

Summary

The purpose of this paper is to discuss the application of semiotics to the instruction of language, particularly foreign or second language. The first section of this paper will deal primarily with what semiotics is and its implications for education. The

Second Language

Teaching: a

Semiotic Approach

second section will consider criteria suggested by semiotics by which methods of language instruction can be evaluated and discuss applications to the classroom. The final section will deal with potential applications to teacher training suggested by a semiotic approach to language instruction. In this approach, semiotic criteria would be used primarily as an evaluative tool to determine whether methods and techniques are viable. This is an approach to language instruction; there is no prescriptive semiotic curriculum.

Ensino de Segunda Língua: Uma Abordagem Semiótica

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Resumo

Este artigo discute a aplicação da semiótica ao ensino de língua, especialmente língua estrangeira ou segunda língua. A primeira parte lidará com o conceito de semiótica e suas implicações para a educação. A segunda parte analisará critérios sugeridos pela semiótica através dos quais se possa avaliar

métodos de ensino, bem como suas aplicações em sala de aula. A parte final apresentará possíveis aplicações da abordagem semiótica de ensino de língua no treinamento de professores. Nessa abordagem, critérios semióticos seriam utilizados como instrumento para avaliar a viabilidade de métodos e técnicas. Trata-se de uma abordagem de ensino de língua; não há, em termos semióticos, um currículo prescrito.

In preparing myself to teach English in Japan, I read Earl Stevick's *Memory, meaning & method*. In it he poses a paradox as follows: in the field of language teaching, Method A is the logical contradiction of Method B: if the assumptions from which A claims to be derived are correct, then B cannot work, and vice versa. Yet one colleague is getting excellent results with A and another is getting comparable results with B. How is this possible? asks Stevick (1976). In a positivistic paradigm such results are not supposed to happen.

I have spent the past six years of my life as a teacher trying to come to terms with what I consider to be a serious flaw in instructional practice. I consider myself a humanist and as such desire that humanism be the driving force behind my actions in the classroom. I sense, however, that humanistic practice in the classroom is at best a spotty affair, at worst, simply given lip service. The primary bug in the works seems to be positivism, in particular its offspring, behaviorism. My personal dilemma was that even when I recognized that I was simply putting my students through the hoops, my training in

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behavioral methodology was all I had to fall back on; I could not think of an alternative to putting my student through the hoops. I have since been in search of a complete philosophy of instruction within which to structure the instruction I wished to provide.

This lack of a philosophy of education encompassing humanism has led to a situation where there is a number of fine teachers and instructional designers creating excellent alternatives to traditional instruction while there is no structure for these alternatives to fit within – no means for them to become viable to the vast majority of educational planners. Some of these programs find homes for short periods in schools or school systems where they survive on the patronage of some powerful or strong-willed person. The program, however, is likely to disappear when the patron does, because it has no integral place in the curriculum. In Japan, for example, a climate exists where innovation is accepted because there appears to be a number of learning blocks associated with the instruction of English. In general, however, no structure exists to integrate innovation into the formal structure of educational institutions. Programs that are not successful in short periods of time, or programs dependent upon individual patronage (most language teachers stay in Japan only a short time) tend to fade away. This is particularly unfortunate because the effects of any particular program are usually long-term rather than short-term.

I propose that using a semiotic model to structure language education would make room for innovations in instruction, and provide us with some humanistic criteria by which to do formative evaluation of such innovations.

What Is Semiotics and what does It have to do with education?

Semiotics is a philosophy that posits that all knowledge is mediated by signs. A sign is something that stands for something else (Deely 1982). All we can know of the world is signs. This means in effect that we do not see the world as it really is, we perceive signs that make it possible for us to construct a reality – an idea of what the world is. Each individual's construction of reality is his or her *Umwelt*. It is in effect a bubble in which each individual lives (von Uexküll 1981). The *Umwelt* is composed of each individual's inner self, including cognitive potential and the experiences each individual has had. These are used to build a subjective construction of the physical world. Everything we perceive about the physical world is filtered through this *Umwelt*. Because of this filter we cannot know the physical world directly. The *Umwelt* therefore constructs and is constructed by the physical world. The *Umwelten* of individuals are in constant communication with the physical world as well as the *Umwelten* of other individuals.

