

Reflection: Phil Race, University of Leeds

In this article, I'd like to explore the rationale for reflection as a key factor underpinning both successful learning by students, and successful continuing professional development by their teachers in higher education. "But how can I reflect? What do you mean by reflection? How will I know when I've reflected well?" are questions which students and staff alike ask about the process. Moreover, "how can I show that I've reflected successfully?, What will be deemed satisfactory evidence of my reflection?" are their next questions. This article aims to help by addressing all of these questions. In particular, my tenet in this article is that reflection can best be evidenced by answering questions. Just about all good questions have the letter 'w' in the key interrogative word - who, what, when, where, why and how, for example.

Why reflect?

Reflection deepens learning. The act of reflecting is one which causes us to make sense of what we've learned, why we learned it, and how that particular increment of learning took place. Moreover, reflection is about linking one increment of learning to the wider perspective of learning - heading towards seeing the bigger picture. Reflection is equally useful when our learning has been unsuccessful - in such cases indeed reflection can often give us insights into what may have gone wrong with our learning, and how on a future occasion we might avoid now-known pitfalls. Most of all, however, it is increasingly recognised that reflection is an important transferable skill, and is much valued by all around us, in employment, as well as in life in general. The ability to reflect is one of the most advanced manifestations of owning - and being in control of - a human brain. Have you reflected today? Almost certainly 'yes!'. But have you evidenced your reflection today? Almost certainly 'sorry, too busy at the moment'. And the danger remains that even the best of reflection is volatile - it evaporates away unless we stop in our tracks to make one or other kind of crystallisation of it - some evidence. In our busy professional lives, we rarely make the time available to evidence our ongoing reflection. But we're already into an era where our higher education systems are beginning to not only encourage, but also to require our students to evidence their reflection. So what can we do to address the reflection culture gap - how can we approach accommodating our lack of experience in evidencing our reflection, and helping our students to gain their skills at evidencing their reflection?

So what's the problem?

The problem, in a nutshell, is that relatively few teachers in higher education have ever been asked to reflect. Many who enter the profession have been good students - which boils down to successful students. But that does not necessarily mean they have had experience of - or indeed training in - how to evidence their reflection on their developing professional practice. Now that higher education is evolving to embrace personal development plans by students, records of achievement, or 'progress files', the kind of reflection that we are starting to require our students to undertake is beyond the personal experience of most of the staff who are requiring it. This is evidenced by the expressed difficulties that staff working towards awards such as Postgraduate Certificates in Teaching and Learning in Higher Education are only too willing to admit to when they themselves are asked to evidence their own reflection on the learning they experience while working towards such awards. In short, if we aren't very skilled at reflecting, how on earth are we going to help our students to become skilled?

Where, when and by whom is reflection needed?

Reflection is increasingly required in education and employment. More specifically, evidence of reflection is required, for example:

- where students are required to build up 'personal development planning' portfolios, or learning logs, or records of achievement, both as evidence to be able to present to prospective employers, and (more importantly) as a proactive process to help them to deepen their ongoing learning as it happens.
- Where teaching staff are required (or encouraged) to build up records of their reflection on their developing work associated with teaching, learning and assessment, so that they develop their practices in a more efficient and focused way than if they simply left reflection to chance.
- In most areas of professional life, where continuing professional development is required or expected, and where it is important at any stage to be able to show that such development is indeed being undertaken in an organised and professional way.
- Some professions have led the way regarding reflective practice, not least nursing and health care disciplines. But for other disciplines, progress has been slower. Hard-nosed engineers, mathematicians, scientists and business professionals have tended to shrug off reflection as subordinate to subject knowledge and skills. But the wider community beyond the campuses of higher education continues to value 'rounded' individuals, who can not only demonstrate subject knowledge and skills, but can develop and grow as circumstances around them continue to change and evolve.

Reflection: making sense of learning

Elsewhere, I've argued the case that 'digesting', or making sense of what is being (and has been) learned is a key factor underpinning successful learning. I've also argued that it's an oversimplification to regard learning as occurring in cycles, and that five key processes overlap and interact with each other, like ripples on a pond. For example, 'digesting' or 'making sense' links to reflecting on the experience of having done some learning-by-doing (practice, repetition, trial and error, experience, and so on). Moreover, 'digesting' links to making sense of incoming feedback (other people's reactions, praise, critical comments, seeing the results of one's learning, and so on). In the earlier versions of learning cycles, the term 'reflective observation' was much used, but I would argue that this is just a relatively narrow slice of the broader field of reflection. Deep reflection needs far more than simply observation, and for observation to be at its best it needs more than just a reflective dimension (requiring in addition analytical, extrapolatory, and other aspects as well as just inward-looking aspects).

My work both with staff and students indicates that the digesting stage of learning is often the hardest to get to grips with. This is in no small measure due to the fact that people find it hard (sometimes even quite alien to their nature) to reflect, and to evidence their reflection.

