactions between the three corners are
balanced. Too much emphasis or change in just one or two points leads to a
distortion of the triangle.
Transformation refers to the extent of these changes and asks how much they have been fundamental as opposed to cosmetic. Has an outcomes-based approach indeed transformed the interaction between the three areas of development and thus the learning experience of the students or merely tinkered with the vocabulary of learning but not the system? Our overarching question is this: has the move to an outcomes-based approach, and specifically the assessment of learning outcomes, transformed the process of teaching and learning in the UK OU?

Assessment as learning (Endnote 1)
In the literature of education and training, no matter what the context or level of learning, almost every text on assessment talks about change. The change described may take many forms but essentially it is about a change in the purpose of assessment and in the methodology of assessment. The term 'paradigm' is frequently used -

‘Assessment is undergoing a paradigm shift from psychometrics to a broader model of educational assessment, from a testing and examination culture to an assessment culture.’ (Gipps 1994 p 1)

Together with notions of change comes a range of what appears to be dualisms. Hager and Butler (1996) describe two models - the scientific measurement model and the judgmental model. Other contrasts include psychometrics or educational assessment; formative or summative assessment; normative or criterion referenced assessment; objectivity or subjectivity. The 'traditional' purposes of assessment for measurement, judgement, accountability, selection, prediction and classification have been overtaken by discussions about 'educational assessment' (Glaser 1990) or, more generally, as 'assessment for learning'. (Coats 1998) The focus has moved from summative assessment to formative assessment; from terminal to continuous assessment; from assessment of what has been learned to assessment of what is being learned. The overall message would seem to be that assessment is now more about learning than testing; assessment for the benefit of the learner and their teacher rather than for accountability to some outside body or programme. This message supports our decision to work for quality enhancement rather than just quality assurance.

However, there is a tension here that directly affects assessment. How can you move to an educational assessment methodology (or paradigm) that places emphasis on the learner and supposedly encourages them to take more responsibility for their own learning, stressing autonomy and empowerment, and at the same time subject that
learner to a prescribed curriculum and defined outcomes to learning. (Atkins et al 1993).

Our approach to the assessment of learning outcomes is seen as an integrated part of teaching and learning, in which both teacher and student play an interactive role, in which teaching and learning are seen as complex and socially mediated. It recognises the importance of a range of assessment methods, including those that are most appropriate for an outcomes-based approach. It endorses the point made by Gipps (1994).

'We must develop and propagate a wider understanding of the effect of assessment on teaching and learning for assessment does not stand outside teaching and learning but stands in dynamic interaction with it. We need also to foster a system which supports multiple methods of assessment while at the same time making sure that each one is used appropriately.' (Gipps p15-16)

**The assessment of learning outcomes**

The heated debate within the UK and elsewhere about outcomes-based approaches has not only been about the use of outcomes *per se* but about the precise nature of those outcomes and their assumed effects on the learning process. Stating outcomes and appearing to focus only on the *product* of learning does not negate the importance of learning *as a process* that is, to a certain extent, always individualised. Nor does it mean that the stated outcomes will be the *only* learning outcomes; just as students who study any subject learn not only the content of that subject but make their own meanings and constructions of that 'knowledge' as they learn it. Most students learn many other important lessons about themselves, their learning strategies, their colleagues and the social context in which they operate. (Coats and Stevenson 2005) These 'lessons' can be articulated and explored; they do not have to be assessed. The important thing is that the learning outcomes and their assessment should make a positive contribution to the learning process.

