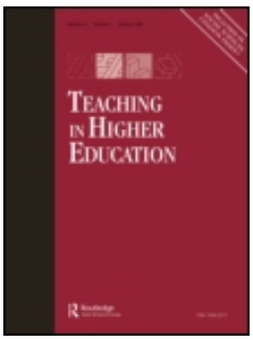

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Teaching in Higher Education

ISSN: 1356-2517 (Print) 1470-1294 (Online) Journal homepage: http://www.tandfonline.com/loi/cthe20

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To cite this article: Mary Ryan (2013) The pedagogical balancing act: teaching reflection in higher education, Teaching in Higher Education, 18:2, 144-155, DOI: 10.1080/13562517.2012.694104

To link to this article: https://doi.org/10.1080/13562517.2012.694104

Teaching in Higher Education, 2013
Vol. 18, No. 2, 144–155, http://dx.doi.org/10.1080/13562517.2012.694104

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The pedagogical balancing act: teaching reflection in higher education

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(*Received 23 October 2011; final version received 13 April 2012*)

Despite the common use of the term reflection in higher education assessment tasks, learners are not often taught *how* to communicate their disciplinary knowledge through reflection. This paper argues that students can and should be taught how to reflect in deep and transformative ways. It highlights the reflexive pedagogical balancing act of attending to different levels of reflection as a way to stimulate focused, thoughtful and reasoned reflections that show evidence of new ways of thinking and doing. The paper uses data from a current project to illustrate the effects of focusing on particular levels of reflection in the pedagogical strategies used, and argues that while the goal of academic or professional reflection is generally to move students to the highest level of reflection to transform their learning/practice, unless higher education teachers attend to *every* level of reflection, there are specific, observable gaps in the reflections that students produce.

Keywords: reflection; pedagogy; reflection in higher education; transformative learning

Introduction

Reflection is a common expectation for learners in higher education, both informally in the hope that learners will reflect and act upon feedback provided, but also in formal assessment tasks. Despite the common (and often undefined) use of the terms reflection or reflective in assessment tasks (Kember et al. 2008), learners are not often taught *how* to reflect, which different types of reflection are possible, or how best to communicate their disciplinary knowledge through reflection (Ryan 2011). Indeed, attempts to include reflection in assessment tasks with little or no pedagogical scaffolding generally results in superficial reflections that have virtually no impact on learning or future practice (McIntosh 2010).

Reflection, or reflective practice, has a long tradition and stems from philosophy, particularly the work of Dewey (1933) on reflective thinking for personal and intellectual growth. Hegel (1949) was another early thinker in the area of reflection or what he termed the 'sensible history of the mind' through phenomenology. He suggests that understanding of life experiences is progressive, increasing in meaning and complexity as experience and thought is personally and consciously understood. A more overtly critical and transformative approach to reflection, which is rooted in critical social theory, is evident in the work of Friere (1972), Habermas (1974) and

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others who have followed their lead (e.g. Hatton and Smith 1995; Mezirow 2006). Critical, transformative reflection suggests that an alternative reality can be recast in which the student or professional can take an intellectual stance in dealing with critical issues and practices, and is empowered to initiate change (Giroux 1988).

Schön's (1983) work on the 'reflective practitioner' has also influenced many scholars interested in the work of professionals and how 'reflection-in-action' and 'reflection-on-action' can influence their professional education. Schön's approach is steeped in practice, particularly in building theory from practice. His ideas about improving practice through reflectivity and theory-in-use have inspired much debate around the role of espoused theory and theory-in-use. This view has been criticised for not moving beyond the immediate situation and for potentially perpetuating hegemonic or normalising forms of practice rather than enacting change at a broader level (Gur-Ze'ev 2001). However, as Giroux (1988) and Mezirow (2006) remind us, it is in the dialogic and intellectual stance that is taken in relation to everyday practice as an element of social and cultural conditions, that change can be enacted both at a personal level and at a broader contextual level. In treating 'self' as a subject of critical study in relation to others and the contextual conditions of study or work, 'lifelong learning' can be fostered.

