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ABSTRACT

A study explored contextual influences upon the writing of students in their final year of secondary schooling. Six teachers in 6 subject areas and 12 students enrolled in 2 or more of these 6 classes were selected as case studies. The researcher spent an academic year observing the contexts in which writing occurred, recording class sessions, interviewing students and teachers about their perceptions of writing, and examining written texts. This corpus of contextual data demonstrated that student-teacher interactions were a critical influence on the nature of academic writing produced by the students. Analysis of these interactions revealed (1) that teachers' views of relationships between language and learning in their respective disciplines strongly influence the nature of writing in their classrooms; (2) that cultural, academic, and discipline-specific traditions frequently cause dissonance between teachers' pedagogical ideals and the writing they assign; and (3) that students' academic writing reflects the conflict between these first two findings. (Author/JD)

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How Does Writing Emerge from the Classroom Context?

(A naturalistic study of the writing of eighteen year-olds
in biology, English, geography, history,
history of art, and sociology)

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How Does Writing Emerge from the Classroom Context?

(A naturalistic study of the writing of eighteen-year olds in biology, English, geography, history, history of art, and sociology.)

ABSTRACT

This study explored contextual influences upon the writing of students in their final year of secondary schooling. Six teachers in six subject areas and twelve students enrolled in two or more of these six classes were selected as case studies. The researcher spent an academic year observing the contexts in which writing occurred, recording class sessions, interviewing students and teachers about their perceptions of writing, and examining written texts. This corpus of contextual data demonstrated that student-teacher interactions were a critical influence on the nature of academic writing produced by the students. Analysis of these interactions revealed that:

- (a) teachers' views of relationships between language and learning in their respective disciplines strongly influence the nature of writing in their classrooms;
- (b) cultural, academic, and discipline-specific traditions frequently cause dissonance between teachers' pedagogical ideals and the writing they assign;
- (c) students' academic writing reflects the conflict between (a) and (b).

INTRODUCTION

The worst problem came when using the data to plot a depth and velocity map of the reach. The most detailed plan available (by courtesy of the GLC) was a scale of 1:1250, and this plan was obviously too small to be used for showing the measurements. Eventually I decided to scale this map up until it was sufficiently large to use to show channel depth and velocity... (Vernon,¹ A-level Geography).

What can influence a historian's stance? The time at which they write is one factor; their place in society is another. The historian will always reflect something of their age and their culture. This, in turn, will be reflected in their own opinions, and by their reason for writing. A Marxist historian of the late twentieth century might interpret the French Revolution as a stage in the "class struggle"; Carlyle interpreted it as a biography of

Napoleon; Rankine would have tried merely to record 'what happened', oblivious of his value judgements; Acton would have seen it as a stage of progress. Even if a historian is not trying to argue a case, he can be 'objective' only within the limits of his own conditioning and status... (Christine, A-level History).

I'll sum up now, as I see you've heard enough. I am just an ordinary hard-working, family-loving American. I came out of jail hoping for work and peace. Instead I was forced to cross America in a crowded jalopy. Situations changed me. I became hungry and aware, aware of the injustice of my position. Slowly I awoke to the truth. The system was not there to help the Oklahoma refugees, but to destroy us. It is up to you to restore my faith in American justice. Find me guilty if you wish, for guilty I am; but take into consideration my position and the attitudes of those around me. Think carefully to yourself. Would any honest American have acted differently? Your conscience will punish me; my conscience is clear... (Virginia, A-level English).

From the first scribble of crayon on paper to an investigation into causes of riffles in streams, or to an assessment of the nature of objectivity in historical writing, or to an attempt to view circumstances through the eyes of a fictional character: what a tremendous achievement is literacy! What students can articulate in writing by the time they finish secondary school marks one of the most exciting and yet still mysterious 'rites of passage' our children undergo in their journey through the educational system. How does this development in writing 'happen'?

The most obvious area of agreement underlying recent and current investigations into writing, whether empirical or theoretical, is that writing does not just 'happen'. It is an individual, personal act of cognition which emerges from a vast and intricate network of

historically and culturally shaped contextualizing influences. When, for example, a small child names her or his marks on paper, the names are drawn from cultural-specific referentials; when this child puts pencil to paper in school, not only what is written, but also where that pencil is positioned on the paper, whether it moves from left to right and horizontally or from right to left and vertically, are historically and culturally determined; when this child, several years later, writes a history essay, or an English essay, or a report on an investigation of land formations, the written text will be an artifact of discipline-specific, institutionally authorized conventions at the same time that it will be an artifact of one person's individual response to an assigned writing task. How is it that writing can be, in apparent paradox, simultaneously conventional and individual? simultaneously social and personal? Attempting to answer this question requires us to look not only at the contexts from which written text emerges, but also at our picture of relationships between language and cognition within particular contexts, for it is in this interplay between thought and language that idiosyncratic experiential knowledge and socially shaped conventionalized knowledge become integrated into each person's construction of the world.

Since writing is a social act which emerges from a network of contexts, socio-cultural, educational, and textual, and which is thereby imbued with a wide range of conventions appropriate to the linguistic-conceptual needs of various discourse communities or

situations, it becomes necessary to try to determine the processes of induction into these mores of language use. What is now frequently called 'traditional pedagogy' assumes a rather straightforward transmission of these conventions from teacher to learner, but the work of Piaget on cognitive stages of development (1960), of Vygotsky on concept formation and inner speech (1962) and of Polanyi on the development of personal knowledge (1958) has influenced current theorists to envision a much more complex process of induction into language as manifestation (and creation) of thought.

David Olson explores some pedagogical implications of the interrelationship between inner speech and cognitive development in his controversial article, "From Utterance to Text" (1977). Building on Bruner's distinction between communicative competence and analytical competence (1975), he refers to children's academic writing as "mapping sentences onto sentences" rather than mapping sentences onto their experiences of the world. These experiences, according to Polanyi, coalesce into each child's personal construction of the world, founded upon a growing breadth and depth of tacit knowledge.

Two complementary ways of conceptualizing discipline-specific evidence in written text have been posited by Bruner and Polanyi: Bruner's notion of 'analytical competence' focuses on the process of drawing upon propositional structures, upon the authorized views of discipline-specific bodies of knowledge presented in written/printed text; Polanyi's notion of personal knowledge focuses on the process

of drawing upon one's experience and knowledge of the world, particularly upon direct experience with discipline-specific evidence. Ideally, the writing assigned in school should require students to engage in both of these cognitive activities in order for the students to integrate information received from textbooks and reference books with what they already know and understand, particularly through direct experience, about their respective subject areas. However, recent investigations into writing in secondary schools, such as those of the London Writing Research Group (1975) and Arthur Applebee (1981), suggest that opportunities to develop the 'analytic competence' which involves reformulating propositional content overbalance opportunities to draw upon experiential or personal knowledge. Part of the reason lies in the role in which much of the assigned writing in schools places the students. If students are offered the opportunity to act and write as apprentices in their respective disciplines, for example, by formulating their own questions or problems and working first-hand with the evidence of the discipline in order to solve or elaborate upon them, then students may develop confidence and competence in drawing upon their own knowledge in composing written text. If, however, students find themselves predominantly in the role of novice-to-expert, interpreting and/or reformulating ensembles of propositions for an examining audience, they are, at best, developing primarily their 'analytical competence'. But since, as Britton observes, "language and experience interpenetrate one another" and

"available modes of expression influence the experience from the start" (1975), it would appear that the opportunity to draw more upon one's experiential, personal knowledge would encourage a thought-language-experience dialectic which would further the development of written competence. It would therefore seem that Polanyi's view of personal knowing unites thought and language in ways which have important implications for written articulation in schools.

