The Relationship Between Feedback and Change in Tertiary Student Writing in the Disciplines

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This study examined the relationship between teacher written feedback and change in the disciplinary writing of tertiary students in their final year of undergraduate study. The student texts and teacher written feedback examined arose naturally out of a third year disciplinary-based unit in which each student submitted a text three times over the course of a semester, each time receiving feedback and a mark prior to rewriting and resubmitting. In analyzing the relationship between the different types of feedback and the changes that occurred, the feedback was categorized according to the issue that was being addressed, the manner in which it was given, and its scope. The different types of feedback were directly related to the changes that occurred in the students' subsequent rewrites. The analysis shows that certain types of feedback are more strongly related to change than other types of feedback. In addition, the analysis shows that change is further influenced by the balance between the various individual points of feedback and the degree to which they reinforce each other. The findings show that the use of feedback that is strongly related to change can improve the writing of students in the disciplines.

Concerns have long been expressed about tertiary students' ability to write (Lea & Street, 1998; Reid, 1997; Russell, 1991) with many educators looking to find effective ways to improve their students' writing. Many initiatives have been undertaken at universities to address this issue such as the provision of academic skills advisers and writing classes. This study, however, addresses improvement of writing within the disciplinary context.

The disciplinary context provides many challenges that are difficult to recreate in a writing class. Through their degree program, students are placed in learning contexts where they grapple with increasing complexity and depth of subject matter which they are often required to address in lengthy, detailed, and specific ways (Enders, 2001; Grabe & Kaplan, 1996; Vardi, 2000). As they further progress in their studies, they need to demonstrate their ability to evaluate textual material in ways appropriate to the discipline (Geisler, 1994) and demonstrate where they are situated relative to the literature. This ability to construct their own "voice" through aligning, disagreeing, contrasting and juxtaposing the ideas of others (Ivanic, 1998) is a major intellectual challenge for students (Carson et al, 1992).

While much has been written about disciplinary ways of writing (Chanock, 1994; Lea & Street, 1998; Odell, 1992), writing in the disciplines is not uniform (Herrington, 1985; Ivanic, 1998). There are many different types of writing tasks and many different expectations from staff even when situated in the same discipline (Herrington, 1985; Lea & Street, 1998; Vardi, 2000). This poses additional challenges for students each time they write for a new task and is further exacerbated when writing for a new lecturer.

As these challenges are specific to the disciplinary classroom and the writing task at hand, an important responsibility is placed on lecturers to help their students meet the specific writing requirements of the classroom. One of the major tools that lecturers have is written feedback. Its role in improving tertiary student writing has been studied across a number of different contexts including tertiary composition study, second language acquisition, and the disciplinary context.

Across these three contexts, a number of similar conclusions have been drawn about feedback and its role and effectiveness in the writing process. Several researchers have found that when given an opportunity to revise, students usually attend to most teacher written feedback and make changes (Ashwell, 2000; ; Ferris, 1997; Sweeney, 1999), particularly when written as a request or a direction on what to improve and how (Ferris, 1997; Sweeney, 1999; Ziv, 1984). Changes in response to feedback occur even when students do not understand why the change needs to be made (Ziv, 1984). Feedback increases the number of changes that students make on revision (Ashwell, 2000; Fathman & Whalley, 1990; Sweeney, 1999) and these changes usually improve the quality of student writing (Beach, 1979; Beason, 1993; Fathman & Whalley, 1990; Olson & Raffeld, 1987; Sitko, 1993).

Certain types of feedback have been found to be more effective in producing positive change than others. Overall, text-specific feedback results in more substantive change than general feedback (Chamberlain, Dison, & Button, 1998; Ferris, 1997; Jenkins, 1987; Sweeney, 1999; Zamel, 1985). Feedback addressing the characteristics of mechanics, structure or content in the text has been found to lead to changes which improve the quality of writing (Ashwell, 2000; Beason, 1993; Fathman & Whalley, 1990; Ferris, 1997; Olson & Raffeld, 1987). But, while feedback on mechanics improves writing, when it is the only

feedback given, it does not necessarily translate into increased marks in the discipline (Olson & Raffeld, 1987). This finding reflects the importance that disciplinary markers attribute to both content and form in their evaluation of the overall quality of the written piece.

