

Learning through Reflection –
A guide for the reflective practitioner

Andrew Castley

University of Warwick

Note: Written initially in 1996, this paper was revised in May 2005.

Thanks are due to my colleagues Ann Devlin of the Nene Centre for Health Education and Dr Stephen Swailes of the Sunlev Management Centre for some of the following ideas and sources.

Work-based learning programmes are about learning primarily from experience at the place of work. Fundamental to the learning process in this context is the ability to reflect constructively on that experience. This paper attempts to make that process explicit so that learners are provided with a tool they can use to develop the range, depth and effectiveness of their professional expertise.

So the paper is essentially for practical use. The first three sections summarise the conclusions of a number of commentators, and incorporate examples relevant to experience-based programmes which were current at the time at University College Northampton. Section 3 suggests practical ways in which to reflect constructively on experience. Section 4 presents an inventory of questions to assist in each stage of the process of reflection.

1. Boud and Walker (1)

1.1. Feelings.

When reflecting on an event it is useful - often important - to recall how you felt at the time. Were your feelings positive, negative, neutral? Were you confident, uneasy, nervous, insecure? Were you satisfied, dissatisfied? Why? What particular features, people or behaviour made you feel that way? Why did they make you feel that way? Are these factors related to something else that needs attention?

1.2. Association.

Link the event to other experiences which may be similar or different in particular respects. Use non-critical techniques to make connections, like brainstorming, writing, talking, using a tape, before you go on to analyse and evaluate them. This way you generate analogies which can lead to insights, or you find you have developed your thinking linearly from a previous experience.

For example:

preparing students for groupwork might be analogous in some way to socialising at a party; or

The way you handled a difficult situation at work may have similarities to (or specific differences from) situations experienced elsewhere.

1.3. Integration.

In this phase, work with the data provided by the experience and the association phase above to explore relationships within it and to draw conclusions. Mind maps and Venn diagrams can be helpful in this; for less concrete ideas, analogies, similes and metaphors can be useful. For example,

Was the assessment of a particular exercise consistent with its declared purpose? Was the preparation of the students consistent with what was subsequently asked of them? Was there consistency between the teacher's assumptions about prior knowledge and actual prior knowledge of the students?

In the processing of examination results, was there effective communication between administrators and academics? Were obligations fulfilled? Was full documentation available? Was the Examination Board well chaired? In what way?

1.4. Validation.

In this phase, test the conclusions from the integration phase above against what you know to be true, effective or valid from other experience. Are your conclusions consistent with past experience, or others' experience? Its validity can also be tested by a version of Einstein's "thought experiments" in which you mentally run through a possible application in practice of your conclusions. Does it "feel right?"

1.5. Appropriation.

Appropriation means making the learning one's own. This can be at the level of a fairly straightforward technique, but is often at a profound level in which the learner's world view can shift. "The new learning which flows from reflection can not only change future approaches to events, but can also affect the behaviour of learners, as well as providing learners with an insight into how they learn. Other possible outcomes of this reflection are a greater readiness to apply what has been learned, and a deeper commitment to action."

For example,

When people are consulted about a new idea or development, two things usually happen: the idea is improved, and people's readiness to accept it is

increased. This insight might lead the learner to revise their approach to managing a department, running meetings or structuring an activity for their students. This changed behaviour is particular to the learner and would be highly valued by them.

2. Boyd and Fales (2)

The following components of the process of learning through reflection were identified by the authors in many respondents in their research. These stages refer to learning which takes place at a profound level and affects at least to some extent the way in which the learner views the world.

2.1. A sense of inner discomfort.

This could be intentionally provoked by a teacher, mentor or advisor, but often evolves apparently spontaneously in the learner. It can be the feeling that something does not fit, has been forgotten, is confusing, has too many possible alternatives; it is often described as a sense of "stuckness".

2.2. Identification or clarification of the concern.

The reflective learner will be able to convert this vague unease into a defined problem or issue. It may happen unconsciously, or the learner may consciously explore the sense of unease by writing, identifying "blocks" (*why don't I make that call? Am I worried I'll get a negative response?; Why don't I make a start? Do I think I won't be able to do it?*).

"The key characteristic which seems to differentiate reflective learning from other types of mental activity (thinking or problem solving) is that the problem is conceptualised in relation to self. The individual is aware of and places self as the centre point reference for the problem or task."

