

Exploring Students' Responses to Faculty Formative Feedback in the Online Learning From a Higher Education Practitioner's Perspective

James M. Mbuva
National University

This study explored students' responses to faculty formative feedback in the online learning environment from a higher education practitioner's perspective. the study examined the meaning of students' responses and formative feedback, as well as how we can determine that students are responding to their faculty's formative feedback. The study provided some specific factors influencing students' responses to faculty formative feedback, some of the potential challenges associated with the formative feedback examined by the practitioner, the effects of using faculty formative feedback on students' learning and responses in the online learning space, some of the practitioner's observations, some of the practitioner's faculty formative feedback statements, some observed challenges to faculty formative feedback by the practitioner, students' responses to faculty formative feedback during and after class completion. The study hypothesized that faculty formative feedback, which includes timely, specific, clear, encouraging, motivating, and constructive criticism with actionable steps, enhances students' perception of feedback, engagement, positive relationship with the instructor, and promotes positive responses to student learning success.

Keywords: faculty formative feedback, student engagement, faculty, teacher, instructor, learner, students' responses, feedback, practitioner, academic success, students' work

INTRODUCTION

The introduction part of this study addressed the background of the study, purpose of the study, problem statement and the significance of the study.

Background of the Study

This study explores students' responses to faculty formative feedback in the online learning space of a higher education practitioner's study. As early as 1989, online learning had not gained much traction. Still, a survey conducted by Moore (1989) developed a learning framework showing that types of student interaction in the learning process should embrace content, instructor, and peer interaction (Rakhimova & Barotov, 2023; Rajalingam, Kanagamalliga, & Karuppiyah, 2021; Harper, 2018).

In the wake of the 2000s, the growth rate of online learning in universities and colleges increased, marking more concern and inquiry on online teaching in higher education and student learning and quality of education in the new online teaching and learning experience (Halup & Bulliger, 2013; Picciano, 2006; Kim, & Bonk, 2006; Zhao, 2003; Robinson, & Hullinger, 2008; Allen, & Seaman, 2007; Seaman, Allen, & Seaman, 2018; Maringe, & Sing, 2014).

We have existing literature gaps in that much research focuses on delivery methods, less on how students learn in the online platform and the significance of faculty formative feedback and students' responses on online teaching and learning which became very evident during COVID-19 learning experience (Mbuva, 2023; Bragg, Walsh, & Heyeres, 2021; Carrillo, & Flores, 2020; Kebritchi, Lipschuetz, & Santiago, 2017; Tallent-Runnels, Thomas, Lan, Cooper, Ahern, Shaw & Liu, 2006). Now, as higher education practitioners, it is high time we think about how students learn in online education more deeply, and that involves students' responses to faculty formative feedback, thus enhancing students' involvement in their learning (Irons, & Elkington, 202; Gikandi, Morrow & Davis, 2011; McCarthy, 2017).

We need to find how students respond by indicating that they have understood the formative faculty feedback and that they will revise their work and bring it to where it should be meeting their learning expectations, thus showing that they are getting it by being sensitive to their responses and encouraging dialogue with students to clarify feedback issues of both faculty and students (Ellegaard, Damsgaard, Bruun, & Johannsen, 2018; Haug, & Ødegaard, 2015).) In some of our BA and MA programs, we may find that we care more about student enrollment and testing them at the end of the program than we take time to know the process of how they are learning and their responses, articulating whether we support their learning to meet expectations and learning outcomes. However, when it comes to preparing teachers for the 21st learning, we must pay close attention to student engagement in their learning, and our task is to find ways of engaging them. One of the ways of engaging a Master of Arts in Education coupled with a teaching credential is to provide formative feedback from the start of the class to the finish line and, at the same time, expect to find students' responses on their learning and provide a continuous dialogue and interaction to enhance student learning. After all, when we prepare teachers to teach children, we want them to master the content, ways of teaching, student engagement, dispositions, and conducive subject matter delivery and learning environment, and it is important to encourage teacher-student dialogue to ascertain students' responses on teaching, and we can best meet their learning needs.

The Purpose of the Study

This study aimed to explore students' responses to faculty formative feedback in the online learning space in higher education from a practitioner's perspective. As early as 1989, online learning had not gained much traction. Still, a survey conducted by Moore (1989) developed a learning framework showing that types of student interaction in the process of learning should embrace content, instructor, and peer interaction (Rakhimova & Barotov, 2023; Rajalingam, Kanagamalliga, & Karuppiiah, 2021; Harper, 2018).

In the wake of the 2000s, the growth rate of online learning in universities and colleges increased, marking more concern and inquiry on online teaching in higher education and student learning and quality of education in the new online teaching and learning experience (Halup & Bulliger, 2013; Picciano, 2006; Kim, & Bonk, 2006; Zhao, 2003; Robinson, & Hullinger, 2008; Allen, & Seaman, 2007; Seaman, Allen, & Seaman, 2018; Maringe, & Sing, 2014).

We have existing literature gaps in that much research focuses on delivery methods, less on how students learn in the online platform and the significance of faculty formative feedback and students' responses on online teaching and learning which became very evident during COVID-19 learning experience (Mbuva, 2023; Bragg, Walsh, & Heyeres, 2021; Carrillo, & Flores, 2020; Kebritchi, Lipschuetz, & Santiago, 2017; Tallent-Runnels, Thomas, Lan, Cooper, Ahern, Shaw & Liu, 2006). Now, as higher education practitioners, it is high time we think about how students learn in online education more deeply, and that involves students' responses to faculty formative feedback, thus enhancing students' involvement in their learning (Irons, & Elkington, 202; Gikandi, Morrow & Davis, 2011; McCarthy, 2017).

We need to find how students respond by indicating that they have understood the formative faculty feedback and that they will revise their work and bring it to where it should be meeting their learning expectations, thus showing that they are getting it by being sensitive to their responses and encouraging dialogue with students to clarify feedback issues of both faculty and students (Ellegaard, Damsgaard, Bruun, & Johannsen, 2018; Haug, & Ødegaard, 2015).)

The study takes the position that faculty formative feedback is an everyday practice to support student's learning and success (Moya & Tobar, 20217). I want to know if students provide their input through

responses to faculty formative feedback in the online learning space because education is now through online learning and online teaching because of the digital age generation, and there are few or no formal classrooms as we know it where we teach in a four-cornered physical structure; so it is essential to understand if students are reading faculty formative feedback and consequently provide their responses showing improved work, meeting learning expectations, and that marks purpose of this study and the study hypothesizes that students who read and respond faculty formative feedback they perform better and at the end of the class they have academic improvement and meet the learning outcomes of their course.

Problem Statement of the Study

I am doing this study because I teach in a one-month class format in higher learning and call for serious interactive learning activities about content, delivery, formative feedback, and students' responses for meaningful learning to occur. Further, with the collaborative Zoom video Conferencing is applied to allow students to meet the instructor and their fellow students, and this makes learning better compared to when students work alone at their homes or workplace.

We can have excellent learning outcomes, weekly deliverables, objectives, expectations, intensive teaching, study, and learning, but this does not mean students learn. We need effective feedback, starting with faculty formative feedback followed by students' responses to ensure student learning (Morris, Perry, & Wardle, 2021). I must make sure that students are learning. Therefore, I became sensitive to students' learning by providing formative feedback, calls, and emails, and consequently expect students' responses to inform whether they are learning and need additional support to succeed in their learning. Further, I needed to know that my students get it after the formative feedback, finishing their assignments, discussions, and signature assignments of their practical learning through field study (Irons & Elkington, 202; Morris, Perry, & Wardle, 2021). Then, I can ensure that my students are meeting learning expectations and doing what they are supposed to do because of the shortage of time. Because we have just one month, and if any student blinks, they will fail, and I expect my class to succeed, meaning that I do not expect them to score a D or C or even a B minus in my class. That is why we must maintain profitable and timely faculty formative feedback and students' responses about their learning.

I want my students to grow, and I tell them from the very beginning that they start with an A grade and that it is upon them to remain at an A and B level or remove themselves because I have very high expectations, and I lay them down at the beginning of the class. At the same time, I email or call and make weekly online Zoom video conference meetings, which are collaborative. The students come, and we meet each other. They meet their fellow students, and there are discussions concerning the assignments and questions students ask. Following the class, I always develop a video in case those who do not have time to come can read and reflect on it. They could also email me that they read and reflect on their understanding of the class content (Irons, & Elkington, 2021; Morris, Perry, & Wardle, 2021).

That is why, in higher education and particularly in teacher training programs, we must make a conscientious effort to ensure that students are learning and that no one is left behind immediately. Frequently, I would see some students not engaging by not doing their work, some delaying, and others not doing their work on time or at all. As a serious teacher who wants students to learn and meet learning outcomes, I wanted to ensure that students are learning, so I began to be very cautious about the formative feedback I give about students' work; and that is why knowing students' responses after formative feedback is vital in their learning because it informs the faculty students' responses to the formal feedback and the overall delivery process of the course content (Gikandi, Morrow, & Davis, 2011; McCarthy, 2017).

Significance of the Study

The significance of this study is threefold. First, the study prepares me to learn best practices in the interplay of formative feedback and students' responses in teaching and learning. I want to follow the best practices in teaching and learning to enhance students' success in learning. One of the best teaching practices is faculty formative feedback and the students at the same time providing their responses to demonstrate that they are understanding and, therefore, they will improve in their learning and that their academic performance will show a difference. So, to me, it is very important because it provides new

knowledge and information for me to use and help my students in their learning process. I care about student learning, and I want to develop a culture of caring, a culture of teaching that incorporates faculty formative feedback and student responses and doing follow-ups to ensure students learn through emails and calling.

Second, other faculty members in my school and other universities and schools will benefit because I plan to publish this study. I want them to know that providing formative feedback and encouraging students to write responses is essential to ascertain that they understand faculty feedback, content, and learning expectations.

Third, I believe that the study will be an addition to educational research on the interplay of faculty formative feedback and students' responses where faculty from PK-12, Universities, and colleges my students are going to read and benefit students from all programs.

METHODOLOGY OF THE STUDY

For the purposes of collective data, this study's methodology included research questions, literature review, constructivist research paradigm, reflective Journaling—autoethnography, action research, a case study, a practitioner method, and a self-evaluative method, site, data analysis, limitations, delimitation of the study, and definition of terms.

Research Questions

The study used the following questions to mine information from literature on formative feedback and students' responses in the teaching and learning process to explore students' responses to faculty formative feedback in online learning from a higher education practitioner's perspective.

1. *What is the meaning of students' responses and formative feedback?*
2. *How do we know students are responding to their faculty's formative feedback?*
3. *What Are Some Specific Factors Influencing Students' Responses to Faculty Formative Feedback?*
4. *What are some of the potential challenges associated with the formative feedback examined by the practitioner?*
5. *What are the effects of using faculty formative feedback on students' learning and responses in the online learning space?*
6. *What are some of the practitioner's observations?*
7. *What are some of the practitioner's faculty formative feedback statements?*
8. *What are some observed challenges to faculty formative feedback by the practitioner?*
9. *What are some of the students' responses to faculty formative feedback during and after class completion?*

Literature Review

The study reviewed related literature addressing the theory and practical issues surrounding faculty formative feedback and students' responses to it to provide answers to the research questions (Pollmeier, Fisch, & Hirschmann, 2025; Post, Sarala, Gatrell, & Prescott, 2020; Efron & Ravid, 2018; Hean, Anderson, Green, John, Pitt, & O'Halloran, 2016).

