

Lutfieh Mohammad Rabbani, Khaleel Shehadeh Alarabi, Najeh Rajeh Alsalmi, Abdellateef Abdelhafez Al Qawasmi. (2022). Roles Interplay between Teachers and Students in the Provisions of Feedback: Establishing a Common Ground. *International Journal of Early Childhood Special Education (INT-JECSE)*, 14(1): 688-696. DOI: 10.9756/INT-JECSE/V14I1.221081

Received: 03.10.2021 Accepted: 19.12.2021

Lutfieh Mohammad Rabbani¹
Khaleel Shehadeh Alarabi²
Najeh Rajeh Alsalmi³
Abdellateef Abdelhafez Al
Qawasmi⁴

Roles Interplay between Teachers and Students in the Provisions of Feedback: Establishing a Common Ground

Abstract

Although the critical importance of feedback in the context of formative assessment is self-evident, controversial conceptions concerning teachers' and students' roles in the overall feedback practice are still ongoing. To address this dilemma, seeking to uncover the complexity of engagement with feedback, in its entirety, is fundamental. This conceptual article, therefore, aims to illustrate a set of provisions under which having a shared awareness of feedback is believed would support the coordination between teachers' and students' efforts toward engagement with feedback, with reference to the notion of feedback literacy. Specifically, the current argument has been framed within the socio-constructivist paradigm which conceptualizes the multifaceted feedback construct as a dynamic social process of communication, with a specific focus on its cyclic and interactive nature. Overall, the outcomes stress the interdependent responsibility of teachers and students in which both contribute to the effectiveness and sustainability of the overall practice of giving and receiving feedback. A key message from the article is that the successful identification of the performance gap and "what's next" via feedback is never sufficient to evoke and sustain student's engagement with feedback unless this is meaningfully connected with long-term purposes and informed by the need to fulfill self-actualization potential. Accordingly, attention needs to be redirected more to the individual factors that may significantly influence student's dispositions toward feedback. Finally, we call for new pathways that support these endeavors while bringing teachers and students into a common ground to better coordinate efforts in between.

Keywords: Engagement with Feedback, Feedback Literacy, Formative Assessment, Formative Feedback, Student Engagement.

Introduction

In the influential work "*The Power of Teacher's Words*", Denton (2013) made the case that the communicative language used by teachers with their students is one of the most powerful teaching tools. This is because teacher's words, if crafted and expressed thoughtfully, can have a profound influence of student motivation and performance. The author emphasized that teachers should be consciously aware of what

they say to students and how they say it, paying particular attention to both the explicit and implicit meanings these words could permeate. A cautionary note must, therefore, be made concerning the teacher's spoken or written language as it may stimulate or inhibit student's learning, and most crucially, their aspiration to make forward progress. Such potential impact of the teacher language on students at the different levels, whether directly or indirectly, should not be underestimated. Thereby, it becomes

Lutfieh Mohammad Rabbani¹, College United Arab Emirates University, UAE.
Khaleel Shehadeh Alarabi², College United Arab Emirates University, UAE.
Najeh Rajeh Alsalmi³, Nonlinear Dynamics Research Center (NDRC), Ajman University, Ajman, UAE.
Humanities and Social Sciences Research Center (HSSRC), Ajman University, Ajman, UAE.
Abdellateef Abdelhafez Al Qawasmi⁴, Ministry of Education – Jordan.

increasingly important to bring “*feedback*” under the spotlight of scholarly endeavors as teachers most often rely heavily on feedback as a language of communication to exchange information with students, whether orally as part of the classroom interaction or through the written comments provided in response to student’s work (Sadler, 2010).

In essence, teachers tend to generate diagnostic data from student’s outputs, interpret them correctly, and respond to effectively via feedback. This, in turn, enables students to have a clear sense of how well they are doing and what they might need to do further to improve (Carless, 2019). In this manner, feedback, as an instructional practice, significantly contributes to creating instructive opportunities at which both teachers and students can recognize and work upon strengths and weaknesses (Thurlings et al., 2013), resulting in systematic, evidence-based, and continuous monitoring of student’s progress (Harrison, 2015). This is, in essence, the ultimate purpose of *formative feedback* in the context of assessment for learning (AfL). In this respect, and given the extensive body of literature on formative feedback, the vital role of feedback as a central influence on the learning process has been repeatedly asserted (Carless, 2019; Hattie & Timperley, 2007; Pitt et al., 2020). Consequently, feedback is not only seen as a fundamental pedagogical practice (Zhang & Zheng, 2018) but also a key characteristic of quality teaching (Walker, 2009). It is then apparent why the practice of providing constructive feedback is widely perceived as a professional obligation, as well as a significant event for both students and academics (Zhang & Zheng, 2018). However, and given that student engagement plays a central role in the effectiveness of teacher feedback (Jørgensen, 2019), the extent to which students actively take the responsibility of engaging with feedback processes is questionable (Winstone et al., 2020).

