REPORT RESUMES

ED 013 558
THE LANGUAGE LABORATORY; 1966--AN APPRAISAL. PANEL DISCUSSION.
BY- NOSTRAND, HOWARD LEE AND OTHERS

EDRS PRICE MF-$0.25 HC-$0.68 17P.

PUB DATE APR 66

DESCRIPTORS- *LANGUAGE LABORATORY USE, *COLLEGE LANGUAGE PROGRAMS, *SECONDARY SCHOOLS, *LANGUAGE LABORATORY EQUIPMENT, *LANGUAGE INSTRUCTION, PROGRAM IMPROVEMENT, LANGUAGE TEACHERS, ELECTRONIC CLASSROOMS, EQUIPMENT UTILIZATION,

## TABLE OF CONTENTS

**PANEL DISCUSSION: The Language Laboratory, 1966: An Appraisal.** Howard Lee Nostrand, moderator

- Training of Language Personnel. Edward Marxheimer, University of Alberta, Edmonton. ........................................... 32
- The Language Laboratory 1966: An Appraisal. Igor M. Gladstone, Nathan Hale High School. ........................................... 34
- The Present Status of the Language Laboratory. George C. Buck, University of Washington. ............................................. 38
- Modifications and Adaptations in the Use of the Language Laboratory. Thomas McNutt, Bothell Senior High School. ................. 42
- The Integration of the Laboratory in the Language Programme at Simon Fraser University. Geneviève C. Bird, Simon Fraser University. ................................................................. 43
TRAINING OF LANGUAGE LABORATORY PERSONNEL

Edward Marxheimer
University of Alberta, Edmonton

Language laboratory problems are due to two main causes: lack of training of the language teacher with respect to the language laboratory equipment and materials; lack of training of the laboratory administrator about when, how or why to schedule laboratory hours, and how to keep the equipment in satisfactory working condition.

Training the language teacher to take full advantage of a language laboratory involves two aspects. The teacher must be familiar with the equipment, knobs, switches, dials, etc. This familiarization is simple and can be achieved by anyone in less than two weeks of continuous serious work. The other part is more involved. Machines do not really teach just as telephones do not talk. The teacher still teaches - however, in a different manner, through programmed materials. This means specifically that the teacher presents in the laboratory materials that cannot be presented in class, materials that would not otherwise be available to the student, and that the teacher works with the student in a way that the classroom does not allow. This certainly does not mean that the language laboratory replaces the class or the teacher, nor that the language laboratory and its operation and use belong to the realm of vocational training. It simply means that a student taught by an instructor who can make full use of the aids available, can achieve better results in the language he is studying. Unfortunately, common language teaching practice has it to put on the tape that comes with the book, lesson by lesson, and herd the students into their stalls to somehow absorb the audio-lingual fodder dispensed by the tape. Little if any critical judgement is exercised by the teacher who usually does not know a good taped program from a bad one, except by the more or less justified claims put forth by the publisher. What results does the teacher expect to get from replacement drills - transformation drills - analogy drills - fixed increment drills - paired sentence drills - equivalence drills 1. - and how will he use this material and reinforce it when he talks in the foreign language to the student in his class? How does he correct his pronunciation? How many times must the student listen to the new foreign material before he has really heard it? What about using literary materials and at what level? Answers to these questions can be found through the very time consuming process of trial and error, a process which most instructors have no time to engage in, either because such an activity is not considered to be at the level of scholarly research, or simply because their teaching schedule precludes spending three to four hours a day on systematic experimentation and research.

The second problem is the laboratory administration, maintenance, and scheduling. Most schools, universities and colleges have by now a person in charge of this task and most laboratory administrators have their teaching load reduced accordingly. Usually, however, the administrator li-
mits himself, or is limited by his other tasks, to merely scheduling laboratory periods, and seeing to it, as if he were running a railroad, that classes arrive and depart on time. The main function of the person in charge of a language laboratory, be it a 20 or 200 position installation, aside from scheduling classes and keeping the equipment in working condition, should be to work with the language teacher, keep him informed as to what materials are available, what new developments are taking place, and to help the teacher technically and pedagogically with the preparation of his language or literature laboratory programmes.

