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USING CRITICAL INCIDENT ANALYSIS TO ASSESS STUDENTS IN BOTH CLASSROOM AND FIELDWORK SETTINGS

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Abstract

For many social work students, practice placements are experienced as having little continuity in learning and teaching modalities to classroom based units previously undertaken. One way of providing closer integration of learning from classroom and field settings is for some assessment tasks to be similar. In recent years there has been increasing recognition that the development of professional practice requires students to be able to critically appraise or assess their own work. One task which potentially encourages reflective learning and thinking across a range of domains, but need not be too onerous, is critical incident analysis. While there are a number of examples of this being used in formative and summative assessment of social work students on placement, there is relatively little reported about the use of critical incident analyses as an assessment task which promotes learning in the classroom setting. This paper reports on a study conducted in Scotland in which we explored the use of critical incident analysis and found it to be a flexible assessment tool for which there is some potential in classroom and placement settings.

Introduction

As university-based social work educators, we are frequently subjected to the anxieties of our students, especially in relation to the requirements for practice learning placements in agency settings. While these can occur at any stage within the placement, heightened levels of anxiety are most apparent to us around the dates when assessment tasks are due for submission. While this can be due to students' concerns as to whether their performance in the agency setting will be judged as having been sufficiently competent, sometimes the anxieties pertain to the actual assessment tasks. This is understandable given that many students experience little continuity in learning and teaching modalities, including assessment tasks, between classroom units and practice placements. This paper reports on research which has explored use of critical incident analysis as a method of assessment for social work students in Scotland in both the classroom and practice learning settings.

Background

Among educational theorists over the past couple of decades there has been considerable interest in, and development of, the idea that reflection on experiences can lead to crucial learning (Boud and Knights, 1996). Furthermore, contemporary educational theory stresses the need to provide constructive feedback to students, which facilitates student development and better equips them for undertaking the same or a similar task in the future. Formative feedback can also assist students to evaluate their progress and plan for future learning (Cree, 2000). There is also

increasing recognition that the development of professional practice requires students to be able to critically appraise or assess their own work (Boud, 2000). A further development in thinking about assessment concerns the alignment of learning and assessment tasks (Biggs, 2003).

Within social work education, recent decades have also seen the development of a canon of literature on methods of assessing students that go beyond the more traditional essays and exams (for a review of this literature see Crisp and Green Lister, 2002). However, sometimes, these newer assessment methods (eg development of portfolios) which have been linked to the aim of enhancing reflective learning, seem to make quite burdensome demands on both students and their assessors (Crisp and Green Lister, 2002). One task which potentially encourages reflective learning and thinking across a range of domains, but need not be too onerous, is critical incident analysis.

What are critical incidents?

Critical incident analysis was first developed in order to understand pilot errors in flying aircraft (Flanagan, 1954) and subsequently used in researching safety in anaesthesia (Cooper, Newbower, Long and McPeck, 1978; Craig and Wilson, 1981). However, critical incidents need not involve a high risk or potentially dangerous situation, although some writers have suggested otherwise (eg Mills and Vine, 1990). While recognising that the potential for diversity as amongst those who have written about critical incident analysis in respect as to how the task is defined (Minghella and Benson, 1995), there would be general agreement that:

The vast majority of critical incidents, however, are not at all dramatic or obvious: they are straightforward accounts of very commonplace events that occur in routine professional practice which are critical in the rather different sense that they are indicative of underlying trends, motives and structures. These incidents appear to be 'typical' rather than 'critical' at first sight, but are rendered critical through analysis. (Tripp, 1993, pp.24-25)

There is generally also some element of surprise (Chesney, 1996). However, it is not always essential that those for whom an incident is critical are active participants in the process. Nor need the interaction be lengthy. Descriptions of the actual event are often a few sentences, totalling under one hundred words (Legault, 1996).

Critical incident analysis to enhance student learning

Whereas researchers are concerned with analyzing the meaning that their respondents ascribe to events, educators use critical incidents as a method for developing learning in a range of professional disciplines including nursing (Burgum and Bridge, 1997; Parker, Webb and D'Souza, 1995), education (Kuit, Reay and Freeman, 2001) and social work (Mills and Vine, 1990), in both undergraduate (Parker et al., 1995) and postgraduate (Tripp, 1993) courses, and in continuing professional education (Kuit et al., 2001; Mills and Vine, 1990). Typically this involves students both describing and going on to reflect and analyse the incident and identify the learning that has arisen from them as a result of this (Tripp, 1993). Critical incident analyses can be a stand alone piece of assessment in the form of a lengthy structured essay (James, nd-a; nd-b). Alternately, if the format is very short and structured, the written documentation of critical incidents may be around 300 words or less (Ghaye and Lillyman, 1997).

