ABSTRACT
        A variety of sources, including writing samples and
videotapes of writing sessions, were examined to determine what
speech events underlie the written compositions of students from
fourth through twelfth grades. Findings revealed a correlation
between different levels of writing competency and four types of
speech events: encoding, conversation, presentation, and ritual.
Typically, students based their early written work on the simplest
form of communication behavior--encoding, which concentrates on
processing letters, words, and phrases. Once they had mastered
encoding, students began to model their writing on the more complex
speech events of conversations and presentations, both establishing a
close relationship between the speaker-writer and the reader through
conversationally structured writing and creating a greater distance
between the two through presentations. The most advanced students
used ritual, invoking authority through modeling devices such as
footnotes and references. Awareness of the underlying rhetorical
situations in student compositions can help teachers develop writing
programs sensitive to students' developing abilities. (MM)

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The Speech Events Structuring Written Composition

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Questions about how students categorize the social situa-
tions of their world and use these categories to differentiate
their ways of speaking and writing have become increasingly
important in the study of school language in general and of
school writing in particular. The sociolinguistic perspective
marked a radical change in writing research in both analysis of
components and definitions of competence. In the analysis of
components, the early studies of grammatical forms examined the
structure and frequency of these forms, not their social associa-
tions, and the early studies of process structures examined the
timing and form of these procedures, not their associations with
particular speech events.

In the analysis of competence, the early studies of writing
adopted Chomsky's view that competence was based on "an ideal
speaker-listner, in a completely homogeneous speech community"
(Chomsky,1965:3). In these studies, competence meant syntactic
maturity (Hunt,1965), a "stage...within the mind" (Roh-
man,1965:27), or, as in the following recent example, an ima-
gined, ideal instructor:

> To gauge the Reader-Based effectiveness of this
> report, skim quickly over Draft 1 and imagine the
> response of the instructor of the course, who needed
> to answer these questions...Next, try the same test
> on Draft 2. (Flower, 1979:34)

In the area of competence, socialinguistic theory says that
participants have different capabilities for different contexts,
have a tacit knowledge of relationships in a speech event, and
exhibit a wide sphere of capabilities in speech performance, not

just grammatical ability (Hymes, 1979:45).

In the area of analysis, sociolinguistic theory begins with the assumption that "oral language is "the sea on which everything else floats" and that "writing begins as written down speech" (Britton, 1970:165). Vachek, for one, has shown how writing is like oral language and at the same time different, arguing that the two are "functionally complementary" systems (Vachek, 1973:16). Vygotsky has shown how this similarity and difference develop in language acquisition. Vygotsky says that children begin by imitaing aloud the language they hear in everyday life, then they compress their external speech into internal monologues, and then in writing they make the change "from maximally compact inner speech to maximally detailed written speech" (Vygotsky, 1962:100).

A number of researchers have recognized that the most critical problem in the structuring of meaning in writing is the structuring of the imagined speech event remembered from the oral language experience:

> I further assume that the difficulty of writing good prose arises largely from the linguistic abnormality of addressing a monologue to an unseen and unknown audience. (Hirsch,1977:58)

> The most critical adjustment one makes is to relinguish collaborative discourse, with its reciprocal prompting and cognitive cooperation, and go it alone. (Moffett, 1968:87)

One of the first problems in understanding the structure of speech events is the distinction among speech situations, speech events, and speech acts (Hymes, 974). A wedding is a speech situation with such speech events as conversations and the ritual ceremony, and a speech event has within it many different kinds

of speech acts expressing relations among the components in a speech event.

In studies of the speech events structuring writing, three relationships are primary -- distancing, expressing the relationship between writer and audience; processing, expressing the relationship between writer and subject; and modelling, expressing the relationship between writer and text. Speech acts can be words or phrases which mark or signal particular relationships. Distancing speech acts express such relationships as verbal jeopardy (Pratt, 1977:215), camaraderie, formality, and hesitancy (R. Lakoff, 1977); procesing speech acts distinguish between approximate and normative subjects (G. Lakoff, 1975) and between connected and integrated subjects (Chafe, in press; Kroll, 1977); and modelling speech acts distinguish between transitory and permanent or archival texts (Olson, 1980:106).

