

UNIVERSITY OF SHERBROOKE

**The relationship between written teacher feedback on
essays and student motivation: A research synthesis**

La relation entre les commentaires écrits des enseignants(es) sur des dissertations
et la motivation des étudiants : une synthèse de la recherche

By

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Faculty of Education

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Was evaluated by an examining board made up of the following individuals:

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SUMMARY

This research addresses the topic of teacher written feedback on essays and its effect on student motivation. In doing so, it attempts to address three issues pertinent to the CEGEP system. First, correcting forms a large part of instructor workloads, however, newly hired instructors have little training in providing effective feedback. This study attempts to solve this issue by determining best practices. Second, the newer framework of assessment as learning emphasizes creating assessments that are authentic and that challenge higher levels of learning. However, how should these assignments be corrected? Lastly, student success and motivation are important concerns in Québec. It is the goal of this research to see how feedback can help increase student success.

The following research question was chosen based on an initial literature review: What impact do teacher written feedback strategies on student essays have on student motivation? Sub-questions included: 1) What are the various written feedback methods teachers use to assess analytical writing? 2) What kind of feedback do students prefer? 3) What are student's self-perceptions about the positive and negative effects of written feedback methods on their motivation? 4) What are intervening or latent variables? 5) What do researchers suggest to engage students in a feedback dialogue?

In order to accomplish this, a research synthesis of n=19 studies containing measurements of student perceptions of feedback was used as data. There is a large body of literature on student perceptions about the feedback they receive and it is worthwhile studying it for larger patterns. The articles were chosen using strict criteria, including: the comparability of the variables studied, the ability to isolate motivation, closeness in age to college students, and study quality. The studies from the sample were coded qualitatively for themes using several data extraction forms.

The results supported a relationship between student motivation and teacher written feedback on essays. Students stated that direct feedback that struck a balance between pointing out sincere achievements and providing criticism in the form of specific directives for future improvement, written in a tone that was respectful of the affective impact of feedback on self-esteem, had a positive effect on their willingness to use feedback and on their motivation. Surprisingly, this relationship went in a negative direction as well: in some cases the efforts teachers were taking to correct their students' essays were actually demotivating their students, instead of motivating them to make changes and learn from their mistakes as the teachers were intending. Feedback that focused only on the negative, that was overly harsh in tone, or that was vague decreased student motivation. Student emotions were also shown to have a strong role in the feedback process. In particular, negative student emotions to the feedback they received had a larger effect, in a negative direction, on student motivation. Interestingly, mitigating the negative effects was possible by using certain feedback techniques and strategies. This cushioning effect, in turn, also had a positive effect on student motivation. The solution from many of the researchers was to form a dialogue with students about what the definition, purpose, and use of feedback should be.

This research adds to the discussion on feedback by providing a unique look at how student motivation and student emotion affect the feedback process. It also adds to the research by providing teachers with concrete suggestions for feedback strategies and their cost-effective benefit on workload. Unique findings include: a) the negative effects of certain kinds of teacher feedback on student motivation, b) the differences in feedback preferences between L1 vs. L2 learners and language vs. subject learners, and c) the effect of the pre-existing student-teacher relationship.

RÉSUMÉ

Cette recherche étudie les commentaires écrits des enseignants sur des travaux et dissertations, et leur effet sur la motivation des élèves. L'étude tente de répondre à trois questions pertinentes au système collégial. Tout d'abord, corriger des travaux forme une grande partie de la charge de travail de l'instructeur, mais les nouvellement embauchés ont peu de formation pour offrir une rétroaction efficace. Cette étude tente de résoudre ce problème en déterminant les meilleures pratiques. Ensuite, la théorie de l'évaluation comme outil d'apprentissage souligne que les évaluations doivent mesurer les problèmes authentiques selon les niveaux les plus élevés de la taxonomie de Bloom. Mais comment ces devoirs devraient-ils être corrigés ? Enfin, la réussite et la motivation des étudiants sont des préoccupations importantes au Québec. C'est le but de cette recherche d'établir comment la rétroaction peut aider à augmenter la réussite des élèves.

Les questions de recherche suivantes ont été basées sur une revue de la littérature initiale. La question de recherche était : Est-ce que les commentaires écrits sur les dissertations d'étudiants ont un impact sur la motivation ? Plus précisément : 1) Quelles sont les différentes méthodes de rétroaction que les enseignants utilisent pour évaluer les travaux analytiques ? 2) Quel type de commentaires préfèrent les élèves ? 3) Quels sont les effets positifs et négatifs des méthodes de rétroaction sur la motivation ? 4) Quelles sont les variables confondantes ? 5) Qu'est-ce que les chercheurs suggèrent pour engager les élèves dans un dialogue de rétroaction ?

À cet effet, une synthèse de la recherche a été réalisée. La taille de l'échantillon est 19 études, qui comportent des mesures des perceptions d'étudiants. Il existe un grand nombre d'études sur la perception des étudiants sur les évaluations qu'ils reçoivent et cela vaut la peine de les étudier pour trouver les plus grands motifs. Les articles ont été choisis selon des critères rigoureux, y compris : la comparabilité des variables étudiées, la possibilité d'isoler la variable de motivation, l'âge des étudiants, et la qualité de recherche. Les études de l'échantillon ont été codées qualitativement pour les thèmes, en utilisant plusieurs formes d'extraction de données.

Les résultats établissent une relation entre la motivation des élèves et les commentaires écrits des enseignants sur des dissertations. Les étudiants ont déclaré que la rétroaction directe qui a trouvé un équilibre entre la sincérité et les critiques spécifiques et applicables, et qui était écrite avec un ton respectueux, a eu un effet positif sur leur volonté d'utiliser la rétroaction et sur leur motivation. De manière surprenante, le contraire peut également être vrai. Dans certains cas, la rétroaction des instructeurs peut effectivement démotiver leurs élèves. Les commentaires qui portaient uniquement sur le négatif, qui étaient trop dur par leur ton, ou qui étaient vagues, ont diminué la motivation des élèves. Les émotions des élèves ont également été montrées comme ayant un rôle important dans le processus de rétroaction. En

particulier, les émotions négatives des étudiants à des commentaires reçus ont eu un effet plus important, dans un sens négatif, sur la motivation des élèves. Il est intéressant de noter que l'atténuation des effets négatifs a été possible par l'utilisation de certaines techniques et stratégies. Cette mesure d'amortissement, à son tour, a également eu un effet positif sur la motivation des élèves. La solution de la plupart des chercheurs était de former un dialogue avec les élèves sur la définition, le but, et l'utilisation des évaluations.

Cette recherche contribue au débat sur la rétroaction en fournissant un regard unique sur l'impact de la motivation et de l'émotion des élèves sur le processus de rétroaction. Elle contribue également à la recherche en fournissant aux enseignants des suggestions concrètes sur les stratégies de rétroaction et de leur rentabilité sur la charge de travail. Les conclusions manifestes incluent: a) les effets négatifs de certains types de rétroaction de l'enseignant sur la motivation des élèves, b) les différences dans les préférences de rétroaction entre les apprenants L1 et les apprenants L2, et des étudiants dans un cours de langue par rapport à un cours thématique, et c) l'effet de la dynamique entre l'étudiant et l'enseignant.

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CEGEP instructors spend a great deal of time correcting. Despite the fact that correcting forms a large part of every teacher's workload, it is an area where few receive training. While elbow deep in a pile of essays, one is plagued with thoughts of: Is my effort worth it? Are students reading my comments? Will they take my advice?

The traditional view of assessment defines correcting as a one-off measurement. At its best, the task of the grader is to render a professional opinion on the quality of the student work submitted. At its worst, it is an after-the-fact justification for the grade being given or a quality-control measure to ensure that only certain students pass the course. In other words, it is assessment *of* learning. Contrary to this is the 'assessment *as* learning' theory. In this theory, assessment is a continuous ladder of assignments and measurements, all designed to guide and encourage meaningful learning. The task of the grader is to use their professional opinion to measure the quality of the student work submitted *and* to provide professional advice and motivation to the student on how to get to the next level.

The problem is that teachers are spending a great deal of time writing feedback comments on essays, hoping that their efforts are helping their students learn. Yet, studies indicate that college and university students are not happy with the feedback they receive and worse yet, that this feedback may have little effect on grades or on the attainment of learning objectives between assignments. The reactions of some researchers, who are teachers themselves, lean toward self-preservation: But it must be the students! Maybe they are not reading what I am writing! Maybe they do not understand my comments! However, studies are showing that students are reading feedback, and more importantly, that they want to use it. So what is happening: why is there disconnect between teacher intentions and reality?

This research tests the theory that teacher written feedback on essays can have both a positive and a negative effect on student motivation and that this change in student motivation in turn effects how receptive students are to the professional advice being given to them. Therefore, it looks to answer the question: what methods for teacher written feedback on essays have a positive effect on student motivation and would thus make teacher effort in feedback achieve its goal of helping students to learn?

CHAPTER ONE: STATEMENT OF PROBLEM

It is clear that assessment plays a large role in student learning and that this role has changed dramatically over the past few decades. Assessment's value is that it can be used both to enhance learning and to measure it. Used properly, assessment can challenge students to use higher-order learning skills and to actively engage in their learning. Many traditional methods of assessment have come under fire for evaluating only factual knowledge. The biggest change in assessment has been to create more complex and objective assessment as learning methods that allow students to "reason critically, to solve complex problems, and to apply their knowledge in real-world contexts" (Shepard, 2000, p. 8). One traditional method of assessment that has weathered this storm is the essay; it challenges students at all levels of learning and requires the student to actively engage with the subject. However, despite the wealth of research on the role, creation, and evaluation of assessment there is one area that many instructors would like to know more about: how do instructors correct essays in this new framework, in order to use assessment to foster learning? Students in higher education are being asked to complete more complex assignments which themselves require more complex methods of teacher feedback.

Compounding the problem is that correcting forms a large part of every teacher's workload, yet it is an area where few receive training. For example, university instructors state that they feel their job is to "correct everything", yet they do not want to "overwhelm students", which are two conflicting statements (Goldstein, 2004, p.72). If instructors do have pedagogical training it is usually on how to create assessments, not on how to correct them. Essay writing is an assessment method used across many university disciplines, from Arts and Humanities, to Science and Career-programs. This topic is also important because in constructivism teachers are supposed to act as expert guides by allowing students to learn independently and actively by providing necessary and timely scaffolds.

However, in large lecture halls active learning is challenging; at the college and university level teacher-student ratios can be quite high. Neither is this uncommon in post-secondary and tertiary education worldwide: many instructors are required to teach courses with students numbering in the hundreds, with little or no outside help for grading. Frequently, written feedback on assignments is the only communication students receive from their instructors. This situates feedback as a prime technique for constructing an effective learning environment. It is worthwhile then, to base this effort on research and informed practices. Since CEGEP instructors are required to do all of the grading for their courses themselves, this is a pertinent issue.

Despite research on student learning, student motivation, and student engagement being extant, its connection to the independent variable of written teacher feedback on essays is not an apparent one. Assessment occupies a key role in the learning process and it is worthwhile seeing the process through to the end by looking at how instructors can provide effective feedback. Many studies show that post-secondary students view feedback as an area where improvement is needed (Rowe, Wood & Petocz, 2008) and a quick glance at the literature reveals some critical issues. First, some students state they do not receive feedback at all (p. 5), showing that there is a large variation in feedback from teacher to teacher. Second, constructivism encourages assessment and feedback that is: “more flexible, integrative, contextualized, process oriented, criteria referenced and formative” (Ellery, 2008, p. 421). Although this is positive for students because the “‘assessment for learning’ approach encourages student independence and self-evaluation and can lead to active and deeper learning” it requires more effort on the part of teachers (p. 421). Third, no matter how much time teachers spend providing essay feedback all efforts are “futile” without student internalization and uptake of the comments (I. Lee, 2013, p. 113). As Shepard (2000) states, “[w]e take it for granted that providing feedback to the learner about performance will lead to self-correction and improvement” (p. 11). In other words, essay feedback strategies need to be chosen in a way that encourages students to internalize the comments and that promotes

learning. Fourth, instructors may not realize that their feedback on essays can actually negatively affect students. In other words, not all effort is good effort:

They [teachers] continue to spend a huge amount of time correcting written errors, risking giving inconsistent and inaccurate correction because of fatigue and burnout. They continue to do what seems efficient for themselves but demotivating for students, scrawling detailed written comments on student texts (which may not be legible), filling it with circles, underlines and error codes, without seeming to care that such feedback is likely to confuse, frustrate and put off the recipients (I. Lee, 2013, p. 113).

The aim of this research is to provide post-secondary and tertiary instructors with a synthesis of the latest primary research concerning written feedback on student essays and its effect on student learning and motivation so that they may use feedback decisions that are based on theory and academic research. Correcting, like every other aspect of teaching, is complex and no single feedback method will work universally. Teachers will need to choose the feedback suggestions that suit their assessment methods, their classroom, their students, and their teaching philosophy. A classroom is an eco-system within which feedback plays only one part. The purpose of this research is to synthesize the literature to determine how written feedback on student writing affects student motivation and what confounding variables affect the impact feedback has on learning. Considering that teachers spend such a large amount of their workload providing feedback it is an area where teachers can benefit from making a cost-benefit analysis of their methods. The extra time required to provide more complex feedback for more complex assignments comes at a cost to teachers; they have to give up other areas of their workload to achieve it. Which types of feedback or timing methods provide the most effective results? Does the rate of effectiveness compensate for the extra time involved in providing the feedback? Instructors can benefit from knowing all the variables involved when deciding which feedback methods work best for them, including: an estimated time investment, the opportunity cost, and the projected value for student learning.

CHAPTER TWO: CONCEPTUAL FRAMEWORK

This research has been informed by many theoretical frameworks, but four in particular have shaped its research design: 1) constructivism, 2) assessment as learning, 3) written corrective feedback in second-language learning, and 4) student motivation.

1. CONSTRUCTIVISM

The conceptual framework for this research starts with the theory of constructivism in education. One of the founding theorists in this area is John Dewey, who theorized that students learn better when teachers create authentic, student-centered, experiential learning (1938). This was quite different from the traditional, behaviourist view of education held at the turn of the century that thought the best form of knowledge transfer was one-sided transmission, not two-sided communication (Dewey, 1916). Although Dewey's theories of education are labeled as "pragmatism" rather than constructivism, they started a change away from traditional teaching and laid a base for later constructive thinkers such as Piaget and Vygotsky. Constructivists believe that students come to the classroom with their own socio-cultural beliefs and backgrounds that make them "assign relevance and significance to certain events and whose behavior are guided by their own goals" (Storch & Wigglesworth, 2010, p. 306). Teachers fit into this new progressive model not as fountains of knowledge, but as expert guides who are best able to create an environment suitable for student learning: "the teacher loses the position of external boss or dictator but takes on that of leader of group activities" (Dewey, 1938, p. 59). Vygotsky's theory of zone of proximal development shows that students learn best at certain levels of difficulty. Left on their own, learners will remain static in their level of learning. Teachers can scaffold activities to get students to the next level, but if this next step is too high students will lose motivation. It is up to the expert teacher to create levels that are challenging steps forward without leading to discouragement.

The cognitive benefits of this type of learning and teaching are that students learn the material in a more meaningful way. According to Bloom, all learning is not equal. Lower levels of learning concern memorization and understanding a concept, but more complex learning takes place when students use the higher levels of thinking: applying, analyzing, synthesizing, evaluating and creating. Ramsden (2003) argues that traditional teaching leads to surface learning, which is superficial memorization of the concepts and ideas being taught, akin to Bloom's lower levels of thinking. The constructive way of teaching promotes deep learning, which addresses Bloom's higher-order levels of thinking. Teaching manuals for college and university professors now emphasize the need for student-centered, active, experiential learning in addition to the traditional lecture method (McKeachie & Svinicki, 2006). Educational psychologists have conducted subsequent work in the area of constructivism and they are showing that constructivism does indeed better match up with what is happening cognitively to humans when they learn. Research has shown that "learners' skills and abilities d[o] not fully explain student achievement" (Schunk, 2005, p. 85) and that variables such as motivation, goals, self-regulation, and cognition play a mediating role.

Interdisciplinarity is also part of this movement. Interdisciplinary learning focuses on solving real world issues with the "interaction [of] two or more different disciplines" (Lattuca, 2001, p. 17). This leads students to create their own meaningful learning experiences, allowing them to better relate to their education by providing them with more real-world value (Boix Mansilla, 2006) and allowing students to be better prepared for employment post graduation. Regardless of whether a classroom is interdisciplinary, it is clear that what students learn in one classroom is not alien to what is happening in the classroom beside them. For example, writing does not only happen in English class and learning to write well is not only the job of English teachers (Flateby, 2005). Therefore, the need for written feedback on student writing assessments crosses disciplines.

2. ASSESSMENT AS LEARNING

When using a constructivist approach to education, the role of assessment changes. Instead of focusing on summative tests and exams to measure knowledge transferred, constructivists use formative assignments that stress assessment as learning and encourage active participation (Ellery, 2008). In other words, assessment as learning is recognition that “assessment can support learning as well as measure it” (Black & Wiliam, 2003, p.623). The traditional measurement approach emphasized giving a grade and providing an explanation for the measurement. It focused heavily on assessing rote learning and functioned as the culmination of the learning process (Shepard, 2000). In the assessment as learning approach evaluation is simultaneous to the learning going on in the classroom and assignments focus more on problem-solving and real-world situations. The aim is to provide formative assessment that helps the student to learn from mistakes, to gain feedback, and to improve their learning (Biggs, 1999). When assessments are used to encourage learning, correcting is seen as another channel of communication with students and assessment functions as an instructional strategy (McKeachie & Svinicki, 2006). In this way, the end result is not “how much the final score is” (quantitative), but “how well” (qualitative) the grade matches the student’s completion of the course objectives (Biggs, 1999, pp. 150-151). Assessment as learning puts assessment in a central place in the classroom instead of “being postponed as only the end-point of instruction” (Shepard, 2000, p. 10). The benefit of this new assessment model is that it “encourages student independence and self-evaluation and can lead to active and deeper learning” (Ellery, 2008, p. 421). Furthermore, this more authentic assessment is a chance for students to learn what real world challenges will be in their field (Wiggins, 1989a). In the traditional assessment method the purpose of correcting is a final evaluation to indicate to the student where their answers are correct and incorrect. According to Knight (2002), the purpose of this type of assessment is ‘feedout’, rather than feedback. It is a measurement of institutional performance rather than student performance: “[w]hen assessment certifies or warrants achievement it has a feedout function, in that the grades and classifications can then be treated as a performance

indicator for the student, department, institution, employer, funding body, quality agency or compilers of league tables” (2002, p.276). In the assessment as learning method the purpose of correcting is student learning; teachers provide feedback so that the student can participate in the process of their learning and to help guide them towards the right answer. In the words of Black and Wiliam, it is both “diagnostic” and “prognostic” (2009, p.17).

