

University Education Students' Self-Perceptions of Writing

Trevor J. Gambell
university of saskatchewan

University students in preservice education programs write primarily for their professors, whom they see as content experts and evaluators. Consequently, they find writing a difficult and often unrewarding task. This study examines the perceptions of 48 elementary education preservice teachers of their own writing vis-à-vis the written demands of their courses. Students admitted, often tacitly, that their writing difficulties resulted from reliance on the ideas and language of others, an inability or unwillingness to conceptualize an audience, uncertainty about the rhetorical features of expository and argumentative modes, and lack of understanding of a process approach to writing. The study has implications as much for teacher educators as for students in preservice education programs.

Les étudiants inscrits dans les programmes de formation des maîtres écrivent essentiellement pour leurs professeurs qu'ils voient comme des experts et des évaluateurs de contenu. Ils considèrent donc la rédaction comme une tâche difficile et peu gratifiante. L'étude dont il est fait état dans cet article analyse les perceptions qu'ont 49 stagiaires au primaire de leur écriture par rapport aux exigences de leurs cours. Les étudiants admettent, souvent tacitement, que leurs difficultés en composition sont causés par divers facteurs : ils se fient sur les idées et le langage des autres, ils sont incapables ou ne veulent pas imaginer leur auditoire, ils connaissent mal les caractéristiques rhétoriques des modes d'exposition et d'argumentation et ils ne comprennent les méthodes de rédaction. L'étude peut servir autant aux formateurs qu'aux stagiaires.

Elementary education pre-service teachers at the University of Saskatchewan should be reasonably good writers. Selected from among many applicants who have met university entrance requirements, they are a selection of a selection based on an intake quota. Having entered their second year, they have demonstrated their ability to manage the writing demands of first-year university courses primarily in the arts and sciences. (For undergraduate studies, drop-out and failure rates are highest in first year.)

One would therefore expect second-year preservice elementary education students, predominantly female, to see themselves as proficient writers in the university setting. But do they? This paper reports a study of such students mostly in second year at the University of Saskatchewan. The study sought to discover these students' attitudes toward their own writing, and how they go about writing for academic purposes. The results show that even success-

ful students are uncomfortable with their own university-level writing. Writing is difficult and often not enjoyable for many of them.

At the university undergraduate level writing is the dominant, if not exclusive, language mode through which learning is evaluated. Increasingly as course sections swell with students beyond pedagogically desirable limits for process-oriented instruction, instructors rely more and more on term papers and written examinations as means of assessment. The university has always valued writing as the most highly developed, abstract, and complex language mode. During their high school years students have been steeped in the demands of academic writing, usually taken as expository and argumentative modes of discourse. Expository writing in particular has been deemed appropriate for academic discourse because the writer takes a supposed objective stance toward the subject, often through use of the passive voice.

With the increasing tendency in education disciplines toward ethnographic and qualitative research methodologies, this long-standing tradition of expository and argumentative writing is being challenged. Increasingly we find writing by educational researchers and theorists in other modes, including the descriptive and even the narrative, but in few instances have education students been allowed to use alternative modes of discourse for academic purposes. Education students, along with most undergraduates, still assume that professors expect expository and argumentative writing in the objective voice.

Their perceptions are accurate. In a study of university education professors' expectations for student writing (Gambell, 1987), I found most professors demanded the argumentative mode. Professors believed their students wrote poorly, but when professors' meaning of poor writing was analyzed it amounted to students' inability successfully to come to grips with the mode of discourse demanded of the discipline and expected by professors. Yet these professors had not thought it necessary to teach students how to write in the mode of discourse valued in the discipline.