PURPOSE

In the shift to a sociolinguistic perspective in theories of modern discourse, three problems have been identified as particularly important (Odell, 1979): (1) Are the categories of purpose consistent with the reasons students "give for the choices they make in producing a piece of writing?" (2) "Would different evaluation procedures lead us to make different judgments about a given student's writing performance?" and (3) "Is it in fact true that different kinds of writing tasks elicit different kinds of writing performance from students?" These problems of category definition, norms, and differential use are the focus of the three hypotheses guiding this present study:

I. The Speech Event Hypothesis: The four speech events of encoding, conversations, presentations, and ritual are an underlying structure in student writing and express the purposes of student writers in four areas -- distancing to audience, processing of subject matter, modelling of text, and learning to write the code (encoding).

II. The Norm Hypothesis: When evaluation procedures express the judgments of teachers in a school district, the evaluation scale will distribute student writing in a developmental sequence from bottom to top.

III. The Differential Use Hypothesis: When students are given different writing tasks, they will change their use of speech event markers in their writing.

The Speech Event Hypothesis

The speech event hypothesis focuses on the problem of how to define the primary structure of a piece of writing. The primary structure of a piece of writing should express the writer's purposes, should be simple enough to use, and should have evidential support in previous research on structure in writing. The speech events proposed in this study are marked by speech acts expressing particular relationships of writer-audience, writer-subject, writer-text, and writer-encoding. The last relationship refers to the problems of learning the code such as holding the pencil and making letters.

A preliminary inquiry into the reasons given by five students for their choices in two writing samples suggests that the descriptions of purpose are often just another way of describing

the relationships among the components in a speech event. Although some student comments expressed uncertainty ("I don't know"), most student comments could be categorized as one of four relationships in a speech event : (1) writer-audience relations, the self ("I just felt like it") and others ("wanted her to know it," "get a good grade"); (2) writer-topic relations ("So I could explain it," "This happened first so it had to be moved"); (3) writer-text relations ("I knew he would put it on the wall," "Oh, I thought I'd throw it away anyway"); and (4) writer-process relations ("I couldn't remember so I left a space," "I kept one sheet for notes").

Although these typical relationships within speech events appear to represent the reasons that students give for their choices while writing, the students do not recognize typical categories as the ones they use to classify speech events. For example, students often confuse Moffett's categories of memoir and autobiography, of history and chronicle, of recording and reporting, and of generalizing and theorizing (Moffett, 1968:47).

What categories do students recognize and use? They recognize categories of speech events from their experience with oral language. They recognize that in writing there are "real" events and "pretend" events, and then there are conversations ("like talking to friends"), presentations ("like giving a speech in class"), ritual ceremonies ("like the declaration of independence or the flag slaute"), and encoding events such as those in which a student has an interchange with a foreign visitor who cannot speak English.

Thus, the first requirement of a category is that it be based on experience from oral language. The second requirement is that it be structured and simple so that it can be used by students as a cognitive scheme to differentiate ways of speaking and writing. According to cognitive theory, the most useful categories are "typical instances" (Bruner,1956:64), a "formula" or "caricature" (Bruner,1960:25), "a sterotyped situation" (Minsky,1975:1), or prototype (Rosch,1977). Rosch found, for instance, that people organize some categories around prototypes, not a list of features, and, as a result, the category bird coheres around the prototype robin, with penquin somewhere near the boundary of the category and chicken between the penquin at the boundary and the robin at the point of central tendency. The use of prototypes to define speech events means that category membership is a matter of more or less, not all or none. For example,between a letter and court testimony,a personal letter is probably the most prototypical conversation in writing, and some story telling and court testimony may be very close to the boundary separating conversations and presentations. In addition, conversations and encoding are a pair, and presentations and rituals are a pair. The simplicity gained by using prototypes such as conversations does not necessarily mean a loss of stability when individual features are examined. For example, Britton et al. reported a stable association of writer-audience and writer-subject relationships in transactional writing (Britton et al., 1975:189-190).

The features of prototypical speech events are the language

markers of three speech acts expressing the relationships of dis-
tancing (writer-audience), processing (writer-subject), and
modeling (writer-text). Much of the work of identifying a useful
code has been completed by Halliday and Hassan (1976), Loban
(1976), Kroll (1977), Keenan (1977), and Chafe (in press). Olson
was particularly helpful in his discussion of school textbooks as
a form of ritual (Olson, 1980). Most of the code is lexical.
Syntax was not used because, among other things, Rubin and Piche
found that syntax was "neither clear nor easily interpretable" as
a marker of audience adaptation. They suggested, "Perhaps other
linguistic variables (e.g., lexical) would yield more profitable
insights in this respect" (Rubin and Piche, 1979:313).