Akin to this framework is the large body of research on formative assessment. In particular, research by Black and Wiliam (2009, 2003, 1998a, 1998b) has shown the positive effect of formative feedback on learning. Formative assessment is assessment that is part of a learning process as opposed to being an end result. Any assessment that “provide[s] information to be used as feedback to modify teaching and learning activities” and assessment “used as evidence...to adapt the teaching to meet student needs” would be formative (1998b, p.140). In formative assessment, the feedback cycle does not only exist between teacher and student, but also includes peer feedback and self-regulation. In this new cycle, the teacher provides the “trigger to initiate self-regulatory processes in the student”, both in cognition and motivation (Nicol & Macfarlane-Dick, 2006, pp.202-203). This formative assessment is contingent on the concept of dialogic feedback, a type of written and verbal feedback that promotes reciprocal discussion between all parties involved in the process. According to Nicol “...feedback should be conceptualised as a dialogical and contingent two-way process that involves co-ordinated teacher-student and peer-to-peer interaction as well as active learner engagement” (2010, p.503). The old method of feedback as a one-way communication from teacher to student changes to one where communication is two-way. Feedback in this framework, therefore, needs to follow the same rules of inter-personal communication and tone that are expected of all social interactions within a culture. If it is considered culturally undesirable for friends or family members to yell negative comments at one another, then using an overly harsh tone and negative criticism in feedback is similarly socially inappropriate. Goldstein’s (2004) literature review pointed out the need for

communication between teacher and student in the grading process in order to avoid “appropriation” and instead aim for “helpful intervention” (p.68).

Instead of creating a ranking system where students rush to compete against each other, assignments created in the assessment as learning model are criterion-referenced, instead of norm-referenced. In norm-referenced assessments, the achievement of students on an assessment is measured by comparing the student’s performance against the performance of other students. This comparison can be made within a class or more largely across a grade, school, district, country, or internationally. In criterion-referenced assessments, students are judged on whether they have met the objectives of the course so that all students can measure their improvement over the term (Biggs, 1999). Researchers in this area, such as Wiggins, disagree with norm-referenced, standardized, nation-wide tests and bell-curving grades (1989a, 1989b). An even greater danger, Wiggins (1989a) points out, is that the bell-curve has an effect on student motivation because it will always make half of your students feel like they are worth less. Instead, the focus should be on authentic assessment methods that are performance-based and present real world problems (Biggs, 1999). Instead of assessment methods, such as standardized tests, which focus on rote learning assessment methods in the new model are more complex. According to Shepard, the goal is to make assessment methods a more accurate representation of what the student is learning, by matching the environment of the class and providing students with challenges that mirror those they will face in their discipline once they start their careers. The assessment methods are therefore “more open-ended performance tasks” and take more varied forms (2000, p. 8). Examples include journals, reflective essays, group projects, portfolios, self-assessment, peer-evaluation, and discussion groups. However, despite the variety of assignments possible in the assessment as learning framework, one thing that is common to many of the assessment methods is that they ask students to submit a piece of writing. In particular, the tried and true assessment method of the essay makes the transition from the measurement approach to the assessment as learning approach quite well, as

it promotes active and independent learning as opposed to memorizing content for the next test (Flateby, 2005). Since the aforementioned role of teachers changed to that of the expert guide, feedback on written assignments is one method teachers can use to steer students in their learning.

3. WRITTEN CORRECTIVE FEEDBACK

To date, most of the work on written feedback on assessments has been conducted by L1 (1st language learning) and L2 (2nd language learning) educators; in this body of literature the variable is termed ‘written corrective feedback’ or WCF. For the research literature published in English this means researchers are in the disciplines of English Literature and ESL. There are many debates in this field, but the central one is about whether or not to use WCF in the first place. Truscott is against error correction, while many new researches have shown the opposite stance, such as those by Bitchener (as cited in I. Lee, 2013). And of course, there are those in the middle, such as Juwah (2004) who states that it is not efficient to point out mistakes that students could find for themselves, such as grammar errors or typos. Although the debate is still ongoing the pendulum in the past few years has swung in favor of using WCF to correct student writing. Current debates include the grammar correction debate (How should grammatical mistakes be corrected?) and the debate over direct versus indirect feedback (Do you provide the answer or simply point out the mistake?). However, all the debates can be summed up in the following questions by Hashemnezhad & Mohammadnejad: “1) Should learners’ errors be corrected?, 2) When should learners’ errors be corrected?, 3) Which errors should be corrected?, 4) How should errors be corrected?, and 5) Who should do the correcting?” (2012, p. 232).

4. STUDENT MOTIVATION

The question of why two students react differently to similar challenges has intrigued researchers in many educational fields. Motivation used to be thought of as a static quality that everyone possessed (Pintrich & Garcia, 1994). Behaviourists,

such as Skinner, theorized that with positive and negative reinforcement, everyone could be motivated. However, educational researchers today recognize the dynamic quality of motivation: individual students act in unique ways to the same set of educational challenges and can change their motivation over time (Paris & Turner, 1994). Simply knowing the correct learning strategies is not enough to make a student successful; they also have to possess “the motivation to use those strategies” (Schutz, 1994, p.135). McKeachie’s situated motivation theory shows that student motivation depends on a dynamic situational context influenced by four factors: a student’s cognitive assessment of the situation at hand, the students’ construction of these assessments, the context of the situation, and unstable changes in goals over time (cited in Paris & Turner, 1994, pp. 214-216). Different factors that affect motivation are intrinsic and extrinsic goals, age and the level of study (Goodman *et al.*, 2011), interest in a subject, student choice, and challenging material (Paris & Turner, 1994). Students use motivational strategies to navigate “risky situations, helping to maintain self-worth or to harness anxiety” while learning (McKeachie in Schutz, 1994, p.125). Covington’s self-worth theory of achievement motivation states that “the need for self-acceptance is the highest human priority” and that school achievement should be seen in the context of the students need to “aggrandize and protect self-perceptions of ability” (Covington & Roberts, 1994, p. 161). Thus students will choose among four different orientations all of which are aimed at making this happen: failure-avoiding, over-striving, failure-accepting, and success-oriented (pp. 166-168).

Paul R. Pintrich was an educational psychologist whose theories played a foundational role in the study of motivation and self-regulated learning. Pintrich is known both as one of the most productive researchers in this area and for focusing on the scientific research of motivation; research needed a rigorous scientific method and a practical goal (Harackiewicz & Linnenbrink, 2005). Pintrich saw that motivational research had to be integrated with the new views on cognitive learning. Pintrich saw motivation as being composed of three components: value, expectancies, and affect. One of this researcher’s most influential works is that on achievement goal theory, or

the interplay between mastery goals (“learning and improvement”) and performance achievement goals (“demonstrating competence and outperforming others”) (Harackiewicz & Linnenbrink, 2005, p. 76). This led to work by other scholars examining the relationship between the different goals and debates over which goal is more effective. Most now seem to settle on the superiority of mastery goals, although performance achievement can have both positive and negative effects on the student, depending on the situation (Harackiewicz & Linnenbrink, 2005).

CHAPTER THREE: LITERATURE REVIEW

Student perceptions and opinions about the feedback they receive on corrected essays has been researched extensively. The most common data collection instrument used is the questionnaire; there is data available from numerous student samples across many English-speaking colleges and universities, in North America, Europe, Australia, and increasingly in Asia and the Middle East. Several themes emerge in this literature review and these will be dealt with in the following sections: 1) the effect of feedback on student learning, 2) research on student motivation relevant to feedback, 3) research on written feedback in L2 and ESL learning, rubric-guided feedback, and peer assessment, 4) student expectations and perceptions on the feedback they receive, 5) discrepancies and misunderstandings arising from the feedback, 6) the particulars of the Millennial student and its impact on feedback reception, and finally 7) the recommendations and suggestions provided by the literature.

1. FEEDBACK AND ITS EFFECT ON STUDENT LEARNING

A big concern in the literature is whether or not written feedback positively affects student grades. In this case, student grades are assumed to be measurements of student learning that has taken place. This is an important relationship to study since a strong assumption made by teachers is that their correcting will have a positive effect on their students and will encourage them to learn from their mistakes. However, the research is not conclusive on this relationship; instead it shows that feedback in some instances has little or no effect, or worse yet, a negative effect on grades.

There are studies that show feedback having a positive effect on grades and on future rate of error correction. Weaver (2006) sampled 44 university students by questionnaire and 22 students with group discussions. Although only half stated that

they felt feedback impacted their motivation, later on in the questionnaire most stated that if there were suggestions for improvement they made them (p. 386). Students stated that they were motivated to use feedback when it was constructive (p. 390). Rowe and Wood (2008) sampled 29 university students from Macquarie University in Sydney, Australia using individual interviews and focus groups. The results showed that not only did students use feedback, 100% said they wanted feedback and that it was “important to them” (p. 4). In Halawah’s (2011, p.384) study of 232 undergraduate UAE students, a questionnaire asked students to rate 30 items related to student motivation on a 5-point Likert scale. The item “giving feedback after tests and assignments” had a mean average response of 4.5, ranked higher than “creating curiosity” (3.8), “instructor’s enthusiasm” (3.7), “using a variety of teaching methods” (3.7), and having a “good relationship with students” (3.6). Demaree’s (2007) experiment on 41 physics students at The Ohio State University showed that students in the experimental group who received more developed feedback saw a statistically significant improvement in their grades between assignments than those in the control group who received brief, one-word comments as feedback. Lastly, Chandler’s (2003) experiment of 1st and 2nd-year music students at an American conservatory showed that students who were required to fix their errors upon receiving their corrected assignments showed a statistically significant improvement in the amount of errors in their next assignment compared to students who were not required to do so. Both the control and experimental groups were ESL writing classes and the grader/teacher remained the same between both groups.

Conversely, there are just as many studies that support feedback having little or no effect on student grades. For example, McGrath, Taylor and Pychyl’s (2011), study showed that feedback had no statistically significant effect on student grades. The researchers studied the effect of developed versus undeveloped feedback on assignments. 30 students were given two assignments; for the first assignment half were given more developed feedback while the other half was given undeveloped feedback, then the groups were switched for the second assignment. The

questionnaire given to students at the end of the experiment showed that although students found that the more developed feedback was “fairer” and more “helpful” (p. 6) it had no statistically significant difference on their grades between the two assignments (p. 7). Students perceived an advantage to feedback, despite the fact that the analysis of their grades from the feedback experiment did not show this. Furthermore, this lack of difference from one assignment to the next was despite the fact that the more developed feedback took “twice as long” to provide (p. 9). A study by Crisp (2007) showed the same result: that grades on a subsequent assignment were not affected in a significant way by written feedback. Crisp purposefully sampled 51 Australian undergraduate social work students who handed in two writing assignments that ended up being corrected by the same grader. The researcher assigned two essays with the same grading scheme six weeks apart to see what changes occurred between the first and second essay results. Surprisingly, there was no change in the mean average grade between the first and second assignment, which the author interpreted as being due to students not using the feedback comments from one assignment to the next. To add more evidence to this claim, those second essays with the biggest increase in grades were those with fewer amounts of problems identified by the markers. However, grades and student learning are two different things; are there other ways to measure whether students are benefitting from the feedback they receive?

A concern of many educators is that students are not reading their feedback comments but simply skipping to the grade at the end of the assignment. However, the research shows that this concern is unfounded: students state that they want feedback and read it. From Higgins, Hartley and Skelton’s (2002) questionnaire data gathered from 94 university students in Business and Humanities, 97% of students stated that they “usually read” written feedback and 82% “claimed to pay close attention to feedback” (p.57). Similarly, the case studies of F. Hyland (1998) found that of the 6 students followed, all students except one tried to use the feedback the teacher offered. Of those 5 students, when all the individual points of feedback on

assignments were added up, only between 6-14% of feedback was unused (p.262). Furthermore, Williams and Kane's (2009) large-scale analysis of data from 12 educational institutions in the UK between 1996 and 2007 showed that students want feedback. Using accessible statistics, public data, student comments, and satisfaction surveys Williams and Kane's analysis found that in more than one institution "useful" feedback was rated as being highly important by students: in one institution it ranked 17 out of 217 items, while in another it ranked 8 through 11 out of 100. The authors found that because students viewed feedback as being so important in their learning process they had high expectations of it, which may explain why students rated the quality of the feedback they are receiving poorly.

What is more concerning is that the research shows that a bigger problem is that students are reading the comments, they just are not processing them, because of a lack of ability, misunderstandings, or being so overwhelmed by volume that they just do not know where to begin. For example, Chanock (2000) studied 101 students and their 10 teachers at LaTrobe University in Victoria, Australia and asked students by questionnaire what they thought the phrase "Too much description; not enough analysis" meant and approximately half could not properly define it. Ferguson's (2011) much larger sample of 566 university students, both undergraduate and graduate students, showed similar results: 50% of the respondents reported that at one time or another they had experienced difficulty understanding the feedback they received (p. 55). In a study by Storch and Wigglesworth (2010) students were paired up and asked to write a text that was then corrected using either direct or indirect feedback. Afterward, the pairs were recorded while redoing their text when they received their feedback. Most made the changes as suggested by the teacher in the immediate aftermath, but alarmingly they had no retention of the corrected principle 23 days later.

What is clear is that the numerous primary studies on the impact of teacher feedback do not agree with each other. The reasons for this include: intervening and

latent variables, how researchers measure student learning, and small sample sizes. A possible intervening variable is whether or not a student is used to receiving more developed feedback; a student who is new to an assessment as learning classroom may not realize the purpose of the comments on their essay. A latent variable is student motivation; whether students are reacting to feedback because of the extrinsic motivation such as grades, justification of grades, or the correct answer, or the intrinsic motivation such as the motivation to learn and improve (Rowe and Wood, 2008). Student learning is measured differently in each study, with some researchers equating it with grades and others letting students self-assess their learning using questionnaires. Furthermore, another point to consider is that a lack of discernable improvement in grades does not necessarily mean that learning has not taken place. And lastly, another reason for this disagreement may be related to research design: much research in education is done by teachers in their own classrooms or departments, which provides for small sample sizes and purposeful, but non-random convenience sampling. Also, the data source is most often self-reported questionnaires, which reflect respondents' perceptions rather than a measurement of actions.

2. STUDENT MOTIVATION

Although the effect of feedback on student learning is uncertain, the research shows a possible relationship between feedback and student motivation. Egan's (2011) literature review demonstrated that grading, feedback, and formative assessment all aid in creating a culture of goal setting in the classroom. Ferguson's sampled 566 students at all levels in university and surveyed their opinion on what formed effective feedback. A common response was that feedback had the ability to build "confidence and encouragement" and that too much negativity would make them give up (p. 57). Indeed, some students in Rowe and Wood's focus groups linked motivation to "their worth as a person" (2008, p. 3). Students answering Halawah's (2011) survey listed feedback perceived as being accurate as the factor that motivated them. Furthermore, Weaver showed that although only half of its student

questionnaire responses stated that feedback encouraged their academic performance, overall the students stated that they followed constructive suggestions for improvement when they were given (2006, p. 386). I. Lee (2013) noted from personal observation that unfocused feedback “is likely to hurt their [a student’s] ego and damage their self-confidence in writing, and may in turn affect the uptake of feedback”. Students with lower language proficiency tended to find focused WCF, which showed the most important errors rather than all errors, “more manageable and motivating.” In this context, it is “discouraging” and “confusing” to be faced with such a large number of errors with no idea how to fix them or how to rank their urgency (pp. 109-110).

One of the variables shown to have a large effect on student motivation is the student’s sense of self. Students are constantly formulating and reformulating their “self-schema”, their knowledge about themselves as learners, throughout their lives (Pintrich & Garcia, p. 115). Events that can change learners’ opinions of themselves include positive or negative educational experiences, assessments from teachers, or good or bad grades. Pintrich suggests that students form their self-schema much like they form theories about the subject matter they are learning. If they have evidence that they are good at a subject - perhaps they received a good grade - then they will form a self-schema where they are good at that subject (Pintrich & Garcia, 1994). In Atkinson’s theory of need achievement all “achievement behavior is the result of an emotional conflict between a tendency to approach success and a disposition to avoid failure” (as cited in Covington & Roberts, 1994, p. 159). Therefore, motivation is linked to the risk involved in achievement; students balance a fine line between the payoff of success and the risk of failure. Students would like the reward of success, but have to mitigate the negative effect failure has on their self-worth. For example, students faced with the possibility of failure can use two different strategies to deal with the pain of having failure affect their self-schema. Some students self-handicap, a strategy that sees them withdraw their effort from a project so that whether they win or lose their self-worth is no longer attached. Others use the opposite strategy of

“defensive pessimism” where in the face of possible failure they apply more effort but set lower achievement expectations to lessen the blow should failure occur (Pintrich & Garcia, 1994, pp. 125-126). Students use these motivational strategies to help them maintain their self-worth. Parboteeah and Anwar (2009) summed up this affective response students have with feedback: students interpret their feedback based on if the results they received were equal to their effort, as well as the level of discourse, powerlessness, and emotion that the feedback elicited. What the research shows is that student motivation and assessment are cyclical variables: motivation affects student performance on assessments and the information from their performance on these assignments in turn forms their self-schema, which then affects their self-motivation. What this points to is that: 1) teacher feedback on writing has a possible effect on student motivation and a student’s sense of self, and 2) that this effect will vary from student to student based on their individual situation. The feedback strategy that works to increase one student’s motivation may not work with another.

Interestingly enough, self-esteem of the grader has even been shown to play a role in the feedback process. An experiment by Jeffries and Hornsey (2012) compared how 263 undergraduate psychology students peer-evaluated each other when the feedback was given face to face, anonymously, or not at all. Students were less likely to state negative comments when the feedback was delivered personally, i.e. face-to-face. Inversely, they were more likely to give negative comments when told either the results were going to be delivered anonymously or that they were never going to be received by the student at all. Surprisingly, the proportion difference between positive and negative feedback given personally versus that given anonymously or not at all was much higher in markers with a self-reported lower self-esteem.

