

# The benefits of language laboratories for learning Japanese as a foreign language

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This article considers the pedagogical benefits of a state-of-the-art language laboratory for learning Japanese. The article argues that, although many believe the language laboratory is anachronistic, it deserves its rightful place as one of the 'new' technologies which can enhance foreign language learning. The benefits, however, are subject to the teacher's ability to encourage within students feelings of confidence and control about using this technology.

## INTRODUCTION

Increasing claims are being made for the contribution of 'new' technologies to foreign language teaching (see, for example, Bouman's (1996) account of videotape's enhancement of the study of literature). This paper examines the language laboratory, a technology that by contrast many regard as old-fashioned, even anachronistic, and certainly no match for the sophistication and excitement of interactive multimedia. The paper scrutinises the technology in the context of the first twelve months of use of one such laboratory by undergraduate students of Japanese as a foreign language (JFL) at Central Queensland University in Australia. The results of a survey questionnaire of fifty of these students reveals that generally they appreciate the language laboratory's capacity to assist their language learning, but that feelings of confidence and control are felt more strongly by some students than others.

The paper is divided into the following sections:

- a summary of the literature about language laboratories;
- a review of selected issues in the educational technology literature;
- an analysis of the results of the survey questionnaire.

## THE LITERATURE ABOUT LANGUAGE LABORATORIES

The bulk of the literature relating to language laboratories was published in the 1960s and 1970s (see, for example, Dakin 1973; Hayes 1968; Huebener 1965). At this time the favoured methodology of

foreign language learning was audiolingual. This preference was reflected in the appeal to behaviourist and cognitive models of learning (Dakin 1973: 11–14), and in the reliance on 'drill and practice' exercises. The four macroskills – reading, writing, listening and speaking – were generally treated separately rather than in an integrated pedagogy.

The growing recognition of the importance of listening skills in foreign language learning (M. Danaher 1993, 1994, 1996) was accompanied by an expansion of the perceived roles of the language laboratory. The prevailing view was not that the laboratory could replace the conventional classroom, but that certain key elements of language learning could be demonstrated and practised most effectively in the laboratory. According to Huebener:

What is not possible in the average classroom can be done in the laboratory. It provides regular practice in listening to model voices and makes it possible for the student to engage in much imitative and repetitive drill. This sort of practice strengthens the learner's ability to understand the spoken language at normal speed. It also helps considerably in building up the student's vocabulary and thereby increases his [*sic*] ability to speak. (Huebener 1965: 149)

Within these parameters, more specific benefits claimed for using the language laboratory included the individualisation of learning (Huebener 1965: 151), which involved self-paced learning and individual attention from the teacher (Dakin 1973: 3) and opportunities for extended individual practice (Dakin 1973: 170–171), the capacity to develop reading and writing skills in association with listening and speaking (Huebener 1965: 151–153), the

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provision of a number of 'native voices' in addition to that of the teacher (Hayes 1968: 15), the encouragement in students of the ability to evaluate their own linguistic proficiency (Hayes 1968: 16), and the opportunity for visually impaired students to engage in 'active listening', whereby pupils would follow the tape with a Braille transcript' (Couper 1996: 7).

At the same time, it was commonly recognised that language laboratories had significant pedagogical limitations, the most important being its restricted role in fostering a facility at communication, which is the cornerstone of language learning. As Dakin points out:

Only one half of the process of communication can be reproduced [in a language laboratory]. For true dialogue, we need at least two human beings. We do not need a tape-recorder. (Dakin 1973: 7)

Similarly, some commentators on the foreign language teaching of visually impaired students warned about

the dangers of over-using tape-recorders at the expense of learning to read and write/braille fluently (Couper 1996: 7).

The literature on language laboratories shows that such laboratories are recognised for their capacity to facilitate students' contact with a range of speakers' voices and to individualise their language learning. On the other hand, language laboratories are generally held to impede dialogue and interaction among language learners. Both these sets of claimed attributes are taken up in the discussions of both the educational technology literature and the results of the Australian JFL students' survey questionnaire.

## THE EDUCATIONAL TECHNOLOGY LITERATURE

The contemporary literature about educational technologies falls broadly into two groups of commentators. One group reflects what Grundy has labelled 'the lure of technological practice':

The lure of technological practice is thus the fantasy of certainty in the realm of human affairs. It is also to be found in the illusion that the social world corresponds to the natural world and can be 'acted upon' in the same way. (Grundy 1989: 88)

Proponents of this view typically wax lyrical about the technical sophistication and/or the potential for learner empowerment of the latest technologies associated with 'the information superhighway'. Many educational technologists appear to subscribe to an implicit hierarchy of technologies, with print at the bottom and interactive multimedia at the top. The single most commonly cited criterion

for establishing a technology's position in this hierarchy is its interactive capacity, with the corollary benefit of user control of the technology. Thus hypertext is praised because it allows students to interact, individually or in groups, with ideas and information and to exercise a degree of control over those stimuli by rearranging them and recreating them in different formats. Related assumptions are that interaction involves individualised learning, which in turn is promoted by using a range of media, rather than a single technology.

The other group of commentators on educational technologies take issue with many of the assumptions held by those who have been attracted to 'the lure of technological practice'. Even those writers within the first group who focus on the pedagogical rather than the technical attributes of educational technologies have been criticised for promoting views that range from naïve optimism to aiding and abetting the expanding surveillance and control of modern social life. Their beliefs have been characterised as conforming to 'technological determinism', in which 'Technology is reified, in that it is seen as something "out there", and it lacks social, political or ethical effects' (Sachs 1994: 18), and to a rational curriculum code derived from the industrial revolution and the social efficiency movement of the nineteenth century (P. Danaher, Bartlett and Rowan 1995).