The notion of *Umwelt* is especially important for education. The *Umwelt* is created through continuous interaction of the individual with the physical world. This interaction involves all the senses; it is both verbal and non-verbal. According to John Deely (1986), verbal language is an extension of non-verbal communication. This is demonstrated by the ability of humans to communicate not only with other humans who speak other languages, but with non-human species as well. It has been estimated that 80% of all communication is non-verbal.

Culture plays an important role in the construction of *Umwelten* in humans because it is an aspect of the

individual's environment. Culture determines in a very dramatic way what experiences the individual will and will not have, let alone the importance attached to experiences that do happen.

Knowledge is an aspect of the present state of the *Umwelt*. Learning, or growth, happens at the juncture of the *Umwelt* and the physical world. A new experience may reinforce current knowledge or it may challenge it. When the *Umwelt* changes because of experience, learning has occurred. Learning is a naturally occurring phenomenon. For an organism to survive, it must constantly learn and change based upon experiences that occur through this constant communication. The process is semiosis. The study of this process is Semiotics.

How do Semiotic assumptions about education differ from Positivist assumptions?

Positivist assumptions concerning education include the notion that the environment is an objective location existing separate from the individual. The environment is the same for all individuals, indeed, all species—it is basically unchanging. It is a physically existing entity that has an impact upon an organism and serves as a source of stimulation. Through manipulation of the environment, learning can be controlled.

Knowledge is located in the physical world and it is the responsibility of the individual to discover it. There is correct interpretation of this knowledge because the world exists in only one way. Hence Stevick's Paradox. Finding this correct interpretation is also the responsibility of the individual. Inability to do so is the result of lack of information due to the

state of the art or some failing on the part of the investigator.

Knowledge is to be transferred from teacher to learner in a manner such that the student understands it in the same way as the teacher, who is a more qualified interpreter. When faulty communication occurs remediation or correction may be required to get the student in line with "truth" (Cunningham 1987: 202). Students are mere receptacles for the information the teacher has deemed important.

Semiotic assumptions concerning education are quite different. In place of the notion of environment is the notion of Umwelt. An Umwelt of an organism is not independent of the organism but exists only in relation to the organism (Cunningham 1987: 210). This should explain why one cannot structure an environment for learning – it only exists as Umwelt – a subjective world, and is controlled by the learner. We can only structure our own personal "environment" although we can certainly have an impact upon the Umwelten of others through communication. The Umwelt is not static, it is constantly dynamic at both the level of species and level of individual. The planet with its atmosphere is itself a living, changing organism.

Knowledge is created by each individual to account for experience. It exists at the intersection of Umwelt and the physical world. Students therefore are not receptacles of knowledge – they are agents in its creation. Knowledge does not exist apart from the learner, and it does not necessarily exist in the same way in two individuals, multiple interpretations are possible.

What would instruction based on a semiotic philosophy be like?

1. Experiential: hands on.

First of all, it would be experiential. Elliot Eisner comments that: "what people become is largely a function of what they have an opportunity to experience" (1981: 466). Nicolas Ferguson likes to say that if typing classes were taught like language classes, there would be one typewriter at the front of the classroom and teachers would invite students to the front individually to show them where the "j" was. His response was to develop a language program where each learner spends about 40% of his time speaking and 50% listening.

There are two aspects to communication experience: receiving and sending. Ferguson attempts to balance the two. What is most important to consider is that the performing talents of the instructor are irrelevant to an experiential education except to the extent that they are interactions with students. This suggests a restructuring of the traditional classroom inasmuch as the teacher would give up center stage — there would be no center stage — a three ring circus, minus the nasty connotations, would be a more appropriate description.

