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Improving Feedback Research in Naturalistic Settings

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Introduction

This book has sought to advance a view that feedback should make a difference to students' learning. Unfortunately, feedback practices in higher education too often treat feedback as an input model (Bing-You et al., 2018; Boud & Molloy, 2013), where at best, time, effort and care are

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injected into the crafting of feedback information in the *hope* that it will lead to learning. This can be deeply unsatisfying for staff and is particularly inefficient as efforts are potentially wasted because effects on learning are unknown (Price, Handley, Millar, & O'Donovan, 2010). And, from the student perspective, it may not address their concerns for improving performance and it can often be unhelpful for the next phase of their learning. In keeping with the emphasis of this book, we now focus attention on designing research that can be used to investigate the influence of feedback on learners. In the higher education context, we rarely have the opportunity to undertake fully controlled studies, so our focus here is on undertaking research in naturalistic settings in which assessment tasks and feedback processes commonly have real consequences for students.

The relative proliferation of reviews and meta-analyses of feedback in higher education (Bing-You et al., 2018; Evans, 2013; Hattie & Timperley, 2007; Jonsson, 2013; Kluger & DeNisi, 1996; Winstone, Nash, Parker, & Rowntree, 2017) would suggest that in fact researchers have explored the effects of feedback on learners. Arguably, such research within the psychological tradition has a richer history in exploring the effects of feedback than other approaches to educational research (Wiliam, 2018). Limitations of existing research include a focus on student satisfaction rather than learning, the use of aggregated grades at the end of a unit of study and/or the self-reported use of feedback information (Shute, 2008). However, satisfaction does not equal learning, grades do not inform how students make sense of and utilise performance-relevant information, and cognitive sense-making does not equal contextualised action. In a comprehensive review of feedback research in higher education, Evans (2013) argued that findings of existing research were often limited through the use of self-report data, collected at a single moment in time and without sufficient attention to context. While these research approaches have been valuable in prompting researchers to pursue feedback as a worthwhile topic of investigation, they do not address the problem of the effects of feedback

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in a sufficiently detailed manner for particular feedback processes to be illuminated in normal university contexts.

Importantly, findings from the existing body of research are confusing when it comes to identifying the influence of feedback because effect sizes vary widely between studies and examples of negative and/or unintended effects abound (Wiliam, 2018). Overall, we have come to a position where we can support the statement that there is no "one size fits all" type of feedback intervention, but we "know little about what kinds of feedback are likely to be helpful in a given situation" (Wiliam, 2018, p. 15). We use this statement to orient the research endeavours that we discuss in this chapter. Specifically, we seek to promote a research agenda that contributes to an understanding of how feedback works, for particular learners, in particular circumstances. What makes this chapter different to others that have looked recently at methods for researching feedback (e.g. Brown & Harris, 2018) is that we explore research designs that occur in naturalistic settings, take account of theory and focus on students' sense-making and actions in relation to this sense-making. As such, we do not discuss experimental approaches that sanitise and narrow the range of variables at play, instead focusing on better understanding of how feedback works in naturalistic settings.

Conceptual Framing for Feedback Research

If we are to better understand how feedback works, then it is not sufficient to only research the effects of a particular feedback intervention. Rather what is also required is to make sense of the ways that inputs, processes and outputs interplay within a particular context. In learning and teaching, impact is not based on a linear, direct, causal relationship between action and outcomes (Ahmad et al., 2018). Therefore, a clear rationale for the research design is necessary, which is not often the case in higher education research (Ahmad et al., 2018). By having a clear conceptual framework and rationale, we open up the possibility of relating effects with relevant inputs and processes rather than other factors. Being clear about conceptual and theoretical frameworks strengthens explanatory power and method-

ological rigour—both of which having been critiqued as being limited within the existing body of literature (Evans, 2013; Wiliam, 2018).

Conceptions of feedback have shifted as we have seen greater sophistication in conceptions of learning that have impacted on educational practice and research. In this book, we conceptualise feedback within a socio-constructivist frame as *processes where learners make sense of performance-relevant information to promote their learning*. This shift from behaviourist and cognitive perspectives can be conceptualised on three dimensions—a move away (1) from what the teacher does to what the student does with performance-relevant information; (2) from feedback as input (i.e. information) to a process in which students take an active part as agentic and responsible learners; and (3) from context being absent to recognition of the fundamental influence of disciplinary contexts and cultures. In this chapter, we adopt a situated, process-centred and student-centred perspective on making sense of and using performance-relevant information, choosing to foreground the effects of feedback particularly on the learner and their actions and accomplishments.

