# STUDY SKILLS IN EDUCATION

# Critical Thinking Skills for Education Students

Second edition

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### Introduction

In previous chapters we have looked at how your critical thinking can be developed through improving your information literacy skills and in practising your writing. This chapter looks at the process of reviewing your own writing and how analysing it can be used as an aid to learning. This chapter guides you through checking the level of your criticality. It shows you how this criticality may be built into your writing.

### Learning outcomes

Having worked through this chapter you should be better able to:

- reflect through writing (i.e. learn through writing and write reflectively);
- review the style and structure of your writing;
- consider the importance of the clerical tasks of editing and checking.

Thinking about your thinking . . . reflecting on your reflections . . . analysing your analysis.

### Reviewing your written work

One of the things we are always told is *make sure you check what you have written*. How many times have we heard that and what sense have we made of that statement? How often do you re-read what you have written, not just to check for spelling and grammatical errors but also to ensure that the point of view you are trying to communicate is really clear?

Reviewing your own writing at a simple level is easy and involves:

- re-reading sentences to check that they make sense;
- reading paragraphs before moving to the next section to ensure continuity;
- reading from the start after a break to get yourself back into the flow of the writing.

However, as discussed in the previous chapter, writing helps to develop your critical thinking skills and you need to ensure that what you have written demonstrates these. Therefore it is necessary to exercise these skills in analysing your own writing in order to ensure that your writing has captured your higher-level thinking. This means that you must be:

- willing to question your own personal views;
- open to the ideas and views of others;
- questioning the interpretation and conclusions of others (remember, just because it is in the public domain does not mean that it is correct or valid);
- able to make (positive and negative) judgements;
- able to explore the implications of the evidence/data;
- self-confident enough to present your own interpretation of the information you have gathered;
- honest in facing your own biases/prejudices;
- flexible in considering alternatives and opinions;
- willing to reconsider and revise views where critical reflection suggests that change is warranted.

Analysing your work in this way may reveal deficiencies in your argumentation or areas that need further clarification or substantiation in the form of evidence. This evidence may come from your own personal practice/experiences. Metacognition or self-reflection is often helped by the requirement to keep a personal development plan/portfolio and many

students are encouraged to keep reflective journals; recording their experiences, observations, perceptions and learning. These journals can be invaluable resources for aiding the development of critical thinking and self-confidence and may provide sources of information to support your argumentation. This is known as self-referencing.

### Worked example

The more familiar form of self-referencing is the straightforward use of quotations from a learning journal or a teaching file in a formal essay. In this worked example a student teacher writes about her class teacher's use of one child with good English as an Additional Language (EAL) skills to support another child newly arrived in the class from Pakistan.

My teacher decided to seat Child A next to a bright child, Child B, who also originated from Pakistan and spoke both Urdu and English very well. It was explained to me that Child B could help with translating in the classroom as well as providing personal support to Child A throughout the school. As a new arrival, Child A needed to learn EAL as quickly as possible.

Following feedback from the assistant on Child A's English language development, my teacher started to give Child A the same set work as children in Wave 3 of the Primary National Strategy . . .

I, however, was concerned about . . . the onus on Child B to support Child A.

Looking back to notes in my journal (16/10/08) I noted:

Child B speaks Urdu and has been helping Child A a lot but I sense that Child B is really getting fed up with it now as Child B has less time for their own work.

The impact of this extra responsibility was further evident when I came to mark Child B's report writing task for literacy. Child B is one of the top ability writers but this was not reflected in their work. I decided to speak to them . . . they then confided that they had not been able to concentrate as Child A was occupying a significant amount of their time asking questions.

The writer took a brief quote from her journal and then expanded on it in her essay, providing additional evidence to back up her view.