Despite these positive observations about the types of feedback that result in improved writing, both researchers and students from across a range of contexts have expressed concerns about how it is used in the classroom. Researchers have found that some teachers give limited feedback (Plum, 1998; Spinks, 1998), misread students' work (Jenkins, 1987; Zamel, 1985), over-emphasize certain aspects of the text such as grammar (Cohen & Cavalcanti, 1990), arbitrarily impose rules and standards (Zamel, 1985), and do not address specifics in the text (Chamberlain et al., 1998). Feedback from some teachers has been variously described as vague (Chamberlain et al., 1998; Jenkins, 1987; Zamel, 1985), unclear or cryptic (Chamberlain et al., 1998; Hoadley-Maidment, 1997; Jenkins, 1987), ambiguous (Jenkins, 1987), sarcastic (Chamberlain et al., 1998), contradictory (Chamberlain et al., 1998; Zamel, 1985), buck-passing (Chamberlain et al., 1998), and lacking in praise or positive comments (Beason, 1993; Chamberlain et al., 1998; Cohen & Cavalcanti, 1990; Spinks, 1998).

These types of observations about teacher feedback have led Jenkins (1987) to the conclusion that feedback often lacks a sense of instruction, and Chamberlain et al. (1998) to the conclusion that much of the feedback students receive is unhelpful. Vague, unclear, non-text-specific feedback would appear to be particularly unhelpful when students enter a writing situation with new conventions, norms, ideas and ways of thinking as occurs in the discipline based classroom.

Given the observations made about teacher feedback, it is not surprising that several researchers (Cohen & Cavalcanti, 1990; Plum, 1998; Sitko, 1993; Zamel, 1985) have observed that many students have problems in using it. Students in various studies have reported not understanding a range of feedback that they have been given (Cohen & Cavalcanti, 1990; Jenkins, 1987; Lea & Street, 2000; Leki, 1995; Sommers, 1992). This lack of understanding has been linked not only to "unhelpful" feedback, but also to feedback that does not reflect the in-class discussions and negotiations which had occurred about the writing (Sperling & Freedman, 1987). Students report sometimes not knowing what to do with the feedback given (Leki, 1990) and are disappointed when they do not receive enough useful feedback (Spinks, 1998). These types of findings have even led some to conclude that written feedback is not effective (Faigley et al., 1985; Hillocks, 1986; Leki, 1990).

Yet despite these problems with teacher feedback, students report wanting useful feedback (Spinks, 1998) and have spoken of the types of feedback they like or would like to receive on their writing. Several studies have reported that students want positive feedback (Beason, 1993; Cohen & Cavalcanti, 1990; Hyland, 1998; Spinks, 1998). This aspect of feedback is important as it not only provides motivation, but also information about the correctness of a response (Wittrock, 1986). However, students also want teachers to engage with their ideas and provide feedback on content and its organization (Cohen & Cavalcanti, 1990) with direct explicit instruction on how to improve (Hyland, 1998; Leki, 1990; Ziv, 1984) – a desire which is strikingly similar to the types of feedback found to be effective in producing positive changes to students' writing. When they do not receive these types of feedback, the experience can result in a lack of motivation to continue writing (Hyland, 1998).

While students clearly want the types of feedback found to be effective in improving writing quality on rewrite, the tertiary context of writing within the disciplines often does not provide students with the opportunity to act on the feedback they get. Given that at the pre-tertiary level and at the postgraduate research level, students are given feedback on their drafts, it is quite an anomaly that undergraduate students are rarely given an opportunity to act on feedback from their assignments. Both Chamberlain et al. (1998) and Beason (1993) have noted, that when tertiary students are given an opportunity to respond to teacher feedback, they do so and that this results in improved writing.

To date, studies on feedback have examined the various types of feedback given to students (Beason, 1993; Chamberlain et al., 1998; Ferris, 1997; Spinks, 1998; Tapper & Storch, 2000), the types of feedback to which students attend (Ashwell, 2000; Beason, 1993; Olson & Raffeld, 1987), the amount of change that results (Ashwell, 2000; Ferris, 1997; Hyland, 1998; Sweeney, 1999), the change in quality of writing (Beach, 1979; Fathman & Whalley, 1990; Olson & Raffeld, 1987), and students' reactions to the feedback they receive (Cohen, 1993; Hyland, 1998; Jenkins, 1987; Lea, 1994; Spinks, 1998; Ziv, 1984). There does not appear, however, to be any research which directly relates each point of feedback given to the subsequent changes made to the text. This study addresses this gap by examining feedback and change within the disciplinary context.