One highly effective means of restructuring the classroom is to divide the class into pairs. This has a number of advantages: Experience of individuals is maximized, much more language is practiced; the instructor can deal with pairs in a similar manner as with individuals, effectively cutting class size in half; peers may be more effective at making corrections than teachers; teachers seem to be "out of the loop" from the perspective of students; the pair is optimal from the vantage point of responsibility – each member must share equally, as groups get larger there is a tendency for

individual members to revert to a passive mode; teacher interactions with small numbers are more likely to be timely and appropriate to the needs of learners; teacher interactions are likely to have a more powerful effect on a small group than on a large group; and teachers get out of the job of handling content and into the job of handling social interactions, they get to know their students better – important to understanding the Umwelten of their students. A semiotic approach suggests that without this basic knowledge of the learner's Umwelt on the part of the teacher instruction is very much a hit and miss affair.

Instruction founded on experience is primarily concerned with the experiences of the learner. This seems to me a sounder choice than founding instruction on knowledge. This makes it possible to focus on the knowledge constructions of individual learners. Decisions about specific instructional experiences will depend upon the instructor's interpretation of the Umwelten of his or her learners.

2. Make use of all senses and potentials available in students.

Experiences should cover all modalities of communication. In the process of learning as a natural phenomenon individuals are not limited to one or two senses with which to communicate, rather all the senses are available for drawing upon. Eisner believes that all individuals should receive education so that they are competent in all forms of communication. He names this literacy and says that learners should be literate in all forms of representation.

There are no coincidences. Forms of representation like mathematics and music exist specifically because they are the only way that the

meanings they convey are made possible. Meanings made possible by dance are different from those made possible by poetry. Literal translations cannot be made from one modality to another without significant loss of meaning (Eisner 1981).

Every individual has the potential to create meaning in multiple modalities, however, the extent to which that individual is capable of such an activity is dependent upon the forms of representation he learns to use. The ability to use these modalities affects both the ability to understand meanings created by others and the ability to create meanings. There is interaction between our sensory systems and forms of representation so that we can conceive an idea in one modality and express it in another. A writer may begin with pictures in his head and end with words on paper (Eisner 1981).

At present, the development of literacy in the many of the forms of representation that are available in the culture is neglected. This neglect denies learners access to meanings that are specific to particular forms and adversely affects the kinds of meanings they can express (Eisner 1981).

This sentiment is echoed by Rockefeller (1977) in his report "Coming to Our Senses: The Significance of the Arts in American Education." We use all of our senses to interpret and convey the complexities of everyday life. While verbal and written language is essential, all our sensory languages need to be developed as well if words are to fulfill their deeper function and deliver both subtle and vivid messages.

Man is by nature a sign manipulator, so it makes sense that the education of man should concern itself with the manipulation of signs. This would lead to a focus on the

"how" or process (how the learner manipulates signs himself in order to make new discoveries). A semiotics-based philosophy of education would deal with the question of the process learners use to create knowledge.

What sign systems are significant to language education? One could certainly argue that all are useful. After all, we attempt to describe experiences, no matter the type, with language. Assuming Deely's conjecture that language grows naturally from non-verbal forms of communication, especially gesture, is correct, dealing with language as a purely verbal entity is somewhat sterile.

For example, the instructional technique of roleplay uses a large amount of one's sensory capacity and requires conjuring up memories of others. It has great potential for use in the classroom, provided that the instructor is willing to take the trouble to make certain that students use their emotions, physical acuity, and ability to visualize, as well as their verbal skills. An added benefit of roleplay is that it is easy to introduce aspects of target culture into instruction through the appropriate use of movement, vocalizing, and emotional display. One way to break through the verbal barrier is to use ambiguous dialogues, those whose meanings are totally dependent upon context. TPR, for example, makes use of the fact that learners know how to walk, throw things, jump on things, etc. It simply demonstrates a new way of talking about these actions. An instructor using the Natural Approach might take students through a procedure they are familiar with: sharpening a pencil, driving a car, planning and taking a photograph, learning a dance. The important message of methods like TPR is that physical actions are involved in first language learning and can be used in second language learning.

Using procedural exercises: activities where one student gives directions while the other follows them are an effective combination of cognitive, verbal and bodily-kinesthetic and/or spatial skills. The use of commonly known procedures described in the target language by the instructor makes use of the students' innate abilities to problem solve. They understand what is happening and this gives them important clues to what is being said.

In an immersion program, school subject matter, especially that with its own obvious sign system (music, math) can be taught totally in the target language.

