

USING THE LANGUAGE LABORATORY *
 (or Rolls Royce bumpers make very good bottle openers)

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The language laboratory (LL) is now some thirty years old, and yet there still seems to be a shortage of answers to the important questions that can be asked concerning its use:

Are we using our LL's better than we did 25-30 years ago, or have they just gathered more dust?

Do we actually know why we are using the LL in any given class session, or is it simply on the timetable?

Are we using the LL properly - if there is such a thing as a 'proper' use of the L.L.?

Do we look on our L.L. sessions as an essential part of language learning, where we can observe the learning process as closely as if we were in a scientific laboratory, or is it just a break from the classroom?

Do we regard the freedom given to the student by the use of the L.L. as positive, and our inability to control all students from the console as productive?

Lastly, has the LL changed with the changes in language teaching, that is, has the L.L. become functional and notional and communicative, and given up its structural bride and her well-drilled bridesmaids?

* This paper was given at the Annual Mextesol Convention, Acapulco, 1980.

If the answer is NO to all or most of these questions, and I have the feeling that it may well be, why do governments, schools, universities and companies continue to spend large sums of money on LL equipment, and why do teachers continue to use them? Should we not be putting the LL, the methods used, and the materials under a severe, practical analysis to find out how the LL is being exploited -- and whether the way it is being used matches or comes close to taking advantage of the different features that were built into it? And should we not also (and perhaps more importantly) be examining the principles of teaching and learning that went into the design of the LL?

The LL is a valuable and carefully thought-out machine for learning. Unfortunately very often, and for a variety of reasons, the LL is only poorly used, or is used for odd and never -- dreamed -- of purposes (hence the reference to Rolls Royce bumpers in the title). I have nothing against new and innovative uses, but if a peripheral use becomes the main function of a piece of equipment, it does seem rather wasteful.

The language learning and teaching process is changed when the LL is brought into the program. It is a powerful and expensive tool and it cannot be ignored. It is, in my view, so powerful that it can help or hinder language learning depending on how it is used. The focus of this paper will be on the analysis of how the LL as an aid to class practice is actually used by teachers and students, and on how this can be done without having to set up elaborate longitudinal studies.

In the last major comparative study of LL use in Great Britain, the York study (Green, 1975), the conclusion was reached at the end of the study that 'the language laboratory appeared to be an ineffective, though common, exploitation of costly equipment.' (p. 203). Unfortunately, we are not told precisely why this was so, nor are we told how the LL was used by teachers and students.

Given this conclusion, and the conclusions of other similar studies (e.g. Smith, 1970), why do LL's continue to be bought and used? There appear to be both historical and mythological reasons for this.

Historically the LL has often been purchased for ad-

ministrative reasons. It is clearly labour-saving, since large numbers of students can practice in a language laboratory. Where there are large classes and few teachers, the LL can help overcome this problem. An example of such a situation influencing the spread of LL's was to be seen in the United States in the late 1950's and early 1960's.

Mythologically it has often been claimed that the LL has definite advantages over other aids and certainly over the poor, over-worked teacher in the audio-lingual drill class.

While the first reason is one of short term practicality and necessity, that is, making the best of the shortage of trained language teachers, the second appears almost to contradict this, implying that when the shortage is over, the LL can be retained as it is not only labour-saving, but is more efficient than the teacher (thus cutting time), and is also more accurate (thus cutting wasted effort) and also provides greater satisfaction in the learner by increasing his/her responsibility. In other words, the second reason, the mythological one, is that students will learn a foreign language faster, better and with more enjoyment in the LL than in the classroom.

Any tool, whether language laboratory or robot on a car assembly line, is acquired because its manufacturers claim that it is:

- i. more efficient (i. e. rapid and labour-saving)
- ii. more reliable (i. e. accurate and trouble-free)
- iii. more satisfactory and convenient for the user
(i. e. it provides 'job satisfaction')

Thus we can say that a tool is acquired to do a specific task better than it would be done by other means, and its performance must be constantly checked and evaluated to ensure that its performance matches its claims. To return to the language laboratory and the comparison with the Rolls Royce bumper, it is a great waste of resources if the LL is used for something for which it was not really intended and which does not fully exploit its potential.