Method

This naturalistic study was conducted in a third year comparative Industrial Relations (IR) unit in a

large Australian university. As part of their assessment, over 100 students were given a major 2500 word take-home writing assignment, and were required to write in response to the same essay prompt three times over the course of the semester each time working to improve their written response. After submitting each text, the lecturer provided detailed written feedback and a mark to each student before the next rewrite was due. The first text was allocated 15%, the second 20%, and the third 10%. The student texts that arose naturally out of this process formed the basis of this study.

The participants comprised those full-time third year IR students whose first language was English and who consented to having their written work analyzed. This resulted in a pool of 15 students. The written texts along with the accompanying feedback of four of these students were selected for in-depth analysis. Collection and analysis occurred after all assessments had been completed and marked in order not to affect study results. These four sets of texts (3 from each student) were selected as they displayed (a) a range of marks from failure through to high achievement and (b) different rates and patterns of improvement in mark as depicted in Figure 1.

In all the selected sets, the lecturer provided substantial amounts of written feedback on both the students' first and second texts, irrespective of the grade given. The students all showed high rates of compliance with feedback that required or suggested that improvements could be made.

The first and second texts written by each student contained feedback on which students could act. Each point of feedback was coded in three ways reflecting:

- The characteristics of the text that the feedback addressed;
- The manner in which the feedback was written; and
- The scope of the feedback.

Through repeated examination of the data and based on insights gained from the categories used by other researchers in feedback and revision studies (Beason, 1993; Faigley & Witte, 1981; Ferris, 1997; Olson & Raffeld, 1987; Spinks, 1998) the codes listed in Table 1 were developed. The defined parameters for each code are detailed in Appendices A - C.

Figure 1
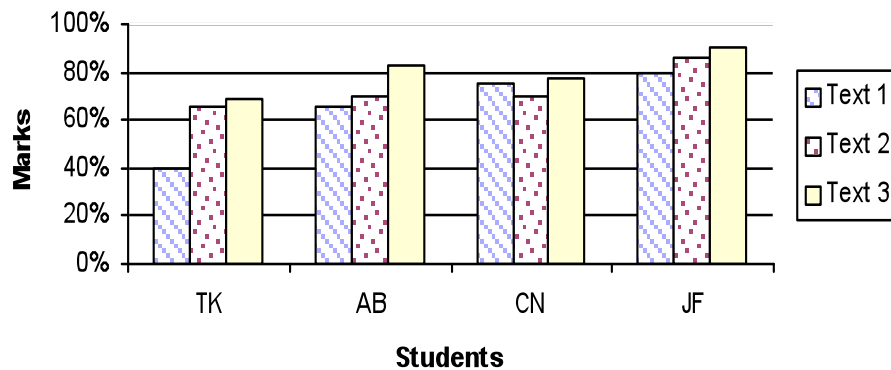Improvement in Student Essays

Table 1
Feedback Codes

Characteristics Addressed	Manner addressed	Scope of feedback
▪ Mechanics ▪ Information ▪ Referencing ▪ Academic expression ▪ Thinking ▪ Organization ▪ Sources ▪ Unclear ▪ Other	▪ Prescription ▪ Direct edit ▪ Question ▪ General comment ▪ Explanation ▪ Evaluation ▪ Indication ▪ Other	▪ Local ▪ Global ▪ Unclear

Table 2

Number of Points of Feedback by Characteristic Addressed

Characteristic Addressed	Total Number in Sample
Mechanics	58
Information	39
Referencing	63
Academic expression	61
Thinking	58
Organization	77
Sources	23

Table 3
Types of Feedback Strongly Related to Change

Scope	Manner and Characteristic Addressed
Global	• Prescriptive feedback addressing organization in conjunction with information and/or thinking and/or sources • Prescriptive feedback addressing mechanics or referencing and citation in conjunction with an explanation or example
Local	• Prescriptive feedback on the role and structure of the introduction or conclusion at the section and whole of essay levels • Direct editing of mechanics, referencing and citation practices, or academic expression • Prescriptive feedback addressing academic expression, information or thinking

Each point of feedback was coded in three ways. For instance, a point of feedback given at the end of the text such as, *"See Gardner and Palmer (1997)"*, was coded as follows:

▪ Characteristics addressed = Sources used;
▪ Manner addressed = Prescriptive; and
▪ Scope of the feedback = Global.