Critical Incident Analysis in Practice Learning

Like many educators, our first forays into critical incident analysis were confined to the practice learning sector of the curriculum. We were aware of two distinct ways in which critical incident analysis had been used in the assessment of practice learning undertaken by social work students. The first of these involves practice teachers using students' critical incidents to structure supervision sessions and hence formative feedback to students in the midst of their practice learning (Davies and Kinloch, 2000). The second, requires students to submit a written critical incident analysis to university staff about an incident which occurred during their practice learning. These tend to be of essay length and form part of the requirements for summative assessment of a placement (Monash University, undated).

A demonstration project exploring the use of critical incident analyses was developed jointly by the authors and staff from the newly developed South Lanarkshire Practice Learning Centre (PLC) in the West of Scotland. The PLC plans include providing innovative placements to social work students in an effective learning environment. Staff at the PLC were interested in moving beyond the traditional paradigms of placement provision for social work students, and using an evidence based approach are trialling innovative models of placement provision including use of group supervision and peer supervision. The potential of critical incident analysis to contribute to both formative and summative assessment was identified.

A structured pro-forma was developed as a framework for analyzing critical incidents which arise during a programme of social work education, including practice learning. It was noted that even within supervised practice learning course modules there may be a range of situations from which critical incidents arise, and that not all of these may involve the student in some form of direct social work practice. To encourage regular use of the framework, a brief set of core items which students should use in the analysis of all critical incidents was identified, along with an extended set of optional questions, for further reflection, some of which may not be applicable to all critical incidents in a student's learning. This process yielded an initial set of 17 questions to which could be asked about a critical incident. On subsequent reflection, we decided that a pro-forma with 17 questions was too cumbersome. Further work then saw these 17 points distilled into five key questions, each of which included a number of optional bullet points which students could consider according to circumstances.

CRITICAL INCIDENT FRAMEWORK

1. Account of the incident

- What happened, where and when; who was involved?
- What was your role/ involvement in the incident?
- What was the context of this incident, e.g. previous involvement of yourself or other from this agency with this client/ client group?
- What was the purpose and focus of your contact/ intervention at this point?

2. Initial responses to the incident

- What were your thoughts and feelings at the time of this incident?
- What were the responses of other key individuals to this incident? If not known, what do you think these might have been?

3. Issues and dilemmas highlighted by this incident

- What practice dilemmas were identified as a result of this incident?
- What are the values and ethical issues which are highlighted by this incident?
- Are there implications for inter-disciplinary and/ or inter-agency collaborations which you have identified as a result of this incident?

4. Learning

- What have you learned, e.g. about yourself, relationships with others, the social work task, organizational policies, and procedures?
- What theory (or theories) has (or might have) helped develop your understanding about some aspect of this incident?
- What research has (or might have) helped develop your understanding about some aspect of this incident?
- How might an understanding of the legislative, organizational and policy contexts explain some aspects associated with this incident?
- What future learning needs have you identified as a result of this incident? How might this be achieved?

5. Outcomes

- What were the outcomes of this incident for the various participants?
- Are there ways in which this incident has lead (or might lead to) changes in how you think, feel or act in particular situations?
- What are your thoughts and feelings now about this incident?

All ten students who were placed with the PLC over the summer of 2004 and their practice teachers were invited to a workshop at the PLC one week after the 80 day placement commenced. This workshop was jointly convened by the co-ordinator of the PLC (who was also practice teacher for five of the students) and by the authors. The concept of critical incident analysis and the framework were introduced and discussed by those present for about 40 minutes. Participants were all provided with a number of copies of the critical incident proforma and with copies of the instruction sheet. Student participants were also given a copy of the pro-forma on a computer disk as a Microsoft Word file. The next phase of the workshop involved students and practice teachers working by themselves for about 20 minutes to begin completing a critical incident proforma. For the remaining hour, the authors met separately with groups of students and practice teachers both to a) trouble shoot any issues which had emerged with the proformas and instructions and b) to gauge their thoughts and feelings about the process.

When interviewed at the end of the placement, all students identified that critical incident analysis had been a useful aid in supervision. As one student explained that it helped progress the supervisory relationship:

It is a good starting point to get discussion going. It's a good way for students and practice teachers to get to know each other's value base, like my practice teacher would say 'I wouldn't have approached it that way.

As the students who participated in this demonstration project had existing summative assessment tasks, we were not able to require them to undertake a critical incident analysis as part of their summative assessment for this piece of practice learning. However, we note that some students were in fact able to use elements of critical incident analyses which they had produced for their final reports and/or practice studies. In particular, several students identified that feedback from practice teachers and peers have been a useful experience both in developing practice and written work. For example:

Getting feedback on the critical incident analysis definitely helped me think through the next situation, more as it was happening rather after the event. Also I my kept examples so that I could use them in my reports....Handing your analyses to practice teacher and other students and getting feedback is putting you through the scrutiny of others and being assessed.