At more advanced levels, students may discuss examples of art work, cookery, athletic expertise, or emotional experiences in the target language. At this point students can begin to provide support to one another in the target language and hopefully make the language learning environment a special experience for those involved.

3. Purpose: to nurture change in Umwelten

- a. To provide a rich context in which interaction can take place.

It also makes sense to emphasize those experiences that bring about a change in the Umwelten of learners. Opportunity for needed interaction is greater in a rich context than an impoverished one. The more information, the greater the potential that something will catch the attention of some learner, or in Krashen's terms provide the all essential $i + 1$. Pragmatically this means throwing a wide enough net in terms of content that the present knowledge of each learner in the group is covered as well as the $+ 1$. John Oller provides a criterion by which to judge the

richness of language materials. He suggests writing out as many questions about the material as you can come up with. The greater the number of questions, the greater the depth of the material (Oller 1983). In general, it is far more satisfying to a language learner to come to grips with a passage with some meat in it. Lozanov or Ferguson would certainly argue that making something too simple, by dealing for example with only one idea, signals the learner that you have no confidence in his abilities. Even if his language level is low, one should not assume his cognitive abilities are, but rather, make use of his problem solving abilities.

For example, notions of family and friendship are universally common. One can as easily identify Sally as one's sister's best friend as identify her as a girl. In English the question "Is Sally a girl?" would be considered silly. Furthermore it is impoverished enough in information to be quite boring to most learners. The richer the context, the more likely entry points for making the connection that makes growth in the *Umwelt* possible.

b. To provide opportunity for abductive reasoning.

Growth of the *Umwelt* happens when the individual is challenged by some surprising piece of information (experience) that forces him or her to alter his or her *Umwelt* to account for it. This creative activity is accounted for by abduction. Abduction is the process of making educated guesses about the world around us. It is a creative process, a way of formulating hypotheses from the cues we receive from the physical world. These cues are often non-verbal, and our reading of them may even be sub-conscious.

In learning a language, this is potentially the simplest to understand, yet hardest to implement. On the one

hand, the entire vocabulary and structure of the target language has great potential for providing surprising information to the student. The problem is that most teachers explain away the surprises before students get a try at them. The activity turns from one of problem solving to one of trying to remember what the teacher said was happening.

When such opportunities arise, as they definitely do, the instructor should curb her initial desire to explain (especially to an entire class, because not everyone will be ready for an explanation anyway). Rather, offer the students with the question other examples of use of language with the same problem, and let them form hypotheses for surprising information. Finally, help them test these hypotheses.

Instructors should keep in mind that abductive reasoning places a major part in the growth of *Umwelten* and that depriving students of abductive experiences deprives them not only of immediate growth but potentially of developing the skills that make growth possible. One responsibility of a semiotics-based language curriculum would then be to allow students to practice abductive processes.

c. To provide students with evidence that multiple realities exist.

Because of the individualized nature of constructions of the world created through semiosis, it makes sense that the focus of instruction should be in large part at least the current state and potential of the individual student. According to Reigeluth (1987: 3) our group-based, lock-stepped, graded, and time-oriented system is responsible for effectively destroying the inherent desire to learn in all but a small percentage of learners. On the other

hand, this focus must be balanced with the notion that semiosis is the product of interaction, in large part, interaction with other people. Group interaction is required in order for maximum learning to occur. This will first of all bring the student to understand that other constructions than his own exist, and secondly facilitate his learning process by giving him experiences that challenge his present construction of the world.

Discussions with fellow students will provide evidence to individuals that multiple realities exist, especially if reflexive skills (discussed below) are developed. Language instruction, however, offers something more. The foreign or second language is the product of another culture, understanding it is in part dependent upon understanding that culture. The fact that languages are so different suggests multiple realities, as do other aspects of target cultures.

Cultural experiences need to be provided to language learners. If the instructor has lived in the target culture, she can provide some of these experiences, using roleplay, literature, fine arts, films, and other books and recordings. If a member of the target culture could be interviewed by members of the class, all the better. This would have the advantage of providing students experience with methods of inquiry, which they will transfer to other language learning environments, and even to totally different subject fields. If it is possible for students to get the experience of immersion in the target culture, that's even better. In the United States there are ethnic neighborhoods that might serve this purpose. Of course in the second language situation, the target culture is readily available to the student. Field work should be an integral part of instruction, i. e., scavenger hunts, observations, etc.