2.3 Openness to New Information.

Having identified the issue the reflective learner will not want immediately to resolve it, but will remain open to new information or perspectives on it. Often this openness is as much a feeling, a willingness to suspend judgement, as a detached intellectual process. It can take the form of reviewing past experience, engaging in lateral thinking activities (De Bono-style), brainstorming, discussion, changing activity (conscious disengagement), or facing up to a really challenging question.

This is where an adviser or mentor can often be of great value, and where the learner working alone can easily miss taking full advantage of the learning opportunity. Be proactive here - at least write down your thoughts or discuss them with others, always trying to explore and push at the boundaries.

2.4. Resolution.

For an intuitive thinker, this stage is the "a-ha", or relief stage, when the learner now feels comfortable with the issue. It can occur apparently quite suddenly and spontaneously, or following a period of active thinking about the issue. This comfortableness will usually come from an insight, a new appreciation of how one thing influences another. This could be at the level of technique or process. If this is at a deep level, it might cause the learner to change at an equally profound level - It is not unusual for attitudes, beliefs or values to change in this process.

For example, in *dealing with "difficult" people, one might learn to adopt specific verbal techniques; on the other hand, one might come to see kinds of "difficult" behaviours in the broader context of their personality, background and perspective, and one's attitude towards people generally may change as a result.*

2.5. Deciding to take action.

Here the learner will decide on the relevance or potential effectiveness of the new insight to practical situations. *How will it work in practice? How right does it feel? How will it be received by others? Which others are likely to be most receptive? Which most helpful? Which most objective?*

Alternatively the context of this learning may be such that the resulting insights merely allowed to rest in the self without acting overtly on it.

Whatever the decision, even negative feedback from others is unlikely to take the learner back to square one: changes in the resolution stage of this process seem never to be wholly lost.

3. Schon (3)

A third proponent of reflective learning, Donald Schon, suggests that reflection-on-action comprises three broad phases: conscious reflection; critical analysis; action / new perspective. All commentators agree that feelings play a significant role in triggering the reflection and, particularly with profound insights, in the final shift in perspective. Let us use Schon's three phases and see the others as elaborations of them. Each phase requires identifiable skills or attributes.(4)

3.1. The first phase requires the learner to be self-aware and to be able to empathise. That is, the learner needs to be aware of the interaction between him / herself and the environment. Whilst these attributes will be among the desired outcomes of reflective learning, they will actually foster the learning process itself. It seems to be a question of strengthening these characteristics through reflective practice.

3.1.1. Honey and Mumford's inventory of learning styles (Honey, 1985) together with D. Kolb's experiential learning cycle and Belbin's analysis

of roles which people take naturally in a group situation, provide practical vehicles to develop these attributes.

3.1.2. The learner must also be observant and able to describe objectively and in detail the events of the experience. Keeping a log, diary or journal, or simple notes taken during or after the experience should help develop both the powers of observation, and self-awareness.

3.2. The second phase requires critical skills. The ability to be objective, to perceive the actual cause and effect of actions, to challenge and identify issues of practice and principle which need to be addressed, all belong here. The ability to use theory and concepts in such an analysis is also relevant. The following pointers may help establish a process: (5)

3.2.1. Hypothesis testing.

Much of mankind's knowledge has come from hypothesis testing. A hypothesis is a statement of the following type:

Students learn best from enthusiastic teachers; or

The best managers specify exactly what is required, or again

Having freedom of action in your work is a great motivator.

Each hypothesis can be tested by research, or by experience through what is termed action research or simply by experience observed in a less structured way.

But you do not have to rely on the hypotheses of others. From personal experience of work or arising from a course of study or training, a learner may be able to generate his or her own hypothesis to test. It is almost certain that one's "own" hypothesis has already been thought of, and can be found in the relevant literature, but this should not deter the learner from thinking along these lines. The resulting learning experience is the more powerful for being original to the learner, and one's own perspective may well be unique.

For example:

I generally work best in the mornings; or I generally prefer flexitime; or

My students are increasingly instrumental in their approach to their studies.

3.2.2 Applying theory.

Unlike a hypothesis, a theory is a generalised statement resulting from experiment and/or an extensive process of logical thinking. For example:

In the long run, pay is not a great motivator at work (a conclusion from Maslow's work);

Kolb's four stages of experiential learning; Bloom's taxonomy of educational objectives.

Any of these theories is testable in a work situation: the main aim would be to bring a little piece of theory to life.

3.2.3 Examining rival propositions.

It may be illuminating in choosing between alternative actions to formulate relevant propositions in general terms, and compare them with your own experience.

