

Enabling Student Uptake of Feedback

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Abstract

In light of a new paradigm to feedback, the focus shifts from how and when instructors deliver feedback to learners' agency on feedback. Feedback produces learning if the students are given the opportunity to use and to act on it to move forward. There is ample research on models and designs for assessment and feedback; however, there is not a one-size-fits-all model for higher education courses. Each university setting is a different case with different dynamics, different disciplines where the replicability of a model is not possible. This study used content analysis to investigate how assessment and feedback design can sustain opportunities for feedback encounters and enable student uptake of feedback using a sociocultural perspective. After exploring the process of assessment and feedback design, different agents of five blended English for Academic Purposes courses, and potential feedback encounters were mapped. An established matrix of feedback for learning was used to investigate and code the feedback encounters generated in the course. The results of the content analysis indicated satisfactory student uptake of feedback, and opportunities for potential feedback encounters before, during, and after the assessment. Additionally, the results pointed to the need for more feedforward commentaries and self-regulatory feedback.

Keywords: blended learning, content analysis, course design, higher education, scaffolding

1. Introduction

In a new paradigm approach to feedback, the emphasis is placed on the impact feedback has on student learning and achievement (Winstone & Carless, 2019); the focus shifts from how and when instructors deliver feedback to learners' agency on feedback (Carless & Boud, 2018; Winstone & Carless, 2019). Feedback overcomes the limitations of a unilateral transmission of information from the instructor to the student (Boud & Molloy, 2013; Evans, 2013; Nash & Winstone, 2017). It is a dialogic process, a shared responsibility between the agents of the process (Boud & Molloy, 2013; Carless, 2015; Henderson et al. 2019), and it is information provided by diverse sources that students, as active agents, must recognize, understand, and engage with. Feedback produces learning if the students are given the

opportunity to understand where they are going (feed up), how they are going (feed back) and what they have to do next (feed forward) (Hattie & Timperley, 2007). In respect to this, Brooks’ et al. (2019) in their Matrix of feedback for learning, reviewed Hattie’s and Timperley’s (2007) feedback model (a seminal meta-analyses of educational research) and proposed a conceptual matrix that encapsulates “the right conditions” (p. 26) for productive feedback and which constitutes “a conceptual model for feedback that can be translated into practice” (p.26) both in onsite and online learning. In the Matrix of feedback for learning (Brooks et al., 2019), in Figure 1, the x axis shows the types of feedback: feed up, feed back, and feed forward. The y axis shows the feedback levels: task, process, and self-regulation. The intersection between x and y axis allows for matching of the purposeful feedback types with the differentiated feedback levels. Reading across the matrix, the three columns (feedback types) highlight to teachers the importance for each student to have clarity about the learning intent, the individual progress, and the next step to improve (Brooks et al., p. 26-27). The three rows (feedback level) of the matrix demonstrate to teachers that learners require varying input depending on their task proficiency. More advanced learners gain from more relational process or self-regulatory feedback, whereas novice learners require explicit task-based feedback (Brooks et al., 2019; Hattie, 2012).