Although there is a great deal of consensus over the definitional facets of feedback as a construct in terms of meaning, purposes, types, and characteristics, there are some different considerations with respect to the functional dynamics of teachers and students’ roles in the practice of providing and receiving feedback when viewed as a social process of communication. In particular, controversial conceptions over the provision of *engagement with feedback* are ongoing, reflecting the tension between the roles of the two major players in the overall process. This has led to considerable research directed towards assessing students’ engagement with feedback and factors contributing to their disengagement accompanied with interventions that could improve the situation (Ajjawi et al., 2021; Ali et al., 2018; Price et al., 2011; To, 2021;

van der Kleij, 2020; Winstone et al., 2020). The notion of *feedback literacy*, which concerns being how well informed both students and teachers are about the feedback processes and their role therein, is currently becoming central in this discussion (Sutton & Gill 2010; Winstone et al., 2020; Molloy et al., 2020; Han & Xu, 2019).

Taken together, the intention of this paper was not to reflect on the status-quo concerning engagement with feedback, as findings on this matter have been comprehensively addressed in the research literature (Carless, 2019; Jørgensen, 2019; Winstone et al. 2020). This paper rather confines its attention to the nature of the interaction between teachers and students in the dynamic feedback process by highlighting their interactive role in the engagement process. Therefore, the overt aim was to (1) elucidate this focus while conceptualizing feedback as a social practice of communication drawing on the socio-constructivist perspectives of learning, situated within the broader theoretical framework of feedback literacy; (2) identify set of conditions under which a common ground can be established for the participatory interplay between teachers and students in the feedback practice to best coordinate efforts in between, which are believed necessary to evoke and sustain their engagement with feedback. The novelty inherent in the current work is that it contributes to the existing literature by comprehensively analyzing the construct “engagement with feedback” through the lens of “socio-constructivist paradigm” to chart some ways forward while making the connection between them explicit. We argue that unpacking the dilemma of engagement with feedback is a rather difficult undertaking without the consideration of the multifaceted complexity associated with the construct in its entirety.

The present conceptual article, is an effort to address the topic under consideration, relying on critical and extensive review of prior published scholarly work to reflect on relevant research findings concerning the practice of feedback. Broadly, the paper is located within the framework of Assessment for Learning (AfL) and the primary focus used for this review was central to “engagement with feedback”, thus, the search was limited to literature performed in the field of education and assessment. Moreover, the foundation for this work is sketched based on studies that regarded feedback from the social constructivism paradigm (Jørgensen, 2019; Price et al., 2011; Sadler, 2010), along findings from recent work under this line of research (Ali et al., 2018; Molloy et al., 2020; Sadler, 2010). Regardless of contextual differences, the purpose being described concerns and have significant practical implications within the school, undergraduate, and higher education levels. Therefore, the current discussion examines

relevant arguments pertaining to the topic in the context of teaching and learning across these settings, building on a holistic perspective to develop a sound theoretical understanding while drawing upon integrated evidence rather than stand-alone evidence from either context. Nevertheless, seeking to differentiate between factors and highlight provisions that may have a supreme influence on engagement with feedback across these different contexts is something that might be considered in future research into this issue.

The paper presents the outcomes of the review as follows: initially, the interactive nature of feedback practice is clearly explained to lay the foundation necessary for perceiving it as a process of social communication, and then, the discussion is linked to key findings concerning the conceptualization of feedback as a complex construct. After, consideration is given to the crucial role of teachers and students in terms of engagement with feedback from where several potential challenges arise. The article then concludes with implications for learning and instruction, along with a set of provisions under which having a common ground in view of feedback literacy would facilitate the coordination between teachers and student's efforts with this respect. Finally, we call for new pathways for future research and practice that could support these endeavors.