The encoding speech event presents a special coding problem.
The three relations of distancing, processing, and modeling
appear to be distinctive features in such speech events as
conversations but may have limited usefulness as markers of the
encoding speech event. Rubin and Piche, for example, suggest
that the absence in their data of audience sensitivity from
fourth graders may have been due to "an added cognitive load
posed by the act of writing" (Rubin and Piche, 1979:312-313).
Dore, among others, has identified the problem of analyzing the
language of young learners.

> The two-sided thesis I want to propose here is that
> conversation is the immediate communicative content for
> language development, but that properties of conversa-
> tion itself...cannot explain the abstract structure of
> the language.... (Dore, 1979:339).

Dore proposes a speech event framework he calls "C-acts" or

"protoconversational acts" which are not full blown conversations but which are a set of "communicative behaviors which appear before word production" (Dore, 1979:242). Bruner calls these speech events "joint action formats" (Bruner, 1979:87). What Dore and Bruner examine in these events is the behavior indicating language strategies. Two approaches to the encoding speech event will be used in this present study of writing, the coding of misspelling (Wing and Baddeley, 1980) and garbles (Graves, 1979; McDonnell and Osburn, 1980) and coding of the location and time of pauses, using the techniques developed by Matsuhashi (1981). The difference between this work and Matsuhashi's is that Matsuhashi examined only good writers, as reported by teachers, and this study will examine the pauses of writers at various levels of competency on a district examination in writing.

The cognitive model used in this study assumes that two mechanisms of memory activation are at work, automaticity and attention, and that both can occur simultaneously (Posner and Snyder, 1975). The mechanism of automaticity responds to the task of writing letters by activating both low-level stimulus analysis (What letters make what words?) and semantic analysis in related or associated memory locations (Of the words that come to mind, which seem to work?). Automaticity never inhibits retrieval. Whatever is triggered, good or bad, comes out. In the higher levels of writing competency, automaticity is fast and uses no attention or very little in the processing of small units, and, as a result, the mechanism of attention can be used to encode larger units of text, helping organize paragraphs,

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provide sentence transitions, and so forth, while automaticity handles the encoding of small units.

In the lowest levels of writing competency, however, automaticity is often slow, often retrieving unworkable letters and words, and, as a result, the mechanism of attention must compensate for the failures of automaticity (Stanovich, 1980). When all of attention is used for smaller units like letters and words, it cannot be used for organizing larger units like sentences and paragraphs. This general model of cognitive processing is workable within either a duplex or levels theory of memory (Klatsky, 1980:26). If an encoding effect is present, a significant statistical decrease of encoding features should occur from the bottom to the top.

In summary, the first hypothesis proposes that there are four speech events structuring student writing in schools-- rituals, presentations, conversations, and encoding. Presentations and rituals have far distances to audience, permanent texts, highly organized subjects. The difference is that rituals have formulaic expressions associated with particular speech events ("Do you take this woman to be your lawfully wedded wife?"). Conversations, on the other hand, have close distances, impermanent texts, and loosely organized subjects. Encoding events are characterized by numerous starts and stops as the writer struggles to encode the language, very much like an exchange with a foreign visitor who does not know the language or with a child who is learning to speak. To establish the first

hypothesis as correct, the features of distancing, processing, and modeling should show a consistent and stable relationship within the speech events of conversations and presentations.

The Norm Hypothesis

The second hypothesis argues that the minimum proficiency examination in schools is a particular type of speech situation in which the teachers, with some of the ultimate values of the institution at issue, will rank student writing in a developmental sequence from bottom to top. In other words, the writing samples that are structured by speech events learned late in development will be those that receive the highest scores. It is assumed that much of the developmental scale is contained in a single grade. Says Moffett, "I know from research I have conducted in grades 4-12 that the development of writing is unbelievably relative, to the point that pupil capacity seems to vary as much horizontally throughout the population of one grade as it does vertically through the grades" (Moffett, 1968:54).

Many studies have identified students as being at some level of school competency, but no study has attempted to determine whether or not there are common values governing writing assessment throughout a school district. Both Emig (1971) and Perl (1978) base their classifications on teacher reports, but there is no description of the underlying scale of competence. The recent minimum competency legislation and the development of writing assessment procedures by districts make possible, maybe

for the first time, the study of a scale of competency used throughout a school district.

