

Reflection: Turning Experience into Learning

Edited by

David Boud,
Rosemary keogh
and David Walker

 **RoutledgeFalmer**
Taylor & Francis Group



**REFLECTION:
TURNING
EXPERIENCE
INTO
LEARNING**

This page intentionally left blank

REFLECTION: TURNING EXPERIENCE INTO LEARNING

**Edited by David Boud, Rosemary Keogh
and David Walker**



RoutledgeFalmer
Taylor & Francis Group

LONDON AND NEW YORK

First published 1985 and reprinted 1987 by Routledge
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Reprinted 1994

Transferred to Digital Printing 2005

Routledge Falmer is an imprint of the Taylor & Francis Group

Copyright © 1985 David Boud, Rosemary Keogh,
David Walker and contributors
All rights reserved

British Library Cataloguing in Publication Data

Reflection: turning experience into learning.

1. Learning, Psychology of

I. Boud, David II. Keogh, Rosemary

III. Walker, David

370.15'23 LB1051

ISBN 0-85038-864-3

Published in the USA by Nichols Publishing Company,
PO Box 96, New York, NY 10024

Library of Congress Cataloging in Publication Data

Boud, David.

Reflection, turning experience into learning.

Bibliography: p.

1. Learning — Addresses, essays, lectures. 2. Thought
and thinking — Addresses, essays, lectures. 3. Students,
Self-rating of — Addresses, essays, lectures.
4. Experiential learning — Addresses, essays, lectures.

I. Title

LB1060.B68 1985 370.15'23 84-16507

ISBN 0-85038-864-3

Contents

INTRODUCTION	
What is Reflection in Learning?	7
<i>David Boud, Rosemary Keogh and David Walker</i>	
CHAPTER 1	
Promoting Reflection in Learning: a Model	18
<i>David Boud, Rosemary Keogh and David Walker</i>	
CHAPTER 2	
Autobiographical Learning	41
<i>J P Powell</i>	
CHAPTER 3	
Writing and Reflection	52
<i>David Walker</i>	
CHAPTER 4	
Debriefing in Experience-based Learning	69
<i>Margot Pearson and David Smith</i>	
CHAPTER 5	
Reflection and Learning: the Importance of a Listener	85
<i>Susan Knights</i>	
CHAPTER 6	
Reflection and the Development of Learning Skills	91
<i>Alex Main</i>	
CHAPTER 7	
Reflection and the Self-organized Learner: a Model of Learning Conversations	100
<i>Philip Candy, Sheila Harri-Augstein and Laurie Thomas</i>	
CHAPTER 8	
Judging the Quality of Development	117
<i>Philip Boxer</i>	

CHAPTER 9	
The Role of Reflection in a Co-operative Inquiry	128
<i>John Heron</i>	
CHAPTER 10	
Action Research and the Politics of Reflection	139
<i>Stephen Kemmis</i>	
Index	165

INTRODUCTION

What is Reflection in Learning?

David Boud, Rosemary Keogh and David Walker

How do you introduce a diverse collection of articles on 'Reflection: Turning Experience into Learning' when many of the contributors have not until now used the term 'reflection' or 'reflection in learning' to describe their own activities? This was the problem which faced us when we met to decide how best to approach our task. We drafted an introduction which gave a straightforward account of what we regarded as reflection, and as we reread it we became increasingly dissatisfied with what we had written. It did not portray any of our intellectual excitement about the issues and it failed to indicate that reflection, as we understand it, is an active process of exploration and discovery which often leads to very unexpected outcomes. As we searched for a new form of expression we began to exchange experiences about what had led us to become so committed to our present project.

All three of us are involved in continuing professional education in various ways and had come to our present positions from very different backgrounds. One of us works in a university and conducts training programmes for university teachers, another works in technical education as a curriculum advisor, and the third is a priest who is responsible for an adult education centre focusing on spiritual development. We had met through membership of an association of teachers and trainers who were involved with experience-based learning. Part of our shared concern was a dissatisfaction with both traditional methods and more recent innovations in teaching together with a desire to promote an awareness in learners of the possibilities for learning and of the need for them to take control of their own learning.