Figure 1: A Matrix of feedback for learning

Learner Stage	Feedback Level	Feeding Up: Where am I going?	Feeding Back: How am I going?	Feeding Forward: What do I have to do next?
Novice	Task	Feeding Up Prompts: <input type="checkbox"/> Today we are learning... <input type="checkbox"/> Success in this task will look like... (exemplar/model) <input type="checkbox"/> The key criteria for success are... <input type="checkbox"/> We are looking for... Feedback Strategies <input type="checkbox"/> Reduce complexity <input type="checkbox"/> Use exemplars/models <input type="checkbox"/> Identify misconceptions <input type="checkbox"/> Use diagnostic assessment for goal setting	Feedback Prompts: <input type="checkbox"/> You <i>have/haven't</i> met the learning intention by... <input type="checkbox"/> You <i>have/haven't</i> met the success criteria by... <input type="checkbox"/> Your answer/work is/isn't what we are looking for because... Feedback Strategies <input type="checkbox"/> Avoid over emphasis of error analysis <input type="checkbox"/> Feedback must be immediate <input type="checkbox"/> Match feedback to success criteria	Feed Forward Prompts: <input type="checkbox"/> To fully meet the learning intention you could... <input type="checkbox"/> Addressing the following success criteria would improve your work... <input type="checkbox"/> Adding/removing ____ would improve your work. Feed Forward Strategies <input type="checkbox"/> Use language from the success criteria <input type="checkbox"/> Use scaffolding <input type="checkbox"/> Feed Forward must be timely <input type="checkbox"/> Use challenge <input type="checkbox"/> Refer to goals
	Process	Feeding Up Prompts: <input type="checkbox"/> The key ideas/concepts in this task are... <input type="checkbox"/> These ideas/concepts are related by... <input type="checkbox"/> Key questions you could ask about this task are... <input type="checkbox"/> Skills you will need in this task are... <input type="checkbox"/> Strategies you will need in this task are... Feeding Up Strategies <input type="checkbox"/> Use graphical organisers <input type="checkbox"/> Reduce scaffolding <input type="checkbox"/> Increase complexity <input type="checkbox"/> Use mastery goals	Feedback Prompts: <input type="checkbox"/> Your understanding of the ideas/concepts within this task is... <input type="checkbox"/> Your thinking about this task is... <input type="checkbox"/> You demonstrated ____ skills to a ____ level. <input type="checkbox"/> You used ____ strategies to a ____ level. Feedback Strategies <input type="checkbox"/> Feedback amount can start to increase <input type="checkbox"/> Feedback complexity can increase <input type="checkbox"/> Use prompts or cues	Feed Forward Prompts: <input type="checkbox"/> You could improve your understanding of ____ concepts by... <input type="checkbox"/> Thinking further about ____ could improve your work by... <input type="checkbox"/> You could improve your ____ skills by... Feed Forward Strategies <input type="checkbox"/> Feed Forward amount can start to increase <input type="checkbox"/> Feed Forward complexity can increase <input type="checkbox"/> Use prompts or cues <input type="checkbox"/> Use challenge
	Self-Regulatory	Feeding Up Prompts: <input type="checkbox"/> How will you use the learning intention? <input type="checkbox"/> How could you use the success criteria? <input type="checkbox"/> Which other ways could you monitor your work? Feeding Up Strategies: <input type="checkbox"/> Reduce emphasis of exemplars <input type="checkbox"/> Mastery and performance goals	Feedback Prompts: <input type="checkbox"/> Are you on track with your work? <input type="checkbox"/> How do you know? <input type="checkbox"/> To which level are you satisfying the success criteria? <input type="checkbox"/> Are you on track to achieving your goal? <input type="checkbox"/> How do you know? Feedback Strategies: <input type="checkbox"/> Delay feedback <input type="checkbox"/> May only require verification feedback	Feed Forward Prompts: <input type="checkbox"/> How could you deepen your understandings? <input type="checkbox"/> How could you improve your work? <input type="checkbox"/> What is the next step for your learning? <input type="checkbox"/> How do you know? Feed Forward Strategies: <input type="checkbox"/> Delay feedback <input type="checkbox"/> Reduce teacher reliance <input type="checkbox"/> Develop self-regulated learners

(Brooks et al., 2019, p. 28)

Research has shown that feedback is crucial for learning in higher education (Brooks et al., 2019; Hattie, 2015; Winstone & Boud, 2020). It is recognized as “a complex and differentiated construct that includes many different forms with, at times, quite different effects on student learning” (Wisniewski et al., 2020, p.13). Feedback size effects, which can range between 0.48 (Wisniewski et al., 2020), 0.70 (Hattie, 2018), and 0.79 (Hattie & Timperley, 2007), confirm the high degree of variability in the educational context, and the challenge for institutions to promote feedback and assessment design that sustain productive feedback. A growing body of research has shown that each university setting is a different case with different dynamics, culture, and disciplinary thinking where the replicability of a feedback model is not possible (Bearman et al., 2014; Carless, 2015; Hattie, 2015; Hattie & Timperley, 2007; Henderson et al., 2019; Lashari et al., 2013; McConlogue, 2020; Nicol, 2010; Shute, 2008). Previous research has demonstrated that the use of standardized feedback designs to address diversity and discipline-specific context is a limitation to effective feedback processes (Henderson et al., 2019; Winstone & Careless, 2019). Limitations to productive feedback processes are also identified in assessment design, which frequently restricts student agency and actions in response to feedback (Winstone & Carless, 2019), and in feedback design which is subdued to assessment (Esterhazy et al., 2019; Winstone & Boud, 2020). Feedback is a process that is intertwined with assessment (formative and summative) but is not subordinated to it. Feedback opportunities are not isolated instances following assessment, or instances which can be added to any learning event (Boud & Molloy, 2013; Esterhazy, 2018; Winstone & Carless, 2019). Feedback is “an integral part of course design” (Esterhazy et al., 2019, p. 15).

This study, conducted with content analysis, aims to contribute to the understanding of the adequacy of feedback and assessment design of a blended course to sustain feedback encounters and learners’ uptake of feedback. To capture the complexity of the feedback processes, feedback is analyzed with a sociocultural perspective of where feedback practices are conceptualized as social practices in a discipline-specific context (Esterhazy, 2018, 2019). Empirically, this study uses Esterhazy’s three-layer model (Esterhazy, 2019) to map the relations between the different agents of a blended course and potential feedback encounters. Brooks’ et al. (2019) matrix of feedback for learning is used to investigate and code the feedback encounters generated in the course. The most common types and levels of feedback sustained by the assessment and feedback design. The research questions (RQ) of this investigation are 1. Which types and levels of potential feedback encounters do the assessment and feedback design of this course sustain? 2. Which types and levels of feedback do instructors generate in the online component of the course? 3. What is the level of task

resubmission in the online component of the course? 4. What is the level of student uptake of feedback in the online component of the course?