I would like to conclude this discussion of relations between thought and language with an extract from the writings of Gadamer (quoted in Eagleton, 1983) which concerns the perfect imperfection of any speech act in terms of realizing or manifesting the wholeness of one's thoughts in words:

...every word, in its momentariness, carries with it the unsaid, to which it is related by responding and indicating. The occasionality of human speech is not a casual imperfection of its expressive power; it is, rather, the logical expression of the living virtuality of speech, that brings a totality of meaning into play, without being able to express it totally. All human speech is finite in such a way that there is within it an infinity of meaning to be elaborated and interpreted.

These words have profound implications for investigating written text in schools, and for looking at the efforts of teachers and students to produce written text which engages meaningfully with the evidence of different disciplines. Rather than emphasizing what is 'missing' or 'flawed' in students' texts, and in learning-teaching situations, as though there is some entity which could be considered an 'ideal' text within an 'ideal' pedagogical context, Gadamer's words turn our

attention to investigating what occurs, to what is happening in both text and context. His words encourage us to try to see what assumptions and what cognitive processes lie behind the perceived phenomenon, for, as Eagleton (1983) writes:

The text does not allow the reader to see how the facts it contains were selected, what was excluded, why the facts were organized in this particular way, what assumptions governed this process, what forms of work went into the making of this text, and how all this might have been different.

Looking at text alone, therefore, decontextualized from the various influences and circumstances of its creation, is not enough if we want to learn more about the nature of writing, the processes of composing, and the development of written competence in our schools. In order to try to determine what sorts of influences are critical in students' taking on board discipline-specific discourse conventions and manifesting them in written text in a voice of their own, it is necessary to explore as many contextualizing features as possible, bearing in mind always that

...there is something in writing itself which finally evades all systems and logics. There is a continual flickering, spilling, and defusing of meaning - what Derrida calls 'dissemination' - which cannot be easily contained within the categories of the text's structure (Eagleton, 1983).

The specific problem which this study addresses is how, within the examination-oriented sixth form context, students are enabled to transform information, knowledge, and understanding to written text which enables them to enter confidently and competently into

discipline-specific universes of discourse. The literature concerning the history of social relations within the classroom suggests that the most critical factor in this process is the teacher, who formulates most of the writing tasks which can either limit or open up varieties of cognitive engagement with discipline-specific evidence, who influences the nature and amount of reading which shapes the textual and intertextual contexts for written text, and who structures the opportunities for composing, and talking about composing, within the classroom context. It is therefore on teachers, and their interactions with students in relation to writing, that this study focuses, particularly the strategies teachers employ to enable their students to transform information, knowledge, and understanding to written text, and the manner in which their students take these on board, interpret them, and manifest them in written text.

DESIGN AND METHOD OF THE STUDY

In the British educational system, the upper-sixth form provides a context for learning which is rigorously defined by external examinations, wherein writing functions as the principal means of demonstrating knowledge. It is in this context particularly that the London Writing Research Group found the highest concentration of transactional writing at the analogic level for teacher-as-examiner (1975). It seemed an ideal locus for extending the investigations of this seminal study, by looking at how this writing is produced within the contextualizing influences of culture, school, and classroom.

This investigation therefore locates itself in the upper-sixth form of a large comprehensive school on the southern boundary of inner-city London. Selection of teachers and students was on a voluntary basis. Six teachers in six subject areas - biology, geography, history, history of art, English, and sociology - were willing to allow me to sit in on their classes for an entire year. Of the students enrolled in these six classes, twelve were enrolled in more than one of the six; all twelve were included in the study. Notes and audiotapes of class sessions, individual and group interviews with students and teachers, written journals which I asked the twelve students to keep throughout the year, and all written text produced by the students in these classes provided the data base for the study.

From the preliminary talks I had with students and teachers, as well as concerns about writing raised in recent and current research, I generated the following list of questions:

1. What differences and similarities in basic language components such as lexis, syntax, and organization of response are evident in student writing in the different disciplines?
2. What differences and similarities in the tacit traditions, root metaphors, and governing paradigms are evident in student writing in the different disciplines?
3. What differences and similarities are evident in the methods for acquiring and mores for assessing evidence in the different disciplines?
4. How do students learn to use these various language structures and to accommodate this competence to what is required?

5. In what ways do particular features of the classroom language environment influence the writing of students in that classroom?
6. To what extent and how do the various sorts of writing tasks in different subjects promote understanding of new concepts and information?
7. What are the uses of transactional writing in the school setting, and how do these relate to its uses in society?

ORGANIZING THE DATA

Although my original seven questions about writing in an educational setting served me well as 'filters' while I was observing the class sessions and gathering my material, they provided me with far too much information for me to present and analyze in one thesis. To provide a basis for selecting what I would present and analyze, I needed an additional filter. Honing into this very particular, very sharp focus required a thorough sifting through the data with an eye to discovering the most salient message they were trying to tell me. It is, I think, important to emphasize that this final narrowing was not an external imposition upon the data, but rather a central position within the data. What ultimately emerged as most central from my observations was that student-teacher interactions within the intricate network of the classroom context most critically influence and shape the nature of written text in these six classes.

Based on my year of observations, I tried to select, for each subject, extracts from a lesson, or series of related lessons, which would have the potential to serve as springboards to the nature of writing done in each classroom, and the nature of student-teacher

interactions related to that writing. These were written up in the form of contextualized vignettes, one for each discipline. I wanted to avoid analytical intervention at this stage of the discussion, at the same time that I needed to draw from each vignette what it had to say about the nature of written text, the nature of composing processes, and the nature of student-teacher interactions related to the composing of the written texts in each subject area. I consequently decided to interrogate each of the vignettes with the same set of questions, questions which would allow the teachers and students, for the most part, to supply most of the information in their own words:

1. What is the nature of the sources and resources of information, knowledge, and understanding required by this task?
2. How are students enabled to transform this information, knowledge, and understanding to written text which responds to the specific task?
3. How does this task relate to the writing generally assigned in the classroom?
 - a) the teacher's perceptions of writing in the discipline
 - b) the students' perceptions of writing in the discipline
 - c) the nature of the discourse of the discipline as it emerges from the above perceptions in relation to the assigned writing tasks.

A SUMMARY AND ANALYSIS OF THE CLASSROOM LANGUAGE ENVIRONMENTS PRESENTED IN THE VIGNETTES

1. The Nature of the Sources and Resources of Information, Knowledge, and Understanding

The first movement concerns the sources and resources of information, knowledge, and understanding which the students bring to

bear on formulating their responses to writing tasks. In posing this question in the vignettes, I am reinforcing the view of writing as not just an instant 'skill' which can be mastered, but as a kind of knowing, as well as a means of knowing. It is evident that different levels of knowledge enter into the fulfillment of different kinds of writing tasks. When during the course of presenting these vignettes, I divide these sources and resources into 'internal' and 'external', I am, in essence, saying that for every writing task these sixth formers engage in, some part of the information or knowledge required to formulate a response is available through 'internal' resources such as the following:

- a) their discipline-specific 'recallable knowledge' from their short term and long term memories;
- b) their 'tacit' knowledge', by which I mean their breadth of knowledge and understanding which goes beyond discipline-specific boundaries to their experiential knowledge of the real world, their intertextual knowledge, and their knowledge of academic discourse, and which might need heuristic prompting in order to be more fully tapped;
- c) their 'intuitive' knowledge, by which I mean their ability to 'intuit' the requirements of a specific question and hone in on and integrate whichever areas of their tacit and recallable knowledge would be most suitable with the information they glean from external sources.

