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Fostering student motivation and engagement with feedback through ipsative processes

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Abstract

Recent feedback literature emphasizes the active role of learners in feedback processes and a programmatic approach to feedback design. This conceptual paper argues for the importance of ipsative processes, i.e. processes focusing on learners' progress as a mechanism in meeting these two requirements. It suggests that the iterative nature of ipsative processes can encourage effective, learner-centred feedback and its implementation across multiple tasks can promote the uptake of feedback in subsequent work. Using self-determination theory, the paper discusses how ipsative feedback processes create conditions which can foster students' perceptions of autonomy, competence and relatedness, thus fostering student motivation to engage with feedback. The implementation of ipsative processes is illustrated with references to two pedagogic practices. The paper identifies the need for further empirical research investigating academic and noncognitive benefits of ipsative processes in feedback for students as well as autoethnographic work examining the implications of implementing ipsative processes for teachers.

Keywords: feedback; ipsative processes; learner-centredness; motivation; programmatic assessment

Introduction

Recent literature exploring feedback practices in higher education has moved away from viewing feedback as a teacher-centred to a learner-centred practice. From passive recipients of teachers' comments on the quality of their past work, students have been repositioned as active learners committed to seeking and utilising information about the quality of their work in the context of their study. What Carless (2015) terms the new paradigm of feedback, also referred to as Feedback Mark 2 (Boud and Molloy 2013), focuses on feedback interactions with teachers and peers, and students' proactive recipience of feedback (Winstone et al. 2017a) through goal-setting and self-reflection. The skills and capacities developed during acts of engagement with feedback are intended to go beyond the immediate task to prepare students for the workplace and lifelong learning.

Enacting the practices related to a learning-centred view of feedback rests on the assumption that educators embed in courses opportunities for eliciting, responding and acting on feedback and that students actively engage in these processes. However, there is evidence to suggest that feedback designs in higher education are often rudimentary (Esterhazy and

Damsa 2019) and student action in ensuring the impact of information they receive is wanting (Winstone, Pitt, and Nash 2020). There is also a recognition that in order to design effective feedback processes, educators need relevant conceptual tools which promote learner-centredness. This paper proposes that ipsative processes be positioned as a key element to enact new paradigm feedback and motivate students to learn. Such ipsative processes are necessarily learner-centred and rely on the presence of a sequence of iterative tasks in order to offer a tangible point of comparison of students' performance. That is, feedback information is provided not just on the present task, but in relation to the performance of the student on previous tasks. This aims to influence students' motivation to act on feedback information and plan further improvement. It also provides an opportunity for students to reflect on their learning journey as it is highly personal. In the context of the new paradigm of feedback which emphasizes learner agency and uptake of feedback information, ipsative processes are a viable mechanism to promote student engagement. In the existing and rather scanty literature, ipsative feedback processes have been discussed either in the context of ipsative assessment (Hughes 2014, 2017; Seery et al. 2019) or reported as a one-off feedback learning intervention (Univio and del Pilar Perez 2019; Tilley and Roach 2017; Zhou and Zhang 2017). However, we suggest that what is needed is a clear articulation of how such processes can meet the conditions of effective learner-centred feedback and, thus, contribute to encouraging students to learn.

The aim of this conceptual paper is to present ipsative processes as a pedagogic feedback practice and a mechanism to enact new paradigm feedback approaches. It offers a novel contribution to the literature on feedback through articulating the consistent comparison of student own work, inherent in ipsative processes to promote motivation to engage and act upon feedback information. Students experience direct knowledge of their own improvement which encourages further engagement with learning. In this way, it responds to the call for the presence of explicit and deliberate comparison processes in the curriculum proposed by Nicol (2020).

The paper starts by identifying an appropriate theoretical frame and then outlines recent shifts in the understanding of feedback as a learner-centred process. It then repositions Hughes' (2014, 2017) earlier work on ipsative assessment to offer a new conceptualisation of ipsative feedback processes as a mechanism for maximising the potential of learner-centred feedback. It then discusses conditions needed for effective operation of ipsative feedback processes and identifies and illustrates pedagogic activities through which they may be implemented. The paper concludes with a discussion of the scope of applicability of such processes and directions for future research.

