ABSTRACT
                A review of the literature on writing in a non-native
or second language looked at empirical research, responded to a
series of questions on the state of the art, and identified an agenda
for future research. The questions addressed these issues: how
writing ability in a non-native language (NNL) develops; whether
there are developmental stages; levels of writing skill development
that can be expected at different stages of NL learning; the
relationship between development of NNL writing ability and other NNL
skills; the relationship of the process of NNL writing and the
first-language writing process; the intersection of language skills
and composing skills; the influence of native culture and cultural
experience on NNL writing; the effects of instruction on development
of and performance in NNL writing; and the issues of affect,
including identity and voice, specific to NNL writing. Analysis led
to identification of research priorities in the areas of sampling,
methodology, and topics. Recommendations include the following:
broader age sampling and research on second languages other than
English; greater attention to diglossia, code-switching, computer
use, and affective issues; and more longitudinal studies and
attention to specificity and context of writing tasks. A 134-item
bibliography is included. (MSE)

Writing in Non-Native Language:
What We Know, What We Need to Know

Sandra R. Schecter
University of California, Berkeley

Linda A. Harklau
University of Rochester

DRAFT -- DO NOT CITE WITHOUT PERMISSION

October 1992

Writing in a Non-Native Language: What We Know, What We Need to Know[1]

Historically, second language acquisition research has focused largely on the development of spoken language. The role of literacy has been treated as a peripheral concern. Moreover, until recently, in what research existed on literacy in a non-native language, "literacy" was often construed to mean reading.

The past few years have seen explosive growth in research interest in writing in a non-native language--witness, for example, the field has recently acquired its own journal-- and we felt that this was an especially appropriate time to take stock, to get a clear picture of exactly what has been empirically documented about writing in a non-native language up to this point, and the sorts of theories and thinking that have guided our inquiry thus far.

In reviewing the literature, we sought pieces in which data were collected and analyzed.[2] We did not include articles in which the primary intent was to describe (or prescribe) pedagogical approaches or curriculum. Nor did we review work devoted exclusively to advocating a particular political or philosophical stance. That is not to say that we regarded these pieces as unimportant to the field. On the contrary, some of this work clearly has been influential in shaping the paths of inquiry that the field has taken. However, we wanted to center our review around empirical findings, thus avoiding the pitfall where the musings of scholars appearing in print become instantiated as truths in subsequent discussions.

Upon summarizing the various studies' findings, we then asked ourselves, as educators concerned with the writing abilities needed by linguistic minority students to

succeed in our schools and workplaces, to articulate an agenda of fundamental questions about non-native language writing the answers to which both researchers and practitioners believe are crucial to the academic success of linguistic minority students. We decided on the following:

1. (DEVELOPMENT) How does writing ability in a non-native language develop? Are there developmental stages? What levels of writing skill development can be expected at different stages of NNL learning/acquisition?

2. (WRITING AND OTHER LANGUAGE SKILLS) What relationship is there between the development of writing ability in a non-native language and the development of other NNL language skills?

3. (WRITING PROCESS) What do we know about the "process" of non-native language writing and its relationship to L1 writing process? Where do language skills and composing skills meet in the writing process?

4. (CULTURE) How does native culture and cultural experience influence NNL writing?

5. (EFFECTS OF INSTRUCTION) What effects can instruction have on development of and performance in NNL writing?

6. (AFFECT) What issues of affect--including identity and voice--are specific to NNL writing?

As a preface to the summary of findings that follows, we would mention here that as the work of synthesizing the research and compiling a resource for colleagues progressed, we found that although a great deal of research attention has been addressed to some topics in the field, such as errors appearing in the texts of college-level non-native writers, researchers have not always addressed the educational issues that we have identified as important as extensively as we would have hoped. In addition, many of the studies we encountered appeared unguided by any larger vision of what we needed to know about non-native language writers, and what we needed to do to pursue that knowledge.[3] In a sense, then, this paper is as much about identifying a future research agenda for the field as it is a summary of the assembled research.

We now address each of our questions in turn.

THE DEVELOPMENT OF NON-NATIVE LANGUAGE WRITING ABILITY

Extant studies on non-native language writing proficiency development are overwhelmingly cross-sectional in approach. Most have focused on syntactic features of texts produced by non-native writers.[4] Implicit in this methodology is the assumption that comparison of texts produced by highly and poorly rated non-native writers will reveal a linear continuum of text features which might be associated with advancing language development. Such studies typically utilized text measures such as T-unit and other

syntactic analyses; cohesive devices and other discourse measures analyses; and error analysis.[5]

Researchers have used T-unit analysis to compare non-native writers at varying proficiency levels on the assumption that the measures can provide the same information on development when used with non-native writers as they do when used with native writers. T-unit length has been shown to increase in step with other measures of proficiency (Kameen, 1980; Sinclair, 1983; Sharma, 1979), although in some studies the correlation has been statistically insignificant (Anakasiri, 1986; Gilbert, 1976; Larsen-Freeman & Strom, 1977). Other measures which have been found to increase in step with proficiency are: words per sentence (Kameen, 1980; Lim, 1982); words per clause (Kameen, 1980); amounts of preposed adjectives (Sharma, 1979); adjective clauses (Gilbert, 1976); and passives (Kameen 1980). Generally, research using these methods tends to support the notion that as non-native writers gain in proficiency they tend to pack more information into longer sentences using reduced clauses (Kameen, 1980; Jacobs, 1981).

Because non-native writers tend to make more errors and different kinds of errors than native writers, some researchers believe that a measure that factors in error is likely to yield a better approximation of the developmental path of non-native writers than T-unit analysis alone (Bardovi-Harlig & Bofman, 1989). Accordingly, Arthur (1980), Larsen-Freeman and Strom (1977), Lim (1982), Sharma (1979), and Scott and Tucker (1974) found that measures of the proportions of "error-free" T-units in texts correlate positively with proficiency measures.

Other researchers (Fein, 1980; Ostler, 1987; Gilbert, 1976) have incorporated a native

language writer cohort into T-unit analysis research designs, on the assumption that native language writing is the target of non-native language writing development. This line has proven unproductive; no evidence has been found to show a linear progression by nonnative language writers toward native-like writing. (Perhaps native language writers themselves vary considerably in their control of written syntax, especially in the college-level academic prose most commonly sampled by researchers following this line of investigation?) Cross-sectional studies employing Halliday's and Hasan's (1976) taxonomy of cohesive devices have found no clear developmental trend. However, two studies (Lindeberg, 1985; Woodley, 1985) utilizing variants of propositional analysis suggest that more proficient writers are better than less proficient writers at linking new information to old information in order to delineate and maintain a theme.

Cross-sectional studies of errors by proficiency level also reveal that as they become more proficient, L2 writers make proportionally fewer grammar errors and sentence-level errors, while the proportion of word choice errors and word or constituent level errors increases (Linnarud, 1975; Anakasiri, 1986). Researchers have also found cross-sectional trends towards improvement in spelling (Arthur, 1980; Larsen-Freeman & Strom, 1977; Linnarud, 1975), punctuation (Arthur, 1980), and lexical variety (Arthur, 1980; Larsen-Freeman & Strom, 1977).

Since the vast majority of studies claiming a developmental trend in the texts produced by adult L2 writers are cross-sectional, we have no data on developmental stages, although several researchers (Acuna, 1985; Brooks, 1985; Elliott, 1986; Larsen-Freeman & Strom, 1977) have stated that a developmental stages hypothesis could account for their

findings. As Hakuta (1977) and Huebner (1979) have found for speaking, patterns of writing development traced longitudinally may look very different from cross-sectional data, and may reveal different dynamics.

While college-educated adults are the age group overwhelmingly most studied in terms of development, there is also a growing body of literature exploring bilingual literacy acquisition in children. Often influenced by contextualized, ethnographic approaches used in investigating L1 literacy development (see Graves', 1983 and Calkins', 1983 descriptions of writing classrooms),[6] these studies have found that writing development proceeds in much the same way for bilingual children as it does for monolingual children (Edelsky, 1982a, 1982b, 1983; Edelsky & Jilbert, 1985; Halsall, 1985; Quintero, 1984; Seda & Abramson, 1989; Urzua, 1987).[7] Two additional classroom studies (Piper, 1989; Van Haalen, 1990) find evidence that bilingual children use even "more advanced" composing strategies than their monolingual peers.