What does such a definition demand of us if we are interested in researching the effects of feedback practices on students and their learning? First, it prompts consideration of wider boundaries of feedback processes than content, delivery, timing and mode towards a more holistic focus which includes what the student does. Second, the definition prompts us to view feedback not as a primarily one-off single intervention like a flu shot, but as an iterative process that is cyclical and continuing. This leads to a focus of research not primarily on what teachers do, but to trace the enactment of performance-relevant information through the activities of learners, and to start thinking about "feedback regimes" in supportive learning environments. This leads to exploring how students engage in feedback behaviours such as feedback seeking, judging and calibrating and how they then put these into action in situated ways that vary by professional, disciplinary or local context. In other words, feedback research should explore inputs, processes, contexts and effects.

Inputs of feedback may include, but are not limited to, teacher comments. Indeed, performance-relevant information may come in different forms from many sources, such as conversations with peers, computerised responses on quizzes, haptic information generated through a hands-on

procedural task, self-judgements of work against a rubric or exemplar and comments in class about another student's work. This broader perspective on performance-relevant information shifts the onus away from the teacher for "input" towards information-rich learning environments and the design of tasks the completion of which may elicit useful information. Monitoring feedback processes is thus important to track the various ways in which students make sense of the multiple sources of performance-relevant information, how knowledge inputs might be ascertained, (re)constructed and/or the problem reframed. Feedback processes again should be considered in terms broader than one-way transmission. Thoughtful nesting and sequencing of tasks can prompt feedback loops to occur. Activities that elicit students' judgements or enable reflection on and use of performance-relevant information should also be tracked to understand how each influences individual students in particular ways. Otherwise, if we assume an intervention such as feedback is homogenous and delivered context-free, we continue to obscure why feedback might be detrimental for some learners and not others, or why particular conceptions of feedback or even environment conditions might have different effects. It also opens up the research agenda to explore what sorts of performance-relevance information students make sense of and use naturally within their university curricula to influence their learning.

Categories of Effects on Students

Feedback inputs and processes can influence learning in many different ways and over different time spans. These range from immediate effects on completing tasks more effectively in the current unit of study to longer-term influences on how students approach learning throughout their enrolment. We can divide these into three broad categories: (a) task-related performance/work; (b) meta-learning processes such as self-regulation; and (c) identity effects such as orienting students to the sorts of careers they may embark on or professionals they wish to become. These categories are not exhaustive, but they help to focus on the kinds of indicators that might be pursued in feedback research.

Task-Related Effects

As learning is a key outcome of feedback, indicators of this are central to any research study. Learning can be considered in terms of the short term, contained within the current course unit; medium term, across units within a course; and the long term, beyond the course. When we are looking at learning though, we should consider not generalised measures of performance averaged across many outcomes, but learning related to the particular learning outcomes on which feedback was focused, and related learning processes. Effects may be collected from different sources, using different methods and include qualitative and quantitative data. Effects can be observed through indicators that come in different forms and are proxies for learning, for example, changes in student work as indicated through artefacts of student assessments, improvements in judgements of the work or personal accounts of how performance-relevant information has been made sense of and used.

When it comes to task-related performance or work, these have been typical of previous feedback research that looked at improvements in grades as a result of feedback as a proxy for learning. However, the trouble with relying on improvement in marks/grades is that it reveals little about the quality of the learning or the sense-making/action taken by the students as a result of the feedback regime. The relationship between performance and learning is not a straight forward one with improvements in learning not necessarily leading to changes in performance and vice versa (Soderstrom & Bjork, 2015). Furthermore, grades are typically aggregates of marks awarded for the entire task and they obscure improvements in meeting required learning outcomes or specific competencies. Grades are also focused on the immediate task and so do not shed light on broader meta-learning processes that we might deem useful for sustainable assessment, that is, extending beyond the immediate task (Boud & Soler, 2016). Medium- and long-term effects of learning require longitudinal research to span change across multiple tasks, units or programmatically. Portfolios or programmatic feedback journals may form an interesting repository of evidence of students' development where the artefacts themselves may be analysed.