What I have, perhaps too broadly, labelled 'intuitive knowledge' is a critical part of these 'internal' resources which students bring to bear on formulating written (and oral) responses to assigned tasks, since it signifies the cognitive events which activate and integrate other kinds of knowledge, - might therefore, perhaps more aptly, be termed 'ways of coming to know'. My intended meaning of the term

'intuitive knowledge' is derived, in part, from Michael Polanyi's discussion of subjective aspects of personal knowledge:

...as human beings, we must inevitably see the universe from a centre lying within ourselves and speak about it in terms of a human language shaped by the exigencies of human intercourse. Any attempt rigorously to eliminate our human perspective from our picture of the world must lead to absurdity... (1958)

in part from what George Kelly calls our "hierarchical construct system" (1955) wherein we select salient features of concepts or ideas through contrastive processes, and, in part, from what Michel Foucault (1972) calls "procedures of intervention" in the formation of concepts.

For information which is not available from these 'internal' resources, the students need to turn to 'external' sources or resources, such as notes, textbooks, reference books, newspapers, audio-visual media, real-world examples, and the like. It is in the drawing together of these external and internal resources, so that they 'speak' to each other in meaningful terms, that the interactive drama of the first movement is developed.

The ratio of external to internal resources brought to bear on the task determines to a significant extent the nature of the struggle. The evidence presented in the vignettes demonstrates that different writing tasks tap these various resources in different proportions, with students experiencing different sorts of problems in each area, ranging from struggling to articulate clearly the maximally compact understandings represented in what Vygotsky (1962) calls 'inner speech' or thought when the focus is predominantly on

'internal' resources, to determine the salient points and how to organize them when the focus is on 'external' sources of information. The following example illustrates this relationship.

In history of art, both teacher and student express concern about the need to draw so heavily on external sources of information, particularly because of the conceptual depth and difficulty of the relevant literature. Julia speaks of having to read one chapter over sixteen times before she can understand what it has to offer her with respect to the information she requires for her writing task; she also tells of the difficulty she experiences 'reducing' the information to usable notes because of the abundance of detail (Interview, March 14, 1985). She describes two tactics she uses to help her tap these external resources: she either reduces the content of each paragraph to one macrostructural sentence formulated in her own words, or copies one sentence from the paragraph, if there is one, which accomplishes the same purpose (March 14). A related concern of both teacher and student is the amount of time spent on dictating notes. Mr. Christopher would prefer to spend more class time drawing out his students, and having them express their own personal responses to the (already once removed) slides of works of art. However, because of the amount of 'knowledge' or information required by the history of art syllabus, and the difficulty many students have understanding the discussions of philosophical concepts sitting behind the major art movements in the reference materials, he feels that his dictated notes, which make the philosophical concepts

and authorized readings of the works of art more accessible in less time, provide an essential component of the resources of information students can draw upon. Mr. Christopher describes the two major types of writing tasks he assigns as those focusing on "a personal response within an art historical context" and those focusing on "the history of art criticism" (Interview, March 20, 1985). In the latter, the sources of information are predominantly external, although internal and internalized resources of discipline-specific, tacit, and intuitive knowledge and understanding are all brought to bear on the process of responding to this kind of task. Mr. Christopher's concerns with these tasks center on the difficulties students experience with structuring a "clear, logical argument", and selecting the relevant details to develop the "central core of the argument" (March 26, 1985). Julia, correspondingly, refers to the difficulties of finding, understanding, selecting, and organizing the relevant details from the related reading. In the personal response type of task, there is more of a balance between internal and external resources being brought to bear on answering the question, and a corresponding shift in the expressed concerns of both student and teacher. Julia's references to these tasks indicate her concern with both expressing her ideas clearly and organizing her response logically and coherently. Mr. Christopher is concerned, in these tasks, primarily with the difficulty students encounter when transforming a visual experience to a verbal medium (March 26).

It is evident that this first movement of the classroom polyphony - this gathering together of information, knowledge, and understanding in response to a particular writing task - plays a major role in the interactive drama between student, teacher, and task in creating the particular context out of which a particular text emerges. It defines the loci, internal and external, of the composing problems set by any particular writing task, and thereby foregrounds writing as much more than a 'mechanical' operation or skill, showing instead that writing is indeed a kind of knowing which is organized and made available through particular features of the classroom context.

2. Transforming Information, Knowledge and Understanding to Written Text

Both teachers and students acknowledge that transforming information, understanding, and knowledge into coherent written text is a difficult and complex enterprise. Teachers therefore find it needful to employ a variety of strategies to try to enable their students to articulate competently and confidently in writing what they have come, or are in the process of coming, to understand about the body of knowledge which comprises their respective subject areas. What complicates this 'stage' of composing even further is the strong influence of the examination-oriented context of A-level classrooms upon the constant dialectic between convention and choice which permeates all writing. The teachers' and students' perceptions of the conventions of writing which will be rewarded on the examination

are powerful determinants in shaping the enabling strategies developed by the teachers, and the manner in which they are interpreted and taken on board by the students, and manifested in their written text.

When I asked the six teachers for their views of what constitutes written competence in their respective disciplines, all six of them framed their responses in relation to the kind of writing which is required on the examination:

1. ...to put forward a logical argument accurately, concisely, clearly, in scientific language, with the main points isolated (Biology, March 20, 1985).
2. ...to construct an essay that is relevant to the title, shows a logical development, and is closely argued, contains an abundance of relevant examples as supporting evidence for the argument, and exhibits wider reading around the subject...uses language economically but to fulfill a purpose (Geography, March 26, 1985).
3. ...to rationalize and formulate arguments, make judgements, extrapolate from one piece of work to another piece of work,...hang their ideas on a central core to achieve consistency of argument. It's a logical process,...a rational statement (History of Art, March 26, 1985).
4. ...to develop a lucid argument with supportive evidence in response to a particular question (History, March 20, 1985).
5. ...it's a particular style of academic writing you're after, wherein the student offers a particular view and supports that view and uses alternative views for discussion. They need to structure an argument around a theme, and give a sense of moving through an argument (Sociology, March 28, 1985).
6. ...the essay represents a cognitive process of your demonstrating your knowledge of what you've read, your understanding of it, your ideas about it, your ability to write about these thoroughly and share what you think with a reader, your ability to use a text in support of what you say, your ability to shape your answer, to argue a point,

and to arrive at a conclusion of your own (English, December 13, 1984).