This paper argues that students can and should be taught how to reflect in deep, critical and transformative ways to engender sustainable learning practices. It highlights the reflexive pedagogical balancing act of attending to different levels of reflection as a way to stimulate focused, thoughtful and reasoned reflections that show evidence of new ways of thinking and doing by both students and teachers. First, the paper elaborates levels of reflection and identifies pedagogic strategies that can be used to prompt these levels in students' work. Next, it draws on data from a current teaching and learning project to illustrate the effects of focusing on particular levels of reflection in the pedagogical strategies used. Given the teaching and learning focus of this project, I have taken a slightly unusual approach to the data presentation and analysis. I present examples for diagnostic purposes, that is, to specifically illustrate the ways in which particular levels of reflection have been neglected or superficially discussed. This approach became part of the reflective cycle within the project, stimulating reflective responses from lecturers about their own teaching and led to the collaborative development of strategies for addressing such responses. The paper argues that while the goal of academic or professional reflection is generally to move students to the highest level of reflection to transform their learning/practice, unless higher education teachers attend to *every* level of reflection, there are specific, observable gaps in the reflections that students produce.

Levels of reflection

Reflection has been variously defined from different perspectives (e.g. critical theory or professional practice) and disciplines (see Boud 1999), but at the broad level, the definition used here includes two key elements (1) making sense of experience in relation to self, others and contextual conditions; and importantly, (2) reimagining and/or planning future experience for personal and social benefit. This definition reflects the belief that reflection can operate at a number of levels and suggests that to achieve the second element (reimagining), one must reach the higher, more abstract levels of critical or transformative reflection as outlined below.

Transformative reflection or reflexivity is context dependent (Ovens and Tinning 2009) and is characterised by mental and self-referential 'bending back' upon oneself of some idea or thought (Archer 2010), such that one considers associated factors and influences and decides whether and how to respond or act in any given situation. I use the term 'transformative reflection' (Ryan 2011) interchangeably with reflexivity here, although I recognise the argument for the differentiation between reflection and reflexivity, particularly by Archer (2010). Many researchers and commentators agree that there are different types or hierarchical levels of reflection. Grossman (2008) suggests that there are at least four different levels of reflection along a depth continuum. These range from descriptive accounts, to different levels of mental processing, to transformative or intensive reflection. Similarly, Bain et al. (2002) suggest different levels of reflection with their five 'R's' framework of reporting, responding, relating, reasoning and reconstructing. Hatton and Smith (1995) also posit a depth model, which moves from description to dialogic (stepping back to evaluate) and finally to critical reflection. I argue that when reflective processes move to transformative or intensive levels, they become reflexive processes, dependent upon action, such as those proposed by Archer (1995, 2007, 2010).

Academic or professional reflection, as opposed to purely personal reflection, generally involves a conscious and stated purpose (Moon 2006) and needs to show evidence of learning and a growing professional knowledge. This type of purposeful reflection, which is generally the aim in higher education courses, and is the focus of this paper, must ultimately reach the critical level for deep, active learning to occur. When students are provided with opportunities to examine and reflect upon their beliefs, philosophies and practices in relation to the contextual conditions of their field, they are more likely to see themselves as active change agents and lifelong learners within their professions (Mezirow 2006).

The pedagogical task

For the purposes of the current project and this paper, I use the Bain et al. (2002) terminology of the five 'R's' – reporting, responding, relating, reasoning and reconstructing – to illustrate levels of reflection within the data. These have been conflated to four 'R's' as reporting and responding are often difficult to separate for the purposes of teaching and assessing reflection. Prompts can be provided to help structure the reflection through the levels (see Table 1).

Level one, reporting/responding, is the most basic level of reflection, where students are taught to *notice* and deliberate about aspects of their practice. They should form an opinion or have an initial emotional response to an issue or incident that is relevant to the discipline, the professional field or learning space, and the specific subject under study. For Archer (2007), deliberation is concerned with 'exploring the implications of endorsing a particular cluster of concerns from those pre-selected as desirable to the subject during the first moment' (p. 20). The first moment (discernment) occurs when internal dialogue compares and contrasts reflective, retrospective and prospective considerations. Discerning and recounting incidents seem easy enough to do, however, it is crucial that the reporting phase has a clear focus and provides an introduction that gives the student direction for the higher levels of reflection.

