The author looks at programmed learning in foreign languages from outside the university, from outside formal education, and from outside foreign language instruction itself. He examines it as a corporation executive would, asking whether this means of instruction can develop the skills his employee needs in a foreign country and whether it can do it autonomously (without an instructor). The program examined is Mueller and Niedzielski's "Basic French." The author feels that this is "truly programmed to the extent that it can serve as instructor in French to isolated persons," but he does not intend "to imply that it seems to be as good as it can be made, even now." (DO)
An Outside Look at Programmed Learning in Foreign Language

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For what it is worth, this will be a look at programmed learning in foreign language from outside the university, from outside formal education, and from outside foreign language instruction itself. Although a wider study of foreign language courses was originally envisioned, these comments will refer almost wholly to Mueller and Niedzielski's Basic French, a linear programmed learning course, the development of which I have been able to observe, sometimes closely, sometimes at a distance, since at least 1958. I have many small things to ask about the course, but really one big one which concerns my needs: to what extent is the course truly autonomous?

My company, Resources Development Corporation, provides training research, consultation, and materials to industry and government. Our staff and available consultants are mainly behavioral scientists, and our clients are mainly from the process and energy industries—petroleum, petrochemicals, chemicals—and from the metal-working industries. Our training materials are all programmed learning courses designed to be used by a trainee wherever he is when he finds time to study. Our trainees may be from labor, middle supervisory ranks, or from management. Some of our programmed learning courses are available or soon will be available in French, Spanish, German, and Japanese; and we are approached more and more frequently on training problems in overseas operations where language learning is needed. Thus we are interested in language training which gives promise of being capable of autonomously assuming the burden of language instruction in the circumstances where our materials are presently used.

In the front matter of Basic French occurs an interesting paragraph:

Years of testing the Basic French methodology have indicated that its success is dependent on competent guidance from the instructor. To use the program independently, as a totally self-instruction program would be an interesting experiment, the outcomes of which the authors and publishers would enjoy learning about. The program as tested, however, used the usual classroom situation, and the student and teacher can be confident when it is used in this environment.

It is a good question.
Yet the design of a course is not the whole answer, nor are the course and the language laboratory facilities taken together. Learning is profoundly affected by the social system in which it takes place, and a learner is moved to study or not to study by the degree of support he received from "significant others"—persons who are near, whose opinions he values or fears, and to whose attitudes he is sensitive. Thus it is possible for training to have everything in it that is needed, yet be rendered ineffective by something quite subtle that sets the learners against it. It is equally possible, by mending social-system fences, to mobilize "significant others"—friends, relatives, superiors—it is its favor so as to permit the training to have full effect.

In industry, where the effectiveness of training is measured by its expense, by increased efficiency, by enhanced safety, by reduction in costs, by reduction in damage and reject rates, by increased professionalism, and other indices of improved capabilities, programmed learning now carries a significant portion of the training load at many levels, and in the process industries RDC-developed programmed learning courses are the training media of choice wherever they are available. This acceptance is due fully as much to a hierarchy of sanctions for this mode of training that starts at a sufficient elevation in organizations to have profound effects on all those below, as it is due to the quality maintained in the development of the programs.

Innovation in elementary and intermediate college language courses has a social-system pistol—or may I say arsenal—pointed at its head from the word go. I had a distinct sense of déjà vu as I read Valdman's restrained report on the Indiana Multiple Credit Self-Instructional Elementary French course. In the late fifties I participated in the Modern Language Audio-Visual Research Project at Wayne State, even administering a federal grant for developing an audio-visual, culturally oriented, French elementary program. The project was distinguished for its emphasis on French culture now quite common in books and courses, and for financing Ted Mueller's tapes which drilled some 90 different French structural patterns using some 300 common French words. Like Valdman's program where the 'display session' was invented to provide a formal arena where students could exercise their voices in conversational interchanges, the Wayne program has probably left few traces in the institution where it was conducted.

In a recent visit to Lexington, I was able to watch display session groups at work. They act to keep the students talking French among themselves and they provide a strong sanction for diligent study in the laboratory. Yet Mueller feels that more is necessary, that each student working in the laboratory needs the supportive presence and sanction of a faculty member concerned with his successful
accomplishment of his learning tasks. I have to agree, and agreeing am left with the question posed in the preface of his book: can a programmed learning course be successfully used independently, on its own, remote from such ad-

junct instruction?