'Good assessment now is that which most closely reflects desired learning outcomes and in which the process of assessment has a directly beneficial influence on the learning process.' (Boud 1995)

Allan (1996), in a useful paper on outcomes in higher education argues for more flexibility in the definition and assessment of outcomes and defines her position as one in which

'.. the learning outcomes are clearly expressed, in a form which enables learners to know at the commencement of a course or
module, what it is they are expected to achieve in relation to subject content, personal transferable skills and academic outcomes. But this is not tantamount to pre-specifying unambiguous statements of predicted behavioural objectives which derive from a given learning experience. This is unacceptable on three grounds. First there is no intention that outcomes statements should seek the unity of response which necessarily characterises behavioural objectives. Secondly there is no assumption that the outcomes derive uniquely from either the teaching objectives or the course/module content. This is not to undermine or denigrate the role of the lecturer, but rather to emphasise the role of the student in accepting responsibility for his/her own learning and to acknowledge that learning might take place in a variety of settings. Thirdly, there is no explicit expectation that the course/module must necessarily be completed in order to achieve the outcomes, some of which may be claimed through the accreditation of prior experiential learning schemes.’ (Allan 1996 p 104)

It is important to differentiate between the specifying of learning outcomes and the criteria that will be used in their assessment. Again, the ideal might be for both students and teacher to agree these and in some informal, formative assessments this may be possible. What is essential, however, is that the students are always aware of the criteria against which any of their work is assessed and that there is 'alignment' between teaching, learning and assessment. (Biggs 1999)

Assessment criteria have been viewed with suspicion by those who advocate that assessment decisions should be made by the professional judgement of teachers. However, the unreliability of 'impression marking' is well known. For example, some of the most damning evidence on the reliability on essay marking was presented in a presidential address to the British Psychological Society (Newstead 1996). At the other extreme, Sadler (1989) provides a wonderful example of how over fifty criteria could be used to judge one piece of written work - not unknown in the current practice of some HEIs. It is the explicit link between the desired learning, the description of learning outcomes, the assessment methodology and the criteria by which they will be assessed that determines the value of the learning experience.

Specified outcomes and stated criteria need not constrain that experience nor lead to conformity. Outcomes can be diverse, even personalised; the learning route to
achieving them can be varied, even individualised. Assessing the 'product' of learning against criteria does not mean that the 'process' of learning becomes unimportant. Neither teaching towards outcomes nor assessing by criteria should mean that the student's learning is ignored.

'If one is interested only in whether students can carry out certain tasks, know certain things or achieve certain objectives, it may be of little concern to know what took place during the learning process itself. What is important is whether they met the objectives rather than why, or why the objectives were not achieved. If, however, one is concerned with improving the quality of learning, and encouraging students to engage in worthwhile activities that stimulate student motivation for future learning it is necessary to look beyond the outcome to examine the process. Rather than assessment being something you do to people it is an interactive activity between students and teacher that can play an important role in providing feedback, the aim of which is to improve the quality of future learning.' (Willis 1993 p394)

Knowing the expected outcomes and being clear about the criteria that will be used to assess whether or not they have been achieved gives more control to the learner and thus enables them to use that assessment as a learning experience. Assessment can be, indeed always is, a learning experience, with or without an outcomes-based approach and clear assessment criteria. Our argument is that appropriate outcomes and shared criteria can enhance that learning.

We want to claim that an outcomes-based approach can support the transition from the assessment of learning to assessment for learning and to recognising the role of assessment as part of the process of learning. To encourage this transition the importance of feedback on learning has to be recognised. In assessing assignments in the UK OU, the tutor provides the student with feedback that they are encouraged to engage with and reflect on in order to further their learning. We recognise that the relationship between feedback and reflection is complex. While reflection can occur without feedback, it is an important component of effective reflection. But as most teachers know, feedback alone may not lead to improvement. Sadler (1989) argues that to be effective the whole process must also relate to standards or goals and introduces a useful definition of 'closing the gap'.
Stated explicitly, therefore, the learner has to (a) possess a concept of the standard (or goal, or reference level) being aimed for, (b) compare the actual (or current) level of performance with the standard, and (c) engage in appropriate action which leads to some closure of the gap. (Sadler 1989 p121)

An awareness of the learning outcomes involved might help the tutor to provide appropriate feedback and the student to close the gap. The importance of appropriate feedback is crucial to learning through assessment. (Taras 2003)

**Chapters in the UK OU 'story' - a journey towards an outcomes-based approach**

Historically, the divide between the central design of OU courses and the regional delivery of those courses was considerable. Students were provided with course materials directly from the course team; tutors were (and sometimes still are) expected to offer what was termed ‘learning support’ rather than ‘teaching’.