3. FEEDBACK IN L2/ESL LEARNING, RUBRIC-GUIDED FEEDBACK, AND PEER-ASSESSMENT

Three main developments in the area of feedback are L2 and ESL written correction, rubric-guided feedback, and peer assessment. Research on written feedback in language learning used for the purpose of this study was aimed at English and English as Second Language instructors, as well as tutors and learning center professionals. For example, Bitchener (2008), Evans, Hartshorn and Strong-Krause (2011), Hashemnezhad & Mohammadnejad (2012), I. Lee (2013, 2008), Storch and Wigglesworth (2010) all focused on students learning English as a second language. Although there is still debate in L2 learning over whether or not to correct and how to correct, what is clear is that certain types of feedback methods are more effective for certain types of errors (Hashemnezhad & Mohammadnejad, 2012). The term used to describe feedback methods in this body of literature is ‘written corrective feedback’ (WCF) and describes methods that correct: student acquisition and use of language, word choice, organization, sentence structure, and grammar. Often missing from this branch of literature is how to correct analysis or idea development, however there are concepts from WCF that can be applied to essay feedback in other disciplines. For example, I. Lee’s (2013) literature review showed that it may be better to use indirect methods of feedback with errors that are rule-based, such as grammar, while direct feedback may work best with errors that are more abstract, such as “word choice and word order” (p. 111). Lee also points out the difference between *errors*, which are skills not yet mastered by students which need to be corrected for learning, vs. *mistakes*, which are skills that have been mastered by students but have not been followed in this particular instance, such as typos (p. 112). This distinction between errors that indicate a lack of learning vs. mistakes that reveal a temporary lapse in decision-making could easily be applied to all disciplines. For example, spending a few extra minutes to provide direct and specific essay comments to correct a student’s abstract error is an efficient use of a teacher’s time; to do so for a concrete, rule-based mistake is not. Storch and Wigglesworth (2010) conducted a quasi-experiment and observational study with 48 Australian university students and found that indirect

feedback in the form of errors codes worked best in L2 learning. Their interviews of student pairs who were asked to verbally talk through their reaction to and application of feedback shows that the lack of a direct answer to copy led to increased student engagement in order to correct their mistake. All disciplines have both technical and analytical elements to their writing that need to be corrected; for example, in the Social Sciences proper referencing is a technical, rule-based element that students must learn where teachers could use error codes to efficiently provide feedback.

Most of the research covering the ideal ‘form’ of feedback in disciplines’ outside of language learning focuses on the use of rubrics. The aim of the rubrics is twofold: they reduce grader variation and they allow students to see what they will be assessed on. As Newstead states: “One of the key factors in any form of assessment is the notion of reliability: that the system of assessment should allow the same mark to be awarded to a piece of work regardless of the marker” (as cited in Read, Francis & Robson, 2005, p. 242). Both are ethical issues, as grader bias happens not only because of grader misunderstanding of the assessment criteria (Hunter & Docherty, 2011) but because of other subconscious factors such as reactions to race (Harber, Stafford & Kennedy, 2010) or gender (Read, Francis & Robson, 2005). In both cases, teachers were subconsciously grading more easily those whose visible background they perceived as a minority, affecting the students goal-setting abilities and student motivation. Rubrics have also been linked to increased independence in students. For example, Andrade, Wang, Du and Akawi (2009) studied the use of self-assessment rubrics in 268 elementary and middle-school aged children by asking students to write a rough and final draft of an essay assignment, while the treatment group was given a self-assessment rubric in-between the two submissions. One of their findings was that there was a greater link between self-efficacy and rubric use, however only for female students. Universities recommend the use of rubrics to their professors and the University of South Florida has even created a multi-disciplinary rubric, the *CLAQWA* (the Cognitive Level and Quality of Writing Assessment) for professors outside of the discipline of English to use (Flateby, 2005). A subsection of this

research has tried to reveal the effect of providing an essay sample to students, such as Andrade *et al.* (2009) who provided a sample essay along with their rubric and Carkenord (1998) who studied the feedback strategy of including a full-credit essay exam answer when returning exams. The goal of much of this research is to limit variation in the grading of standardized essays and entrance essays (Hunter & Docherty, 2011) and to justify their continued use as an assessment tool at the post-secondary level. In particular, research out of the UK has attempted to justify its use of essay writing in standardized tests for university admission. The rubric provides a solution to negative research on the use of essay writing in general as an assessment tool at the post-secondary level. For example, O'Donovan (2005) explores the fairness and lack of standardization in the essay method compared to multiple-choice tests in the university setting. Hunter and Docherty (2011) studied the issue of grader-to-grader variation, even with the use of rubrics. However, despite the increased use of rubrics, teachers still include feedback throughout the essay, whether in error codes, comments in the margins, etc. The effects of the comments in the margin have a large effect on top of the information students receive from the rubric, so both need to be studied in order to find out more about student learning.

In addition, the use of rubrics has led to research on the effect of who is doing the correcting. Peer assessment is also an area widely studied, in particular since it is a method to lessen the workload of revisions and draft writing for teachers with large classes. One sub-genre of this research is devoted to ways to improve the effectiveness of peer assessment, since students are not trained in it. Gielen, Tops, Dochy, Onghena and Smeets (2010) compared the effect of peer feedback to the effect of teacher feedback on secondary students. They found that including a "form" or rubric for peer-assessment improved its effectiveness. However, less than half of the students in their sample stated that peer-assessment was helpful and less than a quarter found the process of giving their peers feedback helpful.

4. STUDENT EXPECTATIONS AND PERCEPTIONS ABOUT FEEDBACK

Much research has been devoted to what student perceptions are towards the feedback they receive and most of it focuses on learning about what they dislike about the current state of their feedback. Student responses to questionnaires reveal that small, one-word comments, or checks and crosses in the margin are not valued (Ferguson, 2011), along with vague, non-specific, or general comments (Crisp, 2007; Weaver, 2006). On the other side of the spectrum, students find too many comments overwhelming (Crisp, 2007). Students prefer teachers to make comments on the larger elements of their essays such as content, arguments, and ideas, rather than small elements such as grammar and referencing (Ferguson, 2011). In particular, students link negative comments to a decrease in motivation (Ferguson, 2011; Hodges, 1997; Weaver, 2006). Hodges gives a quote from one of the student's interviewed: "I think that the teacher must remember that the student is a person and has feelings even if they have only basic skills, and that what the teacher says will be taken to heart – even by students who 'don't care'" (1997, p. 88). Negative or unexpected feedback seems to affect students' self-esteem; in fact it has also been shown that students with low self-esteem interpret the feedback they receive as judgmental and negative (Young, 2000 as cited in Weaver, 2006). Interestingly, one research found that students viewed the returning of their feedback via electronic methods negatively (Ferguson, 2011).

So what do students want from their feedback and what kind of feedback has greater uptake potential? Encouragingly, what the literature reveals is that students want feedback and find it important (Williams & Kane, 2009). Numerous studies show that students want more feedback, rather than less. Students prefer information in addition to just their grade (Rowe & Wood, 2008) and commonly cite that they are "frustrated by brief comments" (Ivanič *et al.*, 2000, p.60 in Williams & Kane, 2009). There is a strong demand from students for teachers to point out the positive aspects of their essays (Ferguson, 2011; Hodges, 1997). Students stated that positive comments help them increase their confidence (Weaver, 2006). They value

constructive comments that help them to learn how to fix problems (Crisp, 2007; Ferguson, 2011). Indeed, when asked to provide concrete examples of unsuccessful feedback, students mention instances where no suggestions for improvement are provided (Weaver, 2006). When given the choice of which type of writing they value, brief written comments throughout and a final explanatory paragraph are the two top qualities, whereas a “stated grade” ranked a low 6 out of 7 among student preferences (Ferguson, 2011, p. 55). Students like feedback that is conversational in tone (Rowe & Wood, 2008) and that is part of a two-way communication between teachers and students (Goldstein, 2004). Interestingly, one study shows that students benefit from developed feedback – comments that are fully explained - on negative aspects of their essays, but that positive feedback had a positive effect on students regardless of whether it was developed or not (McGrath *et al.*, 2011). Students also appreciate comments that are more personal in nature, focusing on unique aspects of their paper (Ferguson, 2011). It shows that “you’re not just a random number, that someone cares about you, that they read your work and make a comment” (Rowe & Wood, 2008, p. 3). Most researchers agree that for feedback to be effective it has to be “timely” (Ellery, 2008, p. 426; Williams & Kane, 2009, pp.272-274), although this is not always quantified and what may seem timely to an instructor’s workload may not be timely in the minds of students. Ideal return time for essays with feedback was listed as 2-3 weeks in three studies (Ferguson, 2011, p. 58; Rowe & Wood, p. 4; Williams & Kane, 2009, p.277). Another definition is that timely feedback is “consequential”; a corrected assignment is returned with enough time for the student to make the necessary changes for the next assignment (I. Lee, 2013, p. 115). What seems to be agreed upon is that the “less delay...the better” (p. 114).

5. DISCREPANCIES AND MISUNDERSTANDINGS BETWEEN TEACHERS AND STUDENTS

The research shows that there are strong discrepancies between the feedback teachers think they are providing and what students perceive they are receiving. First, the literature shows that there are discrepancies between how teachers and students

view the amount and purpose of feedback. For example, through comparisons between questionnaires collected from 450-medical students and 51 teachers, Perera *et al.* (2008) found that student and teacher perceptions on the amount of feedback did not match up. 75% of the teacher's stated that "they provide regular feedback to students", but only 55% of students stated that they were receiving regular feedback (p.396). The survey responses of 130 3rd-year undergraduate students and 80 staff members compared by MacLellan (2001) revealed that although both groups agreed that one of the purposes of assessment was to "grade/rank", when asked if "assessment motivates learning" 69% of teachers chose "frequently", the highest Likert-response possible, while 65% of students chose "sometimes", the 2nd highest response on the 4-point Likert scale (p.310).

Secondly, not only do students and teachers disagree over the amount of feedback being given, the research also shows that communication errors between teachers and students are common. Hodges' (1997) case studies provide a good example of this. Teachers were taped thinking out loud while they gave feedback on student essays. The tapes were then compared to the comments that actually made it onto the paper. Additionally, students were interviewed while they were reading their teacher's written feedback in order to see if students understood what their teachers had meant to express. The main results were that teachers were not always able to communicate their assessment of student work and students often had trouble understanding the comments. As previously mentioned, a study by Chanock questioned teachers and students about their use of the common feedback item "Too much description; needs more analysis". The results were that at best 51% of the history and political science students studied knew what the teacher had meant by the comment (2000, p. 103). This misunderstanding between teacher and student is exacerbated because students "do not yet share a similar understanding of academic discourse" as the person giving them feedback (Weaver, 2006, p. 380). Another possible reason for this miscommunications between student and teacher may also be due to the high volume of feedback being transmitted: if a student is overloaded with

too many comments on one particular assignment, they may see it as too overwhelming of a task to apply the feedback forward. Glover and Brown (2006) coded assignments marked by tutors for 147 biology and physical science students at two universities for “type” and “depth” (p.4). The majority of the comments written by the tutors were “concerned with science content” and 20.2% of those were pointing out “use of English” (p.6). The authors concluded that the feedback from the tutors showed a trend of summative, low-quality, unhelpful, yet high-volume feedback; according to Glover and Brown it is no wonder students find little use for teacher feedback.

Third, another discrepancy found is that different disciplines require different criteria for common essay qualities, such as description, analysis, structure, and language use. For example, the analysis required in a history essay is quite different from the analysis required from an art history essay and each has differing amounts of description (Chanock, 2000). This makes comments on essays even more confusing to students as they may have done what was successful in one course yet received negative feedback about it in another. Furthermore, classroom structure and organization varies between disciplines, which makes a discipline’s attitude towards assessment methods different (Weaver, 2006). For example, one subject matter might assess by predominately assigning essays, another with multiple-choice tests, and yet another with lab work. This means that depending on your discipline, students may have lots of practice writing or very little. This may explain why studies have found little improvement in grades between assignments; it may not be that students are ignoring feedback, but rather that they do not understand what the feedback means (McGrath *et al.*, 2011). I. Lee points out the concept of “student uptake”: that feedback internalization is limited by what students are able to process and the issue of “learnability” (2013, p. 113). What seems clear is that students require instruction on how to read and use the feedback they receive (Weaver, 2006). Another factor is the sometimes competing goals of students compared to their educators. As Flateby puts it: “While many of our students arrive...expecting to passively receive

information from experts that will be relevant to the next test, we hope to cultivate individuals who can think in context, who value multiple perspectives, and who are self-motivated learners” (2005, pp. 24-25).

These misunderstandings between teachers and students are especially concerning since the research showed that although teachers offer help to their students, students are often reluctant to ask for it (Hodges, 1997; McKeachie, 1994). This is because they either do not know that they need to ask for help, they are too afraid of receiving negative comments from the teacher, or they do not know how to ask the teacher for help. Students interviewed in one study pointed out that they knew how to ask for help, but that this was an extra step on behalf of the student that they did not always make (Rowe & Wood, 2008). In another questionnaire, students revealed in their open-ended answers that chasing teachers for verbal feedback was difficult because as one respondent stated: “the tutor only has one hour to see people and there are 15 other people in front of you waiting to see him/her first” (Blair *et al.*, 2013, p.73). Further aggravating the situation is that students who actually do make it to the teacher’s office may be “obscured by emotional static” and thus unable to really take in the answer that is being given to them (Chanock, 2000, p. 95). Making matters worse, Chanock’s (2000) questionnaire showed that while some students stated that they understood what a feedback comment meant, upon further questioning it turned out they did not. Furthermore, it is the attitude of some teachers that students of a college or university level should be able to look up the meaning of comments they do not understand. However, when Chanock tried to look up the meaning of the word ‘analysis’ in commonly available dictionaries, the definitions were confusing, unclear, and differed widely from what disciplines actually meant by the word.

6. MOTIVATING CONDITIONS SPECIFIC TO ‘MILLENNIAL’ STUDENTS

Millennials refer to the generation of students born between approximately 1981 and 1999 (Lancaster & Stillman, 2002). Much research has been done to study

the historical and sociological context in which the current population of college and university students was raised. Although the defining characteristic of this generation is their birth into a world of technology, in terms of motivation it is important to look at the personality traits of this group. They are the children of Baby Boomers and thus were subject to drastically different parenting methods than previous generations. Authoritarian parenting was replaced with “highly communicative, participation oriented parents” (Lancaster & Stillman, 2002, p. 31). These parents had fewer children and were spending more time with the ones they had, including a significant increase in the time fathers spent with their children (Winograd & Hais, 2008). Motivating college and university students raised in this fashion will take different strategies than those of previous generations.

One of the interesting characteristics about Millennials is their unique view of feedback. Feedback is an area that differs widely from Millennials to previous generations and this is where the generational gap between students and their teachers can be widely felt (Lancaster & Stillman, 2002). As children of parents who see parenting as formative training for adulthood they are used to receiving large amounts of feedback from their parents. It has been speculated that the constant access to technology has led Millennials to be accustomed to “24-7 conveniences” and that they expect “instant gratification” from their schools (Provitera-McGlynn, 2008, pp. 20-21). In particular, a huge generational gap exists in the tone of feedback expected: teachers now face students who are used to receiving positive rather than negative feedback (Provitera-McGlynn, 2008; Winograd & Hais, 2008). Interestingly, workplace management and training research as well as research in higher education has noted that although this generation is confident and has high self-esteem (Howe as cited in Jonas-Dwyer & Pospisil, 2004), they tend to overestimate their abilities and situations (Donnison, 2007). This may have implications, as the feedback they are given cannot always be positive. Therefore, those giving Millennials feedback have the extra variable of ‘generational outlook’ to consider when creating effective feedback.

7. FEEDBACK SOLUTIONS AND SUGGESTIONS

While there are many concrete feedback methods available to teachers correcting written language, there are few researchers that offer practical solutions for teachers when formulating feedback on the analytical and idea development side of writing. Hodges (1997) reminds teachers that feedback needs to be like any other piece of writing: it needs to contain a thesis or themes as well as proper tone. Hodges also reminds teachers that students need an opportunity to ask questions about what the comments mean. Since this often does not happen outside of class, allotting time in class to read feedback could be helpful. McGrath *et al.* (2011) states that negative feedback is seen as most helpful when it is developed by the teacher and explained. However, many of these suggestions are based on personal anecdotal experience rather than from primary research. Usually, the suggestions are less than specific and not operationalized.

Of the practical advice available for teachers providing written feedback on essays, most of it addresses the issue of time management. This is because a big concern of many teachers studied is lack of time. As Flateby states: “[r]educed resources and increasing enrolment have challenged our faculty’s capacity to assign student writing that requires the drafts and revisions we know are necessary for improvement” (2005, p. 22). Chanock (2000) gives the suggestion of bringing up a common feedback suggestion generally to everyone in class if your current teacher/student ratios make individual comments too time consuming. Ellery (2008) used verbal feedback given to the class as a whole during lecture time as a way to cut down on the time investment of providing feedback for essay tests. Rowe and Wood (2008) found this technique useful as well, with students in their study stating that they did not mind if feedback was given in class, as long as it was generic and addressed to everyone. Bloxam and Campbell (2010) studied the effectiveness of using interactive cover sheets, that allowed for students to identify the areas of their assignment that they would most like help with. The feedback on the assignment

could then be aimed directly at pertinent issues, with the intention of increasing student engagement with feedback.

Studies from the past few years have also focused on the use of technology to speed up the feedback process. Of particular interest is that of audio feedback, as many programs – such as *MS Word* and *Turnitin.com* - now provide this feature. The hope is that this method would be less time-consuming for teachers who knew how to use the technology and easier for the student to ‘read’. Bourgault, Mundy and Joshua’s pilot study showed that students found that audio-feedback recorded in .mp3 files and returned to them via email was: “perceived [...] to be more personal, always/often contained positive or constructive feedback, [and] was easier to understand” (2013, p.45). Another pilot study conducted by Sipple (2007) found similar results regarding students’ positive reactions to audio feedback. The 33 students surveyed preferred audio feedback to written feedback because they felt that the comments were more positive, it increased their confidence and the audio feedback was seen as more personal. This is consistent with the aforementioned study by Jeffries and Hornsey (2012) that showed feedback given personally was more positive in tone than that given back anonymously. In terms of using of audio-feedback in order to decrease the turn-around time of assessment, Lunt and Curran (2010) found that tutors using *Audacity* software were able to reduce their average feedback time for a 2000-word piece to five minutes, down from 30 minutes for written comments on a cover sheet and throughout the text. They found that one-minute of feedback was equal to six-minutes of traditional pen-and-paper feedback on essays. Conversely, Rodway-Dyer, Knight and Dunne (2011) survey of 51 students found that students viewed listening to audio-feedback more time-consuming, because it required extra time to listen to and understand. There also exist new technological software that may enable teachers to provide instantaneous feedback to students. Landauer, Lochbaum and Dooley (2009) and Rolfe (2011) reviewed the use of two technological tools for formative feedback, *Writetolearn.net* and *Turnitin.com*, respectively. This is a well-researched issue in the UK, as there is a need for faster

grading techniques for the essays required of students taking various national assessment tests (e.g. Hutchison, 2007). Davies (2009) attempted the same with technological programs in peer-assessment of essays.

