

The Physical and Technical Characteristics of English Language Teaching Courseware in Malaysia

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Abstract

The present paper reports the findings of a study that investigated the physical and technical characteristics of the English language teaching courseware in Malaysia. A randomly selected group of English language teachers in Malaysia (n=200) were surveyed to evaluate the courseware. SPSS (18.0) was applied to analyze the data. The results showed that the teachers consider the technical and physical characteristics of the courseware (its technological sophistication and user-friendliness among others) to be of a moderate level. The findings can be useful for educational software developers as well as English language teachers and researchers. More research is needed to find how teachers evaluate the courseware in reference to its pedagogical appropriateness and learner attributes.

Keywords: Courseware, Physical and technical characteristics, Malaysia, Educational technology

1. Introduction

Instructional Technology is a field of innovation which covers different areas of education such as programmed instruction, distance learning, large-group instruction, computer-assisted instruction, and Web-based instruction. In order to find out about the ways and reasons for application and implementation of innovation, diffusion and adoption theories have been integrated into instructional technology development (Surry, Ensminger & Haab, 2005). Instructional Technologies may be useful not only for the students but also for the teacher. The benefits include enhancing the students' motivation, attracting their attention, and helping them understand difficult concepts.

Teachers make use of instructional activities in their classes in order to enhance motivation and intention to learn in their students. There are two types of intrinsic and extrinsic motivation identified in the literature. The learners, who have intrinsic motivation, do not need any external stimulus because they are motivated internally. The teachers need not worry because these students are already self-tuned for success. It has been argued that those students that are "intrinsically motivated more easily learn on their own because their stick and carrot are internal" (Kadzera, 2006, p. 152). However, when learners lack intrinsic motivation, teachers will have to create extrinsic motivation to bring students in and keep them involved in the process of learning. As Charles and Senter (2002) have mentioned, "when teachers speak of motivation as a component of a lesson, they refer to what they do to attract students' interest and engage them more or less willingly in the work provided" (p. 66). Hence, implementation of

instructional technologies can create learning desire for the students.

Moreover, instructional technologies help the students to stay focused and keep their attention throughout the process of learning. For example, Williams (1991) pointed that the use of the overhead projector “enables the teacher to maintain complete classroom control and interest in a lesson” (p. 26). When such technologies are integrated, teachers can attract the students’ attention to the type of technology being used or the information provided through such technology. When the students’ attention is captured, they can follow the lesson carefully and learn the concepts better.

Finally, the teacher will be able to better explain the concepts which are difficult to explain orally. When technologies are integrated, the students easily comprehend and follow the lesson because they can see the material, its mechanism, and its function. Sometimes there is no need for further elaboration on the part of the teacher. Furthermore, the students’ listening and observational skills are enhanced which leads to easing their understanding of complex concepts. On the benefits of application of educational technology, Majed (1996) stated that “the use of technology makes possible increased individualized instructional opportunities which enable the teacher to have adequate spare time for preparation of instruction that will meet the needs of the learners” (p. 59). He also claimed that when instructional technologies are integrated in educational settings, the students’ attitudes toward learning the language will improve and they will be more prepared for their future activities in society.

1.1 Research in Educational Technology

Research in the area of Computer Assisted Language Learning (Baker, Gearhart, & Herman, 1994; Sheingold & Hadley, 1990) has shown that teachers often regard the use of computers in language classroom positively mainly because of the following reasons:

1. Computers provide a means of interactive technology.
2. They help the teacher change and enhance their teaching style.
3. They offer novel ways to present instructional materials using more interesting and efficient ways like word processors, spreadsheets, and databases.
4. They facilitate classroom management.
5. They increase teachers’ feelings of self-worth.

As these studies have indicated, computers can support students by motivating them to solve their problems more autonomously, to think more independently, to collaborate better with peers, and to interact more efficiently with their teachers. Computers can improve the quality of instruction by changing the teacher’s role from a dispenser of knowledge to a facilitating coach and making the learners more active (David, 1991). When opportunities for individualized instruction are created, rather than teaching and lecturing the whole class, teachers will be more engaged in promoting learning team activities among students while team teaching will also be encouraged. Teaching should be more than merely dispensing knowledge and reinforcing the correct response. Rather, teachers should engage learners by stimulating them with complex problems that can have various solutions (David, 1991). Implementation of computers in the language classroom will enable teachers to spend more time individually with their learners which can help them identify individual learners’ special needs. Efficient use of computers can increase students’ motivation.