Meta-Learning Processes

The second category of effects relates to meta-learning processes, such as self-regulation of learning, making evaluative judgements, emotional regulation, digital literacy, assessment literacy or feedback literacy. Collectively, these refer to meta-learning processes that extend beyond the task, and the unit, and may theoretically be transferable. Nicol and Macfarlane-Dick (2006) posited that feedback should develop students' ability to regulate their learning through setting goals, monitoring performance in relation to these goals and taking action. Others have called for the purpose of feedback to be reoriented towards developing students' evaluative judgement, that is, the capability to make judgements about the quality of work of self and others (Tai, Ajjawi, Boud, Dawson, & Panadero, 2018). Research would seek to make visible the judgements about work and learning which might typically occur in students' heads.

Assessment literacy refers to understanding of the rules, expectations and purposes of assessment. Similarly, feedback literacy refers to "understandings, capacities and dispositions needed to make sense of information and use it to enhance work or learning strategies" (Carless & Boud, 2018, p. 1315). Research might then explore specific feedback behaviours in situ, students' attitudes and positioning in relation to others to access roles and agency, as well as aspects of emotion and emotional regulation. If feedback is a function of the student, then greater sophistication and awareness as a learner should enhance take up and utilisation of feedback information. The role of trust (Carless, 2013) and effective relationships (Farrell, Bourgeois-Law, Ajjawi, & Regehr, 2017; Telio, Regehr, & Ajjawi, 2016) is increasingly being researched as these are precursors to the uptake of information and influence students' sense-making, behaviours and outcomes.

Identity Effects

The third category of effects is less immediately discernible, but equally important as feedback processes inculcate in students the practices of the discipline or profession (Molloy et al., 2019). Feedback can play an

important role in orienting students to disciplinary knowledge, practices, values and expectations and what it means to be a practitioner in a given field. Through feedback conversations, educators model ways of speaking, thinking and doing within a particular profession (Ajjawi & Higgs, 2008; Molloy, 2009), thus inducting students into a profession. Analysing feedback conversations can illuminate standards of quality for work as sanctioned by that landscape of practice. Eraut wrote of students,

> we need to know much more about how their learning, indeed their very sense of professional identity, is shaped by the nature of the feedback they receive. We need more feedback on feedback. (2006, p. 118)

There is still very limited research that naturalistically explores how students make sense of performance-relevant information (or feedback inputs both intentional and unintentional) across their degree programs which inform their identities. We might consider that one of the reasons learners might get defensive when "receiving" feedback is because the self is represented in the work; that is, we invest ourselves or some aspect of our identity into the work making criticism difficult to engage with. However, much less is known about how feedback processes come to shape our personal and professional identities across a program of study.

As mentioned, we do not conceive of these categories of effects as being exhaustive. They do, however, orient us when considering research designs. The effects that we seek to explore through research are likely to influence other decisions in the research process, including the theoretical framing of feedback and learning as well as methods of data collection and analysis, which we now turn to.

Theoretical Framing for Feedback Research

Theoretical frameworks help to guide the assumptions that underpin research, about the nature of knowledge and knowing, and about learning and how it is constituted. The theoretical framework chosen should relate to the purpose of the research and the phenomenon under study, thus influencing the chosen research methods. The theoretical framework

adopted will enable the assumptions that are inevitably made in any study to be made more explicit, should direct attention to issues and features that are germane, enable appropriate research questions to be formulated and assist with the interpretation of what is uncovered. Theory may also be applied post hoc to inform the analytical process. Theory privileges particular ways of viewing the problem and obscures others. In any particular case, developing the theoretical framework and research questions to be addressed is often an iterative back and forth process. For the purposes of clarity, we start with thinking about the influence of theory when researching effects and the different levels of abstraction to which they apply.

The importance of theory for feedback research is evident. Brookhart (2018) refers to two eras in feedback research in her review of summative and formative feedback: the shift from behaviourist views of learning towards cognitive and constructivist. Remarkably, if the question of conceptual framing is still niggling, she identified that studies conducted in the behaviourist tradition showed small effects on learning, while those in the constructivist tradition identified large effects on learning. This is why understanding how feedback works is such an important endeavour. Further, we now see a greater push towards understanding feedback within a sociocultural frame (Ajjawi & Boud, 2018; Esterhazy, 2018; Sutton, 2012) which opens up new avenues for research as we describe below.