If student engagement with learning is to be influenced, the reasons why they should engage, that is, student motivation, needs to be centrally considered. This paper adopts self-determination theory (SDT) (Ryan and Deci 2000) as a useful lens through which to discuss ipsative feedback processes. This theory has been chosen since it is a theory of motivation, thus a necessary precursor for engagement with feedback. SDT has been suggested as a fruitful explanatory theory for the findings of the best designed empirical studies of feedback (Ajjawi et al. 2021). Feedback research studies which have adopted an SDT perspective suggest that internal motivation impacts effort, learning and well-being (Pat-El, Tillema, and Van Koppen 2012; Krijgsman et al. 2019). SDT focuses on the perceptions of autonomy, competence and relatedness and posits that the satisfaction of these three psychological needs promotes intrinsically motivated values and predicts engaged behaviours in activities. Thus, from an SDT frame, in order to be successful, feedback interventions need to create

environments that support the perceptions of autonomy, competence and relatedness as they will enhance students' motivation and engagement with feedback processes.

Background

Recent shifts in the understanding of feedback

For many years, Hattie and Timperley's (2007) definition of feedback as "information provided by an agent (teacher, peer, book, parent, self, experience) regarding aspects of one's performance" (Hattie and Timperley 2007, 81) dominated conversations about feedback practice. This view sees feedback as 'telling' or a one-way transmission of information from teacher to student (Boud and Molloy 2013) and implies students' passive recipience of teachers' comments. Such passive recipience meant that much of early feedback literature focused on how to improve the formulation of feedback messages and, consequently, *give* better feedback (Duncan 2007; Lizzio and Wilson 2008; Poulos and Mahony 2008). There has been little consideration of the fact that students require opportunities to construct actively an understanding of feedback messages before they can be used to regulate performance (Nicol and Macfarlane-Dick 2006).

Another line of feedback research, therefore, has begun to question the effectiveness of teachers' 'telling' in student knowledge acquisition. Nicol (2010) proposed that feedback should be conceptualised as a "dialogical and contingent two-way process that involves coordinated teacher-student and peer-peer interaction as well as active learner engagement" (Nicol 2010, 503). Similarly to Nicol (2010), Beaumont, O'Doherty, and Shannon (2011) view feedback as a 'dialogic cycle' where learners have multiple opportunities to engage. Sadler (1989) also draws attention to the need to train learners in interpreting feedback information, making connections between this and the work they produce and how the work can be improved in the future. He alerts us to the importance of completing the feedback loop, i.e. detecting if the feedback information has been made sense of and acted upon so that it does not remain 'dangling data.' Turning the 'gift' of feedback (Askew and Lodge 2000) into a dialogue with increased learner involvement in the process is the first major change in the conceptualisation of feedback.

The second noticeable shift in the understanding of feedback has been a move from interpreting feedback as a singular act of information-giving to framing it as a process. What is evident when viewing feedback as information, is that, even if it intends to influence students beyond a particular task, it does not in itself have a process to do so and, consequently, addresses only the specific task. Research into written feedback comments (Glover and Brown 2006; Orsmond and Merry 2011), for example, suggests that they tend to focus on how well the task was understood or performed rather than on prompting students' self-regulatory behaviours, which Hattie and Timperley (2007) identified as most likely to elicit change. Boud and Molloy (2013) note that this view of feedback, referred to as Feedback Mark 1, is not sustainable in the long term as it requires others to constantly generate information to meet the learning needs of students and does not prepare them for independence beyond the course.

When students are recast as active agents in the learning process, and consistent with this, active constructors of feedback information (Nicol 2010), then feedback can no longer be seen as an act of transmission but a process used by learners to facilitate their learning. Hounsell (2007) succinctly discusses the features of sustainable feedback such as a greater focus on providing high-value feedback information, transforming students' role in feedback and enhancing the congruence and guidance of feedback. Carless et al. (2011) also emphasize

the role of feedback in enhancing student capacities for ongoing lifelong learning by supporting student development of goal setting and planning their learning. This represents a learning-focused approach to feedback which is defined as "a process in which learners make sense of information about their performance and use it to enhance the quality of their work or learning strategies" (Henderson et al. 2018, 16). This understanding sees elements of feedback not as isolated chunks of information but as processes intended to develop students' self-regulation and evaluative judgement, i.e. decisions about the quality of their work (Tai et al. 2018).