8. CONCLUDING REMARKS ON THE LITERATURE

The literature reveals that there is a lack of consensus about the relationship between written teacher feedback on student essays and student learning. Although feedback shows a relationship with student motivation, the student/teacher relationship, student engagement, and student learning, it is not always in the direction that the teacher hopes. Feedback's effect on grades, task correction, and future use are also unclear. Furthermore, there are many misunderstandings between the teacher writing the comments and the students reading them, as well as many lurking variables that can affect the way students internalize the comments. However, the fact to be remembered is that students consistently state that they want feedback to learn. Although the issue of time management is widely discussed, a cost-benefit analysis of the worth of feedback to students versus the time spent has not been attempted. Therefore, this literature review shows that it is worthwhile to further study the possible relationship between written teacher feedback on essays and student motivation.

CHAPTER FOUR: DEFINITION OF CONSTRUCTS

1. THE TERMINOLOGY AND TYPOLOGY OF ASSESSMENT

1.1 Grading vs. feedback

Grading is the “process of calculating or measuring a student’s work and assigning a letter grade” (Smith, 2008, p.326). It is part of the traditional view of assessment and treats the assignment handed in as a *fait accompli*, requiring only a teacher’s final judgement of its quality. Feedback is the term used in the assessment as learning framework. It is “information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way” (Ramaprasad, 1983 as cited in Walker, 2009, p.68). In other words, comments or information given by the teacher that pinpoint where a student is, where they need to be, and the teacher’s professional opinion on how to get there. It should be noted that those ascribing to the traditional view of assessment may use the terms interchangeably, because feedback is viewed as being applicable only to the assignment at hand. Many researchers in the assessment as learning framework use the more specific term ‘feed-forward feedback’ to correct for this.

1.2 Written feedback vs. written corrective feedback

Written feedback is that which is written by teachers on student assignments and can refer to any “information provided by [the teacher] regarding aspects of one’s performance or understanding” (Rowe *et al.*, 2008, p. 3). Thus grades at the end of an assignment, comments throughout, a short text at the end of the assignment, rubric-use, and checkmarks beside a paragraph all apply. The forms this feedback can take are numerous, such as comments or symbols (such as checks or x’s) in the margin on essays, how the final grade is revealed, and any summative comments at the end of the essay. Since one of the purposes of this study is to find effective and efficient methods of feedback, possible verbal methods of feedback that could more efficiently

replace written feedback will also be explored, even though they may not fit into the definition of “written”. Examples may include: group explanations given post-assessment to the class, one-on-one feedback while handing essays back, or meetings after class. Written corrective feedback refers specifically to language and writing acquisition and is most commonly used to refer to correcting mechanical mistakes in language and writing, such as grammar errors, orthography errors, and verb-tense errors.

1.3 Summative vs. formative assessment

Summative assessment is a measurement of student retention and is a “once-off assessment” that provides students with no opportunity to resubmit corrected mistakes. It only affords students the “opportunities to act on feedback...in vague, indeterminate way in the future.” Formative assessments are those which are part of a multi-stage assessment process where the student has the chance to redo, improve, or correct their assignment for resubmission or to improve on the same skills for a subsequent assignment (Ellery, 2008, p. 422). Formative assessment’s purpose is corrective and for students to learn from their mistakes, not simply a justification for a grade or an assessment of their level of proficiency (Flateby, 2005).

1.4 Positive vs. negative feedback

Negative feedback is feedback whose sole purpose is to point out mistakes. It is unconstructive and provides little clue as to the correct answer. In comparison, positive feedback can mean two things. The first definition is feedback that points out positive aspects of an assignment. When students have fulfilled an essay criterion successfully, it is pointed out. The second definition is feedback that contains constructive criticism, by being positive and hopeful in tone. For example, instead of just pointing out mistakes, priorities are highlighted and suggestions for improvement are given. The terms “positive” and “negative” can be confusing since they are polysemantic words that can also denote value. This is a problem when studying student preferences; students tend to define positive feedback using both definitions.

1.5 Direct vs. indirect feedback

Direct feedback is when the instructor provides the student with the correct answer when an error is pointed out (Hashemnezhad & Mohammadnejad, 2012). It can also include “reformulations” of portions of student writing (Storch & Wigglesworth, 2010, p. 308). Indirect feedback utilizes “various strategies...to encourage learners to self-correct their errors” (Hashemnezhad & Mohammadnejad, 2012, p. 231), such as providing “hints” that lead students to the right answer (I. Lee, 2013, p. 110). Examples include marking codes (Storch & Wigglesworth, 2010, p. 308) or “simply indicating errors” without providing the answer (Hashemnezhad & Mohammadnejad, 2012, p. 231).

1.6 Developed and undeveloped feedback, focused and unfocused feedback

Developed feedback is any feedback that is intentional and part of a greater corrective system or framework, based on a teacher’s teaching method, teaching philosophy, or beliefs. For example: instead of using one-word comments, comments would be explained and a conversation developed with the student (McGrath *et al.*, 2011). Undeveloped feedback is “using vague abbreviations or one-word comments” (McGrath *et al.*, 2011, pp. 1-2) without forethought as to how students will use or interpret them. Similarly, focused feedback is when the teacher uses “selective” written corrective feedback instead of marking everything, focusing on top priorities instead of pointing out every error. The unfocused feedback method is when the instructor provides feedback for every error that occurs in the assignment (I. Lee, 2013). Often, undeveloped feedback and unfocused feedback go hand-in-hand.

2. STUDENT MOTIVATION

Student motivation was left intentionally broad in this research, by defining it as any action by a student in response to feedback that shows evidence of an effect on their affective or cognitive ability to continue or further their learning. For the purposes of this research, the variable of student motivation was operationalized using the following guidelines:

- Did students show evidence that they *reacted* to feedback?
- Did students make decisions about what was *useful* or *not useful* about feedback?
- Did students use *motivational strategies* as a response to feedback?
- Was there evidence that feedback impacted student *self-esteem* or self-image?
- Did students take actions as a result of feedback that showed they were trying to maintain, preserve or protect their *self-worth*?
- Did students take actions to *control anxiety* as a result of feedback?
- Did students show evidence of *long-term learning retention* or *improving* performance on subsequent assignments as a result of feedback?
- Was there evidence that feedback impacted student desire to *continue learning*?
- Did students have an *emotional* response to the feedback instead of a logical one?

CHAPTER FIVE: METHODOLOGY

1. RESEARCH QUESTIONS

Based on the above literature review, it is clear that students' perception of feedback is an area that now contains a large body of research. Most of it was gathered from questionnaires, interviews, and focus groups that asked student respondents if they read feedback, if they understand it, how effective this feedback is, and what their opinion of it is. However, an unintended result from these data collection instruments is that they tangentially provided data on student perceptions of how feedback affects their motivation. Based on the literature review themes of the importance of dialogic feedback and learning-oriented assessment, teachers are encouraged to use assessment as a way to communicate with their students and to create an on-going dialogue that will help students to assess their current abilities and make professional suggestions for how to get to the next level. This research will evaluate the existing data to test the assertion that teacher written feedback on essays and student motivation are related.

To do this, this research studied the relationship between the variables of written feedback on essays (independent variable) and student motivation (dependent variable). The main research question was: What impact do teacher written feedback strategies on student essays have on student motivation? Sub-questions included:

1. What are the various written feedback methods teachers use to assess analytical writing?
2. What kind of feedback do students prefer?
3. What are students' self-perceptions about the effects of written feedback methods on their motivation?
 - a) What do they identify as the positive effects of these written feedback strategies on their motivation?

- b) What do they identify as the negative (or no) effects of these written feedback strategies on their motivation?
4. What intervening, latent, and confounding variables affect the relationship between feedback and student motivation?
5. What feedback strategies do researchers suggest to start and engage students in a feedback dialogue?

The goal of this research synthesis is twofold: 1) to see if there exists a valid research basis for a further primary study that tests for an association between teacher written feedback and student motivation; 2) to create a guide for teachers to aid them in correcting essays so that they can use best practices in completing a task that forms a large part of their workload. The costs of feedback methods will be presented along with their benefits on student motivation so instructors can make decisions on which method works best in their classrooms and which feedback strategies are worth taking the time to carry out.

2. RESEARCH DESIGN: THE RESEARCH SYNTHESIS METHOD

The existing body of research on student perceptions of feedback was re-assessed to see what information the data reveals about the effect of teacher written feedback on student motivation. However, a more systematic approach than a literature review was desired in order to look for patterns in a way that eliminated as much researcher bias as possible. Due to the fact that this pre-existing data is mostly qualitative, a method that qualitatively synthesized the research in order to search for patterns, relationships, and further study questions was needed. Therefore, this study relied on a research synthesis design. Although meta-analyses using quantitative data are common, research syntheses that study qualitative data are less common – perhaps because of the tendency towards quantitative research in social science. However, this researcher shares the opinion of Suri and Clarke (2009) that meta qualitative research adds value to the body of research and that education research needs to be more inclusive in its research methods. Seeing as there is such a large

body of qualitative data on the topic of feedback it seems wasteful to not study it for patterns, trends, and incongruences. It is hoped that the use of the research synthesis method will: reduce research bias, increase data quality, and increase transparency for how themes are discovered.

The research synthesis method is becoming more and more popular with education researchers and the validity of using the research synthesis method to conduct meta-qualitative research is well established. This method has a long history of use in qualitative analysis, going as far back as 1904 (Norris & Ortega, 2010). It is used in response to criticism that the traditional literature review method is “intuitive” (Suri & Clark, 2009, p.401) and that it has a “lack of methodological rigor, and lack of appropriate evaluation of source material” (Major & Savin-Baden, 2010, p.128). The main difference between a research synthesis and a literature review is that all decisions as to how themes and patterns are discovered are explicitly described and detailed so that replications can occur. The goal of research synthesis is to summarize the “information overload” of qualitative data faced on a topic and to present “clear, synthesized findings, and solid recommendations for research, policy, and practice as a result of these findings” (p.127). This research design also solves a major problem in educational research: that its samples are highly fragmented. The unit of study in educational research is often students in the same grade-level or course, in order to study the same group of students with the same teacher. This means that the studies have a physical limit to their sample size and duration. Major and Savin-Baden (2010) have pointed out that qualitative research synthesis can provide a link between these fragments, “in some senses enabling longitudinal study” (p.137) through *pastiche*, when longitudinal study of the same subjects is not available.

This research synthesis follows a combination of the steps laid out by Major and Savin-Baden (2010), Norris and Ortega (2010), Suri and Clarke (2009), Valentine, Hedges and Cooper (2009), Bowman (2007), and Hedges and Cooper (1993) in their guides to the method. The steps involved in the selection of studies,

the inclusion and exclusion criteria, and the analysis procedure for themes are detailed below to enhance transparency and so that this work may be replicated. The following previous research syntheses that studied feedback as an independent variable were consulted to compare their data inclusion/exclusion criteria: Agius and Wilkinson (2014), Lyster and Saito (2010), Li (2010), Williams and Kane (2009), Parboteeah and Anwar (2009), Truscott (2007), and Russell and Spada (2006). Studies in the broader discipline of education that used the research synthesis method specifically with qualitative data analysis were also consulted and used as examples, in particular those by Ritzhaupt, Poling, Frey and Johnson (2014) on the use of digital games in education; Thomas and Rieth (2011) on multi-media anchored instruction, and Gentry, Denton and Kurz (2008) on technology-based mentoring of teachers.

3. DATA COLLECTION: ARTICLE SEARCH AND FILTERING PROCEDURES

The data collection process consisted of purposely sampling academic journal articles that summarized primary research on student perceptions of teacher written feedback. The data was collected using stages adapted mostly from Bowman (2007). First, searches for articles describing primary research measuring student perceptions of feedback were undertaken using academic library-owned computer databases. Only peer-reviewed articles were accepted. The databases of two academic libraries in and near Montreal, Quebec, Canada with significant holdings in English that were available to the researcher were consulted. McGill University Library was consulted first, including databases: *ArticleFirst*, *ERIC*, *Psycinfo*, *ProQuest Research Library*, *EditLib*, *Academic Search Complete*, *Science Direct / Elsevier*, and *JStor*. Next, Champlain College St. Lambert's library was used to access the databases of *Ebscohost Academic Search Premier*. The search dates were from June to July 2014.

Searches were conducted using a list of cross-referenced search terms (see Appendix A). Although it took longer, it provided better results to search the databases using the three concepts of 'feedback', 'student perceptions', and 'essays' and then to manually narrow the results down for the variable of 'student motivation'

afterwards in the ‘inclusion/exclusion’ phase, instead of using ‘student motivation’ as a fourth database search term. This was due to the fact that when all four terms were used in the databases, the search results received were too small to be of value. This seemed a result of either: a) the way the search terms in the databases were chosen or catalogued, or b) the algorithm of the search engine. The search terms in the first column were cross-referenced with every combination of those in the second and third columns. This resulted in 50 separate searches. The first 50 results from each search were used. This search was done twice, once for each academic library. This resulted in an initial pool of 5,000 possible search results for consideration, however many articles appeared more than once. One search limitation was that some of the articles that appeared in searches provided dead links, however in the handful of cases where this happened it was possible to find the same article in a different database.

Considered choices were then used to filter articles found during the article search process. An initial choice was made by looking at the title and article abstract to see if any information included or excluded the article from the sample, using strict and systematic criteria. These criteria can be found in the *Exclusion / Inclusion Criteria Form* (see Appendix B). If the article was not excluded from the title or abstract, then the methodology section of the article was consulted to match up against the exclusion/inclusion criteria. This filtering stage was done twice in order to catch errors.

In particular, attention was paid to operationalizing the variable of student motivation in as large of a manner as possible, in order to gain the largest swath of information possible. Study instruments that contained closed-ended questions were only included if student motivation was explicitly measured. However, questionnaires, interviews, and focus groups that contained open-ended questions were given more leeway. Data relating to student motivation was often found when students had been asked to explain why they are turned off by their feedback. In this case, a study was included if the instrument contained open-ended questions

measuring: student motivation, emotions, feelings, preferences, satisfaction, or opinions on the effectiveness or usefulness of feedback. For example: many studies contained versions of the questions ‘What feedback do you find useful/helpful?’ or ‘What type of feedback do you prefer?’ which if open-ended could possibly illicit responses that revealed data on student motivation. Studies that only measured whether students ‘understand’ or ‘read’ the feedback received were not included.

The bibliographies of the articles left after the article filtering were then searched for other relevant studies. Additionally, two previous research syntheses, which were found during the article search process but excluded from the sample for lacking primary data - Agius and Wilkinson (2014) and Parboteeah and Anwar (2009) - were searched in order to replicate findings. In order to prevent file-drawer bias, if the studies found in this stage were from academic conferences or graduate theses and were readily available through a *Google* search, they were included. Approximately 100 extra articles were found by searching through cited references in this way. All the studies were then subjected to the article filtering process described above. The end result of this article search, filtering, and cited reference searching was a sample size of $n = 36$ articles (see full list in Appendix D).

4. DATA ANALYSIS

4.1 Study quality

At this stage in the research, the 36 articles were evaluated for: a) study quality, and b) whether or not it was possible to isolate the variable of student motivation in a sound manner. Value was placed on finding “high-quality articles” that were trustworthy and valid, rather than “the inclusion of every published report” (Montcrieff, 1998 as cited in Bowman, 2007, p.174). This was done because article quality is a pivotal step in the research synthesis process and it has been pointed out that this step is the one that still needs the most work (Major & Savin-Baden, 2010). Article quality was decided using the *Quality Evaluation Form* (see Appendix C) that

was loosely based on that by Agius and Wilkinson (2014). Results were then recorded and tabulated using *MS Excel*. For this stage, Suri and Clarke's advice was followed to avoid privileging "academic knowledge over practitioners' experiences, tacit knowledge, and wisdom" (2009, p.412). An explicit choice was made to not exclude teachers' researches of their own classrooms or small interviews or focus groups. This type of 'in the trenches' research is often done with small sample sizes over a short length of time yet it reveals important data. In many research syntheses, validity is used to measure study quality. However, since this sample consisted of questionnaires, exclusion based on controlled experiments was not taken into account. Instead, study quality was related to the researcher, sample, and questionnaire quality. The *Quality Evaluation Form* was first tested on 10 articles that were not in the original sample then edited as needed. Articles passed this stage if they fulfilled most of the criteria; however, they were excluded automatically if the variable of student motivation could not be isolated. The results were coded twice and any discrepancies were re-evaluated. After this stage, the original pool of 36 articles was reduced to a final $n = 19$ articles.

4.2 Data extraction and theme creation

First, each of the 19 articles was read through carefully and summarized using the *Article Summary Form* (see Appendix E). This form was created using a modified version of an example provided by Carolyn Dellah. The articles were summarized for: discipline, research methods, and research results. Next, these article summaries were used to fill in the *Data Extraction Form*, created specifically for the research questions of this present study (see Appendix F). The *Data Extraction Form* was completed using *MS Word* to include as many details as possible. The *Data Extraction Form* was then analyzed qualitatively for themes. These themes were tallied up in two ways: for the number of times they appeared in the data and the number of times they appeared in the data as a fraction of the number of studies where this measurement was taken. The themes that appeared the most were chosen for the results section below. Both the *Article Summary Form* and the *Data*

Extraction Form were pre-tested on 3 articles from the sample. However, the data extracted from this stage was discarded. After this pre-test, the forms were edited as needed.

5. RESEARCH DESIGN ISSUES

This study will contribute to the existing body of literature by adding to three new areas of inquiry: 1) isolating the relationship between written feedback and student motivation, 2) using questionnaires on student self-perceptions and not just traditional experiments, 3) looking at the differences between disciplines, not just L2 learning. The systematic research synthesis method was used to decrease researcher bias compared to a straight literature review. However, the design of this project is not without its issues.

According to Suri and Clarke from a “methodologically inclusive perspective” choosing articles based on study quality is “biased against certain paradigmatic orientations” (2009, p.400). To correct for this, data gathered using questionnaires, case studies, and interviews was chosen over controlled experiments, of which there are many meta-analyses already. Also, because only library-owned academic databases were used in the first stage of the article search process, this research may not have completely avoided “file-drawer bias” due to a paucity of PhD dissertations and conference publications in these databases. However, these types of publications were included in the second stage of the article search process in an attempt to make up for this. The ultimate goal of this research was to facilitate research replication. The databases used represent the common types of databases that a CEGEP teacher in an Anglophone institution would have access to.