Children tend not to code-switch when writing in a non-native language (Edelsky & Jilbert, 1985; Hadaway & Cukor-Avila, 1986), and when they do code-switch, switching is almost entirely intrasentential (Edelsky, 1982a). Furthermore, code-switching can be a deliberate composing strategy, as opposed to the inadvertent product of interference it was hypothesized to be two to three decades ago (cf. Ng, 1966).

What happens to native language literacy as writing proficiency in a non-native language develops? Several studies have found that second language instruction can influence spelling (Staczek & Aid, 1981; Fagan & Eagan, 1990) and punctuation (Swain, 1975) in first language writing, although since these studies were not longitudinal, we have no way

of knowing how permanent these realignments are. In these studies, moreover, native and target languages shared the same script, and we have no leads on the potential influence of a new writing system on first language composing behavior. Further, we know little about the ways in which writing or learning to write in English, say, might constitute a different order of task for a Chinese speaker, say, than it might for a francophone. Arthur's (1980) study suggests that diverse linguistic and cultural groups might be taking different developmental paths to L2 writing proficiency. This hypothesis would need to be pursued through research in which subjects' native varieties do not share the same scripts as their target varieties.

Stairs (1990) contends that Native American children schooled in English have increased difficulty with idiomatic use of their first language as their English writing becomes more fluent. Conversely, the first language writing skills of non-stigmatized bilingual groups, such as anglophone Canadians educated in French immersion programs, tend to fare better, with either no evidence of impairment due to learning of literacy in a second language (Swain & Lapkin, 1981), or evidence of native-language writing skills surpassing those of monolingual, English-language educated peers (Swain, 1975). On the whole, classroom studies of bilingual literacy acquisition in children confirm the importance of the wider sociolinguistic context of language development, since sociocultural factors appear to be stronger determinants of how well learners will fare in first and second language writing proficiency development than developmental factors such as age.

What can the research tell us about writing development in younger versus older learners? Wald (1987) compared English L2 writing skills of Spanish L1 speakers who had

enrolled in English-speaking schools before first grade with those of learners who had enrolled in English-speaking schools in junior high or later. His findings indicate that strategies used by late learners in acquiring English literacy were not of the same order as those used by children. Late learners, for example, were capable of differentiating to a greater extent between appropriate spoken and written language register.

WRITING AND OTHER LANGUAGE SKILLS

Writing and Speaking

What relationship is there between the development of writing ability in a non-native language and the development of other NNL language skills? Researchers have found little relationship between writing and speaking <u>ability</u> in a non-native language. Several correlative studies of proficiency levels find little correspondence (Brooks, 1985; Florez & Hadaway, 1987). However, clear differences have been found between the spoken and written language <u>production</u> of L2 learners (Anderson, 1980; Soter, 1988; Vann, 1980; Wald, 1987). Anderson found that cohesive devices were used more in speaking than they were in writing, while Vann and Wald found that written texts of non-native writers display more complex syntax than their speech. Vann also found that written narratives of second language learners were generally shorter than their oral narratives. And Edelsky (1982a, 1982b), working with children, found that code-switching occurred less frequently in writing than in speaking.

With respect to error in speaking versus writing, Abraham (1981) found that learners made fewer errors in the production of written language than in spoken language, which she

took as evidence of the role of monitoring hypothesized by Krashen (1981) and Bialystock (1981). However, Scott and Tucker (1974) found that learners made more errors in spoken production than they did in written production in one sample, but not in the other. Some types of errors such as preposition errors were made with equal frequency in either mode, and article errors were actually more frequent in writing than in speaking.

As far as a sequential relationship is concerned, there is no necessary reason a second language learner need achieve a certain level of oral fluency before they can productively learn to write in that variety, according to Urzua (1987), Hudelson (1989), and Edelsky and Jilbert (1985).

Overall, the apparent lack of relationship between writing and speaking has led Soter (1988) to claim that mastering the rhetorical conventions of writing of a non-native language is, for non-native speakers, analogous to learning a third "language." Although this may be overstating the case, differences noted between written and spoken language have been characterized as a register difference by linguists (Chafe, 1985; Tannen, 1985). Thus, learning to write in a variety one has learned to speak in entails more than merely learning a set of new skills; it entails learning a different subset of language features distinctive to written communication. Even young children such as those in Edelsky's (1982b) work have been reported to be sensitive to such differences. Adults learning a non-native language, however, may not always be able to distinguish between appropriate register features of spoken and written language, which could explain why, for example, one might find spoken register features in the writing of L1 Arabic speakers (Atari, 1984; however, a "writer-based prose" hypothesis might also be advanced to explain these findings).

Writing and Reading

Reading ability in a non-native language is correlated with non-native language writing proficiency (Acuna, 1985; Carson et al, 1990; Hague, 1984; Pimsarn, 1986), although the strength of the reported correlation varies. It would be extremely useful, however, to have more research specifying the cognitive dimensions of the link, or explaining how language learned through one skill affects proficiency in the other. (See Eisterhold, 1990, for a discussion of this issue.) Extrapolating from first language research, Krashen (1984) hypothesized that L2 writing ability is developed primarily through extensive reading, although we could find only one empirical investigation of this hypothesis, in which findings were inconclusive (Burger, 1989). Galvan (1985), however, did find that learners perceived their L2 reading skills to be superior to their L2 writing skills.

WRITING PROCESS

What do we know about the "process" of non-native language writing and its relationship to L1 writing process?[8] Where do language skills and composing skills meet in the writing process? We have reason to believe that many aspects of the L1 and L2 composing process are similar. Writers appear to use the same recursive, nonlinear composing strategies (Zamel, 1983), planning strategies (Jones & Tetroe, 1987), and revising strategies (Hall, 1990; Urzua, 1987; Samway, 1987) when writing in native and non-native languages, although the findings diverge concerning whether the patterns of pausing are the same or different (compare Jones, 1985, with Fagan & Eagan, 1990).

Individuals appear to vary in the ratios of native to target language used while

composing, as evidenced in both think-aloud protocols and drafts (Chelala, 1981; Kelly, 1986; Martin-Betancourt, 1986). Researchers disagree about the positive versus negative effects of use of the native variety while composing in a second language. Zamel (1982) reported that writers disliked resorting to translation, and Chelala found that use of the native language during composing caused interference errors. Conversely, Friedlander (1990) found that students benefitted from planning in the language in which topic knowledge had been acquired, even if that meant that they would plan in one language and write in another.

How do non-native writers incorporate source materials into their texts? This question is of great practical importance to educators and students in higher education, since college-level students do a great deal of writing from sources and responding to texts (Brooks, 1989). In fact, some L2 educators argue that a major goal of non-native writing instruction at this level is to socialize students into academic discourse communities (Horowitz, 1986; but see Raimes, 1985 for a dissenting view).

Non-native writers reportedly incorporate more of source materials than do native writers, but are less able to integrate the material into their texts (Campbell, 1990), and may distort the meaning of the original (Johns & Mayes, 1990). As writers gain in proficiency, however, they are better able to integrate information in writing (Cumming & others, 1989), and copy less verbatim from the original (Johns & Mayes, 1990). Non-native writers have also been found to paraphrase differently than native writers, incorporating more points from the original text than native writers, but including less detail about each point (Connor & McCagg, 1987).

Non-native writers encounter particular difficulty due to lack of automaticity in L2

vocabulary (Galvan, 1985; Martin-Betancourt, 1986), grammar (Galvan, 1985), and reading (Chelala, 1981). Writers develop adaptive strategies to deal with these problems; for example, they postpone consideration of exact word choice until late in the composing process, and avoid the use of problematic grammatical structures. Cumming (1990) argues that L2 word and cross-linguistic equivalent searches can be viewed in a positive light--as a learner-prompted means of integrating L1 and L2 knowledge (rather than an added burden or constraint on the writer).

In some ways, however, lack of automaticity has negative consequences for the composing processes of non-native language writers. Studies have documented instances in which L2 writers abruptly stop writing to attend to lexical and grammatical concerns (Galvan, 1985), edit less and exhibit less sense of audience than they do in their native language (Fagan & Eagan, 1990), or engage to a non-productive extent in "external regulation" of texts--to use a Vygotskian term--expending more effort on gaining control over the non-native writing task than on conveying information to readers (Rivers, 1987). As one might expect, more highly rated non-native writers are more flexible on writing tasks, less focused on the sentence level, and better able to manage the simultaneous demands on their attention while composing, than less highly rated writers (Betancourt & Phinney, 1987; Cumming, 1989; Cumming, 1990; Jones, 1983; Zamel, 1983).