These textual goals offer a powerful statement of teachers' perceptions of what constitutes written communicative competence at A-level. They converge upon what we might call a 'set' of cognitive activities related to formulating and developing an argument or a line of argument. Although each teacher's conception of argument has somewhat differing, discipline-specific components, some common assumptions about the nature of argument are either implied or made explicit in these responses: it is logical and lucid; it has a hierarchical structure of main ideas and supporting evidence; it manifests developmental movement throughout the text, from a statement of the argument or line of argument through evidence-based elaboration to an informed or 'proven' conclusion; it is composed in an appropriately academic, discipline-specific register. And, although these assumptions do not, in themselves, preclude using the writing process itself as a means of clarifying for the writer what her or his line of argument might be, they do presuppose a considered, thought-through response to the assigned topic. Consequently, when students have to write under constraints of time, such as during examinations or in-class timed essays, they need to be able to formulate a line or argument in response to a specific topic quite quickly, since they have insufficient time to use the writing process itself to help them discover what it is they want to say about the topic. Most of the twelve students in the study have sufficient knowledge of the content required for specific writing

tasks; their problem lies in how to 'structure' what they know into a line of argument relevant to the particular focus of a specific topic in the appropriate discipline-specific register. All six teachers use the writing events which are not timed to enable their students to develop confidence and competence in this transformation process, so that when they are composing under the pressures of time constraints, they will be able to conceive, formulate, and articulate a line of argument within the allotted time.

Although all of the vignettes show teachers engaged in helping students with processes of composing, the sociology vignette offers the most explicit example of a teacher employing strategies to enable his students to develop cognitive activities required to transform information, knowledge, and understanding to written text so that they can formulate an argument or line of argument efficiently and effectively under examination conditions. Mr. Goodman tells his class:

What they're [the examiners] looking for is the ability for you to apply the knowledge that you have - what they're looking for is your power of analysis, your ability, having analyzed the problem, to mount a coherent argument in order to answer it. That's what's being tested at A-level.

At the moment, because you're in a nice and calm, cool, calm and collected situation, you should be able to do that. You should be able to give time to analyzing the question and you should be able to give time to the way you are going to answer the question, and you should become so thoroughly used to doing that, that when you are actually in a position of having to do it under time pressure, you can do it very quickly. That is the skill you are trying to develop...once you

begin to see how to use your material to build an answer, then you're there.

At this point in the class, he is trying to help his students analyze what the topic requires in terms of sociological knowledge, and then to organize and formulate that knowledge into a "coherent argument". He suggests that the difficulty of composing lies not so much in structuring an outline of an argument, since that is often implicit in the question, but in tracing a developmental path through the ideas in order to formulate a line of argument, and articulating the direction of that path competently and appropriately in written text. A bit later in the lesson, he says:

Okay. There is an outline. Now what is it that you have to do to get from that - which is sketchy - to a coherent, well-ordered, well-argued, well written, precisely expressed, direct, simple essay - that I, or in fact anyone else, could read? Well, that's where the work is, because in order to get that sense of coherence, in order to get that argument - ...you have to present a balanced argument...what you might like to do is build up a diagram...by diagramming things, having it in front of you, you can plan a route. I think it is wise when you're planning not to...finalize what you're going to write, just to say everything that is relevant. Then, after you've transferred it to diagrammatic form, to look at it and say, "Alright now, if I start there, where does it match?", and that's the stage I want you to be able to get to quickly before you take your exams.

After a week at this preliminary planning, Mr. Goodman meets with each student individually, and offers them a particular rhetorical structure - thesis-antithesis-synthesis - which he suggests is well-suited to developing a line of argument in essays such as the one

they have been assigned. He becomes quite concretely directive in offering this strategy, even so far as suggesting actual organizational phrases, in order to help his students understand how the pattern requires them to draw out from their information and knowledge primarily those details and concepts which can be related by their similarity or opposition to each other, and how to demonstrate strongly and effectively this relationship in their written text. In his conference with Steve, he says:

Mr. Goodman: What you should be concentrating on is the contradictions between what Marx and Weber say...What we're looking for, what you'll get credit for, is your ability to integrate the material on Marx and Weber...do you know what I mean by that?

Steve: Means I need to understand the theories and apply them to the question.

Mr. Goodman: It does mean that, year, and you've got to cross-reference them...I mean you get more credit for talking about Marx's two-class system and then immediately comparing it with Weber's view of a say middle class...so you don't say "This is how it was a hundred years ago - this is how it is now" in a descriptive way. You could say, "This is what Marx says about social class...but that doesn't seem to fit the picture, and Weber offers an alternative view which may seem more appropriate", but what you can then do is come back and counterargue again using Marxist thinking, so you have the Marxist perspective, the Weberian perspective, and the functionalist perspective...but rather than one: Marx, two: Weber, three: functionalism, or whatever, rather than putting it in that block fashion, what you should be trying is to find themes that you can debate in each of the theories...

What Mr. Goodman is trying to achieve in these interviews is the development of an awareness in his students that a deeper cognitive

engagement with the evidence of the discipline is required in the formulation of their responses than in the "classificatory writing" which the London Writing Research Group found to be the predominant mode in secondary schooling (1975). In the model he recommends to his students, they are required to analyze the information available to them to find correspondences and contrasts in relation to common themes, select relevant material, arrange it both hierarchically and contrapuntally, and articulate it in a register appropriate to A-level sociology. Realizing the complexity of the task, he devotes considerable time and energy to trying to enable them to work within this model, to help them understand the particular cognitive activities required, and to help them to perform them.

But how do the strategies of their teacher influence the way in which students transform information to written text? The significance of posing this question lies not so much in the teachers' strategies per se, but in how they are interpreted by their students and made use of during the formulation of written text. The sociology vignette shows both similarities and differences among the four students involved in the study who take sociology in the way that they interpret Mr. Goodman's strategies and use them as guides to composing their responses. Journal extracts show that all four students find the opportunities offered during their conferences for discussing the essay and clarifying problems helpful, and that all four students apply Mr. Goodman's suggestions for transforming their information and knowledge to written text. However, in their

interpreting of his strategies, we see some dissonance between Mr. Goodman's intentions and his students' constructions of them. For example, whereas Mr. Goodman is suggesting a way of reading, analyzing, selecting, and synthesizing sociological knowledge, Susan, John, and Steve express feelings that Mr. Goodman, and the sociology reference books, have done this analyzing, selecting and synthesizing for them, and that all they need to do is write what he, or the books, have said:

In sociology, you must select from your notes and background reading, and then apply it to the question...the concepts are already formulated... (Susan, Interview, March 20, 1985).

Sociology essays are easier [than English or history]. You read the books, take down the facts, repeat them, and show that you understand...the learning experience comes from the required reading...In the sociology essay, I only half finished it before I went into the hospital. I did the reading, had the conference, it was really good, but I didn't finish it...he tells you what to put into them and how to do it, and then you just do it (John, Interview, March 14, 1985).

...in sociology, you can often use the organization of your notes for the organization of your essay. It's good in that it clarifies points for the exam, but it doesn't make you feel important.

What this dissonance between intentions and interpretations indicates is that interactions among task, text, and context, specifically the contextualizing influences of teachers' enabling strategies in relation to responding to a particular task, are neither straightforward nor predictable. So many historical, socio-cultural, and situational factors are operative in any teaching-learning-

writing event that large scale generalizations based on individual case studies would be out of order. At the same time, it is evident that teachers' enabling strategies play a key role in shaping the written text which emerges from the classroom context.