The greatest research design issue was the lack of external coders for inter-rater reliability, which was due to a lack of funding. However, intra-rater reliability was achieved by completing the inclusion/exclusion phase and the coding phase twice, always on separate days. Any discrepancies between the two sets of results were

looked at in more detail. Many of the articles in this sample were also summarized in other published articles, so this served as a way to crosscheck the data in the *Article Summary Form*.

Since this study synthesized research already conducted and no primary data were collected, there was no ethical issue concerning human subjects and no need to gain approval from an institutional ethics committee (Bowman, 2007). Primary research on student self-assessment of motivation would have required psychological support for respondents in case the research prompted strong emotions or caused negative effects on student self-esteem. This study aimed to adhere to the ethical premise that educational research should advance understanding in the field by synthesizing the large body of primary studies to identify trends and patterns. The research also adheres to the ethical principle of practical use by providing those in the discipline of education with suggestions and solutions for theory, practice, and policy.

CHAPTER SIX: RESULTS

1. RESEARCH QUESTION #1: WHAT ARE THE VARIOUS WRITTEN FEEDBACK METHODS FOR ASSESSING ANALYTICAL WRITING?

Using the 19 articles from the sample, it was possible to group the strategies teachers used to provide written feedback on essays into five categories: medium, type, assessment of learning, assessment as learning, and assessment as dialogue. Table 1 shows the different methods the teachers studied used to provide feedback on essays. It was not possible to gather from the data how often each strategy was used or how common/uncommon it was.

Table 1: Teacher strategies for correcting essays

Medium	Type of comment	Assessment <i>of</i> learning (comments on product at hand only)	Assessment <i>as</i> learning (comments intended for future learning)	Assessment <i>as dialogue</i> (comments intended to generate a discussion on feedback)
<ul style="list-style-type: none"> • Error code or symbol • Written comment in the margins • Written paragraph at end of essay • Rubric/matrix • Verbal comment to group • Face-to-face, individual verbal comment 	<ul style="list-style-type: none"> • Content comment • Factual comment • Ideas comment • Mechanical comment • Praise • Criticism • Directive • Harsh / de-motivating comment • Mitigated comment (i.e. good, then bad) 	<ul style="list-style-type: none"> • A grade at end of paper • One or two-word comment (e.g. “Good job!” or “Unclear”) • Indication of success or error (e.g. checkmark/x) • Correction of error • Negative comment • Undeveloped or unfocused comment (i.e. correcting everything) 	<ul style="list-style-type: none"> • Indication of error + clue on how to fix it. • Indication of error + specific instructions on how to fix it • Explanation of error • Problems + solutions • Positive comment (i.e. successes + constructive criticism) • Developed comment • Focused comment 	<ul style="list-style-type: none"> • Personal comment • Engagement with content comment • Comment on how to use feedback in future

2. RESEARCH QUESTION #2: WHAT KIND OF FEEDBACK DO STUDENTS PREFER?

This research question was based on the premise that “the effectiveness of WCF has also been suggested to hinge upon students’ preferences for it. In other words, students’ opinions and preferences for certain types and amounts of WCF affect their use of it for learning” (Amrhein & Nassaji, 2010, p.97; Blair *et al.*, 2013). And that “ignoring students’ expectations may de-motivate students (Leki, 1991 as

cited in Amrhein & Nassaji, 2010, p.117). Four main themes emerged from coding the 19 articles for similarities and differences: 1) students' definitions of feedback; 2) the types of feedback sought; 3) a frustration with negative comments and a desire for sincerity; and 4) a desire for communication and fairness. These four main themes were chosen by coding the sample of 19 articles and tallying the number of times a code appeared (see Appendix G). In the case of all four themes, there was no single study in the sample that provided an opposing result.

The first interesting result was that overall, students' definitions of feedback aligned with the assessment *as* learning theory, instead of the traditional assessment *of* learning view. In the studies that asked students to define feedback, students saw the purpose of feedback as: 1) to learn what they did right and wrong on the current assignment, and 2) to apply the feedback forward to other assignments and situations. Students viewed feedback as part of their learning process, not as a ranking or summative system. The most encouraging finding when looking across the data was that in every study where the question was asked, students expressed a desire for feedback or stated that they read comments they received. Ten of the studies measured this variable in some way and all 10 of the studies concluded that a large majority of students desired and read feedback. The notion that students just want to read the grade at the end of their essay or that a teacher's time writing comments are wasted was not supported. Furthermore, a large portion of the studies stated that students wanted feedback that they could apply to future learning, what is termed "feed-forward" in the literature. Students wanted feedback that was general enough to apply to more than one situation and that was detailed enough to give them information for the future.

Across the studies, students sought feedback that provided specific directives. Students want more than just a grade, although most researchers did not ask this question directly as it was usually taken as an assumption that teachers provided more than just a grade when giving feedback on essays. Students desired more than a

current situational assessment: they were looking for specific instructions that helped them to correct their mistakes for the future and they wanted these comments phrased in a general enough manner that allowed them to use the feedback on future assignments. There was also a relationship between negative student preferences and one-word comments, vague comments, error codes, and indirect clues. In other words, students want detailed and direct comments and do not want short comments, vague comments, or indirect comments. In fact, one of the reasons for this dislike of one-word and vague comments, especially those regarding content, such as: “This is not good” or “Awkward” or “Needs more analysis” are that students did not understand what they meant. Perhaps this is because the aforementioned comments usually apply to content errors, which are large and abstract, and therefore, more time-consuming to fix. The students may need more help in fixing these large errors. Students valued and used feedback more on drafts than finals. In the studies that asked students for their preferred timeframe for receiving feedback, students stated that it had to be timely enough to apply forward, usually defined as 2-3 weeks for essay work, which agreed with the timeframe found in the literature review. Encouragingly, although students wanted feedback as soon as possible, the students in this sample understood the time and work constraints placed on teachers. However, many of the studies from this sample also showed student frustration at writing assignments placed at the end of term, where it is impossible to receive essays back.

Another theme found in the 19 articles was that students did not like when teacher feedback only pointed out negative elements of their essays. In particular, students expressed frustration at negative comments that were only mechanical in nature, such as spelling, grammatical, referencing, and formatting issues. This signalled to them that their teacher was not engaged with their ideas. However, this was only true of studies conducted in ‘subject’ classes; the opposite was true of students in language, writing, or L2 classes. In these cases, students wanted to see all of the mistakes they made with language. L2 students wanted teachers to correct all mechanical errors, even if the same one was occurring more than once. L1 students

wanted teachers to focus their comments and liked content comments best. This finding has interesting implications for CEGEP instructors, because even though they may not be language teachers, a large majority of students in some CEGEPs are L2 (or more) learners. Students in the 19 articles wanted a balance of good and bad comments and did not like extremes in either direction. For example, although students valued teachers pointing out their achievements they did not want insincere praise. Students had a hard time matching up a less than positive grade with comments that were 'only positive'. Likewise, students reacted badly when comments were only negative, and this seemed to be due to the fact that students did not see their work as only negative. In the words of one student: "It is perfect to me" (Treglia, 2008, p.118).

Another theme that emerged in student preferences for feedback was a desire for communication and fairness. Students want personalization in the written feedback they receive from teachers on essays and equated comments on an essay with caring. They appreciated when teachers showed engagement with their ideas. In the words of one student: "It is very deflating to put hours of work into the content of an assignment and then receive negative comments on the use of grammar and use of commas, etc and very little feedback on content" (Dowden *et al.*, 2013, p.355). A student in F. Hyland's (1998) study stated that comments where the teacher showed they responded personally made her enjoy writing more. In Poulos and Mahoney (2008), first-year students specifically valued comments that empathized and helped them integrate into university. However, this personalization could go too far as well. Many students in the studies identified that there was inconsistency in the feedback between: their assignments within the same class, assignments handed in by different students, and the expectations of teachers in different courses. A student comment that appeared a few times were suggestions for rubric use, as it visually reinforced fairness between markers and assignments. As for the amount of comments preferred, no study quantified this. However, students stated that comments that showed the teacher took the time to provide them tailored suggestions was preferred. They

associated this with comments that showed the teacher was engaged in their essay content, not just the superficial mechanics. However, no study specifically looked at 'how much is too much'.

3. RESEARCH QUESTION #3: WHAT ARE STUDENTS' SELF-PERCEPTIONS ABOUT THE EFFECTS OF WRITTEN FEEDBACK METHODS ON THEIR MOTIVATION?

The data supported the premise that teacher written feedback has an effect on student motivation. From analysing the studies, three themes emerged: 1) that feedback has a strong effect on student motivation; 2) that students experience not just a professional reaction, but an emotional reaction to feedback; and 3) that negative effects can be mitigated with return time, tone, and a positive student/teacher relationship.

The first relationship students identified was between feedback and student motivation. 16 of the 19 studies in the sample contained data on this variable and all 16 showed a relationship between the two variables. Feedback had a positive effect when it: contained positive results, contained a good grade, acknowledged sincere achievements, was encouraging in tone, and showed that future improvement was possible through the use of directive comments. The relationship was in a negative direction when feedback contained a very low or failing grade, was too harsh, only pointed out negative elements, was overly focused on mechanical errors (in subject courses only), and contained no direction on how to improve. What was difficult to discern was the reason for a student's lack of desire to use the feedback they received. It was impossible to discern between extrinsic and intrinsic motivation in the 19 articles. As an illustrative example of how this might affect the findings, a subject in F. Hyland's (1998) study used the feedback she received more than her peers, yet was just copying the teacher's suggestions without internalizing them; thus she used the feedback more but learned less. However, one distinction did appear: the reason behind a student not applying the feedback forward was sometimes more a matter of practical ability. Sometimes, feedback was just not phrased in a way that made it

possible for the student to use that information further. Examples of this include comments that applied only to the assignment at hand and comments that were too specific to be applied to other classes. For example, “Good point” may be a tough comment to apply forward as the student has to first figure out why it was a good point and then discern the lesson that they can apply to future assignments. The effect of pre-existing student motivation to fix their own mistakes, outside of teacher feedback was also noted in the case studies of F. Hyland (1998), where one student made 73% of their revisions between drafts that could not be traced to teacher feedback (p.272).

The second theme found in the 19 articles was that students have an affective response to the feedback they receive. This is an important result as affect is shown to have an effect on student motivation (Pintrich as cited in Harackiewicz and Linnenbrink, 2005). It is clear from the studies that students have an emotional reaction and they show evidence of feedback helping and hurting their self-esteem. This relationship between feedback and emotions played into the previous relationship between feedback and motivation: a student who had a large negative reaction to their feedback also experienced a decrease in motivation to use that feedback forward. For example, receiving a good mark tended to improve a student’s positive emotions, which led them to use the feedback suggestions the teacher provided more often and quicker. Students stated that the negative emotions they felt because of a bad grade could be mitigated by time. In other words, students had to take a few days to get over the emotional response before using the feedback professionally. In most cases, time helped students get over bad emotions, but in some cases the negative response was so high that it prevented the student from using the feedback at all. In Carless (2006) this point-of-no-return was a severely low grade or a failing grade. This was the case regardless of how the student had self-assessed their work: one student found that the teacher’s low assessment was valid, but still showed signs of using self-confidence preservation techniques. However, it was made worse if the student found the negative mark unjustified. Students used feedback even

less when they thought a comment was based on a teacher's personal opinion or that the teacher was personally biased against them (Poulos & Mahoney, 2008). Sample student responses concerning the emotional effect of feedback gathered from open-ended survey questions and interview questions are contained in Table 2.

However, teachers cannot avoid giving out bad marks and they should not feel as if they have to raise a mark in order for their feedback to be used. The research showed that clear strategies can help counter the negative effect a bad grade has on student motivation and student emotions. One of the strategies that lessened the emotional effect of feedback was the return time. The earlier the feedback was returned to the student, the more positively they responded to it, regardless of the content of the feedback. In other words, handing back the unsuccessful assignments first – if it was possible to make this measurement beforehand - would yield better use of feedback. Tone also had a big impact on how students used feedback. Students responded positively to teacher feedback when there were both positive and negative comments. Positive comments were appreciated only if they were sincere and pointed out a student's real achievements. Students equated positive comments with success and satisfaction. Two studies showed that positive comments worked best when they were first. Another study stated that students understood that when teachers used the formula "Positive comment + but + negative comment" they were easing them into the negative but that it still increased their motivation. Negative comments were received badly if they were too harsh in tone, elicited too much emotion, were de-motivating, or showed too much power on behalf of the teacher. In Dowden *et al.* (2013) students stated that feedback that was only negative felt like a "personal attack" (p.355). In numerous studies, students self-assessed that negative comments caused lower confidence, bad emotions, and lower motivation. This effect was worse if the comment was vague, for e.g. "This makes no sense". Students were able to respond to negative criticism if it was constructive and directional in nature. In other words, teachers must strike a balance between providing a realistic assessment of ability not yet acquired and being too harsh. The trick seemed to be whether the

Table 2: Quotes from student respondents that illustrate the effect of teacher written feedback on their affective state.

The effect of teacher written feedback on:	Student quote
Self-worth and self-esteem	<ul style="list-style-type: none"> • “Feedback that only points out the negative tends to give me an emotional response as it appears as if it is a personal attack” (Dowden, 2013, p.355) • “Don’t mind to be told wrong if I am plain wrong but going on about my English hurts me and I don’t find it useful either” (Blair, <i>et al.</i>, 2013, p.73). • One word answers to “What do I feel about this feedback?”: “Pleased, happy, relieved, disappointed, irritated, gutted, motivated, upset, satisfied, worried” (Quinton & Smallbone, 2010, p.130). • “...made me feel bad and disgusted” (Smith, 2008, p.328)
Anxiety	<ul style="list-style-type: none"> • “When I check to see the mark [on the notice board], I feel pressurised. If the grade is okay, the pressure is released.” (Carless, 2006, p.299). • “Writing assignments is a stressful time, as I am always questioning whether I have answered correctly. (Dowden, <i>et al.</i>, 2013, p.354). • “When there is too much negative critique I tend to ignore the comments totally as it is just too unpleasant and upsetting” (Ferguson, 2011, p.57).
Motivation	<ul style="list-style-type: none"> • “It is very deflating to put hours of work into the content of an assignment and then receive negative comments on the use of grammar and use of commas, etc and very little feedback on content” (Dowden <i>et al.</i>, 2013, p.355) • “If all comments are negative I would never write a paper again” (Ferguson, 2011, p.57) • “...if feedback is not so good, I mean that teacher criticise many mistakes I have, then I feel – ‘Oh I don’t like writing’” (F. Hyland, 1998, p.268) • “If the teacher gives you many feedbacks, you will feel very touched, that they care about you as a student. I read it and make corrections and remember it. It is a pleasure for me” (K. Hyland, 2013, p.186). • In response to the interviewer pointing out a mitigated comment and asking “What do you think of this comment”: “That I have good ideas. It makes me feel good...that I need to work harder...that I have some, like I understand something, but then I need more work at it. (Treglia, 2008, p.115). • “...when some professor corrects something and tells me, <i>this is bad, it’s not good</i>, I feel depressed” (Treglia, 2008, p.116). • In response to a positive comment: “When I read this comment I felt like I can do anything” (Treglia, 2008, p.117). • “Positive comments by lecturers have really given me the confidence and motivation to continue when I have had doubts about my ability...” (Whittington, Glover & Harley, 2004, p.327).
Initial reaction	<ul style="list-style-type: none"> • “ If the feedback is not so good, first I may feel depressed, but quite soon I may adjust myself to see how to do it better next time” (Carless, 2006, p.229). • “I feel great when I have positive comments...” (Seker & Dincer, 2014, p.79)

student took the negative criticism personally or whether the teacher was able to craft the comments in such a way that showed students it was to improve their learning. Negative feedback that was developed and directional in nature was responded to more favourably, whereas negative comments that were vague were usually discarded. Surprisingly, one study showed that positive comments, regardless of whether they were developed or undeveloped were taken well (McGrath *et al.*, 2011). One way that students identified as providing a realistic negative assessment was to be considerate in tone and to recognize their effort regardless of their grade. Another way was to be encouraging and to help show them that they were “still in the game” (Lizzio & Wilson, 2008, p.267). Also, positively phrasing negative aspects; for e.g. using ‘You might try this’ instead of ‘You didn’t do this’ worked well (Ferguson, 2011). This application of positive and negative comments was not the same from student to student though; F. Hyland (1998) found that a student who received an overall positive assessment still saw a decrease in her motivation when the teacher did not praise an element of her assignment that she had thought she excelled at.

Another mitigating factor in how students responded to negative comments was the pre-existing student-teacher relationship within the classroom. The case studies from G. Lee and Shallert (2008) showed that a student was more likely to use teacher written feedback when they trusted in the teacher’s professional ability. Furthermore, student-teacher relationships that were more open to dialogue aided in a student’s use of feedback. For example, using correcting techniques that demonstrated two-way communication helped increase positive emotions when receiving feedback. This supported a similar trend in the literature review. Furthermore, students only tended to ask the teacher clarification questions regarding the feedback they received if they had a positive student-teacher relationship. Lastly, students responded more positively to comments that showed the teacher was personally interested and engaged with their work. For example, as stated before comments on content, rather than mechanical errors in L1 learning improved student emotions because it made them feel like their teacher was responding to them and not their technical skill.

These engaged and personal responses to students seemed to signal to students that their teachers cared about them and their learning and this elicited a more positive emotional reaction to feedback.

4. WHAT INTERVENING AND LATENT VARIABLES AFFECT THE RELATIONSHIP BETWEEN FEEDBACK AND STUDENT MOTIVATION?

The research showed the relationship between written feedback on essays and student motivation was affected by lurking variables. First, the amount of trust students had in a teacher's abilities and the quality of the pre-existing student-teacher relationship, as shown above, effected how much feedback a student listened to and used-forward. In G. Lee and Shallert's (2008) study this relationship was cyclical: a low-level of trust in an L2 teacher's language ability - in this case, because the teacher was not a native-speaker of the language being taught - led to the student not using the teacher's feedback. This led to the teacher becoming frustrated at the student because he was not listening to advice, which in turn led the teacher to hold a bad opinion of the student's attitude towards learning, which in turn changed the form and frequency of future feedback.

Second, students did not agree on whether they wanted developed and focused comments (correcting highlights) or undeveloped and unfocused comments (correcting every mistake). One reason discovered for this was that L1 and L2 learners as well as bilingual vs. monolingual learners showed different preferences for feedback. L2, bilingual, or writing and language learners tended to prefer every error corrected, including every grammar error. In comparison, L1, monolingual, and students in subject courses tended to prefer developed feedback that highlighted the most urgent and important areas to work on, and preferred comments on content and ideas rather than mechanical errors. All of these latent and intervening variables further supports the need for teachers to tailor their feedback strategies to match their students for increased effectiveness.