Research on bilinguals writing in their first and second languages shows a correlative relationship between L1 and L2 writing skills, although this relationship can be weak (Canale, Frenette, & Belanger, 1988; Carson et al., 1990; De Jesus, 1982; Hague, 1984). Canale, Frenette, and Belanger attribute divergent findings regarding the power of the relationship

to the effects of the various measures used to assess writing, finding that the strength of the relationship varied wi*h the evaluative measure used.

One might also apply the findings of studies investigating how writing ability in one langua۶ ۱ is related to ability in the other in order to speculate on the larger questions of how writing ability and language ability are related, and how they connect and work together during the composing process.

Cummins (1981) hypothesizes that literacy-related aspects of a bilingual's proficiency in L1 and L2 are held in a "common underlying proficiency" (CUP), which is interdependent across languages. While Wald (1987) and Canale, Frenette, and Belanger (1988; Canale, Belanger, & Frenette, 1982) generally endorse the notion of CUP, they point out that Cummins based his notions largely on measures of oral and written language comprehension, and to a lesser extent, spoken language production. Researchers have scarcely begun to piece together the specific ways in which native and non-native language writing would show evidence of a common underlying proficiency.

Taking another view, Cumming (Cumming, 1989; Cumming et al., 1989) has argued that writing ability and language proficiency are complementary but separate factors in the nonnative language composing process. Cumming (1982) compared L2 writing proficiency with measures of L2 proficiency and L1 writing proficiency. While L2 writing proficiency was correlated with both level of ESL proficiency and L1 composing ability, these two factors functioned independently. Cumming and colleagues (1989) found that use of problem solving strategies while composing correlated with individuals' level of writing expertise in L1, but not with level of L2 proficiency. In previous work, Fein (1980) and Raimes (1985)

both concluded that "poor" ESL writers may not be as poor at writing skills per se as they are in language skills, lending support to the hypothesis that language skills and composing skills are separable.

Neither Cummins' theories nor Cumming and colleagues' hypothesis, however, can account for the depreciation of the overall composing capacity that has been documented in the L2 writing of non-native speakers already literate in one language (Fagan & Eagan, 1990; Galvan, 1985; Rivers, 1987). Furthermore, these hypotheses do not differentiate between managerial processes such as planning and organizing writing--which one would think would be relatively independent of language--and linguistic processes such as lexical and syntactic choice--which one would think would be tied more closely to language ability. Further research in the area of non-native language writing process might test the viability of a differentiated model of how language and writing abilities interact during the composing process.

WRITING AND CULTURAL BACKGROUND

How does native culture and cultural experience influence NNL writing? At the discourse level, the texts of non-native writers appear to differ substantially from those of native language writers. Moreover, native readers perceive these discourse differences as deficiencies in fluency or idiomatic expression that detract from texts' effectiveness as vehicles for communication.

Discourse analyses of texts of individuals writing in L1 and L2 focus at a variety of levels, ranging from intra-sentential features, to paragraph organization, to the broad

rhetorical flow of arguments. At the level of intra-sentential features, Kaplan (1978) found that non-native language writers of English varied significantly from native language writers of English in the syntactic patterns they chose when asked to complete sentences, a finding which he interpreted as evidence that non-native language writers use different sentence-level strategies from native language writers to establish and sustain focus on a topic. In another study of intra-sentential features, Rittershofer (1987) found that Japanese L1 students favored grammatical devices that exist in both Japanese and English (e.g., demonstratives) when writing in English, sometimes at the expense of more idiomatic or appropriate English devices which do not exist in Japanese (e.g., pronominals).

At a broader level of analysis, Norment (1982) employed Halliday and Hasan's (1976) taxonomy of cohesive devices to analyze L2 writers' texts. Spanish L1, Chinese L1, and English L1 speakers' writing in English varied, suggesting L1 linguistic or cultural influence on how cohesion and discourse structure are achieved. Two further studies using the Halliday/Hasan taxonomy indicate that both Spanish L1 (Derrick-Mescua & Gmuca, 1985) and Arabic L1 (Atari, 1984; Derrick-Mescua & Gmuca, 1985) writers favor the transfer of an L1 strategy of employing parallelism and coordination to maintain cohesion in their texts over the strategy of subordination typically used in English texts.

At the propositional level, Norment (1982), employing Milic's logical categories to investigate whether text organization of native and non-native writers differed, found differences in the organizational patterns of texts of English, Chinese, and Spanish writers writing in English. Santiago (1970), again using Milic's logical categories, found substantial similarities in the organizational links of the texts by Spanish-speaking subjects writing in

both English and Spanish.

At a yet more "macro" discourse organizational level, Achiba and Kuromiya (1983) found evidence for Kaplan's (1966) "oriental," or indirect, inductive style in compositions written in English by Japanese native speakers. Rittershofer (1987) found evidence that Japanese writers transferred an ancient Japanese prose pattern (ki-sho-ten-ketsu) into English prose. Nishimura (1986) found significant differences in how American English native speakers, intermediate, and advanced Japanese L1 students working with English text, and intermediate and advanced Japanese L1 students working with text in Japanese, reorganized a prose passage, with the two groups of lower ESL proficiency Japanese students reorganizing the English and Japanese texts in the same order; conversely, the reorganizations of the more advanced students were different in English and Japanese, providing evidence for a developmental trend--that transfer of rhetorical organization patterns does indeed occur, but its effects weaken with proficiency. However, Ricento (1987) found that English monolinguals and Japanese L1/English L2 bilinguals performed similarly in reordering English translations of Japanese texts that had been scrambled.

Houghton and Hoey (1983) have pointed out that there are text features such as content and style which do not contribute to the discourse structure of a text but which are nevertheless necessary to master in order to create the perception of natural discourse. Although content and stylistic elements of texts of non-native language writers have proven generally resistant to systematic text analyses, findings on such elements nonetheless are noted frequently in the research literature. Evidence thus far supports the hypothesis that cultural background does influence the content selected by writers as appropriate for their

texts. McKay (1989), coining the phrase "written discourse accent," asserts that non-native writers of English approach topics with a "different set of cultural assumptions and role expectations" than native writers. Native and non-native writers may differ, for example, in the amount of emphasis placed on emotional and mental processes, as opposed to physical and "objective" information (Dennett, 1990; Dicker, 1986; Soter, 1988), in the chain of events presented as logical causation (Hu, Brown, & Brown, 1982), and in the extent of figurative language, proverbs, and didactic or moralistic statements included as part of conclusions of texts (Achiba & Kuromiya, 1983; Indrasuta, 1988; McKay, 1989; Ostler, 1987).

English L2 writers have been found to employ genres different than those employed by native English writers to convey certain kinds of information, using narrative rather than expository or descriptive prose to elaborate and illustrate points in a college essay, for example (Dicker, 1986; Atari, 1984). They may also have expectations different from those of native speakers concerning the functions of specific genres, for example, requiring narratives to teach as well as entertain (Indrasuta, 1988). Differences between native and non-native language writers also have been noted with regard to transitions and "contextualizing devices" (e.g., "This story is about...") used to orient readers (Atari, 1984; Connor & McCagg, 1987; Frestedt & Sanchez, 1980; Ostler, 1987; Scarcella, 1984). For example, Arabic L1 writers have been reported by both Atari and Ostler to begin essays with a global statement that may be judged by anglophone readers as irrelevant to the main thesis of the text.

How do researchers explain these differences in discourse and rhetorical organization? In keeping with the argument first presented in Kaplan's (1966) early "contrastive rhetoric"

hypothesis, many researchers attribute such phenomena to transfer from first language linguistic and cultural norms for written expression (cf. Connor & Kaplan, 1987; Purves, 1988). There are dissenters, however. In particular, Mohan and Lo (1985) argue that previous training in writing is an additional, and perhaps more powerful factor in non-native language writers' patterns of rhetorical organization. Specifically, students in their study attributed difficulty in organizing L2 compositions to a lack of prior formal training in writing. Liebman-Kline (1986), who also surveyed non-native writers of English about their background and previous training in writing, reported findings similar to those of Mohan and Lo, and asserted that much of the impact claimed for L1 culture on L2 rhetoric may in fact be attributable to previous formal training in writing.

Our own conclusion, after reviewing the literature on the effects of cultural influence and prior training, is that the two are virtually impossible to isolate, and that it may well be that we will not find a valid means of testing related hypotheses empirically. Nonetheless, it would be useful to have further qualitative documentation in a variety of formats and from a variety of perspectives--students', teachers', basic researchers'--of the ways in which diverse aspects of non-native writers' personal histories impact their writing performance in their non-native language. We likely will learn more from the syntheses that ensue from the overlapping of these multiple perspectives than we have from studies that attempt to insulate important variables from the "contaminating effects" of their real world relationship.