Suppose now that we consider how the student might take a more critical approach. She might have written that her 'sense' of something in the quotation but I sense that Child B is really getting fed up was initially left without the evidence that led to her supposition. The paragraph that follows does provide this evidence, but we do not know for certain what created the sense in the first place. To link the two would have provided a stronger logical flow to the writing. A critical style of writing might be as follows:

Child B speaks Urdu and has been helping Child A a lot, but I sense that Child B is really getting fed up with it now as Child B has less time for their own work.

I believe the 'sense' that I had was not merely intuitive but was evidenced when I marked Child B's writing. Child B is one of the top ability writers but this was not reflected in their work.

This follow-up is critical in the sense of revealing more or making more evident (not in the sense of finding fault or shortcomings).

### Reflection

The term 'reflection' will be familiar to many students, particularly those who are studying subjects that involve professional practice. Frequently you will be required to reflect on your experiences as a means of learning. You will probably be familiar with the adage that a reflective practitioner learns from every experience, but the non-reflective practitioner will do the same things over and over again.

How does reflection relate to analysis? Quite simply, analysis is part of the reflective process, but it is also a term that is applicable in other contexts. To start with, the word 'reflect' implies looking back. It will require thinking back to place yourself in the learning situation. It requires imagination to conjure up the detail. Considered in a reflective moment, the possible anxiety of the situation can be confronted and thought through. The term was first used in an educational context by the American academic Dewey [1933]. The ideas were developed by Boud et al. [1985, pp26–31] in the form:

- returning to experience recalling or detailing important events;
- attending to feelings using helpful feelings and removing or managing obstructive ones;

• evaluating experience – re-examining experience in the light of one's existing knowledge.

### Reflective task

Think of an example of how you have reflected on a learning experience. Consider the following aspects:

- Were you able to describe the situation accurately with enough detail such that you could identify what was effective and what didn't work so well?
- Were you able to identify precisely any problems or strategies to improve your learning/understanding/practice?
- Did you discuss the problems with anyone? If so, consider what you learned from that discussion. Were you able to incorporate what others said into your reflection on the experience?
- What form did the reflection take? Did you write it down and if not, what might the process of writing have added to the value of your reflection?
- Have you used the learning gained from the reflective process? Were you able to refine your understanding further? If so, how?

There are many different interpretations of the term 'reflection', often related to particular disciplines and the way reflection is used. For example, scientists would probably refer to 'critical self-evaluation' rather than reflection. This difference in semantics is common across disciplines (even the term 'critical thinking' defies cross-disciplinary consensus about the skills and attributes it includes). The important issue is not the label that is used, but the learning that occurs from a particular process.

If you are not familiar with reflection, it is a common mistake merely to write a descriptive account of an event or experience. However, learning comes from deeper consideration, analysis and evaluation. A simple prompt for one new to 'reflection' is as follows.

 What? Give a clear description of the events and processes in relation to a particular circumstance. Set out the context of your learning and

perhaps what the expected outcomes were. What emotions did you experience or how did it make you feel?

- So what? Explore the meaning and impact of your observations in the light of your current knowledge and that which is accessible elsewhere. How has this experience impacted on your knowledge/understanding/ practice/values? Was it valid and meaningful and if so, in what way?
   Did it have impact on you, your practice and on others?
- Now what? What can you do with this new knowledge/understanding? What relevance does it have to you as a developing professional? How might you use it to influence or inform the subject knowledge base, others or professional practice?

### Reflective task

Look at an essay or journal in which you have been required to reflect. Consider how you have addressed each of the three categories of reflection and whether there is a good balance in emphasis between them. Note that description is a necessary part of the process of revisiting the examined situation, but it needs to be selective and accurate. Good, relevant detail is valuable and feelings may offer important insights.

### Levels of reflectiveness

A set of descriptions of levels of reflectiveness is useful when self-assessing written work that is reflective in character. Kember et al. (2008, pp369-79) propose four graded categories for assessing reflectiveness: (1) habitual action; (2) understanding; (3) reflection; and (4) critical reflection.

### Habitual action

Expert practitioners do this in routine situations which they have met many times before. Students may follow rigidly a procedure that they have been taught (the student may then provide material in an essay without any sense of the meaning).

