Scholars from varied disciplines--first language (L1) acquisition, second language (L2) acquisition, composition research, and cognitive psychology--have found a high level of permeability in their search for more effective classroom models of writing instruction. Among the most influential work in this area has been Stephen Krashen's theory of L2 acquisition. Krashen makes a distinction between language learning--involving conscious knowledge of rules--and acquisition, a subconscious process. Cognitive psychologist Jerome Bruner added to Krashen's theory by emphasizing language acquisition as a necessity for thinking and achieving the highest levels of cognitive development. Also influenced by Krashen's work, Alice Horning formed a theory of writing development which states that for basic writers, academic written English is a second language. Other research--such as the work of Jim Cummins, Janet Emig, and the Bullock Report--shows the increasing overlap of research in L1 and L2 acquisition, language and thought, language and learning, and language and writing. Process writing techniques, reflecting this research, utilize natural language settings which develop communication, which in turn facilitates acquisition. Furthermore, methods that promote writing development necessitate student-centered environments which lower anxiety, increase levels of confidence, and provide natural language contexts based on meaningful communication for both L1 and L2 writers. (Twenty-four references are appended.) (MM)
FIRST LANGUAGE/SECOND LANGUAGE: ACQUISITION, WRITING, AND COGNITIVE DEVELOPMENT

BY

DIANA M. DIAZ, ED.D.
DIRECTOR, THE LEARNING CENTER
SUNY COLLEGE OF TECHNOLOGY
AT FARMINGDALE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Diana M. Diaz

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"
The relationship of first language (L1) acquisition research to the research on the development of second language (L2) skills has recently been the source of some inquiry, discussion, and analysis and has consequently stimulated new and provocative thinking for each discipline. The need for L2 students to develop skill and ability in writing has been a dynamic catalyst in this process of inquiry. No longer satisfied with teaching methodologies arrived at by trial and error with little theory and research to support them, L2 writing instructors and researchers have begun to broaden the scope of their inquiry in the attempt to formulate more effective classroom models for writing instruction. The question most have sought to answer has been "What is the most effective method to achieve the highly complex, cognitively involved skill of writing for L2 students?". The process of this inquiry has led to the work of a varied group of scholars: L1 acquisition researchers and theorists, L2 researchers and theorists, composition researchers and theorists, and cognitive psychologists. As a result, these varied disciplines and their work have begun to illustrate a high level of permeability as they find themselves seeking answers to questions on language and its
role in human and academic development.

Among the most influential and suggestive sources has been the work of Stephen Krashen. Krashen's theory (1983) of L2 acquisition, based on research from applied linguistics, consists of five hypotheses. Simply stated they are:

1. The Acquisition - Learning distinction

For Krashen, language learning involves conscious knowledge of the second language, knowing the grammar and rules and being able to talk about them. Acquisition, on the other hand, is a "process similar if not identical to the way children develop ability in the first language... a subconscious process". (10) In this distinction acquirers are not totally aware of the fact that they are acquiring a language. What they are aware of is that they are using the language in the process of communication.

2. The Natural Order Hypothesis

Krashen states that "acquisition of grammatical structures proceeds in a predictable order". (10) While the order is different from L1 acquisition order, some similarities between L1 and L2 acquisition order do exist.

3. The Monitor Hypothesis.

This is the heart of Krashen's acquisition theory. The Monitor, essentially, acts as an editor. In his view, language learning is necessary to allow the monitor to function. Thus, the existence and necessity of a monitor implies that formal language learning has a role to play in second language performance.
4. The Input Hypothesis.

This highly complex hypothesis focuses on the processing of information by the acquirer and the contextual components needed for acquisition. A critical component of this hypothesis states that "(we) acquire by 'going for meaning' first, and as a result, we acquire structure." (p. 21) Krashen believes "comprehensible input" is essential to the acquisition of a second language and must occur in the context of natural language use.

5. The Affective Filter Hypothesis

Key to this hypothesis is that a variety of affective variables relate to successful L2 acquisition. These variables can be condensed into three primary variables.