1.1. Feedback as a relational process

Esterhazy (2018, 2019), in her study on the reconceptualization of feedback through a sociocultural lens, proposed a conceptual framework that represents feedback as a relational process that emanates from feedback encounters between the learners, the instructor, and the discipline-specific learning environment. Esterhazy (2018, 2019) explained this process in a three-layer model which envisions feedback practices as the interplay of the feedback encounter layer, the course design layer, and the knowledge domain layer. In the feedback encounter layer, feedback encounters generate from the interactions between instructors, students, and discipline-specific resources like assessment criteria, standards, exemplars, knowledge content, and resources. The course design layer comprises the feedback opportunities the instructor and instructional designer plan in the course design which are shaped by the interaction between the different course elements (tasks, resources, technological tools, distributions of responsibilities among students/instructors). In the knowledge domain layer, feedback practices are shaped by the interplay of the cultural tools (materials and intellectual resources) and the social conventions inherent in the discipline knowledge domain (disciplinary thinking and ways to organize and generate knowledge), norms, and values of a specific course and discipline (Esterhazy, 2019). By focusing on the core issues of the feedback process, Esterhazy provided a framework that resonates with the new feedback paradigm (Winstone & Carless, 2019), where feedback practices are a shared responsibility, generated from the interaction between the agents and the element of a course, and are shaped by epistemic relations. Esterhazy's framework suggests the disentanglement of feedback and assessment design (Winstone & Carless, 2020). Feedback practices cannot be represented by a linear chain of events following assessment, but by a network with diverse social and epistemic relations (Esterhazy, 2019; Winstone et al., 2020). Respectively, the contact between learners-instructor-learning materials, and the ways of organizing and generating knowledge, is inherent in the specific knowledge domain of a discipline (Boud & Molloy, 2013; Esterhazy, 2019; Winstone & Carless, 2019; Winstone et al., 2020).

1.1.1 Blended learning: assessment and feedback design

Blended learning aims to make teaching and learning experiences more adaptable, efficient, and effective by planning for the best of each modality, both face-to-face and online (Cleveland-Innes & Wilton, 2018; Cronje, 2020; Stein & Graham, 2020). Boosting active learning, building an engaged learning community, and promoting learner autonomy are among the most crucial components of the blended-learning pedagogies (Quality Matters Higher Education Rubric, 2020; Stein & Graham, 2020). The advantages and affordances

provided by the face-to-face and online pedagogies are several: easier access to learning activities, learner “guidance and triggers” (through resources, activities, and assessment) (Stein & Graham, 2020, p. 15), opportunities for individualized learning (e.g., control over the study pace), increased social interaction, more time on task (triggered by instructions, notifications, scaffolds, etc.), and enhanced course design (Cleveland-Innes & Wilton, 2018; Quality Matters Higher Education Rubric, 2020; Stein & Graham, 2020). Despite the lack of uniformity in the design and structure of blended learning courses, a growing body of research has shown a clear consensus on research-based frameworks and standards based on course alignment (alignment of course learning outcomes, units' and lessons' learning objectives, assessment, learning resource, and activities), engagement, communication, accessibility, and navigation to promote learners' attainment of the course learning outcomes (Bonk & Graham, 2006; Cleveland-Innes & Wilton, 2018; Cronje, 2020; Quality Matters Higher Education Rubric, 2020; Stein & Graham, 2020). Backward design is one of the foundational approaches to course design based on the principle of course alignment with a start-at-the-end approach (Mc Tighe & Willis, 2019; Wiggins & Mc Tighe, 2005). In a backward design approach to course design (McTighe & Willis, 2019; Wiggins & McTighe, 2005), the focus is primarily on student learning and understanding, and on encouraging intentionality during the design process. A three-stage backward design supports the promotion of student learning (McTighe & Willis, 2019; Wiggins & McTighe, 2005). In the first stage, by prioritizing clear course learning outcomes, the focus is on what students are expected to learn in the course. In the second stage, the attention is on the identification of the type of assessment that will produce acceptable evidence of student understanding and proficiency (McTighe & Willis, 2019; Wiggins & McTighe, 2005). In the third stage, the emphasis is on planning the instructional activities that will help students meet the desired results. It is at the second and third stage of a backward design that assessment and feedback design integrate with the course design (Boud & Molloy, 2013; Esterhazy et al., 2019; Goodyear, 2015; Malecka et al., 2020; McTighe & Willis, 2019; Wiggins & McTighe, 2005).