Once categorized, each point of feedback on one text was then compared with the resultant change in the subsequent text. Any changes directly related to that point of feedback were recorded. Overall, 379 points of feedback and the resulting changes in the subsequent text were analyzed. Table 2 shows the number of points of feedback analyzed based on the characteristics addressed.

The coded feedback along with the resultant changes were grouped and examined to identify the commonalities in relationships between feedback types and change across all the cases.

Findings

Feedback Strongly Related to Change

Table 3 shows the types of global and local feedback that demonstrated a strong relationship with change.

Global feedback strongly related to change. Two main types of global feedback were found to be strongly related to change. The first is global prescriptive feedback on organisation of the text. This type of feedback often resulted in widespread changes across the text when it was directly linked to information and/or thinking and /or sources. For example, the following point of feedback written at the end of the text resulted in its complete restructuring in the subsequent iteration.

"I appreciate your decision to concentrate on three countries. I think it would have been more consistent and preferable in terms of your thinking for the essay to have used the same topics/headings for all 3 countries."

This finding matches with Olson & Raffeld's (1987) finding that feedback focusing on content (information and ideas) in conjunction with its structuring significantly influences the quality of the rewritten text. This study shows that deep changes can occur when feedback on the organization of the text indicates how to make the text work *in combination with* (a) the types of information they need to incorporate, (b) where it can be found, and (c) how it needs to be engaged with.

The second type of global feedback found to be strongly related to change was global prescriptive feedback which addresses generalizable rules or conventions, such as those found in mechanics and referencing and citation. This can also result in wide spread change across the text when coupled with an explanation or example. For example, the following feedback written on the lecturer's feedback sheet resulted in widespread change.

Don't start paragraphs with a mouthful of authors. In-text referencing is best done in

Table 4
Global and Local Feedback Poorly Related to Change

Scope	Type
Global	• Evaluation of mechanics, academic expression, referencing and citation, sources used, organization, information or thinking • Prescriptive feedback on organization or thinking given in general writing terms
Local	• Prescriptive feedback on organization or thinking given in general writing terms

brackets at the end of the relevant sentence or paragraph.

This finding is similar to Ferris's (1997) finding that global feedback on grammar results in substantive changes across the text. As mechanics and the conventions for referencing and citation are surface characteristics that do not influence content, the students showed that they could easily and readily incorporate these into the existing text. While these types of surface changes have been found to improve the quality of ESL student writing (Ashwell, 2000; Fathman & Whalley, 1990; Ferris, 1997), in tertiary writing their influence on the perceived quality of the text would appear to be minimal. This could be seen with one of the students who, despite complying with copious amounts of surface feedback, received only a minimal increase in mark in her next text. This conclusion is supported by Olson & Raffeld (1987) who found that when only this type of feedback is given, students' marks do not necessarily rise.

Local feedback strongly related to change. Three types of local feedback were found to be highly effective in promoting change. The first is local prescriptive feedback on organization which focuses on the thinking and information in introductions and conclusions at the whole of essay and section levels. This resulted in widespread deep changes to the text including changes in focus, content, analysis, and structure in the next iteration. This was seen, for example, with the following local point of feedback given alongside the introduction:

> *..emphasize the principle themes – e.g,. legislation, framework for centralized bargaining, role as employer, etc*

The second type of local feedback found to result in consistent change was direct editing of mechanics, referencing, and citation. This resulted in students consistently making the changes in at the point of editing. The third type is local prescriptive feedback which addresses either information or thinking. While this also resulted in changes to the text, the effectiveness of that change appeared to be dependant on the degree of coherence already exhibited in the text. Where coherence was strong across all levels of the text, this type of feedback allowed the student to incorporate the additional information and critical thought within the existing

structure of the text. However, where coherence in the text faltered, this type of feedback was not necessarily incorporated in a coherent manner.

In examining the types of feedback which are strongly related to change, it is interesting to note that while it has been suggested that teachers should not use prescriptive feedback (Leki, 1990; Lunsford, 1997), this study shows that prescriptive forms of feedback can be highly effective in producing change in texts. The influence of prescriptive feedback is confirmed by Ferris (1997) and Ziv (1984) who found that students took this type of feedback seriously and complied with it.

Feedback Poorly Related to Change

While several types of feedback could be strongly related to change, other types were found to be poorly related to change. These are shown in Table 4.Global evaluation through the use of rating sheets could not, on their own, be directly related to change. While this finding could in part be attributed to the difficulty in analyzing general feedback, when a point of global evaluation was poor and *no other feedback was given* generally change did not occur. This may reflect the difficulty students have in using feedback that is not text-specific and is supported by Spinks (1998) who found global evaluation in the form of evaluation sheets to be of limited value.