Constructivist Research Paradigm

Knowledge and Experiences

The study used constructivist research paradigm to obtain knowledge and experiences of the practitioner and the students about faculty formative feedback and students' responses expressing their understanding of the assignments, and collaborative discussions from the discussion board in the online learning experience; because in education educators and learners construct meaning through their lived personal life and learning experiences and their social context, and we engage our social context to create knowledge; and as a researcher practitioners, we are not detached from interactions with our students, and we arrive at meaning through discussions and dialogues and mutual understanding (MacLeod, Burm, &

Mann, 2022; Plarska, 2021; Bogna, Raineri, & Dell, 2020; Nugroho, 2017; Adom, Yeboah, & Ankrah, 2016; Winter, 2003).

Constructing Own Worldview

With constructivist research paradigm, students are involved in the knowledge development to make sense of the new learning experience by connecting with their prior knowledge, thus, as people faculty and students construct our Worldview, which is the way we see reality, including teaching and learning in the light of faculty formative feedback, and students' responses to feedback (MacLeod, Burm, & Mann, 2022; Plarska, 2021; Bogna, Raineri, & Dell, 2020; Nugroho, 2017; Adom, Yeboah, & Ankrah, 2016; Winter, 2003).

Reflective Journaling - Autoethnography

This study used qualitative approaches, action research, and a classic practitioner's method (Davison, Martinsons, & Malaurent, 2021; Baumfield, Wall, & Hall, 2012; McNiff, 2013; Grady, 1998). These qualitative approaches include reflective Journaling, also known as autoethnography to document experiences as faculty giving formative feedback on students' work and observing their responses, and the study analyzed these reflections (Segú Odriozola, 2023; Lutz, & Parette, 2019; Bowers, Chen, Clifton, Gamez, Giffin, Johnson, & Pastryk, 2022; Farrell, Bourgeois-Law, Ajjawi, & Regehr, 2017). The student's written responses will give an understanding of the feedback process and its reception by the ITL 604 students.

Action Research

The study used an action research framework guided by a practitioner inquiry approach following a cyclical process of planning, acting, observing, and reflecting (Davison, Martinsons, & Malaurent, 2021; Casey & Coghlan, 2021; Stringer & Aragón, 2020; Coghlan, 2019; MacDonald, 2012).

Further, a thematic analysis of students' responses is applied to collect open-ended responses from students about the formative feedback they received in their work and analyze them for patterns using manual coding (Yukhymenko, Brown, Lawless, Brodowinska, & Mullin, 2014; McWatt, 2021).

A Case Study

A case study methodology focusing on ITL 604 Class is applied to track changes in student engagement and performance over time as a response to formative feedback (Schwandt & Gates, 2018; Harland, 2014; Tellis, 1997).

A Practitioner Method

Finally, the study used a classic practitioner method to implement a change in feedback approach, observing and recording students' responses to consequently refine the formative feedback strategy (Heikkinen, de Jong, & Vanderlinde, 2016; Anderson & Gold, 2015; Chernick, 2011; Shields, 2004).

For students to benefit from the faculty formative feedback, it must be positive, motivating, development of self-regulating skills, timeliness, specific and constructive, clear direction on student improvement, varied ways of communication, and improvement teacher student relationship in the learning process (Fluckiger, Vigil, Pasco, & Danielson, 2010;)

Self-Evaluative Method

This is a self-evaluative study that seeks to demonstrate that students' learning is highly dependent on many elements shown in the study, including students' perceptions of faculty's formative feedback, instructional processes, favorable relationships between students and their teachers, and the overall effects of faculty formative feedback.

Site

The practitioner delved into his own ITL 604 Online Class. The choice of observing this class centers on time, convenience, and because the study seeks to help improve teaching, faculty formative feedback, student engagement, students' responses to enhance the ongoing faculty formative feedback to students' work, and students' responses or reactions to the faculty formative feedback.

Data Analysis

Throughout the study data were analyzed, research questions based on faculty formative feedback and students' responses were established to guide the literature review by revealing commonalities, patterns, and summarization of themes; and this thematic analysis assisted in identifying themes across the literature, practitioner observation and feedback to students' work, and students' responses and systematic categorization of the whole research content; further, Open AI GPT was responsibly used keeping the integrity of the process to recognize patterns and themes (Braun, & Clarke, 2024; Perkins, & Roe, 2024; Christou, 2024; Naeem, Ozuem, Howell, & Ranfagni, 2023; Vaismoradi, Turunen, & Bondas, 2013).

Limitations of the Study

This study's limitations are evident since it is a practitioner's study; therefore, it is biased. It is biased in the sense that the practitioner is interested in collecting data from his own class observations and studying the behavior of his own students, and he does not go out to study other classes or other schools.

Delimitation of the Study

The study's delimitation is specific to the practitioner's classroom, where he teaches ITL 604. He is not looking into other classes or courses but specifically examining his classroom to ascertain students' behavioral attitudes and responses to faculty formative feedback on their work.

Definition of Educational Terms

The study defined some specific educational terms to enhance the clarity and meaning of some of the terms used in the study, which were either used interchangeably or independently defined to enhance meaning and effectiveness in the educational arena.

Students

Learners in a regular classroom or an online learning environment.

Faculty Formative Feedback

What the teacher or instructor says or comments about students' work (assignments, discussions, etc.)

Students' Responses

What students say about faculty formative feedback.

Teacher

A teacher is one who teaches students.

Instructor

An instructor is one who teaches students.

Faculty

Teachers and instructors in colleges or universities are responsible for teaching, curriculum development, and administration.

LITERATURE REVIEW

The literature part of the study delved into the literature addressing the study's research question, reviewed and analyzed data to answer the research questions. From the questions, topics were established and aligned with the research questions to enhance the flow and various facets of the study.

The Meaning of Students' Responses and Faculty Formative Feedback

This study defined two important things primarily used in it, which include students' responses and faculty formative feedback.

Students' Responses

Responding to Faculty Formative Feedback. Students' responses occur when the students themselves after the faculty sends formative feedback showing what they think about their work. Here, students work in online education, including discussions and assignments such as 1A assignment, 1B assignment, 2A assignment, 2B assignment, 3A, assignment 3C, assignment 4A, and assignment 4B. When the faculty writes creating formative feedback concerning the students' assignments, and the students respond showing how they are students are doing, demonstrating their understanding of the faculty's formative feedback, this is what the study defines as students' responses (Lui, & Andrade, 2022; Fluckiger, Vigil, Pasco, & Danielson, 2010). Students' responses may be that the faculty feedback has helped them to understand the assignment questions better or that explanations of the discussions and assignments are clear after reading the faculty formative feedback (Lui & Andrade, 2022; Fluckiger, Vigil, Pasco, & Danielson, 2010).

Students' Responses Bring Learning to the Light. If faculty formative feedback influences students' learning, on the other hand, students' responses bring learning to the light, thus making it visible; thus, in a nutshell, students' responses to faculty formative feedback include how learners interpret, engage with, and act upon the feedback they receive. These responses can be cognitive (e.g., understanding the feedback), emotional (e.g., feeling motivated or discouraged), and behavioral (e.g., revising work based on feedback); and effective engagement with formative feedback is crucial for learning, as it enables students to make informed adjustments to their work and strategies (Lui, & Andrade, 2022; Hattie, 2021; Hattie, 2015; Hattie, 2012; Fluckiger, Vigil, Pasco, & Danielson, 2010).

Faculty Formative Feedback

Ongoing Assessment. The study takes faculty formative feedback as an ongoing assessment of student learning during an online learning and teaching environment, different from summative assessment at the end of teaching; specifically, it refers to when the faculty in higher education learning, especially in online setting, reads and assesses students' construction of their learning experiences through their understanding of the class work in terms of the established collaborative discussion and assignments and determines whether the students are meeting the learning outcomes or whether they need improvement, and the faculty writes to the students' gradebook detailing what they need to work on to succeed in their learning (Mbuva, 2023; Morris, Perry, & Wardle, 2021; Baleni, 2015; Vonderwell, & Boboc, 2013; Gikandi, Morrow, & Davis, 2011; Espasa, & Meneses, 2010). Faculty formative feedback is specific and focuses on evaluating students' work to see whether they are doing well and need help with their assignments (Baleni, 2015).

Beware of Students' Responses. However, suppose students do not respond to faculty formative feedback; we are in a massive problem because for formative feedback to mean anything at all, faculty must be aware and very keen on the students' responses because we want to know if students read the faculty's formative feedback and consequently come to the point of the understanding the assignments, or whether they need help, and this can only be gathered from students' work and responses (Lui, & Andrade, 2022).

Guiding Students. Summarily, faculty formative feedback refers to the information faculty provides aiming at guiding students to improve their learning and performance; it is ongoing, specific, and constructive, focusing on helping students understand their progress and areas for embellishment and improvement; and the faculty can administer the feedback through various formats, including written

comments, audio recordings, and video messages (Lui, & Andrade, 2022; Hattie, 2021; Morris, Perry, & Wardle, 2021; McConlogue, 2020; Hattie, 2015; Hattie, 2012; Gikandi, Morrow, & Davis, 2011).

Some Ways We Know Students Are Responding to Their Faculty Formative Feedback

The question we want to answer here is how students respond to their faculty's formative feedback. Have they read the faculty's formative feedback? What evidence do we have that students are responding to show and explain that they received the formative feedback?

To answer these questions, we must consider four things: assignment revisions, academic performance, surveys and questionnaires, and feedback access logs.

Assignment Revisions

Changes Students Make to Their Work (Assignments, Discussions, etc.). Studies show that faculty can know that students are responding to the formative feedback and that they are understanding by analyzing changes students make to their work between initial and revised submissions would provide evidence of students acting on feedback (Robins, Smith, Kost, Combs, Kritek, & Klein, 2020; Ellegaard, Damsgaard, Bruun, & Johannsen, 2018; Owen, 2016). Moreover, improvements in subsequent drafts students submit would often demonstrate that students have engaged with faculty formative feedback and have applied the feedback they received from the faculty (Irons & Elkington, 2021; Bader, Burner, Iversen, & Varga, 2019; McGarrell & Verbeem, 2007).

Students' Improved Work Is the Sign. By students improving their completed work they will meet the class learning outcomes and the overall course expectations set for their learning and then we know faculty formative feedback is working between faculty and the student (Zhu, Liu, & Lee, 2020; Kulkarni, Bernstein, & Klemmer, 2015); However, if the students are silent and not responding to the faculty showing genuine partnership in teaching and learning, then perhaps the students did not read or they ignored the feedback all together (Mandouit, 2018; Rowe, 2011; Fluckiger, Vigil, Pasco, & Danielson, 2010).