The above writing event from the sociology vignette is just one example of the ways in which teachers and students work interactively to try to solve composing problems at this very complex stage of transforming information, knowledge, and understanding to written text. Despite the fact that it is framed by the expressed intention of the teacher to prepare his students to demonstrate in writing, under time constraints, their understanding of sociology to an examining audience, the task and the pedagogical strategies Mr. Goodman employs engage the students in cognitive activities necessary to the reformulation of discipline-specific information in response to a particular topic. These cognitive activities serve to distance the resulting texts from the "classificatory writing" which the London Writing Research Group found to be alarmingly prevalent in secondary schools in the mid-seventies. The above example also highlights these transformation procedures as an important feature of writing as a taught process, a feature which demands a tremendous amount of conscious attention on the part of teachers and students. The vignettes reveal a wealth of other examples, some of which stress similar cognitive activities, some of which focus on exploring a variety of alternative possible responses, some of which focus on discipline-specific registers, and some of which encourage the

students to manoeuvre more competently and confidently within the constant dialectic between the conventionalized manner of responding and their own felt responses. These enabling strategies are critical influences in transforming information, knowledge, and understanding to written text in these six classrooms.

In their attempts to enable their students in these transformation procedures, there appear to be three major moves. First, the teachers seek to identify for the students the kind of text at which they are aiming. Secondly, they draw attention to the constraints under which their students will be operating and indicate the necessary simplifications which will be required because of these contextual factors. Thirdly, they try to help their students with the intermediate analysis and decision-making which lie between task and text. Some key features of writing pedagogy arise from these enabling procedures. The first is that writing is for both students and teachers a site of competing claims, growing out of the constraints of the A-level examination context on the dialectic between convention and choice. Next is that despite these competing claims, the teachers of six different disciplines converge on the aim of developing a "lucid argument". Finally, within this convergence about goals for writing, the teachers utilize a wide range of enabling strategies in the course of seeking to develop their students' performance.

It is clear from this brief attention to the processes of transforming information, knowledge and understanding to written text

that the development of written literacy and competence is much more than a simply transferrable skill. It is further suggested that different disciplines, requiring different sorts of cognitive engagement with discipline-specific evidence, have concomitantly different ways of perceiving and structuring 'lucid argument'.

3. The Role of Writing, as Perceived by the Teachers and Students, in These Six Classrooms

The third question in each of the vignettes asks how the particular writing event spotlighted in the discussion relates to the writing generally done in the six classrooms. The preceding discussion has suggested that within the overarching category of transactional writing at the analogic level for an examining audience, we in fact find a wider range of functions. These functions are related to the varied aims and intentions of teachers and students as they work together to reconcile the conflicting claims made upon writing in the A-level examination context. In order to complete the picture I am trying to recreate of the writing which occurs in the six classrooms involved in the study, I want to illustrate the spectrum of these functions by examining the teachers' and students' perceptions of writing in their respective disciplines, and the nature of the discipline-specific universes of discourse that students are being required to enter through their assigned writing tasks.

A brief summary of the roles that writing plays in these classrooms will reveal both general trends and discipline related

trends. Writing in the history class functions almost exclusively as a demonstration of knowledge to an examining audience. Although Miss Aird and her students both express regret at not engaging in exploratory, investigative, and creative writing, they concur that getting through the examination is the most important goal at A-level. When students reflect on the writing they have composed in history, however, some goals and attainments other than just purely demonstrating knowledge in order to pass an exam are mentioned: Christine, for example, uses assigned writing tasks as an opportunity to "explore historical controversy" and to develop her own voice; Elaine takes pride in learning how to "structure an argument" in a way which allows her more personal engagement with the ideas in her writing than in previous years, where she just "basically listed the facts". Even so, the four students in the study who take history agree with Cora's statement about writing in this class:

...because it is, at the moment, doing work for the exam, and that's it. We're not working at things you're especially interested in. We're working on questions that are likely to come up. If we have a special interest in something that isn't likely to come up, what's the point in using time on it?...it's an intermediate phase... to get good results for a job or university. It's not something to enjoy, but working towards an exam (February 26, 1985).

Writing in Mr. Moore's geography class serves a broader range of roles, although still within the predominant function of writing to demonstrate knowledge to an examining audience. Based on teachers' and student perceptions referred to in the vignette, writing in this class can be categorized into four mutually inclusive functions:

- a) as demonstrations of knowledge, and of how to structure that knowledge in appropriate style for an examining audience
- b) as syntheses of content knowledge to serve as a study tool for the students
- c) as indications of content knowledge and competence in communicating that knowledge to serve as a pedagogical goal for teachers
- d) as opportunities for exploring controversies and/or speculating on the formation of physical phenomena.

This fourth function epitomizes how the three movements interpenetrate polyphonically in the classroom language environment, and how they operate within the contextualizing influence of the examination syllabus. Because the Cambridge Examining Board's geography syllabus encourages 'hands on' engagement with primary evidence by requiring two major fieldwork projects plus an individual exploration of geographical phenomena, several of the students' writing tasks put them in the role of 'apprentice geographers', wherein their writing functions not only to record their engagement with the evidence, but also to speculate about origins and causes and effects, and thereby to enter the universe of discourse of geography as 'protogeomorphologists'. Because of the primary nature of the evidence in these tasks, Mr. Moore's enabling strategies focus on exploring alternative possibilities, assessing contradictory explanations, and integrating what is newly learned with what the students already know and understand about the physical world they live in. The discourse of the discipline becomes therefore an integral part of their interactions with the evidence of the

discipline, and discipline-specific terminology becomes less of a problem than it might be if the students were encountering it only through engaging with secondary and tertiary evidence of the discipline. The geography vignette indicates that Mr. Moore's students manifest this approach to writing in the texts they compose, even when, as in Christine's case, they think of writing in physical geography as primarily the marshalling of 'facts'.

In Mr. Fox's biology class, although the Nuffield Foundation syllabus is supposed to encourage individual exploration and experimentation, the content demands of the syllabus are so heavy that even though they have an extra session a week on Fridays after school the students' engagement with biological evidence is predominantly through the printed word. Consequently, although the first three functions of writing generated from the teacher's and students' perceptions of writing in geography can be also found in the perceptions of the teacher and students in biology, the fourth function, which the syllabus intends to foreground, is absent. Correspondingly, students in this class experience far more difficulty with discipline-specific terminology, finding it difficult to achieve the precise degree of specificity required. The following observation by Mr. Fox sums up the problem in relation to the predominant function of writing in this class:

You get your answers wrong not because you don't understand the concept but because you get the language wrong. Is your understanding different depending on whether you use your phrase or mine? The examiner will think so...You must be able to

predict what the examiner wants (October 10, 1984).

In their writing, students must converge not only upon the ideas anticipated by an examining audience, but in the actual terminology anticipated by this audience. The biology vignette indicates that Mr. Fox devotes a considerable amount of class time trying to enable his students to transform what they know into written text which enters the discourse of biology perceived as authorized by tradition and the requirements of the examining board.

Mr. Christopher, in history of art, is the teacher in the study who most explicitly describes his conflict between wanting his students' writing to reflect their personal engagement with works of art, and being forced by syllabus demands to use writing as a means of gathering information and received knowledge about art history and art criticism, particularly as the year draws to a close. Whereas his goal is to have his students integrate their felt responses with their knowledge of authorized 'readings' of works of art within the historical and philosophical contexts of the movements behind the works of art, he feels compelled as the examinations approach to assign writing which synthesizes authorized knowledge about the topic. He speaks of wanting his students' writing to be

an intellectual process of developing the theories sitting behind a work of art rather than a description of the work of art itself...The work of art serves as a catalyst between artist and spectator...so, throughout the intellectual process, the writer 'talks' to himself or herself the same as the artist 'talks' to himself as he produces the work of art (March 26, 1985).