Research shows that language teachers should have the following perceptions before any successful implementation of educational technology in their classes:

1. Technology can enhance teaching and learning (Dwyer, Ringstaff, & Sandholtz, 1991; Sheingold & Hadley, 1990).
2. Computers can help teachers do things that they could not do on their own (Albright & Graf, 1992).
3. Teachers or learners’ productivity can be enhanced with the aid of computer-based technology (Sheingold & Hadley, 1990).
4. Educational technology can make the learners ready for their professional life in the work world (Albright & Graf, 1992).
5. It aids teachers to give their learners more information efficiently (Sheingold & Hadley, 1990).

It can be argued that one of the major advantages that efficient use of educational technology can have in teaching language is its promoting learner autonomy (Congress, 1995). As Sheingold and Hadley (1990) point out, educational technology can minimize the need for the teacher’s constant directions that paves the way for more individualized instruction. Learners can employ computers as useful tools to achieve challenging goals and to do

more in a relatively shorter period. Teachers can also present more useful materials for learners with mixed ability levels.

Admittedly, the related literature is not always in favor of educational technology. For example, it has been argued that when computers are used in the language classroom, they reduce the interaction and eye contact between the teacher and the learner (Schmid, 2008). Such problems, however, can be avoided by using the right form of technology for a given learning-teaching context. Schmid (2008), for example, regards the interactive whiteboard as a more appropriate form of technology than computers for a language classroom. In Dudeney's (2006) words, interactive whiteboards "make the computer invisible, as all interaction with both the hardware and the software takes place within the familiar confines of the board itself" (p. 27). Thus, it should be noted that the same form of technology that has proved successful in a particular learning-teaching context may not be adequate for another.

1.2 Malaysian English Language Teaching Courseware

Gibbs, Graves, and Bernas (2001, p. 2) define teaching courseware as "software developed for the purpose of providing instruction." Courseware in this study is referred to as "any educational package including a number of lessons or courses appended with tests, teacher's/ learner's manuals and guidelines available online and/or on CDs and/or DVDs" (Mukundan & Nimehchisalem, 2008, p. 72). In Malaysia, in an attempt to integrate technology into the teaching-learning of English at schools, the English language teaching courseware was developed in 2003 (Curriculum Development Center, 2003). It was expected that English classes would be more attractive and engaging with the use of educational technology (Curriculum Development Center, 2003). The English Language courseware includes a package of compact disks which consist of several units each of which has been divided into a number of lessons. The package also comprises a Teacher's Courseware Resource Guide which has two sections, called Teacher's Training and Teacher's Resources. The Presentation-Practice-Production (PPP) approach is followed throughout the teaching courseware, in which the new lesson begins by warming up the learners through listening and reading activities in a section called 'introduction'. Then, the linguistic forms or functions are introduced to the learners in a subsequent part, 'content'. This is the main teaching screen in which the concept is explained to the class. Having presented the new lesson, the teacher, then, moves to more practical activities related to the content in the next section, 'activity'. In the next part, labelled as 'evaluation' the learners are given more freedom on their practice. They are instructed to create the newly learned functions or forms automatically. The section helps the teacher to ensure students' full comprehension of the new lesson. The last two sections 'enhancement' and 'extension' include more activities seeking to consolidate the newly learned content. While the enhancement section contains enrichment activities, the extension has additional tasks that get the learners to personalize the new lesson. There are several types of activities implemented in the courseware including fill-in-the-blank, drag-and-drop, multiple-choice, and true/false activities.

The courseware, however, has been criticized by some researchers. For example, Mukundan (2008) warns that the screen-by-screen approach of the courseware gives the impression to the learner that she is sitting a lecture rather than taking an English lesson. He also states that educational software may not help language learners just because they have proved useful for students from content-based subjects (AiniArifah & Norizan, 2008).