Ensuring Students' Engagement. Therefore, whether students respond to faculty formative feedback is critical and should be on the minds of every faculty member in the online class setting. Educators as practitioners should ensure that students in their online classes are engaged, respond to faculty formative feedback, and are fully involved in their learning. When students' work after faculty formative feedback does not show evidence of improvement, and they do not talk about it in their responses, then we know they did not read the formative feedback; and this is a significant loss because it shows that the student did not benefit from the feedback; and this leads this study to faculty follow-up to help us understand students' learning needs and how best we can support them to meet their learning needs. (Irons & Elkington, 2021; Mandouit, 2018; Fluckiger, Vigil, Pasco, & Danielson, 2010).

Academic Performance

Performing Better. One of the best ways to know if students are responding is through academic performance. A study by Crisp (2020) found that students who received individualized, content-specific faculty formative feedback performed better on standardized exams, and this was based on the timeliness, frequency, distributions, and individualized and content-specific feedback (Hutchins, 2024; Prince, 2022; Calhoun, 2020; Wolfe & Reuer, 2019; Larsen, 2016).

Overall Academic Success. So, faculty and school administrators must make it a practice of applying specific targeted feedback by direct interaction between students and faculty through faculty formative feedback and students' responses to assure they are reading them and help them improve their work, meet their learning needs, and succeed in their academic performance. The students' overall academic success is absolute proof that students are responding to faculty formative feedback, and studies already show that there are correlations between the quality or quantity of feedback and students' academic outcomes, thus suggesting responsiveness. (Hutchins, 2024; Prince, 2022; Calhoun, 2020; Pinger, Rakoczy, Besser, & Klieme, 2018; Larsen, 2016).

Surveys and Questionnaires

Surveys and Questionnaire. Another way of knowing if students are responding to faculty formative feedback is to serve them surveys and questionnaires to ascertain and collect information about their perceptions and reported behaviors regarding feedback (Van der Kleij, & Lipnevich, 2021; Gehlbach, Robinson, Finefer-Rosenbluh, Benshoof, & Schneider, 2018; Mulliner, & Tucker, 2017)

These Instruments. Consequently, these instruments will assess how students perceive the usefulness of faculty formative feedback and how they incorporate it into their revisions of their assignments, and in the overall learning processes (Irons, & Elkington, 2021; McCarthy, 2017; Fluckiger, Vigil, Pasco, & Danielson, 2010;).

Feedback Access Logs

Another way of knowing students is by responding to feedback and accessing logs. This learning management system (LMS) can track whether students access the faculty formative feedback provided by the faculty (Winstone, Bourne, Medland, Niculescu, & Rees, 2021; Uhlenhake, 2019; Laflen & Smith, 2017; Risley, 2006). By using this LMS data on students' responses, we can determine the frequency and duration of students' interactions with feedback materials (Cantabella, Martínez-España, Ayuso, Yáñez, & Muñoz, 2019; Cerezo, Sánchez-Santillán, Paule-Ruiz, & Núñez, 2016; Wei, Peng, & Chou, 2015).

Some Specific Key Factors Influencing Students' Responses to Faculty Formative Feedback

Some factors influencing students' responses to faculty formative feedback include timeliness, specificity, constructive criticism, actionable steps, and feedback delivery methods.

Timeliness

Studies show that providing feedback promptly after an assignment or learning activities prompts students to respond and apply it immediately (Fisher, Brotto, Lim, & Southam, 2025; Yee, Deshler, Rogers, Petrulis, Potvin, & Sweeney, 2022; Winstone, Nash, Rowntree, & Parker, 2017; Wiggins, 2012). The timely faculty formative feedback is not one time by ongoing because it aims at enhancing its relevance and usefulness of the feedback for students, making them more likely to engage with it (Fisher, Brotto, Lim, & Southam, 2025; Mandouit, 2018; Fluckiger, Vigil, Pasco, & Danielson, 2010).

Specificity

Feedback should pinpoint specific areas of strength and weakness, rather than general comments, vague, because non-specific feedback will not be effective and not able to guide academic improvement (Fisher, Brotto, Lim, & Southam, 2025; Yee, Deshler, Rogers, Petrulis, Potvin, & Sweeney, 2022; Nelson, Ysseldyke, & Christ, 2015; Aguinis, Gottfredson, & Joo, 2012; Schartel, 2012; Williams, & Smith, 2017; Chan, & Luo, 2022; Hattie, J., & Timperley, 2007).

Constructive Criticism

Feedback should be delivered in a supportive manner, focusing on improvement rather than criticism (Fisher, Brotto, Lim, & Southam, 2025; Yee, Deshler, Rogers, Petrulis, Potvin, & Sweeney, 2022; Chan, & Luo, 2022; Fong, Schallert, Williams, Williamson, Warner, Lin, & Kim, 2018; Schartel, 2012; Carless, 2006). This study shows that students are more receptive to feedback perceived as constructive and encouraging, rather than purely critical, which turns students off from learning (Williams & Smith, 2017; Baker, Perreault, Reid, & Blanchard, 2013; Thomas & Arnold, 2011; Brinko, 1993).

Actionable Steps

The faculty formative feedback should provide straightforward suggestions on how students can improve their Work (Fisher, Brotto, Lim, & Southam, 2025; Yee, Deshler, Rogers, Petrulis, Potvin, & Sweeney, 2022; Irons, & Elkington, 2021; Nelson, Ysseldyke, & Christ, 2015; Wiggins, G. 2012; Sadler, 2010; Halverson, 2010). Moreover, faculty formative feedback must include clear guidance or improvement

strategies to effectively support learning (Narciss & Zumbach, 2022; Irons & Elkington, 2021; Morris, Perry & Wardle, 2021).

Feedback Delivery Method

Studies have shown that students may respond better to personalized feedback in individual Zoom video meetings, written comments, or online platforms depending on their learning style (Yee, Deshler, Rogers, Petrulis, Potvin, & Sweeney, 2022; Chan, & Luo, 2022; Ramani, Könings, Ginsburg, & van der Vleuten, 2019; Nicol, & Macfarlane-Dick, 2006). The delivery method—whether written, verbal, digital, or face-to-face—affects how students interpret and use feedback, with some formats fostering greater engagement (Ginsburg & van der Vleuten, 2019; Nicol & Macfarlane-Dick, 2006).

Some Potential Challenges With Formative Feedback Factor

Although faculty formative feedback benefits students in their learning, we find some very critical challenges such as overwhelming feedback provided by the faculty, unclear feedback, and the negative perception students may have about faculty formative feedback.

Overwhelming Feedback

From the onset, it is true that too much of everything is not good, whether food or drinks; and the same way is true of the faculty formative feedback. The reason being that too much of feedback can easily confuse and overwhelm the learners, so faculty need to measure based on the students' learning needs, how much feedback they need to write, be confusing and overwhelming for students (Doyle, 2023; Lodge, Kennedy, Lockyer, Arguel, & Pachman, 2018; Glover, & Brown, 2006).

Unclear Feedback

Unclear faculty formative feedback will not support student learning because the feedback is vague and obviously it may not be helpful for students' learning because of the long time they use trying to understand faculty's comments or writing; hence, instructors must be clear in their communication to support students' learning and to avoid misunderstanding and waste of students' time (Doyle, 2023; Morris, Perry, & Wardle, 2021; Bader, Burner, Iversen, & Varga, 2019; Moya, & Tobar, 2017; Shute, 2008; Glover, & Brown, 2006).

Negative Perception of Feedback

Perception is as effective as the truth about anything, and that is why faculty should be mindful of students' perception of feedback because if the faculty formative feedback is negative, it's likely that students may become discouraged of doing their online class assignments; because after all they deem the feedback to be negative, overly critical or not relevant to their learning needs; hence, instructor must view the feedback they give in the viewpoint of the students whom they are trying to help (Kobra, 2024; Doyle, 2023; Tan, Whipp, Gagné, & Van Quaquebeke, 2019; Al-Hattami, 2019; Mulliner, & Tucker, 2017). What does this mean to educators? It means that as teachers we do much and so be it; good teachers are good because they want to support students' learning all through.

Some Effects of the Usage of Faculty Formative Feedback on Students' Learning in the Online Learning Space

We have addressed students' responses to faculty formative feedback, and it is fitting to address the effects of the usage of faculty formative feedback on students' learning in the online learning space. What happens to students when good faculty formative feedback is applied by faculty is exhilarating. In examining literature, the effect of formative feedback shows various benefits of faculty formative feedback to student learning, including enhanced motivation and self-directed learning, improved academic performance, positive emotional responses, enhanced engagement, positive student perceptions, behavior changes, improved student-faculty relationship, and increased student satisfaction.

Enhanced Motivation and Self-Directed Learning

Modify, Nonevaluative, Supportive, Timely, and Specific. Faculty formative feedback, as “information communicated to the learner that is intended to modify his or her thinking or behavior to improve learning,” (Shute, para 1. 2008) is a game changer in students’ learning. It should “should be nonevaluative, supportive, timely, and specific” (Shute, para 1. 2008) because it produces and promotes enhanced student motivation and self-directed learning (Mohamad Nasri, Nasri, & Abd Talib, 2022; Choi, Onah, Pang, Sinclair, & Uhomoibhi, 2021; Calhoun, 2020; Anderson, 2016; Sumantri, & Satriani, 2016; Rowe, para. 1, 2017; Embo, Driessen, Valcke, & Van der Vleuten, 2010; Shute, 2008).

Constructive Feedback. Theorists of formative feedback demonstrate that timely and constructive feedback can boost students’ motivation and encourage self-directed learning behaviors and development of self-determination in learning (Onah, Pang, Sinclair, & Uhomoibhi, 2021; Yousuf, Conlan, & Wade, 2020). For instance, during the COVID-19 pandemic, online formative feedback was found to enhance students’ motivation and self-directed learning skills significantly (Tlili, Burgos, Olivier, & Huang, 2022; Zainuddin, Farida, Keumala, Kurniawan, & Iskandar, 2022; Hung, 2022; Calhoun, 2020).

Improved Academic Performance

Individualized, Content Specific. Studies have demonstrated that students who receive more individualized and content-specific feedback tend to achieve higher scores on assessments (Onah, Pang, Sinclair, & Uhomoibhi, 2021; Yousuf, Conlan, & Wade, 2020); This means that the improved students’ academic achievement is because faculty formative feedback helps students better understand course material, learning outcomes, and course expectations (Morris, Perry, & Wardle, 2021; Hill, Berlin, Choate, Cravens-Brown, McKendrick-Calder, & Smith, 2021; Crisp, 2020; Van Wart, Ni, Rose, McWeeney, & Worrell, 2019).

Highly Developed Academic Achievement. In the overall understanding of the significance of faculty formative feedback, students who actively engage with feedback often improve their assignments and exhibit highly developed academic achievement. For example, a Med study found that students who received faculty formative feedback had positive learning experiences and performed better at the end of the course (Irons, & Elkington, 2021; Hill, Berlin, Choate, Cravens-Brown, McKendrick-Calder, & Smith, 2021; McCarthy, 2017; Moya, & Tobar, 2017; Marden, Ulman, Wilson, & Velan, 2013).