Assessment design is included in the development of the course learning units. At the micro-level, this means that formative assessment for learning and summative assessment are developed along with the design of the learning units, “a body of subject matter that focuses on a major topic and that lasts between a few days and a few weeks” (McTighe & Willis, 2019, p. 201). Formative assessment for learning is part of a sequenced and scaffolded learning unit, which rigorously aligns with all the components of the unit and the established criteria and standards (course learning outcomes, unit learning objectives, learning resources, teaching, and learning strategies, formative /summative assessment, criteria, standards, and mindful integration of technology to best support learning and teaching) (Carless, 2015; Carless, 2017; Hattie, 2015; Hattie, 2018; McConlogue, 2020; McTighe & Willis, 2019; Quality Matters, 2020). Research on assessment demonstrated that scheduled ongoing and

nested formative assessment creates iterative opportunities for student engagement and progress towards the course learning outcomes (Esterhazy, 2019; Hattie & Clarke, 2018). Assessment design that included opportunities for resubmission of revised formative or summative work reinforces in learners the importance of assessment for learning and creates opportunities to engage with feedforward feedback commentaries and uptake of feedback (Carless, 2015; Esterhazy, 2019).

With respect to feedback design, relations between different elements of the learning units need to be planned up-front to create opportunities for productive feedback practices and potential encounters with feedback to happen (Esterhazy, 2018). For feedback design to support and generate an array of opportunities like learner requesting feedback, generating feedback, making sense of feedback, self-assessment, and implementing feedback (Boud & Molloy, 2013; Esterhazy, 2019; Hattie & Clarke, 2018; Winstone & Carless, 2019), it is necessary to plan the relations between resources, tasks, and responsibilities (Esterhazy, 2019). In practical terms, this translates into designing learning paths or units where resources (content, instructions, prompts, scaffolds, and criteria) integrate with tasks and with scheduled and possible feedback encounters (Boud & Molloy, 2013; Esterhazy, 2019; Hattie & Clarke, 2018; Winstone & Carless, 2019). In the context of this research, we will focus on blended learning as an effective and mindful combination of online learning “to supplement and support onsite learning” (Stein & Graham, 2020, p.10).

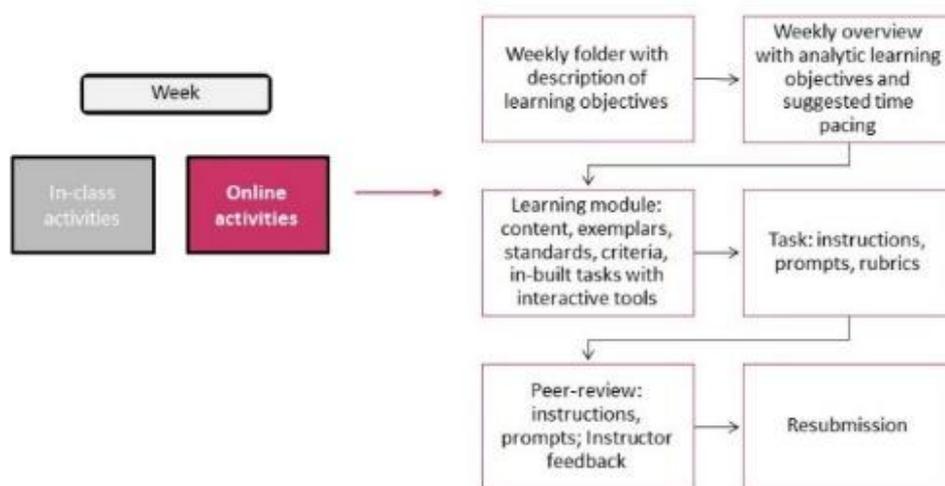
2. Method

2.1 The physical setting

This study took place at Deree - the American College of Greece (ACG), a non-profit private college, in the blended English for Academic Purposes II (EAP) course of the undergraduate division. In this course, students advance their competence in academic English and become familiar with the methods of college-level study. One of these is the use of feedback for learning. The course was built, in Blackboard Learning Management System (LMS), by the director of the program of English for Academic Purposes and instructional designer together with the team of the EAP instructors. Following the institutional policy on blended course (30%-50% of face-to-face teaching is delivered through online format and pedagogy), the specific EAP blended course offers 6 hours in-class and 3 hours asynchronous online. The course design followed a backward design approach, and discipline-specific methodology was addressed with Long’s methodological principles of language teaching (2009) (e.g., using task as the unit of analysis, promoting learning by doing, and exposing students to a variety of sources). The blended course design incorporates both online components and classroom learning for a 13-week instruction. In conformity with the teaching and learning institutional policy, instruction includes inter-alia structured and focused small

and large-group discussions, structured and focused writing activities in which students produce, share, and submit writing individually or collaboratively, listening and reading comprehension activities, peer-feedback, one outside-of-class meeting with the instructor, office-hour meetings, and group/individual tutorials through the Student Academic Support Services. The 13-week instruction is organized into weekly folders with two sub-folders for the in-class component and the online component (see Figure 2). Each online week, with the exclusion of the final week, contains: a weekly overview with measurable learning objectives aligned to the course learning outcomes, learning resources, success criteria, standards, exemplars aligned with the tasks, instructions and prompts for formative and summative assessment, and timelines to consult the resources, to complete readings and tasks, and scheduled feedback encounters.

