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ABSTRACT

Children learn a second language quickly and easily simply by being exposed to it. Adults generally learn more slowly and less well. It is hypothesized that the brain in youth is extremely plastic, but hardens with adolescence and adulthood and becomes less receptive. Children learn in an active way, during play, and the language is reinforced by pleasure and by corresponding activities. Adults usually learn passively in a classroom involving only audiovisual methods and memory. Accordingly, the following characteristics of effective language learning programs are suggesged. For children: Native-speaking teachers, several hours of instruction or exposure daily, linguistically unstructured activities, no corrections until the child is fluent, cultural lessons may or may not be used, supportive home-school environment. For adults: A well-trained, dynamic and patient teacher, students with expressed goals, daily or frequent classes that are both small and homogeneous, linguistically and methodologically sound textbooks, acting out situations in the language, varied modalities of presentation, minimum of correction, outside practice, availability of tutors, individualized instruction, explication of purposes and goals of a learning activity. (CHK)

SOME CHARACTERISTICS OF AN EFFECTIVE LANGUAGE LEARNING PROGRAM

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To a large extent, language learning is a process of man's internal faculties about which relatively little seems to be known. Externally we can of course observe that, like walking, normal children learn their mother tongues (L1) at approximately the same ages and at an amazingly rapid rate. Furthermore, an additional language (L2), or languages (L3, L4, etc.), can also be easily added to the native tongue by pre-pubertal children in a multi-lingual setting. After puberty, we can also observe that this ability to absorb languages in what appears to be an osmotic manner begins to diminish, for reasons yet unknown, although a few adolescents and a small number of adults retain--or perhaps develop anew--a greater or lesser kind of language learning facility.

This striking difference between the language learning behavior of pre- and post-pubertal human beings is believed by some researchers (e.g., Lenneberg, 1964) to imply that there is a neuro-physiological basis for the difference, that whatever pre-pubertal biology uses to bring language learning about either disappears or atrophies rather quickly in adolescence, in most humans. Penfield's experiments with brain-damaged aphasics would seem to support this biological claim (Penfield and Roberts, 1959). In these experiments, aphasic children who had received brain damage to the left side of the brain (the language side) were able to recover their speech--more correctly, to re-learn to speak--by shifting their speech activity to the right hemisphere, which is normally considered the "wrong" side of the brain for speech. Penfield and his associates proved this conclusively by injecting a speech-inhibiting drug into the right hemisphere of these children, whose speech was then temporarily affected. Brain-damaged adults were unable to make a comparable shift: for them the right hemisphere was not available for language use.

Asher (1969) refers to this phenomena (although not necessarily supporting it) as the "theory of brain plasticity" in which with age the biological clock in man changes the cellular plasticity of the brain which, in turn, reduces the organism's capacity to learn language, whether native or foreign. In other words, this theory implies that if a person has not learned to speak by the age of puberty, he never will speak. While Penfield's brain-damaged children were able to re-learn their native languages in the other side of their apparently remarkably plastic brains, left-hemisphere-damaged adults were unable to re-learn any language at all and remained life-long aphasics.

If we are to take this plasticity theory seriously, we must look for a reasonable way to explain how it is that some, albeit few, adults retain something similar to their childhood ability to learn L2's. One possibility would be to postulate a linguistic child-adult, one whose language component never atrophies. Such a person would not necessarily be an "immature" adult

mentally as far as general intelligence is concerned. He would only be immature linguistically, which of course implies that the language learning function of the brain does not mature, or harden, but continues to store data in its linguistic memory banks, much like an open-ended computer. The actual physiological reasons necessary to explain such a "linguistic child-adult" theory are, of course, no more available to us at this stage of brain research than are the actual physiological reasons to explain such similarly bizarre mental behavior as so-called photographic memory. Another interesting possibility is that adults may develop a distinct way of learning an L2, one which is quite unlike their childhood language learning, but which receives similar (although usually weaker) results, especially in the area of articulatory fidelity, as most teachers of adults have no doubt observed.