Teaching staff in higher education are not alone in often finding it hard to write about reflection on their professional practice. In the last two years or so, over 10000 staff in higher education have been admitted to membership of the Institute for Learning and Teaching, and many remember that the hardest part of writing their applications was writing around 500

words about 'reflective practice and professional development'. Writing about the latter part was for most quite straightforward, as it boils down to presenting a little factual information about the staff development they have done in the last few years. But writing about 'reflective practice' is much harder for some, not least because the language of academe tends to be remote, formal and scholarly, whereas the language of written reflection needs to be more personal and quite informal.

Reflection could be argued to be the essential stage where learning is integrated within the whole learner, and added to existing frames of reference, and internalised and personalised.

Reflection as a basis for enriching learning dialogues

Perhaps the most powerful advantage of evidencing reflection consistently and coherently is that it opens up the possibility for dialogue with significant others, for example dialogue based upon evidenced reflection between:

- Teachers and learners, enabling learners to gain feedback on the quality and depth of their reflection, so that they are able to improve and develop both their reflection and their learning;
- Staff developers and teachers, enabling teachers to gain feedback on their own thinking about their triumphs and disasters alike, to enrich their own learning about their developing practice;
- Appraisers and appraisees, so that appraisal becomes a deeper and more meaningful process for both parties, allowing a greater depth of relevant discussion between them at appraisal interviews, and increased ownership of the appraisal agenda for appraisees.

The common ground among each of these three scenarios is the development of a greater sense of ownership, both of what has already been achieved, and what remains to be achieved.

A widening agenda for evidencing reflection

It is probably unwise to attempt to 'teach' people to reflect (whether they be students, professionals, or employees). The process of reflection can indeed be illustrated to those whose reflection is to be improved, but in the final analysis reflection remains an individual act in most circumstances (though the increased benefit of a group of people being involved in shared reflection is even more significant in many situations where collaborative and team activity is to be encouraged).

In this discussion paper, I propose that the most efficient way of helping people both to reflect and to evidence their reflection can be to provide them with questions as devices to help them to focus their thinking, and direct their thinking to those areas of their work where reflection can pay highest dividends. This paper presents some starting-point questions to illustrate the range of reflection that can be encouraged.

The widening agenda includes that of widening participation in higher education, where there are many more students from diverse cultures and educational backgrounds in the system than was formerly the case. This makes it all the more necessary to legitimate student

reflection, and for teaching staff to have close encounters with the range of student reflection which can be uncovered, so as to enable them to tune in better to the 'widened' student community.

Moreover, with increased attention to student retention in higher education, student reflection can be one of the most powerful vehicles for alerting teaching staff to the range and nature of problems that 'at risk' students may be experiencing, and allowing for compensation and adjustment to be made to reduce the levels of risk. Furthermore, getting students to reflect on their learning, their aspirations, their triumphs and their disasters can add significantly to the value of their educational experience overall, and help them to work towards being more self-assured and self-aware graduates.

In short, there has been no better time to get our act together regarding evidencing reflection - both our own reflection, and that of our students.

Reflection transcends time

Although many attempts to cause people to evidence their reflection tend to be backward-looking, the reflection which can be generated by past, present and future-tense questions can be much deeper.

For example, the trio of questions:

1. What worked really well for you?
2. Why do you now think this worked well for you?
3. What are you going to do as a result of this having worked well for you?

is a much richer agenda for reflection than just any one of these questions on its own.

Some questions to help students (or ourselves) to evidence reflection

As in the example above, questions which aid deep reflection are rarely single questions, but tend to form clusters. There is often a starter question which sets the agenda, and frequently is a 'what?' question. Then come the more important ones - the 'how?' questions and the 'why?' questions - and sometimes the '.... else?' questions which ask for even deeper thinking and reflection.

In general, it seems too obvious to state it, but simple 'yes/no' questions can rarely enable the extent of reflection which can be prompted by more open-ended questions such as 'to what extent...?'. Sadly, however, there remain far too many 'closed' questions on student feedback questionnaires, and unsurprisingly the level of student reflection that such questionnaires tend to elicit is limited.

On the next page are some clusters of questions. The first part tends to be a scene-setting starter, and the sub-questions which follow are probing or clarifying questions, intentionally leading towards deeper or more-focused reflection. These questions are not in any particular order. A set of questions to aid student reflection on a piece of work just finished could use some of these as starting points, and usefully add in subject-specific questions to help to flesh out the agenda for reflection.