Feedback: A Dynamic and Complex Construct

Building on the framework underpinning this article, the conceptualization of feedback in this article as a construct is heavily influenced by the social constructivist theories of learning and draws on premises of interactionist views of feedback which argue that individuals make sense of the world by interacting and engaging with it, where interpretations are shaped by the socio-cultural context (Rust et al., 2005). Recent discussions on the topic have challenged the traditional teacher-driven model of feedback (Boud & Molloy, 2012; Jørgensen, 2019; Molloy et al., 2020) which is rooted in the behaviorist paradigm in which feedback is viewed as a directional transmission of knowledge from one source to another. Instead, they orientate feedback to a more highly contextualized social process of communication, involving a dynamic two-way exchange of information (Price et al., 2011).

Viewing feedback from this angle, it becomes more than a given piece of information, but rather a dynamic activity or a process in which individual characteristics, the interaction between teachers and students, and other situational factors, all influence the construction and re-construction of feedback comments (Thurlings

et al., 2013). Together, these portray the interfering role of the provider, the recipient, the task at hand, the feedback message itself, the nature of communication, and the context in which feedback is given (Thurlings et al., 2013). All besides organizational factors that may exist at the macro-level (London & Smither, 2002). At this point, it is worth noting that variations within each of these factors may also occur across each individual case or circumstance. Moreover, and given the chronological factor throughout the developmental continuum of the learning process, such variations are suspect to change as well over time. Taken as a whole, and although students individually construct their own interpretations from the feedback information (Weaver, 2006), multiple internal and external mediating factors shape these interpretations, which in turn, influence student's receptivity to feedback. Hence, these factors contribute to the overlapping and interactive nature of the overall feedback process (Thurlings et al., 2013).

From the interpretations described above, two points can be extrapolated: the first is that none of the multiple influencing factors should be discarded when examining the issue of engagement with feedback (William, 2006). Second, the discussion of the interplay between feedback providers (teachers) and receivers (students) must be accompanied by the acknowledgment of its complexity. Combined, it can be argued that the stated or unstated assumptions about the sustainability of engagement with feedback in view of the explained transformable and ever-changing matrix appear to have its challenges. These are discussed further.

Roles in the Feedback Provision: An Interactive and Cyclic Agency

As delineated above, feedback needs to be understood as a phenomenon in the social practice of two-sided communication, while stressing the role of the two major participants in the process, teachers and students (Ajajawi & Boud, 2017). Bringing this understanding into a sharp focus, teachers take data from students' output and "feed" responsive information "back" to students in turn. In this sense, teachers appear to initiate the feedback communication, however, students proactively act as originators of the activity from the outset since they must first demonstrate their learning to enable teachers to diagnose and reflect upon it. Moreover, when students seek feedback themselves by means of an opinion, advice, or critique, they allow for a dialogic interaction to take place (Winstone, et al., 2020). Alternatively, teachers may, or, may not, give room for that conversation to expand. Hence, both parties may establish feedback

communication and could further facilitate more sophisticated starting points (Carless, 2019).

Likewise, and after initiating the feedback process, when students do not effectively exploit the received feedback and turn it into fruitful actions, they discontinue the feedback cycle. Similarly, if teachers do not follow-up on that, the cycle is brought then to an end. Accordingly, and drawing on (Carless, 2019) spiral model of feedback, and Johnson and Johnson's (1994) Interpersonal Communication Model, it becomes clear that the reciprocal flow of information in-between teachers and students in the feedback process is ongoing, cyclic, and developmental by nature. Both participants give and take information, and thus, have the agency to either initiate, expand, interrupt, or terminate the cycle. This means then that regardless of any individual endeavors, the continuity and the effectiveness of the overall feedback process rely on the active contribution of both players at many levels. It is indeed a shared responsibility (Hu & Kuh, 2002).

At this point, a question that may come to mind is that what drives the continuity of the feedback cyclic process? Zhang and Zheng (2018) considered "improvement" as the main aim of the feedback practice. This aim was generally described as what Sadler (2010) called "closing the performance gap" which entails the gap between the current level of performance and the desired or ideal level (Voerman et al., 2014), and involves pointing out the gap by addressing existing errors and helping students to remedy these errors (Walker, 2009). The former function of feedback was beautifully summed up by Tunstall and Gipps (1996) as lightening the way forward, and in the words of Hattie and Timperley (2007), it is the identification of where to go next and how. In this sense, the function of the feedback then implies creating a meaningful "need" to move "next" in order to thrive toward continuous improvement. Taking the broader frame of learning, "what's next?" may correspond to and sort of knowledge, skills, or behaviors that students may need to acquire, improve, or change along the learning journey. On this basis, it is logical to infer that student's constant attempts to move further to the "next" with respect to some aspects of their learning is the driving force for sustaining the continuity of the feedback cycle. Since there will be always a further advanced level to outreach and master, then, "what's next" seems to be endless, indicating the absence of an endpoint in the feedback cycle (Carless, 2019).