Table 1. Prompts for the reflective scale.

Levels	Questions to get started
Reporting and responding	Choose a focus: an issue or incident that posed a problem or had a positive impact on your learning or practice. Report what happened or what the key issue or incident involved. Why is it relevant? Respond by making observations, expressing your opinion, or asking questions.
Relating	Relate or make a connection between the incident or issue and your own skills, professional experience, or discipline knowledge. Have I seen this before? Were the conditions the same or different? Do I have the skills and knowledge to deal with this? Explain.
Reasoning	Highlight in detail significant factors underlying the incident or issue. Explain and show why they are important to an understanding of the incident or issue. Refer to relevant theory and literature to support your reasoning. Consider different perspectives. How would a knowledgeable person perceive/handle this? What are the ethics involved?
Reconstructing	Reframe or reconstruct future practice or professional understanding. How would I deal with this next time? What might work and why? Are there different options? What might happen if [. . .]? Are my ideas supported by theory? Can I make changes to benefit others?

Note: Levels adapted from Bain et al. (2002).

Level two, relating, is the level that specifically introduces the personal tenor that sets reflection apart from other genres in which disciplinary knowledge is demonstrated. This level requires students to reflect on the issue in terms of their own prior experiences with this issue, a related issue, or in a similar setting. They must make connections with *their* skills and knowledge thus far, along with their values and priorities, and how these relate to the values and priorities of other stakeholders and of society more broadly. They can then begin to determine whether they have the resources to deal with the issue, whether to consult others or access resources and how to plan a way forward. Archer (2007) suggests that internal conversations are inherent in the reflexive process, whereby one decides how and when to act, based on their understanding, commitment, values and priorities in any given context.

The third level, reasoning, moves the reflection from a largely personal response to an intellectually rigorous analysis of the context, the issue and possible impacting factors. According to Archer (2007), the interplay and interconnection between individuals and social structures are crucial to understand courses of action produced by subjects through reflexive deliberation. In this way, individuals are seen as active agents who mediate their subjective concerns and considerations (values, priorities, knowledge and capabilities) and their objective circumstances (e.g. course and assessment requirements, professional responsibilities, etc.) to act in certain ways. Ways of working within the discipline and the profession will determine the types of evidence or analysis that should be undertaken, and students' choice of language/artefacts should demonstrate their knowledge of the discipline and the

specific subject matter (Freebody and Muspratt 2007). Explanation and discussion should be evident as students examine different possibilities and sometimes consider ethical implications.

The highest level of reflection, reconstructing, is the most difficult to achieve, and indeed, to measure. Students should demonstrate new ideas, and ways of thinking about or approaching an issue. Specific decisions that they have made about future practice should be documented with justification in relation to 'best practice' from the disciplinary field. Different options can be posed, with predictions about possible effects. Language should be future-oriented, but should relate directly back to the current issue (Ryan 2011). Students can consider the ways in which possible actions will benefit self and/or others, and whether new questions or solutions might arise for a broader 'good'.

Choosing the right balance: learning from the data

This section of the paper analyses and discusses data from a current project investigating and trialling reflective practice across university courses in Education, Health, Business, Law and Creative Industries in one Australian university. The larger project involves semi-structured interviews and focus groups with 40 volunteer staff and 40 volunteer students from across university faculties, along with samples of reflective work from 60 participating students across faculties. However, only selected student work samples and reflective brainstorming from two staff focus groups ($n = 10$) are used in this paper to address the key concern of the paper: scaffolding each level of reflection. The work samples analysed here are drawn from subjects undertaken in Education (pre-service Elementary and Secondary – $n = 25$), Health (Psychology and Nursing – $n = 15$), Business (Marketing – $n = 10$) and Law ($n = 10$), and were chosen as representative examples from the larger corpus because the lecturers involved used pedagogical strategies that (consciously or unconsciously) targeted and/or neglected particular levels of reflection. It is important to note that these examples are used in a diagnostic way to serve as a prompt for lecturers to reflect upon their teaching. That is, I use them to show how particular levels of reflection can be neglected or superficially discussed. These examples prompted reflective brainstorming from two focus groups of participating lecturers about possible strategies to address these weaknesses in students' reflections.