Both local and global feedback addressing organization in general writing terms unrelated to the information in the text and without explanation (e.g., "more analysis" and "use topic sentences") were also poorly related to change. This confirms the findings of many (Beach, 1979; Beason, 1993; Fathman & Whalley, 1990; Ferris, 1997; Olsen & Raffeld, 1987; Sitko, 1993) that general feedback has less influence on student revisions than text-specific feedback.

Relationships Between Points of Feedback and Their Influence on Change

While much of the literature (Ashwell, 200; Beason, 1993; Chamberlain et al., 1998; Fathman &Whalley, 1990; Ferris, 1997; Jenkins, 1987; Olsen & Raffeld, 1987; Spinks, 1998; Sweeney, 1999; Tapper & Storch, 2000; Ziv, 1984) and the findings described thus far focus on individual points of feedback, this study also found that relationships *between* points of feedback can influence the type and extent of change.

Several significant relationships between points of feedback were found to be strongly related to change. One is the relationship between the global and local feedback. Overall, the study found that global feedback was strongly related to change where it was augmented and supported by local feedback which modeled and made clear how and where the global feedback could be applied in the text.

Another important relationship found was the degree to which different points of feedback "send the same message." Where feedback conflicted, change was less likely to occur. This occurred for example where students were directed to improve their text on an aspect of their writing for which they had received a positive evaluation. This shows the importance of ensuring that separate points of feedback complement and reinforce each other. While the literature shows the importance of providing positive feedback (Beason, 1993; Cohen & Cavalcanti, 1990; Hyland, 1998; Spinks, 1998), these findings suggest that being overly positive can be counter-productive and can result in students not making necessary changes.

Another significant relationship to emerge was the relative amount of feedback given in one area as opposed to another. The students in this study appear to have attended to those areas which received the greatest quantity of feedback. This was sometimes to the detriment of other important, yet less emphasized, feedback. This occurred for example with one student who received copious amounts of feedback on surface textual features (such as mechanics, referencing, and academic expression). This appeared to have obscured the more isolated but important feedback on deeper aspects of the text (e.g., content and thinking) which the student did not address. This shows that feedback as a whole needs to be balanced with focus directed at the most important deep issues that need addressing.

These relationships between the various points of feedback, in turn, function in conjunction with the grade allocated. The relationship between the grade and the overall feedback would appear to be very strong. This was most clearly revealed on the first texts that the students submitted. Two students each received 23 points of feedback. One of the students was given a mark of 40%. The change in her subsequent text was dramatic suggesting that the initial low mark was an important part of her much improved performance. The other student received a mark of 75%. Although changes were requested through the feedback, fewer changes were seen in the subsequent text and many of the problems highlighted in the first text persisted in the second text. The students appeared to have judged the relative importance and value of the feedback based on the overall mark. This shows how important it is for feedback to indicate the most salient aspects to which students must attend in order to improve their grade,

and is confirmed by reports from students who were disappointed with their grade and the lack of feedback on how to improve (Spinks, 1998).

Role of the Iterative Process

While the types of feedback and the relationships between the points of feedback are important, the assessment process in which they occur also appears to play a significant role. In the context studied, the students received a mark for each version of the text. While teachers often do not give marks to draft work, it would appear that the marks provided in each version of the text in this iterative process influenced the students in two major ways. Firstly, it helped develop a high level of student compliance in attending to the feedback given. Secondly, it got the students to start early in the semester on their writing task and provided them with over 7 weeks to write, address feedback, and rework the text providing them with what Nelson and Hayes (1988) term a "high investment writing situation" (p. 19).

With the students investing in the task and attending to the feedback, the process provided the instructional means by which the lecturer could help improve their writing. Hence, a process approach with staged marks that provides students with an opportunity to attend to feedback and make appropriate changes can be highly effective where appropriate types of feedback are given.

However, there was also some evidence that the process may have restricted learning through the students becoming reliant on the lecturer to identify problems and provide direction for improvement. Where problems in the text existed and the lecturer did not indicate a need for improvement, change often did not occur. Similarly, where the lecturer took responsibility for improving fluency of the text (e.g., through directly restructuring the sequence of information in the text), the students simply followed without attempting to deal with the fluency issues on their own. These findings provide some evidence for the concerns that some have expressed about iterative feedback including the hand feeding of information (Sweeney, 1999), reduced ownership of writing (Hyland, 2000), and student compliance resulting in a lack of critical engagement both with their own ideas and the marker's feedback (Muncie, 2000; Sperling & Freedman, 1987).