- d. Provide students with reflexive skills, and nurture empowerment.

For students to come to terms with their own learning processes and with the knowledge they will construct, reflexivity will be important. To know that there are multiple realities should be a liberating realization. To realize then, that you or I am empowered to effect the world around us as a group or as individuals and that knowledge can play a role in how we decide to have that effect is a powerful motivation for the creation of more knowledge. To reach this point responsibly, each learner should engage in a significant amount of soul searching both individually and in groups where his thoughts can be critiqued by others.

There are a number of techniques available for developing skills in reflexivity. Students can be asked to keep personal journals of their language learning experience. Initially, at least, these should be done in the native language. Later the instructor can require that they be done in a mixture of the target and native languages or even the target language alone – the ability to express oneself affectively in another language is evidence of being fairly skilled in that language.

In addition, the instructor would benefit from occasional reflexive debriefing sessions with her students. These will assist the instructor in evaluation of instructional strategies, and if handled skillfully will create a bond of trust in the classroom. To make such sessions work, instructors should be prepared to allow students to express themselves emotionally, should accept what students say, even when disagreeing with them (multiple realities), and should try to reconstruct for themselves the reality of the students through interviewing techniques: asking thoughtful

questions and listening to the responses.

The objective of development of reflexive skills in students is to make it possible for them to realize that when they learn something, they are at the same time changing the world as they know it. Proactive decision-making, then, can affect the world. This realization should help each student come to terms with the stake he has in his own education.

Application to teacher training

1. Being aware of the *Umwelten* of learners

The primary charge of teachers would be to facilitate semiosis or growth. Instructors would be required to be continually aware of the processes of their charges to make certain that they get the experiences they need to grow. This would require the skill of being able to reconstruct in one's own mind the *Umwelten* of other individuals in order to give advice and counsel on how to proceed, or what experiences are likely to be productive. It would be important to keep in mind the level of ability each student demonstrates in the manipulation of various sign systems. The use of naturalistic methods of evaluation and inquiry within a Semiotics-based curriculum seems quite natural. Reigeluth's suggestion that teachers maintain profiles on individual students does as well (Reigeluth 1987).

Of importance in Uexküll's notion of *Umwelt*, is the idea that one can learn about the *Umwelt* of another through what he calls "participatory observation" (Uexküll, T. 1981). Skills in participatory observation should be cultivated in pre-service and in-service instructors. They are of value for reasons of evaluation and inquiry. Teachers should be involved in both

these processes; evaluation in order to remain in touch with how well selected materials, techniques, and resources are helping students, and inquiry in order to contribute to knowledge in the field. The latter can be justified on the basis that a semiotic approach to instruction involves helping students gain the skills they need in order to create knowledge for themselves. Instructors can set examples for their students by modeling techniques of inquiry.

Teacher training should include requirements for completion of case studies (hands on) using naturalistic methods both for the purpose of reconstruction of the *Umwelten* of individuals (inquiry) and for the purpose of analyzing the interaction of individuals with instructional materials (evaluation). Techniques could include ethnographic studies, emic studies, and hermeneutic circles as described by Lincoln and Guba (1985; see also Guba & Lincoln 1985). Execution of these techniques would help instructors develop skills in observation, note-taking, and interviewing (listening as well as question asking).

2. Being reflexive

Instruction would be focused on the student, not content, would unfold as student needs became apparent, and would be oriented toward the individual learner or small groups of learners. Knowledge would be regarded as a process, not a static structure to be learned and remembered. Instructors can be encouraged to reach this conclusion on their own through development of reflexive skills. This would involve small sem-inar size groups, like support groups, where pre-service and/or in-service instructors would meet to discuss their own learning preferences and problems and later, those of their students. This would encourage a constructive interaction

among participants to solve the problems of individuals with their own learning problems and with the learning problems of their students.