Crowhurst (1990) has argued for the teaching of persuasive/argumentative discourse during the elementary school years and beyond, for pupils have little opportunity for such writing although such modes are demanded in higher education. She maintains that children naturally use the argumentative mode, and that direct instruction should build upon that foundational language base. However, many educators fail to recognize that facility in the argumentative mode develops more in written discourse than in oral discourse. Oral argumentation is notably egocentric; oral argument makes a point of ignoring or turning aside counter-arguments and conflicting data. Although debating is oral argumentation, it usually occurs in the middle grades of schooling rather than during the elementary years. Written argumentation must take account of the opposing voice because written argumentation must assume a debate. It cannot afford to be single-minded else

it will be taken as hollow rhetoric. Likewise, expository writing must make allowance for its audience. In an earlier study (Gambell, 1987), I found professors cited students' failure to address the audience in argumentative discourse as a major weakness.

There have been numerous studies of undergraduate students' writing in the arts and sciences (Anderson et al., 1990; Flower & Hayes, 1980, 1981; Nelson, 1990) but little research on preservice education students' writing. It might well be argued that education students differ little if at all from other undergraduates in their writing ability or in their approach to or attitude to writing. But because teachers are language role models for students, and because teachers instruct students how to write, it is essential they know about the writing process and the relationship between writing, knowledge, and learning. Their self-perceptions of writing are vitally important; if teachers can reflect on their own writing, they may better understand their students' writing and help learners become more able writers.

Flower and Hayes (1981) developed a theory of the cognitive processes in writing to lay groundwork for more detailed study of thinking in writing. Their theory is based on protocol analyses over five years with undergraduate students. Flower and Hayes hypothesize that the art of writing has three major elements, the three units of their model: the task environment, the writer's long-term memory, and the writing "process." The task environment consists of the rhetorical problem (topic, audience, exigency) and the text produced so far. The writer's long-term memory consists of knowledge of topic, audience, and writing plans. The element of the writing "process" includes three components: planning (generating, organizing, goal setting), translating, and reviewing (evaluating and revising). I emphasize this third major element, the writing "process."

Nelson (1990) was interested in how 13 freshman students interpreted and responded to writing assignments in courses in a range of disciplines (sociology, engineering, literature). She reported her findings by discipline because she wanted to integrate interview data from professors with those from their students. Nelson concluded students relied on their individual resources, such as their past experiences with the subject matter of the course, past experiences with similar kinds of writing tasks, and what she called individual "production systems" or strategies for completing certain kinds of assignments. However, students differed in the extent to which they drew from these various sources (p. 388).

In the Anderson et al. (1990) study, five undergraduate students who scored highest on a university placement essay requirement formed a small research group to continue writing support for other courses they were taking, while collaborating on research about college-level writing. The five took courses in every undergraduate college, observing and recording teacher and student activities in classes involving language (primarily

writing), learning, and achieving. These five undergraduate students collectively found that except in meetings alone with teachers, they were evaluated only on the products of their independent work, not on their active participation in the course, or on their self-consciousness about language. They noted frequent conflicts between professors' and students' views of how language should be used to foster learning. Learning in lower-division, introductory courses was assumed by professors to be a private, competitive action (p. 17).

These students concluded that

an audience-centred approach should be taught as applicable not only to our writing, but to all of our language interactions in each course, whether student-to-student or student-to-teacher. Also, stressing applicable mechanical skills, such as note-taking, would be helpful. . . . help us clarify the value systems of the particular discourse communities in which our work is evaluated. (p. 27)

THE STUDY

Participants in this study were 48 elementary education preservice teachers in their second (mostly) or third year. Most were female. Students were registered in two sections of a compulsory English language arts methodology course which began in January 1989. On the second day of lectures I asked students to write detailed responses to eight questions. Each question was discussed with and among the students before they wrote individual responses to it. This process took up most of the class time. I wanted to collect this information at the outset of the course, before we got into the course topic of writing and the writing process. I did not want students to mediate existing writing practices or perceptions with new-found knowledge of writing and the writing process developed during the course.

Since I was grading these students, I ensured confidentiality of their responses.