Returning to the triangulation model we can illustrate historical links between - course teams, tutors and students. The triangle below (Fig 2.) illustrates the course teams disseminating information to both tutors and learners. Similarly tutors are passing information on to students. There is no element of feedback or dialogue evident anywhere in this model.

![Fig. 2 Historical relationships between course team, tutors and students](image)

LOTA work has showed us just how much individual and group teaching, particularly related to learning outcomes, is done by tutors who mediate the package for individual learners. Tutors have the detailed knowledge about how students handle the course materials and real evidence of their learning and performance through their assignments. Teaching through assessment and providing written feedback on
assignments is what the UK OU calls ‘correspondence tuition’. This forms the basis of tutor-student dialogue which is also developed via face-to-face tutorials, phone contacts and increasingly e-mail and electronic conferencing. Tutor- student dialogue can inform exchanges between tutors and course teams, some of whom increasingly over the years have encouraged, valued and systemically recorded feedback from experienced tutors. The use of electronic communication is a major component of all aspects of the design and delivery of UK OU of courses and one undoubted benefit of this has been the gradual establishment of course specific electronic conferences by which students may enter into dialogue directly with course team members as well as tutors.

The triangle (Fig 3) can be used to show the students occupying the apex and double-ended arrows illustrating interaction between all three points of the triangle.

![Diagram showing interaction between students, course team, and tutors](image)

**Fig 3.** Current relationship between students at the apex of the triangle – the most important position – with interaction between all three points of the triangle

The essence of the interaction, no matter where it occurs in the triangle, is to facilitate the students' learning. If students feel able to question what is being asked of them and course teams and tutors strive as a result to be transparent in all aspects of their teaching, the students becomes more involved in their own learning and better able to engage in self-assessment. The use of outcomes provides a framework for this self-assessment.

We would now like to look in more detail at how these channels of dialogue have been developed and strengthened through the LOTA project beginning with the work done centrally within the faculties in terms of the design of courses.
a) Designing the curriculum: central work with faculties

Without doubt the most important thing about the LOTA project was that central UK OU funding enabled two full time academic staff in COBE to be assigned to the work and supported the buy-out for 2 days/week of an academic from each of the eight faculties. Having this extended ‘LOTA team’ was probably the key to our success since cross-faculty activities are notoriously difficult to organise. The funding allowed staff time to devote to the work and their commitment and enthusiasm was remarkable. (Yes, it is possible to get enthusiastic about learning outcomes!)

So how far have we got? All new courses have to list their learning outcomes and details of their assessment before they are approved for production. All awards, new or revised, have to undergo considerable scrutiny to ensure their claims to the assessment of their learning outcomes are substantiated, often involving lengthy discussions with COBE before they are approved. Newly designated ‘Programme Committees’ now take responsibility for the approval and maintenance of clusters of awards within subject areas. For an institution where, five years ago, individual course teams were considered virtually autonomous in what they taught, how they taught it and how it was assessed, this is a considerable transformation. Designing the assignments was usually the final and least prestigious task; now they need to be discussed even before the first planning document is approved. Issues of creativity and constraint are still raised but no one seriously believes that we can return to the former situation – not just because of LOTA requirements but because resources for course design and development are much reduced.

Guidelines about the assessment of learning outcomes at course level are more prescriptive now than previously. We have produced a checklist (See Appendix) describing the process of assessing learning outcomes particularly designed for implementation within the UK OU. This proved contentious at first but faculty reactions have shifted from resistance (‘why do we have to do this?’) to compliance but with a very clear request for advice and assistance (‘Now show how me how to do it?’)

For the past five years (2001-2006) we have also received funding from a specific Higher Education Funding Council for England (HEFCE) initiative to encourage more ‘Human Resource’ activity in HEIs related to the curriculum. This echoes other initiatives on ‘educational professional development’ (EPD) within the UK OU and across the HE sector. It was this funding that enabled us to engage in a
considerable amount of work involving our part-time colleagues and their students on issues around the assessment of learning outcomes, reflecting and endorsing our triangulation process.