Implications of learner-centred feedback

The shifts in the conceptualisation of feedback described above point primarily to increased learner agency in the feedback processes. Conceiving feedback as a learner-centred process has important implications for both learners and educators. For learners, it means that they are encouraged to have a sense of responsibility over their learning. Implicit in this notion is the belief that learners are active in eliciting and processing feedback and possess strategies and willingness to implement it in their subsequent work. They look for opportunities to enhance their own learning through feedback from various sources, i.e. teachers, peers, automated systems or social networks. Students need to have the knowledge how to make sense of feedback, which involves not only interpreting feedback comments but also possessing strategies of dealing constructively with feedback (Jonsson 2013). Since feedback is an emotional process, how learners manage their emotional equilibrium can determine their engagement. It is important that they feel respected and supported by teachers as well as peers and establish trusting relationships with each other (Molloy, Borrell-Carrio, and Epstein 2013; Ryan and Henderson 2018). Such learners have developed or are developing dispositions which make them feedback literate which include appreciating feedback, making judgments, managing affect and taking action (Carless and Boud 2018).

While it is possible that some students may begin their studies with already highly developed notions of agency and feedback literacy, for the majority of undergraduate students, these capabilities can only be developed in suitably created learning environments. For educators, therefore, this implies adopting teaching and learning strategies which encourage learner participation through, for example, generating useful feedback for others (Molloy, Boud, and Henderson 2019), related guidance and modelling (Carless and Boud 2018) or designing assessments or tasks enabling the completion of feedback loops (Carless 2019). Orchestrating opportunities for learners to engage with goal-setting and self-assessment of their work are other processes which need to be considered when designing course units as these support students in developing self-regulation and evaluative judgement (Tai et al. 2018). Moreover, teachers' own understanding of the sociocultural and affective aspects of the feedback process (Xu and Carless 2017) is a prerequisite to building trusting relationships with the learners, crucial to support learner-centredness.

Ipsative feedback

The term 'ipsative' derives from the Latin word 'ipse' meaning 'of the self' and, in the context of feedback, ipsative refers to a comparison of individual's current performance with the previous one. It should be noted that, though not labelled as such, elements of ipsative processes are often present in teaching and learning practice and can be identified under terms such as: developmental, achievement or self-referential feedback as well as captured in phrases such as learning goals, personal learning gain, personal best and progress reports (Hughes 2017).

Ipsative feedback has previously been primarily discussed within the context of ipsative assessment (Hughes 2011; 2014; 2017a). Hughes (2011) positions ipsative assessment as a way to resolve the tensions of competitive assessment and emphasizes that it promotes student self-regulation and intrinsic motivation. Ipsative feedback, according to Hughes (2014), should include focusing on providing learners with achievable ipsative goals; providing information about learners' current progress; and emphasizing more generic skills that can be improved in future tasks. Hughes' work elucidates important features of ipsative assessment and feedback: (1) the starting point of the learner is relevant as it is through the comparison with it that progress, or learning, can be identified; (2) it provides a longitudinal overview of learning. In light of the contemporary views of feedback, the forward-looking aspect of feedback is its key element (Boud and Molloy 2013) and the concepts of individual goal-setting and the focus on the production of the improved work are important features. Why, then, has there only been a limited uptake of the idea of ipsative processes in feedback?

One of the reasons why they have not been extensively discussed previously is that many of their features have been in tension with prevalent 'old paradigm' transmission view of feedback, which undervalue the importance of student action in the feedback process. Moreover, since ipsative feedback processes require the presence of consecutive tasks, they demands a tighter curriculum design, which can limit its application in course units which are not structured accordingly. However, the main factor influencing its minimal uptake may relate to its claim that the ultimate goal of ipsative feedback is a personal best performance rather than attaining externally-set standards (Hughes 2014). It is on this point that we depart from Hughes. Contemporary higher education is, and will most likely continue to be, focused on explicit academic standards and discipline learning outcomes. Separating students' performance from standards impacts the transparency of feedback and assessment processes. It also inhibits students from plotting improvement as feedback processes are more likely to influence learning when students can see how the information about meeting learning outcomes can be utilised in subsequent tasks with the same outcomes (Boud 2017).