For example:

"Class size has no discernible effect on students' learning", set against "The more tutor/student contact, the better the potential for learning"; or

"When dealing with other people, it is best to be assertive: know where you will draw the line": set against "Empathise: always hold the interests or view point of the person you are dealing with at the front of your mind".

3.3 The final phase requires the skills of synthesis and evaluation - Synthesis is the ability to integrate new knowledge with previous knowledge or experience, and the insights of others. Frequently a perusal of the literature will help in this:

3.3.1. Practitioner literature.

Practitioner literature is often in the form of journals. In all areas of work there are regular publications in which people report on some aspect of their work. Email user groups, e-forums, mailbases and weblogs are major channels of sharing experience. These articles and notes are a fruitful way of generating practical ideas and perspectives on your own work.

3.3.2. Academic literature.

Books and refereed journals belong to this category. These tend to be more abstract, and though using empirical evidence, deal mainly in theories, concepts and principles. Principles and Practice of Management, Educational Theory, and Educational Psychology would be examples of areas of interest in academic literature.

3.3.3. Evaluation

Evaluation is the ability to set experience or evidence against criteria and standards. An obvious general criterion of judgement would be "Did I do the job well?" But this is not very helpful. By what criteria have you given the answer? Here are some possibilities:

Was it done on time? Was it done with minimum of effort? Did I communicate effectively? How do I know that? Was the work qualitatively sound? What am I measuring that against? What are others now doing / able to do as a result? What change has been brought about? What benefit has that brought? How do I know that? How does that job fit in with a broader project?

Some of the ideas we have set out above in "critical thinking" may also be relevant in this phase.

4. Implications for the reflective learner (B)

This is an inventory of questions which may be used to promote reflection on an experience. Experience is taken to mean, in the work context, a one-way communication, a more complex one-to-one interaction, a project, an organisational or administrative process, or a learning exercise. The inventory could be used also to plan any experience.

Phase 1: Intentions, and whether you have met them.

- What would have been the ideal outcome of the experience in terms of the process (the experience of all participants) and the product (the results)?
- Did the experience fall short of the ideal? In what ways? By what criteria?
- Am I recalling all material aspects of the experience? Am I interpreting them correctly? How do I know?
- What are my feelings about this experience?

Phase 2: Critical analysis

- Did I devise or structure the experience appropriately?
- Did I take into account my own strengths and limitations?
- What skills and knowledge do I need to learn to improve the experience? Did I take into account the perspectives of others?
- Did I prepare myself appropriately? Did I prepare others appropriately?
- Did I carry out the experience appropriately? Were my initiatives and responses appropriate? Were the initiatives and responses of others

appropriate? If not, why not? What theory or concepts are relevant to the structure and/or to the execution of the experience?

- Did I apply them appropriately?

Phase 3: Synthesis (integration) and evaluation

- Could I draw any conclusions (make hypotheses?) from the experience?
- How does the experience relate to existing theory, concepts or propositions? Does it support or run counter to them? Are there implications for how I might apply the theory, concept or proposition next time?
- Should I set yourself the same objectives again? Will I approach them in the same way?
- What skills and knowledge do I have to develop to improve the experience? Does this experience connect with other, analogous experiences of mine or of others? Would a look at the literature help?
- What will I do differently next time in terms of preparation and execution? Is this a change (i) in technique, or (ii) in attitude or (iii) in value (belief) system? What are my feelings about this?

5. Summary.

Participants in work-based professional development programmes are most likely to develop and transform their professional practice if they are able to reflect purposefully on their experience. Knowledge of relevant theoretical frameworks, concepts, and principles of good practice are important frames of reference for developing professional practice. Also important are self-awareness and the skills of description, critical analysis, integration and evaluation. Thinking around these skill and knowledge areas should help participants make the most of their Professional Development Programme. The inventory of questions and issues may help in the process of reflection.

Andrew Castley 19.10.1996

Revised 16 5 2005

References

1. Adapted from Experience and Learning: Reflection at Work. D. Boud and A. Walker 1991.
2. Adapted from Reflective Learning: Key to learning from experience in the Journal of Humanistic Psychology Vol. 23 No. 2, Spring, 1983, pgs. 99 - 117. E.M.Boyd and A. W.Fales.

3. The Reflective Practitioner: How Professionals Think. 1991. D.Schon.

4. Adapted from Reflection: a review of the literature, in Journal of Advanced Nursing, 18, 1188 - 1192, S. Atkis and K. Murphy

5 Adapted from S. Swailes, A Guide to Project Work in Management. Nene College, 1995.