The fact that the four speech events represent a developmental continuum in the schools is suggested by Britton et al. Their year by year data show increases in writing for the teacher examiner, decreases for the teacher-learner dialogue, increases for transactional writing, and low but constant levels for expressive writing. But Britton does not have data on how the schools assessed this writing, and, therefore, the relationship between the different types of writing and school norms remains speculative. Tests of statistical significance will be used to determine whether the speech events have strong or weak associations with particular score levels on the district scale used in writing assessment. If the speech events are strongly associated with different score levels, then the sequence from bottom to top can be matched against what is known about language and writing development and trends from one grade level to another.

The Differential Use Hypothesis

Odell observes that many students do not make even gross distinctions among communicative events, approaching "different tasks with a single set of oversimplified rules." Odell asks, "Is it in fact true that different kinds of writing tasks elicit different kinds of writing performance from students?" (Odell, 1979:41). The third hypothesis is that students do change the speech event markers in their writing when they shift to a task requiring a change. To establish this hypothesis, statistical

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tests must show that when students in the proficiency examination
are given two pieces of writing, an essay and a letter, conversa-
tional markers significantly increase in the letter.

PROCEDURES

The speech events structuring writing samples are the pri-
mary focus of this present study, but these writing samples occur
within larger speech situations which determine issues of task
validity, scoring scale validity, scoring reliability, coding and
sampling. The discussion in this section will put these issues
in a social linguistic perspective. In this perspective, the
writing exam is valid if it satisfies its social claims. The
exam claims to require performance which parents and teachers
value. The validity question is, Is there evidence that parents
and teachers approve the exam as requiring performance they
value. In a cognitive perspective, the exam is valid if it
claims to measure the two kinds of writing in the two tasks, but
it is invalid if it claims to measure all writing skills.

Within the larger speech situation, the present study
focuses on four hypothesized speech events--encoding, conversa-
tions, presentations, and rituals, and within these speech events
the study examines the cognitive act of distributing attention
and the three speech acts of distancing to audience, processing
subject, and modelling text. Each of the speech acts is binary,

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having contrasting markers for close/far audiences, approximate/normative-embedded subjects, and permanent/impermanent texts. Although each writing sample may use all markers, a given speech event is represented by the dominance of particular types. Writing structured by conversations has more markers of close audience, approximate subjects, and impermanent texts. Writing structured by presentations has more markers of far audience, normative-embedded subjects, and permanent texts. Writing structured by encoding speech events, on the other hand, has more language markers of encoding problems and more cognitive markers of attention to small units, represented by the location and length of pauses during the act of writing. These cognitive markers represent a different dimension of processing, processing procedures rather than subjects.

Last, writing structured by ritual speech events has more footnotes, references, abstracts of articles, sub-titles, colons in sentences and titles, charts, and figures. These ritual markers represent a different dimension of modelling, modelling a social artifact or icon, not just a text (Olson, 1980). But these markers generally did not appear in the writing samples and were dropped from consideration. The ritual speech event was retained in the hypothesis for reasons to be discussed later.

Validity of Task

Parents and teachers designed an essay and letter topic and the setting (fifty minutes each, in class) to require the minimum performance necessary for graduation from high school. For

parents, the validity question was, Do the topics represent what
students should be able to write about when they leave high
school? For teachers, the validity question was, Do the topics
represent what students can or do write about in schools? Meet-
ings on these two questions, usually involving both parents and
teachers, began in the fall of 1978 and decisions were made in
the spring of 1979. The district research office gave technical
advice at the later meetings. The school board reviewed the
decisions and gave its approval. 1979 was the first year of the
exam, and the 1980 and 1981 exams followed the same format.
Topics and procedures were piloted during 1977-1978.

The essay topics were "an object you are attached to" (Fall
1977), "a person you like, dislike, or admire" (Spring 1978), "a
person who has had the most influence on your life" (1980), and
"an educational field trip...where you think the class should go
and why" (1981). The letter was the same for 1980 and 1981:
"Write a letter to the employment agency below and explain what
job you would like and what your qualifications are..."

Validity of the Scoring Scale

The papers were scored using holistic scoring procedures and
a six-point scale (Myers, 1980). Selected papers defined and
anchored each point. The validity question was, How generaliz-
able is the scale to other school communities? 106 teachers in
five other cities were asked to rank the unmarked papers 1 to 6
and to estimate what percentage of the students in their classes
was above and below the scale. 70 percent of these teachers

scored papers 1 (bottom), 2, and 6 (top) the same as the local raters. Seventy percent also rated paper 5 as a 5 or 6, and over 70 percent rated the two middle papers as a 3 or 4. The teachers estimated that 26 percent of their students wrote papers better than the top, and that 4 percent of their students wrote papers worse than the bottom. Because the teachers taught all grades, 7-12, and the samples were only from ninth graders, this discrepancy was expected.