Some of the problems arising out the process, however, appear to be related to the types of feedback given. Where the lecturer did not take control over the meaning making, but provided sufficient scaffolds for students to make meaning on their own, there was evidence of students having critically engaged with ideas. The findings suggest that the use of explicit

global feedback complemented by sufficient local feedback to clarify the points made globally provides the scaffolds needed. This type of feedback combined with an iterative process with staged marks ensures compliance in attending to task while minimizing hand feeding, the lack of critical engagement and loss of ownership.

Conclusion

Providing feedback on student writing in the disciplinary context is an important way to improve writing. However, providing extensive detailed feedback in the manner examined in this study is time consuming for both staff and students. This study demonstrates that feedback need not be extensive to be effective. As shown, when certain types of feedback are provided in a high investment context, widespread changes to text can result.

Overall, the findings suggest that feedback can improve the quality of tertiary students' texts where it

1. is clear and direct as occurs in prescriptive feedback;
2. links structuring of the text with content;
3. encourages the students' own meaning making through global feedback supported by local examples;
4. does not emphasize surface feedback (e.g., grammar, spelling, referencing conventions) over feedback on deep aspects of the text such as the content, level of analysis, and its structuring in the text; and
5. is provided in a context in which the students invest highly in the writing, attend to the feedback, and act on it.

While the findings of this study are limited to the writings of four students and the feedback of one marker, they support previous research which shows that feedback can play an important role within the disciplinary setting. They also provide clear direction to both disciplinary based teaching staff and academic staff developers on some effective ways to use feedback which can deal with the types of dissatisfaction students have expressed with the quality and usefulness of the feedback they are getting. Further research is needed to examine the impact of this type of feedback and other types of feedback with other student groups and markers.

References

Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing, 9,* 227-257.

Beach, R. (1979). The effects of between-draft teacher evaluation versus student self-evaluation on high school students' revising of rough draft. *Research in the Teaching of English, 13,* 111-119.

Beason, L. (1993). Feedback and revision in writing across the curriculum classes. *Research in the Teaching of English, 27*(4), 395-422.

Carson, J., Chase, N., Gibson, S., & Hargrove, M. (1992). Literacy demands of the undergraduate curriculum. *Reading, Research and Instruction, 31*(4), 25 - 50.

Chamberlain, C., Dison, L., & Button, A. (1998). *Lecturer feedback - implications for developing writing skills: A South African perspective.* Paper presented at the HERDSA Annual International Conference, Auckland, New Zealand.

Chanock, K. (1994). Disciplinary subcultures and the teaching of academic writing. In K. Chanock (Ed.), *Integrating the Teaching of Academic Discourse into Courses in the Disciplines. Proceedings of the Conference held at La Trobe University Nov 21-22, 1994.* Bundoora, Australia: Language and Academic Skills Unit of La Trobe University.

Cohen, A. D., & Cavalcanti, M. C. (1990). Feedback on compositions: Teacher and student verbal reports. In B. Knoll (Ed.), *Second language writing: Research insights for the classroom.* Cambridge, UK: Cambridge University Press.

Enders, D. (2001). Crossing the divide: A survey of high school activities that best prepared students to write in college. *The Clearing House, 75*(2), 62-67.

Fathman, A. K., & Whalley, E. (1990). Teacher response to student writing: Focus on form versus content. In B. Knoll (Ed.), *Second language writing: Research insights for the classroom.* Cambridge, UK: Cambridge University Press.

Ferris, D. R. (1997). The influence of teacher commentary on student revision. *TESOL Quarterly, 31*(2), 315-339.

Geisler, C. (1994). *Academic literacy and the nature of expertise: Reading, writing, and knowing in academic philosophy.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Grabe, W., & Kaplan, R. (1996). *Theory and practice of writing.* London: Longman.

Herrington, A. J. (1985). Writing in academic settings: A study of the contexts for writing in two college

chemical engineering courses. *Research in the Teaching of English, 19*(4), 331 - 361.

Hillocks, G. J. (1986). *Research in written composition.* Urbana, IL:NCRE Publications.

Hoadley-Maidment, E. (1997). From "story" to argument: The acquisition of academic writing skills in an open-learning context. *Language and Education, 11*(1), 55 - 68.

