

INDIVIDUAL PROJECT REPORT (TAU FELLOWSHIP)

Researcher: Dr Karen Collett (EG 7)

Staff Number: 931853

Institution: University of the Western Cape

Project Title: Enhancing peer dialogical feedback loops and academic literacies using technology: A Design Based Research Intervention.

Keywords:

Peer Formative Feedback, Higher Education, Design Based Research, Blended learning.

BACKGROUND AND AIMS OF THE PROJECT

Student protests in 2015 and 2016 through the national “#Fees must fall” and “#Rhodes must Fall” campaigns clearly highlighted the needs of students at higher education institutions in South Africa to affordable, meaningful, flexible and supportive higher education opportunities. These conditions presented staff such as myself with particular pedagogical challenges in the design and delivery of accessible and meaningful teaching and learning experiences and assessment opportunities (Bozalek, Gachago, Alexander, Watters, Wood, Ivala & Herrington, 2013).

One particular and critical challenge was the need to improve systems of feedback to students in order to develop their academic literacy (Boud & Molloy, 2013; Dison & Clarence, 2017). Boud and Molloy argue that “feedback is the mechanism through which students discover whether they are successful in their work and if they are on track to meet expectations. It is central in their lives as learners.” (2013, p. 1).

The Council on Higher Education assessment policy (CHE 2016) and UWC policy assessment policy (UWC, 2012) and policy guidelines (UWC, 2017) endorse the need for students to receive formative feedback. Increasingly higher education (HEI’s) institutions use TurnItIn, an online (anti-plagiarism and assessment package) to ensure a level of self-editing and checking for similarity, before a final submission as part of a formative feedback process. However in most HEI’s an integrated approach to the development of student academic literacies and particularly feedback literacies are weak (Boud & Molloy, 2013; Carless & Boud, 2018; Dison & Clarence 2017). In addition, the use of technology to enhance formative feedback requires strengthening both in practice (Carless & Boud, 2018; Knight, 2003) and in assessment policy (Collett, 2018).

My research project focused on enhancing caring and formative peer feedback opportunities in online and face-to-face forums in my honours courses using technology. I intend that my findings would help to inform improvements in my teaching and the work of other HEI colleagues working towards integrated and transformative approaches to developing academic literacies and strengthening peer formative feedback processes. Academic literacies are seen as a contextualised social practice that takes place within the context of teaching and learning (Dison & Clarence, 2017, Lea & Street 1998).

The following key questions informed by design based research (DBR) process:

1. What key curriculum and assessment design principles from the literature and practice can enhance systems of formative peer feedback to enhance student academic writing in on-line and face-to-face learning environments?
2. What types of feedback sources, modes and forms do students find most helpful (caring) in helping them to improve their academic writing?

3. In what ways did online similarity feedback and qualitative peer and tutor feedback support development in student academic writing?
4. What scaffolding about feedback and feedback processes do students feel they need to provide feedback and receive feedback from their peers and tutors?

ENGAGING WITH THE LITERATURE

In my review of the literature related to feedback and deep level learning, I found that the Political ethics of care Fisher and Tronto (1990) and Tronto (2013) and the dimensions of “Response-able Pedagogy” by Bozalek and Zembylas (2017: 64) provided useful frameworks to inform moral and social justice dimensions in the design of the curriculum development principles that informed my DBR intervention.

In addition to these normative frameworks I drew on the principles of meaningful and authentic activity-based learning which require engaging students as central actors in the learning and feedback process (Boud & Molloy, 2013; Bozalek, et al., 2013). The work of Herrington, Reeves and Oliver (2010) on authentic learning and Herrington on authentic e-learning (2006) and John Biggs (2003) on constructive alignment principles, as well as assessment in higher education (Clarence, Quinn, & Vorster, 2015) informed the key principles and action steps informing my Design Based Research. In these learning environments meaning making, reflection and feedback provide the ingredients for authentic learning (Bozalek et al., 2013, Boud & Molloy, 2013; Gibbs, 1999; Parker, 2015).

A key aspect I was concerned about was the development of a learning environment in which student felt safe and supported to be able to give and receive feedback in both and online and face-to-face environment. Feedback is defined by Boud and Molloy as “a process whereby learners obtain information about their work in order to appreciate the similarities and differences between the appropriate standards for a given work, and the qualities of the work itself, in order to generate improved work.” (2013, p.205). They argue for a view of feedback as “a complex system that needs to permeate the curriculum, rather than an activity that appears from time to time” (ibid, 2013, p.25). Yang and Carless (2013) argue for the need to develop trust to enhance the processes of dialogical feedback. Recent research by Carless and Boud (2018) and Xu and Carless (2017) highlights a need to address the social and affective dimensions of feedback and to enhance capacity for feedback literacy and the uptake of feedback. Through my research I aimed better address social and affective dimensions of feedback through dialogical learning in online and face-to-face professional learning communities (Carpenter, 2017; Dufour & Eaker, 1998).