To meet this need of people trained in the critical evaluation and use of language and literature audio and video works, as well as movies and television productions, we embarked recently, at the University of Alberta, Edmonton, on a joint venture between the School of Education and the Faculty of Arts to bring about a program of studies leading to a M.A. or Ph.D. degree in this particular field. The program has yet to jell into its final consistency before it is officially adopted. Meanwhile, we are gaining experience in offering workshops like the one outlined on the attached circular.

THE LANGUAGE LABORATORY 1966: AN APPRAISAL

Igor M. Gladstone
Nathan Hale High School

Introduction

In the Seattle Public School System laboratories are well equipped, and their utilization depends upon the program of the school itself.

The Nathan Hale Program

Nathan Hale High School of Seattle, Washington, is operating on a modified schedule called "Six on Seven". Under this modified schedule, the student registers for seven periods instead of the traditional six. The seven periods rotate on a seven-day cycle during which each subject has four morning sessions of fifty-minutes each and one ninety-five minutes session in the afternoon. Thus, though registered for seven periods, the student attends only five periods a day.

Importance of the Language Laboratory at Nathan Hale

In examining this modified schedule in relation to the foreign language program, three areas of instruction emerge as an adaptation of the audio-lingual approach to language learning: the development of a tape library containing all that is taught in the foreign language classes; the development of team planning and team-teaching programs; the development of seminar courses utilizing a semiprogrammed system of learning and used in conjunction with extensive laboratory experience - this program interacting with individual recitation and group exchange. The language laboratory in such a program becomes an important instrument.

System Used

The Nathan Hale foreign language laboratory is well equipped. It contains thirty-six individual booths, eighteen of them having student tape decks for individual library work. The console panel is versatile; a teacher can control twenty-three different programs and monitor thirty-six students in the room on an individual basis. The console is placed in the rear of the room so that students do not face it and thus give full attention to whatever they are doing.

A recording room and ample cabinet space for tape storage are in the rear of the laboratory. A comprehensive library for all modern languages taught at Nathan Hale is kept current by the departmental faculty. Presently, there are approximately thirteen hundred taped programs.

The acquisition of such a library is a time-consuming process and involves two types of work: the work of cueing commercially prepared tapes which come with the adopted texts; and the work of making original recordings of supplementary and enrichment readers, with time-interval insertions for student repetition and practice.
The tapes are coded for prompt identification, and the locations of various sections in a taped program are indicated by the judicious use of colored leader tapes:

White leader tape: Signals the beginning of section to be listeded to by students.

Yellow leader tape: Signals a section, with time intervals, for student repetition.

Red leader tape: Signals a section on substitution, expansion, and transformation drills.

Green leader tape: Signals a test section.

Blue leader tape: Signals that students are to practice reading from text.

When a drill section has more than one type of drill, the following coding is used to identify and separate them:

Drill one: Red leader tape with white leader tape.
Drill two: Red leader tape with yellow leader tape.
Drill three: Red leader tape with red leader tape.
Drill four: Red leader tape with green leader tape.
Drill five: Red leader tape with blue leader tape.

The operation of such a tape library is complex and requires the cooperative efforts of the entire foreign language staff. In addition to the tasks performed by the teachers, student assistants do routine processing; and native visitors, provided by the Seattle School District, take an active part in the preparation of tapes for instructional purposes.

How used.

The modified schedule, operating in conjunction with team-teaching and seminar courses, requires a unique approach in the use of the laboratory. It necessitates a code of practice for the teachers, a statement of responsibilities for the students, and departmental scheduling of classes.

The teachers have a code of practice which was designed by the teachers themselves. It states:

On his laboratory period he will be in complete charge of the room.
He will have the material ready and laid out.
He will survey the condition of the laboratory.
He will have students report to the laboratory on that period.
He will use his time to the best advantage of the students.

The students have some definite responsibilities which are listed on a special sheet given out to them at the beginning of the semester. In addition to explaining the operation and handling of the equipment in the booths, the sheets state clearly that it is the student's responsibility
to report, before the class starts, any faulty or defective equipment.

The language laboratory schedule is designed in terms of course needs. Each period rotates, and this requires an appropriately scheduled laboratory session which effectively accommodates the largest number of students. Under this plan, teachers can be in the laboratory for one or two periods on one day, none on the next, and three or four on the third.