Questions posed and discussed were:

1. How would you describe yourself as a writer? (Do you enjoy writing/find it onerous/find it easy or hard?)
2. What problems do you have with writing? Please be specific. (E.g., narrowing a topic, conceptualizing a topic, researching a topic, structuring an argument/paper, sentence structure, grammar, vocabulary, spelling.)
3. Do you proofread and edit papers before you hand them in? Explain.
4. Do you have others proofread and edit your papers before you hand them in? Explain.
5. Do you do one draft of a paper, or several drafts? Explain.
6. Do professors comment on your papers when they evaluate them? Explain.
7. Do you find professors' comments on papers useful? Explain.
8. General comments about your university writing.

FINDINGS

Writing: Enjoyable, Easy, or Difficult?

Most students (38) found writing enjoyable, though half found it difficult, the other half easy. Ten did not enjoy writing and found it difficult. Some students believed their writing was better organized, more fluent, and clearer than their oral articulation. In other words, they were more comfortable presenting their thoughts in writing than speaking in class. Such students had been rewarded for their writing but, on the other hand, felt inadequate speaking formally. Several mentioned being encouraged to write as children and that writing became a “hobby” for them. Others noted that “in the university setting writing skill is of paramount importance.”

Those who found writing difficult but enjoyable did not write well under pressure (such as with tight deadlines), disliked writing research papers (because they could not discuss their own opinions, ideas, or feelings), found it hard to move from the research to the writing stage (“problems getting the thoughts from my head to the paper”), and had trouble “finding the right words.” The difficulty of the expected mode of academic discourse, either exposition or argumentation (the research paper), may explain these responses. Students were unsure about vocabulary—should it be quoted and cited as subject-specific language, or should it be paraphrased language?—and how they should approach a topic that was assigned rather than self-selected and in which they had no particular interest.

Those who did not enjoy writing and found it difficult put off writing to the last minute. They relied heavily on the words of others (quotations), and found it hard to organize thoughts and ideas. Often they thought their own ideas had little merit.

One student put it this way:

At times I find it difficult to write, especially when it is about my own ideas, questions, and opinions. I have difficulty writing information papers from my own point of view in my own style after researching the topic. My paper usually ends up one big quote.

Problems with Writing

Since students identified more than one area of difficulty, the total exceeds 48. The most common problem (mentioned by 27 students) was selecting, refining, or narrowing a topic. Students found it difficult to put borders around their topics and to confine discussion to the topic as identified or defined.

I have problems narrowing down a topic and organizing all the info[rmation] together in a logical meaningful way. Usually my papers end up to be too vague because my topic was too broad. And my paper usually is mixed up.

Another major problem (20 students) was that of organizing a paper and structuring an argument. Students found it difficult deciding what information, from all they had accumulated, was relevant or important to their topic. This problem is essentially one of determining the audience for the paper. Students were unsure what the audience (the professor) knew, should know, or wanted to know. It is essentially an information guessing game on the part of the writer.

I find it hard to back up what I say and to expand what I've written. I assume that the reader has the same or higher previous knowledge of the topic as me.

The third-mentioned problem was researching a topic. Fourteen students said researching the topic was the most trying part of writing a paper. This problem is linked with the previous one, that of determining what information to gather and what to select for inclusion. Students felt that when they researched a topic they relied on others' ideas; that is, they were not confident (or competent) in challenging, or even thinking to challenge, those ideas. One student put it this way:

I have problems researching a topic because it seems that once I have read someone else's ideas I can't help but use them which forces me to source [sic] the writer.

Interestingly, mechanical aspects of the writing process were among the least-mentioned problems. Nine students mentioned grammar; eight, spelling and mechanics (punctuation); and six, sentence structure. Their comments on mechanical aspects showed these were usually identified by professors, rather than being a self-confessed difficulty. Two examples are:

I seem famous for "run-on sentences," not that I'm even sure what they are.

The biggest complaint that I receive on my papers is sloppy grammar.

One student saw a humorous side to this problem when he or she wrote that "me grammar and spelling aint da best either."