Speaking of our context, we argue that neither the clarification of "what is next", nor mapping the road toward it "the how element" is sufficient to evoke student's inner appetite toward their continual growth (Price et al., 2011). This is because improvement is time-consuming and

does not come with no cost in terms of dedicated effort and commitment, and we, therefore, should not expect students to seriously pertain to these if they don't have a clear sense of the genuine "purpose" behind "why" they supposed to do so. Hence, when students do not recognize the real value of the given feedback to their improvement, they tend to diminish its importance (Weaver, 2006). The point being made here is that student's willingness to invest in their own improvement via feedback is, indeed, an individual endeavor, besides being a key deterrent of student's personal success (London & Smither, 2002).

Discussing this understanding from a practical standpoint, teachers may successfully construct feedback that highlights what needs to be improved, and in the best scenarios, they provide supportive instructions for pursuing this improvement, however, they may fail to convey the reasons why this improvement is necessary. Similarly, it is common that feedback is provided with superficial inputs on the errors or mistakes that are limited to the task on hand, with no indications of the general principles or rules underpinning these. In such a case, feedback help makes students attain to some extent the short-term goals within a specific context, however, these are rarely linked to the overall learning outcomes, nor to other long-term goals, whether at the academic, personal, or professional level. It is worth noting here that what so-called, transformational feedback, is the one that can have an impact not only within, but also beyond the courses the students are undertaking. This put more emphasis on the wider role of feedback (Carless, 2019), and therefore, highlight the notion of longer-term engagement with feedback that is situated within the broader framework of improvement and personal growth.

We thereby problematize the term "specific feedback" when it corresponds only to the short-term goals of a particular assessment event, and argue that by all means, specific feedback needs to be visualized in light of the long-term goals and the ultimate purpose of continuous improvement as these are the driving forces behind the overall learning process (Carless, 2019). It is the teacher's role then to make this connection explicit and tempting. In this way, the function of the feedback becomes more than enabling the recognition of students' errors, to a deeper realization of the profound rationale behind these. This must be supplemented with reasonable justification of how the new right understanding may contribute to the student's improvement and growth in a broader sense. Approaching the practice of feedback from this perspective while linking the current performance with "what's next" in light of the "purposeful need" for achieving consistent growth and improvement, or what so-called "self-actualization" according to

Maslow's hierarchy of needs (Maslow & Lewis, 1987), is believed would encourage students to adopt habits such as goal setting, and subsequently, sustain developmental accomplishments with respect to their learning, which are necessary for their self-regulated learning process (Sadler, 2010).

Feedback and Engagement: Unpacking the Linkages

From the interpretations described above which highlight the complexity of feedback when viewed as a social process of communication, and stress the resulting interdependent responsibility of teachers and students in undertaking and sustaining their roles in the overall practice of giving and receiving feedback, we argued that feedback may not necessarily support student's learning if not accompanied with genuine purposes of why improvement ought to take place. Thus, an individual sense of accountability can be drawn by a persistent need for change, improvement, and growth. This provision acts as a key factor with respect to engagement with feedback.

The above notions illustrate a more dynamic and student-centered conceptualization of the feedback practice with a specific focus on the student's role. Given this illustration, and building on Duijnhouwer et al. (2010) and Fredricks et al. (2004) conceptual frameworks of student engagement, improvement can be achieved at the emotional, cognitive, and behavioral levels. Therein, students need to mindfully engage with feedback activities (affectively, cognitively, and behaviorally) with overt actions across these levels (Jørgensen, 2019). In this view, engagement with feedback is conceptualized as a multidimensional construct across the three interrelated dimensions of affective, cognitive, and behavioral engagement (Man et al., 2020). Taken as a whole, adopting such holistic and socially-embedded conceptualization of feedback in terms of student engagement has had a good potential for guiding research on the topic. As a consequence, a shift has taken place from the exclusive focus on the production of the feedback process (including perspectives on feedback, preferences, types, and the quality of feedback practices) to the underlying processes associated with student's utilization of the produced feedback (Boud & Molloy, 2013), indicating moving from the input phase to the action phase (William, 2006). Students, therefore, are more positioned as active players, and therefore, more demand is put on their role in terms of showing responsibility for the regulation of their learning (Sadler, 2010). In this respect, it is expected that students make sense of the received feedback information and apply it for the purposes of ongoing improvement