This type of scheduling permits the students, who are in seminar, to go to the laboratory practically any time and to use the tape library according to their course requirements. There is also another advantage for the students: they can use the laboratory facilities to review or to prepare for aural-oral work.

The afternoon sessions are ninety-five minutes in length. Class work, in conjunction with laboratory work, can be assigned for those lessons which require aural-oral reinforcement and recitation. There are four plans worked out by the teachers for these afternoon sessions:

Plan A: laboratory work first, followed by class work, in equal time.

Plan B: class work first, followed by laboratory work, also in equal time.

Plan C: class work, laboratory work, and class work, each phase lasting thirty minutes.

Plan D: laboratory work done in three equal periods for review work, current work, and introduction to new work.

These plans offer a variety of possibilities. The teachers can select whatever fits the requirement of the course. For instance, in some classes that are team taught, the laboratory sessions are intensive. The whole group is divided into three or four sub-groups, each section meeting in the classroom on a rotating schedule. While the teacher in the classroom is working with one group on specific problems, the teacher in the laboratory drills and reinforces with the other groups, the material discussed and analyzed.

A seminar student has access to the laboratory at any time; he may go to the tape library, pick up the tape corresponding to the unit he is studying and occupy an empty booth with a tape recorder. Also, the student may help himself to a reel of practice tape. The student may listen to a text as the teacher would have read it to him in class, imitate the native speech of a narrator, or drill on a difficult pattern or test himself. The student may study his comprehension problems until mastery is reached. Time is no longer a factor in his obtaining a grade and credit. Quality becomes paramount in the course.

Results.

The laboratory work at Nathan Hale has taken on a new dimension because the tapes available now offer the teachers the possibilities of presenting drill and pattern practice, of combining audio-experiences with many native speeches, of training the students to increase rapidity or aural comprehension and speech fluency. All students can work aloud, simul-
taneously, yet on an individual basis. The teacher is free to focus his attention on the individual student's performance without interrupting the work of the class. The tape library opens the way for independent study and takes care of the differences in learning rates among students.

There is a feeling on the part of the faculty that much less effort is required to enable the students to attain a high degree of excellence in pronunciation and intonation. The electronic equipment, when used appropriately and with related drill materials, has greatly increased the opportunities for the student to manipulate the repetitive patterns. The voluminous tape library of text material available to students for listening or practice reading has drastically reduced the need for traditional class reading. The tremendous waste of student time, listening to partners rather than to native speakers, is eliminated; and intensive simultaneous individual reading practice is substituted. Time for analysis of stories, for discussion of ideas, and for study of culture and creative expression has increased tremendously. Keeping the laboratory open at all times has provided the opportunity for the students to advance rapidly in terms of accomplishment and quality of learning.

Conclusion.

We feel that, with less time per pupil contact and without increased physical effort in speech production by teachers, we are able to accomplish more and to offer more than traditional school programs. We also offer the students through the maintenance program the opportunity to maintain language skills once they are learned.
What role does the Language Laboratory play in the teaching of languages today? What role might it play? And what role should it play? These are the questions which will concern us in this paper. The first two can only be discussed on a factual basis. The final question is speculative and a matter of opinion or persuasion. I must confess at the outset that some of my statements will necessarily be based on somewhat limited exposure to the facts but the research literature seems to bear me out.

If we start with the public schools and the first question, we usually find a lab which is too small for the number of language students. But this is only the beginning of the difficulties. There are severe maintenance problems since few schools have electronic technicians on the staff who can perform this extra duty. A full-time man would be out of the question. An inflexible schedule with no open end limits the visitations per week to one or less. Materials must come from outside sources or they are hastily prepared by a teacher who has neither the time nor the training, whether it be in the language itself or in the technique of structuring drills, to construct them properly. The one primary advantage on the public school level is that the teacher knows precisely what is on the tape and most likely she supervises the performance of the student. I will return to these two points later. If she happens to be positively oriented toward mechanical devices and the equipment is sophisticated enough to allow monitoring, the class may well be fortunate.