Positive Emotional Responses

Supportive feedback can foster positive emotions, such as increased confidence, students’ interest in learning and reduced anxiety, which are conducive to learning (Rezai, Ahmadi, Ashkani, & Hosseini, 2025; Fisher, Brotto, Lim, & Southam, 2025; Kobra, 2024; Yee, Deshler, Rogers, Petrulis, Potvin, & Sweeney, 2022; Yousuf, Conlan, & Wade, 2020; Värlander, 2008); Conversely, when faculty formative feedback is poorly delivered, it may lead to negative emotions that hinder learning, thus killing motivation and will to move forward, a learning quality needed for academic success (Fong, & Schallert, 2023; Hill, Berlin, Choate, Cravens-Brown, McKendrick-Calder, & Smith, 2021; Shelton-Strong, & Mynard, 2021; Rowe, 2017)

Enhanced Engagement

When students perceive feedback as valuable and relevant, they are more likely to engage deeply with course content and because of self-determination skills they develop throughout the study, they participate actively in learning activities (Rezai, Ahmadi, Ashkani, & Hosseini, 2025; Onah, Pang, Sinclair, & Uhomoibhi, 2021; Yousuf, Conlan, & Wade, 2020; Mohammadi Zenouzagh, Admiraal, & Saab, 2025).

Positive Student Perceptions

Timely, Specific, and Actionable Feedback. Studies indicate that students value timely, specific, and actionable feedback (Rezai, Ahmadi, Ashkani, & Hosseini, 2025; Mohammadi Zenouzagh, Admiraal, & Saab, 2025; Yee, Deshler, Rogers, Petrulis, Potvin, & Sweeney, 2022; Onah, Pang, Sinclair, & Uhomoibhi, 2021; Yousuf, Conlan, & Wade, 2020).

Helpful, Not Negative, and Disorganized Feedback. When students perceive feedback as helpful, they are more likely to apply it, leading to better learning outcomes. However, when students face negative, disorganized, and none substantial feedback, they are put off, and this affects their academic performance, thus causing them to perform below expectations or fail to meet educational standards and success (Fisher, Brotto, Lim, & Southam, 2025; Fong, & Schallert, 2023; Hill, Berlin, Choate, Cravens-Brown, McKendrick-Calder, & Smith, 2021; Morris, Perry, & Wardle, 2021; Owen, 2016; Yorke, 2001).

Culture of Caring. What does this mean to an instructor who cares for their student's success in their learning? Our purpose in preparing teachers for the 21st century should be coupled with a culture of care to ensure teacher candidates succeed in their learning and, consequently, their teaching profession in the long run; this comes about by supporting students, understanding the needs of adult learners making career changes, and working hard to accommodate students, to produce positive student perceptions on our teaching, and formative feedback to be clear, and specific to student learning needs (Ball, & Ladson-Billings, 2020; Benade, 2017; Velasquez, A., West, Graham, & Osguthorpe, 2013; Schleicher, 2012; Day, Lovato, Tull, & Ross-Gordon, 2011; Windschitl, 2009; Compton, Cox, & Laanan, 2006).

Behavioral Changes

Students Benefit. Observations of students revising their work based on feedback, seeking clarification, or demonstrating improved understanding in subsequent tasks suggest that they are benefiting from the feedback provided (Rezai, Ahmadi, Ashkani, & Hosseini, 2025; Fisher, Brotto, Lim, & Southam, 2025; Darby, 2019; Yee, Deshler, Rogers, Petrusis, Potvin, & Sweeney, 2022; Baleni, 2015).

Instructors' Commitment. Instructors who commit to knowing their students, support students' learning by being there for students by making follow-ups, walking hand in hand in the online learning platform, listens to students and asks them the areas they need help and what they expect to learning from the class, connecting and communicating with students via emails and calls, see immediate behavioral changes and positive attitude as a response to reasonably organized faculty formative feedback (Bender, 2023; Mbuva, 2023; Hollister, Nair, Hill-Lindsay, & Chukoskie, 2022; Darby, 2019; Hoffman, 2014; Palloff, & Pratt, 2011).

Positive Changes. As educators, we want to see positive changes from our students, and the beneficiaries are students and instructors, because they come to know they are teaching correctly. What an excellent reward this is!

Improved Student-Faculty Relationship

Open Relationship

Student-Teacher Healthy Relationships. Open communication through formative feedback can foster a more positive relationship between students and instructors. Authentic pedagogy seeks to cultivate student teacher healthy relationships to enrich teaching and student learning, and online-teaching and learning studies show that student-faculty warm relationships enhance student learning and academic success (Bender, 2023; Mbuva, 2023; Darby, 2019; Davis, Hoffman, 2014; Christe, 2013; Summers, & Miller, 2012; Palloff, & Pratt, 2011)

Clarity, Commendation, and Acknowledgment of Students' Works. However, this student-faculty relationship is works with faculty formative feedback spelling the information of what students need to do to bring their work to the expected learning expectations and at the same time commending and acknowledging students when their work demonstrates they met the academic excellence expected (Bender, 2023; Darby, 2019; Hoffman, 2014; Palloff, & Pratt, 2011; Jackson, Jones, & Rodriguez, 2010). The evidence that students benefit from an instructor-student relationship is easy to get because we can get it through their improved work, and if the students respond to faculty formative feedback through writing via email, collaborative discussions, and course evaluation at the end of the class.

Increased Satisfaction

Effective Formative Feedback. Students receiving effective formative feedback report show higher satisfaction with their learning experiences, which is associated with greater engagement and persistence

in online courses (Rezai, Ahmadi, Ashkani, & Hosseini, 2025; Mohammadi Zenouzagh, Admiraal, & Saab, 2025; Yousuf, Conlan, & Wade, 2020; Crisp, 2020; Darby, 2019; Hoffman, 2014; Davis, Summers, & Miller, 2012).

Faculty Connecting and Communicating With Students. When faculty make an effort to connect with the students and communicate with the students and it is essential because it is through this connection that faculty helps students understand the limitations of their assignments or if they did not complete their discussions, field-study assignments such of simulated learning experiences it is faculties responsibility to help the students reach their academic goals by answering the questions correctly as it is expected in a given course (Fisher, Brotto, Lim, & Southam, 2025; Chory, & Offstein, 2017; Mihanović, Batinić, & Pavičić, 2016; Hoffman, 2014; Jackson, Jones, & Rodriguez, 2010; Anderson, & Carta-Falsa, 2002).

Healthy Faculty-Student Relations. We find that healthy student-faculty relations increase students' satisfaction, motivation, and performance because faculty helps students understand their inadequacies or areas of embellishment and improvement in their learning so that the learning outcomes of that course are achieved (Fisher, Brotto, Lim, & Southam, 2025; Van Wart, Ni, Rose, McWeeney, & Worrell, 2019; Chory & Offstein, 2017; Mihanović, Batinić, & Pavičić, 2016; Christe, 2013; Jackson, Jones, & Rodriguez, 2010).

Practitioner's Observations

The practitioner's observations included positive students' responses, faculty communication with students, and faculty decisions to accommodate students based on their learning needs.

Positive Students' Responses

- Throughout the year of teaching in the ITL 604, students generally respond positively to faculty formative feedback when it is timely, specific, actionable, and focused on areas for improvement.
- It allows students to identify gaps in their understanding of the assignments and course expectations, adjust their learning strategies, and feel more engaged in their learning process. This leads to improved academic performance and a greater sense of self-efficacy.
- However, the effectiveness can depend on factors like communicating with the students, the delivery method, clarity of feedback, and the student's perception of their relationship with the faculty member (Fisher, Brotto, Lim, & Southam, 2025).

Faculty Communication to Students

- For students to succeed in their learning, faculty should send personalized emails and even call them to understand their learning needs, including discussing late or incomplete assignments or discussions.
- When instructors call or email students, they alert them that they did not meet assignment expectations.
- However, the communication must be clear and direct, highlighting the areas students must improve to meet the course expectations.

Faculty Decision to Accommodate Students

- If students do not take the call, instructors should leave and send an email with a clear message articulating the purpose of calling and the need to follow up concerning assignments, for instance, 1A, 2A, 3B, or 4A.
- In some cases, instructors may find that students forgot the assignments and the submission time or that they are sick, have an ill family member, or have emergencies.
- Now, when instructors find the truth, they will wisely decide to accommodate these students by not changing the content of the assignments but providing support and strategies to enhance student learning.
- Extend the time of submission.
- Meet the students to learn about their situations and plan to help them consistently succeed at the end of the week.

Some Examples of Faculty Formative Feedback to Students' Work

Some examples of faculty formative feedback on students' work are commendable work, outstanding teaching plan, limited comprehension, permission to resubmit work, reaching out and encouragement to submit work at a specific time, commendation on students' participation in collaborative Zoom video conference, and support and guidance.

- **Commendable Work.** Your work is commendable. However, you would improve it if you showed ways to engage learners in your classroom.
- **Outstanding Teaching Plan.** You have an exceptional teaching plan in your responses. How would you show how your teaching plan can be applied to 3rd graders?
- **Limited Comprehension and Permission to Resubmit Work.** Your responses on teaching reading comprehension to 5th graders are limited. So, I permit you to resubmit the same assignment and include all the parts needed to foster effective techniques and support comprehension teaching.
- **Reaching Out and Encouragement to Submit Work at a Specific Time.** Good afternoon. I am writing to determine what happened in week 1, assignment 1A. I talked to you in class via Zoom Videoconferencing, and you can complete this assignment for some points. So, please move on and submit this missing assignment by tomorrow at 11:59 pm.
- **Understanding and working with Specific Time.** I understand your situation, but I will allow you to submit all your week 2 assignments by Thursday at midnight.
- **Commendation on Student Participation in Collaborative Zoom Conference.** Your participation in the collaborative Zoom Video conferencing Class last night was excellent, and I commend you for your efforts in learning.
- **Support and Guidance.** Welcome to the ITL Class! Please go to the course Home, scroll down to week 1, click week 1, locate MCs, click it, and follow the lead. I hope this helps you. If not, please attend our first Zoom meeting on 2/5, and I will be able to help. Please let me know if you have any other questions.
- **Highly Developed Work.** Your responses to Week 1: Assignment 1A-Personal Identity Analysis were detailed, purposeful, and highly developed. Congratulations, and keep it up!
- **Limited Responses, Be Encouraged.** Your responses are limited to the expectations because you must respond to questions concerning the cultural iceberg and bias. Equally, you didn't address your assets fully. Finally, you missed the synthesis part of the assignment. Be encouraged and take on this assignment with confidence. I permit you to resubmit these areas with adequate responses/answers to the questions asked.
- **Difficulty Opening Your Assignment.** Your assignment didn't open, and when I downloaded it, it showed an error. Such as, {"Errors": [{"Message": "Not Authorized"}]} So, what? Please resubmit your assignment to regain your full credit. For now, it shows 0 points because it didn't open, and I must show that I graded the work. Thank you so much for your cooperation.
- **Responses are Emerging; Permission to Resubmit.** Your responses to week 2 assessment 2A—asset identification were emerging. However, I permit you to resubmit this work by Wednesday at 10 pm, articulating with a more apparent color showing the assets in the third column and how you would engage learners. Thanks.