EFFECTS OF INSTRUCTION

What effects can instruction have on development of and performance in NNL

writing? We emphasize here that the synthesis reviewed only empirical work written in the idiom of research report. The effect of instruction, however, more than any other issue pertaining to non-native language writing, is explored through other forms of investigation, forms which may not be labelled or packaged as research per se--curriculum guides, programmatic prescriptions, or teacher research, to give several examples—but which are nevertheless clearly relevant to instructional issues. Those wishing a broader view, then, than that provided by empirical findings of academic research are directed to these additional sources.

Response to student writing and its effects on students' revisions has been a major area of investigation on writing instruction. In studies of instructor feedback on the writing of L2 learners, Cohen (1987) and Cohen and Cavalcanti (1990) found that college instructors' comments consisted mostly of single words, and comments on grammar and mechanics. Also, in verbal protocols, teachers praised their students' strengths; however, most of the written comments that students eventually saw focused on problems.

A number of studies have investigated the effects of feedback from instructors. Error correction is a common concern in these studies. On the whole, non-native writers appear unable to correct many of their errors even when teachers identify them in the text (Chappel & Rodby, 1982; Chandrasegaran, 1986). Moreover, explicitness of feedback does not necessarily have any effect on the amount of errors left in revised texts or made in future work (Robb, Ross, & Shortreed, 1986; Ross, Robb, & Shortreed, 1988) (but see Fathman & Whalley, 1990 for conflicting results). However, writers reportedly have an easier time identifying errors in their texts than stylistic problems such as register inconsistency

(Chandrasegaran, 1986). Feedback on grammar does not seem to hinder students' writing fluency (Fathman & Whalley, 1990; Robb, Ross, & Shortreed, 1986).

There are many aspects of revision which cannot be encapsulated within the notion of "error," such as those pertaining to rhetorical choice--word choice, syntactic choice, or flow of discourse--that remain unadressed in the extant research. While past studies of error have yielded important findings, investigation of a wider range of revising phenomena would be helpful in preventing the trivialization of the complex process of revision.

Several studies (Halsall, 1985; Kreeft et al., 1984; Peyton & Seyoum, 1989; Peyton et al., 1990; Seda & Abramson, 1989) have explored exemplary models of teacher response in elementary classrooms, with the objective of suggesting constructive models for response. Teachers using techniques of dialogic and interactive journal writing have been found to customize written response by matching topic order and wording used by students, and to serve as both language translator and mediator while interpreting children's drawing and writing. Response to students' writing in these studies departed from observed classroom discourse and closely resembled native-speaker/non-native speaker interaction. In addition, stud nts wrote more and with more complex syntax on topics on which both they and their teacher had exchanged personal experience and knowledge. Thus, the use of journals as a pedagogical tool would seem to be even more effective with L2 learners than in Language Arts classrooms, since this technique provides an additional mechanism for the teacher to provide learners with needed vocabulary and syntactic structures.

Studies of student attitudes towards response and revision reveal that college level writers first look at their papers for the grade, and then review compositions once or twice

(Cohen, 1987; Cohen & Cavalcanti, 1990; Radecki & Swales, 1985). Students also reportedly write more when writing for a grade, although in other respects their writing is much the same in terms of content, organization, and error (Chastain, 1990). Poorer writers reportedly pay less attention to feedback than better writers (Cohen, 1987). Most L2 writers seldom revise (Cohen, 1987; Cohen & Cavalcanti, 1990), and see revision as punitive or unnecessary (Radecki & Swales, 1985). Revisions tend to be at the surface level, and do not affect the basic meaning of the original text (Cohen, 1987; Hall, 1990). The authors differ in their interpretations of the research findings concerning students' attitudes towards response and revision: Harklau concludes that students would benefit from more explicit instruction on how to use instructor response to edit their work. Schecter believes that the problem is more systemic—that college-level ESL students devalue composition instruction, seeing this as a form of remedial coaching, rather than as academic subject matter on equal footing with history, or sociology, say, and thus may view successive revisions as a waste of time.

In research specifically on topic selection and pre-writing activities, non-native writers have been found to vary from native writers in the essay prompts and topics they prefer (Chiste & O'Shea, 1988; Leonhardt, 1985). One study (Liebman-Kline, 1987) indicated that L2 writers find visual techniques such as outlining a more useful pre-writing activity than more verbally-demanding activities such as open-ended exploratory writing or answering a set of questions on a topic, and another (Dennett, 1990) found that while native language writers may use writing as a means of discovery, non-native language writers did not. Hall (1990) found that writers were much more likely to make pre-draft plans or notes in L2 writing than in L1; however, they seldom referred to these plans during writing, seeming

instead to use them as rehearsals for writing. Another study found that the best writers in the sample spent the most time on pre-writing (Dennett, 1990).

A number of studies in the area of instruction and L2 writing focus on nature and effect of writing task. Edelsky (1983) found that the segmentation and punctuation patterns of Spanish L1/English L2 bilingual children were influenced by the nature and context of writing tasks. Jones and Tetroe (1987) found that when the final sentence of a composition was supplied to non-native language writers, students' planning changed and improved in both L1 and L2 composing. Kroll (1990) found that, overall, ESL students tended to make the same sorts of errors when writing under time constraints in the classroom, or when doing take-home assignments, although there was a tendency (not statistically significant) to make fewer errors and a narrower range of errors, as well as to achieve higher holistic scores on essays written outside of class. Learners in Zamel's (1982) study of writing process reported that they preferred an interval of time for essay-writing that would allow them the opportunity to put their writing aside for a while and come back to it later with further ideas. Brooks (1985) found a positive correlation between time spent on writing at one sitting and ratings of writing proficiency.

On the effects of genre on the quality of non-native writers' texts, the evidence is divided. Norment (1982) found that non-native writers' discourse organization or use of cohesive devices did not change substantially when they were asked to write narrative versus expository essays. Sinclair (1983), on the other hand, found that ESL students employed longer T-units in writing expository essays than they did in writing within argumentative, descriptive, or narrative genres. Likewise, Siu (1986) found that EFL students

used longer T-units, longer clauses, and more clauses per T-unit in argumentative texts than in narrative texts.

In research focusing on the effects of instructor characteristics, Franklin (1984) compared a Hispanic and Anglo teacher in two first grade bilingual classrooms. Both teachers emphasized English literacy, viewing Spanish literacy primarily as a means to that end, although the Hispanic teacher used more Spanish in the classroom. One teacher used a sight-word approach to reading and viewed reading as a precursor to writing, while the other used a phonics approach to reading and incorporated many writing opportunities into literacy instruction. Teaching strategies used by either teacher were found not optimally effective by the researcher, in that they failed to draw on children's background knowledge about the forms and functions of literacy, or to allow children to use literacy as a communicative tool.

We found only three studies exploring instructional issues related to L2 writers and computers (Benesch, 1987; Li, K.N.Y., 1990; Van Haalen, 1990). K.N.Y. Li found that, on the average, computer written essays were significantly longer than hand-written essays and received significantly higher holistic ratings. Benesch, however, reported that utilizations of computers on the part of three learners studied were highly individualized, with one student revising substantially more than the other learners, and a second, conversely, appearing to use the computer as a high tech typewriter.

Noteworthy for its absence in the research literature on instruction is close documentation of the depth and substance of the writing that students actually do in L2 classrooms. Such basic descriptive documentation is a prerequisite for interpreting numerical

findings on proportion of time allocated to writing activity in classrooms. Of what use are percentages, for example, if we cannot be confident that what _we_ would call "writing" (as opposed to "copying" or "filling in blanks") is actually taking place in the various classrooms observed? Moreover, without this descriptive information, it is difficult to make the case for research on the effects of instruction on non-native language writing development and performance. Surely we do not wish to support instructional strategies that promote activities we deem wasteful no matter how effective these strategies prove. Thus, we need to be able to identify the diverse kinds of writing tasks that students actually perform in classrooms in order to be in a position to make conscientious recommendations regarding whether investing energy in creating classroom environments that promote more of the same activity appears a worthwhile enterprise.

NON-NATIVE WRITING AND AFFECT

What issues of affect--including identity and voice--are specific to NNL writing?[9] Although we are aware of the importance which second language theorists such as Krashen (1981) and Schumann (1978) attach to affective factors in acquiring a language, research on affective factors is scant, and addresses primarily the issue of writing anxiety in L2 students.