(Carless, 2019). Student's effectual interaction in this manner contributes to the ultimate goal of feedback that is central to their wide-based developmental growth as explained earlier. Such development of student's self-regulative capacities is the essence of sustainable feedback (Carless, 2019), however, it cannot be imposed but rather need to be intentionally performed by students themselves (Price et al., 2011).

For that reason, engagement requires student's willingness, as well as the ability to interpret the feedback in terms of learning needs and then take actions to better meet those needs (William, 2006). Only under this condition, students can meaningfully uptake the feedback and fully benefit from it (Price et al., 2011). Otherwise, feedback fails as a tool for improvement, as well as a way of communication (Sadler, 2010). Thus, efforts made by students in this regard become the cornerstone of the engagement process. Nevertheless, the concept of quality within this frame is abstract and rarely unpacked, presumably because it associates with a wide-ranging of interpretations. In seeking to understand what is meant by 'quality of engagement', our understanding is drawn upon the argument made earlier which is conceptually based on the role of student's self-regulation on their progress and growth. In this view, we may interpret the concept of "quality" in terms of effort devoted to progress toward the desired growth. Building on the holistic framework of engagement discussed earlier, these efforts, therefore, should be functioning along with the emotional, cognitive, and behavioral levels spontaneously. Such efforts could be fully made individually, or, supplemented with a supportive effort from an external agent (i.e., scaffolding). In either case, it should be acknowledged that the relationship between the effort put into action and the yielded results will suffer from some confusion (O'Donovan et al., 2019). For instance, a student may excellently invest effort into a task, yet, when the produced work is assessed against the rubric criteria, it has been considered of low quality although superior diligence has been placed into its production. In such a scenario, unfortunately, no positive feedback can compensate for the lost efforts, simply because students unconsciously understand the low earned mark as a failure, or, as a sign of incompetence. This is very critical as the earned "grade" most often is the prism through which feedback is read (Sutton & Gill, 2010), and subsequently, it influences student's receptivity to feedback (Pitt, 2017). Although it seems beneficial, however, the proposed suggestion that the feedback needs to be detached from the mark (William, 2006) provides no help with unleashing the existing confusion between efforts and results.

Given the considerations above, it's clear that there remain many things that are not known

about how best to conceptualize student's efforts in the process of engagement with feedback in connection to the quality of the produced work or the earned result. The quality of student's effort and the nature of the endeavors undertaken by them to invest in feedback, indeed, need to be recognized, fairly evaluated, and appreciated.

Engagement and Feedback Literacy – Establishing a Common Ground

Overall, the present discussion has placed student's self-regulation and engagement at the core of the feedback process. In line with that, feedback literacy has been proposed as a key mechanism to maximize the potential of these two provisions. The notion of feedback literacy was heavily stimulated by the work of Havnes et al. (2012) and has emphasized the need to activate a constructive interaction between teachers and students by developing a shared understanding concerning the overall philosophy, as well as the practical implications underpinning the practices of feedback. In this sense, both teachers and students share responsibility toward fulfilling interactive roles in order to create and sustain a positive feedback culture (Thurlings et al., 2013). With this regard, much of recent research on feedback has been attuned to this notion with accompanying frameworks for action (e.g., Ali et al., 2018; Han & Xu, 2019; Jørgensen, 2019; Molloy et al., 2020; To, 2021; Winstone, et al., 2020). These have generally comprised the following overarching facets: cognitive capacity (metacognitive and cognitive operations employed by learners to process and reflect on feedback), social-affective disposition (appreciation, motivation, emotional reactions and attitudes toward feedback), and behavioral capacity (strategies and actions used to uptake feedback to enhance self-regulated learning), all of which are in alignment with the previously explained broad conceptualization of engagement with feedback.