While some students could see the potential for critical incident analysis as a summative assessment tool, the perceived applicability tended to reflect their own usage. For example, a student who had only written brief critical incident analyses noted:

It could work as part of a portfolio. It wouldn't stand on its own but you could have examples of other pieces of writing in their too.

Similarly, some students were concerned critical incident analysis was limited in that only enabled them to tackle an incident rather than consider their total involvement in a case. Whether these students would have thought this, had they not had a previous placement in which they had written lengthy case studies, is unknown. Academic socialisation may also explain why most students couldn't envisage critical incident analysis being used to assess anything other than practice learning.

Critical Incident Analysis in Classroom-Based Learning

Having developed a framework that had demonstrated potential as an assessment method in practice learning, the second phase of our work sought to explore the potential for critical incident analysis within a classroom-based subject. In discussions with colleagues in the Glasgow School of Social Work, critical incident analysis was considered pertinent to the subject 'Learning to Learn' which is one of the first modules taken by undergraduate social work students in the new four year degree at the Glasgow School of Social Work and was first taught in 2004. When the new degree structure was developed, it was recognised that:

Students who engage in higher education, and especially those who do so in preparation for further learning and development beyond their degree studies, require to understand the processes of enquiry, learning and development, and to enhance their skills in using these processes purposefully, in order to maximise their capacity for life-long learning. (Glasgow School of Social Work, 2004)

Alignment of intended learning outcomes, course content, and assessment (Biggs, 2003) was a key feature of Learning to Learn. Set tasks facilitated formative feedback to students from their peers and course staff, as well as encouraging students to identify their own needs for further learning. The summative assessment task required students to develop a portfolio comprised of class-based tasks, individual and group work, and a reflective commentary.

Although inclusion of critical incident analysis was not compulsory, the nature of the assessment task provided scope for students to include a critical incident analysis in their portfolios. However, explicit mentions of critical incident analysis were found in only four of the 39 portfolios we reviewed. For one student it was the lecture on critical incident analysis itself that was critical:

The lecture in week five was very helpful. I didn't realise that there was so much learning to be done in every day life. Of course we all learn from the experience we gain, but Laura's lecture on critical incident analysis has shown me that much more can be learned from what may appear as an "every day" experience. Using the critical incident framework really can help tease useful learning out of experiences where no learning had been apparent before.

Another student who had come across the concept of critical incidents before, also found this lecture helpful:

The lecture was about critical incident thinking. I found this very challenging, because it is something I have done in work and not thought about. The lecture showed me the steps to go through and how to record the process. What really challenged me was being put on the spot and being forced to think of an incident during the module to analyse.

Yet what was for one student a challenge to identify a critical incident which had happened during the module, was noted by another student as one which “gave me an opportunity to share my ... predicament” with others in his/her group, noting “I have noticed a lot of change in attitudes from many people since then”. Unfortunately, this student does not go on to reflect on the resultant learning for themselves.

Apart from having to identify an issue to analyse, only one student identified the challenges of honesty and being open when engaged in critical incident analysis:

The module moved on to critical incident framework, which is an area I could identify with, as I have a tendency to over analyse situations to find out exactly how they developed and why they took a particular direction. I know from experience the best approach to use when applying a situation to the critical incident framework is honesty and to have an open mind. This ensures a learning experience is identified from analysing the incident.

Being honest about one’s own involvement in a situation can be painful. As one student in the course wrote in their portfolio about another of the reflective exercises which formed part of the course “...this task asks for me to open up doors that were jammed shut because of emotional pain”.

Without actually mentioning critical incident analysis, several students made mention of incidents which had occurred during the module which on reflection had led to learning either about themselves or others. For example, one such student acknowledged “several incidents during the course, which gave me an insight into my learning” and then proceeded to report one of these incidents. While the student’s reporting was as a single paragraph of text, it very closely followed the five parts of the critical analysis framework which students had been provided with. The following analysis breaks down the student’s account according to the framework.

Critical Incident Framework

1. Account of the incident
2. Initial responses to the incident
3. Issues and dilemmas highlighted by this incident

Student narrative

During the third Problem Based Learning Group I found myself feeling very frustrated and began disengaging from the group.

I initially could not understand why this was.

After the session I reflected on what was making me feel this way and realised that it was because things were not moving fast enough for me. I felt the group were spending too much time on one issue and were not able to move on.