The college picture presents an equally grim prospect, even though from a different vantage point. In contrast to the public schools most institutions of higher learning enjoy restricted class size, a more predictable budget, adequate staffing and maintenance facilities, a flexible day plan with the possibilities of expansion into the evening and week-end hours. On paper at least it would appear that another advantage might lie in the instructor's greater amount of free time, due to his reduced teaching schedule and smaller classes. Some colleges have been known to allow marginal credit in place of scholarly publication to staff members who prepare extensive syllabi for their courses. But to my knowledge no university has ever recognized the preparation of teaching materials, including tapescripts, drill exercises and recordings, as anything beyond the routine performance of a minimal teaching obligation. As a result the efforts of the college instructor are all bent towards those areas which receive academic recognition and monetary reward. Teaching, for the most part, has been turned over to a few dedicated souls who feel an obligation to their students. These may or may not be good scholars. The likelihood is actually higher that they will be both, if I am any judge, because the good scholars are usually people of extraordinary energy who enjoy recognition in everything they do.

The real tragedy behind both the situations depicted above is that language teachers have abdicated or been forced to abdicate their teaching
responsibility to commercial forces. The company with the prettiest packaging, the best salesmen and the most free, taped lessons determines how foreign languages will be taught. It dominates the market. It stifles research. We are no longer interested in how effective we are but in how easily we can manage to get through the day without problems. A concomitant result is that the university no longer has that marvelous advantage over the public school forces of being able to change textbooks from quarter to quarter as they prove unsatisfactory or as new and better ones appear on the market. Now the huge investment of time and money spent in duplicating tapes, coordinating them with the lesson plan, printing up scripts (if this is done at all), etc. forms a lethal inertia which paralyzes the whole system. I feel there is no satisfactory program in German at the present time. I will not presume to judge the other languages but I harbor strong suspicions after observing 8,000 students per year for several years.

The question of what role the lab might play hinges to a large extent on the answers to several other questions. Whose philosophy dictated the choice of equipment? How many people share those views who will ultimately use the lab? Was the layout designed by someone familiar with these matters? Is it large enough to handle the number of students enrolled or the prospective ones in the coming years? If the lab was built in 1963 or later the chances are that its technical quality is satisfactory. The equipment on the market today has been pretty well standardized with the publication of Alfred S. Hayes: Language Laboratory Facilities: Technical Guide for the Selection, Purchase, Use and Maintenance. Wash. D.C.: Office of Education, US Dept. of Health, Education and Welfare, 1963. All the leading manufacturers were called to Washington before the publication of this book to discuss the reasonable and feasible performance standards. If these standards are insisted upon, there can be no technical problems with the adequacy of the equipment. The suitability of course will depend on the design and arrangement.

Although initial performance need no longer be a problem, lasting quality may well be. Few manufacturers maintain quality control divisions worthy of the name because of the expense. Often they will substitute aluminum for stainless steel in sleeves or plastic for metal, light motors for heavy etc. The layman is simply not able to write specifications nor to assess these features. Diekhoff says: "Before installing a language laboratory, school administrators should make careful advance plans with consultants experienced in the use of the laboratory as an aid to language teaching. These consultants should not be in any way affiliated with manufacturers of language laboratory equipment. The costs of operating and maintaining a language laboratory, both in money and in expert man-hours, are essential items in a laboratory budget. At least some of the school's foreign language teachers should be sympathetic toward and acquainted with the use of the language laboratory and prepared to integrate these uses into their teaching." (PMLA, Vol. LXXX, No. 4, Part 2 /Sept.1965/: John S. NDEA report).

Assuming quality, performance and design to be proper, we have a few choices of direction open to us. There is the large classroom approach with fifteen inch tapes and coupled movie projector, such as Purdue uses.
This requires a faculty committed to one approach and willing to produce their own materials. A more flexible arrangement operates at Portland State which has a huge room with spacious control consoles or monitoring positions. Thus it could serve either as a classroom or a library type lab. The Universities of Michigan, Texas and Indiana allow the student to handle his own tape, either in cartridges as at the first one or on reels at the latter two. This kind of individual control is undoubtedly the most impressive type of lab to the casual observer. And I would even admit that for upper division work, special kinds of work and for the top student in the class it might even be the only kind of lab that makes sense. Though in these cases I would prefer automatic, remote recording such as the Yale lab has in order to avoid damage, theft, cluttered booths and to furnish constant supervision.