From this perspective, feedback literacy implies a conscious recognition of the value of feedback, its purposes, the potential benefits, the participant's role in the process, and the strategies to use it. Additionally, and most importantly, it entails the willingness and ability to perform the expected shared roles (Price et al., 2011; Scott, et al. 2011;). Together, these are considered a prerequisite prior to substantial engagement with feedback (Han & Xu, 2019) because without the noted knowledge and capabilities, it is unlikely that students will commit to feedback as an improvement (Molloy et al., 2020). In supportive of that, Weaver (2006) found that even when students acknowledge the value of the feedback and show interest to benefit from it, their insufficient level of understanding could be

a barrier, as they may not be able to comprehend and make sense of the embedded messages. Guidance and strategies on how to engage with feedback in order to enhance learning, are therefore, just as important as the importance of providing feedback itself (Scott et al., 2011).

To this end, our argument reinforces the value of understanding the purpose of feedback and how it is fundamentally orientated toward learner's improvement. The lack of such critical awareness in terms of feedback literacy could be one of the most influential reasons why students may not respond to the provided pieces of information proactively. As such, placing the blame on the feedback or the feedback provider is a weak defense when trying to justify why feedback does not invite learners' active engagement (Havnes et al., 2012), or provoke their actions (Handley et al., 2010).

Conclusion

In seeking to uncover the ongoing controversial conceptions concerning teachers' and students' roles in the feedback practice, addressing the complexity of engagement with feedback is fundamental. The current conceptual article therefore, was informed by the socio-constructivist views which conceptualize the feedback construct as a dynamic social process of communication with a specific focus on its cyclic and interactive nature. Overall, the discussion stressed the interdependent responsibility of teachers and students in undertaking their roles in order to establish the effectiveness and sustainability of the overall practice of giving and receiving feedback. Furthermore, it rationalized the idea that students must be positioned as active players in the feedback process at which they are mindfully engaging with feedback activities, affectively, cognitively, and behaviorally with overt actions across these levels. Last, we draw attention that the identification of the performance gap and "what's next" is only a small part of the complexity of engagement with feedback dilemma. A key message from the article is that these two elements have to be thoughtfully connected with long-term purposes, as well as informed by an endless need to fulfill self-actualization potential. It is argued that feedback may not necessarily support student's learning if not accompanied with genuine purposes of why improvement ought to take place. Thus, an individual sense of accountability can be drawn by a persistent need for change, improvement, and growth, indicating that the fundamental problem lies less with student's capabilities to engage with feedback, but rather with their willingness to invest in their continuous improvement.

Recommendations

What does this imply for practice? First, we draw attention to the need of examining the quality of effort and attempts undertaken by students to invest in feedback as these have to be recognized, embraced, and fairly evaluated, regardless of the achieved results. The concept of quality within this context has not been discussed in the literature. Second, the current article highlights the need for approaching feedback in view of the ultimate purposes that are attached to student's incremental growth, both at the affective, cognitive, and behavioral levels. Thus, the "why" dimension of the feedback must imply meaningful and convincing reasons for students in terms of why feedback matter and why having a persistent "need" for continuous improvement is inevitable, rather than optional. Having more motivating alternatives "purpose-oriented" or "meaning-centered feedback" to the existing models of feedback are needed to better inspire student's willingness to engage. Approaching that from a *Logotherapy* perspective (e.g. the work of Frankl, 2006) or by drawing a coherent base of theory from the different fields of positive psychology building on the work of Seligman (2002) is believed may provide an ambitious and practical vision for what feedback-enriched content should aim for and promotes evidence-based practices to support the enactment of such vision. This can be a genuine attempt as literature have not yet addressed the topic from these perspectives, either empirically or theoretically.

Limitations and Future Research

Taking into account the scope of this paper, the current discussion has been framed within the paradigm of active engagement underpinned by the social constructivist and interactive views of feedback, within the context of assessment for learning. Thus, we built on findings cited earlier in this article to outline the entailed feedback conceptualization while specifically targeting the interdependent roles of the two main participants in the overall feedback process; teachers and students. Given that cognitive and constructivist feedback research only partially explains students' non-engagement with feedback (Jørgensen, 2019), many things are still unknown about what specific individual factors or personal traits may have a substantial influence on student's willingness to improve, and how feedback as an instructional tool can best drive student's willingness and self-discipline to commit to improvement with the consideration of these factors.