Course team contact with regional colleagues and part-time tutors has been increased partly because of the growing realization (at last) that tutors have considerable knowledge of, and experience in, the assessment of learning outcomes that needs to be shared. As we go on to describe, electronic communication makes the triangulation model somewhat easier to sustain.

**b) Regional work with our part-time tutors**

i) **Action research**

While the LOTA-related work has had implications for both central and regional academic staff as outlined above, the biggest challenge has been to involve tutors in explorations of teaching and learning that are their particular concern. The HEFCE funding enabled us to engage in a considerable amount of work involving our part-time colleagues and their students on issues around the assessment of learning outcomes, reflecting and endorsing our triangulation process. One strand of this work was an action research project involving our part-time tutors.

Action research has many different connotations in many differing educational settings. Our chosen definition complies with that given by Carr and Kemmis (1986)

‘Action Research is a form of self-reflective inquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, their understanding of these practices, and the situation in which the practices are carried out’ (p. 162)

It can be expressed more simply in our context as a process whereby the ‘tutor’ and their ‘learners’ - the students working with that tutor on a particular course - carry out ‘research’ into some aspect of their teaching and learning with a view to improving it.

The focus on assessment was an obvious starting point for action research enquiries because of the tutor’s role in the continuous assessment of students through ‘Tutor Marked Assignments’ (TMAs). While TMAs are set by central course teams, the tutors are responsible for both marking and providing feedback to the student. Several tutors chose to investigate other aspects of their work with students including issues specifically related to attendance at tutorials as well as study skills and
support but assessment is so central to the interaction between tutor and student that it appeared as part of many action research projects even when the area of exploration was not assessment per se. In all, over 100 tutors representing all the thirteen OU UK administrative regions engaged in action research, some in collaboration with other tutors, and between them produced some 60 reports.

A two-day symposium held in one of our regional centres enabled the tutors who had completed action research enquiries to plan and present their findings and describe the impact of this activity on their professional development to a large audience of regional staff - in effect, their line managers. One particular enquiry focussed on a course which two tutors of the course described as having ‘implicit’ learning outcomes; ‘implicit’ as neither of the tutors had details of the course learning outcomes and one said in the final report “I didn’t really know what the course team thought the student should be learning” The tutors created a self assessment questionnaire for their students which made explicit both assignment and general course learning outcomes for one aspect of the course. The tutors discovered that explicit learning outcomes appeared to be essential for students whom the questionnaire revealed had poorer understanding of and confidence than related assignment scores suggested.

ii)  Reflective reading
Smaller groups of tutors who had been involved in the initial action research activities have gone on to disseminate their experiences to their tutor colleagues in their own regions. A core group have worked with us to produce materials for events and a revised version of our ‘Action Research’ guide; others participated in ‘Reflective Reading Groups’ - a trial of a conversational approach involving the selecting, sharing and summarising of what they learned from the academic literature around a topic of their own choice of relevance to their practice. A menu of possible pedagogical topics was given to participants from which they were invited to choose a topic bearing in mind the collaborative nature of participation in the project. Assessment was a topic selected by most participants and the specific topic of learning outcomes was also explored. The participants shared and discussed their experiences of the readings with one another via an electronic conference. At the end of the project, the participants provided us with feedback. Whilst there constraints such as lack of time especially at certain stages in the academic year, for example when assignments were being assessed, there were many comments on the positive aspects of taking part and the benefits to practice from so doing.
“...next year I plan to develop the methodology for learning outcomes in the course for my teaching in the light of the Atkins and Hussey articles.... I am looking forward to seeing how the students might benefit”

(Level 2 Business School Tutor)

The reflective reading project has provided a resource of a ‘tried and tested’ reading list for several aspects of teaching and learning, including the assessment of learning outcomes, that is now available electronically to all associate lecturers.

iii) Academic literacies

To further enhance the dialogue between tutors and their students, some of the tutors involved in the action research have continued their enquiries in a project on academic literacies funded by COBE and facilitated by one of our tutors, Anna Magyar, who has extensive experience in this area of work and in action research.