Some Observed Challenges to Faculty Formative Feedback by the Practitioner

Some observed challenges to faculty formative feedback by the practitioner involved, students' attitude, lack of specificity, lateness, and too much feedback.

- **Students' attitude.** Students' failure to perceive faculty's feedback positively, will yield to uncooperative attitude, students' quietness and lack of engagement to learning.
- **Lack of specificity.** When instructor-student communication is vague or unclear, and lacks direction or plan of action, students tend to do little or nothing with their assignments.

- **Lateness.** It is evident that providing late feedback where students might lack time to work on their assignments by making amendments or embellishments to satisfy learning outcomes they perform poorly.
- **Too much feedback.** Too much feedback by instructors may overwhelm the students and may cause confusions and affect the overall students' performance.
- **Students' procrastination.** Students are waiting to work at the end of the week or class, instead of making learning a daily activity.
- **Students' fake promise.** Students respond to the teacher and promise to complete their work on time but ultimately fail to do so.

Some Examples of Students' Responses to Faculty's Formative Feedback

Faculty Formative Feedback and Student Response Question

Students Talking About Feedback. One of the questions we can ask here is, are the students themselves talking about what they have been able to do differently after faculty formative feedback? Has the feedback helped them in their learning?

Students' Revised Work. Indeed, this is an excellent and useful question in this study because if students have benefited from feedback, they want to discuss it. In the same way, if they have read the feedback and seen where the faculty wants them to go to meet the course expectations, students will show it up in their new revised assignments, reflections, and discussions. The things that they have included will show that they have learned.

Some Examples of Students' Responses to Faculty Formative Feedback

In this area of study, we see the students' responses after receiving and reading faculty formative feedback.

- **Thank you for Teaching, Encouraging, Assisting, and Understanding.** First, thank you for teaching our ITL 604 course and providing encouragement, assistance, and understanding.
- **Appreciation of timely feedback, Help, and Inspiration.** I appreciate your feedback and the help you provided when I needed assistance during Zoom sessions and extra time for assignments. I also appreciate your feedback on the extra effort I gave. That helps inspire me to continue to do thorough, detailed, and thoughtful work moving forward.
- **Seeking for Assistance.** Hello Professor, I am doing the Micro-Competencies, and for MC 2, I can't find the information. I would appreciate your help.
- **Thank you, and I am Learning a Lot.** Thank you for teaching the 604 class. I have learned a lot, and it was a very fun class to participate in. I hope I see you soon in another class. Good luck.
- **Thank you for Understanding.** Hello Professor, thank you for Understanding. I'm still working on some of the assignments from the first and second weeks. I'm trying to spend most of my time on them, but I still can't finish them. I will finish everything by the end of the third week. Sorry for the delay.
- **Please Let Me Know.** I hope all is well. My Assignment 1A document and synthesis reflection video are attached. If you have any trouble viewing that video, please let me know, and I can either transcribe it or find another way for you to view it. Please let me know if you have any other questions about the assignment.
- **Much-Need Extension.** Thank you again for the much-needed extension on this assignment, and I hope you have an incredible week.
- **Regaining Missing Points.** Professor, thank you so much for allowing me to regain those missing points that I lost out on because of my expired video link. I am not sure how to add it to the worksheet without it expiring again, so I am just attaching it to the worksheet as an add-on. I apologize for the inconvenience experienced during the first submission, and again, thank you so much for your leniency.

- **Technical Issues.** Apologies for the tardy submission. I was having technical issues with my video. Please find it attached. I'm looking forward to week 2.
- **Opportunity To Resubmit.** Here is my synthesis. I don't know why it didn't work. Thank you for the opportunity to resubmit.
- **Not Able to Do Assignments.** Hey Professor! As I stated in my previous assignment 1B and told you in Zoom today, I just got back from a cruise and was barely able to do these assignments.

FINDINGS OF THE STUDY

The purpose of this study was to explore students' responses to faculty's formative feedback in the online learning space from a higher education practitioner's perspective. The questions of the study included: (1) What is the meaning of students' responses and formative feedback? (2) How do we know students are responding to their faculty's formative feedback? (3) What Are Some Specific Factors Influencing Students' Responses to Faculty Formative Feedback? (4) What are some of the potential challenges associated with the formative feedback examined by the practitioner? (5) What are the effects of using faculty formative feedback on students' learning and responses in the online learning space?

(6) What are some of the practitioner's observations? (7) What are some of the practitioner's faculty formative feedback statements? (8) What are some observed challenges to faculty formative feedback by the practitioner? (9) What are some of the students' responses to faculty formative feedback during and after class completion?

Q#1

The meaning of students' responses and formative feedback. The study showed that students' responses occur when students react to the faculty formative feedback by writing; whereas faculty formative feedback occurs when instructors read students' work expressed in assignments or collaborative discussions to determine whether they are meeting the class learning outcomes and consequently provide guidance and commendations.

Q#2

How do we know students are responding to their faculty's formative feedback? The study's findings showed that Faculty can understand that students respond to Faculty formative feedback by observing assignment revisions, overall academic performance, surveys and questionnaires, and feedback access logs.

Q#3

Some Specific Factors Influencing Students' Responses to Faculty Formative Feedback. Some specific factors influencing students' responses to faculty formative feedback included providing feedback promptly, specificity, constructive criticism, actional steps, and feedback delivery method.

Q#4

Some of the potential challenges are associated with the formative feedback. The study and class observations showed that there are potent challenges with faculty formative feedback, and these involve instructors' provision of overwhelming feedback, unclear feedback, and the negative perception of feedback by the students.

Q#5

The effects of using faculty formative feedback on students' learning and responses in the online learning space. The impact of using faculty formative feedback on students' learning and responses in the online learning space are many and dynamic. First, feedback produces enhanced student motivation and self-directed learning, and the feedback should allow students to modify their work, non-evaluative, supportive, timely, specific, and constructive. Second, feedback aims to improve students' academic performance by providing individualized and content-specific feedback, seeing highly developed students'

work, and improving overall academic achievement. Third, feedback yields positive student emotional responses through the instructor's supportive feedback to foster positive emotions, increase students' confidence and interest in learning, and reduce anxiety. Fourth, feedback enhances students' engagement in their learning by providing relevant feedback, thus enhancing their active participation. Five, feedback produces positive student perceptions when feedback is timely, specific, actionable, helpful, caring, benefiting students, faculty process, commitment, and the overall positive change. Six, Faculty formative feedback yields open relationships where we can have student-teacher healthy relationships, clear feedback which envelops commendation and acknowledgment of students' work in terms of assignments, discussions, and field study projects. Seven, feedback produces increased student satisfaction because it is effective. Faculty members are committed to connecting and communicating with the students and maintaining healthy faculty-student relations.

Q#6

Practitioner's Observations. The practitioner has observed that students respond to Faculty formative feedback on areas for improvement in students' learning when provided in a timely, specific, actionable, and focused manner. Further, the practitioner found that students want to relate with their instructors when the instructors personalize communication with to meet their learning needs; however, students wish to the communication whether via email or calling to be addressing the areas students need improvement by revision of their work, Faculty should be ready to make wise decision when dealing with students who are late, sick, emergencies, or have not submitted their work on time, and that the decision is to accommodate students by articulating with clarity the areas students of assignments, collaborative discussions, etc. Faculty need to go the extra mile to know why students are not engaging, after which they accommodate students by providing support and an action plan for completing the assignments within the accommodated extension, which the faculty should clearly articulate in the action plan.

Q#7

Some of the practitioner's faculty formative feedback statements. In his ITL 604 Class, the practitioner relentlessly made his formative feedback supporting and encouraging statements, including you commendable work, outstanding teaching plan, limited comprehension and permission to resubmit work after revision, encouragement and extra time to resubmit work, understanding working with specific time, commendation students participation in the collaborative online learning experience, consistently supporting and guiding, sincerely showing students when they've done highly developed work, work is emerging, work is limited and needs revision and resubmission, and showing them when opening student's work in their gradebook is difficult based on the software they used in submitting the work.

Q#8

Some observed challenges to faculty formative feedback by the practitioner. Some of the challenges to Faculty formative feedback observed by the practitioner include, first, students' attitude was highly affected by the instructor's failure to provide positive feedback, and students' attitude was uncooperative, quiet, and disengaged. Second, instructors' lack of specificity in their formative feedback was vague, lacking direction, or a clear and timely action plan. Third, late submission of Faculty formative feedback affected students' ability to revise their work on time, thus leading to poor performance. Four, too much feedback overwhelmed students and affected their overall performance.

Q#9

Some students' responses to Faculty formative feedback during and after class completion. Some of the students' responses to timely faculty formative feedback included, thank you for your teaching, encouraging, assisting, and understanding; I appreciate your feedback, inspires me; I would appreciate your help; thank you, I am learning a lot; professor thank you for understanding; please let me know if you have any other questions about the assignment; thank you again for the much needed extension on this assignment; professor, thank you so much for following me to regain those missing points; apologies for

the tardy submission, I was having technical issues; thank you for the opportunity to resubmit; I just got back from a cruise and was barely able to do these assignments.

DISCUSSIONS OF THE STUDY

As shown in the meaning of student responses and faculty formative feedback, university and college educators should provide feedback on students' work and encourage students to react by sharing whether they understood the feedback. Hence, instructors should lead by providing feedback in a timely way.

To enhance effective teaching and learning, the faculty would seek to understand whether students respond to Faculty formative feedback by observing assignment revisions reflected in overall academic performance. Moreover, instructors should conduct surveys, questionnaires, and feedback access logs to determine whether the students are engaging in their learning or falling behind.

Instructors should be aware of the various factors influencing students' responses, hence, the whole learning process; hence, they should promptly provide students with work feedback, specific directions, constructive criticism, actionable steps, and a positive delivery method. This consideration is vital because some studies and observations suggest that to avoid the challenges, feedback should not provide overwhelming feedback to students, and it should give precise feedback to reduce the negative perception of students' feedback.

Studies and observations have shown that faculty formative feedback has positive effects on students' learning and responses in the online learning environment and since the impact produce enhanced student motivation and self-directed learning, allows students to modify their work, it should be non-evaluative, supportive, timely, specific, and constructive; aiming to provide individualized and content specific feedback to improve students' academic performance, positive student emotional responses by producing positive support to foster students' positive emotions, and increase confidence, interest, engagement, active participation, and positive student perception of feedback. However, the instructor's formative feedback should be relevant, timely, specific, actionable, helpful, caring, benefiting students, enhancing instructor-student healthy open relationship, providing commendation and acknowledgement of students' work, and enhancing student satisfaction, demonstrating commitment to effective communication to produce positive change. Six, Faculty formative feedback yields open relationships where we can have student-teacher healthy relationships, clear feedback which envelops commendation and acknowledgment of students' work in terms of assignments, discussions, and field study projects. Seven, feedback produces increased student satisfaction because it is effective. Faculty members are committed to connecting and communicating with the students and maintaining healthy faculty-student relations.