Most recently, the work on mindset from the field of social psychology and cognitive behavior sciences has prompted a fresh wave of

scholarship in education embracing the notion that the personal character has potentially far-reaching implications for students since how students think about learning, intelligence, and their own abilities can have a significant impact on their progress and academic improvement. Thereby, understanding the mechanism of how student's mindset may have a role in framing their conceptions of mistakes and failure needs to be taken into consideration while attempting to investigate their receptivity and dispositions toward feedback, especially for criticism feedback (Carvalho et al., 2014). This, however, was beyond the remits of this paper because it is secondary to the main theme, though, it suggests a new avenue for future research.

References

- Ajjawi, R., & Boud, D. (2017). Researching feedback dialogue: An interactional analysis approach. *Assessment & Evaluation in Higher Education*, 42(2), 252-265. <https://doi.org/10.1080/02602938.2015.1102863>
- Ali, N., Ahmed, L., & Rose, S. (2018). Identifying predictors of students' perception of and engagement with assessment feedback. *Active Learning in Higher Education*, 19(3), 239-251. <https://doi.org/10.1177/1469787417735609>
- Boud, D., & Molloy, E. (2012). What is the Problem with Feedback? In *Feedback in higher and professional education*, Routledge, 11-20. <https://doi.org/10.4324/9780203074336>
- Carless, D. (2019). Feedback loops and the longer-term: towards feedback spirals. *Assessment & Evaluation in Higher Education*, 44(5), 705-714. <https://doi.org/10.1080/02602938.2018.1531108>
- Carvalho, C., Santos, J., Conboy, J., & Martins, D. (2014). Teachers' feedback: Exploring differences in students' perceptions. *Procedia-Social and Behavioral Sciences*, 159, 169-173. <https://doi.org/10.1016/j.sbspro.2014.12.351>
- Denton, P. (2013). *The power of our words: Teacher language that helps children learn*. Center for Responsive Schools, Inc.
- Duijnhouwer, H., Prins, F.J., & Stokking, K.M. (2010). Progress feedback effects on students' writing mastery goal, self-efficacy beliefs, and performance. *Educational Research and Evaluation*, 16(1), 53-74. <https://doi.org/10.1080/13803611003711393>
- Dweck, C.S. (2008) *Mindset: the new psychology of success*. New York: Ballantine Books.
- Frankl, V.E. (2006). *Man's search for meaning*.