Motivation: highly motivated L2 students generally do better in L2 acquisition

Self-Confidence: L2 acquisition is facilitated by high levels of self confidence and positive self-image

Anxiety: Low levels of anxiety, either personal or academic, facilitates L2 acquisition

When seen in the light of most current L2 methodologies which focus on grammar and syntax, are error-correction oriented, and are product centered, this simplified presentation of Krashen's acquisition hypotheses serves to point out how far second language instruction has been diverted from its own informing research.

This second language acquisition theory and research is
becoming so potent a force that it is beginning to be infused into the thinking of those whose interest is the development of writing ability of native speakers. It has gone so far as to be the fulcrum of an emerging theory of writing development of basic writers, those writers whose language skills and past educational experience have left them unable to successfully engage in academic writing. Responding to the need for a comprehensive theory about basic writers and their writing development, Alice Horning (1987) has developed a writing theory based on a central hypothesis: "(B)asic writers learn to write as other learners master a second language because, for them, academic written English is a whole new language" (p. 5). She goes on to state that "the written form of language is a distinct linguistic system, a theorem which is supported by abundant research data." (p. 7) Furthermore, she formulates her theory of writing acquisition around Krashen's hypotheses, illustrating how these address what is known about the needs that must be met if basic writers are to acquire the ability to write. However, the needs of basic writers have been found to be similar to those of other writers, their differences being a matter of degree.

Krashen's hypotheses have added to the growing belief that the impetus and characteristics important to second language acquisition are similar to those which are fundamental to the process of first language acquisition. It is here that our inquiry leads to the work of cognitive
psychologist Jerome Bruner who has increasingly been cited by
those teachers and researchers who have sought to explicate
the role of language in teaching and learning. By his own
admission, Bruner's life's work in cognitive development
research has continually brought him back to the study of
language per se and its pivotal role in the process of
development.

Bruner's research and thinking (1983) led him to place a
powerful importance on language acquisition, first language
to be sure. Citing Chomsky's famed LAD (Language Acquisition
Device) as being incomplete, he states that acquisition "must
be primed by some knowledge of the world and some push to
communicate....You don't acquire language abstractly: you
learn how to use it. You use it to communicate, to put order
into events, to construct realities." (italics mine) (p.163)

Bruner sums up his odyssey, which began as research into
child development and resulted in thinking and theory of
language acquisition concluding that "the need to use
language fully as an instrument for participating in a
complex culture .... is what provides the engine for language
acquisition."(p.173)

Bruner's thinking on L1 acquisition resonates with
Krashen's hypotheses, especially those which emphasize the
importance of the need for the "push" to communicate and the
need for natural language contexts for L2 acquisition. But
Bruner's thinking of language acquisition adds to Krashen's
theory by emphasizing the importance of language to construct
realities, to put order into events and to "operate on that language rather than on the world." (p.182) For Bruner, language acquisition is a necessity for thinking and empowerment and for achieving the "ultimate stage of cognitive development." (p.182)

Jim Cummins, the Canadian linguist, in his important article "Empowering Minority Students: a Framework for Intervention" (1986) puts forth the argument that minority students do not succeed in our schools because of the power-laden relationships between educator and minority students and between schools and minority communities. He offers several suggestions to break the cycle of failure for minority children among them the advocacy for pedagogies which promote "intrinsic motivation on the part of students to use language actively in order to generate their own knowledge." (p.21) He strongly states the need for a pedagogy that aims at liberating students by encouraging them to become actively involved in the generation of knowledge. In his article, he focuses on the basic tenet of the Bullock Report (1975): "talking and writing are a means to learning". (p.50) The report argues for an instructional model that is based on dialogue between student and teacher utilizing both speech and writing as instruments for learning, encouraging a collaborative learning environment, constructing a student-centered environment guided and facilitated by the teacher, and emphasizing the development of "higher level cognitive skills rather than just factual recall and meaningful
language use by students "rather than correction of surface forms." (Cummins, p.28) Cummins advocates this approach not only for first language students but for second language students as well, and echos the work of other second language researchers (Brumfit and Johnson, 1979; Taylor, 1983), Krashen (1977, 1979) among them.

That a linguist and bilingual education researcher of the stature of Cummins builds his argument on the findings of the Bullock Report is further evidence of the growing cross-fertilization of research on language. Where once L1 research was separate from L2 research, the growing inquiry into language and thought, language and learning, and learning and writing have brought these previously separate branches of research closer.