A number of studies have been conducted on the quality of the teaching courseware. Mukundan and Nimehchisalem (2008) studied the courseware in the light of the lessons that Johnson (2003) presents in 'From Lofty Beginnings to the Age of Accountability: A Look at the 30 Years of Educational Software.' As they concluded, the teaching courseware developers were not fully aware of the wisdom of ages that Johnson's lessons provide. Therefore, the courseware was developed and applied in a rush and without being thoroughly evaluated. This led to a number of problems including lack of:

1. valid and reliable means of assessment to evaluate learner achievement,
2. proper exchange of ideas between experts from different areas,
3. any online support for the teachers/students using the courseware,
4. dynamic tasks and content that give learners possibilities of choice in their learning experience,
5. teacher training workshops,
6. high quality,
7. a successful combination of classroom fun and learning experience,
8. teachers' willingness to provide feedback on the courseware,
9. authentic activities, and

10. sophisticated multimedia features.

In a more detailed analysis of two randomly selected units (10 lessons) in the Form One English language teaching courseware, Mukundan and Nimehchisalem (2011) reported the following results:

1. Most of the lessons followed a linear approach of presenting, practicing and producing the content.
2. The courseware showed a dominant role in modelling and providing feedback, and reducing the teacher's role to a computer operator.
3. The courseware had a lopsided focus on the language skills with a primary emphasis on listening.
4. The time that developers suggested for presenting each lesson was not sufficient.

Review of literature shows that there is lack of research on the physical and technical characteristics of English language teaching courseware in Malaysia. Within the scope of this research, physical and technical characteristics are analyzed by evaluating the extent to which the courseware is technologically sophisticated, is user-friendly, contains novel and interesting activities, and focuses on learning rather than preparing the students for exams. The present study will seek to evaluate the courseware in reference to such characteristics. In order to meet this objective, the following research questions were posed:

1. Is the courseware sophisticated and technologically advanced?
2. Is the courseware user friendly?
3. Does the courseware indicate variety and novelty?
4. Is the courseware exam-oriented?

2. Method

Survey method was used to answer the above mentioned questions. A randomly selected group of secondary school English language teachers (n=200) was given a list of questions related to physical and technical characteristics of the courseware. The teachers were from Malacca, a state in the southern region of Peninsular Malaysia. Table 1 summarizes the demographic features of the respondents. As the table shows, a majority of the respondents were male teachers aged between 31 and 45. Most of these teachers majored in English Language Teaching and perceived themselves to have moderate soft skills. The respondents were almost evenly distributed into three groups of below 10 years (28.5%), between 11 and 20 years (37%), and over 20 years (34.5%) of teaching experience.

The instrument that was used for data collection had 26 items and a 6-point Likert style scale, ranging from 0 (signifying 'lacking') to 5 (signifying 'very high'). The first section of the questionnaire elicited the respondents' demographic characteristics. It had been developed by the researchers and validated by a panel of experts. The questionnaire was administered to the respondents and collected on the spot. After the data had been collected, they were entered to SPSS and analyzed to answer the four research questions. The next section reports and discusses the results of this analysis.

3. Results

This section presents the findings in reference to each research question.

3.1 Technological Sophistication

The first of which concerned the technological sophistication of the courseware. Table 2 presents the findings of the first research question. According to the table, almost half the respondents (45.5%) considered the courseware moderately sophisticated. Another significant value in this table concerned the number of the respondents who rated the courseware as having a low level of technological sophistication. However, about one in three respondents evaluated the courseware as a technologically advanced software program.

3.2 User-friendliness

Table 3 summarizes the findings of the second research question that related to the user-friendliness of the courseware. As the results show, a few respondents (13.5%) rated the courseware lacking or having a low level of user-friendliness. However, the largest proportion of the teachers (about half, 46%) perceived the courseware as moderately user-friendly. Additionally, a considerable percentage (40%) regarded this feature of the software as high or very high.

3.3 Variety and Novelty

Table 4 summarizes the results of the third research question which dealt with the variety and novelty of the material in the courseware. The results were almost similar to those of the second research question. While only a few teachers (19%) believed that the courseware lacked or indicated low levels of novelty and variety, a larger

percentage (32.5%) perceived its content as highly or very highly novel. Likewise, a majority of the respondents (about half, 48.5%) rated this feature of the courseware as moderate.