Hyland, F. (1998) The impact of teacher written feedback on individual writers. *Journal of Second language Writing, 7*(3), 255-286.

Ivanic, R. (1998). *Writing and identity: The discoursal construction of identity in academic writing.* Amsterdam, Netherlands: John Benjamins Publishing Co.

Jenkins, R. (1987). Responding to student writing: Written dialogues on writing and revision. *Writing Instructor, 6,* 82-86.

Lea, M. R., & Street, B. V. (2000). Student writing and staff feedback in higher education: An academic literacies approach. In M. Lea & B. Stierer (Eds.), *Student writing in higher education: New contexts.* Buckingham, UK: The Society for Research into Higher Education and Open University Press.

Lea, M. R., & Street, B.V. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education, 23*(2), 157-172.

Leki, I. (1995). Good writing: I know it when I see it. In D. Belcher & G. Braine (Eds.), *Academic writing in a second language: Essays on research and pedagogy.* Norwood, NJ: Ablex Publishing Corporation.

Muncie, J. (2000). Using written teacher feedback in EFL composition. *ELT Journal, 54*(1), 47-53.

Nelson, J., & Hayes, J. (1988). *How the writing context shapes college students' strategies for writing from sources.* Berkley, CA: Centre for the Study of Writing [Microfiche], ERIC Document No. ED297374.

Odell, L. (1992). Context-specific ways of knowing and the evaluation of writing. In A. Herrington & C. Moran (Eds.), *Writing, teaching and learning in the disciplines.* New York: The Modern Language Association of America.

Olson, M. W.,& Raffeld, P. (1987). The effects of written comments on the quality of student compositions and the learning of content. *Reading Psychology, 8,* 273 - 293.

Plum, G. A. (1998). Doing psychology, doing writing: Student voices on academic writing in psychology. In C. N. Candlin (Ed.), *Researching academic literacies.* Sydney, Australia: Macquarie University.

Reid, I (1997). Disciplinary and cultural perspectives on student literacy. In Z. Golebiowski & H. Borland (Eds.), *Academic Communication across Disciplines and Cultures: Selected Proceedings of the First National Conference on Tertiary Literacy Research and Practice* (Vol. 2). Melbourne, Australia: Victoria University of Technology.

Russell, D. (1991). *Writing in the academic disciplines, 1870 - 1990: A curricular history.* Carbondale, IL: Southern Illinois University Press.

Sitko, B. M. (1993). Exploring feedback: Writers meet readers. In A.M. Penrose & B.M. Sitko (Eds.), *Hearing ourselves think: Cognitive research in the college writing classroom.* New York: Oxford University Press.

Sommers, N. (1992). Between drafts. *College Composition and Communications, 43,*23-31.

Sperling, M., & Freedman, S.W. (1987). A good girl writes like a good girl. *Written Communication, 4,* 343-369.

Spinks, S. (1998). Relating marker feedback to teaching and learning in psychology. In C.N. Candlin (Ed.), *Researching academic literacies.* Sydney, Australia: Macquarie University.

Sweeney, M. (1999). Relating revision skills to teacher commentary. *Teaching English in the Two Year College, 27*(2), 213-218.

Tapper, J., & Stoch, N. (2000). Writing in the disciplines: Teacher feedback in a business law subject. In C. Beasley (Ed.), *Refereed Proceedings of the Third Biennial Communication Skills in University Education (CSUE) Conference "Making the Critical Connection".* Murdoch, Australia: Teaching and Learning Centre, Murdoch University.

Vardi, I. (2000). Writing experiences in multidisciplinary first years: A basis for confusion or development? In C. Beasley (Ed.), *Refereed Proceedings of the Communication Skills in University Education.* Perth, Australia: Murdoch University.

Wittrock, M. C. (Ed.). (1986). *Teacher behavior and student achievement.* New York: MacMillan.

Zamel, V. (1985). Responding to student writing. *TESOL Quarterly, 19*(2), 79-102.

Ziv, N. (1984). The effect of teacher comments on the writing of four college freshmen. In R. Beach & L. Bridwell (Eds.), *New directions in composition research.* New York: The Guilford Press.

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Appendix A
Parameters of the Codes for the Characteristics of the Text Addressed by the Feedback

1. Mechanics
    Any feedback concerning grammar, spelling or punctuation. It includes both verbal feedback such as *"not grammatical*," and non-verbal such as underlining, circling, question marks.