- | | |
|-------------|---|
| 4. Outcomes | I decided I would not allow myself to leave the session feeling this way again but would share it with the group and suggest ways of moving the discussion forward. |
| 5. Learning | This highlighted how confident I felt within the group and how committed I was to moving things forward. |

Despite numerous limitations, this second study has demonstrated some potential for the use of critical incident analysis in classroom based modules undertaken by social work students. Furthermore, it has found some resonance with students who are both new to social work and to studying at degree level. Clearly much more work is warranted in exploring this further, especially as the only other example we had found of critical incident analysis being used in the assessment of classroom based modules in social work education had occurred among postgraduate students (Montalvo, 1999).

Conclusion

To date we have undertaken demonstration projects exploring use of critical incident analysis a) in both practice learning and classroom module settings, b) with undergraduate and postgraduate students, and c) as a tool for formative and summative assessment. As such we have found it a seemingly flexible assessment tool for which there is some potential in each of these scenarios, although we acknowledge that more research is needed. Interestingly, we found that students who have first used critical incident analysis in the classroom may be more receptive to its use in the assessment of practice learning than vice versa.

In both studies, we found students for whom critical incident analysis proved a useful tool in making sense of incidents which had emerged in learning situations. However, there are also many students who would choose other options over critical incident analyses if given a choice. This is understandable, given that the critical incident analysis frameworks we have developed ask students to consider more dimensions of an incident than is the case in some of the other reflective learning tasks to which they are exposed. For this reason, we suspect some students perceive the task as more difficult. Yet conversely for other students, the degree of structure may result in critical incident analysis being perceived as more straightforward and with a clearer idea as to what the expectations of students might be. Use of a critical incident analysis framework may be further facilitated by making it available in a computer readable format.

All qualifying programmes in Scotland are required to conform to *The Framework for Social Work Education in Scotland* (Scottish Executive, 2003) in respect of the knowledge, skills and competences which graduates should acquire prior to graduation. Several requirements of the *Framework* could well be demonstrated by students using a critical incident analysis. For example, critical incident analyses could be used to demonstrate a range of skills including the following:

- Analyse the information they have gathered, weighing competent evidence and changing their viewpoint in light of new information, then relate this information to a particular, task, situation or problem. (Scottish Executive, 2003,p.28)
- Review outcomes in the light of actual outcomes. (Scottish Executive, 2003,p.29)

- Review intentions and actions in the light of expected and unintended consequences. (Scottish Executive, 2003, p.35)
- Recognise and work with the complex tensions and links between intra-personal and inter-personal processes and the wider social, legal, economic, political and cultural context of people's lives. (Scottish Executive, 2003, p.37)
- Analyse the impact of injustice, social inequality and oppression. (Scottish Executive, 2003, p.38)
- Reflect on and change their professional behaviour in the light of growing experience. (Scottish Executive, 2003, p.39)
- Make effective preparation for meetings and lead them in a productive way. (Scottish Executive, 2003, p.41)
- Analyse and work with the factors that inhibit integrated working across discipline, professional and agency boundaries. (Scottish Executive, 2003, p.42)
- Overcome personal prejudices to respond appropriately to a range of complex, personal and interpersonal situations. (Scottish Executive, 2003, p.43)

Having been involved in the development of the new four-year honours degree in social work at the Glasgow School of Social Work (which commenced in September 2004), we identified a number of points in the curriculum in which critical incident analysis could be used for either formative and/ or summative assessment. These include:

Some Potential uses of Critical Incident Analysis in Glasgow School of Social Work's MA (Honours) degree in Social Work

Year	Module	Potential use
1	Learning to Learn	Students could use critical incident analysis to identify their own learning style and the factors that influence this.
2	Practice Learning 1	Students could use critical incident analyses to identify salient issues for discussing with their practice teachers and to take significant responsibility for their own continuing learning and development. A write-up of a critical incident could be included as part of a portfolio which demonstrates learning during the placement. Such learning could include practice issues, legal and ethical issues, and/ or issues of discrimination or inequality. Practice teachers review a series of critical incident analyses as evidence of student development during a placement.
3	Professional Roles in Organisational Contexts	Students could use critical incident analysis to demonstrate an understanding of the organisational context of social work or of the multiple, complex and contested accountabilities in social work organization including partnerships with service users and carers.
4	Development Planning	Students could use critical incident analyses to reflect on their learning across the programme and analyse the processes involved.

The appropriateness however of critical incident analysis as a form of assessment will however depend on the learning objectives for an assessable module and the extent to which these learning objectives can be aligned with the features of critical incident analysis. Nevertheless, it might be hoped that students who have used critical incident analysis in the assessment of classroom based units, will have more continuity in their methods of assessment and hence one less reason for anxiety when they arrive in their first field placement.

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