We were convinced that it is important to draw upon learners' prior experience and to provide opportunities for them to be engaged actively in what they are learning. We also agreed, however, that experience alone is not the key to learning. Too often we have seen students subjected to half digested (and half baked) practical work or work experience and to inappropriate academically oriented learning under the guise of professional education and training. What is it that turns experience into learning? What specifically enables learners to gain the maximum benefit from the situations they find themselves in? How can they apply their experiences in new contexts? Why can some learners appear to benefit more than others?

The more we thought about these issues, the more we identified the importance of what we termed 'reflection'. What do we usually imagine when we think of reflection? In the physical sense we think about mirrors and reflected images, of looking and seeing a parallel version of the world. From a human view we may imagine thinking quietly, mulling over events in our mind or making sense of experiences we have had. Groups of people may also come to mind: engaged in reflection either as meditation or prayer or actively discussing recent events and issues. Comparing notes, roundtable discussions, carrying out a post mortem (metaphorically speaking), having an informal group discussion are all used to describe activities with which we are familiar and which have some relation to 'reflection'.

It seems that we all recognize the importance of these activities in our lives. We say that we need time to catch up with ourselves, to take stock, to make sense of what has happened, or to share other peoples' ideas on an experience. These are so commonplace that we regard them as almost natural events in our culture — as natural as breathing. We know intuitively that we need to do these things in order to learn from our experiences and to deal with our expectations.

The activity of reflection is so familiar that, as teachers or trainers, we often overlook it in formal learning settings, and make assumptions about the fact that not only is it occurring, but it is occurring effectively for everyone in the group. It is easy to neglect as it is something which we cannot directly observe and which is unique to each learner, but, as Duley (1981, p611) points out: 'The skill of experiential learning in which people tend to be the most deficient is reflection.' Perhaps if we can sharpen our consciousness of what reflection in learning can involve and how it can be influenced then we may be able to improve our own practice of learning and help those who learn with us.

One approach to improving our understanding of reflection was to examine some of the issues experientially. The Australian Consortium on Experiential Education organizes regular workshops on all aspects of experience-based learning and, in 1982, it devoted its annual one-day conference to the theme 'Reflection: A Neglected Area in Learning'. One of our colleagues planned and conducted the day's activities and led us to begin to consider the issues which were involved. It was a stimulating experience, but one which left us with considerably more questions than we had initially. We became convinced that reflection is a vital element in any form of learning and that teachers and trainers need to consider how they can incorporate some forms of reflection in their courses. Reflection is not a single faceted concept as our conference title had seemed to imply, but a generic term which acts as a shorthand description for a number of important ideas and activities.

Some examples of common learning situations were useful to us in clarifying the idea of reflection in learning. We want to present these and consider them in the light of some simple models of experience-based learning which have been proposed in recent years. Let us examine what

might occur in a week-long field trip for geology students, and the clinical placement of a student of child care.

In each case three stages are apparent: preparation, engagement in an activity, and the processing of what has been experienced. In the case of a geology student learning how to conduct a search for oil-bearing strata, the student knows that the aim of the trip is to practise reading the clues on the ground which indicate priorities for further testing of underground content and to become aware of the constraints of field work conditions. Before departing on the trip the teacher will already have briefed the class about the location of the ground search and the exercises which will have to be completed. Lists of equipment, costs to the students, transport and camping arrangements will have been discussed.

In the case of the child care student, placement in a pre-school group might be part of the requirement for the completion of a Child Care Certificate, the aim of the placement being for students to learn about the role of the child care worker in a practical setting. Some of the students will have given some prior thought to the coming experience and will have been encouraged to plan for it by deciding on what they should observe, what questions they should ask, and what skills they should practise. They may talk over these ideas with other students and with their teachers. Many students will be preoccupied with some of the practicalities: what to say to the supervisor of the pre-school on their first meeting, how to handle the unruly child, what clothes to wear and how they should protect themselves from messy fingers.

In both examples the preparatory stage would normally consist of a number of elements:

- an outline by the teacher or supervisor of the aims of the activity and the broad structure of what is to take place
- students will have the opportunity to seek clarification and perhaps to make modifications to what has been suggested
- they will have practised some of the skills required of them in the setting of the college or university
- they will be introduced to the resources that are available to assist them during the period of their practical experience.