Conceptualising ipsative feedback processes

Ipsative feedback processes are conceptualised here as learner-centred feedback approaches which are organised across multiple tasks with similar learning outcomes. The link to unit and course learning outcomes, and standards more broadly, is paramount in conceptualising ipsative processes and is an important shift from the ipsative assessment discussed by Hughes (2014). Sadler (2009) argues that familiarising students with standards requires more than a one-off message delivered through rubrics. Commenting on aspects of work which demonstrate, or fail to demonstrate, task expectations needs to be at the forefront of any feedback practice, whether ipsative or not. Any comments on students' work need to be framed not only by what the student has done before, which is Hughes' (2014) position, but also by the assumptions about standards that the assessor is making. In order to claim that students' work has improved, an assessor needs to have a clear view of what constitutes such improvement, which need to be formulated with reference to the appropriate standards for work of that kind. Moreover, every iteration of a task and associated engagement with standards can refine students' notions of quality (Ajjawi and Bearman 2018). From a teaching perspective, each task gives instructors valuable insight into how students are enacting standards. Ipsative feedback processes are responsive to students' idiosyncratic enactment of standards. Since teachers have likely internalised the standards of a particular unit, when providing information in relation to students' previous work, they can map students' individual learning trajectories with regard to specific learning outcomes. As these trajectories would differ for each student, they can prompt students to develop their own

learning goals and strategies. What ipsative feedback processes offer is an opportunity to communicate to students that enactment of standards is developed over time, thus promoting ongoing dialogue about notions of quality.

The internal connection between tasks, central to ipsative processes, provides students with the scaffold to implement strategies necessary for change. Students need to see how they have progressed on the issues that were problematic in an earlier task in order to recognise that they have improved and are thus progressing as they wish. The purpose of ipsative feedback processes, therefore, is to map students' learning progress so that they can plan improvement towards a desired goal. Students formulate their goals based on common standards for the task they are working on, past feedback information on a similar task or choose a unique direction of their own. In any case, the elicitation of students' own desires or standards needs to be articulated so that the measure of progress can be provided.

Ipsative feedback comments would normally include qualitative information about the domain content, for example the appropriateness of students' knowledge, flagging any misunderstandings or requesting clarification and also provide students with a measure of how well they are moving through the learning process. Therefore, ipsative feedback informs students of the quality of their current work and indicates how this work has progressed in the direction of standards since their previous performance on a similar task. The emphasis on sense-making and future actions means that, as a result of comments, students' motivation and the choice of learning strategies are likely to change, which resonates with the learner-centred feedback processes.

Ipsative processes and the prompting of comparisons

The key feature of ipsative processes is communicating information about student progress across tasks. This is formed on the basis of comparison of the quality of a student's consecutive work. Students' own work, therefore, becomes a referent to generate comparison which can focus on the similarities, differences, strengths and weaknesses of consecutive tasks. When processing such feedback information, learners can develop an ability to notice and recognize patterns, principles and relationships in their work, increasing the likelihood of learning transfer. Seeing connections between past and present performance can also impact self-assessment processes during which learners often recall prior performance or standards internalised from previous tasks (Yan & Brown, 2017). The teacher's role in crafting the comparisons inherent in ipsative processes is paramount as they can link criteria for comparison with course learning outcomes and the standards required. However, there is potential to scaffold these processes and get students progressively more involved in making comparisons themselves. Following the teacher's relevant modelling and guidance, students can learn to identify causal patterns or contingent relationships that underpin their work. Nicol (2020) notes that deliberate and mindful comparisons encourage students to see beyond surface-level differences between examples and develop abstract and higher-order thinking. When engaged in making explicit comparisons, students generate internal feedback which may result in their reinterpretation of the task or a change in goals and strategies (Nicol 2020). And since ipsative processes afford an opportunity of multiple sequential comparisons, with time, they can lead to more elaborate internal feedback generated by students.

Self-determination theory and ipsative feedback processes

According to SDT, students are self-motivated to learn once their psychological needs for autonomy, competence and relatedness are met (Ryan and Deci 2000). Autonomy is the

psychological need to have some freedom of choice to contribute to learning activities; it is the need to experience the behaviour as emanating and endorsed by the self (Reeve 2012). Competence reflects the inherent desire to be effective in one's pursuits and interactions with the environment (Reeve 2012). Students' preconceived competence may be affected by past performance and the desire to be effective in the future, with past and future reciprocally informing the other (Ryan and Deci 2017). Relatedness refers to the need to establish close emotional bonds and secure attachments with others (Reeve 2012). Students experience relatedness need satisfaction when they feel a sense of belonging and connection to teachers and peers within a formal learning setting (Ryan and Deci 2017). Feedback processes, therefore, need to create conditions for each of these needs as this will motivate students to engage with feedback and strive to achieve outcomes including improved performance, developing evaluative judgement and self-efficacy (Ajjawi et al. 2020). The ways in which ipsative feedback processes can satisfy the perception of the needs of autonomy, competence and relatedness, thus influencing students' motivation to engage with feedback and achieve desired learning goals is illustrated with references to the case studies which have included ipsative feedback interventions.