Proofreading and Editing: Self

Nearly half the respondents (23) stated they thoroughly and consistently proofread and edited their own papers before handing them in. However, 17 students who stated they did on subsequent analysis of written comments were shown to have misunderstood proofreading and editing. These 17 saw proofreading and editing as "a quick read-over" just before handing in the paper; some saw them as about spelling. The general vagueness comes through in this statement:

Yes, I reread to make sure that it is written in English and is understandable.

Seven students admitted to inconsistent editing and proofreading; sometimes they did them and sometimes not. Reasons converged on one of two rationales: insufficient time, and the limitations of proofreading and editing one's own writing. The latter rationale suggests a fairly well-reasoned idea of the role of the writer in the writing process. The most cogent comment was:

I try to proofread and edit papers to the best of my ability before I hand them in. By and large I find it difficult to proofread my work more than once or twice.

No student admitted to never proofreading or editing a paper.

Proofreading and Editing: Other

This question asked students to what extent, if any, they elicited others' help to proofread or to edit their papers; responses differed greatly from those to the previous question about self-editing and proofreading. Nearly half (23) of the students did not have other readers proofread and edit their papers because they were unaware of the benefits of doing so. Some had never thought about this possibility. But other reasons suggested that students decided not to have others read unfinished papers because they feared embarrassment over possible grammatical infelicities and failings. Yet another reason was students' wishes to take full credit for what they had written, and presumably for the high grade they expected. The competitive nature of academic writing shows here. The two very different perspectives are captured in students' statements:

No, it is my work and I want the mark I receive to be totally mine.

No, I don't like many people to read what I write. No matter what topic I write on, if I wrote it, it's private to me.

I do not get others to read my work because I get embarrassed. I do not want people to tell me my essay is useful or to lie about it, so I use my own judgment.

Nine students did have others read their papers, using "at least one friend" or "at least two people." An equal number were inconsistent in having others act as proofreaders and editors. Seven students did not understand that proofreading and editing could be performed by a person other than the writer, whereas three students said the question prompted their first consideration of having others proofread and edit one's writing.

Drafting: One or Several?

There was a clear split in responses to this question: 30 students said they wrote several drafts, and 18, one draft. However, of those who mentioned several drafts, some included point-form notes during the prewriting phase as a draft. These students saw drafting as including everything from one's first written notes through to the final copy. Writing teachers and researchers, however, separate what goes on during the prewriting phase from what occurs during the composing or drafting phase. One student described his or her process in these words:

Several drafts. First I take down important points, then I organize those points under different headings, then I put them into paragraphs (my rough copy). Then I put them in order.

Among those who relied on one draft of a paper, reasons usually involved time: students procrastinated writing a paper and had time for only one draft, or found multiple drafts too time-consuming. One student believed his/her paper deteriorated beyond a second copy, so wrote one draft, then made a final copy.

Professors' Comments

It was gratifying to discover that 22 students mentioned professors' written comments on their papers, and they appreciated such comments.¹ Students remarked that professorial comments were both positive and negative, and that the latter comments helped students to improve their writing. These students take such written comments seriously, learn from them, and realize that a mark alone, however gratifying, does not enable them to improve as writers.

Most professors do comment on the papers I write for them. Comments, as well as the mark itself are very useful to me. The more professors write for me, the more I feel I can learn from them.

However, 26 students believed professors' comments were inconsistent from one professor to another and that professors were not thorough enough in providing written feedback. Students were particularly upset when papers were returned with no written comment, merely a grade.

Students responded to this question in terms of their experience writing papers in all their university courses. In most cases, though, students did not compare disciplines or courses. The vagueness of professorial comments bothered some students.

I don't find their [professors'] comments very helpful because they are usually so vague, you don't know what it pertains to. For example, they may write "you lost track in the body of the report." Where??

Some of the many points raised in answers to the question about usefulness of professors' comments are worth reporting here, although they are minority views. Two students were displeased with professors who made only positive comments. They believed they could handle suggestions for improvement and change.