To my knowledge no laboratory has achieved its "should" state. In any learning situation, and especially one on such a huge scale, the ideal condition is instant identification of the problem and immediate access to corrective measures. The laboratory on the college level should be a human laboratory shared by all the language departments, educational psychologists and learning theorists. Much more space and financial support should be made available. John B. Carroll has written an article whose title alone should be enough to intrigue every one of you here to read it: "wanted: A Research Basis for Educational Policy on Foreign Language Teaching," (Harvard Educational Review, Vol. 30, No. 2 /Spring/ 1960, 128-140). There are some devastating criticisms of our "fly by the seat of your pants" profession and some legitimate challenges which will have to be met seriously in the very near future.

Many experienced teachers very probably have sound instincts about how to proceed in the classroom, based on many years of careful observation. And still none of us know how to answer the question in every student's mind: How do I learn vocabulary? or: What's the best way to study this lesson? Teaching pronunciation in a classroom of more than one student is certainly hopeless. But how long is it advisable to concentrate on pronunciation exercises in the laboratory? When does the law of diminishing returns set in? As a matter of fact, are any of the commercial exercises efficient? Or are the proponents of audio-discrimination theory closer to the truth? They have certainly produced some startling results. There has been some research on the length of drill sessions but most of it is entirely inadequate. The problems of satiation, boredom or ineffectiveness of reinforcement need very careful study. The teacher's enthusiasm for his fascinating drills is often not shared by the students. My office is so located that I am often forced to overhear many of the students comments. Even if these aren't taken at full value, there must be some validity to them. All of these problems could be investigated by teams of interested scholars. The subjects don't even need to be paid, since they have to be there anyway. The major criticism of most psychological studies is that they are performed on segments which are much too short and whose educational value might be questioned. The larger problem however is that psychologists prefer working with animals to reduce the variables. In University laboratories it is extremely difficult to control the massive movement of students. You can never be sure of getting the same subject back again. On the other hand this is the strong point in favor of those language teachers who claim significant strides forward with the aid of the new mechanical aids. Their judgment rests on experience with
hundreds of students extending over several years. Subjective as it may be, it too deserves the credence of even the most hardened skeptics.

In the immediate future I am unable to see a multiple-media mushrooming in language laboratories. A few small private schools, such as Oklahoma Christian, or state institutions with education as their avowed purpose, such as Grand Valley State, or major schools who make the large administrative decision to adopt a comprehensive approach for all subjects - and Ohio State may serve as an example here - may take this direction. But for most the initial outlay will prevent any such drastic move.

A more conservative and economically feasible approach would be to develop programmed sequences for each aspect of grammatical structure. These could be available on reels, cartridges, dial-access systems, memory discs or some product of the future. The student would be referred to them on the basis of classroom correction, analysis of his own mistakes or general assignment. Audio-discrimination drills for individual pronunciation problems could also be developed for that 10% of the student population with little or no audio-memory or mimicry ability. In a more elaborate system these might be coupled with visual material and even a kind of reflectophone which would allow the student endless replay possibility.

Many of the things mentioned in this paper are technically feasible at this very moment or could be within a very short time. Unless demands are made by teachers with the vision to see the possibilities, they will wait upon chance development in a commercial research institution, where their further development will result from by-product interest.

I have said little or nothing about the Language Laboratory at the University of Washington. For those of you who are interested, I have a mimeographed description of our equipment which I would gladly mail on request. Essentially, it is the largest laboratory devoted exclusively to languages in the country. Its physical arrangement suffers because of the impossible architectural problems inherent in old buildings. However, it embodies nearly every concept discussed within this paper and hence is adaptable enough to meet the varied and unpredictable demands of a huge and ever changing language faculty. Its programmed instruction center serves a large and heterogeneous audience which otherwise would probably not study languages formally. Its reproduction and testing facilities serve schools throughout the state and often reach across the borders. A staff of 30 people keep the laboratory humming as long as there are students with the desire to learn.
MODIFICATIONS AND ADAPTATIONS IN THE USE OF THE LANGUAGE LABORATORY

Thomas McNutt
Bothell Sr. High School

If, as Germaine Bree (See Publ. of the M.L.Ass'n, May 1963) maintains, "the end of foreign language teaching is on the highest level, to produce genuine humanists knowledgeable in the literature and other aspects of another culture and capable of discussing them in another language on a mature level" - how do we best utilize the language laboratory to achieve this aim?