Figure 2: Example of a weekly structure



The learning resources and activities are paced and scaffolded and partly delivered in a learning module that allows specific sequencing and integration of the diverse components of the multi-week unit. Formative assessments are performed with discussion board tools to support conversation among peers and opportunities for resubmission. VoiceThread application, which offers multiple ways of engaging students (text, audio comment, video comments, and doodle) is used to guide reflection on the writing process. A journal helps students think over their work as a part of a meta-cognitive process. Blackboard quizzes, for the language activities, provide automated correction. Summative assessment comes in the form of multi-staged assessments that are submitted in Blackboard assignment and in Turnitin and which include provisions for resubmission of tasks.

2.1.1 The dataset and the data collection

Institutional Review Board (IRB) approval was granted prior to data collection. Prior to the dataset collection, to identify the potential feedback encounters in the blended course, the researcher mapped the online component of the course to Esterhazy (2019) three-layer model. The course mapping revealed that the multi-week unit design enacted a possible network of potential feedback relations, traceable to the interdependence of its components (the learning resources, the tasks, and the planned feedback encounters: instructor feedback, peer feedback, automated feedback, self-assessment). A network of potential feedback relations was detectable within a week and within multiple weeks, when scaffolded task, peer-reviews, and resubmission were at play. The dataset used in this research was generated in the online component of 5 sections of the EAP blended course offered in a spring semester with a population of 5 instructors and 52 students. The researcher focused on weeks 1 to 12; week 13 was not included as it did not qualify for the content analysis. The dataset is composed of artefacts that include the instructor generated feedback commentaries to the formative and summative assessments submitted by the students, to the peer feedback commentaries, all formative and summative assessments with the respective resubmissions, and the instructions, prompts, scaffolds, criteria, and rubrics. Taking into consideration the information-rich setting provided by the different elements of the online components and its potential to illuminate and to align with the inquiry's purpose (Krippendorff, 2018; Patton, 2015), the artefacts, generated in the course, were purposefully sampled, and the researcher, prior to beginning the study, adopted a scheme based on a "complete target population" of a one-semester cohort (Patton, 2015, p.284). Investigating feedback as a relational process where epistemic and social relations are the results of the interaction between learners, instructor, and the course setting (Esterhazy, 2019), implied recognizing the importance of the contribution of each student and instructor (of the cohort) to this participatory and contextualized process (Patton, 2015). A total of 533 documents (with 7.666 segments, and 151.767 words) were sampled. The data on task resubmission was retrieved from Blackboard grade center.

3. Content analysis and coding

This study was performed with content analysis. In the last two decades, content analysis has been adopted in a variety of educational research including research on asynchronous communication (Cohen et al. 2007; Neuendorf, 2017). By looking directly at communication through texts or transcripts (Cohen et al., 2007) and, therefore, falling within the central aspect of social interaction, content analysis drives to the identification of patterns and themes (Patton, 2015). It provides both qualitative and quantitative insights; it is a discreet means of analyzing interactions and it provides an understanding of complex patterns of human thought and relations within a given setting (Cohen et al. 2007; Krippendorff, 2018; Patton, 2015). For

the content analysis, the researcher followed Krippendorff's set of instructions (2018): unitizing, sampling, coding, reducing data, methods for statistically summarizing or simplifying data. Coding was performed with MAXQDA 2020 software. Brooks' et al. matrix of feedback for learning (see figure 1) was used to investigate and code the instructions, prompts, scaffolds, instructors' feedback commentaries in the online component of the blended course. Coding units were reduced at meaningful sentences (Brooks et al. 2019; Strijbos et al., 2006). Strijbos' et al. (2006) unit of analysis and segmentation procedure were adopted. The coded segments were analysed according to the relative frequency of each feedback code in relation to the total feedback and of the learners' uptake of feedback code in relation to the total opportunities to act on feedback generated by the instructors. Memos were used to reflect on the use of prompts and strategies of the coded segments as suggested by the literature review and the matrix of feedback for learning (Brooks et al., 2019). The comparison between coded segments with the instructor feedback on the students' work and resubmission allowed the identification of uptake of feedback. 10% of documents were coded by a second coder with the purpose of improving the inter-coder reliability (Patton 2015). In the four meetings, the two coders discussed the differences and learnt from the differences to improve the coding agreement (Krippendorff, 2018; Patton, 2015). With the four meetings, the intercoder agreement Kappa (Brennan & Prediger, 1981), went from a moderate agreement value of $K=0.43$ to $K=0.65$, after the third meeting, and to $K=0.71$ after the fourth attempt, a substantial improvement in the strength of agreement.