In view of the concerns of this paper, two specific criticisms of the conventional wisdom about educational technologies warrant particular attention. The first criticism is that, far from being an unproblematic or unidimensional phenomenon, interaction is complex and resists easy categorisation. Bates (1991) argues that a crucial distinction exists between interaction as an individual, isolated activity and as a social activity, and that both contexts are needed for learning to take place (p. 5). He adds that a key question to ask about 'the quality of interactivity' of a technology is 'what kind of thinking it is likely to stimulate in the learner, and whether this is appropriate for the task at hand' (p. 6). Similarly, Collins (1993) distinguishes between interactive and active learning; interactive learning provides immediate feedback but reduces thoughtfulness, while active learning promotes thoughtfulness but does not always provide immediate feedback (pp. 3-4). A variation on these distinctions is the contention by Hillman, Willis and Gunawardena (1994) that what they call 'learner-interface interaction' exists as a separate 'paradigm' and as 'an independent... mode of interaction' (p. 34). In other words, students' engagement with educational technologies should be considered as different from the mediating effects of those technologies.

The second criticism is directed at the assumption that the individualised learning commonly associated with interaction is necessarily a positive experience. Moore (1994: 2) has pointed to the importance of learner interdependence coexisting

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with learner autonomy. Callister (1994) goes further and claims that individualised learning can easily shade into learner isolation:

'Individualisation' was actually a misnomer. Individualised instruction with computers most often involved students doing the same problems in the same sequence using the same instructional strategies. Only the pace varied from student to student. Such techniques were more about isolation than individualisation. (Callister 1994: 242)

This section of the paper has sought to position the authors as belonging to the second group of commentators on educational technologies – that is, as pursuing a 'healthy scepticism' in regard to the technical and particularly the pedagogical claims made for such technologies. This is reflected in our recognition of the complexity of discussing interaction and individualised learning in relation to educational technologies. Nevertheless we remain convinced that, given appropriate procedures being adopted in specific learning sites, it is possible for

a selected technology to contribute directly to the attainment of educational goals. We turn now to consider how this situation applies to Australian university students of JFL and their use of a language laboratory.

## STUDENTS' VIEWS OF THE LANGUAGE LABORATORY

Before analysing students' views of the language laboratory, some detail is necessary about the nature of the equipment and the way it is set up, how it tends to be used, and how the scheduled language laboratory lessons relate to the students' overall Japanese language programme. The operating mode is a Sony LLC-2000M System. It offers operational features based on MO (magneto-optical) technology. This means it is possible, for example, to record and store listening texts onto MO disks, and then a student is able to access these texts randomly and listen to them at his/her own pace without interfering with material to which another student is listening. Therefore the system is highly flexible and caters to both individual and group learning.

The characteristic tasks associated with this system include: individual listening to a listening text, followed by a link-up between the teacher and two students, who then do reading practice and answer comprehension questions related to the text; students recording their voices reading a text and then listening to their pronunciation and intonation; and students doing dictation exercises together as a class. The language laboratory lessons are related to the overall programme in that these lessons concentrate on enhancing the students' listening and speaking skills. Part of a typical language laboratory lesson is directly related to the main textbook, and other parts of the lesson are used to study incidental language functions and to listen to other kinds of texts.

The remainder of this section of the paper analyses the results of a survey questionnaire completed by fifty first and second year JFL students at Central Queensland University in Australia about their views of the first year of operation of a fully equipped language laboratory. The laboratory was used for regularly scheduled lessons, in which students were assisted by a lecturer in their recording of their own voices in response to the recorded voices of several 'native speakers'. In addition, students had access to the laboratory at times that classes are not scheduled.

The questionnaire comprised two sections. The first section consisted of 15 statements with which students were asked to record their degrees of agreement. The second section posed six open-ended questions.

Table 1 displays the results of the first section of the questionnaire. With regard to the mean, the two possible extremes were 5.00 for 'strongly agree' and 1.00 for 'strongly disagree'.

Table 1 Questionnaire results (first section)

Statement	Mean	Standard Deviation
The lecturer provides an appropriate level of support to students during language laboratory sessions.	4.08	0.627
It is equally easy to learn in pairs and individually when using the language laboratory.	3.84	0.758
Using the language laboratory makes learning JFL fun.	3.74	0.955
Using the language laboratory has significantly increased my confidence as a JFL speaker.	3.38	0.846
Students from different cultural backgrounds find it equally easy to use the language laboratory.	3.32	0.968
The same skills currently developed in the language laboratory could be gained equally easily using other technologies.	2.94	0.732
After using the language laboratory I complete follow up exercises at home.	2.84	0.967
Studying Japanese as a Foreign Language (JFL) is easy.	2.42	0.874
If students are going to 'skip' a class in JFL, it is most likely to be the language laboratory session.	2.28	1.001
It is more difficult for mature age students than for younger students to use the language laboratory.	2.20	0.825
The language laboratory is too old-fashioned to use in these days of the information superhighway.	1.84	0.703
The technology in the language laboratory is difficult to use.	1.82	0.712
It is easier for male students than for female students to use the language laboratory.	1.74	0.820
It is more important to learn how to read and write than it is to speak and listen in JFL.	1.74	0.716
I frequently use the language laboratory in my own time.	1.60	0.748