Learners' attitudes concerning writing in a non-native language writing appear to be linked more closely to instructional experience than to the psychological impact of writing in a non-native language. Castellano (1989), for example, found that an adult bilingual basic writer's attitude towards composing had been influenced by negative early literacy experiences. Zamel (1990) linked student attitude to specific instructors' attitudes and

teaching styles. Learners in her study felt more comfortable and expressed more satisfaction with instructors who acted as facilitator and collaborator than with instructors who believed that their role was to transmit their own expert knowledge to students.

In self-report surveys of writing anxiety based on protocols previously applied to L1 writers, Spanish L1/English L2 students enrolled in a Spanish L1 writing course reported higher anxiety levels about writing than did students enrolled in an ESL composition course (Betancourt & Phinney, 1987). The authors attribute this result to students' previous instructional experiences in their native language. Conversely, Fayer (1986) found that learners expressed more apprehension about writing in their non-native than in their native language, although their anxiety about L2 writing was reportedly lower if they were enrolled in a writing class. Gungle and Taylor (1989) found that a survey developed for research with L1 writers yielded few significant findings when applied to L2 writers, and speculated that L2 writers' concerns about writing may well be different from those of L1 writers.

To pursue this line, we might speculate that voice and persona are aspects of writing which would take on completely different significance when writing in a non-native language than in a native language. Such issues have as yet received little attention from the research community, with only a couple of ethnographic studies of bilingual children's writing (Edelsky, 1982b; Urzua, 1987) even touching on the topic. (In particular, Urzua found that bilingual writers' sense of voice was strengthened when they took control of their own writing topics.) We find more information concerning the subjective reality of how non-native writers grapple with issues of voice and identity in the writing of individual non-native writers in literary sources. Such sources may provide a rich vein of starting

hypotheses for empirical investigation and documentation of such questions as: How much can be revealed about one's essential personality or character in non-native language writing? To what extent and in what ways do writers experience a constriction of their sense of selfhood? Or perhaps one's "self" takes on different nuances when writing in different languages? How is it that some non-native language writers report experiencing less anxiety about writing in a non-native language than do writers who are composing in their native language (Betancourt & Phinney, 1987)? Could it be that they regard non-native language writing more as an index of proficiency and less as a conveyor of individual identity than native-language writing? Although one can anticipate the methodological headaches that would accompany this line of investigation, we nevertheless believe that the real-life imperatives for elucidating issues of voice in non-native language writing outweigh the inconveniences. We would suggest that we have reached a point of diminishing returns with survey findings which fail to elucidate non-native writers' unique issues of identity and affect. It is time to provide non-native speakers with opportunities to define their own issues of identity and affect with respect to L2 writing, listen carefully to what they have to say, and try to communicate accurately what we hear.

DISCUSSION

As we noted previously, as educators we are especially concerned with writing instruction provided to linguistic minority students in our schools. Our vision of research priorities follows directly from these concerns. Grouping of points under the headings sample, method, and topic, identify what we feel are the crucial gaps in our knowledge base.

Sample groups: Who is studied

Important to bear in mind is that the responses yielded by the research to the questions that we have posed are skewed in some ways because university level students comprise the overwhelming majority of subjects of non-native language writing studies (some two thirds of the corpus). Not surprisingly, then, in discussions of the implications of research findings on writing in a non-native language, we often encounter the tacit assumption that literate adults learning to write in a non-native language are representative of all non-native language writers' experience.[10] Adults learning literacy skills for the first time in a non-native language, preschool children, and child-en in later elementary secondary school, are all sample groups which merit more systematic or purposeful study.

Similarly, with respect to languages studied, more data that describe writing development and process phenomena in target languages other than English would be helpful in both testing hypotheses related to the developmental path of learners and in exploring issues of generalizability in writing process research findings.[11]

Topics: What is studied

School contexts are only part of the ecology of written language use in a bilingual community. Information acquired through naturalistic study on the uses of written languages by bilinguals in a variety of diglossic contexts—home, school, community, government—is an important, yet underdeveloped source of information for educators about the written text environment experienced in the daily lives of linguistic minority children. In this vein, we find McLaughlin's (1985) documentation of how members of a Navajo

community divided their use of English and Navajo writ*en language to be a model of inquiry which we would welcome seeing replicated in other contexts.

Also, given the current emphasis in leading segments of the North American educator community on instructional technology, we could use more descriptive research on how learners and teachers utilize computers in non-native language writing, and more hypothesis-generating on how they _might_ be used to foster growth in ability. Here descriptions of exemplary pedagogy would be both timely and useful.

Finally, we still know almost nothing--and need to inform ourselves seriously--about the affective dimensions of writing in a non-native language, especially those dimensions that relate to writers' issues of voice and identity.

Methodological priorities: How it is studied

The vast majority of studies of non-native language writing thus far have utilized a single, one-time sample. Longitudinal data on the development of L2 writing in individuals likely will provide a different perspective on issues such as developmental stage hypotheses, and are therefore important to obtain.

Also important, especially in research about instruction, is increased specificity about the writing tasks that non-native language writers are asked to perform and about the contextual aspects of text production for these tasks.

We are confident that as research on writing in a non-native language comes of age-- and our knowledge base continues to grow and develop--inevitably the field will hold its

researchers accountable to high standards with regard to specificity of contextual parameters and systematicity of design and execution. We hope, too, that concurrent with this growing concern with methodological rigor, the issues that researchers choose to identify as significant will be framed increasingly in terms of both their theoretical generativity and the practical and humane imperatives of their undertaking.

Endnotes

1. The research report herein was supported by the National Center for the Study of Writing and Literacy under the Educational Research and Development Center Program (Grant No. R117G10036) as administered by the Office of Educational Research and Improvement U.S. Department of Education. However, the findings and opinions expressed in this report do not necessarily reflect the position or policies of the Office of Educational Research and Improvement or the U.S. Department of Education, and no official endorsement should be inferred.

2. In compiling pieces for review, we utilized four sources: *Linguistics and Language Behavior Abstracts*, ERIC, *Dissertation Abstracts International*, and bibliographies of pieces reviewed. Where the same research was reported both in a master's thesis or doctoral dissertation and in a subsequently published article, to avoid redundance we included only the more recent published piece in the final edited version. Where the same research was discussed in both a conference presentation and a published work, we retained only the published work for the bibliography. At present, we have 173 entries recorded and abstracted on a Notebook II database, plus supporting materials such as measurement instruments used by second language writing researchers. For each entry, the database includes keywords for: age level of writer(s); native

language of writer(s); target language; research in methodology; genre of the writing studied; and the context in which writing was produced.

The annotated bibliography is available as Technical Report No. 51 from the National Center for the Study of Writing and Literacy, Graduate School of Education, 5513 Tolman Hall, University of California, Berkeley, CA 94720.

3. A substantial number of studies we reviewed, for example, documented article usage errors among various groups of second language writers of English. While initial inquiries in this area may have been useful, we question what purpose further studies would serve, and furthermore, what these studies reveal about the level at which researchers are conceptualizing the field.

4. Studies of syntactic development began to appear in the mid-70s, inspired by the work of Hunt (1965) and Loban (1963) on development among L1 writers. In many cases, the goal was to tease out syntactic features that were the best indicators of a non-native language writer's overall level of proficiency or development. Later work also incorporated Halliday and Hasan's (1976) framework for the analysis of cohesive devices.

5. Error analyses were especially prevalent in the early years of research specifically on writing in a non-native language, first appearing in the mid-70s.

6. Edelsky's (1982a & 1982b) study of emergent literacy in bilingual children marked the first major use of qualitative methods in the study of L2 writing.

7. One should, however, exercise caution in suggesting that there is any single developmental path which can be considered typical or normative for L1 emergent literacy. While developmental sequences have been demonstrated for syntax and spelling, claims regarding other learning sequences, such as genre acquisition, are contested.

8. The first calls for research on the second language "writing process" appeared in print in the late 70's. Research in this vein followed in the early 80's, usually based on the work of first language researchers such as Emig (1971) and Flower and Hayes (1977; 1981a; 1981b).

9. We define "voice" as characteristic attitude of writer toward reader and subject, and distinguish this meaning from that of "style", referring to the outer manifestations of rhetorical choice.

10. We also note that in many of the research reports country of origin of sample groups was unspecified. Thus, we encounter an additional tacit assumption that literate adults learning to write in a non-native language are a uniform population.

11. Part of the explanation for the paucity may be an artifact of how we established our corpus, working from English and French sources; however, since English is the international language of research, one would expect that if there were a body of knowledge in this area, some of it would have turned up in searches.