Indeed, observation of adult L2 learners in the classroom will reveal that the most able learners are generally persons who are adaptable, have good memories, as well as few inhibitions about making strange sounds, and who do not feel uncomfortable with unusual combinations of grammatical elements or meaning (Hall, 1964, p. 449). Such persons might be said, somewhat unscientifically, to possess an "outgoing" personality; in other words, they are extroverts. Nida (1957) mentions that missionaries who were talkative extroverts learned foreign languages faster than quiet, studious learners. For the average un-extroverted adolescent-adult learner, however, a good deal of concentrated effort and time is necessary to learn an L2, which will almost always be spoken considerably less than perfectly. Carroll (1960) refers to this phenomenon as "low aptitude" for L2 learning. If, in fact, we are able to establish that "high aptitude" learners do indeed possess similar personality traits, then a "personality theory" of adult language learning is inevitable, one which would enable teachers and textbook writers to design materials which meet the needs of personality-types rather than assuming that all adolescents and adults learn alike, but some faster and some slower than others. Such a "personality theory" would, of course, seem to imply that certain idiosyncratic or personality features are crucial for adult language learning, features which may or may not be present in childhood and which, as we have seen, are not crucial until after the arrival of puberty. Such a "personality theory" would seem to accomodate the "plasticity theory," or at least account for those occasional adults who appear to escape the bonds of the "plasticity theory." Obviously, a great deal of research is necessary to establish the validity of either theory. Whatever theory is correct, it is still patently obvious that we are left with different types of language learners in the classroom, for which distinct teaching strategies must be developed.

Characteristics of a Child Language Learning Program

Such theories, while scientifically unvalidated, may nevertheless assist language teachers to understand the differing kinds of learning behavior in the classroom. The child, following the "plasticity theory," apparently need only be talked to in L2--either by a teacher, by a peer, by an adult, or, preferably, all of these--in order to activate his language learning system. Play activities which involve a high degree of language use will therefore probably be more effective teaching devices than hands-folded structure drills. While in Spain, for example, I observed my own children learn to speak Spanish in

5. Cultural lessons may or may not be used (e.g., learning about Mexico), depending on the inclination of the teacher and the goals of the total language program, but "cultural enrichment" programs will probably have little or no effect on the linguistic output of the student. Bilingual education programs for, say, Spanish-speaking children that desire to stress Mexican cultural content while at the same time teach English would therefore do well to eliminate ESL drill classes and substitute lessons in Mexican culture taught in English. In other words, teaching a Spanish-speaking child how to shoe a horse in English is probably just as effective a way to teach him English as talking about pumpkins and singing songs about Jack o' Lanterns, and perhaps even better in terms of total physical response. Bilingual programs may, of course, have other than linguistic reasons (e.g., cultural ones) for teaching certain subjects in the child's native language.

That few schools in this country are willing to invest in this kind of a language-teaching committment at the only-age level where it can be taught truly effectively and easily seems to reveal a lack of American interest in foreign language education. Such programs would not be at all difficult to establish. Anything less is mere toying with language learning , as perhaps evidenced by the unsuccessful FLES programs of the 1960's. There does seem to be a slight glimmer of committment, however, in certain diglossic areas of North America, where large linguistic minorities (e.g., Southwestern U.S.) and/or potential political problems (e.g., Quebec, Canada) exist. In the U.S., for example, federally-legislated bilingual education programs have in the last ten years provided concurrent L1/L2 education. Still in an infant stage, the long range results of these programs remain to be assessed (see Anderson and Boyer, 1970). In Canada, recent legislation has made possible bilingual instruction in any community which has a 5% linguistic minority. Prior to that, in one now-famous case, a group of English-speaking Canadian parents in St. Lambert (near Montreal) decided that they wished their children to become fluent in French. A French monolingual teacher was promptly brought over from France, who proceeded to teach her charges as if they were French children. The results were that these first-graders learned French. Further, by the end of the second year of the program, tests showed that the children were not only able to speak and read French almost as well as the native French-speaking children, but they were able to read English as well as their native English-speaking peers (Lambert and Tucker, 1972).

The only comparable "total immersion" programs in the U. S. are the few elitist so-called bilingual schools in which children of the well-to-do or of the religiously orthodox are sent to French-American schools, Hebrew academies, etc., to be educated in an L2 for cultural or religious reasons. Of course, the average American public school has often been a "total immersion" situation for immigrant children in the process of Americanization, and an unusually successful one, since the language-learning process in these classes contained all of the ingredients that I have previously suggested. Several notable exceptions were the German schools prior to World War I and the specially-

about eight weeks merely by playing in the plazuela with the neighborhood children for several hours a day; in Peru I once observed a 3-year-old British girl who spoke English, Spanish, and Quechua,all quite fluently. In other words, a child need only be exposed to an L2 (or L3, or L4) in order to learn it. Apparently all normal children are able to do this; it can be said, then, that language learning is a trait of childhood (Scovel, 1969). To put it another way, no normal children are unable to learn language when they are exposed to it. I should point out, however, that my own children are no longer able to speak Spanish, since they have been out of that linguistic milieu for over six years now. Unlike walking, then, language must apparently be actively used by a child, lest it be erased or somehow pushed far back into dormant memory storage channels. Taking these facts into consideration, I believe that a serious L2 learning program for children would include most or all of the following ingredients:

1. Native-speaking teachers. These persons need not necessarily be trained, or even adults. They could be persons in the community, high school students, or even L2-speaking classmates. Their only requirement would be to speak to the students in the L2 at all times and, therefore, should be selected for their verbal outgoingness.