In Mueller's development of the program, he and his co-workers have inter-
acted continually between preparation and application of the program in college classes. His published papers report their relentless inquiry into the points of weakness of the program and of its application, and he has papers as yet unpub-
lished which continue this inquiry. Using the Pimsleur-Carroll aptitude tests, he finds the language "aptitude" of the students at Kentucky declining, from Fall, 1967, from the 51st percentile. In the Spring of 1968, aptitude drops to the 40th percentile and dropouts increase from 15 to almost 24 o/o. In the next semester Mueller builds up his training in auditory ability; aptitude falls to 35 o/o, but the withdrawal rate drops to 7.5 o/o. More capable, apparently, of hearing and processing sounds, the students stay in the course. And continue to stay; in the Spring term of 1969, he reports of dropouts, "none so far." Meanwhile grade levels in the course creep upward.

I think the whole concept of "aptitude" for language study stands on shaky ground; I think it is a cultural and r at an innate factor and I am not surprised to see an energetic pedagogy reversing its effects as reflected in withdrawals and grades. If aptitude is to be taken seriously, how can Mueller alter its effects? He re-
ports, over a two year period, displacement upward from "average" to "above average" in listening comprehension, but displacement both upward and down-
ward in writing-- a shift he accounts for by his use of a preliminary provisional text. With the coming of the printed text with the by now well-known ACCESS method of printing responses in the program in ink invisible until rubbed by a special felt pen, the writing of the weaker students, too, picks up.

There are so many oddball results from tests of the use of Basic French in action that one looks for plausible explanations. One explanation may be that to introduce a programmed learning foreign language course into a college situation is to drop it into a stormy sea of social-system cross-currents. There is always the factor of language department attitudes toward experimentation communicated in one way or another to the students. There is the factor of required language which brings in, willy nilly, the eager beavers and the foot-

draggers and that happy middle group that couldn't care less; there are the differential hopes of students for success and fears of failure, and the changes in these hopes and fears as the realities of college life become apparent. There is the shock of college entry to
distort all tests of ability until it has passed over, maybe by the middle of the first term. There are the personalities of teachers, students, and of classes; there must be many "Hawthorne effects" of changes which simply express the students' delight to find that somebody cares.

In any event, the immutables of aptitude and ability ought not be so much affected by pedagogical factors. I have no doubt that test scores influenced by the students' conduct in the language laboratory will jump when Mueller begins to move about them at the tables as they study, as he plans to do. As Mueller experiments, he is only partly modifying the instruction; he is also working on the surroundings -- physical and human -- building circumstances and attitudes favorable to the development of competence with a second language. In the past, I have succeeded in working drastic changes in English-language handling competence in Freshman English by creating a new social-system ambiance there. More pertinently, comparable anomalies in the stance of industrial trainees toward programmed learning validation sessions have, on occasion, provided our staff with skewed validation results that have required us to reschedule the validation with other subjects, and to take more care in making the employees fully aware of their company's need for each one to hit the program with his best efforts.

The development of any programmed learning course takes more time and effort than you would think. Developing an effective programmed learning course to teach a foreign language is a heroic task extending over many years and drawing on many minds. To be in step with current linguistic concepts, the program must reflect phonetic, phonemic, and syntactic theories and analyses unknown to most teachers and little known to most literary scholars. It was not much more than 15 years ago when Robert Hall published his structural description of French and came immediately under attack from traditionalists. Today's scientific description of French is essential to the viability of instruction, programmed or classroom, but hardly more acceptable to conservative minds than Hall's was then. In the Basic French course, this rationale is manifest only in direct presentation of sounds, forms, and syntax in morsels of fact and stretches of practice. All the technical language used is now so commonplace that it should hardly raise a hair. To me, it is comforting to find Pierre Delattre's phonetics, accepted structural and generative syntax elements, and Gougenheim word-frequencies in the presentation, advanced without argument: this is the way the language works; these are the facts; say it this way. Reviewing the grammatical summary at the end of the book, I find it sufficient. If I had this extent of French structure available for spontaneous production at need, no one would notice or care how much else
is outside my competence. I would make my way, understanding myself well enough to think I know what is going on and expressing myself well enough to lead others to think they know what I mean. Sheltered by these two illusions, I am one with any citizen of France, and my use of French for my purposes, whatever they are, will gently add what I now lack. One's command of a language never finds a level; it improves by use or it decays by disuse.