5. WHAT FEEDBACK STRATEGIES DO RESEARCHERS SUGGEST TO START AND ENGAGE STUDENTS IN A FEEDBACK DIALOGUE?

The main suggestion given by the researchers of each article was to create and foster a dialogue about feedback in the classroom. Ways to achieve this included class discussion on the purpose of feedback (Amrhein & Nassaji, 2010; Carless, 2006) and on feedback expectations (F. Hyland, 1998; K. Hyland, 2013). More than one researcher stated that it was important to allow students the opportunity to maintain a two-way dialogue with their teacher about feedback by maintaining a classroom that was open, warm, and supportive (Dowden *et al.*, 2013; Halawah, 2011). Another suggestion was to allow students to vent about how feedback affects them emotionally before moving on to a discussion on how to use it (Quinton and Smallbone, 2010) and teaching students how to deal with their emotions towards feedback (Dowden *et al.*, 2013). Feedback that mimicked a professional working relationship by being courteous, respectful, and professional in tone encouraged the maintenance of this feedback dialogue, although it was noted that social customs vary across cultures (Treglia, 2008). The use of rubrics or standardized marking formats was also encouraged to promote fairness (Whittington, *et al.*, 2004; Smith, 2008; Ferguson, 2011).

CHAPTER SEVEN: DISCUSSION

1. ANALYSIS AND THEORETICAL IMPLICATIONS

Students' perceived connection of written teacher feedback on essays with their emotions and motivation that was previously found in the literature review was supported by this research synthesis. It was clear that the lack of student use of feedback is not due to the student's unwillingness to read them, but in their ability to uptake and use the feedback they are receiving. Feedback that is specific and direct, allows the students to feed-forward. That which was positive and respectful in tone increased student emotions and student motivation, which in turn increased the likelihood students used it. Feedback that focused only on the negative, that was overly harsh in tone, or that was vague decreased student motivation and elicited negative student emotions. All of these qualities of feedback are ones that a teacher can control. There was one variable that affected student motivation that is not under teachers' control: negative assessment results, even if valid, caused negative student emotions and motivation. However, the research synthesis showed several strategies that teachers can use to lessen the effect of negative results on motivation, by mitigating emotional reaction to negative results. However, these conclusions were mostly based on data gathered through self-reporting of student perceptions; the next step is to follow up and research students' actual actions and reactions to feedback.

This research synthesis, for the most part, supported the initial research on student motivation found in the literature review. The relationship between teacher written feedback and student motivation supports Vygotsky's theory of zone of proximal development. Students that receive feedback crafted with the goal of scaffolding their learning were more likely to use that feedback forward. In contrast, when the teacher made a next learning step that was too high, by being overly harsh, negative, or discouraging, students lost motivation. In keeping with the literature review findings, students' affective responses to feedback also affected student motivation. Students were performing a constant balancing act with their perceptions

of their work, their self-esteem and self-schema, and the feedback results they received. The research synthesis added to the literature review by providing a possible explanation for the inconsistent findings in studies on the effect of feedback on student grades and error correction rate. This research synthesis supported that feedback affects student motivation and student emotion, which may then prevent students from using the feedback forward.

Although the conclusions of this study do not support a causal relationship, it is possible to make some overall comments about the variables studied. The variables seem to work together as a filtering process: teacher feedback filters through many variables before students make a decision on whether or not to use it forward (see Figure 1). Before a student decides to use a teacher's feedback forward, they weigh it against: 1) the student's existing self-schema, 2) the student's emotional response, 3) the practicality of the feedback, 4) the student's trust in their teacher, and 5) the student's motivation.

The results did show a few conflicting findings. One seemingly opposing relationship was that students preferred specific and direct corrections of their errors, yet they also defined feedback as helping them to learn. There are many educators that would argue in favour of indirect comments or 'providing clues' because these help students learn how to correct the mistakes on their own instead of passively copying the teacher. One possible explanation for this may be ease of use.

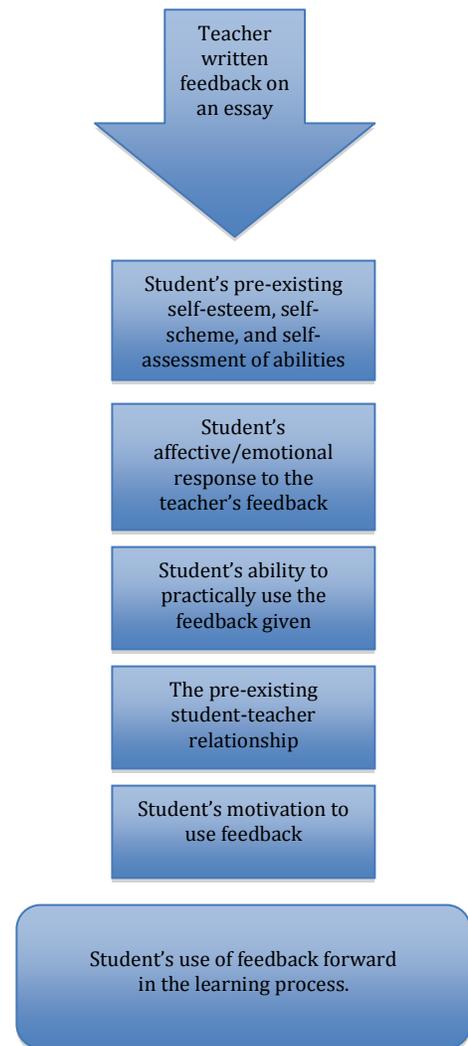


Figure 1: Suggested description of variables

In an example from an article not in the sample, Chandler (2003) found that students found directive comments easiest to implement even though they found indirect ones helped stimulate their learning. Perhaps the ease of directive comments makes them easier to use forward, thus increasing student motivation to use the advice in the future.

Another discrepancy between the studies was that there was disagreement on whether students would go to their teacher for further clarification if they had a misunderstanding: some stated they would readily go ask for help, others that they would not take this extra step. However, the studies did not all contain reliable or comparable measurements of the student-teacher relationship. Since this was already identified by students as being important in how they react to their feedback, how they use it, and whether or not they engage in two-way dialogue about feedback, it seems likely that this would also play a role in whether students went for help. Although a few students stated practical considerations, like too many people in line or office hours that did not match up with their schedules, the answer did not appear enough times to show a reliable theme. But the research did show that students would not follow up if they felt their teacher would take it as a challenge to their authority, was defensive, or not open to student/teacher dialogue.

An interesting finding was related to praise feedback. Millennials are often derided for their need for praise, with the media using words such as “entitled” and “coddled”. However, students in these studies were not asking for facetious or superficial praise: they wished for sincere acknowledgements of actual accomplishments and recognition for their perceived hard work. This request is in line with real world and professional communication standards. For example, an inter-personal relationship that only contained negative, critical comments would be regarded as dysfunctional. Likewise, when saying critical comments in an inter-personal relationship face-to-face, people often use mitigating techniques to soften the blow of criticism. Students seem to be expecting this same level of politeness and

courtesy from their feedback interactions with teachers. In other words, Millennials are just expecting teachers to communicate in the same socially acceptable way as they have already established in their other social interactions. Students are expecting the same standards of politeness that society has created regarding communication: timeliness, considerateness, and genuineness.

2. IMPLICATIONS FOR TEACHER PRACTICE

From the data, it was supported that written feedback on student essays has an effect on student emotion, student motivation, and the student/teacher relationship. Creating the right affective and motivational conditions can help increase the likelihood that students will be motivated to use their feedback and learn from it. The first hurdle that needs to be overcome in the feedback cycle is that teachers need to discard their perceptions that students do not read written feedback; in other words, a teacher's work is not wasted. However, although most students state that they want feedback, this research has supported that student motivation, student emotion, and the student/teacher relationship can impact whether students will use the feedback. Certain teacher-led actions close off students all-together to listening to further feedback: being too harsh or creating a negative classroom environment or student/teacher relationship. However, other teacher led-actions encourage students to keep reading feedback, even when that feedback is negative.

So what feedback strategies can teachers employ to increase student motivation? First, teachers must tailor their feedback strategies to match the student and the situation at hand. One example of how to achieve this is the use of interactive cover sheets, which stimulate a feedback dialogue. In this technique, students are asked to self-assess their assignment and to let the teacher know what type of feedback is the most valuable to them. Second, specific comments that contain direct instructions for improvements seem to be helpful and efficient uses of a teacher's time, but only when they were used for feedback that focused on higher-level or 'high-quality' points. For example, using the phrase 'This strong topic sentence is

making your essay structure very clear' may work better than 'Good topic sentence'. The more specific phrase 'This sentence shows you are analysing the primary source' may be more helpful than 'Good point'. Whereas spending more time correcting lower-level mistakes with direct and specific comments is an inefficient use of teacher time. For those that feel directives make students dependent or passive learners Treglia (2008) provided the suggestion of presenting students with an element of choice, which allows them to take charge of the decision. This can be achieved by using words that describe the instructions as guided suggestions instead of an authoritarian mandate, such as words like: perhaps, may, might, and could. For example, the comment 'Needs more analysis' can be rephrased to 'You *might consider* adding more analysis to this paragraph'. According to Treglia, this would lead to student-led changes. Third, using a respectful and considerate tone is a must for students, and can dampen the effect of a negative assessment. An example from Smith on how to accomplish this was: "You did not provide enough examples of competitors" can be rephrased more considerately as "Could you provide more examples of competitors?" (2008, p.327) Students stated that a respectful tone implied that a teacher had pointed out both the positive and the negative elements of their work. Students overwhelmingly disliked harsh or overly negative comments and perceived them as a personal attack. These harsh comments did not motivate them to improve and in some cases had the complete opposite effect. One interesting finding was that feedback delivered personally tended to be more positive in nature than that returned in writing: face-to-face interactions tended to have a more positive tone. Therefore, teachers that find difficulty in striking a balanced tone may wish to see students who have received very poor results face-to-face or to combine written comments with a face-to-face meeting, in order to discourage an overly harsh tone. There is also a need to be positive, but in a sincere way. For example: 'Good job on the title page, but...' is not as effective as 'I can tell you put a lot of effort into this, but...'. Furthermore, part of having a respectful and polite tone is recognizing the emotional affect of assessment on the student. For example, in Quinton and Smallbone (2010) students were allowed a chance to "dump" their emotions in a

journal entry, then they were asked to come up with a plan on how to use the feedback they received (p.130). Lastly, perceived fairness and consistency can easily be achieved using rubrics and this has the added benefit of reducing correcting time. Although most studies showed that rubrics worked best when they were followed-up with a personal paragraph. A summation of all of these strategies can be found in Table 3. It is important to note that what was found again and again in the data was the need to customize feedback strategies to the teaching environment and to the individual student; the table should not be used as a one-size-fits-all panacea but as a guide of possible strategies that must be chosen using best professional judgement.

The research also showed that concrete actions in course design may help the teacher improve the likelihood that students will use feedback. Assigning essays at the end of term impeded student ability to use their feedback. Draft work and assignments due in the middle of term aided students in their ability to see the use of feedback. Making time in class to discuss and debate the purpose, expectations, and value of feedback is also a solution. Investing in a good student-teacher relationship in the classroom helps to increase the effectiveness of your feedback. The qualities – in both the teacher and the classroom environment - of openness to debate, approachability, and engagement were all shown to accomplish this. Trust in a teacher's abilities and good leadership promote higher use of feedback by students.

So what do these findings mean for teacher workload? Although many of the methods espoused above are time-intensive, what the research does show is that certain methods only work in certain situations and that this means teachers can conduct a cost-benefit analysis. Two fictional case studies have been created to illustrate this:

Table 3: Teacher strategies for using feedback to increase student motivation

Written feedback strategies that work, regardless of the assessment results	Written feedback strategies that work in specific situations	Written feedback strategies that <u>do not</u> work	Course design strategies that help the feedback process	Topics to bring up in a two-way feedback discussion with students
<ul style="list-style-type: none"> • Turn-around time of maximum 2-3 weeks • Making feedback easy for students to access, read, and re-read • Verbal follow-up to feedback • Rubric use • Making feedback personal by uniquely matching up comments to students needs • Providing comments that are useable in other assignments or classes, not just in this situation 	<p>When a student has earned an overall positive assessment:</p> <ul style="list-style-type: none"> • Point out both achievements and areas that can be improved upon <p>When a student has submitted work that has not achieved the learning objectives:</p> <ul style="list-style-type: none"> • Recognize student effort • Point out sincere achievements • Use mitigating comments to highlight areas for improvement • Provide specific directives on how to improve • Focus on important highlights, not on every mistake <p>L2 vs. L1 learning:</p> <ul style="list-style-type: none"> • L1 learners in a subject class prefer comments on content and ideas, rather than mechanical errors (spelling, grammar, citation) • L2 learners prefer to have all of their grammar mistakes pointed out 	<ul style="list-style-type: none"> • Indirect feedback or use of clues • Correcting symbols, ticks, checks • Undeveloped comments: such as vague comments, one-word comments • Unfocused comments that correct everything • Pointing out only the negative • Using an overly harsh or demotivating tone • Providing feedback so late that it can not be used for subsequent assignments • Providing insincere positive remarks 	<ul style="list-style-type: none"> • Using teaching methods that encourage openness and dialogue • Encouraging and assigning draft work • Avoiding assigning essays for the end-of-term when it will not be possible for students to receive them back or apply them forward 	<ul style="list-style-type: none"> • What does everyone expect from feedback? • What is the purpose of feedback? • What is the use of feedback? • How can the feedback you have just received apply to your learning in other classes? • Allowing two-way communication about feedback, not just “take it or leave it”

In case study A, a teacher is correcting the essay of an L1 learner that they have assessed as having high technical skill in English, with low motivation, and low self-esteem. In this case, it may be best to forgo correcting every single mechanical error, since it is clear they are mistakes on an already understood concept instead of not understanding the concept to begin with. Instead the time can be used to craft a concluding paragraph at the end of the essay that acknowledges the student's genuine accomplishments and provides priorities for improvement, of which one of those priorities would be to pay more attention to editing. In this case, the high cost of correcting all language errors would not have an equally high benefit on student learning or motivation, so the action could be redirected. In fictional case study B, a teacher is correcting the essay of a student only to find out that although the mechanical elements are quite solid, the ideas and analysis provided in the essay present real problems. In this case, the danger is that since the goal of the teacher is to provide students with the 'next step', without making it too big for them to recover from, the student may just give up all together when told there are serious flaws with their essay content. In this case, the high cost of providing written corrections on content comes with the risk that it may close the student off from the suggestions entirely. In view of this risk, it may provide more sense for the teacher to estimate the time they would have spent providing written feedback and instead ask to meet with the student face-to-face for that same amount of time to go over solutions. That way the teacher can stress that the next step is possible, while benefiting from the more positive tone inherent in a face-to-face meeting, thus decreasing the risk of student disengagement.

3. IMPLICATIONS FOR INSTITUTIONAL POLICY

This research strongly suggests that feedback strategies need to be tailored to the particular needs and preferences of individual students. The present research showed the need for teachers to adapt their feedback to match the expectations, ability, and estimated emotional response of each student in order to maintain or

increase motivation. These findings mean that teachers should retain the ability to have complete control over the types of feedback they use. Some educational institutions, in order to promote fairness and criterion-referenced grading, enforce standardized rubric use across a discipline or department. However, this ignores the fact that students do not all benefit from the same kind of feedback and that feedback exists within each unique student-teacher relationship. It would be much more useful to require teachers to use a rubric, or to provide suggestions, but to allow teachers the flexibility to make their own. Similarly, some institutions require teachers to submit all assessments and rubrics towards the beginning of term, before meeting and getting to know their students. This also ignores that a one-size fits all approach to feedback is not optimal. What would be better is for an institution to promote rubric use, but to allow the teacher the chance to get to know their students and to tailor feedback where they see fit.

The workload implications of this research will be nothing new to teachers. It is quite clear that providing feedback on essays is a time-consuming process and that in order to promote student motivation, teachers need time to be able to provide tailored, detailed, and specific feedback to each student. Student motivation, student learning and student success are critical issues in the province of Quebec, and quality feedback is proven to have a direct effect. Workload formulas in CEGEP do not account for the type of assessments a teacher assigns; only the number of students they will have to provide feedback for. It usually requires more time and effort to provide feedback in the assessment as learning framework, but regardless of whether a teacher puts a grade on the last page of an essay or gives more tailored, personalized, and complex methods of feedback, their compensation never changes. Currently, the system does not encourage instructors to spend more time on feedback.

4. IMPLICATIONS FOR FURTHER RESEARCH

This current study used data that was mostly self-reported and based on self-perceptions. Although this method of data collection provided a large quantity of

data, it only measured what students believed to have happened. Now that a possible connection between teacher feedback and students' perceived effect on their motivation has appeared the most immediate step for further investigation is to create another study that measures actual student actions or reactions towards their teachers' feedback. What we perceive to be taking place is not always the same as what is actually taking place.

This research has revealed interesting aspects that would benefit from further investigation. One area for further study is the reasons why students feel teachers are overly focused on mechanical mistakes. For example, a study by Orrell (2006) found that although teachers accounted for higher-level, thinking and ideas-related abilities in the final grade, their comments contrarily focused more on teaching content and presentation or editing errors. A proposed reason for this was that such comments are "more concrete, and more easily explained to students to justify the grade" (p.449). However, another possible reason could be teacher frustration at common error types. Greasley and Cassidy (2010) asked 32 lecturers from Bradford University's Health and Social Sciences and Humanities faculties on a voluntary-response email basis to "list up to 10 mistakes that you find particularly frustrating when marking essays" (p.174). The three largest response categories from faculty were "Poor language, grammar and expression", which accounted for 26% of all total comments faculty members listed, "Poor referencing" (19%), and "Poor presentation" (11%). In other words, although teachers may not state that these mechanical errors are primary in the feedback cycle and students do not value over-emphasis of these types of comments, teachers frustrations over them may be the reason teachers focus on these types of errors while correcting.

A possible cross-disciplinary area for future research lies in the variable of student-teacher relationship. A positive student-teacher relationship, one where the student trusts in the teacher's ability, was shown to increase student use of feedback. Many comparisons can be made between research on positive student-teacher

relationships and research on positive employee-manager relationships in the workforce. In the case of the latter, a large body of research on leadership exists in the disciplines of business administration, management, and human resources. It would be fruitful to compare the research in these different disciplines for interdisciplinary crossover.