3.1 Results

Percentage frequency was used to report the results. The results showed that in the instructions, prompts, scaffolds of the 12 weeks of the online component of the blended course about 97,83% of coded segments were recorded as feed up type (see Table 1) with a 38,14% of commentaries directed at task level (e.g., *"We often make mistakes when writing. On the following slides, you will identify the five most common ones and ways to correct them."*), 36,56% at process level (e.g., *"Look at the graphic organizer below that compares Critical and Creative Thinking."*) and 25,30% at self-regulatory level (e.g., *"Have I forgotten any important points that would support the development of the essay?"*). Feedback commentaries generated by the instructors were constituted mainly by feed back type (76,6% of segments with a code) followed by feed forward (23,4%), as shown in Table 2. 84,28% of these segments were directed at task level (e.g., *"You need to insert another sentence in between these two to make the transition smoother."*), 12,6% at process level (e.g., *"How did you explain each of your points for the reader?"*; *"What are the two or three main ideas that will help you explain the disadvantages?"*) and 3,12% at self-regulatory level (e.g., *"Look for online magazines or print magazines and try regularly to read some of the articles. That's a great way to recycle words you are learning and build vocabulary skills."*).

Table 1. Feedback type and level for feedback generated by the course design

Segments with code by feedback type			Segments with code by feedback level		
	Frequency	Percentage		Frequency	Percentage
Feed up	495	97,83	Task level	193	38,14
Feed back	4	0,79	Process level	185	36,56
Feed forward	7	1,38	Self-regulatory level	128	25,30
TOTAL	506	100,00	TOTAL	506	100,00

Table 2. Feedback type and level for instructor generated feedback

Segments with code by feedback type			Segments with code by feedback level		
	Frequency	Percentage		Frequency	Percentage
Feed back	2.526	76,60	Task level	2.779	84,27
Feed forward	772	23,40	Process level	416	12,61
TOTAL	3.298	100,00	Self-regulatory level	103	3,12
			TOTAL	3.298	100,00

Of a total of 234 expected task resubmissions: 92,30% of tasks were resubmitted, 7,70% of tasks were not resubmitted (see Table 3). Learners' implementation (uptake) of instructor generated feedback was at 73,70% of coded segments. 26,30% was not implemented (see Table 4).

Table 3. Percentage of resubmitted tasks

Resubmission of tasks		
	Number	Percentage
Resubmitted tasks	216	92,30
Not resubmitted tasks	18	7,70
TOTAL	234	100,00

Table 4. Implemented and not implemented feedback

Segments with code for implemented and not implemented feedback		
	Number	Percentage
Implemented feedback	711	73,70
Not implemented feedback	254	26,30
TOTAL	965	100,00

The co-occurrences of codes for implemented feedback showed that 63,01% of feedback type at task level was implemented. This was followed by 24,89% of feed forward type at task level and by 10,55% of feed forward type at process level. 77,17% of the co-occurrences of codes for not implemented feedback was identified as feed back type at task level, 12,99% was feed forward type at task level and 7,87% was feed forward type at process level (see Table 5).

Table 5. Co-occurrences of codes with implemented and not implemented feedback

Co-occurrences of codes with implemented and not implemented feedback				
Code system	Implemented feedback		Not implemented feedback	
	Frequency	Percentage	Frequency	Percentage
Feed back task	448	63,01	196	77,17
Feed back process	8	1,13	5	1,97
Feed back self-regulatory	1	0,14	0	0
Feed forward task	177	24,89	33	12,99
Feed forward process	75	10,55	20	7,87
Feed forward self-regulatory	2	0,28	0	0
TOTAL	711	100,00	254	100,00

3.1.1 Discussion

The focus of the RQ 1 was investigating the types and levels of potential feedback encounters which the assessment and feedback design of this course sustain. The results showed that assessment and feedback design created opportunities for potential feedback encounters mainly at feed up type with emphasis on all the three levels of feedback (task, process and self-regulatory). Instructions, prompts, scaffolds, standards, and criteria, nested within the assessment, provided valuable feeding up information in relation to where the learner is going (Brooks et al., 2019; Hattie & Timperley, 2007) and possible encounters at the feedback encounter layer (Esterhazy, 2019). These encounters were confirmed by the instructors' frequent feed back commentaries (recorded in the memos), which referred to how the learner had received and crucially used the instructions, the prompts, scaffolds, criteria etc. to successfully complete a task (e.g., *"This is a very effective funnel introduction, going from the general to the more specific. It confirms a good use of the learning resources in this week online module"*) (Brooks et al., 2019). The focus of RQ 2 was identifying the types and levels of feedback instructors generate in the online component of the course. The findings indicated that the most common type of feedback was feedback type (76.60%) followed by minor but still considerable use of feed forward commentaries (23,40%). Both were mainly directed at the feedback task level, with a much lower use of process level feedback, and minimal use of self-regulatory level of feedback. Instructors tended to generate more commentaries at task level (84,27%), with a more conservative use of process level commentaries (12,61%) and very low self-regulatory level (3,12%). Taking into consideration that the aim of the EAP blended course is to take learner from a lower advanced stage of academic language and critical thinking to proficient stage, in agreement with Brooks' et al. matrix of feedback for learning (2019), commentaries should include more feedback at process and self-regulatory levels, and thus contribute to deeper-learning knowledge (Brooks et al., 2019). The investigation on RQ3, the level of task resubmission in the online component of the course, revealed that the rate of resubmission was very high (92,30%). The assessment design with nested, scaffolded, ongoing and multi-staged created opportunities for resubmission (Carless, 2015; Esterhazy, 2019). Clearly, learners perceived resubmission as a constructive learning opportunity and in a way, it supported students' self-regulation and taking responsibility over their learning (Carless, 2015). The focus on RQ 4 was identifying the level of students' uptake of feedback. Of particular note, the uptake of feedback, identified in the resubmitted assessment, was much higher than non-implementation of feedback. Students responded satisfactorily to the opportunity of implementing feedback to improve performance/strategies. Students implemented mostly feed back type commentaries directed at task level (63,01%). Analysis of the memos indicated that student implemented feedback when commentaries were non-confirmatory, pointed at the error, and elicited or provided a correct answer (Brooks et al., 2019). A part of feedback opportunities which were not implemented related mainly to the use of feed back type commentaries at task level (77,17%) which provided mainly correct