2. Several hours of instruction (or exposure) daily to the L2 for at least the first year, preferably starting in pre-school or Kindergarten, and thereafter at least one hour daily throughout the child's education, including secondary school. After the first year, a content subject, such as health or history, could be taught using the L2 as the medium of instruction.

3. Linguistically-unstructured activities. Special pronunciation or pattern drills, dialogues for memorization, or other structured activities are superfluous and perhaps even prohibitive (Jakobovits, 1970, considers them "theoretically unproductive"). The children should at first listen a great deal and obey commands as they learn to decode them, but no requirements for speaking should be made until the child is ready to speak (see Asher, Jan., 1969). Total physical responses should be encouraged, i.e. the child should talk about what he is doing while he is doing it. Play activities, including songs, rhymes, and word games, should be used extensively in addition to activities which engage cognitive and affective domains. Field trips during which the L2 is used should be frequent.

4. No corrections should be made until the child is fluent, or at least able to communicate in the L2. The child should be encouraged to produce any sentence, even if "incorrect" (Jakobovits, 1970). Like native-speaking children, L2-learning children will straighten out their errors, whether due to over-generalization or to conflict with their own L1, in due time with or without special teaching.

segregated schools for Mexican children in the Southwest, prior to and during World War II (see Anderson and Boyer).

Curiously, after segregated schools and even "speaking Spanish on the school grounds" were supposedly barred, many persons of Mexican cultural and linguistic heritage in the Southwestern U. S. continued to resist the effects of the immersion-Americanization process, along with great numbers of Native Americans. The result was that large numbers of these linguistically non-English-speaking minorities have been virtually educationally disenfranchised in an all-English educational system, or at best poorly educated and unable to compete for diplomas and jobs that require fluency in English. The answer to why these Southwestern peoples have resisted Anglicization seems to lie in their peculiar historico-socio-economic situation, aided by a constant flow of fresh non-English-speaking immigrants from Mexico and points south, factors which were not present in the eastern part of the U. S. during the rapid Americanization of linguistically-different immigrants from Europe, many of whom grew up during periods of extreme xenophobia.

Given the peculiarities of both successful and unsuccessful total immersion programs, it would seem necessary to add one final ingredient to the recipe for effective foreign language learning for children:

6. A home-school environment which supports the child's efforts to learn the L2. Such a milieu can only be created by the presence of a sufficient numbers of L2 speakers both in and out of school (and preferably in the home as well), who can only be spoken to in that language. Use of the L2 must be rewarded by teachers, peers, and parents, plus other adults, as well as community recognition in the form of jobs, scholarships, etc. In other words, use of the L2 must quickly start to "pay off" if the child's total linguistic capabilities are to be engaged. Otherwise, language learning may appear to be a game to the child, of which he will presently grow tired.

Characteristics of an Adult Language Learning Program

We have seen that, for the adult, the childhood capacity (or possibly instinct) to absorb languages fades quickly. In another vein, Bolinger (1968) suggests that perhaps we lose not the capacity but rather the inclination to apply it: "Our firmly entrenched native habits become such a universal grappling tool that we insist on using them even to grapple with a new language" (p. 293). Even Asher (1969) somewhat cautiously admits that, whatever the implications, there is no direct evidence that children have special capabilities for language which are absent in adults. He feels that the belief in the superiority of children for language acquisition may be an illusion (except for fidelity of pronunciation) based on the different ways, or situations, in which children and adults go about acquiring language, which are usually play vs. non-play, action vs. non-action, and physical involvement vs. non-physical involvement:

> Children may learn the new language in play situations when utterances are synchronized with physical movement (i.e., "Come on, Billy, let's run to the corner!"). It may also be that adults learn the new language in static, non-play situations in which their kinaesthetic system is not active and not synchronized with speech transmission or reception (i.e., "Hello, it's a beautiful day, isn't it?") (Asher, 1969, p. 335)