As teachers become aware of the multitude of ways they and their colleagues approach learning problems, they will become aware of some of the ways their own students may do the same, and hopefully expect to find even more. This will, it is hoped, prompt instructors to investigate many approaches, methods and techniques of language instruction, in order to deal with the special needs their students may exhibit. As they come to understand that their own learning is unique and under their own control they should come to understand that they do not control the learning of their students, but that they can nurture it.

Instructors should be encouraged to keep reflexive journals to log their own reactions to and thoughts about the instructional processes of their classrooms. This is usually a requirement of naturalistic inquiry, so that the *Umwelt* of the researcher/instructor can be taken into account as an aspect of the study. It would provide the instructor with an account of how she interacted with the instructional environment and provide a basis upon which the instructor might decide to modify her course of action. It should be used as an aspect of course evaluation on the part of the instructor; because a method of instruction is a contract between instructor and student, the instructor must feel confident that the contract has been upheld on her part.

3. Coming to terms with the impact of culture on the individual

Reflexive sessions will also be used to help instructors discover the impact that culture has had on their own *Umwelten*. This is particularly

important in a field that proposes to introduce another culture to their students. Instructors need to know the extent to which they are shaped by their own culture so that they can challenge their students to see the world in new ways. This would put foreign language teachers in an ideal position to confront the encapsulation of their students and nurture their growth.

I would suggest that all instructors have an experience in another culture, have the experience of confronting their own encapsulation as defined by their culture. Again, the experience should be recorded in the form of a reflexive journal. When possible support groups should be formed to encourage the understanding of the target culture and the growth of individual *Umwelten* in the milieu of this culture. Instructors should especially be encouraged to keep track of those things about the target culture they especially liked, disliked, or found surprising. There should be an attempt through a support group to reconstruct the realities of members of the target culture. Here again, inquiry techniques like observation will be very helpful.

4. Learning to deal with the unique needs of students.

In order to accomplish this, instructors will need to be aware of the many resources that are available to them, the many ways people learn, and techniques for providing an instruction that exploits the resources available within students themselves.

Resources available to instructors include the variety of instructional methods and approaches available. These can be assessed using the criteria provided in the previous section of the paper. Instructors should especially search for methods of language instruction that utilize the

potentials of students, all their sensory capacities.

Instructors should attempt to include other senses than auditory in the language learning process. The auditory channel may not provide the easiest route to language learning for all students, those particularly weak auditorily may find language instruction frustrating to the point of giving up on it. Instructors should experiment with instructional activities using various and multiple sensory modalities. A great deal more needs to be investigated in this area. I cannot think of one method of language instruction that truly makes use of all the learner's senses, except possibly role play, and it is not normally used to this end, but in practice usually focuses on verbal intelligence and auditory perception.

Teacher training courses should include language learning experiences with many different methods of instruction. Many schools talk about innovative methods of instruction, but few engage in them. Experienced instructors in the Silent Way, Suggestopedia, Community Language Learning, TPR, and Natural Approach should be utilized to provide significant instruction in a language, rather than short workshops.

In addition instructors should be exposed to methods of instructional design, so that they can set about structuring learning experiences into a system that resembles the whole of the target language. This may mean more keeping track of the skills and experiences of their students in order to suggest further study rather than prescribing learning experiences (at least on a whole group basis, it is expected that experiences may have to be prescribed for individual students). It may also mean making an informed decision not to structure these learning experiences at all. I

would however suggest that such rule breaking should be decided upon by someone well acquainted with the rules and the consequences and benefits of such rule breaking.

In the same vein, instructors should be encouraged to develop their own systems of instruction that go beyond the parameters of presently existing methods, that employ more of the sensory capabilities of students, and that integrate the best of many different methods without creating something that works against itself, that is internally inconsistent. This would require certain skills instructional design, particularly task analysis.

Use of knowledge gleaned from inquiry and evaluation will help the instructor build such systems. In

teams, instructors could engage in simulations that involve the construction of foreign language curricula for public or private schools or for different developmental levels of students.