A model of analysis was needed to find out whether instructions and advice given for using the language laboratory by teacher trainers, text-book writers, etc. were

carried out, and how often and by whom. It appeared that no one had ever done this, or if they had, they had not published their findings. Such a situation would be unthinkable in any mechanically-minded environment. Imagine, a company buys a large and expensive piece of machinery, and then finds that it produces no more than the old machinery. Surely they would look very closely at the way in which the machinery was being used. It is often stated that the teaching profession, at least in the humanities, is not technically-minded. We tend to accept advice from those with a technical background for as long as that advice works and then reject it equally uncritically when the advice does not produce the desired or expected results.

The LL is said to be more efficient, more accurate and to produce better quality language learning through the responsibility given to learners. In teaching/learning terms, the following advantages are usually claimed for the LL over other aids or no aids:

1. Each student can answer all questions and work all the time.
2. Each student is responsible for his/her own performance.
3. Each student can listen critically to his/her own voice.
4. Each student can work at his/her own pace.
5. The teacher can deal with individual students.
6. The LL can provide a variety of programmes and activities.
7. Each student can work in the privacy of a LL booth.

These seven 'assumed' advantages can be linked to the more general advantages of the LL as a tool: efficiency, accuracy, and responsibility (known as 'job satisfaction').

- Efficiency = links up with Advantages 1 & 4
- Accuracy = links up with Advantages 3 & 5
- Job Satisfaction = links up with 2, 6 & 7

If the LL has all these advantages, why are those students who use a LL not far ahead of those who do not have access to a LL? If we take a closer look at one of the 'assumed' advantages "Each student can listen critically to his/her own voice", we may find a possible explanation.

How are learners able to exploit this advantage? Firstly, because the LL has SPEAK/REWIND/LISTEN controls. The 'assumed' advantage is dependent on the presence of the equipment, which has, in turn, the potential to produce the advantage of constant repetition and comparison built-in as a design feature. This gives us a general principle of:

ASSUMED ADVANTAGE \longleftrightarrow USE OF CONTROL/FACILITY

Unfortunately, it is not enough just to tick off the controls and tricks that the LL can perform, or that are used in any single LL session, in order to find out whether an advantage has been present.

The example chosen ('Each student can listen critically to his/her own voice') assumes certain principles of language teaching and learning, and also assumes that specific conditions have been met. In this case, the conditions would be:

- Student has complete control with ease.
- Student is well-prepared for task.
- Student has time and ability to correct errors and evaluate performance.
- Student is aware that responsibility is his and not the teacher's.

At a more 'delicate' level, we would have to consider questions of principle about the reinforcement of errors, or the value of learning through errors, the role of drills etc.

We now have a more complicated relationship which is shown below in Figure 1.

Figure 1. Relationship of 'assumed' advantages to conditions of use



In order to assess whether the LL is being fully exploited by teachers and students, the above theoretical structure needs to be applied to practical observation grids, containing the all-important conditions of use. In Figure 2., below, some of the conditions of the STUDENT USE OF LL, are shown, as they appear in the actual observation grids:

Figure 2.

GRID 3.: Observation of Class with at on 1981

<u>STUDENTS USE OF LL</u>	<u>COMMENTS</u>
All S. clear as to pedagogical function of LL	5 4 3 2 1 0
All S. 'happy' manipulatively	5 4 3 2 1 0
All S. 'happy' mechanically	5 4 3 2 1 0
S. tend to overlearn	5 4 3 2 1 0
S. tend to underlearn	5 4 3 2 1 0
. . . (12 other conditions)	
S. participation/time	5 4 3 2 1 0

The TEACHER USE OF LL grid is even longer and contains some 25 conditions of use/use of facilities. Some of these are shown below in Figure 3.

Figure 3.

GRID 2.: Observation of Class..... with.....at on 1981

<u>TEACHER USE OF LL</u>	<u>COMMENTS</u>
T. 'happy' use of LL	5 4 3 2 1 0
Pedagogical monitoring/time	5 4 3 2 1 0
Analysis & diagnosis of S. pron. errors	5 4 3 2 1 0
Recorded materials integrated with other mats.	5 4 3 2 1 0

The other grids required are those on equipment used and on materials used, and the use made of materials. The numbers 5 4 3 2 1 0 after each condition/use of facility are linked to a definition scale for each condition/use of facility - basically, absence/presence; good/bad; able/unable etc., for example:

All S. 'happy' manipulatively: 5 - all S. able to perform standard varieties of exercises and drills and to move from activity to activity with minimum loss of concentration.