CHAPTER EIGHT: CONCLUSION

To summarize the results, students understand the process of feedback in the learning cycle quite well. They define feedback the same way educational researchers do, in the assessment as learning framework. However, their preferences do not always align with what they receive: students want specific directions, an acknowledgement of genuine achievements, and for their teachers to engage with them and their ideas. The articles in the sample showed that feedback has an overwhelming effect on student motivation, in both a positive and negative direction, and that this effect can be improved or worsened by teacher-led strategies. Furthermore, students experience not just a professional reaction, but an emotional reaction to feedback and this in turn affects their motivation, feeding a powerful cycle. Encouragingly, negative effects can be mitigated with specific teacher strategies. One major lurking variable was the difference in preference between L1/L2 learners and students in subject courses vs. writing and language courses. A consistently recommended strategy was to develop and encourage discussion between teacher and student on feedback expectations, purpose, and use.

From the literature review, teachers are worried that students do not read the comments they write or that they do not understand the feedback they receive. Perhaps this is self-preservation: teachers are finding that students are using feedback and want to assume it is because students are not doing what they are supposed to be doing. But students want feedback and look for it. They just choose not to use it when it negatively affects their perceptions about their self-worth; students are constantly making balancing decisions in the feedback process. Instead of worrying about the quality of students, especially dwelling on the supposed negative generational characteristics of Millennials (which were not supported in these results), focus should be on teacher-led strategies to enhance the use of feedback. Very little can be done to control who appears in our chairs each September, especially in public

CEGEPs that are based on the principle of democratic enrollment for all who desire to be there. Yet teachers can take concrete steps to increase the efficacy and effectiveness of their feedback. The real question should be: is the feedback we are providing motivating and helping students to correct their mistakes? It is time to start recognising that employing teacher-led strategies can help ensure students are reading and using our comments.

The rules of correcting should follow closely the rules of inter-personal, face-to-face conversations. Teacher written feedback is a conversational interaction and has as its goal student learning. The trick is to find feedback strategies that motivate students by: a) engaging students in a conversation about feedback, and b) helping to mitigate the emotional reaction they have to feedback. To use an analogy from video games: the aim is to tell students to “Try Again” when their assessments do not succeed, instead of saying “Game Over”.

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APPENDIX A
ARTICLE SEARCH PROCESS

ARTICLE SEARCH PROCESS

1) Search location: Montreal-based, academic libraries and their databases

a. McGill (WorldCat)

- i. ERIC
- ii. Psychinfo
- iii. ProQuest Research Library
- iv. EdITLib
- v. ArticleFirst
- vi. Academic Search Complete
- vii. Science Direct / Elsevier
- viii. JStor

b. Champlain College

- i. Ebscohost Academic Search Premier

2) Search dates: June 2014 to July 2014.

3) Search terms used:

Feedback	Student Perceptions	Essays
Teacher feedback	Student perceptions	Essay
Assessment	Student perspectives	Writing
Correcting	Student conceptions	
Written corrective feedback	Student reaction	
Marking	Student response	

4) Bibliography mining from sample articles and literature review articles.

5) Search limitations or drawbacks:

- In the case of a handful of articles found in the searches of McGill's library catalogue, there were broken links to external e-journal databases.
- Solution: The articles were found using other databases outside the search criteria, including Google Search.

6) N of retrieved articles = 36

**APPENDIX B:
EXCLUSION / INCLUSION CRITERIA FORM**

INCLUSION AND EXCLUSION CRITERIA FORM

Inclusion/Exclusion Criteria	Details
The article studies teacher written feedback , or a version of it, as an independent variable. The variable of feedback “could be disentangled from the effects of other treatments.” (Li, 2010, p.319).	Studies looking at peer feedback were excluded. The title ‘tutor’ differed from study-to-study. The ones that used it to refer to someone in a teaching capacity were included. Those who used it to refer to someone who was only in a grading capacity (e.g. teaching assistant, anonymous marker/grader) were not.
Student motivation , or a version close to it, such as: engagement, self-esteem, emotions etc. appeared in the results as a dependent variable.	Student motivation did not have to be the main or original dependant variable studied. Studies that did not include it as a variable, but whose open-ended questions left room for possible findings were included. In particular, studies that measured “usefulness” of feedback contained applicable data.
The study contains qualitative primary research that measures students’ perceptions .	Studies that included teacher perceptions along with student perceptions were accepted, as long as students’ perceptions were clearly separate.
Using the questionnaire, interview, focus group, or case study research method.	Studies that contained experiments were excluded.
It studies the assessment method of essays, writing assignments, or essay-type answers.	
No exclusion was made for discipline type.	The only exception was articles on L2 learning were disqualified if they only studied mechanical language errors (such as grammar correction, recasts, or verb tense errors) that were not the type of feedback focus for this study.
Age group and level of schooling included was: last two years of secondary school, college, or undergraduate university students. These were chosen because they are at a high enough level to be able to self-assess their feedback and because they matched up with the typical Cegep-student profile.	However, the biggest difficulty encountered was that unlike studies of K-12 students, the literature tended to lump all post-secondary students (collegiate, university, graduate) together, regardless of level. Although researchers would state the different levels of students in their sample, the results were usually presented together. This lack of specificity regarding level in the data is worthwhile noting.
It was peer-reviewed and contained a methodology section.	
It was published in-between 1998 and August 2014 .	This date range was chosen because many seminal works in this field were published in the early-1990s. The purpose was to get ‘second-wave’ studies in the sample.
English-language .	

**APPENDIX C:
QUALITY EVALUATION FORM**

QUALITY EVALUATION FORM

#1: Did the article describe research that avoided bias?

- Did the sample contain respondents who were typical representations of the population, typically by avoiding voluntary-response bias?
- Did the research avoid attrition bias?

#2: Was the research reliable and trustworthy?

- Was the researcher's relationship with subjects identified?
- Was the research design adequately described?
- Was there a pilot study?
- Were the sample demographics described?
- Were findings accurately described, analyzed, and supported?

#3: Did the research avoid questionnaire and question bias?

- Did the study include its questionnaire?
- Did the questionnaire avoid bad question design?
- Did the questionnaire avoid bad questionnaire design?
- Did the study avoid bad administration of the questionnaire?

#4: Was it possible to extricate the relationship between written teacher feedback and student motivation?

- Is the article detailed enough to be able to isolate this data?
- Did the original data collection instrument provide an opportunity to accurately measure this variable?

APPENDIX D
QUALITY EVALUATION RESULTS

QUALITY EVALUATION RESULTS

APA Reference	Holding Library and Database	Included / Reason for Exclusion
Amrhein, H.R. & Nassaji, H. (2010). Written corrective feedback: What do students and teachers prefer and why? <i>Canadian Journal of Applied Linguistics</i> , 13(2), 95-127.	Champlain Academic Search Premier	Included
Blair, A., Curtis, S., Goodwin, M. & Shields, S. (2013). What feedback do students want? <i>Learning and Teaching in Politics and International Studies</i> , 33(1), 66-79.	McGill Wiley Online	Included
Bloxam, S. & Campbell, L. (2010). Generating dialogue in assessment feedback: Exploring the use of interactive coversheets. <i>Assessment and Evaluation in Higher Education</i> , 35(3), 291-300.	Champlain Academic Search Premier	Research design description too sparse
Bourgault, A.M., Mundy, C. and Joshua, T. (2013). Comparison of audio vs. written feedback on clinical assignments of nursing students. <i>Nursing Education Perspectives</i> , 34(1), 43-46.	Champlain Academic Search Premier	Pilot study
Carless, D. (2006). Differing perceptions in the feedback process. <i>Studies in Higher Education</i> , 31(2), 219-233.	Champlain Academic Search Premier	Included
Chanock, K. (2000). Comments on essays: Do students understand what tutors write? <i>Teaching in Higher Education</i> , 5, 95-105.	McGill	Questionnaire design
Dowden, T., Pittaway, S., Yost, H. & McCarthy, R. (2013). <i>Assessment and Evaluation in Higher Education</i> , 38(3), 349-362.	McGill Elsevier	Included
Duers, L.E. & Brown, N. (2009). An exploration of students nurses' experiences of formative assessment. <i>Nurse Education Today</i> , 29, 654-659.	Mining McGill Science First	Research design description too sparse
Ellery, K. (2008). Assessment for learning: a case study using feedback effectively in an essay-style test. <i>Assessment and Evaluation in Higher Education</i> , 33(4), 421-429.	Champlain Academic Search Premier	Questionnaire results could not be separated with experiment results
Ferguson, P. (2011). Student perceptions of quality feedback in teacher education. <i>Assessment and Evaluation in Higher Education</i> , 36(1), 51-62.	Champlain Academic Search Premier	Included
Halawah, I. (2011). Factors influencing college students' motivation to learn from students'	Champlain Academic	Included

perspective. <i>Education</i> , 132(2), 379-389.	Search Premier	
Hyland, F. (1998). The impact of teacher written feedback on individual writers. <i>Journal of Second Language Writing</i> , 7(3), 255-286.	McGill Science Direct	Included
Hyland, K. (2013). Student perceptions of hidden messages in teacher written feedback. <i>Studies in Educational Evaluation</i> , 39, 180-187.	McGill Science Direct	Included
Lee, G. & Shallert, D.L. (2008). Meeting in the margins: Effects of the teacher-student relationship on revision process of EFL college students taking a composition course. <i>Journal of Second Language Writing</i> , 17, 165-182.	McGill Science Direct	Included
Lee, I. (2007). Feedback in Hong Kong secondary writing classrooms: Assessment for learning or assessment of learning? <i>Assessing Writing</i> , 12, 180-198.	McGill Science Direct	Respondents too young
Lizzio, A. & Wilson, K. (2008). Feedback on assessment: Students' perceptions of quality and effectiveness. <i>Assessment and Evaluation in Higher Education</i> , 33(3), 263-275.	Champlain Academic Search Premier	Included
MacLellan, E. (2001). Assessment for learning: The differing perceptions of tutors and students. <i>Assessment and Evaluation in Higher Education</i> , 26(4), 307-318.	Mining – McGill Article First	Could not reliably isolate variable of motivation
McGrath, A.L, Taylor, A., & Pychyl, T.A. (2011, Dec 23). Writing helpful feedback: The influence of feedback type on students' perceptions and writing performance. <i>The Canadian Journal for the Scholarship of Teaching and Learning</i> , 2(2), article 5.	Google Search	Included
Montgomery, J.L. & Baker, W. (2007). Teacher-written feedback: Student perceptions, teacher self-assessment, and actual teacher performance. <i>Journal of Second Language Learning</i> , 16, 82-99.	McGill Science Direct	Could not reliably isolate variable of motivation
Parikh, A., McReelis, K. & Hodges, B. (2001). Student feedback in problem-based learning: a survey of 103 final year students across five Ontario medical schools. <i>Medical Education</i> , 35, 632-636.	McGill Wiley Online	Could not reliably isolate variable of motivation
Perera, J. <i>et al.</i> (2008). Formative feedback to students: the mismatch between faculty perceptions and student expectations. <i>Medical Teacher</i> , 30(4), 395-399.	Champlain Academic Search Premier	Could not reliably isolate variable of motivation

Pokorny, H. & Pickford, P. (2010). Complexity, cues and relationships: Student perceptions of feedback. <i>Active Learning in Higher Education</i> , 11(1), 21-30.	McGill Science First	Could not reliably isolate variable of motivation
Poulos, A. & Mahony, M.J. (2008). Effectiveness of feedback: The students' perspective. <i>Assessment and Evaluation in Higher Education</i> , 33(2), 143-154.	Mining - McGill Elsevier	Included
Quinton, S. & Smallbone, T. (2010). Feeding forward: Using feedback to promote student reflection and learning – a teaching model. <i>Innovations in Education and Teaching International</i> , 47(1), 125-135.	Champlain Academic Search Premier	Included
Rowe, A.D. & Wood, L.N. (2008). What feedback do students want? [Electronic version]. <i>Australian Association for Research in Education (AARE) International Education Research Conference</i> . Freemantle, Australia. Retrieved June 22, 2012 from https://www.aare.edu.au/07pap/row07086.pdf	Google Search	Included (This article and the one after it were counted as 1 study)
Rowe, A.D., Wood, L.N., & Petocz, P. (2008). Engaging students: Student preferences for feedback [Electronic version]. <i>HERDSA 2008 Conference: Engaging Communities</i> . Retrieved June 22, 2012 from http://www.herdsa.org.au/wp-content/uploads/conference/2008/media/Rowe.pdf	Google Search	Included
Segers, M. & Tillema, H. (2011). How do Dutch secondary teachers and students conceive the purpose of assessment? <i>Studies in Educational Evaluation</i> , 37, 49-54.	McGill Elsevier	Could not reliably isolate variable of motivation
Seker, M. & Dincer, A. (2014). An insight into students' perceptions on teacher feedback in second language writing classes. <i>English Language Teaching</i> , 7(2), 73-83.	McGill ProQuest	Included
Sipple, S. (2007). Ideas in practice: Developmental writer's attitudes toward audio and written feedback. <i>Journal of Developmental Education</i> , 30(3), 22-31.	Champlain Academic Search Premier	Pilot study
Smith, L.J. (2008). Grading written projects: What approaches do students find most helpful? <i>Journal of Education for Business</i> , 83(6), 325-330.	Champlain Academic Search Premier	Included

<p>Tabatabaei, M.A. & Ahranjani, A.K. (2012). The comparative study of Iranian monolingual and bilingual university EFL students' preferences for different types of written feedback. <i>International Journal of Academic Research</i>, 4(2), 67-69.</p>	<p>Champlain College Academic Search Premier</p>	<p>Could not reliably isolate variable of motivation</p>
<p>Treglia, M.O. (2008). Feedback on feedback: Exploring student responses to teachers' written commentary. <i>Journal of Basic Writing</i>, 27(1), 105-137.</p>	<p>McGill Academic Search Complete</p>	<p>Included</p>
<p>Walker, M. (2009). An investigation into written comments on assignments: Do students find them usable? <i>Assessment and Evaluation in Higher Education</i>, 34(1), 67-78.</p>	<p>Champlain Academic Search Premier</p>	<p>Included</p>
<p>Weaver, M. R. (2006). Do students value feedback? Student perceptions of tutors' written responses. <i>Assessment and Evaluation in Higher Education</i>, 31, 379-394.</p>	<p>Champlain Academic Search Premier</p>	<p>High attrition/response rate</p>
<p>Whittington, V., Glover, A. & Harley, F. (2004). Preservice early childhood students' perceptions of written feedback on their essays. <i>Early Child Development and Care</i>, 174(4), 321-337.</p>	<p>McGill Article First</p>	<p>Included</p>
<p>Zhao, H. (2010). Investigating learners' use and understanding of peer and teacher feedback on writing: A comparative student in a Chinese English writing classroom. <i>Assessing Writing</i>, 15, 3-17.</p>	<p>McGill Science Direct</p>	<p>Could not reliably isolate variable of motivation</p>

**APPENDIX E:
ARTICLE SUMMARY FORM**

ARTICLE SUMMARY FORM

APA reference	
Topic	
Research question	
Discipline	
Methodology	
Methodological rigour and article descriptive enough for replication?	
Data collection instrument included?	
Sample	
Results	
Main Conclusion	
Personal thoughts	

**APPENDIX F:
COMPLETED DATA EXTRACTION FORM**

Research Question	#1 What are the various written feedback methods teachers use to assess analytical writing?	#2 What kind of feedback do students prefer?	#3a What do students identify as the positive effects of these written feedback strategies on their motivation?	#3b What do students identify as the negative effects of these written feedback strategies on their motivation?	#4 What are latent, intervening, and confounding variables that affect the relationship between feedback and student motivation?	#5 What do researchers suggest to start and engage students in a feedback dialogue?
Amrhein, H.R. & Nassaji, H. (2010)	<ul style="list-style-type: none"> 6. Clues or directions on how to fix an error 7. Error identification 8. Error correction with comment 9. Overt correction by teacher 10. Comment with no correction 11. No feedback 12. Personal comment on content 	<ul style="list-style-type: none"> - Students wanted teachers to correct all errors - Students wanted teachers to correct the same error every time it occurred - WCF strategies most liked were “Error correction with explanatory note” and “Direct correction” - L2 students thought English-language errors the most valuable, over content and ideas. 	<ul style="list-style-type: none"> - If errors are explained, they can use this information to correct future mistakes on their own. - If errors are pointed out every time they occur, students can identify patterns that will help them correct their own mistake in the future. 	<ul style="list-style-type: none"> - Indirect feedback, or clues, were not useful. 	<ul style="list-style-type: none"> - Whether it is in L1 or L2 learning, and whether or not the student is writing in their 1st, 2nd, etc. language. 	<ul style="list-style-type: none"> - Teachers can discuss with students the <i>purpose</i> of feedback in their classroom.
Blair, A., Curtis, S., Goodwin, M. & Shields, S. (2013)	<p>Written feedback on essays Written feedback on written exams Verbal feedback on essays Verbal feedback on written exams</p>	<ul style="list-style-type: none"> - Written feedback was easier to access. - But verbal feedback was easier to understand. 	<ul style="list-style-type: none"> - 55.7% said written feedback helps them in their learning - 	<ul style="list-style-type: none"> - Comments that are badly written (illegible) - Vague comments - Feedback that is late, too late to apply to future assignments - Frustrated when access to feedback is difficult, since they expect feedback as part of the learning process. - Different criticism from more than one tutor or class. 	<ul style="list-style-type: none"> - Do students know you are giving feedback? (I.e. in this study, students had a tough time identifying that verbal feedback was feedback). - Do students know the purpose of feedback is to improve their work, instead of measuring it? (In this study 51.3% did understand this) – Even though that a majority, that’s still a really low number. 	<ul style="list-style-type: none"> - Return things on time. - State when you are giving feedback. - Make feedback easier for students to access by embracing more feedback delivery mechanisms.
Carless, D. (2006)	<p>Written feedback Verbal feedback</p>	<ul style="list-style-type: none"> - Wanted “more than a mark” - Feedback that they can apply forward, that isn’t too narrow. - Being able to talk to the teacher for verbal feedback after an assessment 	<ul style="list-style-type: none"> - Students re-read old feedback, even years later and use it. - Students took what they did well and applied it forward. - Feedback on drafts, instead of final result. - Students are more receptive to feedback when it is a good mark 	<ul style="list-style-type: none"> - Tutor exerting too much power or feedback exerting too much emotion. - Discourse: couldn’t read, understand, or too narrow a mistake to apply - Perceived unfairness/differences between tutors, classes, disciplines. - Bad (and especially failing) grades made students shut off to feedback. - Bad/failing grades emotionally affected students 	<ul style="list-style-type: none"> - Students weren’t able to take responsibility for bad/failing grades or to see that it was due to them not fulfilling criteria. They blamed unfairness, the tutor, etc. 	<ul style="list-style-type: none"> - Verbal follow-up feedback - Creating an ‘assessment dialogue’ about all assessment, not just one assignment. - Discussing assignment criteria, its purpose and role in the assessment process. - Discussing the purpose and usefulness of assessment.