At a macro-level, we need to consider our fundamental assumptions of what constitutes knowledge and reality (or research paradigms). This chapter is too short for a comprehensive explanation of paradigms; for this, we recommend Lincoln, Lynham, and Guba (2018). However, assumptions about knowledge (dualist/objectivist versus subjectivist) and reality (being singular, real and "out there" versus multiple and constructed) matter in the ways that the researcher is positioned within the research, how quality is judged and how the research is conducted. Research in naturalistic settings may be conducted within a number of paradigms such as post-positivism, constructivism or participatory (for a fuller description of these paradigms and their implications, see Lincoln et al., 2018).

At a meso-level, we might approach learning through a variety of lenses which should relate to the purpose of the research. For example, approaching learning with a socio-constructivist lens, where individuals construct

new knowledge socially in relation to previous knowledge (Packer & Goicoechea, 2000), might prompt us to explore how students interact with pedagogical and other activities and how they make sense of performance-relevant information in order to take action. While a sociocultural perspective, where knowledge is fundamentally situated within the social, cultural and historical traditions of the practice (Packer & Goicoechea, 2000), might prompt us to consider what individual students (and staff) bring to the process (e.g. personal dispositions, expectations, motivation) and the sociocultural dimensions of practice (e.g. curriculum design, disciplinary norms, institutional expectations) that influence learning. As Esterhazy (2018, p. 1304) argues:

> From a sociocultural perspective, productive feedback can be seen as a collective achievement that is enacted in situ and is shaped by the established conventions and tools of the disciplinary practices. This calls for an analytical approach that allows us to account for both the structural and enactment layers of the practices at play.

At a micro-level, we might also utilise more individualistic theories such as self-regulation of learning (Butler & Winne, 1995) or self-determination theory (Ryan & Deci, 2000). These sorts of theories help us to focus on aspects of learning which act as indicators of effects; for example, the first is about how students set goals, monitor their work and then plan actions to meet their learning goals, while the latter is a theory of motivation. Working with these theories informs the particular processes and effects being researched whether it be the types of learning goals set and how they are followed up, or about perceptions of relatedness and how these influence motivation to engage with feedback. It is beyond the scope of this chapter to consider the wide range of current learning theories and their research implications, but the point is that what is chosen influences what effects are considered worthy of investigation and so a clear theoretical framework is necessary. It is also important to seek alignment between conceptions of feedback and learning, and measurement approaches (and we mean measurement here in the broadest sense to include qualitative exploration).

Research Approaches

So far, we have highlighted issues of theory (macro, meso, micro), inputs (who, what, format, mode), process (how, when, where) and categories of effects (task, meta-learning, identity). In this section, we consider these in relation to research approaches in naturalistic and interventional research. We focus first on methodological considerations of making visible students' sense-making, then on connecting interventional inputs and processes (including innovative feedback designs) with effects.

Researching Naturalistic Sense-Making Processes

Research might overcome the limitations of analyses focused only on formal teacher-driven feedback through widening the unit of analysis to any encounter that contributes to students' learning trajectory, that is shifting the focus beyond the formal curriculum. The challenge is how to make visible the essentially internal processes of sense-making. Learners perceive information from a variety of sources, make sense of it and relate this to their prior knowledge and experience in order to inform subsequent work, for example, through a later assignment. Sense-making is thus an interpretive activity undertaken by the individual in relation to the sociocultural—where individuals bring their frames of reference to bear on the materials (Tummons, 2014). Sense-making may occur in the moment, when students seek or receive performance-relevant information, but also as they approach future-related tasks where information might be re-interpreted in light of the learner's further work.

Methodological approaches to exploring sense-making in situ can include ethnography and narrative utilising methods such as observation, artefact analysis and interview. Observation (in person, audio or video recording) of feedback encounters provides insight into behaviours such as feedback seeking as well as bodily manifestations and/or considerations of the social, cultural and design contexts at play. For example, through observation in the clinical environment, Molloy (2009) identified that although educators had well-placed intentions to promote feedback dialogue, social and contextual factors interplayed to result in typical one-

way monologues. The use of ethnographic methods of observation to understand how feedback works in practice highlights that feedback processes are inextricably linked to the contexts in which they are enacted (Esterhazy & Damşa, 2019; Urquhart, Ker, & Rees, 2018). In each of these examples, the use of observation/recording of the actual feedback encounters enabled analysis of the distinctive *relational dynamics*, "collective ways of doing", and their influence on the effects of feedback processes on students (Esterhazy, 2018). These approaches open up avenues for "feedback practice" as the unit of analysis which attunes us to wider influences on what's going on such as the human-material, sociopolitical, and cultural-discursive arrangements (e.g. Jørgensen, 2019). Therefore, naturalistic research contributes to understanding of the broader learning environment and the practices present within where productive feedback is embedded in social and disciplinary practices (Esterhazy, 2018; Esterhazy & Damşa, 2019).