Four others noted that each professor has a different perspective on writing and that there was inconsistency among professors. To what extent this perception resulted from experiences in different disciplines was impossible to determine. Two students found professors' comments rude and insulting, or overly critical; five students wanted specific comments on their writing structures, organizational skills, and use of research. Some of those comments can be linked with vague comments by professors. One student wrote:

It is especially helpful if they [professors] tell me where I was clear or unclear in conveying my thoughts rather than commenting on the thought itself.

General Comments

Many respondents made numerous comments in this section, thus totals exceed the number of students (48). The comments reveal how students see their writing in light of the demands of academic discourse, and their desire for more writing during their academic lives.

Seventeen students described their realization of the role of academic writing in their university education. They recognized the relationship between language and thought and that writing serves to organize, clarify, extend, and communicate thought. They know, too, that through practice and feedback their writing will improve.

My writing has certainly grown over the year and a half that I have been here. Having to do university writing has opened my eyes. I now realize how important good writing skills are.

Twelve students wanted more choice of topics in their university writing. In comparison to other universities attended, wrote one student, "I am surprised at the limits of choice given to the students—i.e., essay choice is restricted to one or two topics." This respondent, like others, asks for opportunities to be creative not just in choice of topic but in selection of mode of discourse and audience addressed. One student expressed his/her feelings thus:

University writing tends, more than not, to reward opportunity and admonishes [sic] creativity. There are few professors who encourage originality and creativity. Those are the people who I enjoy writing for.

Five students believed the university discouraged writing. I see their view as closely linked with the outlook of those twelve students who decried the restrictive nature of university writing. Their dissatisfactions, however, arose for different reasons, such as having to write six essays in a three-hour final examination. These comments tell what students see as unrealistic writing demands.

Five students were critical of inconsistent and ambiguous standards among professors. I see this problem as an understandable consequence of various writing demands, stylistic expectations, and discourse traditions in different disciplines. When students take courses in a variety of disciplines they feel frustrated as they try to meet different discourse requirements. However, some students noted that professors sometimes didn't provide sufficient instruction on what they expected of students writing papers, nor did they provide information about how they graded papers.

Four students described what they saw as redundant and repetitive writing demands made by their professors, at least two of whom were in the college of education.

Four students commented they very much enjoy university writing and find it a "challenging" and "rewarding aspect of [their] university [life]." Some comments were difficult to categorize even in general terms; they vividly expressed some students' frustration and ambivalence about writing for university courses. Two such comments are:

I enjoy writing essays although my marks have dropped considerably in university on my papers. I find writing quite easy although it depends on the topic and whether I find the topic interesting or not.

I enjoy writing for myself. I hate writing an essay that will be critically picked apart by another person.

DISCUSSION

Despite what university professors or students say, university students in their second year (mostly) of a preservice elementary education program are not poor writers, reluctant writers, or unpractised writers, nor do they see themselves as such. However, many are frustrated and unsure of themselves as writers because of the writing demands made of them in university. I want to discuss this disjunction between the writing competence of students and expectations of academic writing in light of eight factors arising from this study.

The first is that of students' admitted reliance on the ideas and language of others and their suspension of critical judgment. Many students found researching a topic very difficult. Students believed they did not have the freedom critically to approach research, or lacked the skill to do so. Possibly they believe that to appear erudite means to be comprehensive rather than critical and selective. Nonetheless, their deference to subject experts is

widespread and often admitted. Students who called for freedom in selecting topics saw the importance of adopting a more critical role as researcher and writer.

Students were also unaware of the role of expressive language in the writing process. Expressive language (Britton, 1970; Pradl, 1982) explores, penetrates, and comes most readily when we wish to express an idea, thought, or feeling about a subject or experience. Expressive language is the undercurrent of free writing and expression. When expressive language is suppressed, however, writing can become stilted and barren, devoid of the writer's voice. When students feel uncomfortable with an assigned topic they suppress expressive thought and language and defer to the language and ideas of others. Students must be aware of the essential role of expressive language in the creation of at least the first draft of any paper.