<p>Dowden, T., Pittaway, S., Yost, H., McCarthy, R. (2013)</p>	<p>Written feedback - Positive comments - Negative comments</p>	<ul style="list-style-type: none"> - Positive comments - Well-explained comments - Comments that specifically tell them how to improve - Feedback support (i.e. being able to talk with the teacher, etc. outside of the assignment) - Only 49% said they'd follow up with marker, because it's too intimidating. 	<ul style="list-style-type: none"> - Two-way communication in feedback and a feedback dialogue helped increase positive student emotion when receiving feedback. - That 'time' can help them get over the initial emotional response. - Comments on content, rather than pedantic grammar, spelling, etc. - Have clear criteria and rubrics beforehand helped students emotions over feedback. - A good relationship with teacher in the class helps a positive feedback absorption. 	<ul style="list-style-type: none"> - Negative feedback affects students emotionally - In particular, feedback that is entirely negative affects students emotionally, and seems like a "personal attack" - Only stating what's right or wrong. - Frustrated when they didn't understand what correcting symbols mean - Too harsh turns them off the feedback all together. (Although what "too harsh" means is not defined. 	<ul style="list-style-type: none"> - The effect of emotion on feedback was greater in first-year students and weaker students. 	<ul style="list-style-type: none"> - Maintaining a bigger 'feedback dialogue' - That feedback has to be two ways, not 'take this mark or leave it' - Having a good learning relationship with the students to begin with. A "warm and supportive" learning environment had positive effects. - That students need to be taught how to respond to feedback.
<p>Ferguson, P. (2011)</p>	<ul style="list-style-type: none"> - Brief written comments + concluding paragraph summary. - Just a grade - Group verbal feedback 	<ul style="list-style-type: none"> - Students want feedback and comments, want to know how to improve - Brief written comments throughout + paragraph at end highest preference - Group verbal feedback and only a grade ranked low in student preference - Comments that show how to improve, not just justifications for grade - Personal comments that talked about specific parts of their paper preferred. - 50% reported having trouble reading comments - One word comments and ticks confusing, not valued - Return time of 2-3 weeks - Comments that are positive, clear, and constructive - Comments on content more valuable than pedantic grammar, etc. - Frustration over comments that didn't match a grade. 	<ul style="list-style-type: none"> - Students want positive comments - Need positive reinforcement - Positive comments helped build confidence and encouraged them - The overall message should be on how to improve - The marker needs to "say the good things first" 	<ul style="list-style-type: none"> - Negative comments affect confidence - Made them "give up" - Need for positive phrasing of comments: "You could have tired this, instead of you did not do this?" - All bad is just too much - Have to comment constructively - Balance between pos/neg needed, not just all pos or neg. 		<p>Use of rubrics + comments is preferred. KEY THEME: COMMENTS</p>

Halawah, I. (2011)			<ul style="list-style-type: none"> - Giving early feedback had the largest positive effect on motivation - Giving feedback at all had the next largest effect had a positive effect on motivation - Assignment tasks that are realistic in the first place... - Creating an open and positive atmosphere... - Being fair and objective in evaluation also ranked... 		Teacher personality (Are they open, enthusiastic, etc.) affects student motivation.	Teaching methods which encourage open-ness and dialogue
Hyland, F. (1998)	<p>Comments on grammar Comments on meaning Feedback in writing Oral feedback</p>	<ul style="list-style-type: none"> - Student wanted direct comments on how to improve. - All students had unique preferences for the type of feedback they wanted. - Student felt feedback on drafts was more useful than feedback on final products. - Insincere praise was worthless. Example of "Nice comment, but..." 	<ul style="list-style-type: none"> - When the teacher made comments that personally responded to student, she enjoyed writing more, because she felt like the teacher was listening to her. - One student stated that positive comments meant success and satisfaction. 	<ul style="list-style-type: none"> - Both students in the case study started liking the subject, but finished the class hating it! - One reason feedback not used was if they found it irrelevant or not useful. - Not receiving positive comments on something one student thought they were good at, led to her being discouraged. - Lack of positive comments for something the student was insecure about led to decreased motivation. 	<ul style="list-style-type: none"> - Whether the student was strong or weak. - Whether the student was secure or insecure about the element being remarked upon. (In this particular case, that the teacher had not commented positively on something the student thought they were the best at.) 	<ul style="list-style-type: none"> - Make feedback personal and uniquely 'catered' to each student. - Discussion about the aims and expectations of feedback necessary. - Face-to-face talks about feedback.
Hyland, K. (2013)	<p>Grades at end, one word comments Correcting writing vs. correcting facts</p>	<ul style="list-style-type: none"> - Students didn't like teachers who put a grade at the end and said "See me for comments". They felt this was time-consuming for them and that they wouldn't approach teachers because they were too busy to make time for them. 	<ul style="list-style-type: none"> - Personal feedback improved the student/teacher relationship. - Taking the time to give feedback was interpreted as 'caring'. - Timely + personalized + focused = encouragement. - Scaffolding assignments and making a place in your course design for the use of feedback can help students to see the benefits of feedback. 	<ul style="list-style-type: none"> - Lack of draft work signalled to students that writing was not a learning process, but a summative one. - Students stated that receiving no feedback on essays besides from a grade at the end taught them they had nothing to learn from feedback. - Comments that aren't useable (feed-forward) give the message that feedback isn't for learning. - Students don't use the comments from one class to another, because they see the difference between teacher, classes, and assignments as too big too make feedback relevant from one assignment to the other. - Unpersonal + delayed + perfunctory = negative 	<ul style="list-style-type: none"> - Writing in subject matter vs. language teachers. - Draft writing vs. summative writing. 	<ul style="list-style-type: none"> - That there should be an agreement in class between teacher and tutor about what everyone wants and expects out of feedback.

Lee, G. & Shallert, D. (2008)			<ul style="list-style-type: none"> - High student trust in a teacher's ability = a student's use of feedback - A student with low-trust in their teacher had a higher opinion of her when she corrected an assignment "carefully" and "accurately" – even though it received a bad mark and bad comments, the student thought it was accurate. - I.e. it was realistic and not harsh. 	<ul style="list-style-type: none"> - Low-level of trust in a teacher's ability = student not responding to teacher feedback, which was = to a teacher then not liking the student 	<ul style="list-style-type: none"> - Student trust in a teacher's abilities - A teacher's impression of the student's use of their feedback. - Emotion - Interpersonal relationship between the student and teacher 	<ul style="list-style-type: none"> - The role of leadership and abilities (management literature) in the feedback discussion.
Lizzio, A. & Wilson, K. (2008)	Developed vs. undeveloped. Positive vs. negative	<ul style="list-style-type: none"> - Feedback that is transferable between markers and classes, thus making them able to be self-learners - Identifies specific learning goals and gives specific strategies - Comments that showed deep engagement and interest - Clear, understandable, and consistent. 	<ul style="list-style-type: none"> - Feedback that was supportive was deemed more effective: acknowledged achievements, recognized effort regardless of grade, had a considerate tone. - The encouraging comments were linked to their level of motivation and willingness to persist in the course. - Encouraging comments were ones that showed that students were "still in the game" - Positive = positive results, but anything that was encouraging - Feedback was found to be effective when it was encouraging, fair, and developed. - Developed feedback was rated as the most effective. 		In this study, sample characteristics did not affect the relationship between developed, fair, and encouraging feedback = effectiveness.	<ul style="list-style-type: none"> - Teachers need to provide emotional support in their developed feedback. - Developing the conversation by giving them comments that are useable to more than just the next assignment, but all essays in general.
McGrath, A.L., Taylor, A. & Pychyl, T.A. (2011)	Developed vs. undeveloped Positive vs. negative		<ul style="list-style-type: none"> - Students benefitted when negative feedback was developed. - Positive feedback, developed or not, had an effect. For example, a check in the margin had the same effect as words. - Developed feedback was regarded as more helpful and fairer. <p>Students perceived there to be an advantage to developed feedback, but quantitatively there wasn't any significant differences between assignments.</p>	<ul style="list-style-type: none"> - Positive developed feedback was not more encouraging. - Although the grades of those with developed feedback were higher, it was not statistically significantly higher. - Students notice a change in the quality of feedback, from better to worse. 	<ul style="list-style-type: none"> - Time: Developed feedback took twice as long for the teacher to accomplish. 	

Poulos, A. & Mahony, M.J. (2008)	Written vs. verbal Positive vs. negative Developed vs. undeveloped Comments vs. grades	<ul style="list-style-type: none"> - Students defined feedback as evaluating the quality of their assignment + giving specific comments for the future. - Verbal and one-on-one feedback appreciated, but going to seek it themselves was intimidating. - Written feedback helpful because you can consult it again in the future. - Students want details, specific instructions, and comments. 	<ul style="list-style-type: none"> - Students stated the importance of mid-term feedback, to help them assess how they are doing. - First-year students valued emotionally considerate comments more, ones that helped them integrate into their students. - Students with positive assessments of their teachers' abilities viewed their feedback as more effective. 	<ul style="list-style-type: none"> - Essays due at the end of semester are hard to use for feedback, since by the time you get them, you don't need them. - Negative feedback demoralized students, but this was related to how negatively students interpreted the feedback as either a reflection of him/her personal vs. as an opportunity to improve their learning. - Students viewed teacher feedback as less effective when it was viewed as being based on personal opinion or being personally biased. 	<ul style="list-style-type: none"> - First-year students - A student's assessment of their teachers' ability 	<ul style="list-style-type: none"> - Students appreciated timely feedback or at least mid-term feedback. - Increasing students' perceptions of the provider.
Quinton, S. & Smallbone, T. (2008)	Not stated	Not stated.	<ul style="list-style-type: none"> - Students had emotional reactions to the feedback they received. When asked: "How do you feel?" They responded: pleased, happy, relieved, disappointed, irritated, gutted, motivated, upset, satisfied, worried, saddened, upset, pleased, mixed emotions. 	<ul style="list-style-type: none"> - In other words, negative emotions were linked to: anxiety, anger, disappointment, and motivation. 	<ul style="list-style-type: none"> - The ability to reflect on their feedback. - Negative emotions that prevent them from looking at feedback. 	<ul style="list-style-type: none"> - Taking time in class to explicitly reflect on feedback. - Taking time to allow students to "dump" their emotions before looking at the feedback constructively.
Rowe, A.D. & Wood, L.N. (2008)		<ul style="list-style-type: none"> - Students wanted feedback and saw it as a learning experience. - Wanted discussion and engagement in their feedback. - Wanted comments, not just a grade. - Vague, late, and not enough info were negative. - Consistency and fairness - Good time frame for essays 2-3 weeks - Wanted it to be relevant to further study. 	<ul style="list-style-type: none"> - Students place emotional support on feedback. 		<ul style="list-style-type: none"> - Whether students were surface or deep learners 	<ul style="list-style-type: none"> - Students want feedback that is more personal, engaged and discussion-like. -Face-to-face feedback preferred to achieve this.
Seker, M. & Dincer, A. (2014)	Grammatical mistakes Spelling Punctuation Capitalization Content	<ul style="list-style-type: none"> - Students liked getting grammar mistakes corrected the most out of all the language learning categories. 	<ul style="list-style-type: none"> - Students had a mostly positive attitude and emotion towards receiving feedback. - Feedback that was returned quickly was more likely to elicit positive emotions. - Feedback that elicited positive emotions was correlated with quicker use. 	<ul style="list-style-type: none"> - Students reacted with more negative emotion the later feedback was received. - Negative emotion, in turn, was correlated with slower feedback use by the student. 	<ul style="list-style-type: none"> - Return time. 	

Smith, L.J. (2008)	<p>Rubric/matrix correction Paragraph comments + end paragraph Problems + Solutions table</p>	<ul style="list-style-type: none"> - Students read and used comments - Students did not like the method that only pointed out their mistakes. - They preferred the matrix the best at 60% vs. 36.4% - Students didn't really care for feedback regarding 'Mechanical errors' 	<ul style="list-style-type: none"> - Matrix seemed fairer, more consistent, visually easier to understand - Matrix helped to see comments as being professional instead of personal - Students equated the method of comments throughout + paragraph at end as being more personal - Positive + negative comments softened the negative blow. 4.49 mean said they wanted both positive and negative comments. 	<ul style="list-style-type: none"> - Summary of problems seen as being "too mean" 	<ul style="list-style-type: none"> - Students wouldn't look up error codes. 	<ul style="list-style-type: none"> - Use matrix to speed up feedback process for teacher. - Those who preferred consistently, fairness preferred matrix. - Those who preferred personal comments preferred paragraph at end. - Mechanical comments least wanted and used. Impact for time management.
Treglia, M.O. (2008)	<p>Mitigated comments (Sandwich) Unmitigated comments Praise Mitigated criticism Directives Personal comments</p>	<ul style="list-style-type: none"> - Students liked the mitigated comments. - They hated indirect critical comments such as "This doesn't make sense" 	<ul style="list-style-type: none"> - Students linked an increase in motivation to teachers mitigated comments and to teacher's pointing out positive elements when they saw it. - Another student stated that mitigated comments helped her to continue because it is clear that there is a path to continue - The mitigating comments didn't help students quantitatively in the feedback process, but it allowed them to "save face" and to motivate them. - Students liked comments that still left room for their decision-making role in applying feedback. Words like "perhaps, maybe, might" were liked. 	<ul style="list-style-type: none"> - Decreased motivation was linked to critical indirect feedback: "This makes no sense" and "broken" - Students reacted negatively when their effort was not recognized. 	<ul style="list-style-type: none"> - Culture: Students from cultures where politeness is valued viewed mitigating comments as useful. - Students with a still black/white view of knowledge didn't like praise + directive, but positive + directive. 	<ul style="list-style-type: none"> - Positive elements + directives worked best with motivation. Helped students to continue the conversation. - Feedback that mimicking an adult equal professional relationship worked best
Walker, M. (2009)	<p>Types: - Content feedback - Skills development feedback - Motivating feedback - De-motivating feedback - Future study or reference to a resource Depth: - Indication of error - Correction of error - Correction plus explanation of error</p>	<ul style="list-style-type: none"> - Teachers do mostly content with correction of error. - Students prefer mostly Correction of error plus explanation. - Students misunderstood content questions the most often when they were only indicated. 	<ul style="list-style-type: none"> - 73.2% of students stated that positive comments that were sincere, were motivating and encouraging. 		<ul style="list-style-type: none"> - The usability of comments: students can't feed them forward if they can understand them or use them. - Most misunderstood questions were indicative comments on content. 	<ul style="list-style-type: none"> - Students wish to be told what they are doing wrong, why, and how to fix it. - Students wish to have explicit feedback on how this feedback can be used for the future.

Whittington, V., Glover, A. & Harley, F. (2004)		<ul style="list-style-type: none"> - Students preferred for positive achievements to be pointed out and to receive direct instructions for how to improve negative aspects - Students want detailed and explanatory comments - Only positive comments confused them, because it didn't match up with their grades. 	<ul style="list-style-type: none"> - Positive comments were linked to increased motivation. - Particularly to increased motivation in the course. - Comments from teacher were equated with caring. 	<ul style="list-style-type: none"> - Lateness was a barrier for application of feedback. - Essays with a grade/no comments linked to demotivation. - Unapproachable teachers linked to not-seeking clarification on feedback. - Most negative comments were on mechanical errors, i.e. tiny stuff. 	<ul style="list-style-type: none"> - Fairness and consistency. - Timing 	<ul style="list-style-type: none"> - Standardized marking sheet - Comments, not just a grade - Positive achievements, not just negative comments. - Engaging students in dialogue - Using modifiers like "Maybe"
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**APPENDIX G:
LIST OF CODES AND THEME FREQUENCIES**

LIST OF CODES AND THEME FREQUENCIES

Student definition

- Their definition of feedback: measurement or learning?

Types of correcting and corresponding relationships:

Medium:

- Written feedback
- Individual verbal feedback
- Group verbal feedback

Types of comments:

- Positive feedback (highlights, instructions for future)
- Negative feedback (only points out mistakes)
- Pointing out achievements and mistakes, but no instructions for future
- Undeveloped, negative feedback (pointing out all errors)
- Direct feedback on current errors
- Indirect feedback (clues, symbols, checks)
- Specific instructions for future
- Personal or engaged comment from teacher
- Feedback that is applicable to future mistakes or learning
- Formative feedback (drafts or mid-semester work)
- Summative feedback (end-of-term essays)
- Content feedback (ideas, argumentation)
- Pedantic, superficial feedback (grammar, spelling, typos)

Student perception of feedback credibility:

- Perceived fairness
- Perceived bias
- Perceived consistency
 - Comments/grades don't match
 - What worked in one class, doesn't work in this one.
- Teacher ability/trust

Barriers between feedback and student use?:

- Understanding feedback (writing, language)
- Vague comments (too general)
- Timely (later than 2-3 weeks)
- Easy access
- Do they know how to use feedback
- Student/teacher relationship
 - Teacher personality
 - Positive/negative
 - Two-way feedback communication
- Student emotion
- Taking feedback personally instead of professionally
- Harsh comments

Lurking variables:

- L1 vs. L2 learning
- Weak vs. strong student

Motivation relationship:

- Positive direction
- Negative direction

Raw results: Themes for student preferences of feedback

Study	Did students state that they want feedback?	Did students state they wanted their achievements acknowledged? (I.e. For teachers to point out some good stuff and not just the negative)?	Did students state they preferred for teachers to provide specific directives or comments?	Did students indicate that they wanted personalized or engaged comments from their teacher?	Did students state that they wanted feedback that was "feed-forward"?	Did students indicate that they were worried about grader inconsistency or fairness?	Did students state that they would approach their teacher for further clarification?
Frequency counts	10	7	8	7	9	6	4 nos

Raw results: Themes for the effect of feedback on student motivation

Study	Did students have an emotional reaction to feedback?	Is there evidence that students take actions as a result of feedback to maintain, preserve, or protect their self-worth and self-esteem?	Is there evidence that feedback has impacted the students desire to continue learning?	IS there evidence that a two-way teacher-student relationship positively affects motivation?	Is their evidence that a positive tone positively affects student motivation?	Is there evidence that feedback affects a students ability to continue learning (i.e. is it feed-forward?)
Counts	13	9	16	7	8	11