

Technology and Learner Autonomy: Teachers' and Students' Perceptions towards Learner Autonomy in a Computer-Based Learning Environment in a Malaysian Context

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Abstract

The concept of independent learning, or learner autonomy, is nicely embedded in the English language syllabus for primary school and secondary school in Malaysia, as a process of moving to a new concept of learning and teaching; from teacher-centered to student-centered. The syllabus emphasises the application of computers during lessons as tools to encourage students to be independent, especially when a new school concept, the Smart School, was implemented a few years ago. This paper is going to discuss the reality of implementing learner autonomy in the educational system in Malaysia. The data were gathered using interviews, and observations. The findings show contradictory points of view regarding learner autonomy between teachers and students, and also show that there is a degree of autonomy given by teachers to students in the classroom.

Introduction

The current school concept in Malaysia is moving from being teacher-centered to student centered with the aim of developing students to be independent in their learning. This school concept is called the Smart School system and uses technology as a tool for teaching and learning. The Malaysia Ministry of Education plans for a significant increase in technology in education to take place over the next 10 years. The impact of technology in education is hoped to give a new dimension to the quality of students' education in Malaysia, especially to develop learners to become more autonomous language users.

This paper will first briefly explain about the Smart School system in Malaysia, before discussing a study of teachers' and students' perceptions of learner autonomy in this context

The Smart School System in Malaysia

In 2002, the Smart School system in Malaysia was implemented in 87 selected schools nationwide, and aimed to give students skills, knowledge and a background in technology use and application. It also focuses on implementing and developing improved teaching and learning processes. The Smart School concept is different from the ordinary school concept in Malaysia as it highlights changes in the teaching and learning process. That is from the teacher-centered to student-centered, and moving away from memory-based learning to "an education that stimulates thinking, creativity and caring" (M.O.E. Malaysia 1997) and emphasises the cognitive development of students and the integration of knowledge, skills and values for the Information Age. The Ministry of Education emphasises that the new concept of teaching and learning in Smart Schools will take place with the integration of computers in the classroom. The purpose of having computers in the classroom is to use them as learning tools that

initiate self-directed learning using programmes on the main server and other computer-related activities. The curriculum intends to cater to all levels of students with different learning abilities and to encourage self-paced learning using computers. In addition, the aim of the curriculum is also to produce students who are able to work independently and ICT is used as a tool to promote learning and autonomy.

Computer-Based Activities to Promote Learner Autonomy

In this paper, learner autonomy and learner independence are used interchangeably. Learner autonomy is defined as the process of learners deciding their own learning objectives, choosing ways of achieving the learning objectives and evaluating their own progress. The importance of learner autonomy thus defined, has long been acknowledged within the field of second language acquisition as being important for increasing the motivation of language learners (Ellis, 1994). From a language learning perspective, computers are recognised as attractive learning tools that provide students with opportunities to become autonomous learners (Bork, 1994; Carney et al., 1997; Ding, 1997; Dingwall, 1997; Nikolova, 2002). If properly used with suitable activities, computer applications may assist students in many ways, and may be considered as effective tools that motivate learners to seek and to fulfill their own learning needs.

Although computers can offer opportunities for students to be autonomous learners, it remains the role of the teacher to support and conceptualise the students' efforts (Mercer, 1993) and to provide students with appropriate learning opportunities according to their learning needs and pace of working (Loveless *et al.*, 2000). However, how far can students be independent if the school system and the expectation of the students' education performance do not change? In other words, the teachers, administrators and programmers are controlling students' decisions regarding their learning (Barnett, 1993).

Even though there is much research to indicate that computer activities increase students' interactivity and learning, moving towards increased autonomy as language learners can only be successful if computer applications are properly used and understood (Benson, 1998; Towndrow, 2007). Furthermore, computers may actually be an impediment to the development of autonomy unless students have the ability to make useful choices (Barnett, 1993). In Smart Schools in Malaysia, the choices students can make are related to computer-based activities related to language learning and making decisions about their learning objectives.

The Study

The objective of the study is to understand the level of autonomy in a computer based learning environment among secondary school students in Malaysia. In order to do that it is vital to understand the teachers' and students' views on teaching with computers, and their attitudes towards giving and getting autonomy in their teaching and learning in a computer-based learning environment. The research questions were:

1. What are students' and teachers' perceptions towards the use of computers in their classroom compared to having teachers teaching in the classroom?
2. What are the teachers' and students' attitudes / reactions towards learner autonomy as part of the learning situation in the computer-based learning environment?
3. What are the factors that contribute to their attitudes?