Although these questions have been written with student reflection in mind, they could equally be extended to continuing professional development contexts, appraisal contexts, and suggesting some agenda items for a teaching portfolio for lecturers. Whatever the context, however, the quality of reflection which is prompted is only as good as the questions which prompt it. In other words, for optimum reflection, much more care needs to be taken with phrasing the questions than might have been thought necessary. Or, putting it more bluntly, when students seem to have difficulty in evidencing their reflection on their learning, it is often that we haven't yet spent nearly sufficient time on setting up the contexts in which we ask them to reflect.

The questions

- What did I actually achieve with this piece of work? Which were the most difficult parts, and why were they difficult for me? Which were the most straightforward parts, and why did I find these easy?
- How well do I think I achieved the intended learning outcomes for this task? Where could I have improved my achievement? Why didn't I improve it at the time?
- What have I got out of doing this assignment? How have I developed my knowledge and skills? How do I see the payoff from doing this assignment helping me in the longer term?
- What else have I got out of doing this assignment? Have I developed other skills and knowledge, which may be useful elsewhere at another time? If so, what are my own emergent learning outcomes from doing this assignment?
- What was the best thing I did? Why was this the best thing I did? How do I know that this was the best thing I did?
- What worked least well for me? Why did this not work well for me? What have I learned about the topic concerned from this not having worked well for me? What have I learned about myself from this not having worked well for me? What do I plan to do differently in future as a result of my answers to the above questions?
- With hindsight, how would I go about this assignment differently if doing it again from scratch? To what extent will this assignment influence the way I tackle anything similar in future?
- What did I find the greatest challenge in doing this work? Why was this a challenge to me? To what extent do I feel I have met this challenge? What can I do to improve my performance when next meeting this particular sort of challenge?
- What was the most boring or tedious part of doing this assignment for me? Can I see the point of doing these things? If not, how could the assignment have been re-designed to be more stimulating and interesting for me?
- Has it been worth the effort I put in? Do the marks represent a just reward? Should this assignment be worth more or less marks in the overall scheme of things?
- Do I feel that my time on this assignment has been well spent? If not, how could I have used my time more sensibly? Or should the assignment have been designed differently? Which parts of the assignment represent the time best spent? Which parts could be thought of as time wasted?
- How useful do I expect the feedback to be, that I receive on my efforts for this assignment? What sorts of feedback do I really want at this point in time? What sorts of feedback do I really need at this point in time? What are my expectations of getting useful feedback now, based on the feedback (or lack of it) that I've already received on past work?

- Overall, how has this assignment helped (or hindered) my motivation to learn more about this part of my syllabus? Has it encouraged me, or disillusioned me?
- To what extent has this assignment helped me to clarify what I need to learn about this topic? Have I a clearer picture after doing the assignment, or a foggier one? Who can help me gain a clearer picture, if the latter?
- To what extent has this assignment helped me to see where the goalposts stand for future assessments such as exams? Has it given me useful insights into what will be expected of me in future?
- What advice would I give to a friend about to start on the same assignment? How much time would I suggest that it would be worth putting into it? What pitfalls would I advise to be well worth not falling into?
- What are the three most important things that I think I need to do with this topic at this moment in time? Which of these do I think is the most urgent for me to do? When will I aim to start doing this, and what is a sensible deadline for me to have completed it by?
- Reflective conclusions
- This discussion paper has been prompted by several different events in my own life this last week, including my being a participant at a staff-development one-day course on 'influencing skills', where I took away the messages that:
 - To influence people we have to move with them, rather than against them, therefore getting students to reflect is best done by asking them questions which they will be interested to answer from their own learning perspectives;
 - Influencing is not achieved by talking at anyone! (or indeed, more sobering for me as a writer, by writing at anyone).

An open, well-attended lunchtime meeting at Leeds University on 'progress files' added much fuel to my imagination about how to ensure that progress was evidenced not only factually and quantitatively, but also reflectively and qualitatively - and with a good sense of ownership by students of their resulting files.

Reading an ILT discussion paper yesterday on 'widening participation and retention' caused me to reflect on what can we do about the undoubted tensions between the two, and how best can we use both agendas to the greater benefit of all of our students, and not just those who are at risk on 'retention' grounds because of their presence in higher education on 'widening participation' tickets? This led me back to thoughts of a few weeks ago when helping to write a book chapter on 'inclusive lecturing' and my dawning realisation that 'inclusive assessment' was the greater challenge.

The time and space of a train journey to London and an evening alone in a hotel room created the opportunity to sort out my thoughts by writing about them, drafting and redrafting them several times.

As I conclude (for the moment) the muse of my own reflections on these issues, the distant ghostly figure of a verse from past times echoes in part of my memory... "if you don't ask no questions, you won't be told no lies, so watch the walls my darling while the Gentlemen goes by". It's time to stop watching the walls, and get ourselves - and then our students - reflecting, by asking lots of questions which transcend those lies so often elicited by one of our weakest of all 'questioning' devices - the ubiquitous end-of-module student questionnaire! But fighting that is another agenda, another battle, for later