REFERENCES

Abraham, R. G. (1981). The relationship of cognitive style to the use of grammatical rules by Spanish-speaking ESL students in editing written English (Doctoral dissertation, University of Illinois, Champaign-Urbana, 1981). *Dissertation Abstracts International, 42*, 3892A.

Achiba, M., & Kuromiya, Y. (1983). Rhetorical patterns extant in the English compositions of Japanese students. *JALT Journal, 5*, 1-13.

Acuna, D. (1985). English as a second language development: An investigation into the relationship of the students' reading comprehension and writing ability at the college level in Puerto Rico (Doctoral dissertation, New York University, 1985). *Dissertation Abstracts International, 47*, 1201A.

Anakasiri, S. (1986). Indicators of quality in second language written communication (Doctoral dissertation, Southern Illinois University, 1986). *Dissertation Abstracts International, 48*, 583A.

Anderson, P. L. (1980). *Cohesion as an index for written and oral composition of ESL learners*. Paper presented at the Annual Meeting of the Midwest Modern Language Association, Minneapolis, MN. (ERIC Document Reproduction Service No. ED 198 529).

Arthur, B. (1980). Short-term changes in EFL composition skills. In C. A. Yorio & J. Schachter (Ed.), *On TESOL '79: Focus on the learner* (pp. 330-342). Washington, DC: Teachers of English to Speakers of Other Languages.

Atari, O. (1984). *Oral style strategies in EFL written discourse: Implications for teaching college composition*. Paper presented at the Third Annual Linguistics Conference, Irbid, Jordan. (ERIC Document Reproduction Service No. ED 271 006).

Bardovi-Harlig, K., & Bofman, T. (1989). Attainment of syntactic and morphological accuracy by advanced language learners. *Studies in Second Language Acquisition, 11* (1), 17-34.

Benesch, S. (1987). *Word processing in English as a second language: A case study of three non-native college students*. Paper presented at the Annual Meeting of the Conference on College Composition and Communication, Atlanta, GA. (ERIC Document Reproduction Service No. ED 281 383).

Betancourt, F., & Phinney, M. (1987). *Sources of writing block in bilingual writers*. (ERIC Document Reproduction Service No. ED 281 361).

Bialystok, E. (1981). The role of linguistic knowledge in second language use. *Studies in Second Language Acquisition 4* (1), 31-45.

Brooks, E. B. (1985). Case studies of the composing processes of five "unskilled" English-as-a-second-language writers (Doctoral dissertation, New York University, 1985). *Dissertation Abstracts International, 47*, 164A-165A.

Brooks, E. (1989). *Interviews with students and colleagues: What can we learn?* (ERIC Document Reproduction Service No. ED 314 958).

Burger, S. (1989). Content-based ESL in a sheltered psychology course: Input, output and outcomes. *TESL Canada Journal/Revue TESL du Canada, 6*(2), 45-59.

Calkins, L. M. (1983). Lessons from a child: On the teaching and learning of writing. Portsmouth, NH: Heinemann Educational Books.

Campbell, C. (1990). Writing with others' words: Using background reading text in academic compositions. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 211-230). Cambridge, England: Cambridge University Press.

Canale, M., Belanger, M., & Frenette, N. (1982). Analyse préliminaire de l'intéraction L1-L2 à l'écrit. In G. Alvarez, D. Huot, & R. Shein (Eds.), *Intéraction L1-L2 et stratégies d'apprentissage: Actes du 2ème colloque sur la didactique des langues* (pp. 39-53). Quebec: Centre international de recherche sur le bilingualisme.

Canale, M., Frenette, N., & Belanger, M. (1988). Evaluation of minority student writing in first and second languages. In J. Fine (Ed.), *Second language discourse: A textbook of current research* (pp. 147-165). Norwood, NJ: Ablex Publishing Corporation.

Carson, J. E., Carrell, P. L., Silberstein, S., Kroll, B., & Kuehn, P. A. (1990). Reading-writing relationships in first and second language. *TESOL Quarterly, 24*(2), 245-266.

Castellano, M. (1989). *The literacy experiences of a Chicano student: A case study of Ernesto.* Paper presented at the Conference on College Composition and Communication, Seattle, WA. (ERIC Document Reproduction Service No. ED 320 457).

Chafe, W. (1985). Linguistic differences produced by differences in speaking and writing. In D. R. Olson, N. Torrance, & A. Hildyard (Eds.), *Literacy, language, and learning. NY: Cambridge University Press.*

Chandrasegaran, A. (1986). An exploratory study of EL2 students' revision and self-correction skills. *RELC Journal, 17*(2), 26-40.

Chappel, V. A., & Rodby, J. (1982). *Verb tense and ESL composition: A discourse level approach.* Paper presented at the Annual Convention of Teachers of English to Speakers of Other Languages, Honolulu, HI. (ERIC Document Reproduction Service No. ED 219 964).

Chastain, K. (1990). Characteristics of graded and ungraded compositions. *Modern Language Journal, 74*(1), 10-14.

Chelala, S. I. (1981). The composing process of two Spanish-speakers and the coherence of their texts: A case study (Doctoral dissertation, New York University, 1981). *Dissertation Abstracts International, 42,* 5045A.

Chiste, K. B., & O'Shea, J. (1988). Patterns of question selection and writing performance of ESL students. *TESOL Quarterly, 22*(4), 681-684.

Cohen, A. D. (1987). Student processing of feedback on their compositions. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 57-69). Englewood Cliffs, NJ: Prentice/Hall International.

Cohen, A. D., & Cavalcanti, M. C. (1990). Feedback on compositions: Teacher and student verbal reports. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 155-177). Cambridge, England: Cambridge University Press.

Connor, U., & Kaplan R. B., (Eds.) (1987). *Writing across languages: Analysis of L2 text*. Reading, MA: Addison-Wesley Publishing Company, Inc.

Connor, U., & McCagg, P. (1987). A contrastive study of English expository prose paraphrases. In U. Connor & R. B. Kaplan (Eds.), *Writing across languages: Analysis of L2 texts* (pp. 73-86). Reading, MA: Addison-Wesley Publishing Company, Inc.

Cumming, A. (1990). Metalinguistic and ideational thinking in second language composing. *Written Communication*, 7(4), 482-511.

Cumming, A. (1989). Writing expertise and second language proficiency. *Language Learning*, 39 (1), 81-141.

Cumming, A., Rebuffot, J., & Ledwell, M. (1989). *Reading and summarizing challenging texts in first and second languages*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Service No. ED 306 773).

Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In *Schooling and language minority students: A theoretical framework* (pp. 3-49). Office of bilingual and bicultural education, California State Department of Education, Sacramento. Los Angeles: Evaluation, Dissemination, and Assessment Center, California State University.

De Jésus, S. (1982). The relationship between Spanish and English writing proficiency among college freshmen in Puerto Rico (Doctoral dissertation, New York University, 1982). *Dissertation Abstracts International*, 44, 692A.

Dennett, J. T. (1990). *ESL technical writing: Process and rhetorical differences*. Paper presented at the Conference on College Composition and Communication, Chicago, IL. (ERIC Document Reproduction Service No. ED 322 713).

Derrick-Mescua, M., & Gmuca, J. L. (1985). *Concepts of unity and sentence structure in Arabic, Spanish, and Malay*. Paper presented at the Conference on College Composition and Communication, Minneapolis, MN. (ERIC Document Reproduction Service No. ED 260 590).

Dicker, S. J. (1986). Abstracting in writing: A study of four ESL college students (Doctoral dissertation, Columbia University Teachers College, 1986). *Dissertation Abstracts International*, 47, 4007A.

Edelsky, C. (1982a). Writing in a bilingual program: The relation of L1 and L2 texts. *TESOL Quarterly*, 16(2), 211-228.

BEST COPY AVAILABLE

Edelsky, C. (1982b). Three myths about literacy and some counter-evidence. *Journal of the Linguistic Association of the Southwest, 5*(1-2), 66-84.

Edelsky, C. (1983). Segmentation and punctuation: Developmental data from young writers in a bilingual program. *Research in the Teaching of English, 17*(2), 135-156.

Edelsky, C., & Jilbert, K. (1985). Bilingual children and writing: Lessons for all of us. *The Volta Review, 87* (5), 57-72.

Eisterhold, J. C. (1990). Reading-writing connections: Toward a description for second language learners. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 88-101). Cambridge, England: Cambridge University Press.