Some of the modifications suggested by colleagues and F.L. acquaintances are these:

a) Use the lab only for initial introduction to pronunciation and phrasing and use teacher creativeness in the classroom principally from this time on.

b) Use the lab for re-inforcement for those who genuinely wish to master the language, to be used principally on a voluntary basis.

c) Move part of the facilities to an easily accessible location in the library or study hall.

d) Use tapes made from recorded short-wave broadcasts for up-to-minute articles of news and programs of interest. (Equipment can be bought for $50 - $150 usually).

e) The lab serves as an effective testing device for all levels (providing that the audio-lingual style pervades classroom teaching.)

f) Use the lab to improve the district teachers themselves in pronunciation, phraseology, and competence.

g) Use it to reinforce and establish habitual behaviour to all extents possible, leaving the teacher to promote and lead the way for creative behaviour.
THE INTEGRATION OF THE LABORATORY IN THE LANGUAGE PROGRAMME

AT SIMON FRASER UNIVERSITY

Geneviève C. Bird

A brief outline:

The Department of Modern Languages at Simon Fraser University which opened last September offers courses in four modern languages: French, German, Spanish and Russian. One of the essential features of the language programme is the audio-lingual training given during the first four semesters, and particularly during the first two semesters.

For the first two semesters (each of four months duration) the programme consists of eight study hours per week. Following the 'Linguistic Approach', semester one concentrates on hearing, and semester two concentrates on speaking. The first one-hour period of the week is given over to a Lecture which serves as the nucleus or basis for the week's unit of work. This Lecture is attended by all students taking the course. As the week's work proceeds the student will attend two one-hour tutorials (in groups of 20), alternating with two one-hour periods in Sections (of not more than 10 students) with native informants. He will also attend three one-hour Language Laboratory sessions. The structure may be summed up in brief as follows:

1st hour -- Lecture (for total enrolment)
2nd " -- Tutorial: Dialogue (groups of 20)
3rd " -- Section: Native Informant (groups of 10)
4th " -- Language Laboratory Session -- Monitored
5th " -- Tutorial: Grammar (groups of 20)
6th " -- Language Laboratory Session -- Drill
7th " -- Section: Native Informant (groups of 10)
8th " -- Language Laboratory Session -- Drill

You will note that one of the Language Laboratory Sessions is "monitored"; at the other two sessions, the student goes over the same material and does more practice on the same unit.

While this is the general pattern for Semesters one and two, Semesters three and four will require only five hours of study per week and will concentrate on the reading and writing skills.

The preparation of the tapes for each Session requires the editing of commercial tapes which accompany the textbooks and also some additional recording. The exercises are varied and include practice on the various parts
of the lesson including training in pronunciation, transformation drills, questions and answers. We prepare tapes for each period of the programme to fit the ten to twelve minute time unit required by the cassette type cartridge reels we are now using, and which also prevent any waste of time during the Laboratory period.

As our equipment permits the student to record the master tape on a separate track, it is possible for him to use the same recorded material several times during the same period. It should be mentioned that this separate track has proved itself to be a most useful feature and one well worth considering when ordering equipment.

Methods: Limiting our consideration once again to the first four Semesters, and particularly to the first two, we found it very satisfactory to keep to a minimum the simple record-playback procedure, while devoting more time and energy to several recordings of the same exercise -- using of course the same master tape recording as we mentioned above. This procedure was particularly effective for the first of the two drill Laboratory Sessions.

Results: It would be difficult to assess in terms of percentages the results achieved in the Modern Language Programme after only two Semesters of operation. However, one can notice, quite clearly, the value of the method from tests given in the form of personal interviews. The answers to questions show a very good grasp of pronunciation as well as a good handling of structures and vocabulary; there is a relaxed attitude and a liveliness which reflects itself during the conversation. It would be fair to say we have found an enthusiastic response to an enthusiastic programme.

In conclusion, one could stress the close relationship between the various activities which make up the week's schedule, and it is now quite apparent that the Language Laboratory Sessions are as much an integral part of the course as are the Lecture, the Tutorials, and the Sections; they have in fact reached the status of an indispensable adjunct. And may I, in closing, draw to the attention of any who may not yet have it on their lists, a very interesting book by Robert A. Hall: New Ways to Learn a Foreign Language, published in the Bantam Language Library edition.