3 - some S. not completely happy, but getting through. Degree of teacher intervention necessary.

1 - S. definitely 'unhappy' and unclear as to how to perform exercises and drills.

0 - not applicable to this LL session.

We have already seen above that the three criteria of efficiency, accuracy and job satisfaction can be linked to the 'assumed' advantages, and that the 'assumed' advantages can in turn be linked to the conditions of use/use of facilities. Each condition/facility can, therefore, be linked or at least weighted towards one of the three practice criteria. That is, each condition of use/use of facility can be said to be more or less concerned with increasing efficiency, accuracy or job satisfaction, and can be weighted accordingly. Since I have already indicated that 'assumed' advantages are themselves linked to conditions of use/use of facilities, we can also group the conditions around specific 'assumed' advantages. In this way, it will be possible to decide to what extent an advantage was actually present in any individual LL session, and to what extent, therefore the LL was being exploited, and in what ways.

Thirty-nine sessions were observed at a language school in the south of England using the observation grids, and of these, after analysis, only 14 could be said to be fully using the LL, while in 9 sessions, it was not at all clear what the purpose of the LL session was. Taking the 39 sessions as a whole, the greatest areas of weakness in LL use were in self-criticism and self-responsibility, and with regard to actual session content, the weakest area was in the type of listening comprehension practice given. The teacher can have little control in any real sense once a LL session has begun.

Only the preparation and input are in his or her hands. From then on control and responsibility should be with the student, but in many cases in the sessions observed, it was not clear whether the students either wanted or could take the responsibility. Perhaps this is a case of the LL taking over control! A frequent sign of this problem was when the teacher was kept busy by constant monitoring and interrupting. I felt that this showed a desire on the part of the teacher to keep control and teach from the console. The teacher may well have felt guilty for not actually performing, and at being allowed to sit back and listen. In my view, it would be more constructive for the teacher to have felt guilty for not having trained students in self-criticism and self-responsibility.

The content of the Observation Grids was controlled to some extent by questionnaires given to teachers before the observations. These questionnaires contained most of the elements in the Observation Grids. One of the questionnaires attempted to find out if there was a considerable difference between what teachers felt was the current content of LL materials, and what their ideal language teaching materials would be. This brings us back to one of the questions I asked at the beginning of this article, namely, has the LL adapted to changing methods and materials? Are efficiency, accuracy and job-satisfaction compatible with the notional, functional and communicative? The teachers in February, 1979, when this work was carried out, did not seem to think so. They thought that current LL materials were very far removed from their ideal language teaching materials.

Perhaps this is the source of the problem - and I do think that there is a problem - but it is possible that it goes even deeper than the format or content of the materials. Perhaps there are uncompromising LL materials which do produce efficiency, accuracy and job-satisfaction results far ahead of anything else. It might be that teachers and others are simply criticising the wrong things, and that we don't need variety of content or style, but other varieties of materials for the LL. As in other areas of language learning, it is probably time to look more closely at the learner, and at the problems of pace, self-criticism and self-responsibility, and at what these mean in terms of the way the learner processes the language heard in his or her private booth in the LL.

In this article I have tried to put forward the view that if we are to utilize the language laboratory to the maximum, and genuinely exploit its potential as a teaching aid, we must apply the

same criteria to its use as are applied to any tool. I have described and discussed a set of observation grids that were devised expressly to carry out an analysis of LL use by teachers and students in individual L.L. sessions. The results of the observations indicated that the LL is poorly exploited, and when seen together with the results of questionnaires, it was suggested that the LL has not been able to adapt to changes in methods and materials, which put less emphasis on the skills that the LL is believed to train best. Finally, I suggested that the particular problems of the learner in the LL should be examined more closely, and that greater attention should be paid to the listening processes of the learner, within the context of the L.L.

BIBLIOGRAPHY

- Green, P. S. (ed) (1975). The Language Laboratory in School: Performance and Prediction. The York Study. Edinburgh: Oliver & Boyd.
- Smith, P. D. (1970). A comparison of the cognitive and audio-lingual approaches to foreign language instruction. Philadelphia: Center for Curriculum Development.