He then mentions the following functions or roles of writing in history of art:

- a) as a process of self-reflection
- b) to hone their analytical skills
- c) to make manifest what happens in a glance by expanding experience into description.

Early in the year he engages his students in writing tasks which function in the above manner, but in the later part of the year, as the examinations approach, his writing task becomes primarily tasks of information gathering.

The earlier discussion of transforming information, knowledge, and understanding to written text indicates that Mr. Goodman, in sociology, also perceives writing primarily in relation to the examination. He describes the kind of writing he is encouraging his students to compose as follows:

It's a particular academic style of writing you're after, wherein the student offers a particular view and supports that view and uses alternative views for discussion...They need to develop the ability to structure a theme with a sense of moving through an argument...that's the main skill you're trying to teach them (March 28, 1985).

There is a considerable dissonance between how Mr. Goodman envisions written text in sociology and how his students envision it. The vignette shows Mr. Goodman stressing the complexity of cross-referencing and integrating contrasting points of view, and using these to develop a line of argument in response to a specific writing task. Yet the earlier discussion, considered in conjunction with the sociology vignette, also indicates that his students interpret his

strategy as doing most of the cognitive, organizational work for them. They write:

In preparing the essay I learn it...it therefore seems sort of anticlimactic to write it all out neatly...I learn more from doing the background reading than from writing the essay (Steve, June, 1984).

You read the books, take down the facts, repeat them and show that you understand...the learning experience comes from the required reading...he tells you what to put into them, and how to do it, and then you just do it (John, March 14, 1985).

In sociology, you must select from your notes and background reading, and then apply it to the question...the concepts are already formulated - they just need condensing and organizing...When asked to describe, for example, Durkheim's view of social order to compare it with another sociologist, this is relatively easy if organized in the right way (Susan, March 20, 1985).

This dissonance is an interesting feature of the language environment of the sociology classroom, illustrating that student-teacher interactions do not function at the level of straight transmission, but are subject to interpretations which can be quite at variance with intentions.

The English vignette illustrates the broadest range of roles and functions for written text. Excerpts from students' journals indicate six discrete functions for their writing:

1. developing one's own style
2. explaining ideas to oneself
3. as a means of understanding literary text
4. experimenting with ideas
5. enjoyment
6. and the quite unusual - retaliation.

Ms. Elliott describes the following two roles that writing plays in her classroom:

...it's not until you get things down on paper that you get your mind clear, and force yourself to come to conclusions - so that what they write is useful for me to see what they understand and the doing is useful for them to sort their ideas out (March 27, 1985).

Part of the explanation for this broader range of function is the generous coursework component of the Cambridge Examining Board, which allows considerably more opportunity than the traditional boards for personal response, and the nature of the questions which are on the examination itself. According to Ms. Elliott:

...this A-level exam is unique in that it values an imaginative piece as a response to literature...it is a considerable improvement over the traditional A-level 'lit. crit.' type of question...it genuinely wants the student's opinion... (March 27, 1985).

Even so, she goes on to say, all of the examination questions and writing tasks assigned to the students

assume that it will be a considered, thought through opinion, formed from standing at the far side of the book and looking back over it and thinking about the whole thing...and recognizing the need for solid reference to the text to support it...Their essays in their folders are mostly 'end of the process', but it is generally assumed that they have a knowledge of the text. Perhaps we don't give them enough time - give them the essay while they're still uncertain - while they're still working their way through their response (March 27, 1985).

Although this last function of writing is not intentionally utilized by any of the six teachers, some of the students' comments suggest that they understand and take advantage of this heuristic function of

writing to help them come to a deeper understanding of the assigned topic. For example, Linda writes:

Planning is difficult. I try to understand the question, and how much depth is involved. I try to go into as much depth as I need to understand it. Writing helps me to explain things to myself (June, 1984).

It is evident that the predominant role of writing in all of these classrooms is to demonstrate knowledge to an examining audience. However, it is equally evident that within and/or alongside that predominant function, writing can function in a variety of ways to stimulate deeper cognitive engagement with discipline-specific evidence through the processes involved in composing written text. In their efforts to reconcile these potentially, but not inevitably, conflicting functions through the enabling strategies which comprise writing as a taught process at A-level, teachers, and their perceptions of the roles that writing can play, are the most critical factor in determining the role which writing will play in the language and learning environments of their respective classrooms. It is here that the three movements interpenetrate most profoundly, because how the teachers perceive the role of writing will determine the tasks they assign; these tasks determine the first movement, the nature of the sources and resources of information, knowledge, and understanding tapped by the topic. The teachers' perceptions of the role of writing, the task, and the nature of the evidence it draws upon influence the second movement, the strategies which the teachers employ to enable their students to

transform these resources of information, knowledge, and understanding to written text, while the students' perceptions of the role of writing influence how they take these strategies on board, interpret them, and manifest them in written text. This written text, shaped by the contextualizing influences of the first two movements, provides the referential for the third movement, the role of writing and of written text in the A-level classroom in general, and within discipline-specific universes of discourse in particular.

These three movements characterize writing as a taught process in these six A-level classrooms. Within the contextualizing influences of the A-level examination system, they position teachers and students, their perceptions of writing and the enabling strategies they engage in interactively, as the critical central factor in shaping the written text which is composed in these classrooms. The A-level classroom is the site of a number of fundamental contradictions. It is the site of a tremendous variety of processes of learning, as students experience personal growth while they engage with new bodies of discipline-specific knowledge, and use these experiences to construct their own world view. At the same time, it is the site of a tremendous variety of social expectations with respect to what we might call 'marketable skills'. The highly-specialized functions of the A-level classroom - preparing students for university, or other venues of further education, or better employment opportunities - demand that it deliver with respect to these marketable skills, according to standards acceptable to

universities and/or employers. The tension generated by these conflicting functions of A-level education sets up the A-level classroom as an arena for a dramatic struggle, as students and teachers attempt to cope with these contradictory demands. And since it is primarily through writing that students must deliver or demonstrate the extent of their competence in these marketable skills, writing therefore becomes the key site of this struggle. Teachers and students, realizing the need to teach and learn, respectively, the forms and styles of writing traditionally accepted as appropriate by universities and prospective employers for demonstrating the kinds of competencies necessary to survive, compete, and succeed in these institutions, find that their concentration on formal standards constantly undercuts their mutual desire for more personal engagement with new bodies of information. Consequently, we find the situation documented by the London Writing Research Group: a narrowing of function and audience in writing to the predominantly analogic level of the transactional mode for teacher-as-examiner (1975).

Without denying these perceptions, the story I am telling is not a pessimistic one, but rather an optimistic one. Despite the constraints of examinations, despite the constraints of content-laden syllabuses, despite the almost exclusive reliance on writing as a means of demonstrating learning within standards based on outmoded views of both writing and learning, what actually happens in this educational process is that teachers and students do learn, and one

of the things they learn is how to cope within the situation. My story is not a criticism of a lack of "general awareness" among teachers, but an account of students and teachers wrestling with the constraints of the situation as they converge upon the formal registers of the different subjects. It considers how teachers and students in this context, through interaction and engagement in highly creative strategies in their teaching and learning, can, and often do, succeed in producing written text which enters discipline-specific universes of discourse while retaining the integrity of the author's own voice.