Students in each class were provided with prompts for the four 'R's' (see Table 1) and were provided with examples of reflective pieces illustrating effective use of the four 'R's' in that context. Each of the four 'R's' (Bain et al. 2002; Ryan 2011) will be discussed, using data (the full reflections did not move beyond the indicated levels, but for reasons of space, only excerpts from seven students are used here) to illustrate the implications of little or no pedagogical scaffolding of specific levels of reflection. Students voluntarily provided assessment work samples, which were analysed according to the features of each level of reflection (Bain et al. 2002) described in the previous section.

Reporting/responding

It is crucial that the reflection has a specific focus, such as identifying a critical incident or issue, so that students can succinctly reflect at higher levels, rather than recounting all (irrelevant) actions, ideas or contextual variables. In the participating Education and Law subjects, choice of a critical incident or issue was not a key pedagogical focus. Even though these students had been involved in reflective tasks on a number of previous occasions, this study reports on a more directed focus on teaching reflection with prompts (see Table 1). Topics were provided, which were chosen by staff to focus the reflections, however, it is evident that more explicit scaffolding is required to choose a critical issue or incident related to the topic. As Adam's (Elementary Education) reflection indicates, it is relatively easy to slip into a re-telling rather than a critical reflection if the first level of reflection is not focused:

> This paper will cover a number of the experiences, observations and discussions that I had with the two supervising teachers in the multiage classroom during the practicum. The paper will look at the structures in place, the practices used and the beliefs and implementation in the classroom. Also my own personal experience of being a student teacher in the classroom will be discussed [. . .] Miss J explained how each morning there will be a different type of reading such as buddy reading, group reading at once or everyone reads a page. One of the books was titled "Clouds" which had cross curricula links to the science unit on the weather. The worksheets I created for the students to complete covered spelling, comprehension and word recognition. (Adam)

Adam initially outlines his goal for the reflective piece; however, the goal is too general – it essentially suggests that he will discuss everything that happened during his classroom practicum, including 'structures in place', 'practices', 'beliefs', 'implementations' and 'personal experience'. He does not elaborate on whose structures or practices or beliefs, but his subsequent description suggests they are those of the supervising teacher, rather than those that he implemented in the classroom. Relating an incident/issue to practices of expert colleagues is certainly a feature of a professional reflection; however, Adam does not compare/contrast or analyse practice. Rather, he provides a surplus of irrelevant information about what the teacher said 'Miss J explained [. . .]' or the name of a book he used on 'Clouds' or activities he planned 'The worksheets I created [. . .]', with no indication of how any of this information would lead to improved practice or new ideas.

Similarly, Will (Law) provides a general introduction – seemingly his definition of research (as it is not referenced), and his philosophical belief about 'The art of being a good lawyer [. . .]', followed by an outline of what his team was required to do, and his assessment of what he learnt about research for practising law:

> Research can be looked at as the detailed study of a subject, interest or area of interest, in order to discover or derive meaning from that research. The art of being a good lawyer is not necessarily to know everything about the law, but rather to find out the answer. The benefit of this subject is that, detailed information of the law was not needed in every aspect, but rather a common sense, or realistic approach to dealing with the problem (i.e. setting vs. litigation). However, with knowledge comes power and responsibility. Throughout the semester we were challenged with 'spanners in the works' to the initial case brief. It was not necessary to know the law in-depth, but know that what research we had done was sufficient to advise appropriately. (Will)

Will is able to indicate (in the final sentence above) a general principle that he learnt; however, he never moves fully into the reasoning or reconstructing levels of reflection. Neither Adam nor Will has set a clear focus for reflection, which has resulted in a lack of specific reasoning using relevant literature pertaining to a key issue, and notably, has resulted in an absence of reconstructive language for improved practice around an identified issue.

Reflections on teaching: pedagogical strategies to develop reporting/responding. Discussions with staff strongly supported the notion that problem-based scenarios and other simulated strategies can provide opportunities for students to reflect on self and peers in a non-threatening environment. It was noted that activities should encourage detailed 'noticing' (of what's there and what's not there) in relation to relevant topics/issues under study. Discussions and negotiations were also suggested as a way to 'weed out' aspects that are not relevant or which will not lead to potentially transformative action or new ideas. Group-constructed flowcharts were a popular suggestion to map out key points, related examples and literature to access, providing a clear framework for the higher levels of reflection.