answers that as past research has shown do not always help and trigger implementation (Carless, 2015; Hattie & Timperley, 2007). 12,99% of not implemented feedback related to feed forward commentaries at task and process level which respectively elicited the correct answer and pointed out the skills and strategies needed for the task. These commentaries did not trigger students' action on feedback. These results pointed again back to the need to smoothly train student to relate to and implement diverse types and levels of feedback (Brooks et al., 2019).

4. Conclusion

Taken together, this research proposed two contributions. First, a principled assessment and feedback design with a backward design approach proved to be a valuable process which created and sustained opportunities for a) potential and confirmed feedback encounters and engagement of students before during, and after the assessment (Esterhazy, 2019), b) resubmission of tasks through the design of nested, scaffolded, ongoing and multi-staged assessment, c) planned up-front feedback encounters (Esterhazy, 2019), and d) learner action and uptake feedback. Second, the use of Brooks' et al. matrix of feedback for learning (2019) HattHto investigate and code feedback commentaries proved vital to unveil the need to support learner agency on feedback at undergraduate level with more feed forward and self-regulatory instructor feedback. To promote learner agency and to assist students in moving from one learner stage to a more advanced one, course design and generated feedback need to create opportunities to provide the learner with clear objectives to focus on tasks, commentaries about one's progress toward the task, and commentaries to move ahead and improve one's work. The differentiations of feedback at different levels will promote feedback in relation to the task requirements, to the process, strategies and skills needed for a task, and to the self-regulatory strategies to plan, monitor and evaluate personal progress.

5. Limitations

One of the limitations of this study is related to the content analysis performed with one coder. The presence of more than one coder for the ample amount of data would ensure trustworthiness and would produce richer data analysis. Moreover, some of the artefacts had repeated texts, either because they were part of the instructions, prompts, scaffolds of each week in each session, or because a few times the same chunks of feedback commentaries were used for different learners. In addition, there was not enough time a) to investigate the EAP faculty's and students' perspective and experience with the feedback process, b) to assess improvement in the student learning process by comparing results from cohorts in different semesters, and c) to investigate the possible influence of in-class feedback on the

uptake of feedback in the online component of the course. These will be part of the next steps of this research.

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References

- Bearman, M., Dawson, P., Boud, D., Hall, M., Bennett, S., Molloy, E., & Joughin, G. (2014). *Guide to the Assessment Design Decisions Framework*. September, 1–64.
- Bonk, C. J., & Graham, C. R. (2006). *The handbook of blended learning: Global perspectives, local designs*. San Francisco: Pfeiffer.
- Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: The challenge of design. *Assessment and Evaluation in Higher Education*, 38(6), 698–712. <https://doi.org/10.1080/02602938.2012.691462>
- Brennan, R. L., & Prediger, D. J. (1981). Coefficient Kappa: Some Uses, Misuses, and Alternatives. *Educational and Psychological Measurement*, 41(3), 687–699. <https://doi.org/10.1177/001316448104100307>
- Brooks, C., Carroll, A., Gillies, R. M., & Hattie, J. (2019). A matrix of feedback for learning. *Australian Journal of Teacher Education*, 44(4), 14–32. <https://doi.org/10.14221/ajte.2018v44n4.2>
- Carless, D. (2015). *Excellence in university assessment: Learning from award-winning practice*. Springer International Publishing.
- Carless, D. (2017). *Scaling up assessment for learning in higher education*. Springer Singapore. Kindle Edition.
- Cleveland-Innes, M., Wilton, D. (2018). *Guide to Blended Learning*. Columbia: Commonwealth of Learning.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in Education*. New York: Routledge.