The perception of autonomy

SDT theory considers how teachers can create conditions within courses that support students' autonomy. Ipsative feedback normally includes the identification of students' learning goals, which contributes to students' increased perception of autonomy as these practices endorse students' own behaviour. When students form learning goals (with reference to their previous work), they are continually encouraged to monitor and direct their learning activities, thus fostering autonomy. If such a practice is sustained, it has the potential to improve their self-regulation, i.e. self-generated, reflective and strategic engagement in academic tasks (Zimmerman 2000). Creating conditions for autonomy establishes a relationship of mutual respect with students appreciating freedom to direct their own learning and teachers being a part of that process. Winstanley (2017) reports on incorporating cumulative cover sheets as an ipsative feedback process to a group of undergraduate students and suggests that it encouraged students to participate more openly in open tutorials and increased students' voluntary sessions with Academic Learning Advisors.

The perception of competence

Competence in this context relates to students' knowledge of how to make sense of feedback information, which involves not only interpreting feedback comments but also having strategies of dealing constructively with them (Jonsson 2013). Ipsative processes which are focused on incremental progress from task to task are likely to impact students' perception of competence, building a sense of mastery and feeling effective not just on that task, but desirably for their work as a whole. As students are required to compare the standard of their consecutive work to the previous one, they inadvertently will seek evidence of learning, thus focusing on improvements or lack thereof. As reported by Univio and del Pilar Perez (2019) when students self-compare how their work evolved over time, they are more motivated to draw an action plan for improvement, which increases their autonomy and self-management. What is more, when feedback compares students' current performance to the past, students know that the next feedback will be on progress as well, therefore, there is an incentive to act upon it in order to improve before the next task. It also emphasizes students' accountability as there is a continued interest in what students do with feedback inputs. The fact that the information is personally relevant and benchmarked with previous performance (Seery et al. 2017) would further increase the likelihood of students' engagement with feedback.

The perception of relatedness

Feedback interventions which promote students' sense of relatedness to their teachers and peers have been recognized as contributing to beneficial outcomes (Ajjawi et al. 2021). Ipsative processes by definition involve a lack of comparison between students however they can include peer-feedback and a focus on progress rather than grades, all of which may affect students' perception of relatedness. As the emphasis on progress in students' work implies teachers' vested interest in students' learning, it leads to the possibility of establishing relationships of trust and mutual valuing. Ipsative processes are necessarily personalised and such feedback has been reported to contribute to building positive teacher-student relationships by influencing students' self-efficacy and the amount of effort they invest in the work (Price, Handley, and Millar 2011). In such an environment, students are more likely to better maintain their emotional equilibrium, thus contributing to better learning outcomes. To illustrate, Zhou and Zhang (2017) discuss how ipsative feedback fosters students' intrinsic motivation for change and visible learning outcomes stimulate their emotional satisfaction.

It is important to note that ipsative feedback processes will not necessarily result in satisfactory progress and efficient managing of emotions. For some students, satisfaction of their needs of autonomy, competence and relatedness might be more challenging. However, a conversation about lack of progress can lead to identifying underlying issues and the making of informed decisions about relevant remedial strategies to assist and support learners. This is noted by Tilley and Roach (2017) who report that, following an ipsative feedback intervention, students who did not make satisfactory progress were more easily identified and attended meetings with their tutors, which provided an opportunity to re-orientate students to do better next time.

Ipsative and the new paradigm of feedback

One of the implications and challenges of the new paradigm of feedback is that it needs the creation of a carefully prepared learning environment to encourage students to elicit and respond to feedback information. As feedback is a process, it also requires opportunities for feedback comments to be processed and implemented in subsequent work. But, primarily, it needs to allow learners to develop their own capacity to make judgement about their learning progress and plan improvement. Designing such opportunities, therefore, is crucial if feedback is to serve its developmental function (Winstone and Boud 2020). Explicit ipsative design creates conditions for the practices associated with the new paradigm of feedback to be enacted more systematically. The following considers how ipsative processes can enable key features of learner-centred feedback.