- New York, NY: Washington Square.
- Fredricks, J.A., Blumenfeld, P.C., & Paris, A.H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109.
- Han, Y., & Xu, Y. (2019). Student feedback literacy and engagement with feedback: a case study of Chinese undergraduate students. *Teaching in Higher Education, 1*-16.
- Harrison, C. (2015). Assessment for learning in science classrooms. *Journal of Research in STEM Education, 1*(2), 78-86.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81–112.
<https://doi.org/10.3102/003465430298487>
- Handley, K., Millar, J., & O'Donovan, B. (2010). Feedback: all that effort, but what is the effect? *Assessment & Evaluation in Higher Education, 35*(3), 277-289.
<https://doi.org/10.1080/02602930903541007>
- Havnes, A., Smith, K., Dysthe, O., & Ludvigsen, K. (2012). Formative assessment and feedback: Making learning visible. *Studies in Educational Evaluation, 38*, 21–27.
<https://doi.org/10.1016/j.stueduc.2012.04.001>
- Hu, S., & Kuh, G.D. (2002). Being (dis) engaged in educationally purposeful activities: The influences of student and institutional characteristics. *Research in Higher Education, 43*(5), 555-575.
<https://doi.org/10.1023/A:1020114231387>
- Johnson, D.W., & Johnson, R.T. (1994). *Joining together: Group theory and group skills*. Boston, MA: Allyn & Bacon.
- Jørgensen, B.M. (2019). Investigating non-engagement with feedback in higher education as a social practice. *Assessment & Evaluation in Higher Education, 44*(4), 623-635.
<https://doi.org/10.1080/02602938.2018.1525691>
- London, M., & Smither, J.W. (2002). Feedback orientation, feedback culture, and the longitudinal performance management process. *Human Resource Management Review, 12*(1), 81-100.
[https://doi.org/10.1016/S1053-4822\(01\)00043-2](https://doi.org/10.1016/S1053-4822(01)00043-2)
- Maslow, A., & Lewis, K.J. (1987). Maslow's hierarchy of needs. *Salenger Incorporated, 14*, 987.
- Man, D., Chau, M.H., & Kong, B. (2021). Promoting student engagement with teacher feedback through rebuttal writing. *Educational Psychology, 41*(7), 883-901.
<https://doi.org/10.1080/01443410.2020.1746238>
- Molloy, E., Boud, D., & Henderson, M. (2020). Developing a learning-centred framework for feedback literacy. *Assessment & Evaluation in Higher Education, 45*(4), 527-540.
<https://doi.org/10.1080/02602938.2019.1667955>
- O'Donovan, B.M., Den Outer, B., Price, M., & Lloyd, A. (2021). What makes good feedback good?. *Studies in Higher Education, 46*(2), 318-329.
<https://doi.org/10.1080/03075079.2019.1630812>
- Pitt, E. (2017). Student utilisation of feedback: a cyclical model. In *Scaling up assessment for learning in higher education*, Springer, Singapore, 145-158.
https://doi.org/10.1007/978-981-10-3045-1_10
- Pitt, E., Bearman, M., & Esterhazy, R. (2020). The conundrum of low achievement and feedback for learning. *Assessment & Evaluation in Higher Education, 45*(2), 239-250.
<https://doi.org/10.1080/02602938.2019.1630363>
- Price, M., Handley, K., & Millar, J. (2011). Feedback: Focusing attention on engagement. *Studies in Higher Education, 36*(8), 879–896.
<https://doi.org/10.1080/03075079.2010.483513>
- Rust, C., O'Donovan, B., & Price, M. (2005). A social constructivist assessment process model: how the research literature shows us this could be best practice. *Assessment & Evaluation in Higher Education, 30*(3), 231–240.
<https://doi.org/10.1080/02602930500063819>
- Sadler, D. (2010). Beyond feedback: developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education, 35*(5), 535–550.
- Scott, J., Shields, C., Gardner, J., Hancock, A., & Nutt, A. (2011). Student engagement with feedback. *Bioscience Education, 18*(1), 1–9.
<https://doi.org/10.3108/beej.18.5SE>
- Seligman, M.E.P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: Free Press.
- Sutton, P., & Gill, W. (2010). Engaging Feedback: Meaning, Identity and Power. *Practitioner Research in Higher Education, 4*(1), 3-13.
<https://eric.ed.gov/?id=EJ1130410>
- Thurlings, M., Vermeulen, M., Bastiaens, T., & Stijnen, S. (2013). Understanding feedback: A learning theory perspective. *Educational Research Review, 9*, 1–15.
<https://doi.org/10.1016/j.edurev.2012.11.004>

- To, J. (2021). Using learner-centred feedback design to promote students' engagement with feedback. *Higher Education Research & Development*, 1-16.
<https://doi.org/10.1080/07294360.2021.1882403>
- Tunstall, P., & Gipps, C. (1996). 'How does your teacher help you to make your work better?' Children's understanding of formative assessment. *The Curriculum Journal*, 7(2), 185-203.
<https://doi.org/10.1080/0958517960070205>
- Walker, M. (2009). An investigation into written comments on assignments: Do students find them usable? *Assessment & Evaluation in Higher Education*, 34(1), 67–78.
<https://doi.org/10.1080/02602930801895752>
- van der Kleij, F.M. (2020). Evaluation of the 'feedback engagement enhancement tool' to examine and enhance students' engagement with feedback on their writing. *Studies in Educational Evaluation*, 66.
<https://doi.org/10.1016/j.stueduc.2020.100907>
- Weaver, M. (2006). Do students value feedback? Student perceptions of tutors' written responses. *Assessment & Evaluation in Higher Education*, 31(3), 379–394.
<https://doi.org/10.1080/02602930500353061>
- Wiliam, D. (2006). Formative Assessment: Getting the Focus Right, *Educational Assessment*, 11(3-4), 283-289.
<https://doi.org/10.1080/10627197.2006.9652993>
- Winstone, N., Bourne, J., Medland, E., Niculescu, I., & Rees, R. (2021). "Check the grade, log out": students' engagement with feedback in learning management systems. *Assessment & Evaluation in Higher Education*, 46(4), 631-643.
<https://doi.org/10.1080/02602938.2020.1787331>
- Zhang, L., & Zheng, Y. (2018). Feedback as an assessment for learning tool: How useful can it be? *Assessment & Evaluation in Higher Education*, 43(7), 1120–1132.
<https://doi.org/10.1080/02602938.2018.1434481>