Psycholinguist John Carroll (1966) also refers to similar association-retention modes in reminding us that "the more numerous kinds of association that are made to an item, the better are learning and retention" (1966, p. 105). Such association could be cognitive (e.g., descriptions of rules or articulatory features), visual (e.g., pictures of written symbols), or motor (e.g., physical exercises involving association of words with actual motor performances) or, preferably, all of these since, according to Carroll, more associations achieve more learning. Such a learning principle, Carroll urges, strongly dictates against the use of language-teaching systems that employ mainly one sensory modality (such as hearing). Asher offers an array of evidence along these lines which show that use of motor modalities--which he refers to as "total physical response"--does indeed produce a highly-significant difference in retention (Asher, 1966; see also Asher, 1972). Whether or not it is possible to engage easily-embarrassed adults in physical and play activities for hours on end, however, seems doubtful except perhaps under highly special or experimental conditions. Teachers should be aware of Asher's results, in any case, and should probably try to utilize them in so far as the teacher's personality and the students' willingness permit, along with as many other modalities as possible. Why not touch, smell, and taste, in addition to hearing and seeing? Indeed, according to Anisfeld (1966), "sounds are registered not only by our ears but also by mechanisms embedded in the muscles that deal with the feedback from their own activity" (p. 118).

The literature fails to mention the affective domain in language learning, which I believe may be equally important in considering strategies for learning effectiveness. We can observe, for example, that children--in addition to or concurrent with their motor-play activities--are constantly grappling with feelings and emotions through language: "Don't sit there! That's my chair!" "Ouch, I fell down and hurt my knee!" "Tickle, Tickle, tickle!" "My doggie got hit by a car!" "Look at my new baby sister!" "Mommie, that boy hit me!" As adults, we have probably forgotten some of the strong emotions associated with such examples. Besides shouting, crying, and laughing, language serves the child as his primary tool for describing his feelings and communicating his emotional state to those around him. The typical classroom adult language learner, on the other hand, is most often concerned with *la plume de ma tante* trivialities and intellectual parlor games, which make little or no pretense at getting at real feelings. The teacher who is able to engage the students' feeling will have, in my opinion, yet another modality of association to support Carroll's multi-modal plea.

One other important criterion must be considered before we can look at specific ingredients for adult language learning: individual performance and

behavior. While children seem to acquire language at approximately the same time, in the same stages, at the same rate, and in apparently the same way, adults appear to exhibit rather wide differences in language learning modes, as I have already alluded to in the "personality theory" of learning. Some adults learn faster than others; some adults seem to favor visual over purely auditory learning; some adults react unfavorably to group learning in which they have to exhibit their errors; some adults seem to favor analytical learning over purely inductive learning; some adults have an extremely difficult time producing exotic sounds, etc. The list could be extended almost indefinitely. The point is that because of the differing backgrounds, ages, and personality types of adult students--as well as their varied reasons and goals for studying a foreign or second language--no single method or approach is going to achieve maximum learning for all. Furthermore, the audio-lingual axiom of "listen-speak-read-write" is probably unrealistic if we consider that most adults learn more effectively through visual means and that very few persons ever learn to equally speak, read, and write a foreign language fluently anyway. In most cases, a student will be more interested in one goal than another. If he is interested mainly in reading a language, the hours and months of audio-lingual/habit-response mim-mem and pattern drills hardly seems justified, especially in light of experiments which show that students who are taught an L2 mainly through reading and writing activities do indeed learn to write it better than students whose learning is mainly aural-oral (Scherer and Wertheimer, 1964). In order to meet the needs and goals of these almost infinitely varied adult learners, it is only reasonable to assume that a program which provides for individual differences is going to acieve better results than one which is invariable.

Clearly, the contention that "there is no one approach to language" (Bolinger, 1968, p. 290), makes it dangerous, if not downright misleading, to attempt to set down a set of ingredients for a successful language learning program for all adults. The following criteria must therefore be looked at tentatively and undogmatically, with a great deal of leeway for experimentation and for individual teacher and student characteristics.

Some Criteria for an Effective Adult Language Learning Program

1. A well-trained, dynamic, charasmatic and patient teacher who sees as his main purpose the drawing out of his students and the development of strategies for individual learning.

2. Students with expressed goals, who fully intend to accomplish them, and who are fully aware that foreign language learning is one of the most time-consuming and difficult undertakings an adult can attempt in an educational setting (or elsewhere, for that matter).

3. Daily, or at least frequent, classes.

4. Small classes, ideally around eight to twelve students, certainly not more than twenty.

5. Homogenous classes, at least in the beginning stages. The teacher should be fluent in the students' L1, both for purposes of understanding the linguistic inerference from L1 and for explaining points about L2.