According to the practitioner's observation concerning students' response to faculty formative feedback, it improves students' learning; therefore, instructors should send feedback to students in a timely, specific, actionable, and focused manner. Students want to relate to their instructors, but instructors should personalize communication through email or calling to meet their learning needs. To enhance student learning and success, the faculty should make wise decisions when dealing with students who may submit their work late, are sick, or have emergencies at home. The huge decision is to accommodate students by articulating clearly the areas where students need assignments, collaborative discussions, and amendments or revisions. Overall, the Faculty should go the extra mile to know why students are not engaging, after which they should accommodate and provide support and an action plan for completing the assignments within the accommodated extension.

The practitioner's faculty formative feedback statements to students in the ITL 604 Class are supportive and encouraging by commending students' work, showing them that they provided an outstanding teaching plan, showing students' limited comprehension, and providing opportunities to revise and resubmit within a specific time frame. Instructors, you can do the same by allowing students to learn in a climate that allows them to resubmit work after revision, being specific and providing clear directions, and consistently supporting and guiding to enhance student engagement and satisfaction in learning.

Studies have shown that there are challenges to Faculty formative feedback, so instructors should be aware that students' attitudes are highly affected by the instructor's failure to provide positive feedback and

should seek to know why students' attitudes are uncooperative, quiet, and disengaged. Maybe it is because of the lack of specificity formative feedback, which is vague, lacking direction, or a clear and timely action plan, hence calling for educators to submit non-overwhelming faculty formative feedback early to allow students time to review, revise, and submit final work; thus, enhancing students' learning and success.

The study's hypothesis was approved because throughout the study, it was affirmed that faculty formative feedback with timely, specific, clear, encouraging, motivating, and constructive criticism with actionable steps enhances students' perception of feedback, thus creating positive students' responses to feedback and improving student learning success.

Instructors should pay attention to the interplay of practitioners' submission of formative feedback, because the practical-observation study of students' responses to Faculty formative feedback during and after class completion of their class showed that students' responses were positive and appreciative of the practitioner's timely review and submission of feedback to students' work. The students were thankful that the practitioner provided feedback promptly, and they thanked him for his teaching, encouraging, assisting, understanding, appreciating their feedback, and inspiring them. And consequently, students showed appreciation for the help given. The warm and healthy relationship between the practitioner and the students allows direct communication, time extensions, and opportunities to resubmit student work, thus enhancing student satisfaction, performance, and success.

CONCLUSION OF THE STUDY

This study's purpose was to explore how students in higher education respond to formative feedback from faculty in online learning environments. In conclusion, the study has shown that students' responses and faculty formative feedback are critical components of effective online education and significantly influence students' motivation, attitudes, perceptions, engagement, and overall academic achievement.

Understanding how students respond to and benefit from faculty formative feedback allows the faculty, administration, and all facilitators of student learning to direct their instructional strategies to enhance and support students' learning and overall student success.

By implementing diverse communication methods including written comments, audio recordings, video messages, zoom video conferencing, calls to meet students' learning needs to enhance engagement and the overall academic success; timely, actionable, encouraging and motivating, specific, and student-centered feedback practices, higher education practitioners can improve students' positive responses, satisfaction, open and healthy teacher-student relationships and the quality of online learning experiences and outcomes.

Finally, school administrators and higher education curriculum caretakers should establish professional development opportunities to train faculty in effective feedback practices, learn and implement best practices in delivering formative feedback, and stimulate positive student responses to know if they are learning in the online education settings. Moreover, instructors should use learning management systems and other digital tools to streamline the feedback process, track student responses, engagement, and personalization of feedback.

REFERENCES

- Adom, D., Yeboah, A., & Ankrah, A.K. (2016). Constructivism philosophical paradigm: Implication for research, teaching and learning. *Global Journal of Arts Humanities and Social Sciences*, 4(10), 1–9.
- Aguinis, H., Gottfredson, R.K., & Joo, H. (2012). Delivering effective performance feedback: The strengths-based approach. *Business Horizons*, 55(2), 105–111.
- Al-Hattami, A.A. (2019). The Perception of Students and Faculty Staff on the Role of Constructive Feedback. *International Journal of Instruction*, 12(1), 885–894.
- Allen, I.E., & Seaman, J. (2007). *Online nation: Five years of growth in online learning*. Sloan Consortium. PO Box 1238, Newburyport, MA 01950.
- Anderson, L.E., & Carta-Falsa, J. (2002). Factors that make faculty and student relationships effective. *College Teaching*, 50(4), 134–138.
- Anderson, L., & Gold, J. (2015). Becoming–practitioner. *A guide to professional doctorates in business and management*, 105.
- Bader, M., Burner, T., Iversen, S.H., & Varga, Z. (2019). Student perspectives on formative feedback as part of writing portfolios. *Assessment & Evaluation in Higher Education*.
- Baker, A., Perreault, D., Reid, A., & Blanchard, C.M. (2013). Feedback and organizations: Feedback is good, feedback-friendly culture is better. *Canadian Psychology/Psychologie Canadienne*, 54(4), 260.
- Baleni, Z.G. (2015). Online formative assessment in higher education: Its pros and cons. *Electronic Journal of e-Learning*, 13(4), 228–236.
- Ball, A.F., & Ladson-Billings, G. (2020). Educating teachers for the 21st century: Culture, reflection, and learning. In *Handbook of the cultural foundations of learning* (pp. 387–403). Routledge.
- Baumfield, V.M., Wall, K., & Hall, E. (2012). Action research in education: Learning through practitioner enquiry.
- Benade, L. (2017). Being a teacher in the 21st century. *A Critical New Zealand Research*.
- Bender, T. (2023). *Discussion-based online teaching to enhance student learning: Theory, practice and assessment*. Taylor & Francis. Retrieved from https://books.google.com/books?hl=en&lr=&id=OA_JEAAAQBAJ&oi=fnd&pg=PP11&dq=Instructors+who+commit+to+support+students%E2%80%99learning+by+being+there+for+students,+walking+hand+in+hand+in+the+online+learning+platform+see+immediate+behavioral+change+and+positive+attitude+&ots=T8kuRsN1Xz&sig=QaGw38Cd1cH5rSi2tiLYgLbEozU#v=onepage&q&f=false
- Bogna, F., Raineri, A., & Dell, G. (2020). Critical realism and constructivism: Merging research paradigms for a deeper qualitative study. *Qualitative Research in Organizations and Management: An International Journal*, 15(4), 461–484.
- Bowers, S., Chen, Y.L., Clifton, Y., Gamez, M., Giffin, H.H., Johnson, M.S., . . . Pastryk, L. (2022). Reflective design in action: A collaborative autoethnography of faculty learning design. *TechTrends*, pp. 1–12.
- Bragg, L.A., Walsh, C., & Heyeres, M. (2021). Successful design and delivery of online professional development for teachers: A systematic review of the literature. *Computers & Education*, 166, 104158.
- Braun, V., & Clarke, V. (2024). Thematic analysis. In *Encyclopedia of quality of life and well-being research* (pp. 7187–7193). Cham: Springer International Publishing.
- Brinko, K.T. (1993). The practice of giving feedback to improve teaching: What is effective? *The Journal of Higher Education*, 64(5), 574–593.
- Byrne, D. (2022). A worked example of Braun and Clarke’s approach to reflexive thematic analysis. *Quality & Quantity*, 56(3), 1391–1412.
- Calhoun, J.M. (2020). *The effect of teacher-team generated formative assessments on student writing achievement test levels*. Retrieved from <https://digitalcommons.liberty.edu/doctoral/2498/>

- Cantabella, M., Martínez-España, R., Ayuso, B., Yáñez, J.A., & Muñoz, A. (2019). Analysis of student behavior in learning management systems through a Big Data framework. *Future Generation Computer Systems*, 90, 262–272.
- Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31(2), 219–233.
- Carrillo, C., & Flores, M.A. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. *European journal of teacher education*, 43(4), 466–487.
- Casey, M., & Coghlan, D. (2021). Action research-for practitioners and researchers. In *Handbook of qualitative research methodologies in workplace contexts* (pp. 67–81). Edward Elgar Publishing.
- Cerezo, R., Sánchez-Santillán, M., Paule-Ruiz, M.P., & Núñez, J.C. (2016). Students' LMS interaction patterns and their relationship with achievement: A case study in higher education. *Computers & Education*, 96, 42–54.
- Chan, C.K.Y., & Luo, J. (2022). Exploring teacher perceptions of different types of 'feedback practices' in higher education: Implications for teacher feedback literacy. *Assessment & Evaluation in Higher Education*, 47(1), 61–76.
- Chernick, M.R. (2011). *Bootstrap methods: A guide for practitioners and researchers*. John Wiley & Sons.
- Choi, Y., & Anderson, J.W. (2016). Self-directed learning with feedback. *Journal of College Science Teaching*, 46(1), 32–38.
- Chory, R.M., & Offstein, E.H. (2017). "Your professor will know you as a person" evaluating and rethinking the relational boundaries between faculty and students. *Journal of Management Education*, 41(1), 9–38.
- Christe, B.L. (2013). The importance of faculty-student connections in STEM disciplines. *Journal of STEM Education: Innovations and Research*, 14(3).
- Christou, P.A. (2024). Thematic analysis through artificial intelligence (AI). *Qualitative Report*, 29(2).
- Coghlan, D. (2011). Action research: Exploring perspectives on a philosophy of practical knowing. *Academy of Management Annals*, 5(1), 53–87.
- Coghlan, D. (2019). *Doing action research in your own organization*.
- Compton, J.I., Cox, E., & Laanan, F.S. (2006). Adult learners in transition. *New Directions for Student Services*, (114).
- Crisp, E. (2020). Educause Review. Retrieved from <https://er.educause.edu/articles/2020/6/leveraging-feedback-experiences-in-online-learning>.
- Darby, F. (2019). How to be a better online teacher. *The Chronicle of Higher Education*, 17. Retrieved from https://maui.hawaii.edu/pd/wp-content/uploads/2021/06/How_to_Be_a_Better_Online_Teacher_pdf-The-Chronicle-of-Higher-Education.pdf
- Davis, H.A., Summers, J.J., & Miller, L.M. (2012). *An interpersonal approach to classroom management: Strategies for improving student engagement*. Corwin Press. Retrieved from https://books.google.com/books?hl=en&lr=&id=mMRSqIb_RzMC&oi=fnd&pg=PP1&dq=Instructors+who+commit+to+support+students%E2%80%99learning+by+being+there+for+students,+walking+hand+in+hand+in+the+online+learning+platform+see+immediate+behavioral+changes+and+positive+attitude+&ots=vmqzI7ga_G&sig=5i1vPN16ZVcjziFsYf6O2CAHk4Q#v=onepage&q&f=false
- Davison, R.M., Martinsons, M.G., & Malaurent, J. (2021). Research perspectives: Improving action research by integrating methods. *Journal of the Association for Information Systems*, 22(3), 851–873.
- Day, B.W., Lovato, S., Tull, C., & Ross-Gordon, J. (2011). Faculty perceptions of adult learners in college classrooms. *The Journal of Continuing Higher Education*, 59(2), 77–84.
- Doyle, T. (2023). *Helping students learn in a learner-centered environment: A guide to facilitating learning in higher education*. Taylor & Francis.
- Efron, S.E., & Ravid, R. (2018). *Writing the literature review: A practical guide*.