Reliability of Scoring

Each paper was scored twice by different readers and read a third time by a lead reader if the two scores differed by more than one. In the third reading, one score changed. The two scores from the six-point scale were then added together, producing a 2-12 scale. Scoring reliability was estimated in two ways---by the number of even scores, showing the two readers agreed, and by the number of third readings. A check of 3,819 papers in the 1980 reading showed 67 percent of the scores were even and 33 percent were odd. Less than 5 percent of the papers were read a third time in any of the three readings---1978 (including 1977 papers), 1980, and 1981.

Sampling Papers

Random samples were drawn from six populations, copied, and the originals returned. Some copies had to be dropped from the sample because of an absence of grade or score information and because of copies too light to read. The light copies did not

cluster in any particular score category. The numbers in the population and sample and the hypothesis tested by a given sample are shown in Table 1:

INSERT TABLE 1

Coding Papers

From a pilot count of 1977 papers, a list of over 100 speech event markers was prepared and then all markers were counted in sample papers. For each paper, the speech act index for distancing, processing and modelling was calculated, dividing recurrent markers by number of words and adding the result to markers like titles, which could only appear in a paper once. The words in the formulas below are examples of the words appearing on the marker list:

Conversational Distancing (Close Distancing):

$$\frac{\text{You (us, ours) + me (my, mine)} + \underline{\text{I}} \text{ comments } (\underline{\text{I think}}, \underline{\text{I believe}})}{\text{Total Words}} + \frac{\text{One-time orientations}}{\text{(I am writing about)}}$$

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<u>Presentational Distancing</u> (Far Distancing):

$$\frac{\text{Distant sentence subjects (nouns)} + \underline{\text{new information}} \text{ marker } (\underline{A})}{\text{Total Words}} + \begin{array}{c} \text{Opening sentence without} \\ \text{I, me, my, you in} \\ \text{subject position} \end{array}$$

<u>Conversational Processing</u> (Approximate Processing):

$$\frac{\underline{\text{and}}, (\underline{\text{but}}, \underline{\text{or}}) + \text{hedges} (\underline{\text{sorta}}) + \underline{\text{leaps}} (\underline{\text{really}}, \underline{\text{a lot}})}{\text{Total Words}}$$

<u>Presentational Processing</u> (Normative and Embedded
                                    Processing):

$$\frac{\text{embeddings} (\underline{\text{if}}, \underline{\text{who however}}) + \underline{\text{-ing}} \text{ modifiers} + \text{qualifications} (\underline{\text{in general}}, \underline{\text{perhaps}})}{\text{Total Words}}$$

<u>Conversational Modeling</u> (Transitory Modeling):

$$\frac{\text{Punctuation Mark (!, CAPS, Underlining)} \quad \underline{\text{I}} + \text{slang} (\underline{\text{gotcha}})}{\text{Total Words}} + \begin{array}{c} \text{One-Time Ending} \\ \text{(The End)} \end{array}$$

<u>Presentational Modeling</u> (Permanent Modeling):

<u>Title</u> + <u>a</u> <u>statement</u> <u>marked</u> <u>as</u> <u>a</u> <u>conclusion</u> <u>at</u> <u>the</u> <u>end</u>

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The index for a given speech event was the total of indexes for appropriate speech acts listed above. The coding reliability for the markers above was .82 or better.

The markers for encoding speech events were misspellings (Wing and Baddeley, 1980), garbles such as "wuz" (McDonnell and Osburn, 1980), double images from copying over letters, shifts from cursive to printing (at least two letters), and non-rhetorical fragments. The coding reliability for encoding markers was .86. The encoding index was calculated by dividing all encoding markers by total words.

Sampling and Coding the Writing Process

Five students for whom scores were available on the essay, the letter, and a reading and mechanics test were selected to be video-taped while the students wrote two essays. Two of the students had top scores, two had bottom scores, and one had middle scores (6 on the essay, 7 on the letter). The students were given all the time they needed, none exceeding fifty minutes on either of the two topics. One of the topics ("Describe a favorite place, telling why it is a favorite") had the same format as previous exam questions, and the other topic was individualized, based on the individual interests of the students ("Explain why women should be drafted...Why X is a better book than Y"). The subjects were video-taped with two cameras, one an overhead, and, as a result, the screen showed the actual writing on the page, with a small profile shot in the corner of the screen.