### <u>Understanding</u>

In this case the student will demonstrate understanding of the technique or strategy but will have difficulty in applying it because it remains a theoretical concept. In writing, the explanation will show understanding but not how it might be used in practice. It has not become part of the student's working practice.

### Reflection

Reflection requires students to relate concepts and ideas to their own experience. In written work, ideas will be illustrated appropriately with examples from the student's own practice.

### Critical reflection

Critical reflection implies a change or transformation of perspective. When practice has become habitual this is more challenging. Students new to the practice will be more open to the possibility of change. This requires students to recognise their own assumptions and to review them critically.

### Reflective task

Look at the same piece of reflective writing as in the last task and decide, as objectively as possible, which reflectiveness level it matches. Your judgement should be on a best-fit basis. You may find it helpful to isolate paragraphs and analyse them separately.

### Reviewing style and writing structure

Some readers may have developed confidence in structuring their writing. However, this section addresses those who are uncertain and offers approaches to reviewing how writing may be put together. As mentioned before, the expected structure of any written work will vary across disciplines. However, as a student your work will normally be framed by an introduction and a conclusion. The following section looks at the essential features of these structural elements.

### The introduction

Generally, an introduction briefly sets out what you intend to cover in your written work. In essays that have a very non-specific brief that requires you to select the focus, it becomes necessary to clarify your choice. The title *A critical analysis of the potential for interdisciplinary teaching and learning in foundation subjects* would be followed by an instruction to select one or a group of subjects as a focus for the discussion. The introduction would then outline why such subjects were chosen, which cross-curricular themes are to be included and a reference to any general findings that might follow. There might well be an expectation that the student's own experience of teaching or experiencing the subjects being taught would be analysed and subjected to questioning.

In response to the instruction: Submit a piece of writing reflecting your personal response to the way an aspect of one of the tasks carried out in school has raised questions about your own practice, the following student clarifies not only the fact that her topic is cultural inclusion, but also from where she is drawing her examples and the fact that she is adopting a critical approach:

Children from ethnic minority backgrounds now form a tenth of the pupil population (Mohan et al., 2001, p1). Given this fact, I realised the significance of inclusive practices and the embracing of all cultures during my first primary school placement. What I was not prepared for was the introduction of a seven-year-old boy into my Year 3 class who had just moved from Pakistan with no prior exposure to the English language.

In this piece of writing I will analyse my class teacher's practice, both positive and less so, in handling this situation . . . I will then reflect on my own response to this challenge in respect of my own teaching and investigate what I could have done and what I can do later in my placement to improve learning and teaching for the child.

Not all essay titles leave room for customising in this way. Analyse how ICT can support creative learning and teaching is a straightforward instruction. It lends itself to an initial discussion of the issues raised and illustration by example from the literature, but it is not encouraging reflection and therefore the inclusion of personal experiences. Also, some disciplines, particularly those with a positivist, scientific basis, do not encourage the use of personal pronouns and so therefore tend not to encourage the inclusion of examples of self-reflection. However, that does not mean that students

should avoid providing their own conclusions about the matter under consideration.

### The conclusion

The generally accepted pattern for a conclusion is that it summarises the main points raised in the essay. The danger with this is that it if the conclusion does not say or reveal anything new from the accumulation of the insights already discussed it will be superfluous. In the following example, in response to the instruction, With specific reference to a particular literacy lesson which you have taught, identify and discuss two strengths and two growth points, the student successfully makes one new, more general point not explicitly stated in the essay itself. In the essay the student had described situations that were leading towards this broader point, such as, My lesson did not follow the typical Literacy Hour structure; however I do not feel that for this task it was necessary. I still incorporated many objectives from the [Literacy Strategy]. However, she held back from drawing the main conclusion, which is as follows:

The National Literacy Strategy (NLS) is only recommended. It is a guide to how we the teachers can provide our children with the opportunity to reach the required targets set by the National Curriculum. It will not always be appropriate to follow exactly the structure of the Literacy Hour. It is an excellent starting point, however, and truly has, in my opinion ... substantially raised literacy standards among primary school children by encouraging teachers to reach reading and writing in ways which have not been widely used in England' (Beard, 2000, p245). It is a matter of exercising our own discretion to decide the techniques that will aid the children most successfully to reach their full potential.