The Bullock Report and its concurrent research from England has been credited with having had a catalytic effect on L1 writing research in the United states and has been responsible for the growing body of research on writing. After the early L1 writing research of Emig (1970), Graves (1975), Mishel (1974), Pianko (1979), Perl (1979), and Sommers (1980) that illuminated certain aspects of the L1 writing process, came the subsequent classroom research of Clifford (1981), Graves (1983), Calkins (1983) and Perl and Wilson (1986). This research blended with the instructional theories of Elbow (1973, 1980), Bruffee (1983) and Murray (1982) and laid the foundations for strategies and techniques that seek to enhance the development of writing ability.
From this research and thinking have come still developing strategies and techniques which include free writing, extensive writing, teacher conferences, peer group work, drafting, daily journals, emphasis on purpose and audience, the development of a supportive, student-centered environments emphasizing trust, and different perspectives on the role and treatment of error.

But this writing research is also pointing to the power of language to produce thought and learning. In her 1977 article, Janet Emig explored the concept of writing as a mode of learning, placing it in light of new thinking and findings in cognitive psychology. She brought together the arguments and evidence of Vygotsky (1962), Luria (1971), and Bruner (1971) who believe that the higher cognitive functions (analysis and synthesis) develop more fully with the aid of verbal language, particularly written language. After elaborating on their thinking on the connections between writing and learning, she asserts that most successful learning has common features. Learning involves feedback and reinforcement. Learning is also connective and selective; it uses propositions, hypotheses and summarizers; and it is active, personal, and self-rythmed (p.122-124). And, she concludes, the process of writing uniquely corresponds to these important features of successful learning.

Like L1 researchers and thinkers, their L2 counterparts are also beginning to recognize the power of language to be an instrument of thought and a tool for learning. The writing
classroom practices culled from L1 research can be seen as reflective of Krashen's hypotheses, Cummins' emphasis on the active learner, and Bruner's belief in the power of language acquisition and its importance to cognitive development. The acquisition of what Cummins sees as "higher level cognitive skills" demand language acquisition. It then follows that L2 students need to acquire L2 and be in the process of acquiring L2 in order to master cognitive skills in L2. L2 acquisition clearly is and should be our goal, not only for the obvious reasons, but because it can endow acquirers with the instrument of empowerment, a second language with which "to put order into events, to construct realities" and finally the use a second language "as an instrument for participating in a complex culture."

Krashen's hypotheses clearly imply that L2 acquisition is a process, a subconscious process spurred by the urge to communicate and the search for meaning. Process writing techniques utilize natural language settings which develop the push to communicate which in turn facilitates acquisition. Furthermore, the methods which promote the development of writing necessitate student-centered environments, environments which by their nature, lower anxiety, increase levels of confidence, and provide natural language contexts that are based on meaningful communication. These writing instruction methods and techniques also have the potential to increase L2 acquisition as they facilitate L2 writing acquisition while they simultaneously provide a
context where acquisition can occur.

What becomes obvious in this encounter with Krashen, Hornig, Bruner, Cummins, Emig, and others is that the inquiry that first had as its focus the L2 writing development of L2 students, leads to the growing awareness that language per se can be a tool for learning, thinking, empowerment, and cognitive development; that these recently accessed and increasingly accepted aspects of language are also facets of L2 acquisition; that acquisition is best attained in learning environments and contexts that acknowledge communication and meaning as central to the learning experience; and that writing is the language skill that provides the most complete access to these elements of language development. The fact that the Bullock thesis that "talking and writing are a means of learning" has found its way into the work of L2 researchers and linguists seems to indicate its strong potential to be an influence in other areas that deal with learning and thinking. Which simply stated means it has the potential to affect most, if not all, areas of education.

And ironically the very permeability of this research and thinking brings us back to the point that these learning environments and contexts are not only indicated and valid for the development of L2 writers, but it serves to underscore the validity of such environments and contexts for all writers and all learners, L1 as well as L2.
REFERENCES


presented at the Georgetown University Roundtable on Languages and Linguistics, Washington, D.C.