Students suffer, too, from inability or unwillingness to conceptualize an audience. In my previous study of professors' perceptions of student writing (Gambell, 1987), I noted that professors were frustrated when students only envisioned one audience for their writing, namely their professors. Professors were discouraged by reading their own words in print. Students are also frustrated by the implied audience of professor for most writing assignments. Such frustration exacerbates their discomfort when researching a topic, and heightens their lack of ownership of essay topics. To break this restrictive cycle, professors might allow students greater freedom of topic choice, and provide opportunities to address audiences other than themselves.

The importance of ownership of writing topic was a major finding in Flower's and Hayes's (1980) study. They found that one hallmark of good writers was time spent thinking about how they wanted to affect a reader, whereas poor writers were by contrast tied to their topic. Students tied to a topic are also bound to experts on that topic. Being bound to an assigned topic might be less restrictive if students approached the topic from the perspective of the reader/audience, which would then enable them to define and limit the topic.

Writers have four intentions, according to Flower and Hayes (1980). These are:

1. The effect the writer wants to have on the reader.
2. The relationship the writer wishes to establish with the reader, the persona, projected self, or voice the writer wishes to create.
3. An attempt to build a coherent network of ideas, to create meaning.
4. Formal or conventional features of a written text. (p. 28)

Although the 48 student respondents stated these goals or purposes, they hesitated to identify a reader, even were it the professor, and to establish a rhetorical relationship with that reader. Students should define and address a reader/audience if they are to feel confident about and be successful in academic writing.

For students, writing in an expository or argumentative mode is often a guessing game. They are unsure which mode of discourse is preferred because they see no clearly defined purpose or audience in the writing task. The writing process as guessing game suggests interesting parallels with Kenneth Goodman's (1973) description of reading as a psycholinguistic guessing game where even good readers make miscues, and the nature of many miscues are predictable. Students too make miscues when writing for professors: they have difficulty selecting and/or narrowing a topic (27 out of 48), researching a topic (14/48), and organizing a paper with an argument (20/48). These writing misjudgments are predictable; professors, too, found these writing difficulties uppermost in student writing (Gambell, 1987).

Also predictable is that student self-perceived writing difficulties are rhetorical rather than grammatical. This finding is particularly useful because readers often misrepresent perceived writing problems as grammatical and syntactic (structural) when they are rhetorical (Harris & Witte, 1980). However, more students identified their own writing difficulties as rhetorical rather than grammatical. To solve this problem, professors should coach students in the mode of discourse dominant and expected in their discipline. My argument is that this factor constitutes a discipline-specific problem rather than a student-specific one.

This same plea was made by the five successful undergraduate writers in the Anderson et al. (1990) study when they asked professors to help them clarify the value systems of the particular discourse communities in which their written work was evaluated. These five students explicitly stated their belief that "students do need to know how to analyze and imitate the reading and writing they encounter in college" (p. 12). They see themselves as apprentice writers and readers of discipline-specific language, and the professor as the linguistic and rhetorical guide and mentor to and of the discourse community. Professors act as linguistic gatekeepers to their disciplines.

Inconsistency of professorial expectations for student writing is a difficult issue. Specialists must be free to pursue knowledge and frame understandings in the modes of discourse that members of their discipline choose, realizing that historical discourse precedents usually exist and imply a degree of conformity some members find overly restrictive. However, discourse communities shift, often because of new research directions. In education we see the inroads of ethnographic and other types of qualitative research on modes of discourse. If discourse communities are shifting, it is prudent, and academically honest, to apprise students of the numerous modes of discourse used in the discipline and to allow students to use a variety where applicable. If students are free to choose topics, they should also be free to adopt various modes of discourse.

Some student writing problems stem from propensity to delay writing papers to the last minute and thus be unable to use a process approach to writing even if familiar with it. Yet my experience in teaching a writing

course has been that students find it helpful when I sit with them in a writing conference and discuss in detail their first draft of an essay. Compared with other papers they often state that their mark on the final copy is higher as a result of the writing conference.