Elliott, M. (1986). Nasr's development as a writer in his second language development: The first six months. *Australian Review of Applied Linguistics, 9*(2), 120-153.

Emig, J. A. (1971). *The composing process of twelfth graders.* Urbana, IL: National Council of Teachers of English.

Fagan, W. T., & Eagan, R. L. (1990). The writing behavior in French and English of grade three French immersion children. *English Quarterly, 22*(3-4), 157-168.

Fathman, A. K., & Whalley, E. (1990). Teacher response to student writing: Focus on form versus content. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 178-190). Cambridge, England: Cambridge University Press.

Fayer, J. M. (1986). *Writing apprehension among Puerto Rican university students.* Paper presented at the Annual Meeting of the Speech Communication Association, Chicago, IL. (ERIC Document Reproduction Service No. ED 280 283).

Fein, D. M. (1980). *A comparison of English and ESL compositions.* Unpublished master's thesis, University of California, Los Angeles.

Florez, V., & Hadaway, N. L. (1987). *Relationship of oral language proficiency and writing behaviors of secondary second-language learners.* Paper presented at the Southwest Regional Conference of the International Reading Association, Phoenix, AZ. (ERIC Document Reproduction Service No. ED 283 359).

Flower, L., & Hayes, J. R. (1977). Problem-solving strategies and the writing process. *College English, 39* (4), 449-61.

Flower, L. & Hayes, J. R. (1981a). A cognitive process theory of writing. *College Composition and Communication, 32,* 365-387.

Flower, L., & Hayes, J. R. (1981b). Plans that guide the composing process. In C. H. Frederiksen & J. F. Dominic (Eds.), *Writing: The nature, development and teaching of written communication: Vol 2. Writing: Process, development and communication* (pp. 39-58). Hillsdale, NJ: Erlbaum.

Franklin, E. A. (1984). A naturalistic study of literacy in bilingual classrooms (Doctoral dissertation, Indiana University, 1984). *Dissertation Abstracts International, 45,* 2463 A.

Frestedt, M., & Sanchez, M. (1980). *Navajo world-view harmony in directives for English texts.* Paper presented at the Annual Meeting of the University of Wisconsin/Milwaukee Linguistics Symposium, Milwaukee, WI. (ERIC Document Reproduction Service No. ED 193 661).

Friedlander, A. (1990). Composing in English: Effects of a first language on writing in English as a second language. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 109-125). Cambridge, England: Cambridge University Press.

Galvan, M. (1985). The writing processes of Spanish-speaking bilingual/ bicultural graduate students: An ethnographic perspective (Doctoral dissertation, Hofstra University, 1985). *Dissertation Abstracts International, 47,* 481A-482A.

Gilbert, J. W. (1976). *A comparison of syntactic development in the writing of university students, foreign and native.* Unpublished master's thesis, University of California, Los Angeles, CA.

Graves, D. H. (1983). *Writing: Teachers and children at work.* Portsmouth, NH: Heinemann Educational Books.

Gungle, B. W., & Taylor, V. (1989). Writing apprehension and second language writers. In D. M. Johnson & D. H. Roen (Eds.), *Richness in writing: Empowering ESL students* (pp. 235-248). New York: Longman, Inc.

Hadaway, N. L., & Cukor-Avila, P. (1986). *Composing in two languages: A bilingual child's response.* Paper presented at the Annual Meeting of the National Social Science Association, San Antonio, TX. (ERIC Document Reproduction Service No. ED 280 288).

Hague, S. A. (1984). *An assessment of the reading achievement of secondary students and its relationship to the readability levels of student generated writing in English and in Spanish.* (ERIC Document Reproduction Service No. ED 263 533).

Hakuta, K. (1976). A case study of a Japanese child learning English as a second language. *Language Learning, 26,* 321-351.

Hall, C. (1990). Managing the complexity of revising across languages. *TESOL Quarterly, 24* (1), 43-60.

Halliday, M. A. K., & Hasan, R. (1976). *Cohesion in English.* London: Longman.

Halsall, S. W. (1985). An ethnographic account of the composing behaviors of five young bilingual children (Doctoral dissertation, University of Florida, 1985). *Dissertation Abstracts International, 46,* 2555A.

Horowitz, D. (1986). What professors actually require: Academic tasks for the ESL classroom. *TESOL Quarterly, 20* (3), 445-462.

Houghton, D., & Hoey, M. P. (1983). Linguistics and written discourse: Contrastive rhetorics. In R. B. Kaplan, R. L. Jones, & G. R. Tucker (Eds.), *Annual Review of Applied Linguistics, III.* (pp. 2-22). Rowley, MA: Newbury House.

Hu, Z., Brown, D. F., & Brown, L. B. (1982). Some linguistic differences in the written English of Chinese and Australian students. *Language Learning and Communication, 1* (1), 39-49.

Hudelson, S. (1989). A tale of two children: Individual differences in ESL children's writing. In D. M. Johnson & D. H. Roen (Eds.), *Richness in writing: Empowering ESL students* (pp. 84-99). New York: Longman, Inc.

Huebner, T. (1979). Order of acquisition vs. dynamic paradigm: A comparison of methods in interlanguage research. *TESOL Quarterly, 13,* (1) 21-28.

Indrasuta, C. (1988). Narrative styles in the writing of Thai and American students. In A. C. ℓ ℓves (Ed.), *Writing across languages and cultures: Issues in contrastive rhetoric.* ℓpp. 206-226). Newbury Park, CA: Sage Publications, Inc.

Jacobs, S. (1981). Rhetorical information as predication. *TESOL Quarterly, 15* (3), 237-249.

Johns, A. M. & ℓℓℓes, P. (1990). An analysis of summary protocols of university ESL students. *Applied Linguistics, 11* (3), 253-271.

Jones, S (1983). Attention to rhetorical information while composing in a second language. In C. Campbell, V. Flashner, T. Hudson, & J. Lubin (Eds.), *Los Angeles Second Language Research Forum Proceedings: Vol. II.* Los Angeles, CA: UCLA, Department of English.

Jones, S. (1985). Problems with monitor use in second language composing. In M. Rose (Ed.), *When a writer can't write* (pp. 96-118). New York, NY: Guilford Press.

Jones, S., & Tetroe, J. (1987). Composing in a second language. In A. Matsuhashi (Ed.), *Writing in real time: Modeling production processes* (pp. 34-57). Norwood, NJ: Ablex.

Kameen, P. T. (1980). Syntactic skill and ESL writing quality. In C. A. Yorio & J. Schachter (Eds.), *On TESOL '79: Focus on the learner* (pp. 343-350). Washington, DC : Teachers of English to Speakers of Other Languages.

Kaplan, R. B. (1966). Cultural thought patterns in inter-cultural education. *Language Learning, 16* (1-2), 1-20.

Kaplan, R. B. (1978). *Contrastive rhetorics: Further speculations.* Paper presented at the Conference of the American Association of Applied Linguistics held in conjunction with the annual meeting of the Linguistic Society of America, Boston, MA. (ERIC Document Reproduction Service No. ED 172 582).

Kelly, P. (1986). How do ESL writers compose? *Australian Review of Applied Linguistics, 9* (2), 94-119.

Krashen, S. (1981). *Second language acquisition and second language learrning.* Oxford: Pergamon Press.

Krashen, S. (1984). *Writing, research, theory, and applications.* Oxford; New York: Pergamon Institute of English.

Kreeft, J., Shuy, R. W., Staton, J., Reed, L., & Morroy, R. (1984). *Dialogue writing: Analysis of student-teacher interactive writing in the learning of English as a second language.* (ERIC Document Reproduction Service No. ED 252 097).

Kroll, B. (1990). What does time buy? ESL student performance on home versus class compositions. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 140-154). Cambridge, England: Cambridge University Press.

Larsen-Freeman, D., & Strom, V. (1977). The construction of a second language acquisition index of development . *Language Learning, 27* (1), 123-134.

Leonhardt, N. L. (1985). *Effects of assigned versus open topics on the writing scores of university-level non-native English speakers* (Doctoral dissertation, Florida State University, 1985). Dissertation Abstracts International, 46, 2951 A.

Li, K. N. Y. (1990). *Writing with pen or computer? A study on ESL secondary school learners.* Paper presented at the Annual World Conference on Computers in Education, Sydney, Australia. (ERIC Document Reproduction Service No. ED 322 720).

Liebman-Kline, J. (1987). Teaching and researching invention: Using ethnography in ESL writing classes. *English Language Teaching Journal, 41* (2), 104-111.