Providing a range of levels of formative feedback is highlighted by (Gravett & Winstone, 2018; Jacobs, 2017) as being particularly important in HEI context where students experience a range of language barriers to learning. Jacob’s (2017). The research by Ryan, Henderson, and Phillips, (2019) found that different modes of feedback matter to students. The use of online computer assisted feedback is show in the literature to effectively support learner achievement (Hattie & Timperley, 2007; Ko & Rossen; 2004, Maier, Barnett, Warren & Brunner, 1998). Bower’s research on the value of TurnItin for feedback (2008) reveal that it offers the following: detailed (asynchronous) feedback and comment on assessment task using a range of (content, process and self-reflection) options; the ability add custom made comments and cues in writing or verbally; the development, display and modification assessment rubrics. However TurnItin is not be “effective as an anti-plagiarism software without the review, checking and editing by staff and students” (Sutherland-Smith & Carr, 2005, p.94).

My DBR intervention was focused on deepening the refinement of design principles and practice informing peer formative feedback in an online and blended environment using the affordances of Turnitin technology. This intervention aimed at deepening research into the affective dimensions of peer feedback and feedback literacies in online and face-to-face environments and the principles which would inform curriculum and assessment design in HEI courses.

METHODOLOGY

This study was informed by a social constructivist research paradigm using a Design Based Research (DBR) approach. DBR is defined by Wang and Hannafin (2005) as a “A systematic but flexible methodology aimed to improve educational practices through iterative analysis, design, development, and implementation, based on collaboration among researchers and practitioners in real-world settings and leading to contextually-sensitive design principles and theories” (pp. 6-7). Design-Based Research (DBR) has the central goal of “designing learning environments and developing theories or “prototheories” of learning.” (Design-Based Research Collective, 2003, cited by Ruokamo, Hakkarainen & Ericksson, 2012, p.391).

RESEARCH SITE, PARTICIPANTS AND PROCESS

The research case study sites were two of my B.Ed. Honours classes in the first and second semester of 2018. These qualitative case studies provided an in-depth account of phenomena (Babbie and Mouton, 2009) illuminating the meaning (attitudes, behaviour and feelings) in the student lived experiences (Yin, 1989). Data gathering included reflective notes; course surveys; individual and focus group interviews and documentary analysis. Data analysis was informed by Miles and Huberman’s (1994) steps of systematically organising, reducing and analysing data indicated in the DBR approach. Ethical permission to conduct this research was applied for and conducted in accordance with the UWC research policy (2009).

FINDINGS

What key curriculum and assessment design principles from the literature and practice can enhance systems of formative peer feedback to enhance student academic writing in on-line and face-to-face learning environments? **Aspects marked in red indicate principles and aspect added and refined after two iterations of the DBR process in 2018.**

- **Design for collaborative construction of knowledge and engagement with formative feedback through online and face-to-face professional learning communities.**
- Enhance opportunities for giving, receiving and integrating peer feedback.
- **Link authentic student driven assessment and feedback processes to driving learning.**
- Develop capacity for students to make sound academic judgements about their own work and work of others (and **how they would like to make these judgements.**
- Enhance processes of dialogical feedback **in a caring Professional Learning Community**
- **Scaffold reflective thinking on feedback and feedback uptake through presenting, using and reviewing reflexive models**
- Address social justice and care in the design and delivery of the assessment and feedback processes.
- Acknowledge and **surface feelings** and tacit knowledge towards giving and receiving feedback **and incorporating feedback.**

What types of feedback sources, modes and forms do students find most helpful (caring) in helping them to improve their academic writing?

Feedback from a range of sources, tutors, lecturer and peers. Feedback from tutors and the lecturer was found to be more helpful, for some students, than feedback from peers.

- Most useful feedback modes were a combination both online and face-to-face processes. Face-to-face feedback provided additional affective cues which tutors and the lecturer could follow up on from online feedback comments.
- On-line feedback was immediate, from a range of sources and could be returned to and reviewed.
- Both written and verbal or auditory forms of peer, tutor and lecturer feedback.
- Useful types of feedback included, probing questions, suggestions for deeper reading, guidance of topic focus and tips to improve technical and grammatical aspects of writing.