3.4 Exam-orientedness

The final research question asked the teachers whether the courseware focused more on learning rather than testing. The findings were almost the same as those of the previous research questions with the smallest percentage (20.5%) of the respondents considering the courseware to be exam-oriented, but a larger proportion (32%) regarding it as highly or very highly focussing on learning rather than testing. A majority of the respondents (49%) perceived that the courseware moderately focused on learning rather than testing.

4. Discussion

As it is evident from the results, the respondents generally had moderate or high perceptions about the technical and physical features of the Malaysian English language teaching courseware. These results are not supported by the previous research findings. As it was mentioned, the results of our qualitative analysis of the courseware showed that it lacks sophisticated multimedia features (Mukundan & Nimehchisalem, 2008). In a more recent study, it was also concluded that the software has not been developed regarding the available time to cover it in the classroom, which can negatively affect its user-friendliness (Mukundan & Nimehchisalem, 2011). However, most of the teachers in the present study considered the courseware as moderately user-friendly.

These inconsistencies could have at least two reasons. First, the findings of the present and previous studies have all been based on the perceptions of a limited number of researchers or teachers rather than on an empirical analysis of the effect of the courseware on the students' learning progress. Next, what teachers or researchers consider true about the courseware may not be in line with the learners' perceptions. Admittedly, a moderate level of satisfaction with an educational software program on which millions of ringgits have been spent is not a promising result. The courseware could have been more successful if its developers had left it open to the users' feedback as it is the case with most educational software. However, we cannot expect a better outcome when teaching materials are developed in a top-down manner rather than providing the teachers with a framework that helps them develop their own materials regarding their teaching situation. The results of previous studies indicate that a considerable proportion of the Malaysian school teachers (about 26%) are still in their early stages of applying instructional technology and that about half of them (45%) have never used educational technology in their teaching (Sayadian, 2012). Therefore, a study in which laggards (those who have never applied educational technology) are purposely excluded may lead to more reliable results.

5. Conclusion

The results of this study indicated that the Malaysian teachers generally perceive the technical and physical characteristics of the Malaysian English language teaching courseware as moderate. The results have emphasized a need for another study focusing on the students' perceptions about the courseware. Additionally, researchers have previously called for more empirical studies that investigate the learners' attitudes toward the software (Lily & Muhamed, 2000). In depth qualitative studies can also help researchers observe the courseware more closely as it works in the classroom. Finally, besides its physical and technical characteristics, other attributes of the courseware (such as its pedagogical appropriateness and learner attributes) can also be analyzed.

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Table 1. Descriptive statistics results of the demographic features

Demographic feature	Category	Frequency	Percentage (%)
Gender	Male	150	75
	Female	50	25
Age	>30 years of age	24	14
	31-45 years of age	99	63
	45< years of age	77	23
Major	English Language Teaching	123	61.5
	English Literature	14	7
	Applied Linguistics	6	3
	Others	57	28.5
Soft skill	Low	28	14
	Moderate	126	63
	High	46	23
Teaching experience	>10 years (low)	57	28.5
	11-20 (moderate)	74	37
	20< (high)	69	34.5

Table 2. Teachers' perception about the technological sophistication of the courseware (n=200)

	Frequency	Percent
lacking	3	1.5
negligible	14	7.0
Low	62	31.0
moderate	91	45.5
High	23	11.5
very high	7	3.5

Table 3. Teachers' perception about the user-friendliness of the courseware (n=200)

	Frequency	Percent
lacking	1	.5
negligible	4	2.0
Low	23	11.5
moderate	92	46.0
High	64	32.0
very high	16	8.0

Table 4. Teachers' perception about the variety and novelty of the courseware (n=200)

	Frequency	Percent
lacking	2	1.0
negligible	3	1.5
Low	33	16.5
moderate	97	48.5
High	53	26.5
very high	12	6.0

Table 5. Teachers' perception about the courseware focussing on learning rather than testing (n=200)

	Frequency	Percent
lacking	1	.5
negligible	5	2.5
Low	32	16.0
moderate	98	49.0
High	55	27.5
very high	9	4.5