Influenced by the work of Lillis (2001) the project set out to explore academic conventions and the assessment of learning outcomes. There can be wide divergence of views about student writing. For example:

A perspective from a course writer:

“We have no time to understand about student writing. We can have unrealistic expectations about how students use the course materials... We never have the time to stop and think, “What do we mean by critical reflection?”; for example. It was never made explicit to me as a student and I don’t make it explicit to my students”.

and a perspective from a course tutor involved in the academic literacies project:

“I was discussing the course guide with Pete the other day and there was something I didn’t understand and before I would have just thought, “Oh, it’s just the way they do things”. Now I feel able to say: “I don’t understand what you want students to do and if I don’t understand, there’s a good chance they won’t either”.

Individual projects concentrated on the student’s understanding of the tutor’s feedback for it is by feedback that the tutor hopes to enable the student to become aware of what they are doing well, what they are not doing well, why they are not doing well and how they might better achieve the specific learning outcomes of the course.

‘Tutor feedback and student learning should be inseparable. If they become uncoupled, the formative aspect of assessment is lost’

Orsmond et al (2000)
Links between academic writing and the development of ‘complex skills’ have recently been explored by Elander et al (2006)

Each enquiry involved direct interaction with current students based on the course they were studying with the tutor. Again influenced by Lillis (Lillis and Turner 2001), assumptions about language to be used in the writing of assignments were challenged. What is understood by ‘argument’? How does one ‘criticise’? When it is acceptable to talk about ‘I’ as opposed to ‘we’? The language of feedback was also looked at in detail. Is it clear what a tutor means when they say to a student “Your essay doesn’t flow”. The language used by course teams also came under scrutiny, for example in an assignment booklet students are told:

“While you may want to draw on references from outside (the course) your assignments should be based largely on the course materials provided”

This left students unsure about whether they should use outside references and tutors unsure about how much is ‘largely’ in terms of referencing course materials. The differing conventions for referencing used by different faculties was also an issue, especially bearing in mind that students are free to study courses from different faculties. One tutor says:

“When one student e-mailed expressing frustration at having to master a different form of academic referencing than she’d used in previous courses, I was able to encourage her by letting her know that learning the art of referencing is one of the course’s learning outcomes and that the art of adapting to house reference styles is central to that skill” (Third level education tutor)

All the tutor participants used electronic conferencing, skilfully facilitated by Anna, to share their ideas, findings and reflections on what is essentially a new area for most of them. Earlier this year we organised a seminar to enable the tutors involved to communicate their findings and their experiences to a large audience of central and regional staff. The reports of individual enquiries, the scripts of the tutor conferencing and taped individual interviews have provided a rich resource to draw on both within the UK OU and beyond.
iv) **Embedding enquiries**

Another current ongoing aspect of our work with tutors and their students is an investigation into how well learning outcomes are perceived to be embedded by tutors and by students, particularly in newer courses. The project is divided into two stages; the first invited tutors from courses that make explicit mention of learning outcomes within the course materials, to complete a questionnaire that asked about the ways in which the tutor used learning outcomes with their students and in particular in their assessment and feedback related to assignments. Over fifty tutors have taken part in this first stage and from their responses it is evident that there are many unresolved issues surrounding the assessment of learning outcomes.

In some courses, although learning outcomes are listed in, for example, the course guide, there is no mention of them in relation to assignments and continual assessment during the course. In other courses, the assessment of learning outcomes appears to be an ‘add on’ extra. Tutors are being asked in addition to their usual practice of assigning marks and giving feedback by way of written comments, on what the student has done well and what they need to do to improve, to fill in grids related to the stated learning outcomes for the course or for a particular assignment. One tutor describes:

> “The LO assessment sheets are completely separate from everything else. So as a tutor you have to mark the whole TMA as normal writing feedback and marks. And then as a second exercise, you have to go through the TMA again and match up what the student’s written against categories on the LO script”  (Level 2 science tutor)
This is understandably perceived as extra – and unpaid - work by some tutors, “The problem is now becoming realistically managing all the requirements of including appropriate feedback and comments and encouragement, and also juggling with the marking tool etc – along with LO’s as well – this is rapidly becoming unwieldy and unmanageable.” (Level 1 technology tutor)

On another fourth level technology course where tutors have experienced similar problems and alerted the course team, the course team has asked the tutors for ideas on how to best integrate learning outcomes in a single marking process. The tutors are discussing this issue with the course team on the electronic conference for the course - another example of interaction between two points of the triangle. We hope that the second stage of our embedding project will bring views of the third point of the triangle – the students – to bear on the problem of how best to base the assessment process on learning outcomes.