Most important, many students are unfamiliar with the various approaches to writing. True, they have their own approaches. However, many students were not aware of the value of peer or other reader revision strategies. Others felt too shy or intimidated to share their drafts with another reader. If these students could learn the value of expressive writing in early drafts, and develop a critical and objective perspective on their own writing, they could benefit from revision.

The model proposed by Flower and Hayes (1981), with its three major elements and numerous sub-elements, is worth sharing with students. If students use such a model to reflect on their own academic writing, they can begin to identify the goals and purposes necessary to succeed in academic writing. Inability to establish goals and purposes, or at least to be consciously aware of self-realized goals and purposes, characterized many of the 48 students in this study.

CONCLUSION

Among the issues I have raised, the competitive nature of academic writing deserves mention. Students in this study alluded to competition for grades through writing when they refused to have others proofread and edit their papers because they wanted the "ideas" to be solely their own. The five students in the Anderson et al. (1990) study found that professors assumed learning in their courses was "a private, competitive action" (p. 17). On what basis do students develop grade expectations for their written work and how do they rationalize not receiving the expected grade? My experience is that often students equate time spent on writing the paper with grade: the longer they spend writing, the higher the grade they anticipate.

There should be a balance between professorial guidance in writing assignments and student decision-making and goal-setting. Nelson (1990) warns that when tasks are tightly defined, students' approaches might be limited; "by providing overly explicit routines or procedures for accomplishing tasks, [professors] may allow students to use only a narrow range of cognitive processes" (p. 389). Research might help determine the optimum type and amount of guidance in writing tasks.

I see improvement of student writing in the academic university setting as a joint venture of students and professors. Students should rely more on each other as partners in writing than as competitors. Professors should make students aware of the discourse expectations of writing in their disciplines, while allowing students choice of topic and a variety of modes of discourse. Improved student writing serves the whole academic community well, and makes professors' work easier and more rewarding.

NOTE

- ¹ I here combine responses to questions 6 and 7, both of which dealt with the written comments of professors.

REFERENCES

- Anderson, W., Best, C., Black, A., Hurst, J., Miller, B., & Miller, S. (1990). Cross-curricular underlife: A collaborative report on ways with academic words. *College Composition and Communication*, 41, 11–36.
- Britton, J. (1970). *Language and Learning*. Coral Gables, FL: University of Miami Press.
- Crowhurst, M. (1990). Teaching and learning the writing of persuasive/argumentative discourse. *Canadian Journal of Education*, 15, 348–359.
- Flower, L., & Hayes, J.R. (1980). The cognition of discovery: Defining a rhetorical problem. *College Composition and Communication*, 31, 21–32.
- Flower, L., & Hayes, J.R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32, 365–387.
- Gambell, T.J. (1987). Education professors' perceptions of and attitudes toward student writing. *Canadian Journal of Education*, 12, 495–510.
- Gambell, T.J. (1987). In reply. *Canadian Journal of Education*, 12, 527–533. [Response to: "Perceptions of student writing: A comment on Trevor Gambell," by W. John Harker; same source, 524–526]
- Goodman, K. (1973). *The psycholinguistic nature of the reading process*. Detroit, MI: Wayne State University Press.
- Harris, S., & Witte, S. (1980). Sentence combining in a rhetorical framework: Directions for further research. In A. Freedman & I. Pringle (Eds.), *Reinventing the rhetorical tradition* (pp. 89–98). Ottawa: Canadian Council of Teachers of English.
- Nelson, J. (1990). This was an easy assignment: Examining how students interpret academic writing tasks. *Research in the Teaching of English*, 24(4), 362–396.
- Pradl, G. (Ed.). *Prospect and retrospect: Selected essays of James Britton*. Montclair, NJ: Boynton/Cook.

Trevor Gambell is in the Department of Curriculum Studies, College of Education, University of Saskatchewan, Saskatoon, Saskatchewan, S7N 0W0.