Depending on the category of effect being considered, we might elicit internal thinking using techniques such as think aloud (where the participants talk through their thinking as they do the task or read feedback comments) or stimulated recall (where the participants "reconstruct" their thinking during an event or where artefacts or audio clips of feedback dialogue are used to stimulate conversation about the underlying sense-making) (Henderson, Henderson, Grant, & Huang, 2010). Both of these methods are constructions constrained by what can be explicated and what always remains tacit, not to mention our inherent desire for sense-making and creating explanations (Henderson et al., 2010). Longitudinal audio-diaries can also be used where learners record their feedback experiences include how they are making sense of and enacting different sources of information during their learning journey. These diaries can then be shared with the researchers on a regular basis.

These methods of rendering sense-making visible offer rich data collection opportunities to understand the effects of feedback, but by their very nature they will also influence the phenomenon we are interested in. There is no escaping this in naturalistic research: the intrusion of research changes the outcome (Lincoln et al., 2018). In naturalistic research, the researchers' actions, preferences and predispositions are inextricable from the research processes and products. That the researcher's subjectivity informs scholarly

efforts through the entire research process is unavoidable and therefore neither inherently good nor bad. The challenge is to benefit from this effect so that pedagogic interventions without accompanying research can realise similar outcomes. An example of this is in making the process explicit. This can be done for research ends as we have been discussing here, but the making of a process visible to those in the learning milieu may have similar consequences. Rather than attempting to neutralise the researcher's subjective influence, naturalistic research encourages reflection on this influence and appreciation of the ways knowledge (and data) is co-produced through interactions between researchers and participants. Our job as researchers is to be reflexive, to pay attention to the influence of the researcher on the research design (Varpio, Ajjawi, Monrouxe, O'Brien, & Rees, 2017). Effects are not decontextualized, they are influenced through interactions between learners and the learning environment and so to fully understand the effects we need to also explore how they come about through the research processes.

Interventional Research

A number of methodological approaches could be brought to bear to investigate the effects of feedback innovations. The argument here is that feedback processes may be designed to promote opportunities for students to apply the outcomes of their sense-making. It follows that any research that seeks to determine whether feedback makes a difference should engage with feedback regimes designed for this end and which reveal effects such as the use of nested assignments or iterative tasks. Careful design can enable students to produce artefacts that can be analysed with regard to student sense-making and enactment. Alignment between the conceptual and theoretical framework and the pedagogical and research designs is critical, for example choosing data collection methods that are coherent with the purposes of the educational design rather than only those that are simple to measure.

The timing of data collection in relation to feedback processes, the forms of learning and forms of effects to be measured need to be considered carefully. How distant from a feedback event might we expect to see an

effect, and can we attribute the effect to a feedback process? Sagasser, Kramer, and van der Vleuten (2012) identified short loop learning which was focused on problems that were easy to resolve and needed minor learning activities, while long loop learning required a longer period of time and was focused on "complex or recurring problems needing multiple and planned longitudinal learning activities" (p. 67). An effect may take longer than expected to occur, as in the case of developing evaluative judgement where learners may come to know their disciplines over time through immersion and observation of "good work" and therefore engage more fully with notions of quality. These prolonged effects align most with categories two and three of effects mentioned earlier—meta-learning and identity effects.

In the case of long loop learning, where assessment is typically situated, Sagasser et al. (2012) found that learners regulated their learning through making sense of multiple sources of performance-relevant information as well as multiple learning activities. Therefore, only tracking comments from a teacher and assuming that learning is only a result of this is problematic. Students might make use of feedback comments to discuss with their peers, or they may learn from comments their peers obtained, or they may learn and improve in a subsequent assessment because they changed their study approach, and this had nothing to do with the feedback intervention per se.