• Goal-setting

Providing opportunities for students to develop goal-setting capacities has been identified as one of the features of sustainable feedback (Carless et al. 2011) and an important factor determining students' engagement with feedback (Winstone et al. 2017a). Goal setting refers to students identifying outcomes which they want to achieve or skills they need to develop to complete a particular task. This is often done on the basis of prior feedback. However, some learners, especially those with lower self-regulation skills, may find goal setting challenging. Ipsative feedback processes can support students in setting learning goals as they can show the progression of skills from one assignment to the next. Learners, then, can have a more coherent picture of their learning, which can assist them in identifying areas needing improvement. In this way, ipsative feedback provides students with a motive and opportunity to enact feedback (Shute 2008) – learners can see how feedback from one task is relevant to the next and this encourages them to monitor and direct their learning activities.

• Students judging their own work

Ipsative processes support students in making their own judgements about the quality of their work. Students can self-assess by making a comparison between tasks according to criteria or individual learning goals. When students themselves undertake the comparison between assignments, the ipsative feedback loop is closed. Closing feedback loops promotes uptake of feedback and intends to improve students' learning strategies over a period of time (Carless 2019). Self-assessment, as all other feedback processes, requires practice and familiarisation with the skills needed to conduct it with ease and accuracy (Falchikov and Boud 1989; Panadero, Brown, and Strijbos 2016). Since ipsative feedback relies on the comparison of samples of work, it affords the possibility of frequent self-assessment practice. When done systematically, self-assessment can calibrate students' judgement (Boud, Lawson, and Thomson 2013) and better prepare them for the completion of the tasks that follow. It can also make learners self-reliant and can create the context in which they can seek to achieve the 'personal best' performance as they see evidence of their growth across tasks and units. Underperformance in some areas can be used as a guidance to formulate learning goals which will guide the completion of the following tasks.

• Peer feedback

Peers have a role to play in ipsative feedback processes too. There is evidence that peer feedback activities strengthen students' evaluative judgment and it needs to be a central part of instruction and learning. According to Sadler (2010), peer feedback provides an opportunity for tacit and explicit knowledge transfer and is an important means of discerning the qualities aimed for. It has been noted that the act of receiving feedback information (i.e. being an assessee) is considered less beneficial and conducive to performance than being a providor who engages with standards and criteria to formulate feedback comments (Heath and Malecka 2016; Nicol 2013). In other words, the greater impact of peer feedback seems to be on the provider's understanding of what constitutes quality work, which suggests that the knowledge gained from peer feedback can, in turn, enhance students' own work and amplify their academic judgement. When asked to compare two samples of peers' work, assessors will specifically look for evidence of learning and then apply their evaluative judgement in order to provide explicit feedback comments. The act of analysing peers' subsequent work can provide an opportunity for the negotiation of meaning and clarification of reasoning, thus encouraging feedback dialogue.

Practical considerations

How then can ipsative feedback processes be implemented? There are two necessary structural conditions. The first is the presence of a subsequent task which tests comparable knowledge, skills or outcomes. Progress can be detected over time and over multiple events; if offered as a one-off event, it remains only a single comparison. Including several iterations of tasks which include comparable knowledge and skills is, therefore, a prerequisite to successful ipsative design. The second condition to implement ipsative feedback processes is access to students' past work, both by teachers and students. In order to assess progress, two or more samples of work need to be compared and contrasted. Therefore, it is essential that feedback processes such as teachers' or peers' comments, students' learning goals and reflection are saved and documented. Digitalisation and constant development of learning management systems (LMSs) can facilitate these processes more efficiently than paper-based environments.

Apart from these structural conditions, there are also relational conditions which need to be established through the overall feedback design. As they involve interaction with two or more pieces of work by the same author and the commentary on author's progress, they create an opportunity for personalised feedback. In this way, ipsative feedback design allows for care and concern about student's learning to be expressed clearly and consistently especially if there is continuity of a feedback provider. Such interaction communicates to students that they are seen as individuals whose learning trajectories matter and, therefore, creates an opportunity for stronger educational alliances (Telio, Ajjawi, and Regehr 2015) between teachers and students based on mutual responsibility and collaboration.

Successful implementation of ipsative feedback processes is dependent on teachers' understanding of the value of this approach and the knowledge of strategies of how best to engage in the process. We acknowledge that this requires familiarising with relevant tools and conventions, and sometimes changing entrenched ways of doing feedback. As with any novel teaching strategy, this will demand careful planning and likely increased workload at the beginning.