However, on some courses that are less than a year old, tutors suggest that learning outcomes have in fact been well integrated in to the assessment process “Because the LO’s are listed with each TMA and example of what constitutes evidence for these, I have found that part of the marking quite straight forward so far” (Level 1 education tutor)

This gives us hope that the embedding of learning outcomes in the assessment process, though slow, is in fact taking place in that tutors are already using them in their dialogue with their students.

All the tutors volunteering to take part in the project are from courses that mention learning outcomes as such, somewhere in the course material. We have concentrated on the use of learning outcomes in the assessment process but also asked the tutors several questions about how they use learning outcomes during the many possible types of interaction with their students, for example during tutorials, phone calls, on the assignment scripts or on the summary sheet that accompanies each assignment. The answers revealed that, as yet, learning outcomes are rarely used as framework for discussions between tutors and student but there is an overwhelming amount of evidence that tutors believe strongly in the value of learning outcomes in enabling the assessment process to be transparent to the student and the student to take charge of their own learning. The simple process of asking questions about learning outcomes related to the specific course with which a tutor is involved, raises the tutor’s awareness of learning outcomes significantly.
The second stage of the project is now underway and in it tutors are asked to devise their own project to investigate their students’ awareness and understanding of the learning outcomes for their current course. The tutors’ reports on their investigations should be completed by October of this year. – but one maths tutor has already reported that her line manager, a member of the regional academic staff, and the chair of the course team which is designing the successor to the course presently being offered, are interested in the results of her project work with her students as the new course has explicit learning outcomes. They want to hear the students’ perspective so that they can make the learning outcomes explicit and expressed in a way that is clear to both tutors and students. This is another example of the dynamics of the triangle being sustained by dialogue. The fact that over forty tutors have volunteered to continue with stage two of the project is testimony to the importance that many of our tutors place on learning outcomes as part of the assessment process. The results of their projects will be shared with all line managers and course teams. The voice of the student will be heard and the dialogue will be further enriched.

Fig. 5: The triangle shows dialogue between tutors and students about use learning outcomes. Tutors discuss with the course team, the ways in which learning outcomes are to be assessed. Learning outcomes are made more explicit in course materials by course team. Students comment to course team via course electronic conferences and end of course questionnaires.

**Triangulation and transformation - process and progress**

Looking back as together we wrote this ‘story’ of our journey towards an outcomes-based approach to the design of the curriculum – to teaching and learning and particularly towards to appropriate assessment of the outcomes - we experienced moments of insight and understanding with memories of new, exciting and rewarding
initiatives particularly with our part-time colleagues. Returning to our normal patterns of work – responding to e-mails and phone calls, requests for help and advice, invitations to run events in faculties and regions on the assessment of learning outcomes – it becomes apparent that our journey, and our story, is unending.

We believe that the processes represented by our triangulation are useful ways to analyse the inter-relationships and interaction between different cohorts of staff and students in a huge distributed organisation. Here we do feel we have made some progress. Every initiative that has involved interaction along the sides of the triangle has had positive effects.

Moving to an outcomes-based approach and working towards the appropriate assessment of learning outcomes has been a significant way of encouraging communication along all sides of the triangle.

Fig 6: LOTA has maintained the dynamics of the triangle by providing opportunities for interactions

However in terms of the size of the institution the numbers involved are small. We have shown what can be done and have identified and recorded those positive effects of enhanced communication around the assessment of learning outcomes.
The challenge now is how to ‘scale up’ the process without losing the personal interaction we identified as so important.