Relating

Reflection must relate to one's place in the professional field, their current knowledge, resources and world-view, so that the key issue/incident identified in level 1 *reporting/responding* can be reasoned through from this personal perspective, and a suitable plan of action developed – which is quite specific to each person:

> A consideration of Tuckman's Five Stages of Team Development – forming, storming, norming, performing and adjourning (Philips, 1997, p. 142) – offers insight into some of the Edge Communications team's specific experiences. During the first few weeks while the team was 'forming', members focused on getting to know each other so meetings were characterised by polite and non-challenging behaviour, and a degree of uncertainty and apprehension (Petrock, 1990, p. 142). Spending the first few weeks in the forming stage also explains why productivity was fairly low during this time (Bubshait & Farooq, 1999, p. 34) [. . .] A team reaches its peak during the performing stage (Philips, 1997, p. 143). Heightened motivation and effectiveness enjoyed during this stage allows a large volume of work to be completed (Petrock, 1990, p. 10). The Edge Communications team first entered this stage, at the very latest, in the week leading up to the pitch presentation. By then team members had been assigned specific tasks according to their strengths and weaknesses, and were working towards completion to a high standard by set deadlines. (Jason)

Jason (Business) reports on his key issue of 'team development', and uses appropriate literature to reason through this issue in relation to his team marketing assignment. Unfortunately, he sounds like an (almost disinterested) onlooker, rather than a key player in the process. He never uses the pronoun 'I', and he does not relate this experience to any others that he may have had or witnessed in the workplace, or to his particular approach to, or views about, teamwork and whether that was accommodated in this process. One of the consequences of this lack of relating is that Jason does not move to the reconstructive level of reflection. He has not put himself into this reflection, and therefore has not used reconstructive language to suggest how he could change or improve his personal strategies in a similar situation.

Roberta (Nursing) similarly reports a key issue (coping with stress in the workplace), and competently reasons about this issue using relevant literature from the field:

> Everybody responds to stress differently where it can be experienced due to different reasons, and stress can impact on one's performance at work (Career Development Program, 2009). It is critical that nurses practice competently and adhere to professional boundary guidelines to acquire optimum quality in their nursing care (Meehan, McIntosh, & Bergen, 2006, pp. 10–11). It was found in Belcher and Jones' study (2009, pp. 142–152) that graduate nurses find it difficult to develop trusting nurse-patient relationships, which as a result, doesn't give them job satisfaction and the confidence to perform good quality nursing care. I can see why developing trusting nurse-patient relationships are important because patients are in a vulnerable position where they expect that nurses have their best interest at heart. (Roberta)

Roberta uses a personal pronoun once – 'I can see why [. . .]', almost as a token acknowledgement of the reflection genre, however, her beliefs, prior experiences or strategies in relation to this issue are not incorporated into this reflection. As a consequence, similar to Jason, she is unable to move from an almost dispassionate account of this issue in the workplace, to a reconstruction of her own practice or professional strategies. Students in Business and Nursing units were explicitly taught how to reason and justify their reflective pieces, using appropriate sources. This level of pedagogic scaffolding for *reasoning* is evident in these students' work, however, it also highlights the lack of development around *relating*, which was considered by academic staff to be a level of reflection that would 'come naturally' as it is the level with a predominantly personal tenor.

Reflections on teaching: pedagogical strategies to develop relating. Staff considered that activities to scaffold this level could focus on students analysing their skills/knowledges in the area under study; planning and justifying their responses to scenarios or problem-based learning and making comparisons between two related incidents to analyse similarities and differences between the setting, the actions, the consequences, the people involved and so on. They supported activities such as debates and roleplays that show how the issue or incident fits within students' own professional frame, preferred style and worldview, and how this compares with others' views. In this way, it was suggested that students can begin to reason a way forward.