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The tapes were coded for length and location of pauses, the type of revisions made, and the number of words skipped when the writer moved back in the text to make a revision. These timed pauses occurred in seven locations: those in the middle of words and phrases; those before phrases, subordinators, sentences, and paragraphs; and before and after coordinators. In a reliability check, the coding of the investigator and an assistant had a correlation of .76.

In summary, the indexes for the speech events were calculated by counting speech act markers, preparing a speech act index (conversational distancing), and adding together appropriate indexes of speech acts. Recurrent markers were divided by total words. One time occurrences (titles) were not. All papers were scored for competency on a 2-12 scale, and scores and coding procedures were checked for reliability. In addition, five writers representing top, middle, and bottom levels of competency were video-taped while writing. Revisions and pauses were coded, and coding reliability checked. Finally, the social validity of the writing exam was established in meetings of parents and teachers, and the scoring scale was judged for generalizability by 106 teachers in five other cities.

Results

Hypothesis I:

Two primary tests were used to support this hypothesis, although the evidence for each of the subsequent hypotheses con-

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tribute additional support for Hypothesis I. Two tests for this hypothesis were (1) the consistent directional effects of the different speech acts within conversations and presentations and (2) the Scheffe procedure for identifying pairs of groups which showed statistically significant differences at p < .05 or beyond. The individual speech acts within a given speech event were not consistent with each other in their directional effects, either up, down, or curvilinear.

The Scheffe procedure showed a significant difference between essay groups 1 and 2 and 3 and 4 in presentational markers and no significant difference in these markers in groups 2 and 3 (Table 2). In conversational markers in the essay , the Scheffe procedure showed no significant differences between adjacent groups. However, in letters the Scheffe procedure showed a significant difference in conversational markers between groups 1 and 2 (Table 3). Also in letters, all pairs of adjacent groups differed significantly in presentational markers.

In summary, although speech acts do not have a consistent directional effect within speech events, the speech events themselves may be a source of the underlying structure which distinguishes one score category from another in some instances but certainly not all. For instance, the frequency of presentational markers does provide a significant distinction between all pairs of adjacent groups in letters and between groups 1 and 2 and 3 and 4 in essays.

Hypothesis II

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The second hypothesis suggested that the district evaluation scale would distribute the speech events structuring writing in a developmental sequence. This hypothesis would predict that encoding markers would dominate the bottom group and that some encoding problems would increase and others decrease in the movement from group 1 to 2. Table 2 (bottom) shows the dramatic decrease from group 1 to group 2 in encoding. A similar drop took place in letters. In addition, the kinds of encoding problems changed from group 1 to 2. Table 5 shows the increase in punctuation problems from group 1 to 2 and the decrease of inflection problems. These are revisions made by the five case study students who were video-taped. The inflection revisions, requiring attention to a small area on the page, were subject-verb agreement changes (changing subject or verb), apostrophes, and tense. The punctuation problems required marks in more than one place (items in a series, non-restrictive clauses) and clause punctuation such as introductory and independent clauses.

In addition, the five case study students at different score levels differed in the allocation of their pauses while writing. Among the three score levels represented by the five students, the bottom group had the highest average pause time (13.7 seconds) allocated for small units and the lowest (16.2 seconds) for the large units. This tends to support the compensatory principle that if attention must be allocated to small units, attentional capacity may not be available for large units. However, the results from the other score levels suggest that a small difference in average pause time on small units may

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me = a big diff   ce.   Another indication of the size of the unit being processed was the recursive span, how many words back did the writer skip to make revisions. The top writers had maximums of 8 and 15. The bottom writers had 2 and 3.

The stability of the chunk is another indication of development, and an indication of this stability is the standard deviation in the time of the pauses. The greater the S.D., the greater the instability. The higher group (Table 4) had a relatively low standard deviation. The middle group had the larger standard deviation, and this is consistent with the other trends showing this group with increases in large unit problems (Table 5).