And so to transformation – can we claim that despite the small scale of our activities the process has been transformative for people and for processes?

In terms of scale, the answer is probably ‘no’ and at least another five years are needed before we can claim a university-wide change. What the tutors of fairly new courses have said in the questionnaire about learning outcomes supports this. In terms of attitudes, some more marked change is apparent even if it is from ‘why?’ to ‘how?’.

In terms of effects on the individuals who have worked with us we would use the term ‘transformation’ because many of them do talk about the scale of the change in terms of their motivation, attitudes and action. In terms of the institution as a whole, however, so many other factors are driving or contributing to change that there is a danger of ‘innovation fatigue’; a move to an outcomes-based curriculum, especially involving changes in assessment, is seen as yet another issue to address. It is possible to claim, however, that no one involved in the assessment of learning outcomes remains untouched though possibly ‘untransformed’. The area of greatest confusion is still about the ‘language’ of learning but we believe that the dissemination of the work begun on academic literacies will help to address this.

**Conclusion**
In recalling and recounting this story of curriculum change in the UK OU we have once again come to realise the complexity of what has been happening in our institution. This is our story – our perception – of triangulation and transformation; others, including our colleagues, might see it differently but trying to stand back and re-view our work has been useful – if challenging. In the title of the paper we indicate that the story is ‘unfinished’ and this is definitely very true – but it is ongoing ….

Four things have been positive about the work we have been doing and describing:

- We have made our colleagues focus on teaching and learning and, above all, on assessment rather than on the content of their courses.
- We have raised awareness about the ‘staff development’ inherent in curriculum change.
• We have constantly been aware of the enhancement of the learning experience of our students although as yet, we have no real evidence of this.
• We have raised issues about the language of learning outcomes and challenged some of the assumptions that underpin our practice.

We are aware that an outcomes-based approach to the design and delivery of the curriculum can be too rigid and that it may not be possible – or desirable – to identify and record outcomes in HE courses. However, we still believe that the approach can lead to quality enhancement through raising awareness and encouraging accountability. We think that the ‘triangulation’ of the curriculum in a large, dispersed and fragmented institution is a reasonable aim but we acknowledge that our claim to ‘transformation’ is premature and not (yet) supported by evidence. We know that at the individual level both central and regional colleagues who participated in the various activities described in this paper have made significant changes to their practice but at an institutional level compliance does not necessarily mean conviction.

Note 1: A fuller account of the material in this section can be found in a previous ASEESA paper by Coats (1998)

References


Appendix:
A summary of the process of identifying and assessing the intended Learning Outcomes of Courses in the UK OU

<table>
<thead>
<tr>
<th>All courses should describe their learning outcomes in four categories (knowledge and understanding, cognitive skills, key skills, and practical and professional skills)</th>
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<tbody>
<tr>
<td>Existing courses should audit their teaching, learning and assessment material to ensure that the intended learning outcomes are developed and assessed in the course. New courses should build this process into the production phase</td>
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<tr>
<td>Students should be given clear information, in appropriate language, about what learning outcomes are and what they are for.</td>
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<td>Activities and formative assignments should explicitly develop learning outcomes and prepare students for summative assessment.</td>
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<td>All summative assessment activities, including ECAs and exams, should identify which learning outcomes are being assessed and this should be communicated to students and tutors.</td>
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<tr>
<td>Mapping the assessment of learning outcomes for a course should ensure that any options offered within an assignment address the same stated outcomes.</td>
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<tr>
<td>Course teams should check the substitution rule for their course to ensure that all students have the opportunity to demonstrate that they have achieved all the learning outcomes.</td>
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<tr>
<td>Marking schemes should use criteria relating to learning outcomes in advising tutors how to mark assignments and decide on grades. Students should know what the criteria are, and how they are linked to the allocation of marks.</td>
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<tr>
<td>Feedback from tutors should focus on the demonstration of learning outcomes and identify where development is needed.</td>
</tr>
<tr>
<td>Monitoring of tutor marking and feedback should be related to learning outcomes, and this should be made clear to tutors.</td>
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