Reasoning

As evidenced above, when students are taught how to draw on evidence to reason, they are able to produce more rigorous, discipline-focused reflections. If this level is not explicitly modelled, however, students tend to use personal viewpoints or homespun philosophy as 'evidence' in their reflections. Lecturers sometimes take for granted that students will use conventional referencing skills as with most assignments, yet given the personal tenor of a reflection, students often incorrectly assume that rigorous evidence is not required. Students in Law and Psychology were not *explicitly* guided in choosing a critical issue or *explicitly* taught how to analyse the issue using relevant literature or theory. As these were reflective assignments, the

focus was placed on developing 'relating' skills, with skills of reporting and reasoning assumed. Lisa's (Law) reflection illustrates her views on the reflective assessment topic of 'Critical thinking and problem-solving in legal research'. She indicates a positive outcome from her engagement in this unit – gaining new skills and confidence in locating information (evidence of relating):

> In week 1 I had a very simple grasp on legal research. I had a good knowledge on using the library catalogue as well as Internet search engines but definitely needed to expand my capabilities. At times I did find a lot of the research tedious and sometimes a bit of a waste of time however I continued to learn more and more skills every time I sat down to research. I believe that these skills have helped me to develop and produce better work in assignments and more thoroughly researched results. I feel confident in using a variety of legal search engines and electronic sources and will continue to use all the skills I have learnt in the subject. (Lisa)

Unfortunately she focuses on her view of the task (researching), rather than the issue (critical thinking and problem-solving), and discusses technical skills of locating information, rather than drawing on key disciplinary literature to suggest why it is important to access different sources or precedents, or how a particular aspect of law sometimes requires a move outside of the traditional doctrinal paradigm of legal research to use additional methodologies to solve a problem (Hutchinson 2008).

Helene (Psychology) shows strong evidence of relating, with constant use of the pronouns 'I' and 'my', and reference to her previous beliefs, views and experiences around a new area of organisational psychology. She draws on her experience as a 'project manager' to comment on her suitability for this new area:

> When I started I was really surprised to be told Annie's role was predominately one of organisational psychology and she considered herself to be an organisational psychologist. Furthermore, Annie's role was 20% counselling and 80% organisational psychology; my expectation was the complete opposite. I was very open to learning more about this new area within my discipline, as an undergraduate I haven't had a great deal of exposure to organizational psychology therefore I was eager to know more. I have become intrigued and feel my previous experience as a project manager and organizational psychology may just mesh together nicely. (Helene)

As Helene has not chosen a critical issue per se, it is difficult for her to reason or reconstruct her professional learning in any specific way. She does not compare/contrast the different areas of psychology, or access case studies to illustrate differences/similarities or cause/effect of particular strategies in each area. There is no reference to literature to suggest why certain positions require more of one field of psychology than another. Thus, there is no evidence of reconstructive, future-oriented strategies for her professional development, but simply a general sense that her interest has been piqued.

Reflections on teaching: pedagogical strategies to develop reasoning. Staff were adamant that familiarity with key literature and/or theories in their field are essential to show how academic learning can be applied in praxis. To demonstrate this, explanation and discussion using evidence were considered crucial as students examine different possibilities and sometimes consider ethical implications. Other strategies included annotated bibliographies around an issue, development of cause/

effect diagrams that require referencing, comparison/contrast of responses to issues from the literature, and other strategies which require students to explain and justify a course of action.

Reconstructing

Unless the previous three levels have been well developed, it is difficult for students to reach the reconstructing level of reflection. Each of the previous data excerpts has shown a lack of reconstruction, given the absence of one or more levels of reflection in students' work. Ben's (Secondary Education) reflection indicates that he is attempting to reconstruct his future practice by listing what he has learnt, with a final statement about being proactive rather than reactive:

> By completing this reflection, I have re-established communication with behavioural management techniques and strategies through theoretical frameworks. I have discovered that I already implement many classroom and behaviour management strategies recognised by several theorists [. . .] I have realised that I treat my students as social equals however I maintain an authoritative approach to learning [. . .] I do have much to learn in the classroom in the future however I maintain that being proactive about classroom and behaviour management is far more beneficial to my teaching and students (sic) learning instead of being reactive to individuals and groups. (Ben)