Other indica   s of the relationship between the speech events and the scoring scale are the one-way ANOVAS showing the interaction between speech event markers and scoring categories. Conversational markers had a significant interaction (p $<$.05 or beyond) of F=3.555 in essays and F=6.798 in letters. Conversational markers explained (eta squared) only 4 percent of the variance in essays (.045) and only 9 percent of the variance in letters (.094). Presentational markers had a significant interaction (p $<$.05 or beyond) of F=51.951 in essays and F=51.281 in letters. Presentational markers explained (eta squared) 41% (.411) of the variance in essays and 43% (.438) of the variance in letters. One of the reasons for the low explained variance of conversational markers is the fact that the explained variance is insensitive to associations which deviate from linearity. The distribution of conversational markers in essays

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is roughly curvilinear or U-shaped.

Among the other speech events, conversational markers had their highest point in essays in group 2 and dominated group 4 in letters. Presentational markers dominated in the top group in essays and except for the middle groups in letters moved up consistently on the scoring scale.

These trends in the evaluation scale were reflected in the grade level data from grades 4-12 (1977-1978 samples). The grade level data were arranged into four groups -- 4,5/6,7,8/9,10,11/12. Encoding means were .042 in grades 4-5 and then dropped to .038,.024, and .015. The conversational markers from grades 4-5 to 12 were .15,.24, .23, and .13. Presentational markers, on the other hand, were 4.2, 3.3, 5.1, and 4.8. In summary, then, the district's evaluation scale appears to parallel developmental trends.

Hypothesis III

The differential use hypothesis was tested by collecting sample letters and essays from the same students in 1980. For 1980 letters, the mean for conversational markers was 3.6 (X=3.6848), and the mean for presentational markers was 1.4 (X=1.4458). For the 1980 essays, the conversational mean was .36, and the presentational mean was 4.87. From bottom to top, conversational markers in 1980 were 1.8,2.5,4.3, and 4.8. In other words, all the score groups increased their conversational markers in the shift from the essay to the letters.

In another test of the interaction between speech event markers and task (letter or essay), the two-way ANOVA indicated

a significant interaction (p <.05), with conversational markers showing F=199.712 for paper type (letters or essays) and F=2.304 for score category and with presentational markers showing F=14.230 for paper type and F=87.838 for score category. In the multiple classification analysis, paper type accounted for 31% (eta squared) of the variance among conversational markers and score categories only accounted for 2%. In presentational markers, on the other hand, score categories accounted for 36% of the variance and paper type only 1%.

In summary, in the shift from essays to letters, there is a substantial change in the use of conversational markers and almost no change in presentational markers. However, presentational markers do change substantially as the scores increase in both letters and essays.

DISCUSSION

The ritual speech event was kept in the hypothesis, even though the conception contributed nothing to the analysis thus far, because many of the top essays had qualities of detachment and organizational structure that gave them a distinctive quality. The one indication of this special quality is the very high mean (X=8.25) for presentational markers in the top group of essays. The second reason for keeping ritual speech events in the formulation is that secondary schools in the upper grades often project the research paper, complete with many of the traits of ritual, as the ultimate challenge of literacy. In other words, ritual speech events, if not present, are always there in the future for many secondary students.

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The findings of the study suggest that the structure of writing at various competency levels may result more from the interaction of speech events than from a single, dominant speech event. In such a view, the structure of a writing sample is in its speech event layers and their relationships. However, speech event dominance is important. Students do shift their speech event markers when they shift from essays to letters. Finally, the scoring scale does appear to reflect the developmental sequence -- from encoding to conversations and presentations.

Last, speech events might be a useful way of understanding the contradictory demands of writing for many students. First, there is the rule of expressibility (express yourself) and the rule of clarity (be clear). The rule of expressibility is followed in conversations, but the rule of clarity is followed in presentations. Approximations (sort of) are sociable but not presentational. Second, there is the rule of readability (make it easy to read) and the rule of efficiency (omit needless words). Again, the former is related to conversational rules and the latter to presentations. For the student trapped in encoding problems, these rules belong to another world. Studies such as this one may provide a useful reminder that the writing problem is not the same for all students. For some the problem is developing conversational fluency, for othe presentational focus and for still others ritual form.