In summary, instruction in a semiotic approach would emphasize ways of knowing a language not simply in the traditional verbal mode, but in a variety of interconnected modes. In this view, instruction becomes an activity whereby we equip students to deliberately and self-consciously construct the world in which they are to live. In this case, through learning another language students are opening themselves to a world of people, literature, and a way of thinking not necessarily available to them in their own language. Teachers become models of semiosis and

monitors of the student's ongoing semiosis. Classrooms become places where appropriate contexts for knowledge making are provided (Cunningham 1987).

The suggestions provided in this paper are not intended to be total prescriptive systems of instruction either for students or for teachers. Specific instruction is dependent upon the contract between the instructor and her students. This is ultimately the answer to Stevick's paradox, people learn in ways that they are convinced it is best for them to learn and this is determined by student/instructor interaction and negotiation. The suggestions given for teacher training should be integrated into teacher education program, rather than be seen as possible replacements for present practice. □

BIBLIOGRAPHY

Select

- CUNNINGHAM, D. Outline of an education semiotic. *The American Journal of Semiotics* v.5, n.2, p.205-216, 1987.
- . Semiotic aspects of pedagogy. Unpublished paper. 1988.
- DEELY, J. Semiotic as framework and direction. In: DELLY, J.; KRUSE, F. E.; WILLIAMS, B. (eds.). *Frontiers in semiotics*. Bloomington, IN: Indiana Univ. Press, 1986.
- . *Introducing semiotic*. Bloomington, IN: Indiana Univ. Press, 1982.
- EISNER, E. Mind as cultural achievement. *Educational Leadership* v.38, p.466-471, 1981.
- GUBA, E. G. & LINCOLN, Y. S. *Effective evaluation*. San Francisco: Jossey-Bass Publishers, 1985.
- KRASHEN, S. D. *The input hypothesis: issues and implications*. London: Longman, 1985.
- LINCOLN, Y. S. & GUBA, E. G. *Naturalistic inquiry*. Beverly Hills: Sage Publications, 1985.
- OLLER, J. W., Jr. Some working ideas for language teaching. In: OLLER, J. W. & RICHARD-AMATO, P. A. (eds.). *Methods that work*. Rowley, MA: Newbury House, 1983. p.3-19.
- REIGELUTH, C. M. The search for meaningful reform: a third wave educational system. *Journal of Instructional Development* v.10, n.4, p.3-14, 1977.
- ROCKEFELLER, D., Jr. *Coming to our senses: the significance of the arts in American education*. New York: McGraw-Hill, 1977.
- UEXKÜLL, T. von. The sign theory of Jakob von Uexküll. In: KRAMPEN, M.; OEHLER, K.; POSNER, R.; SEBEOK, T. A.; UEXKÜLL, T. von (eds.). *Classics of semiotics*. New York: Plenum Press, 1981.

General

- ASHER, J. J. *Learning another language through actions*. Los Gatos, CA: Sky Oaks, 1982.
- BANCROFT, W. J. Suggestopedia, sophrology and the traditional foreign language class. *Foreign Language Annals*, v.15, n.5, p.373-379, 1982.
- CURRAN, C. A. *Counseling-learning in second languages*. Apple River, IL: Apple River Press, 1976.
- FERGUSON, N. *The Gordian knot*. Geneva: CEEL, 1980.
- FUGELSANG, A. From extension talk to community therapy. In: ———. *Applied communication in developing countries*. Sweden: Dag Hammarskjöld Foundation, 1973, p.30-42.
- GARDNER, Howard. *Frames of mind*. New York: Basic Books, 1983.
- GATTEGO, C. *What we owe children*. New York: Outerbridge & Dienstfrey, 1970.
- HOSENFELD, C. A learning-teaching view of second language instruction. *Foreign Language Annals*, v.12, n.1, p.51-54, 1979.
- SADOW, S. A. Experiential techniques that promote cross-cultural awareness. *Foreign Language Annals* v.20, n.1, p.25-30, 1987.
- SEBEOK, T. A. You know my method. In: ———. *The play of musement*. Bloomington, IN: Indiana Univ. Press, 1981.
- SUHOR, C. Towards a semiotics-based curriculum. *Journal of Curriculum Studies* v.16, n.3, p.247-257, 1984.