Ben seems to be justifying his approach to behaviour management with 'I already implement [. . .]' and 'I maintain [. . .]'. He admits 'I do have much to learn [. . .]', but never explains any specifics or relates this back to any critical issue (at the outset he chooses the general topic of 'behaviour management' rather than a critical issue or incident related to this topic). Scaffolding was provided in this unit around written structure and the four 'R's', with a particular focus on relating and reasoning – evident throughout other sections of the full reflection. Modelling how to isolate a critical incident/issue and using scenarios to reconstruct future practice would be beneficial for students to produce a reflective piece that is not simply going through the motions. This reflection reads as Ben's attempt to mollify the lecturer in an assessment task, rather than a deep and critical analysis of practice, with a specific action plan for the future.

Reflections on teaching: pedagogical strategies to develop reconstructing. For this level staff focused on the importance of action plans, and engaging in scenarios to trial and analyse the effects of different actions. Flowcharts predicting possible responses and their effects were suggested to think through professional scenarios. It was agreed that rolepays and simulations can be useful as a starting point, but where possible, students should be given opportunities to trial low-risk courses of action in the field, optimally with peer or mentor feedback, and then analyse the effects in detail. Responding to assessment feedback was given as a useful reconstructive strategy to model and teach in class. Tutors can use an example of their own (e.g. reviews on a paper or student feedback on their subject) to model this process: students analyse a previous assessment piece from any of their subjects; identify the key points of the feedback; provide a response; then explain a detailed course of action, with justification, to improve. While this level of reflection is the ultimate goal for learning in higher education, unless *all* levels are scaffolded, students are unlikely

to produce succinct, rigorous and transformative reflections in their assessment tasks. The next section outlines how these data from a teaching and learning project have highlighted the implications of particular pedagogical foci around reflection.

Conclusion

When students are expected to produce reflective assessment tasks in higher education, it is essential that pedagogies attend to the explicit scaffolding required for a well-communicated, rigorous demonstration of discipline knowledge and professional practice (Harris 2008). Critical reflection is not an intuitive skill, and competence in different levels of reflection – reporting/responding; relating; reasoning and reconstructing (Bain et al. 2002) – cannot be taken for granted (Ryan 2011). The data reported here illustrate that pedagogic strategies prioritising some elements of reflection at the expense of others, lead to limited or superficial reflections. A key finding from this project is the evidence suggesting that if any of the levels of reflection are neglected or assumed, students' reflections do not demonstrate the ultimate goal of reconstructive reflection with evidence of learning through praxis. First, if a key issue/incident is not *reported* at the outset of the reflection, students lack focus and are unable to reconstruct their thinking/learning/professional strategies in any specific way. Second, if students do not *relate* the issue/incident to their beliefs, experiences or world-view (Giroux 1988), they can demonstrate discipline knowledge but cannot reconstruct their learning or practice to incorporate this new knowledge. Third, if students neglect to use supported evidence to reason with rigour, they rely on personal opinion and homespun philosophy. Thus, they have no new knowledge on which to base any attempt to reconstruct ideas or practice. Finally, if students are not provided with opportunities to apply reconstructive strategies with active experimentation (Kalantzis and Cope 2008), feedback and analysis, they are likely to pay lip service to potential future action or transformed ideas. General statements (particularly concluding a reflection which has not attended to each of the preceding levels) are indicative of a student's attempt to demonstrate reconstruction at a superficial level.

This paper has outlined the importance of using reflective pedagogical strategies to develop each level of reflection in students' assessment work in higher education. The methodological process illustrates the important cycle of reflective and reflexive pedagogical work. Balancing this pedagogical work alongside discipline content development in higher education subjects is important work for improved assessment outcomes and ultimately more reflective learners. Reflective work does not need to sit separately from discipline knowledge, but rather it is an integral component of working within disciplines, providing a bridge between experience, generalisation and 'best practice'.

Acknowledgements

I acknowledge the support provided by the Australian Learning and Teaching Council Ltd, an initiative of the Australian Government Department of Education, Employment and Workplace Relations. The views expressed in this paper do not necessarily reflect the views of the Australian Learning and Teaching Council Ltd.

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