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TABLE 1

Time	For.	Task	Grade	Sample #	Hypo Tested
Fall 1977	1,100	Essay	4-12	82	Hypo II
Spring 1978	1,200	Essay	4-12	97	Hypo II
Spring 1980	3,819	Essay	9	116	Hypo I
Spring 1981	4,500	Essay	9	111	Hypo I
Spring 1980	4,100	Letter	9	99	Hypo III
Spring 1981	4,500	Letter	9	102	Hypo III

TABLE 3

Does the Scheffe Test Show Pairs of Score Groups Significantly
Different in the Frequency of Conversational Markers in Letters? +

Combined					
Group 1	29	.8020	.6709	.1246	.5468 to 1.0572
Group 2	69	1.4469	.8622	.1038	1.2398 to 1.6540
Group 3	76	1.4392	.6802	.0780	1.2838 to 1.5946
Group 4	26	1.6354	.8258	.1619	1.3018 to 1.9689
TOTAL	200	1.3750	.7984	.0565	1.2636 to 1.4863

+ Group 1 = Low; Group 4 = High

In the combined dta for letters, the following pairs of groups are significantly different in frequency of
conversational markers: 1-3, 1-2, 1-4 (at the p <.05 level or beyond).

TABLE 4

How Much Pause Time Do Different Score Groups
Allocate to Encoding Problems with Units
of Different Sizes?

Small Units X Score Categories

Group	Count	Mean	S.D.	S.E.	Minimum	Maximum
I (Low 2-4)	4	13.7346	2.3162	1.1581	12.4524	17.2045
II (Middle 6-7)	2	13.1659	2.6590	1.8802	11.2857	15.0462
III (High 9-11)	4	10.3326	1.2647	.6323	8.9333	11.9333
Total	10	12.2601	2.4304	.7686	8.9333	17.2045

Large Units X Score Categories

Group	Count	Mean	S.D.	S.E.	Minimum	Maximum
I (Low 2-4)	4	16.2321	11.3987	5.6993	6.3333	32.2619
II (Middle 6-7)	2	41.8750	16.6759	11.7917	30.0833	53.6667
III (High 9-11)	4	35.1005	5.8047	2.9024	27.2778	40.1805
Total	10	28.9080	14.5348	4.5963	6.3333	53.6667

TABLE 2

Analysis of Presentational Markers —
In Essays from 1980 to 1981

Combined					
1 (low)	44	1.4558	.7602	.1146	1.2247 to 1.6869
2	78	3.3831	2.5855	.2927	2.8001 to 3.9660
3	65.	3.9951	1.8188	.2256	3.5445 to 4.4458
4 (high)	40	8.2515	4.3343	.6853	6.8653 to 9.6377
TOTAL	227	4.0426	3.3399	.2217	3.6058 to 4.4794

In the combined data for essays, the following pairs of groups show significant differences in the frequency of presentational markers: 1-2, 1-3, 1-4, 2-4, and 3-4 (at the p<.05 level or beyond).

Analysis of Conversational Markers in Essays —
From 1980 and 1981

Combined					
Group 1	44	.5073	.5582	.0842	.3376 to .6770
Group 2	78	*.5166	.9486	.1074	.3027 to .7305
Group 3	65	.3182	.3672	.0455	.2272 to .4092
Group 4	40	*.1534	.1786	.0282	.0963 to .2105
TOTAL	227	.3940	.6551	.0435	.3083 to .4797

+ Group 1 — Low; Group 4 — High

* The two groups showing a significant difference in the combined essays are groups 2 and 4 (at the p<.05 level or beyond).

What Pairs of Score Groups Show
Significant Differences in Encoding Problems?

Scheffe: Essays for 1980 and 1981

Groups	No.	Mean	S.D.	S.E.	95% Conf. Int. for Mean
I (2-3)	44	.2066	.1101	.0166	.1731 to .2401
II (5-6)	.78	.0746	.0389	.0044	.0659 to .0834
III	65.	.0410	.0296	.0037	.0336 to .0483
IV	40	.0192	.0143	.0023	.0146 to .0237
Total	227	.0808	.0856	.0057	.0696 to .0920

The groups that show a significant differences at the p<.05 level. or beyond were 1-4, 1-3, 1-2, and 2-3.

TABLE 5

The Frequency of Inflection (Small Units)
and Punctuation Problems (Large Units)

Score Group	Inflection	Punctuation
ESSAYS		
I (2-3)	.0157	.0152
II (5-6)	.0101	.0218
III (8-9)	.0076	.0161
IV (11-12)	.0011	.0139
(n = 218)	*1-4	*0
LETTERS		
I (2-3)	.0233	.0153
II (5-6)	.0088	.0204
III (8-9)	.0025	.0109
IV (11-12)	.0005	.0080
(n = 210)	*1-4,1-3,1-2	*2-3,2-4

* Pairs of groups which show significant difference of the p<.05 level and beyond.