Lim, H. (1982). The development of syntax in the writing of university ESL students (Doctoral dissertation, University of California, 1982). *Dissertation Abstracts International, 43*, 1133A.

Lindeberg, A. C. (1985). Cohesion, coherence patterns, and EFL essay evaluation. In N. E. Enkvist (Ed.), *Coherence and composition: A symposium* (pp. 67-92). Finland: Åbo Akademi Foundation.

Linnarud, M. (1975). *Lexis in free production: An analysis of the lexical texture of Swedish students' written work.* (ERIC Document Reproduction Service No. ED 145 702).

Loban, W. (1963). *The language of elementary school children: A study of the use and control of language and the relations among speaking, reading, writing, and listening* (Research Report No. 1). Champaign, IL: National Council of Teachers of English.

Martin-Betancourt, M. E. (1986). The composing processes of Puerto Rican college students of English as a second language (Doctoral dissertation, Fordham University School of Education, 1986). *Dissertation Abstracts International, 47*, 2577A.

McKay, S. L. (1989). Topic development and written discourse accent. In D. M. Johnson & D. H. Roen (Eds.), *Richness in writing: Empowering ESL students* (pp. 253-262). New York: Longman, Inc.

McLaughlin, D. (1985). *Literacy in Navajoland: Functions and effects of power.* Paper presented at the Annual Ethnography in Education Research Forum, Philadelphia, PA. (ERIC Document Reproduction Service No. ED 257 324).

Mohan, B. A., & Lo, W. A. (1985). Academic writing and Chinese students: Transfer and developmental factors. *TESOL Quarterly, 19*(3), 515-534.

Nishimura, Y. K. (1986). Prose-organizing strategies of Japanese college students: A contrastive analysis. *Descriptive and Applied Linguistics, 19*, 207-218.

Norment, N. (1982). *Contrastive analyses of organizational structures and cohesive elements in English, Spanish (ESL) and Chinese (ESL) students' writing in narrative and expository modes.* (ERIC Document Reproduction Service No. ED 269 764).

Ostler, S. E. (1987). English in parallels: A comparison of English and Arabic prose. In U. Connor & R. B. Kaplan (Eds.), *Writing across languages: Analysis of L2 text* (pp. 169-185). Reading, MA: Addison-Wesley Publishing Company, Inc.

Peyton, J. K., Staton, J., Richardson, G., & Wolfram, W. (1990). The influence of writing task on ESL students' written production. *Research in the Teaching of English, 24* (2), 142-171.

Peyton, J. K., & Seyoum, M. (1989). The effect of teacher strategies on students' interactive writing: The case of dialogue journals. *Research in the Teaching of English, 23* (3), 310-334.

Pimsarn, P. (1986). The reading and writing relationship: A correlational study of English-as-a-Second-Language learners at the collegiate level (Doctoral dissertation, North Texas State University, 1986). *Dissertation Abstracts International, 47,* 2974A.

Purves, A. C. (Ed.) (1988). *Writing across languages and cultures: Issues in contrastive rhetoric* (Written Communication Annual, vol. 2). Newbury Park, CA: Sage.

Quintero, E. (1984). *Preschool literacy: The effect of sociocultural context.* (ERIC Document Reproduction Service No. ED 282 181).

Radecki, P., & Swales, J. (1985). ESL student reaction and response to feedback on their written work. *Papers in Applied Linguistics, 1* (2), 70-89.

Raimes, A. (1985). What unskilled ESL students do as they write: A classroom study of composing. *TESOL Quarterly, 19* (2), 229-258.

Ricento, T. K. (1987). Aspects of coherence in English and Japanese expository prose (Doctoral dissertation, University of California, 1987). *Dissertation Abstracts International, 48,* 1754A.

Rivers, W. J. (1987). Story writing: A comparison of native and L2 discourse. In J. P. Lantolf & A. Labarca (Eds.), *Research in second language learning: Focus on the classroom* (pp. 195-211). Norwood, NJ: Ablex.

Rittershofer, J. S. (1987). The nominal reference system in the interlanguage of Japanese students writing in English (Doctoral dissertation, Columbia University Teachers College, 1987). *Dissertation Abstracts International, 48,* 119A.

Robb, T., Ross, S., & Shortreed, I. (1986). Salience of feedback on error and its effect on EFL writing quality. *TESOL Quarterly, 20*(1), 83-93.

Ross, S., Robb, T., & Shortreed, I. (1988). First language composition pedagogy in the second language classroom: A reassessment. *RELC Journal, 19* (1), 29-48.

Samway, K. D. (1987). The writing processes of non-native English-speaking children in the elementary grades (Doctoral dissertation, University of Rochester, 1987). *Dissertation Abstracts International, 49,* 451A.

Santiago, R. L. (1970). A contrastive analysis of some rhetorical aspects in the writing in Spanish and English of Spanish-speaking college students in Puerto Rico (Doctoral dissertation, Columbia University, 1970). *Dissertation Abstracts International, 31,* 6368A.

Scarcella, R. C. (1984). How writers orient their readers in expository essays: A comparative study of native and non-native English writers. *TESOL Quarterly, 18*(4), 671-688.

Schumann, J. (1978). The acculturation model for second language acquisition. In R. Gringras (Ed.), *Second language acquisition and foreign language teaching* (pp. 27-50). Arlington, VA: Center for Applied Linguistics.

Scott, M. S., & Tucker, G. R. (1974). Error analysis and English language strategies of Arab students. *Language Learning, 24* (1), 69-97.

Seda, I., & Abramson, S. (1989). *English writing development of young, linguistically different learners.* (ERIC Document Reproduction Service No. ED 321 882).

Sharma, A. (1979). *Syntactic maturity: Assessing writing proficiency in a second language.* Paper presented at the International Conference on Frontiers in Language Proficiency and Dominance Testing, Carbondale, IL. (ERIC Document Reproduction Service No. ED 185 105).

Sinclair, V. E. (1983). *Mode and topic effects on complexity in adult ESL compositions* (TEAL Occasional Paper No. 7). Vancouver, BC: Teachers of English as an Additional Language.

Siu, K. P. (1986). *The effects of mode on syntactic and rhetorical complexity for EFL students at three grade levels.* (ERIC Document Reproduction Service No. ED 274 163).

Söter, A. O. (1988). The second language learner and cultural transfer in narration. In A. C. Purves (Ed.), *Writing across languages and cultures: Issues in contrastive rhetoric* (pp. 177-205). Newbury Park, CA: Sage Publications, Inc.

Staczek, J. J., & Aid, F. M. (1981). Hortographía himortal: Spelling problems among bilingual students. In Valdés, G., Lozano, A. G., & Garcia-Moya, R. (Eds.), *Teaching Spanish to the Hispanic bilingual: Issues, aims, and methods.* New York: Teachers College Press.

Stairs, A. (1990). Questions behind the question of vernacular education: A study in literacy, native language, and English. *English Quarterly, 22* (3-4), 103-124.

Swain, M. (1975). Writing skills of grade three French immersion pupils. *Working Papers on Bilingualism, 7.* (ERIC Document Reproduction Service No. ED 125 262).

Swain, M., & Lapkin, S. (1981). *Bilingual education in Ontario: A decade of research.* Toronto: Minister of Education, Ontario.

Urzúa, C. (1987). "You stopped too soon": Second language children composing and revising. *TESOL Quarterly, 21* (2), 279-304.

Van Haalen, T. (1990). *Efficacy of word processing as a writing tool for bilingual elementary school students: A pilot study.* (ERIC Document Reproduction Service No. ED 318 233).

Vann, R. J. (1980). Oral and written syntactic relationships in second language learning. In C. A. Yorio & J. Schachter (Eds.), *On TESOL '79: The learner in focus* (pp. 322-329). Washington, DC: Teachers of English to Speakers of Other Languages.

Wald, B (1987). The development of writing skills among Hispanic high school students. In S. R. Goldman & H. T. Trueba (Eds.), *Becoming literate in English as a second language* (pp. 155-185). Norwood, NJ: Ablex.

Woodley, M. (1985). Text grammar and learning writing. *Le Français dans le Monde,* 24 (192), 60-64.

Zamel, V. (1982). Writing: The process of discovering meaning. *TESOL Quarterly, 16* (2), 195-209.

Zamel, V. (1983). The composing processes of advanced ESL students: Six case studies. *TESOL Quarterly, 17* (2), 165-187.

Zamel, V. (1990). Through students' e 'es: The experiences of three ESL writers. *Journal of Basic Writing, 9* (2), 83-98.