- Ellegaard, M., Damsgaard, L., Bruun, J., & Johannsen, B.F. (2018). Patterns in the form of formative feedback and student response. *Assessment & Evaluation in Higher Education*, 43(5), 727–744.
- Embo, M.P., Driessen, E.W., Valcke, M., & Van der Vleuten, C.P. (2010). Assessment and feedback to facilitate self-directed learning in clinical practice of Midwifery students. *Medical teacher*, 32(7), e263–e269.
- Espasa, A., & Meneses, J. (2010). Analyzing feedback processes in an online teaching and learning environment: An exploratory study. *Higher Education*, 59, 277–292.
- Farrell, L., Bourgeois-Law, G., Ajjawi, R., & Regehr, G. (2017). An autoethnographic exploration of the use of goal-oriented feedback to enhance brief clinical teaching encounters. *Advances in Health Sciences Education*, 22, 91–104.
- Fisher, D.P., Brotto, G., Lim, I., & Southam, C. (2025). The Impact of Timely Formative Feedback on University Student Motivation. *Assessment & Evaluation in Higher Education*, pp. 1–10.
- Fluckiger, J., Vigil, Y.T.Y., Pasco, R., & Danielson, K. (2010). Formative feedback: Involving students as partners in assessment to enhance learning. *College Teaching*, 58(4), 136–140.
- Fong, C.J., & Schallert, D.L. (2023). “Feedback to the future”: Advancing motivational and emotional perspectives in feedback research. *Educational Psychologist*, 58(3), 146–161.
- Fong, C.J., Schallert, D.L., Williams, K.M., Williamson, Z.H., Warner, J.R., Lin, S., & Kim, Y.W. (2018). When feedback signals failure but offers hope for improvement: A process model of constructive criticism. *Thinking Skills and Creativity*, 30, 42–53.
- Gehlbach, H., Robinson, C.D., Finefter-Rosenbluh, I., Benshoof, C., & Schneider, J. (2018). Questionnaires as interventions: Can taking a survey increase teachers’ openness to student feedback surveys? *Educational Psychology*, 38(3), 350–367.
- Gikandi, J.W., Morrow, D., & Davis, N.E. (2011). Online formative assessment in higher education: A review of the literature. *Computers & Education*, 57(4), 2333–2351.
- Glover, C., & Brown, E. (2006). Written feedback for students: too much, too detailed or too incomprehensible to be effective? *Bioscience Education*, 7(1), 1–16.
- Grady, M.P. (1998). *Qualitative and action research: A practitioner handbook*. Phi Delta Kappa International.
- Grand, S., von Arx, W., & Rüegg-Stürm, J. (2015). Constructivist paradigms: Implications for strategy-as-practice research. *Cambridge Handbook of Strategy as Practice*, pp. 78–94.
- Halupa, C., & Bolliger, D.U. (2013). Student perceptions on the utilization of formative feedback in the online environment. *International Journal of Online Pedagogy and Course Design (IJOPCD)*, 3(2), 59–76.
- Halverson, R. (2010). School formative feedback systems. *Peabody Journal of Education*, 85(2), 130–146.
- Harland, T. (2014). Learning about case study methodology to research higher education. *Higher Education Research & Development*, 33(6), 1113–1122.
- Harper, B. (2018). Technology and teacher–student interactions: A review of empirical research. *Journal of Research on Technology in Education*, 50(3), 214–225.
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge.
- Hattie, J. (2015). The applicability of visible learning to higher education. *Scholarship of Teaching and Learning in Psychology*, 1(1), 79.
- Hattie, J. (2021). Visible learning. *A synthesis of over 800 metaanaly.* Retrieved from <https://www.taylorfrancis.com/books/mono/10.4324/9781315885025/visible-learning-science-learn-john-hattie-gregory-yates>.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77(1), 81–112.
- Haug, B.S., & Ødegaard, M. (2015). Formative assessment and teachers’ sensitivity to student responses. *International Journal of Science Education*, 37(4), 629–654.

- Hean, S., Anderson, L., Green, C., John, C., Pitt, R., & O'Halloran, C. (2016). Reviews of theoretical frameworks: Challenges and judging the quality of theory application. *Medical Teacher*, 38(6), 613–620.
- Heikkinen, H.L., de Jong, F.P., & Vanderlinde, R. (2016). What is (good) practitioner research? *Vocations and Learning*, 9, 1–19.
- Hill, J., Berlin, K., Choate, J., Cravens-Brown, L., McKendrick-Calder, L., & Smith, S. (2021). Exploring the emotional responses of undergraduate students to assessment feedback: Implications for instructors. *Teaching and Learning Inquiry: The ISSOTL Journal*, 9(1), 294–316.
- Hoffman, E.M. (2014). Faculty and student relationships: Context matters. *College Teaching*, 62(1), 13–19.
- Hollister, B., Nair, P., Hill-Lindsay, S., & Chukoskie, L. (2022, May). Engagement in online learning: Student attitudes and behavior during COVID-19. In *Frontiers in education*, 7, 851019. Frontiers Media SA.
- Hung, L.T. (2021). How does Online Formative Feedback Impact Student's Motivation and Self-Directed Learning Skills during the COVID-19 Pandemic? *Journal of Educational and Social Research*, 11.
- Hutchins, E. (2024). *The Impact of Feedback on Teacher Professional Growth*. The University of Maine. Retrieved from <https://www.proquest.com/openview/3a438d1205708fb8dd6033fb00d670ab/1?cbl=18750&diss=y&pq-origsite=gscholar>.
- Irons, A., & Elkington, S. (2021). *Enhancing learning through formative assessment and feedback*. Routledge.
- Jackson, L.C., Jones, S.J., & Rodriguez, R.C. (2010). Faculty actions that result in student satisfaction in online courses. *Journal of Asynchronous Learning Networks*, 14(4), 78–96.
- Kim, K.J., & Bonk, C.J. (2006). The future of online teaching and learning in higher education. *Educause Quarterly*, 29(4), 22–30.
- Kobra, K. (2024). *Exploring the Interplay between English Language Teaching and Psychology: A Comprehensive Review*.
- Kobra, K. (2024). Unraveling the Complex Web of Student Anxiety: Strategies to Foster Confidence, Motivation, and Well-Being in Learning. *International Journal of Research Publication and Reviews*, 5(6), 1888–1892.
- Kulkarni, C.E., Bernstein, M.S., & Klemmer, S.R. (2015, March). PeerStudio: Rapid peer feedback emphasizes revision and improves performance. In *Proceedings of the second (2015) ACM conference on learning@ scale* (pp. 75–84).
- Laflen, A., & Smith, M. (2017). Responding to student writing online: Tracking student interactions with instructor feedback in a Learning Management System. *Assessing Writing*, 31, 39–52.
- Larsen, R. (2016). *Content and Effects of Specific Targeted Feedback from Teacher Observations on Student Achievement in a Large Urban School District*.
- Lodge, J.M., Kennedy, G., Lockyer, L., Arguel, A., & Pachman, M. (2018, June). Understanding difficulties and resulting confusion in learning: An integrative review. In *Frontiers in Education* (Vol. 3, p.49). Frontiers Media SA.
- Lui, A.M., & Andrade, H.L. (2022, March). Inside the next black box: Examining students' responses to teacher feedback in a formative assessment context. In *Frontiers in Education*, 7, 751549. Frontiers Media SA.
- Lutz, B.D., & Parette, M.C. (2019, June). Development and implementation of a reflective journaling method for qualitative research. In *2019 ASEE Annual Conference & Exposition*.
- MacDonald, C. (2012). Understanding participatory action research: A qualitative research methodology option. *The Canadian Journal of Action Research*, 13(2), 34–50.
- MacLeod, A., Burm, S., & Mann, K. (2022). Constructivism: Learning theories and approaches to research. *Researching Medical Education*, pp. 25–40.

- Mandouit, L. (2018). Using student feedback to improve teaching. *Educational Action Research*, 26(5), 755–769.
- Marden, N.Y., Ulman, L.G., Wilson, F.S., & Velan, G.M. (2013). Online feedback assessments in physiology: Effects on students' learning experiences and outcomes. *Advances in Physiology Education*, 37(2), 192–200.
- Maringe, F., & Sing, N. (2014). Teaching large classes in an increasingly internationalising higher education environment: Pedagogical, quality and equity issues. *Higher Education*, 67, 761–782.
- Mbuva, J.M. (2023). Understanding the Effects of the Best Practices of Formative Feedback and Intentional Follow-Ups on Online Students' Success. *Journal of Higher Education Theory & Practice*, 23(18).
- McCarthy, J. (2017). Enhancing feedback in higher education: Students' attitudes towards online and in-class formative assessment feedback models. *Active Learning in Higher Education*, 18(2), 127–141.
- McConlogue, T. (2020). *Assessment and feedback in higher education: A guide for teachers*. UCL Press.
- McGarrell, H., & Verbeem, J. (2007). Motivating revision of drafts through formative feedback. *ELT journal*, 61(3), 228–236.
- McNiff, J. (2013). *Action research: Principles and practice*. Routledge.
- McWatt, S.C. (2021). Responding to Covid-19: A thematic analysis of students' perspectives on modified learning activities during an emergency transition to remote human anatomy education. *Anatomical Sciences Education*, 14(6), 721–738.
- Mihanović, Z., Batinić, A.B., & Pavičić, J. (2016). The Link Between Students' satisfaction With Faculty, Overall Students' satisfaction With Student Life And Student Performances. *Review of Innovation and Competitiveness: A Journal of Economic and Social Research*, 2(1), 37–60.
- Mohamad Nasri, N., Nasri, N., & Abd Talib, M.A. (2022). The unsung role of assessment and feedback in self-directed learning (SDL). *Journal of Further and Higher Education*, 46(2), 185–197.
- Mohammadi Zenouzagh, Z., Admiraal, W., & Saab, N. (2025). Empowering students' agentive engagement through formative assessment in online learning environment. *International Journal of Educational Technology in Higher Education*, 22(1), 9.
- Moore, M.G. (1989). Editorial: Three types of interaction. *American Journal of Distance Education*.
- Morris, R., Perry, T., & Wardle, L. (2021). Formative assessment and feedback for learning in higher education: A systematic review. *Review of Education*, 9(3), e3292.
- Moya, N.P.G., & Tobar, M.C.S. (2017). Formative evaluation and formative feedback: An effective practice to promote student learning in higher education. *Revista Publicando*, 4(12(1)), 321–333.
- Mulliner, E., & Tucker, M. (2017). Feedback on feedback practice: Perceptions of students and academics. *Assessment & Evaluation in Higher Education*, 42(2), 266–288.
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*, 22, 16094069231205789.
- Nelson, P.M., Ysseldyke, J.E., & Christ, T.J. (2015). Student perceptions of the classroom environment: Actionable feedback to guide core instruction. *Assessment for Effective Intervention*, 41(1), 16–27.
- Nicol, D.J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218.
- Nugroho, K.Y. (2017). Constructivist learning paradigm as the basis on learning model development. *Journal of Education and Learning (EduLearn)*, 11(4), 410–415.
- Onah, D.F., Pang, E.L., Sinclair, J.E., & Uhomoibhi, J. (2021). An innovative MOOC platform: The implications of self-directed learning abilities to improve motivation in learning and to support self-regulation. *The International Journal of Information and Learning Technology*, 38(3), 283–298.
- Owen, L. (2016). The Impact of Feedback as Formative Assessment on Student Performance. *International Journal of Teaching and Learning in Higher Education*, 28(2), 168–175.