Depending on the circumstances, and the degree of planning of the course, other preparatory activities may also have occurred (for example, those described in Jenks and Murphy, 1979).

In the preparatory phase reflective activity occurs when students start to explore what is required of them, what are the demands of the field setting and the resources which they themselves have to bring. Typically there would be a relatively high level of anxiety present which some students might respond to by additional preparation and which others might respond to by engaging in a minimal amount of advance planning.

The second phase is the actual field experience. Initially the experience may tend to overwhelm, new observations may rapidly follow each other with insufficient chance for them to be organized and the learner may

resort to coping strategies which involve doing what is most familiar. In the child care student's first days he may be confronted with children talking, moving, asking questions, falling over, splashing paint. The geology student may find she has forgotten an implement she needs, she may recognize several complex rock types and find others she has never encountered before. Students may find that field work is more exhausting than they anticipated as they struggle to write up their notes in the tent in the evening. The relationship between this and what they have been taught in the college may be unclear. There is little or no time to think about it and the world of practice appears at first to be totally divorced from the world of the classroom. In a brief field experience of a week or so the students may never come to terms with the relationships between theory and practice. This may not occur for many students until they return to the context of the educational institution and even then they may require a considerable debriefing to make connections and consolidate what they have learned.

The students in our illustrations will have made various kinds of notes and records of their experience. For some this may have taken the form of systematic laboratory notebooks, for others it might have consisted of jottings of events, remarks, questions and thoughts. The input of information may be considerable and students have to draw back from being totally immersed in the experience in order to digest what is happening. This might involve withdrawing for a time from the task, it might involve talking to their colleagues, or trying to make sense of the experience through keeping a personal diary to record issues, feelings and value conflicts.

The third phase comes after the field experience is finished. Students normally have to report on their experience. In the case of a geologist there would often be a fairly well-defined procedure for writing up field notes, but for the child care student the task might not be so clear. In both cases the students will have to refer to their notes and records, to dredge their memories and to try to reconstruct an account of the salient features that they believe are required by their teachers. Even if there are no formal requirements they may wish to do this for themselves so that they can begin to make sense of the experience. In this process the students will realize many things left undone, questions unasked and records incomplete. All this is part of the learning process.

Looking back on these phases we can see many important features. Learners are having to cope with a considerable amount of new information, they are facing personal demands and the situation forces them into active involvement whether they like it or not. Reflection is needed at various points: at the start in anticipation of the experience, during the experience as a way of dealing with the vast array of inputs and coping with the feelings that are generated, and following the experience during the phase of writing and consolidation. Dewey (1933) refers to these as conscious reflective activity. The activity is purposeful although the particular goals may not be clear to the learner or to the teacher at the

time. The general goal of reconstructing experience is central, continuing and pervasive. In order to pursue this goal, however, learners need to describe their experience, to work through the attitudes and emotions which might colour their understanding, and to order and make sense of the new ideas and information which they have retained.

We can point to any form of learning activity and demonstrate the reflective phases. Even in formal lecture courses we can see the need for students to process the information they have been given, relate this to their previous knowledge, and test their understanding. However, much of the reflective element in these cases has been formalized and procedures have been established which, although they keep students on the task by giving them tests, assignments and tutorial exercises to do, can tend to relieve them of the responsibility for fully relating to their own framework the inputs which they receive. While this may maximize the amount of cognitive learning as defined by end-of-course examinations, it may inhibit the development of self-organized learning.

If we look back on the illustrations we have given we can identify three points we need to bear in mind. First, and self-evidently, only learners themselves can learn and only they can reflect on their own experiences. Teachers can intervene in various ways to assist, but they only have access to individuals' thoughts and feelings through what individuals choose to reveal about themselves. At this basic level the learner is in total control.

Second, reflection as we have described it is pursued with intent. It is not idle meanderings or day-dreaming, but purposive activity directed towards a goal. This is not to say that it may not be helpful to have periods of reverie and meditation associated with conscious reflection, but in themselves these activities are not what we are referring to when we discuss goal-directed critical reflection.