2. Academic Expression
    Any feedback concerning the appropriate use of general vocabulary, subject specific terminology, phraseology, "academic tone" versus colloquial uses of language. It includes both verbal feedback such as *"Not appropriate word" "a bit colloquial?"*, and non-verbal feedback such as underlining, circling, question marks.

3. Referencing and citation
    Any feedback addressing the conventions of referencing, quoting and citation practices either in-text or end-text. It also includes feedback addressing the need for referencing or citation, and feedback related to lack of referencing or plagiarism such as *"Include page numbers"* and *"Is this in the reference list?" "Reference?"*.

4. Sources used
    Any feedback concerned with the appropriateness of sources, the use of other sources, the depth and breadth of research undertaken by the student, appropriateness of quotes. For example: *"See the Australian text Gardner and Palmer (1997) Employment Relations in closed reserve. Has a good chapter on the State"*

5. Organization
    Any feedback concerning how the content was structured, sequenced and linked in the essay. This includes feedback regarding introductions, body, conclusions, paragraphing, topic sentences, where information (including citations and quotes) should be located in the text, sections to be added to the text, signposting, links (both overt and implicit) between different parts of the text, "flow" of ideas, and fluency, and the order or sequence of information. Includes verbal feedback such as *"Your introduction should include a definition", "You need a bridge to the next section"* and *"Leave this for later – it is out of place here"*, and nonverbal feedback such as arrows.

6. Information
    Any feedback concerning the subject matter of the essay including feedback related to choice / accuracy / correctness of information, the meaning/understandings conveyed, relevance of information in relation to question prompt. It includes verbal feedback such as *"Malaysia does not really represent Asia"* and *"Examine the role of government in employment relations"*, and non-verbal feedback such as question marks.

7. Thinking
    Any feedback relating to the quality of thinking / evaluation / analysis / argument/ conceptualization of material/ conceptual frameworks such as *"These are disjointed facts rather than an exploration of the themes"* and *"What are the implications of these findings in relation to the question?"*.

8. Unclear
    Any feedback where it is unclear what aspect of the text is being addressed. This includes both verbal feedback such as *"good"*, and any unclear nonverbal feedback.

9. Other
    Any feedback which does not fit into the above categories. This includes feedback related to the process such as attendance and study habits.

Appendix B
Parameters of the Codes for the Manner in which the Feedback Was Given

1. Comment
Any feedback that is reflective or an observation and does not directly ask the student to make a change. For Example: *"The minimum wage has recently gone up to $368.40"* and *"You are tending to quote extensively but not actually drawing out themes and issues"*.

2. Direct Editing
Any feedback which directly edits the student's work. This includes the changing of vocabulary used, addition or modification of punctuation, the rewording of a sentence, the modification of paragraphing. For example:
In addition it allows employers
     ~~They are also able~~   to move between domestic markets.

3. Explanation
Any feedback that explains why a change is required or explains the marker's reasoning or thinking. For example, feedback such as *"This is repetitive"* written after a prescription such as *"Delete"*. It includes examples given by the marker which are not direct editing of the work such as examples of how to write end-text references.

4. Prescription
Any feedback (including both hedged and non-hedged) that prescribes or instructs the student. For example: "*Put this into your introduction"* and *"An example would be helpful here"*

5. Question
Any feedback which is in the form of a question.
Example: *"Why?"*   This also includes non-verbal querying in the form of a question mark.

6. Evaluation
Any feedback which evaluates any aspect of the student's work. This includes both positive comments, such as *"Good intro"*, and negative comments, such as *"Weak argument"*. Feedback provided through the evaluation rating sheets in which characteristics of the text were rated as *"poor", "marginal", "acceptable", "good"* or *"very good"* are also included.
7. Indication
Any feedback which indicates or points out an aspect of the text, but does not explicitly express the nature of the issue or what needs to be done about it. For example, circling or underlining an aspect of the text, or simply stating *"logic"*.

8. Other
Any feedback that does not fit into any of the above categories.

Appendix C
Parameters of the Codes for the Scope of the Feedback Given

1. Global

Feedback which focuses on the text as a whole.
Example: "*Reorganize your essay into three major themes*" and *"Your essay flowed well"*

2. Local

Feedback which focuses on a specific aspect of the text at that point.
Example: "*Insert a comma here*" and *"Reference?"*

3. Unclear

Any feedback where it is unclear whether it applies locally or globally.