(Lauren Smith, unpublished 2004)

### Structuring the main content of the essay

If your university programme is vocational, it is primarily concerned with developing practice. The purpose of academic study in relation to this practice is to encourage a reflective and informed approach. The brief of an essay will commonly expect any theoretical idea to be illustrated by examples from your own experience. If this is done appropriately (i.e. it illustrates the theoretical point fully, not vaguely or in part), it will demonstrate that you are operating at a reflective level. In some forms of writing you may be expected to discuss a theoretical point, back it with reference to relevant literature and then illustrate it with reference to your

own experience. Here a student first writes theoretically about creativity and then gives an example of her own experience:

The Plowden Report said over forty years ago: 'At the heart of the educational process lies the child.' If the child is truly to be central, creativity and originality must be paramount, otherwise the child is the passive recipient of information . . .

Immediately on entering the area of my first placement school it was obvious that there is encouragement of learning through play . . . There is an area on the corridor outside the classrooms where books and other activities linked to current topics can be found.

(Christine Everett, unpublished 2008)

These would be reversed in another form of essay in which students are being encouraged to develop their own ideas and theories first. The example could be analysed as an example of an environment that encouraged active and independent learning. Only then would writers refer to other authorities in the literature that they had been reading.

### Clerical tasks of editing and checking

You will not need reminding that any written work must be read through and checked for minor errors, fluency and sense. Unfortunately, too often feedback on students' work states that there are many spelling and grammatical errors and that it would benefit from careful and critical reading. Artists will sometimes spend a period of time up close to their canvas working on detail. It is only when the artist stands back that it is clear that the colour balance has been upset or the angle of the nose on a portrait is wrong because the part could not be assessed in relation to the whole canvas when viewed close up. The same is true for writing. If we have spent some time on writing something we often are pleased to see the end of it and don't want to revisit. However, take a step back (get a cup of coffee or something) and then return to the work, reading it through from start to finish. This will help you to judge whether your argument really does hold together. Also take care with paragraphing, to ensure that each paragraph has a central theme which is clear from the beginning.

Then there should be attention to the clerical tasks. After a spell check from the computer, another readthrough is necessary because spell checkers will only pick up mistakes (e.g. mak instead of make) and not words that have been used incorrectly (e.g. the letter was form rather than the letter was

from). Only after these important checks can you consider your work ready for submission.

### Summary of key points

In order to demonstrate your learning through written work, it is necessary for you to identify what is expected of you and that you have clearly evidenced this in your writing. To do this you need to set the context of your work (the introduction), provide evidence of your thinking on the subject through quoting the work of others and using your own experiences to contribute to your understanding, provide valid argumentation based on evidence-based premises that support your viewpoint and then draw your conclusions. Depending upon your discipline and the type of artifact you are required to produce (essay, blog, scientific report, etc.) the language used, the structure and the tone will vary, but the need to demonstrate criticality will be common.

Make sure your essay introduction lets the reader know what the main themes of your writing are. Reserve an interesting feature or general point for the conclusion. Make sure you allow time for the important clerical tasks of editing and checking. Lack of care makes your work appear unprofessional. Poorly constructed sentences, spelling and grammatical errors can make your work difficult to read and therefore affect the flow of your discussion or commentary. It impacts on the ability of the assessor to judge the level of competence you are demonstrating in relation to the learning outcomes that are being assessed. This brings us nicely to the issue of assessing criticality. We have already explored the challenge of defining precisely what skills and attributes comprise critical thinking and therefore an even greater challenge is recognising the demonstration of these skills in written work and then assessing them. We shall address this in the next chapter.

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