- Palloff, R.M., & Pratt, K. (2011). *The excellent online instructor: Strategies for professional development*. John Wiley & Sons. Retrieved from https://books.google.com/books?hl=en&lr=&id=GY9pmmBAhy0C&oi=fnd&pg=PT7&dq=Instructors+who+commit+to+support+students%E2%80%99learning+by+being+there+for+students,+walking+hand+in+hand+in+the+online+learning+platform+see+immediate+behavioral+changes+and+positive+attitude+&ots=ZJTxsxd_2&sig=YfyIvGehxUYh9Hkc7Ytrw5kdF4k#v=onepage&q&f=false
- Perera, J., Lee, N., Win, K., Perera, J., & Wijesuriya, L. (2008). Formative feedback to students: The mismatch between faculty perceptions and student expectations. *Medical Teacher*, 30(4), 395–399.
- Perkins, M., & Roe, J. (2024). Academic publisher guidelines on AI usage: A ChatGPT supported thematic analysis. *F1000Research*, 12, 1398.
- Picciano, A.G. (2006). Online learning: Implications for higher education pedagogy and policy. *Journal of thought*, 41(1), 75–94.
- Pilarska, J. (2021). The constructivist paradigm and phenomenological qualitative research design. *Research paradigm considerations for emerging scholars*, 1, 64–83.
- Pinger, P., Rakoczy, K., Besser, M., & Klieme, E. (2018). Implementation of formative assessment—effects of quality of programme delivery on students’ mathematics achievement and interest. *Assessment in Education: Principles, Policy & Practice*, 25(2), 160–182.
- Pollmeier, T., Fisch, C., & Hirschmann, M. (2025). From profit to purpose: A systematic literature review and future research directions on B Corp certification. *Management Review Quarterly*, 1–44.
- Post, C., Sarala, R., Gatrell, C., & Prescott, J.E. (2020). Advancing theory with review articles. *Journal of Management Studies*, 57(2), 351–376.
- Prince, S. (2022). *Principals’ and teachers’ perceptions of content-specific instructional feedback*. (Doctoral dissertation, Walden University). Retrieved from <https://www.proquest.com/openview/19386f76b05c930b0378c82315676dda/1?cbl=18750&diss=y&pq-origsite=gscholar>
- Rajalingam, S., Kanagamalliga, S., & Karuppiyah, N. (2021). Peer interaction teaching-learning approaches for effective engagement of students in virtual classroom. *Journal of Engineering Education Transformations*, 425–432.
- Rakhimova, Z., & Barotov, J. (2023). Embracing the Power of Collaborative Online Learning: Unveiling the Benefits of Studying with Peers. *Journal of Language Pedagogy and Innovative Applied Linguistics*, 1(5), 96–103.
- Ramani, S., Könings, K.D., Ginsburg, S., & van der Vleuten, C.P. (2019). Feedback redefined: Principles and practice. *Journal of general internal medicine*, 34, 744–749.
- Rezai, A., Ahmadi, R., Ashkani, P., & Hosseini, G.H. (2025). Implementing active learning approach to promote motivation, reduce anxiety, and shape positive attitudes: A case study of EFL learners. *Acta Psychologica*, 253, 104704.
- Risley, C.W. (2006). *Implementing Reading Response Logs in an Intermediate Classroom to Increase Student Interest and Comprehension*.
- Robins, L., Smith, S., Kost, A., Combs, H., Kritek, P.A., & Klein, E.J. (2020). Faculty perceptions of formative feedback from medical students. *Teaching and Learning in Medicine*, 32(2), 168–175.
- Robinson, C.C., & Hullinger, H. (2008). New benchmarks in higher education: Student engagement in online learning. *Journal of Education for Business*, 84(2), 101–109.
- Rowe, A. (2011). The personal dimension in teaching: Why students value feedback. *International Journal of Educational Management*, 25(4), 343–360.
- Rowe, A.D. (2017). Feelings about feedback: The role of emotions in assessment for learning. *Scaling Up Assessment for Learning in Higher Education*, pp. 159–172. Retrieved from https://link.springer.com/chapter/10.1007/978-981-10-3045-1_11
- Sadler, D.R. (2010). Beyond feedback: Developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education*, 35(5), 535–550.

- Schartel, S.A. (2012). Giving feedback—An integral part of education. *Best Practice & Research Clinical Anaesthesiology*, 26(1), 77–87.
- Schleicher, A. (2012). *Preparing teachers and developing school leaders for the 21st century: Lessons from around the world*. OECD Publishing, 2, rue Andre Pascal, F-75775 Paris Cedex 16, France.
- Schwandt, T.A., & Gates, E.F. (2018). Case study methodology. *The SAGE Handbook of Qualitative Research*, 5, 600–630.
- Seaman, J.E., Allen, I.E., & Seaman, J. (2018). *Grade increase: Tracking distance education in the United States*. Babson Survey Research Group.
- Segú Odriozola, M.I. (2023). Autoethnography as a tool for the achievement of deep learning of university students in service-learning experiences. *Social Sciences*, 12(7), 395.
- Shelton-Strong, S.J., & Mynard, J. (2021). Promoting positive feelings and motivation for language learning: The role of a confidence-building diary. *Innovation in Language Learning and Teaching*, 15(5), 458–472.
- Shields, P.M. (2004). Classical pragmatism: Engaging practitioner experience. *Administration & Society*, 36(3), 351–361.
- Shute, V.J. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 153–189. Retrieved from <https://journals.sagepub.com/doi/abs/10.3102/0034654307313795>
- Sumantri, M.S., & Satriani, R. (2016). The Effect of Formative Testing and Self-Directed Learning on Mathematics Learning Outcomes. *International Electronic Journal of Elementary Education*, 8(3), 507–524.
- Tallent-Runnels, M.K., Thomas, J.A., Lan, W.Y., Cooper, S., Ahern, T.C., Shaw, S.M., & Liu, X. (2006). Teaching courses online: A review of the research. *Review of Educational Research*, 76(1), 93–135.
- Tan, F.D., Whipp, P.R., Gagné, M., & Van Quaquebeke, N. (2019). Students' perception of teachers' two-way feedback interactions that impact learning. *Social Psychology of Education*, 22, 169–187.
- Tellis, W. (1997). Application of a case study methodology. *The Qualitative Report*, 3(3), 1–19.
- Thomas, J.D., & Arnold, R.M. (2011). Giving feedback. *Journal of Palliative Medicine*, 14(2), 233–239.
- Tlili, A., Burgos, D., Olivier, J., & Huang, R. (2022). Self-directed learning and assessment in a crisis context: The COVID-19 pandemic as a case study. *Journal of E-Learning and Knowledge Society*, 18(2), 1–10.
- Uhlenhake, K.J. (2019). *Using Learning Management System Data Logs to Examine Student Interaction with Available LMS Tools and Course Login Frequency* (Doctoral dissertation, Baker University).
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398–405.
- Van der Kleij, F.M., & Lipnevich, A.A. (2021). Student perceptions of assessment feedback: A critical scoping review and call for research. *Educational Assessment, Evaluation and Accountability*, 33, 345–373.
- Van Wart, M., Ni, A., Rose, L., McWeeney, T., & Worrell, R. (2019). A literature review and model of online teaching effectiveness integrating concerns for learning achievement, student satisfaction, faculty satisfaction, and institutional results. *Pan-Pacific Journal of Business Research*, 10(1), 1–22.
- Värlander, S. (2008). The role of students' emotions in formal feedback situations. *Teaching in Higher Education*, 13(2), 145–156.
- Velasquez, A., West, R., Graham, C., & Osguthorpe, R. (2013). Developing caring relationships in schools: A review of the research on caring and nurturing pedagogies. *Review of education*, 1(2), 162–190.
- Vonderwell, S.K., & Boboc, M. (2013). Promoting formative assessment in online teaching and learning. *TechTrends*, 57, 22–27.

- Wei, H.C., Peng, H., & Chou, C. (2015). Can more interactivity improve learning achievement in an online course? Effects of college students' perception and actual use of a course-management system on their learning achievement. *Computers & Education*, 83, 10–21.
- Wiggins, G. (2012). Seven keys to effective feedback. *Feedback*, 70(1), 10–16.
- Williams, H., & Smith, N. (2017). Feedback: Critiquing practice, moving forward. *European Political Science*, 16, 159–178.
- Windschitl, M. (2009, February). Cultivating 21st century skills in science learners: How systems of teacher preparation and professional development will have to evolve. In *Presentation given at the National Academies of science workshop on 21st century skills, Washington, DC* (Vol. 15).
- Winstone, N.E., Nash, R.A., Rowntree, J., & Parker, M. (2017). Students' use of feedback: A literature review. *Assessment & Evaluation in Higher Education*, 42(5), 674–692.
- 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.
- Winter, D.A. (2003). The constructivist paradigm. In R. Woolfe, W. Dryden & S. Strawbridge (eds.), *Handbook of counselling psychology*. London: Sage Publications, 241–260.
- Wolfe, A.M., & Reuer, M. (2019). *The effect of personalized feedback on the ability of students to overcome misconceptions in a project-based science curriculum*. Retrieved from <https://scholarworks.montana.edu/server/api/core/bitstreams/acc88b05-ff04-4b90-a6c1-50461a3e75ab/content>
- Yee, S., Deshler, J., Rogers, K.C., Petrulis, R., Potvin, C.D., & Sweeney, J. (2022). Bridging the gap between observation protocols and formative feedback. *Journal of Mathematics Teacher Education*, 25(2), 217–245.
- Yorke, M. (2001). Formative assessment and its relevance to retention. *Higher Education Research & Development*, 20(2), 115–126.
- Yousuf, B., Conlan, O., & Wade, V. (2020, September 14–18). Assessing the impact of the combination of self-directed learning, immediate feedback and visualizations on student engagement in online learning. In *Addressing Global Challenges and Quality Education: 15th European Conference on Technology Enhanced Learning, EC-TEL 2020, Heidelberg, Germany, Proceedings 15* (pp. 274–287). Springer International Publishing.
- Yukhymenko, M.A., Brown, S.W., Lawless, K.A., Brodowinska, K., & Mullin, G. (2014). Thematic analysis of teacher instructional practices and student responses in middle school classrooms with problem-based learning environment. *Global Education Review*, 1(3), 93–110.
- Zainuddin, Z., Farida, R., Keumala, C.M., Kurniawan, R., & Iskandar, H. (2022). Synchronous online flip learning with formative gamification quiz: instruction during COVID-19. *Interactive Technology and Smart Education*, 19(2), 236–259.
- Zhao, F. (2003). Enhancing the quality of online higher education through measurement. *Quality Assurance in Education*, 11(4), 214–221.
- Zhu, M., Liu, O.L., & Lee, H.S. (2020). The effect of automated feedback on revision behavior and learning gains in formative assessment of scientific argument writing. *Computers & Education*, 143, 103668.