Third, the reflective process is a complex one in which both feelings and cognition are closely interrelated and interactive. Negative feelings, particularly about oneself, can form major barriers towards learning. They can distort perceptions, lead to false interpretations of events, and can undermine the will to persist. Positive feelings and emotions can greatly enhance the learning process; they can keep the learner on the task and can provide a stimulus for new learning. The affective dimension has to be taken into account when we are engaged in our own learning activities, and when we are assisting others in this process. External influences to validate the worth of individual learners and groups of learners are often needed.

The notion of reflection in learning is not a new one: we found that it can be traced to Aristotle's discussions of practical judgement and moral action in his *Ethics* (Grundy, 1982). In modern times the most influential figure has been that of John Dewey and his use of 'reflective activity' in learning. Dewey (1933) crystallized what many generations of teachers had known and practised intuitively, namely that there were two kinds of experiential process which led to learning. The first process was trial and error which led to 'rule of thumb' decisions. The value to the learner of this kind of process was limited by the specificity of the problem which

Reflection: Turning Experience into Learning

was solved and the scope of the trial and error explorations. The second process he identified was reflective activity which involved the perception of relationships, and connections between the parts of an experience. Dewey believed that it was this kind of activity that enabled effective problem-solving to take place and that it improved the effectiveness of learning. He explained reflection on experience as if it were a kind of learning loop, continually feeding back and forth between the experience and the relationships being inferred.

In recent years Kolb, Rubin and McIntyre (1971) have added to our thinking through their well-known model of the learning process. The Kolb model is termed an experiential learning model to emphasize the important part that experience plays in the learning process, an emphasis which differentiates this approach from other cognitive theories of the learning process (Kolb, 1976). The core of the model is a simple description of the learning cycle: how experience is translated into concepts, which in turn are used as guides in the choice of new experiences. Learning is conceived of as a four stage cycle. Immediate concrete experience is the basis for observation and reflection, these observations are assimilated into a theory from which new implications for action can be deduced and these implications or hypotheses are used to indicate new experiences (see Figure 1).

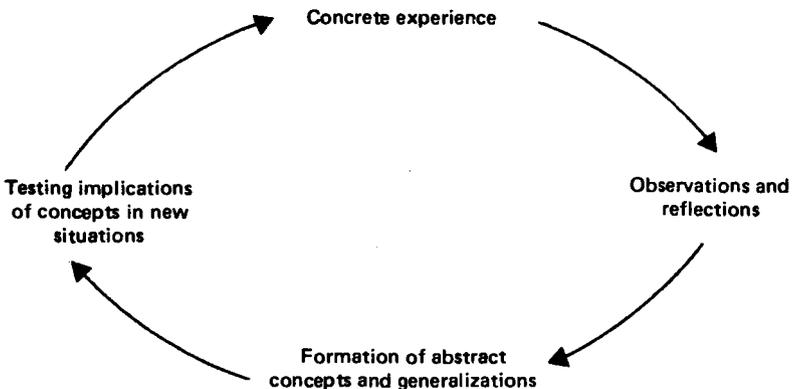


Figure 1 *Kolb's description of the learning cycle*
(Kolb and Fry, 1975)

Kolb argues that learners, if they are to be effective, need four different kinds of abilities which correspond to the four stages of his learning cycle: concrete experience abilities, reflective observation abilities, abstract conceptualization abilities and active experimentation abilities. These abilities represent the contrasting elements of the two major dimensions of cognitive growth and learning: the concrete/abstract dimension and the active/reflective dimension. Any individual will have strengths in

particular parts of these dimensions and will need to develop the skills to operate along the full range if they are to be effective. Kolb has developed a learning style inventory to enable learners to discover their own characteristics in these dimensions (Kolb and Fry, 1975).

Unfortunately Kolb does not discuss the nature of his stage of observation and reflection in much detail. It can appear to refer to the act of associating an incoming idea with one already in the mind of the observer. His scheme has been useful in assisting us in planning learning activities and in helping us check simply that learners can be effectively engaged by the tasks we have set. It does not help, however, to uncover the elements of reflection itself.

Another simple model which gives reflection a central place is that proposed by the British Further Education Curriculum and Development Unit (FEU) in their guide, *Experience, Reflection, Learning*. The FEU model has three phases: the experience of the learner, the specific learning which occurs on the basis of that experience, and the reflective activities which are needed to extract specific learning from the overall experience (see Figure 2).