In what way did online similarity feedback and qualitative peer and tutor feedback support development in student academic writing?

- Students engaged with the online similarity feedback from TII to reduce similarity in subsequent drafts. Some concern about high similarity indexes due to submission of refined drafts.
- There was evidence in subsequent drafts that students had improved on the structure of their writing, as well as improved technical and referencing conventions. The face-to-face meetings with tutors had supported engagement with the uptake of feedback for most students.
- However, a few students did not integrate the feedback received in the online environment.

What scaffolding about feedback and feedback processes do students feel they need to provide feedback and receive feedback from their peers and tutors?

- Awareness about what the assessment standards are. Awareness of the group norms for giving and receiving feedback. Reflection on group norms and processes of interaction to enhance collaborative relationships in small peer groups and peer and tutor groups engaging in dialogue about feedback. Skill at using technology to provide feedback. Access to free internet connectivity and a computer. Practice at giving and receiving feedback in an online environment. Discussion about feedback processes and content in face-to-face encounters. Opportunities to suggest where feedback could be improved. Training in the use of reflective models.

CONCLUSION

These initial findings highlight a number of curriculum and assessment design principles, to support an integrated approach to developing student writing and feedback literacies within curriculum design. They confirm the research by Yang and Carless (2013) that the content of feedback can be derailed if social-affective and organisational factors are not handled effectively. Thus, both on-line and face-to-face opportunities for engagement around formative feedback need to be integrated into the course design to strengthen opportunities for dialogical feedback in blended learning environments. In addition, they suggest that both social and material constraints such as connectivity need to be considered to address issues of care and social justice in assessment practice. In addition, a stronger focus in course design and delivery should be placed on the development of feedback literacies through building relationships in professional learning communities. These findings highlight the need for an integrated and blended approach to the development of academic literacies underpinned by an ethics of care which pays attention to social-affective, material and organisational factors in supporting a response-able pedagogy (Bozalek & Zembylas, 2017).

My TAU group has sparked my interest in the area of affect (Massumi, 2015) and post-humanist research and pedagogy. In future, I hope to deepen my research on formative feedback and the integration of academic literacies in course design, as well as explore the notion of affect and feedback in blended learning environments through a relational ontology (Barad, 2007).

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Appendix A

Table 1. Key principles and actions implemented and tested in the DBR process: Enhancing caring and response-able formative feedback in on-line and face-to-face professional learning communities.

The table below provides a summary of the key principles from the literature and from practice that informed my curriculum and assessment design using TurnItIn and well as implementation steps informing my DBR. **Aspects marked in red indicate principles and aspect added after two iteration of the DBR process.**

Key Principles	Actions informing implementation related to the key principles.
	<ul style="list-style-type: none"> ●
<p>Design for collaborative construction of knowledge and engagement with formative feedback through online and face-to-face PLC's.</p>	<ul style="list-style-type: none"> ● Plan for students to work in PLC related to area of common interest in assessment tasks and where interpersonal relations have been established. ● Design for collaborative construction of knowledge through online and face-to-face PLC's ● Design for leadership and co-leadership of PLC's. ● Ensure PLC's reflect on and refine group norms for working together and feedback. ● Provide opportunities for students to reflect on feedback they received to improve their academic writing and to suggest improvements needed. ● In class, design for the lecturer to provide ongoing feedback to tutors and students between formative assessment tasks on the quality of feedback provided online and improvement in the quality of student writing and thinking. ● Plan for student and tutor meeting to review feedback and uptake of feedback. Students to reflect on how they responded to feedback and integrated feedback in subsequent drafts. ● Plan for ongoing meetings between tutors and lecture to review student integration of feedback and improvements needed in teaching or assessment tasks and processes. ● Design for tutors to be assigned to PLCs based on fit between languages spoken in groups.