The story needs to be told, not through my desire to retain the restrictive educational contexts within which these teachers and students struggle to reconcile conflicting demands, nor through any desire to diminish the valid criticisms of the A-level examination system by the London Writing Research Group and other groups and individuals. My story needs to be told because it begins to fill a gap - the gap left after it is said:

The most striking feature of this - indeed perhaps of these tables as a whole - is the pattern which has been reached by the seventh year. In that year, as will be seen from the tables, about 85% of the writing was judged as transactional, over 58% as transactional for an examining audience, and no less than 42% of the writing was allocated to one cell alone - analogic writing for the teacher as examiner (Britton, 1975).

This is the story of how some of that huge category of 85% transactional writing emerges from the classroom context, specifically from the interactions of students and teachers based on

their perceptions of how writing functions in an educational context. It looks not so much at what is not being done, but at what is being done, creatively and productively, to enable students to articulate in written text their encounters with new bodies of knowledge.

As all stories are shaped within a beginning and an ending arbitrarily imposed on the continual flux of existence, each selected event or motivation having beginnings and endings, influences and repercussions far beyond the borders of the narrative, so my story, which 'starts' in September, 1984, and 'ends' in July, 1985, is similarly seeded with a vast number of untold stories, reaching years into the past and future: stories of the development and roles of educational institutions in society, particularly in British society; stories of how the six teachers learned and selected the particular disciplines within which they are working; stories of how the twelve students acquired and developed linguistic competence within the contexts of home, school, and community; stories of latent learning, and of how this will manifest itself in the years to come; and a host of others. Therefore, when on the first day of 'my' story I walked into these six classrooms and observed teachers and students together engaged in what appeared to be a mutually agreed upon compact to teach and learn in preparation for and despite a final exam, I was immediately thrust, in somewhat of an Alice in Wonderland fashion, into arenas of struggle and conflict in stories begun much earlier, and which will continue to unfold long after this tale is told.

This 'compact' between students and teachers, differently conceived and differently manifested in each of the six classrooms, has grown from a mutually acknowledged awareness of the potential conflicts between learning how to integrate the evidence of different bodies of knowledge into a developing world view and having to demonstrate that learning, in writing, to an unknown examiner. What results is that each of the six teachers assumes what could be called a 'collaborative' relationship with his or her students, in which they work together to try to satisfy the regulated, standardized demands of 'the examiner', while getting on with the business of learning how to conceptualize new, discipline-specific categories of information, and integrate these with their emerging intellectual construction of the world. Since these assumed 'collaborative' roles are frequently taken up by the teachers in relation to assigned writing tasks, they vary according to the nature, focus, and function of the task, as well as according to the individual personality and intellectual stance of the teacher. How the teacher conceives his or her role in this relationship with the students shapes, to a large extent, the dramatic realization of the struggle to reconcile the conflicting demands in the A-level 'theatre of the real'.

Although each teacher varies in the role he or she assumes in different class sessions and at different times of the year, four discrete interpretations emerge as predominant throughout the year in varying combinations. These roles, which are not mutually exclusive, I have called 'the exhorter', 'the mediator', 'the tactician', and

'the shaper'. When teachers assume the role of 'exhorter' in relation to the students, the writing task, and the examiner, they appear to take on the values of the examiner. The roles of 'mediator' and 'tactician' are similar to each other, in that the teachers are 'mediating' between students and the examiner rather than appearing to identify primarily with the examiner's position or value, but whereas in the role of 'mediator' the teacher offers general principles of advice, in the role of 'tactician', the teacher gives very specific advice about the techniques of writing examinations. In the role of 'shaper', the teachers actively intervene in the examination process.

These four interpretations of roles teachers assume in their 'collaborative' relationship with their students are, in a sense, 'umbrella strategies', in what they extend over and influence the entire repertoire of interactive strategies they engage in with their students to help them transform information, knowledge, and understanding to written text. By assuming these 'collaborative' roles, these teachers attempt to reconcile the basic conflict inherent in the two major functions of writing as a taught process at A-level: as a heuristic to promote learning; and as a means of demonstrating learning. This reconciliation can be viewed in terms of teachers' goals or intentions with respect to their students' writing in the A-level context, and the strategies they use to enable their students to accomplish these goals or intentions.

Whenever any of the lessons focused on writing, I noted the area(s) of concern (both teacher-initiated concerns and student-initiated concerns), and the ways in which the teachers tried to assist their students with these concerns. Sorting through this collected information, I found five major areas of concern addressed by teachers, which are listed below in order of classroom emphasis (based on the amount of class time, and the number of references devoted to them):

1. Responding to a specific question
 - a) determining what the question is asking
 - b) drawing on tacit knowledge in order to
 - i) broaden their answer
 - ii) integrate new and known information
 - c) formulating and/or structuring an argument and line of argument in response to a specific question
2. Locating and assessing discipline-specific evidence
3. Improving "style"
 - a) using the terminology of the discipline
 - b) using the register appropriate to the discipline (or to academic writing in general)
 - c) acquiring confidence in one's own style
4. Coping with time constraints
5. Improving the surface features of the text
 - a) essay as form
 - b) spelling, usage, punctuation
 - c) appearance, handwriting

Although the above list of concerns represents the overall picture of the six classrooms, each of the different disciplines has slightly different emphases. In history of art, for example, "assessing discipline-specific evidence" is given priority, followed closely by "using the terminology of the discipline" and "using the register appropriate to the discipline", with "responding to a specific

question" coming next. In English, very little attention is focused on "using the terminology of the discipline" or "using the register appropriate to the discipline", whereas "acquiring confidence in one's own style or voice" takes on more importance. In all six classes, however, with respect to the amount of class time devoted to discussing concerns about writing, the first three general areas listed above take precedence over the last two.

There are seven areas of concern referred to by all students, but their order of importance varies from student to student. The following list is ordered ^{according} to my overall impression of the hierarchy [^] of their concerns:

1. How to structure an 'argument'
 - a) generally
 - b) in response to a specific question
2. Extent of elaboration
3. The essay as a formal construct
4. How to express their understanding or "meaning" clearly in written text
5. The need to improve their vocabulary
 - a) in general
 - b) in discipline-specific terminology
6. Surface features of the text - spelling, punctuation, grammar
7. The lack of opportunity for "creative" or more personal modes of writing.