- Cronje, J. C. (2020). Towards a new definition of blended learning. *Electronic Journal of E-Learning*, 18(2), 114–135. <https://doi.org/10.34190/EJEL.20.18.2.001>
- Esterhazy, R. (2018). *Productive feedback practices in higher education. Investigating social and epistemic relations in two undergraduate courses*. [Doctoral thesis, University of Oslo].
- Esterhazy, R. (2019). Re-conceptualizing Feedback Through a Sociocultural Lens. In Michael Henderson, Rola Ajjawi, David Boud, & Elizabeth Molloy (Eds.), *The Impact of Feedback in Higher Education*. Springer International Publishing. Kindle edition.
- Esterhazy, R., Nerland, M., & Damşa, C. (2019). Designing for productive feedback: an analysis of two undergraduate courses in biology and engineering. *Teaching in Higher Education*, 0(0), 1–17. <https://doi.org/10.1080/13562517.2019.1686699>
- Evans, C. (2013). Making Sense of Assessment Feedback in Higher Education. In *Review of Educational Research* (Vol. 83, Issue 1, pp. 70–120). <https://doi.org/10.3102/0034654312474350>
- Goodyear, P. (2015). Teaching as design. *HERDSA Review of Higher Education Volume 2, 2*, 27–50.
- Hattie, J. (2012). *Visible Learning for teachers: Maximizing impact on learning*. London: Routledge. <https://doi.org/10.4324/9780203181522>
- Hattie, J. (2015). The applicability of Visible Learning to higher education. *Scholarship of Teaching and Learning in Psychology*, 1(1), 79–91. <https://doi.org/10.1037/stl0000021>
- Hattie, J., & Clarke, S. (2018). Visible learning: Feedback. In *Visible Learning: Feedback*. <https://doi.org/10.4324/9780429485480>
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112. <https://doi.org/10.3102/003465430298487>
- Henderson, M., Ajjawi, R., Boud D., & Molloy, E.. (2019). *The Impact of Feedback in Higher Education*. London: Palgrave. <https://doi.org/10.1007/978-3-030-25112-3>
- Krippendorff, K. (2018). *Content Analysis: An Introduction to Its Methodology*. 4th Edition. Sage Publications.
- Lashari, T. A., Alias, M., Kesot, M. J., & Akasah, Z. A. (2013). An effective-cognitive teaching and learning approach for enhanced behavioural engagements among engineering students. *Engineering Education*, 8(2), 65–76. <https://doi.org/10.11120/ened.2013.00011>
- Long, M. H., & Doughty, C. (2009). *The handbook of language teaching*. Chichester, U.K: Wiley-Blackwell.

- Malecka, B., Boud, D., & Carless, D. (2020). Eliciting, processing and enacting feedback: mechanisms for embedding student feedback literacy within the curriculum, *Teaching in Higher Education*, DOI: 10.1080/13562517.2020.1754784
- McConlogue, T. (2020). *Assessment and Feedback in Higher Education: A guide for Teachers*. UCL Press.
- McTighe, J., & Willis, J. (2019). *Upgrade Your Teaching*. ASCD. Kindle Edition.
- Nash, R. A., & Winstone, N. E. (2017). Responsibility-sharing in the giving and receiving of assessment feedback. *Frontiers in Psychology*, 8(SEP), 1–9. <https://doi.org/10.3389/fpsyg.2017.01519>
- Nicol, D. (2010). From monologue to dialogue: Improving written feedback processes in mass higher education. *Assessment and Evaluation in Higher Education*, 35(5), 501–517. <https://doi.org/10.1080/02602931003786559>
- Neuendorf, K. A. (2017). *The Content Analysis Guidebook*. <https://doi.org/10.4135/9781071802878>
- Patton, M. (2015). *Qualitative Research and Evaluation Methods*. 4th Edition, Sage Publications, Thousand Oaks.
- Quality Matters Higher Education Rubric (2020). <https://www.qualitymatters.org/qa-resources/rubric-standards/higher-ed-rubric>
- Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 153–189. <https://doi.org/10.3102/0034654307313795>
- Stein, J., & Graham, C. R. (2020). *Essentials for Blended Learning*, 2nd Edition (Essentials of Online Learning). Taylor and Francis. Kindle Edition.
- Strijbos, J. W., Martens, R. L., Prins, F. J., & Jochems, W. M. G. (2006). Content analysis: What are they talking about? *Computers and Education*, 46(1), 29–48. <https://doi.org/10.1016/j.compedu.2005.04.002>
- Wiggins G., & McTighe, J. (2005). *Understanding by Design: (Vol. Expan)*. ASCD.
- Winstone, N., & Carless, D. (2019). *Designing Effective Feedback Processes in Higher Education: A Learning-Focused Approach (1st ed.)*. Routledge. <https://doi.org/doi.org/10.4324/9781351115940>
- Winstone, N. E., & Boud, D. (2020). The need to disentangle assessment and feedback in higher education. *Studies in Higher Education*, 0(0), 1–12. <https://doi.org/10.1080/03075079.2020.1779687>

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- Winstone, N., Balloo, K., & Carless, D. (2020). “Discipline-specific Feedback Literacies: A Framework for Curriculum Design.” *Higher Education* doi:10.1007/s10734-020-00632-0
- Wisniewski B., Zierer K., & Hattie J. (2020). The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research. *Frontiers in Psychology*. 10:3087. doi: 10.3389/fpsyg.2019.03087