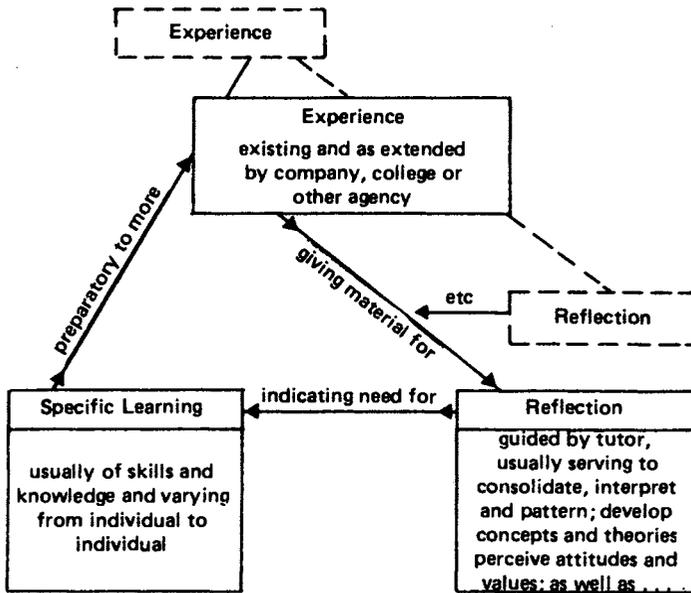


Figure 2 FEU model

The FEU authors' view of the role of reflection in their model is:

The individual's experience needs to be followed by some organised reflection. This reflection enables the individual to learn from the experience, but also helps identify any need for some specific learning before further experience is acquired. (FEU, 1981, p21)

Like Kolb they do not explore the nature of the reflective activity other than to indicate that it includes crystallizing and reinforcing previous learning, developing concepts and generalizations for future use, processes of interpretation and perception of values. Their stress on organized reflection points to the purposive or intentioned nature of the reflective activity, that it is not aimless. They also emphasize a 'whole person' view of the learner and include in their notion of reflection the processing of feelings, values and attitudes as well as the cognitive and psycho-motor aspects of the experience.

Grundy (1982) provides us with a third view of the place of reflection in learning. She considers the experience of a person within the context of a group of autonomous learners with a common learning objective or purpose. As in the Kolb and FEU models, in Grundy's approach the learners have a clear purpose in reflecting on an experience, which may be a shared event or episode.

She has pointed to several places in the learning process where reflective activity occurs. Each person, interacting with other group members, brings their informed practical judgement to bear on ideas relevant to the event. This episode of researching and evaluating ideas is reflection in her view and results in new knowledge and ideas. A further phase of reflection may occur to re-examine more basic assumptions, and deeper insights might develop. These new insights may then be applied to the original event or to other relevant events in more reflective activity. These phases of reflection may be sequential, may overlap, be simultaneous, and some may be omitted.

Grundy also attempts to describe the nature of reflection. In this she adopts a functional approach as does the FEU. What is interesting and different in her work is that she focuses on the relationships which must be obtained between teacher and students and among students if critical reflection is to occur. One of the key features of self-reflection is the need for people to have the freedom to make a genuine choice for themselves, rather than conform to the influence of the teacher or other students. For this to happen, she argues that there must be a structure which allows equal power relationships between group members, including the teacher or facilitator, if the freedom to choose is to be a valid one.

Once we had developed a context and some examples of reflection in learning a plan began to emerge for a publication which would bring together the disparate and diverse writings on the topic of reflection in learning and provide a focus for further exploration. At first this was conceived as a series of papers which would circulate among those particularly interested in the subject. As we talked further to our friends and colleagues, however, it became apparent that the need we had felt was experienced more widely than we had anticipated, and we were encouraged to turn our modest ideas into a book.

Our plan was to identify those people who, in our view, had made an important contribution to thinking and practice in the area of reflection

in learning, ask them to write an account of the approaches to reflection with which they were most familiar and discuss the issues which they considered to be important.

