ABSTRACT: This article outlines a program of extensive research designed to assess the effectiveness of interactive video in language teaching in the UK. The program aimed to teach beginning French was based on the BBC television series "Dès le Début" using videodisc technology. It was evident from the results and from learner response that interactive video provided a highly motivating and successful language learning experience.

KEYWORDS: interactive video, empirical data, student attitudes

Interactive video is one of the most exciting new technological developments to emerge in the last decade and this technology has far-reaching implications for language teaching and learning. To date, however, very little research has been carried out to assess the effectiveness of this exciting new medium and there is an urgent need for empirical data to aid us in our understanding of the full contribution interactive video can make to language learning.

Research projects are slowly being instigated to examine new technologies and the findings of one recently completed study were presented at this year's CALICO conference in Colorado Springs. The presentation was based on Catherine Watts' M.Phil degree entitled "The use of interactive video in language learning." This was a three year study which provides some initial insights into the effectiveness of interactive video in language learning and establishes some preliminary findings concerning this innovative study approach.

The Materials Used

Two interactive video programs were developed by the researcher to form the basis of a series of tests designed to assess the students' learning gains. These two programs were based on a French for beginners series, "Dès le Début," produced by BBC Enterprises and available on videodisc. The subsequently developed computer programs aimed to extend and reinforce the main lexical and functional features of the video material through a variety of exercises. These were divided into three language skill areas: listening and comprehension, speaking, and vocabulary acquisition and
reinforcement. The speaking exercises exploited the second sound channel facility on the videodisc, and included sound-down repetition exercises and prediction tasks.

The Structure of the Research Investigation

The tests took place over a period of two months and involved thirty adult learners recruited from local adult education centers. Each student was following a beginners' French course and was invited to attend two separate two-hour testing sessions. Each study session was organized on an individual basis. The participants used the interactive video programs whilst being unobtrusively observed by the researcher, and took part in detailed pre- and post-study assessments which were tape recorded, as well as a final structured interview. This allowed individual reactions, preferences, comments and complaints to be thoroughly explored and enabled both objective and subjective findings concerning learning gains and pronunciation improvement to be collated.

A second study approach was also established to form a point of reference for the interactive video sessions. This second study approach was based on videotape material from the same "Dès le Début" series. The students used the tape material together with a remote control panel and a worksheet, which contained similar questions to those designed for the interactive video program. Although this video alone approach cannot be regarded as a direct comparison to the interactive video mode, it was considered to be the most closely corresponding study approach to interactive video and served to underline the data obtained from the interactive video sessions. Thus a detailed picture emerged of the students' language learning experience using two allied study approaches and enabled some initial conclusions to be drawn concerning the effectiveness of interactive video.

Results of the Assessments

Pre- and post-study assessments were carried out on each occasion the students attended and involved identical questions being asked before and after each study session took place. The main aim of the assessments was to ascertain whether or not any noticeable improvement could be observed in the students' ability to use and understand the language presented after the study sessions had taken place. All of the assessments were recorded on a cassette recorder to establish any improvement in the students' pronunciation. In fact clear evidence of progress was obtained in the above-mentioned areas and a more significant improvement was observed after the students had worked with the interactive video mode than with the video and worksheet approach.

In the pre-and post-study assessments for both study approaches, the students were asked to perform four types of language activity. They were asked to supply French equivalents of English words and vice versa, translate short
sentences from English into French and understand short sentences spoken in French. In the first study session involving the interactive video program, an average of 66% of the language questions were answered correctly in the pre-study assessment. After the students had worked through the interactive video program, an average of 96% of the same questions were answered correctly. A similar improvement was noticeable in the second study session involving interactive video. In the pre-study assessment, 60% of the language questions were answered correctly and this average figure increased to 95.5% in the post-study assessment.

A noticeable improvement in pronunciation was also observed following the use of the interactive video system. An indication of this progress can be seen from the fact that in one section of the pre-study assessment a total of 17 pronunciation errors were made. In the corresponding section of the post-study assessment, only 7 errors were made.

One reason for the progress the students made in the area of pronunciation when using the interactive video programs was that the speaking exercises incorporated into the computer program encouraged the students to speak aloud. It was extremely encouraging to find that in each testing session 29 out of the 30 participants spoke aloud when asked to do so and fully manipulated the phrases being taught.

The second study approach involving video alone plus a worksheet and the remote control panel served as a point of reference for the results of the interactive video sessions. Although some improvement was discerned between the pre-and post-study sessions, the results were not as significant as for the interactive approach and, in particular, only minimal improvement in pronunciation was recorded. It was interesting to note that although the wording on the worksheets asking the students to speak aloud was identical to that on the computer program, only six people spoke aloud during the first study session using this approach and only four spoke aloud during the second study session. When asked to explain why the students were reluctant to speak aloud using the video alone approach, comments such as the following were typical:

"I felt stupid talking to a machine." and
"It doesn't give you the same confidence that a computer gives you."

Such comments underline the supportive role the interactive video programs played in the learning process, substantiated by such remarks made by the participants in the final interview as:

"You don't feel as embarrassed when you're learning (with interactive video) as you do in the class." and
"At home I speak, but there's nobody there, whereas there is somebody here."
The Students' Opinions

As well as assessing each student's language acquisition, individual comments and preferences were collated in an interview following each testing session. The students were asked to say which of the two study approaches they had enjoyed using most, which they felt they had learned most from and which they thought other people would enjoy using most. The results were overwhelmingly in favor of interactive video in all three instances. In addition, many students made comments to the effect that their confidence had increased during the interactive video sessions, due to the fact they could work at their own pace. This gave them the feeling of being able to control the learning process. The students also said that the interactive video had been fun and had made them concentrate on what was being taught. Some students said they had enjoyed using both approaches, but found their attention wandering when using the video and worksheet approach. This is borne out by the fact that fewer than half of the worksheets were fully completed at the end of the testing session.

Conclusion

Interactive video was found in this study to actively encourage student involvement in the learning process in three important ways: first, by eliciting oral responses; second, by stimulating active listening; and third, by eliminating student passivity toward the television.

The overall picture that has emerged from this study is of a successful and enjoyable language learning experience, which was clearly supported by the learners themselves. It confirms the contention that interactive video has a significant role to play in the future deployment and exploitation of advanced educational technology to support language teaching and learning.

Author's Biodata

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