Naturally, my professional interest in Basic French as a programmer—once I am assured of its factual accuracy, theoretical soundness and adequacy of coverage—lies in its self-sufficiency as a programmed learning course. This is Mueller's concern, too, because he hopes that it will do its drudge part of the teaching and leave the fun part—the appreciation of French civilization, language, and literature—to the student and his teachers, to newspapers, magazines, books, movies, plays, and travel. Is the course sufficient by itself to put the student on his own in French? I do not apply the term "self-instructional" to programmed learning, since I do not mean that the student is in part his own instructor because the material permits or forces him to decide questions that a teacher would decide for him, if there were a teacher there.

In programmed learning, the program is the teacher; the learner stands in the same relation to the program as he does to a teacher. The program gives him tasks to perform, discrete decisions to decide, discrete items to pronounce, write, or interpret. The program does not put him on his own, but hand-holds him from one concept to another from first to last. His participation is summed up as compliance to the clearly-defined and clearly indicated requirements of the program from beginning to end. To the extent that a programmed learning course requires the learner to be his own teacher, it is deficient as a program.

To test the quality of the program, I have used two language lab situations. At home I have a tape recorder playing through its loudspeaker. At the office I have a two-lesson-source, two-student-unit lab with audio-active microphone-earphone circuits. The tape decks are at the console, and the student units may be discretely monitored. The mike tends to suppress ambient noises, of which there are many in my office. The system is balanced so that mike, earphones, and tape-deck handle about the same quality of sound. Still, my wife (who is giving Basic French our test run) says that the laboratory setup is more efficient, but she likes the tape recorder at home better. It is more pleasant, she says, and "probably more natural."

Obviously she does not qualify in any sense as a beginning student of college French, but she is probably much like any adult learner who might need to undertake a "programmed home study."
or night school or adult education course in French; she had Spanish in high school, some practice with the Wayne University project French tapes, and has made with me several brief business trips to France.

Her reactions: she likes the clear instructions in English; she enjoys the drill, which moves with a snap; she values the discrimination exercises in which she learns to hear the differences between a French sound and its English interferers, between the sound and nearby French sounds, the sound and typical mispronunciations, and so on. Her experience with other instruction has been sufficient to make her appreciate in this text the thorough description and workover of each point before she is passed to another. She likes the impressive pedagogical variety of the lessons, which have the effect of letting her experience each new item in the round--as it is intrinsically and as it is, set apart from other similar and different items. The introduction of the unaspirated initial and aspirated final allophones of /p/, /t/, and /k/ presents these sounds in such a way as to block off non-French pronunciation and to establish a basic concept of French syllabic rhythms. (This might get a hasty once-over in class, if it were permitted to come up at all.) When you have heard these stops in syllable-final position exploded like firecrackers at a Chinese New Year, and have been required to pop the aspiration as forcefully as you can imitate what you have heard, you would have to be a relentless linguistic amnesiac to forget them. For one whose last classroom memories are of the Direct Method, these lively exercises are fun. The language about language is clear unequivocal English; but there is adroit use of the non-verbal also: a multitude of tiny line drawings used as stimuli for recognition of words and phrases and for manipulation of utterance partials in pictorial context. Use of the drawings to introduce and reinforce items of vocabulary and syntax cuts down the amount of language about language the student is exposed to.

Thus to the question in the book’s preface about its use in independent study, the response of one learner so using it—a learner who has been several times disappointed by class and self-study situations—is to learn and feel a satisfying sense of learning that is new to her experience, even with “New Key” materials. Like many adults who continue their studies, she "votes with her feet" about courses—when a course is not useful, enjoyable, or profitable, she fades out without a fuss. When it is useful and pleasant, and she is learning, she keeps at it. It would take little extra sanction from the significant social system elements in her life to lead her to pursue the study even more assiduously—if, say, an employer or a chance to live meaningfully abroad were
to add urgency, utility, and recognition to her study--and provide group situations to serve as supportive "display session".

This appraisal of the course as being truly programmed to the extent that it can serve as instructor in French to isolated persons is not intended to imply that it seems to be as good as it can be made, even now. It says only that this programmed learning course seems to have crossed a threshold of instructional autonomy which puts it genuinely and uniquely--in this reader's experience--within programmed learning, not outside it, and not even on the edge. That it has to be bolstered to achieve its full effect by factors of relevance, social system support, perceived utility, salience among things that have to be done, and personal value makes it no different from any other programmed course anywhere. And if I have not mentioned this point before, it is fair for me to say here that I consider programmed learning in foreign language instruction to be one of the most difficult of all applications of programmed learning to bring off successfully.