6. Textbooks and materials which have been prepared using all possible insights of contrastive linguistics and of foreign language methodics (Mackey, 1967).

7. Situationalization of the content towards realistic communicative activities. Rather than concentrating on pattern practices and transformation drills, the teacher should have the students spend most of their time on communicative activities which draw students out and force (motivate?) them to utilize language which expresses felt needs or, at the least, to react to situations that have been artificially, but cleverly, created within the classroom milieu. Game playing and "acting out," along the lines suggested by Francois Gouin nearly a hundred years ago (Brooks, 1960, p. 209) and more recently by Asher (1966, 1969, 1972), in which words are directly associated to concepts and to motor activities rather than to other words, may be important ways to achieve situationalization.

8. Use of varied modalities of presentation and response, including considerable use of visual material such as writing, realia, photos, cartoons, comic strips, film strips, slides, motion pictures, and videotapes, as well as motor activities involving total physical response. A special classroom will be necessary to house and organize these materials in such a way that they are immediately available to both the instructor and the students. The motor activities will also require open classroom space. Activities which work with cognitive and affective domains should take precedence over exercises with purely linguistic ends.

9. An absolute minimum of correction, at least in the early stages. The adult language learner, like the child, needs to feel confident that he can use his new language to communicate with. One of the greatest frustrations for an adult is to be able to have things to say, but without the linguistic equipment to say them. Worse, over-correction and criticism by the teacher can make some adults (probably not the extroverts) hyper-sensitive and embarrassed about using the little L2 they know in front of others. Fluency should therefore be preferred in the early stages over phonological or grammatical accuracy. This is not to say that the teacher should not correct the student at all; rather he should not sacrifice fluency and communication for accuracy. After all, "I come early last night" is hardly less of a message if came is substituted. Misunderstandings, whether phonemic or grammatical or semantic should, of course, be straightened out with the greatest possible delicacy on the teacher's part.

10. Provisions for practice outside of class, such as watching films in the L2 and listening to recorded material, including that of a daily

day to day, so that flexibility is an indispensable quality of a good teacher.

Often the difference between really superb teaching and an acceptable classroom performance is no more than the ability to take advantage of opportunities which develop in the context of the classroom and which cannot be anticipated by even the most talented and skillful of authors.

(Dacanay and Bowen, 1963, p.iv)

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nature (e.g., TV newscasts or radio talk shows), or of a special nature (e.g., recorded songs, dramatic readings, police broadcasts, recorded interviews from TV, comedian's skits and monologues) as well as phonetic and grammatical material on discreet points that the student wishes to review. These drill materials should probably be alternated with songs or other short non-linguistically-minded recordings.

11. Tutor or teaching assistants, preferably L1 speaking, should be available in order to provide individual practice as often as possible. Ideally, these persons would be on hand for practice as many hours per week as desired, and should be at least minimally trained, especially in Points 7, 8, and 9 above. After the early stages of learning, these assistants would preferably be non-L1-speaking.

12. Provision of special learning programs for students with varied personalities, attitudes, and goals. All other areas above being satisfied, this area is the one which requires most of the teacher's time and inventiveness. There are probably no techniques for such individualization, other than continued observation of how adult students seem to learn, and then one hell of a lot of time and effort in trying to provide a learning program for that student.

13. Special "explication" periods before and after each classroom activity, in which the instructor explains the purpose of the activity, what the expected goals are, and outlines any special grammatical (or other) features that may be involved. If rules and exceptions are applicable, they should be mentioned. These periods should be brief and to the point, and should never substitute for lengthier practice periods. (See Carroll, 1966)

In summary, I have tried to show that a foreign language learning program can never be all things to all people, except perhaps for children who appear to learn by instinct upon contact, for reasons unknown. Adults, on the other hand, seem to learn languages either capriciously or deductively, but apparently not instinctively, unless we allow for an instinctive personality. Further, I have attempted to point out that L2 learning, for both children and adults, may be directly connected with factors of sensory, cognitive, and affective involvement. Finally, I have offered two sets of language learning criteria for the two age groups, which I believe to reflect their different language learning capacities.

As an after thought, if none of my suggestions work for a particular teacher, I can only offer these statements by Don Bowen of UCLA as consolation:

> Teaching is an art, and there is no single best way to present material to students. Teachers are different, and what works well for one may be ineffective for another. Classes are not the same: students may differ in motivation, preparation, and ability. Even the situation in a single class may vary from

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