The most general (and probably most readily anticipatable) correlation between the students' list of concerns and the teachers' list is that, within particular classes, the concerns of the teacher are often reflected in the concerns of the students. For example, in

biology, Mr. Fox emphasizes the need to use precise, accurate, discipline-specific vocabulary. Similarly, students studying biology focus on vocabulary in their journals and interviews. An exception to this general pattern is found in English. Whereas all six English students in the study express concern about their vocabulary, Ms. Elliott considers their vocabulary quite adequate, and focuses her attention on other concerns. Another discrepancy or area of dissonance revolves around "extent of elaboration", explicitly mentioned frequently by the students, but only implied in the teachers' expressed concern about "responding to a specific question". Teachers' written comments on students' completed texts, however, do focus on this area of difficulty, but primarily in response to specific areas of over- or under- elaboration in a particular text, rather than as a feature of written text which subscribes to generalizable principles. "The lack of opportunity for 'creative' or more personal modes of writing" is a major area of discrepancy between the two lists, and reflects, in part, the conflicting demands teachers experience with respect to class time, content-laden syllabuses, and preparation for final exams. Although this concern is not articulated in the classroom by either teachers or students (which is why it did not appear in the teachers' list, formulated on the basis of class time devoted to each area of concern), it is nonetheless perceived as an area of 'loss' by teachers as well as students. During our frequent informal chats, all six teachers mentioned that they would like to engage their

students in writing tasks with more scope for personal interests and personal responses, or, in the case of English, wherein the coursework component already allows for more personal responses, to engage their students in writing tasks "while they're still uncertain - while they're still working through their response" (March 27, 1985). The history and geography teachers spoke of recent innovative syllabuses at O-level, which allow for more coursework, more engagement with primary evidence, and more opportunity for students to respond to primary evidence as "apprentice historians" or "protogeomorphologists", and are looking forward to the time when similar syllabuses will be available at A-level. The history of art teacher spoke frequently of his aim to have students integrate their personal responses with "art historical" responses to works of art, but felt he had to concentrate his writing tasks, particularly towards the end of the year, more upon information gathering than on personal response, in order to complete the syllabus in preparation for the exam. It is neither lack of awareness nor lack of desire which inhibits these teachers from choosing to go beyond the transactional mode of writing, primarily at the analogic level, and primarily for teacher-as-examiner. It is the convergence of societal, institutional, and personal pressures to find the most efficient means of helping their students pass their A-level examinations with as high a mark as possible. But a considerable amount of learning occurs as students transform their engagement with new bodies of knowledge into written text composed in this

predominant mode, learning which is enabled by the strategies teachers employ to help their students respond in writing to various kinds of tasks.

Bearing in mind James Britton's observation that "We classify at our peril" (1975), I have collated the various strategies employed by the six teachers throughout the year into twelve categories which pertain to the processes of writing from the formulating of the writing task to the use of completed texts:

CATEGORIES OF STRATEGIES

1. Wording of writing tasks
2. Collaborative use of talk
3. Conferences
 - a) pre-writing; while writing; post-writing
 - b) scheduled; informal
 - c) teacher-initiated; student-initiated
4. Oral comments to class - before, during, after
5. Use of background reading
6. Use of diagrams for planning
7. Use of varieties of writing tasks
8. Use of constraints in preparation for exam
9. Teachers' written comments
 - a) on final drafts
 - b) on interim drafts
10. Use of written texts as MODEL ANSWERS
 - a) texts written by former students
 - b) texts written by teachers
 - c) texts written by classmates
 - i) shared orally
 - ii) shared as written texts
11. Use of printed handouts
12. Use of generalizable heuristics

CONCLUSION

Out of this cross-disciplinary investigation of the writing of students emerge six pedagogical implications which, if taken on board by educators and administrators, and applied in classrooms at all

levels, might positively and significantly influence learning in all subject areas, and the written articulation of that learning.

1. If writing to demonstrate knowledge is perceived as only one of a variety of functions appropriate to the repertoire of writing functions being developed throughout the students' educational careers, then opportunities exist for students and teachers to work together to reconcile in writing the two major interdependent activities of the A-level classroom: engaging with new bodies of knowledge; and demonstrating the extent of that engagement in writing to an examining audience.
2. Since teachers have tremendous corporate insight into and understanding of many important issues involved in transforming information, understanding, and knowledge to written text, particularly within the A-level examination-oriented classroom context, they need to be empowered within the system to take a reflective stance towards the nature of writing opportunities and problems in their respective disciplines and the nature of the strategies they employ to try to capitalize on the opportunities and ameliorate the problems, and to share these with teachers of other disciplines.
3. Since students understand to varying degrees the educational dilemma in which they find themselves at A-level, they also need to be empowered within the system to be reflective about the nature of the writing tasks they are being assigned, and about the nature of the written texts they compose in response to these tasks.
4. Since students have quite definite and differing perceptions of what constitutes written competence in their different A-level subjects, a greater understanding is required, not only of the contextualizing influences involved in the construction of written text, but also of the manner in which students respond to and interpret these contextualizing influences in order to appreciate what is occurring cognitively as well as semantically and syntactically in their written texts.
5. Any attempt to understand and explain how writing emerges within a particular context or set of contexts, for example the network of contextualizing influences in the classroom context, must consider the constant dialectical relationship between convention and choice.

6. If the students' perceptions of what constitutes written competence emerges from a process of interactions with their teachers throughout their educational careers, then opportunity exists within these interactions to shape not only their understanding of written competence, but also the locus and means of validating it, so that students become increasingly independent in assessing their own writing performance.

The strongest message emanating from these six implications is their investment of understanding, knowledge, and power in teachers and students. It is a message of confidence that teachers and students can corporately and collaboratively reconcile the educational dilemmas in which they are positioned in relation to writing as a means of engaging with the new bodies of discipline-specific knowledge they are encountering. It is, moreover, a message which might hold true beyond the particular dilemmas of the A-level educational context to other problems generated in other educational contexts. The next strongest message is the call for needed changes within the system, for example, for timetabled opportunities for interdisciplinary discussions and reflections about the nature of writing, the nature of writing tasks, and the nature of strategies teachers of different disciplines employ in their attempts to enable their students to transform information, knowledge and understanding to written text. The third message focuses on the students, on the need for them to emerge from this interactive process by which they are inducted into the conventions of writing in various disciplines with an independent ability to validate their own writing in the light of enabling strategies suggested by their teachers.

Once we look at writing in context, no easy piece of generalization or dogma comes readily to hand. This study aspired to find out how writing emerges from the A-level educational context. Through exploring that question, it showed writing at A-level to be the site of a dramatic struggle to reconcile two potentially conflicting functions, the conflict engendered, to a large extent, by the A-level examination system. It also showed teachers and students interactively engaged in reconciling that conflict. If it is possible to crystallize a year's investigation of the teaching-learning activities and written texts of twelve students and six teachers into a summary sort of statement, it might be this:

Writing as a taught process at A-level emerges from a network of contextual influences which position both teachers and students in a fundamental dilemma; through corporate insight into the nature of writing as a means of coming to understanding as well as demonstrating understanding, and collaborative effort to employ writing in both of these major functions, teachers and students, working interactively, have the potential to reconcile this dilemma.

Notes

1. The names of the students, the teacher, and the school involved in the study have all been changed.

References

- Applebee, A. N. (1981). Writing in the Secondary School: English and the Content Areas. Urbana, Illinois: NCTE.
- Britton, J. N. et al. (1975). The Development of Writing Abilities 11-18. London: Macmillan.
- Bruner, J. S. (1975). Language as an Instrument of Thought. In A. Davies (Ed.), Problems of Language Theory. London: Heinemann.
- Eagleton, T. (1983). Literary Theory: An Introduction. Oxford: Blackwell.
- Foucault, M. (1972). The Archaeology of Knowledge. London: Tavistock.
- Kelly, G. (1955). The Psychology of Personal Constructs. New York: Norton.
- Olson, D. (1977). From Utterance to Text: The Bias of Language in Speech. Harvard Educational Review, 47, 257-81.
- Piaget, J. (1960). Language and Thought of the Child. London: Rutledge and Kegan Paul.
- Polanyi, M. (1958). Personal Knowledge. London: Rutledge and Kegan Paul.
- Vygotsky, L. S. (1962). Thought and Language. Cambridge, Mass.: MIT.