Research might seek to "track" intermediary indicators of effects. For example, in our work (Ajjawi & Boud, 2018) on the effects of feedback dialogue on self-regulation of learning, we observed intermediary indicators such as self-evaluation of learning, monitoring of performance and reframing of thinking during the feedback conversation. It is not known whether these self-regulatory behaviours are then manifest in other learning encounters as this would require a more longitudinal form of research with follow-up, which tends to be more challenging. Capturing enactments beyond sense-making is worthwhile as mental representations cannot capture the complexity and tacit aspects of practice, plus the relationship between thinking and action is far from simple (Dohn, 2011). That is, we need to consider intermediary indicators that might help us to achieve longer-term effects. Potential emerging methodological approaches, we address here, include participatory research and learning analytics research.

Participatory Research

Given the importance of learner agency in all feedback processes that seek to make a difference, one approach is to move beyond research designs that treat students as an object acted upon to ones that assume that they are necessarily active players. Central to feedback Mark 2 (Boud & Molloy, 2013) is that students are afforded opportunities to exercise agency, to actively seek, judge and use performance-relevant information rather than be subjected to unilateral judgements. Therefore, our research processes could encourage student agency as that is basic to what we are talking about here. Students are agentic in making sense of information and taking action about it. That does not mean they do it alone or unaided, indeed many might be involved in this journey, but we must capture the individual student's learning trajectory. We need to be careful not to deny the student agency in practice or research so that they feel there is a correct answer, or they need to tell us what we want to hear. Participatory research approaches such as action research (Carr & Kemmis, 1986) is a collaborative research approach that seeks to change practices (i.e. action) in particular through a critical edge that has an emancipatory intent which seeks to reduce inequality among the players. There might be cycles of planning, action and reflection around a particular feedback intervention, where students are collaborators and participants in the research informing each aspect of the research. Design-based research (Barab & Squire, 2004) also affords iterative co-design, participation with students and a focus on design.

Learning Analytics

What information is needed on an ongoing basis to enable both learners and those who facilitate their learning to monitor feedback? This is the realm of learning analytics. While most learning analytics to date have utilised existing information to predict adverse outcomes for students on the basis of what they do (e.g. start late, do not access the learning management system, spend insufficient time on tasks), we need to consider what else might be needed for analytics to be useful for feedback research purposes. Learning analytics can enable students and teachers to do their

own research on feedback through the provision of information in useful forms. For example, this might include data on: time from submission to receipt of information, time before next relevant task, accessing of rubrics, records of information sought, received and acted upon, improvements in task performance by learning outcome and criteria. These may also be used to triangulate other forms of data mentioned above.

The field of learning analytics continues to develop quickly and along with it more sophisticated and algorithmic forms of data analysis. An example may be the automatic analysis of discussion forum posts about assessment tasks to reveal the kinds of sentiment, complexity of language, frequency of patterns such as questioning, etc. However, interpretation of this analysis can be varied and misleading, for instance a high volume of questions (e.g. how, why, etc.) could be interpreted as demonstrating positive engagement and student participation in a dialogue around assessment (a possible indicator of feedback literacy), but it could simply mean that students have no agency, and are left asking questions without further clarification. Clearly, in learning analytics, like all the other methods, we need to be concerned with the nature of the effect, the theoretical frame and the validity of the data itself. In an example of case study research, Pardo, Jovanovic, Dawson, Gašević, and Mirriahi (2019) use learning analytics to inform the feedback intervention design as well as being data in the research.

Conclusion

This chapter has sought to open up conversations about researching feedback processes to examine effects rather than to provide a blueprint for doing so. It has done so from the perspective of understanding how feedback works through naturalistic studies. We have drawn attention to potential categories of research on effects of feedback: on direct learning, short, medium and long term; on students' learning processes, such as developing students' evaluative judgement over time; and on students' identity formation as scholars and/or professionals. We have also emphasised the difficulties in attributing effects on learners to particular feedback

practices and the importance of exploring how effects are achieved and at what points in time, rather than simply looking for outcomes.

The greatest challenge for research on feedback is in doing research *with* rather than *on* students. This is necessary because we are exploring a phenomenon in which students not only have a stake, but one which is influenced by how students engage with it and what they do. Research designs which deny learner agency are likely to obscure the very factors which students call to action. We hope the next generation of research into feedback that makes a difference will be inspired by the need to recognise the volition of students and how they can contribute to, and benefit from, excellent feedback practices.

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