<p>Enhance opportunities for use of peer feedback.</p> <p>Enhance opportunities for giving, receiving and integrating peer feedback.</p>	<ul style="list-style-type: none"> ● Design for multiple formative feedback opportunities towards a final polished task. ● Enhance timely feedback through peer feedback. ● Plan for multiple opportunities for technology enhanced timely feedback. Use both TurnItin and Google Drive to enhance both personal and anonymous feedback. ● Provide opportunities for both online and face-to-face modes of giving feedback. ● Ensure that online feedback include both a visual and auditory mode of feedback. ● Include peer, tutor and lecturer feedback in online and face-to-face Professional Learning Communities on assessment task.
<p>Link authentic assessment to driving learning activity.</p> <p>Link authentic student driven assessment and feedback processes to driving learning.</p>	<ul style="list-style-type: none"> ● Encourage student involvement in the nature of the authentic assessment tasks. ● Link the assessment task to activities students can use and value in practice. ● Provide students with a mark or credit for providing formative feedback on the work of a peer and for reflecting on and writing down the feedback they require. ● Ensure that the student selects an assessment activity that has real world relevance and the student can use to improve/inform their practice. ● Promote authentic collaboration around common task in peer groups. ● Involve students in the selection of small peer groups they would like to solicit feedback from. <p>Place students at the centre of decision making about the nature of their assessment task, as well as who they would like to collaborate with in an PLC.</p>
<p>Develop capacity for students to make sound academic judgements about their own work and work of others (and how they would like to make these judgements).</p>	<ul style="list-style-type: none"> ● Engage students in review/development of assessment criteria in the assessment rubrics. ● Provide opportunities for student to reflect on peer writing using assessment criteria ● Provide literature and training (feedback) to students on the type of feedback comments student find most useful in improving their academic writing and critical literacies. ● Design nested assessment tasks that enable students to build on the effects of earlier feedback. ● Encouraged students to judge their own work and to articulate self-evaluation through reflection on their task and the eliciting of feedback ● Build in opportunities for students to reflect on their role in giving and receiving feedback.

	<ul style="list-style-type: none"> ● Provide opportunities for feedback on feedback during the course and through the Professional Learning Communities (PLC's)
Enhance processes of dialogical feedback in a caring Professional Learning Community	<ul style="list-style-type: none"> ● Provide opportunities for students to reflect on the value of the feedback they have given and received. ● Provide ongoing opportunities for students to engage with the type and quality of feedback they receive from peer, tutors and the lecturer in relation to the rubric requirements. ● Enable a degree of flexibility in ways in which students provide feedback to online submission because of access to technology and connectivity. ● Train and develop student skill and confidence in using on-line feedback platforms (TurnItin) to enable them to give and receive feedback in online environments. ● Provide opportunities for students to reflect on their uptake and incorporation of feedback in improving their writing and thinking in PLC's. ● Structure in a greater amount of time for students to provide feedback to peers between formative assessment tasks. ● Plan fewer but more in-depth opportunities for peer and tutor feedback in a sustained way over a course. ● Build in opportunities for Writing Centre tutors and the lecturer to scaffold the development of academic writing and reading during the course. ● Carefully pace assessment, tasks and peer feedback opportunities to ensure students have enough time to provide attentive feedback in the online environment.
Scaffold reflective thinking on feedback and feedback uptake through presenting, using and reviewing reflexive models	<ul style="list-style-type: none"> ● Introduce students to a framework for reflection on their own writing and feedback such as Gibbs' learning cycle. ● Provide student with the opportunity to reflect on their writing (draft) using this framework, in order to identify where they need feedback. ● Build in a requirement for student to specify the feedback they require from peers or tutors on each formative task submitted before submission.
Address social justice and care in the design and delivery of the assessment and feedback processes.	<ul style="list-style-type: none"> ● Establish and norms within each PLC and class for the giving and receiving of feedback to enhance academic writing. ● Provide multiple opportunities for student and tutors to give feedback to each other and to the lecturer on the type, mode and quality of feedback they find most/least useful. ● Address issues of language preference in the writing of tasks and giving and receiving of feedback. ● Reflect on and refine norms within each PLC for the giving and receiving of feedback to enhance academic writing (drawing on

	Tronto's 2013, Political Ethics of Care).
<p>Acknowledge and surface feelings and tacit knowledge towards giving and receiving feedback and incorporating feedback.</p>	<ul style="list-style-type: none"> ● Build in multiple opportunities for monitoring student and tutor feedback through collaborative communities of praxis in face-to-face and on-line spaces. ● Engage students in expressing how they feel about giving and receiving feedback at the start of the course, in the middle of the course and at the end of the course. ● Provide and engage with norms for giving and receiving feedback online and in a PLC. ● Enhance a focus on social and environmental factors that can promote the building of trust during the giving of feedback and the reflection on feedback. ● Provide opportunities for students to reflect on and discuss how they incorporated feedback comments and what facilitated this. ● Build in regular meeting between tutors and the lecturer to monitor uptake of feedback and scaffolding of learner writing and thinking towards disciplinary outcomes.