Courses which include interconnected tasks with linked learning outcomes allow for ipsative processes to be readily implemented. Ipsative processes are likely to be most applicable when used with competencies which can be best acquired through iteration and development over time, for example, with respect to disciplinary academic writing or activities that require practice, such as design skills. When ipsative processes are applied to tasks sequenced across a semester, they provide an opportunity to map students' learning trajectory in a timely fashion, allowing students to compare performances and maximising the chances to unpack deficits and plot improvement. This is beneficial to all learners, but especially the lower-achieving students who are said to derive more substantial benefits from learning interventions than high achievers (Sinclair & Cleland, 2007; Orsmond & Merry, 2011; Pitt, Bearman & Esterhazy, 2019). As ipsative processes focus on mapping incremental improvement, they can be motivating for such learners. Below we discuss how ipsative feedback processes can be implemented in two pedagogic activities: interactive cover sheets and e-portfolios.

Interactive cover sheets identify areas of work about which students would like comments to be offered. They are submitted alongside their completed tasks. They can also include a qualitative self-assessment with student commentary on the strengths and weaknesses of their submission. Therefore, they contain richness of feedback data and, when used regularly, enable students to track their development over the course of a module. Feedback will have an ipsative function when students are invited to reflect on what actions they took in response to previous feedback to improve the quality of current work. This can be done by including prompts such as "How has the feedback for the last task impacted the current task?", and "What actions did you take as a result of feedback for the last task?" Interactive cover sheets can also encourage students to formulate goals based on past feedback and see how they are tracking against evaluation criteria.

E-portfolios provide a mechanism for student's work, feedback communications and plans for action to be assembled in a personal repository to support students in self-monitoring processes. As students' digital records of learning are stored in one place, they can allow ready access to past work and responses to it, thus facilitating and enhancing the effect of ipsative processes. Students can track over time the comments they ask for and receive on their work and the plans they make in response to them. Subsequent providers of feedback

information can see what comments a student has received previously on their work and craft their current input appropriately.

Limitations and development of ipsative feedback

Ipsative feedback processes are predicated on a curriculum which includes iterative task design. This could potentially increase students' dependency on the structure of the program, i.e. without sequenced tasks which help students map their progress, they may not learn. In fact, ipsative processes could fit into a teacher-centred rather than a student-centred framework if the feedback design is so circumscribed that students have little agency in doing anything other than what is explicitly required of them. While this is unlikely to occur in most resource-constrained courses, it is important to include learner-centred processes throughout the implementation of ipsative processes such as goal setting, judging own work and peer feedback as they will develop students' feedback literacy and prepare them for workplace learning. First year units should focus on more explicit ipsative feedback but, as students move through their courses, gain more practice and experience the value of feedback, tight curriculum structure can fade away and ipsative processes can become more implicit.

Ipsative feedback design remains an underexplored feedback practice, therefore, more research on it is recommended. As the quality of human relations within feedback processes is especially significant in the time of online learning and depersonalisation of many elements of higher education (Winstone and Carless 2019), of particular value would be empirical studies which address how ipsative processes can satisfy students' perception of relatedness. Research that examines how information about progress can lead to academic benefits as well as non-academic gains such as enhancing students' skills of collaboration and self-regulation would also be valuable. Moreover, a closer investigation of comparison processes afforded by ipsative feedback can refine our understanding of internal feedback. Finally, autoethnographic studies which focus on teachers' perceptions of the benefits and challenges related to the implementation of ipsative processes can enrich research in the areas of teacher-student feedback partnerships and teacher feedback literacy.

Conclusion

Enhancing student motivation to engage with feedback is crucial if feedback is to have an impact and foster change. The very concept of improvement, central to all feedback, implies at least two points of reference to articulate change. Ipsative feedback processes promote learner-centredness by encouraging self-regulation of learning through self and peer review and goal setting. They allow teachers to gain an insight into how their feedback impacts student uptake. By refocusing feedback from a task to the progress between tasks, learners can get a clearer sense of their improvement or lack thereof, which can provide impetus for their future learning. The conditions needed for the implementation of ipsative feedback processes such as iterative task design, traceability, reflective tasks and action planning are likely to promote students' perceptions of autonomy, competence and relatedness, which can increase their motivation to act on feedback and result in better outcomes.

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