This ultimately led to the present book. Our aim is to focus attention on reflection in learning by bringing together diverse trends in educational ideas and practices with a view to encouraging teachers and learners to adopt a clear view on the role of reflection in their own teaching and learning and consider the range of approaches which is available to them. Specifically we aim to acquaint people with information about different types of reflective activity and areas relating to the process of reflection, by describing what educators are doing and what they consider to be crucial issues.

We want to reach those who wish to develop their own educational practices further by drawing upon the experience of participants in their programmes, both their prior experience and that provided by the programme or course itself. These areas would include project work, on-the-job training, practical work, field study, internships, clinical training, pastoral work, educational gaming and simulation and other forms of experiential learning. We believe that this book will be useful to those who wish to collaborate with others in learning, whether they be students or peers. It will also be of particular interest to those who wish to direct their own learning in conjunction with others, through co-operative inquiry, action research projects, and learning communities.

The contributors have been chosen from very diverse areas. These include management education, teacher training, professional development, spiritual development, medical education, technical training, psychology, adult and continuing education and study counselling. In their own fields they have all been involved in developing activities which have been brought together here under the heading of reflection in learning. They have direct personal experience of the processes they discuss and they can link them to a broader framework.

We have asked them to keep in mind the basic question: what has my work to contribute to an understanding of reflection in learning and how might reflection be facilitated? The core of each chapter is an account of specific ideas, methods and approaches to reflection in specific contexts. They have also been asked to provide a clear rationale for their approach and to indicate any underlying theory and concepts in a way which does not require any specialist background from the reader.

The book has been structured to provide, in the first chapter, a general overview of some of the main ideas. This is followed by accounts of particular approaches and applications. Applications are of two types: the first to conventional teaching or training situations in which the teacher essentially directs or guides the learning process, and the second, to co-operative inquiry in which groups of people work together on a particular project without necessarily identifying themselves as consciously involved in learning.

In the first chapter 'Promoting Reflection in Learning: a Model', we

explore what is meant by reflection in learning and how the idea of reflection in learning relates to other important ideas in the planning of learning activities. This chapter provides a framework within which the various aspects of reflection can be considered. We discuss the essential relationship between learning experiences and reflection on them. The elements of reflection are teased out and presented in terms of a model.

John Powell in Chapter 2, 'Autobiographical Learning', examines the use of autobiographical techniques in assisting learners to come to an awareness of learning and explores the concept of learning through autobiography. He describes how learners can create and use their own autobiographies to come to deeper appreciations of the process of learning. Autobiographies are one form of reflection through writing. David Walker in Chapter 3, 'Writing and Reflection', looks at other methods such as the keeping of diaries, journals and portfolios. He describes how portfolios can be used in educational settings and discusses issues which arise for the teacher or trainer who wishes to employ them.

Reflection does not have to be a solitary activity. It can occur in group settings as well as through individual writing and thinking. The most familiar area in which reflection occurs in groups is when debriefing takes place. Debriefing occurs when participants in a learning activity, be it a simulation, workshop experience or other event, are led through a session in which they relive parts of their experience in a supportive environment and draw conclusions from it. A great deal of work on educational gaming and simulation has stressed the importance of debriefing, but it is a practice which is often given much less attention than its proponents claim it should warrant. Margot Pearson and David Smith in Chapter 4, 'Debriefing in Experience-based Learning', focus on this issue and try to identify why it is that debriefings are not always well conducted, and propose ways in which they can be made more effective.

Between individual activity and working in a group is one-to-one learning. How can one individual help another to reflect on their learning? Susan Knights in Chapter 5, 'Reflection and Learning: the Importance of a Listener', highlights the role of attentive listening and the need for the support of others in learning and reflection.

While most of the contributors focus on a particular approach and illustrate this with reference to their practice, Alex Main in Chapter 6, 'Reflection and the Development of Learning Skills', examines the area of assisting students develop effective learning skills, that is, how students can be helped to learn how to learn. The most productive ways in his experience have been those in which students reflect critically on their own practices rather than through prescriptions of 'good' learning practice.

The idea of a learning conversation is described by Philip Candy, Sheila Harri-Augstein and Laurie Thomas in Chapter 7, 'Reflection and the Self-organized Learner'. This is a specific approach to enable learners to examine their own learning in a systematic manner and uncover their own assumptions and constructs about what they are doing. They are influenced by the work of George Kelly on personal construct psychology