Research Design

A qualitative case study approach is used in this study for developing a greater understanding of participants' behaviours in activities in the classroom and to understand the level of autonomy in the computer-based learning environment. Two instruments were employed in order to gather data. Interviews were used to understand, discover and explore individual attitudes, interest and feelings towards the use of computers and being autonomous in the classroom. Whereas classroom observations were employed to understand how activities in the classroom can promote learner autonomy.

Participants

The school participating in this study was one of the Smart Schools in Malaysia. Two classes of Form 2 students were involved in this study. They were all female students, computer literate and able to use computer applications with little help or no help from the teacher. Their English proficiency level varied, however they were competent enough to understand teacher's instructions in English and were confident using English during class activities. Two teachers from the two classes also participated in this study. They were both teaching English language.

Procedure

The students were interviewed using formal-structured and informal-structured interviews. The formal interviews were done outside the classroom in a formal situation whereas the informal interviews were done in the classroom while the students were doing the activities, during the classroom observations. This was done to understand the students' attitudes towards the learning situation they were involved in and to understand how much they understood what learner autonomy was. The teachers were interviewed using formal structured interviews to understand their position on learner autonomy in relation to the computer-based learning environment and the level of autonomy given to the students.

Classroom observations were carried out for ten lessons in the computer labs and in the classrooms. All observations were recorded using field notes and when permitted, a video-recorder was used to record all activities during the English language lessons. The data from classroom observations were used to understand the learning situation and to support the data collected in the interviews. The data were compiled and analysed using themes and triangulation.

Results and Discussion

Students' Attitudes to Learner Autonomy

In order to understand the students' level of autonomy in a computer-based learning environment, it is crucial to first identify their attitudes towards the use of computers in the classroom and having the teacher teaching them. This section will first discuss the students' attitudes towards both the use of computers in the classroom as a teaching and learning tool, and towards a teacher teaching in the classroom.

In general, when asked for the students' preference between having a teacher teaching in the classroom and using computers during English lessons, all of them said they preferred to have a teacher to teach them. They perceived the teachers and computers as two different entities that would help them in their learning in different ways, and said they needed teachers at certain points during their learning. This perception will lead to the level of autonomy in the students especially when teachers were recognised as human beings who have seemingly unlimited knowledge, and to whom they could turn for information anytime and approach for matters regarding their studies and personal problems. This indicates that the students were highly dependent on the teachers' knowledge when learning. In contrast, students regarded the

computers as objects containing information that was programmed, and had boundaries within the system with information that was controlled by programmers. They felt that there was a limitation in learning when working independently especially when using computers, because they were not ready to let go of the teachers for knowledge and to try to expand their knowledge on their own. In other words, the teachers are knowledge providers who are approachable at any time and whom they can depend on all the time, In fact, they indicated that teachers gave better explanations of problems when compared directly with computers. Student S13 said:

S132014: I learn more through the teacher because she explains more and I guess when you do SSMS, it is just basically answering questions, and the teacher can explain and you can ask more questions. And in case you want something additional you can just ask, and she gives you a proper definition.

Here it shows that students still rely on teachers for learning and are unable to learn independently. The use of computers provides less help to the students to learn and to search information regarding their learning on their own. The high respect for the teachers who are easily approachable, is a contributing factor to these students' lack of autonomy. They know where to turn to when they have a problem in their study and feel more comfortable with the teacher, although other learning alternatives were given to them.

Teachers' Perceptions of Learner Autonomy

When asked about their perceptions/understanding of learner autonomy and their role in developing learner autonomy, both teachers said that one of their roles was to help and guide the students in classroom in order to achieve their learning goals. The teachers understood the meaning of autonomy but they were not able to leave the students to work independently. The teachers said they guided the students with their activities and let them work on their own but at the same time they controlled and monitored the students' activities all the time, especially when the activity involved group work and working with computers. T1 and T2 said:

T21005: I will choose the topic, and then it is up to them where to find it.

T21013: When I give them I will say I want this and make it very specific and they ...

T21014: I just cannot leave them and pick whatever they want ... I will say whether it is suitable or not

T11050: I have to monitor them because I don't want them to lose track.

T1 also indicated that letting students work independently was a challenge because students were not prepared to work on their own. She felt that students were not ready to be independent and a teacher was still their main resource. T1 said that:

T11049: ...they don't want the teacher to be away from them (the students) they want the teacher to be next to her or them. So, I told the students that this is another style of learning... They want me to be there, they know how to do it but they still insist me to be around them.

Furthermore, both teachers regarded the students' independence and their ability to take charge of their learning as highly dependent on the students' language proficiency. T1 and T2 placed language proficiency as the most important criteria for developing learner autonomy or working independently in the English language class. T1 (T11048) said '...those students who are not confident and lack of English will depend on the teacher...'. T2 used the term 'spoon fed' and stated '...they have to be

pushed or you have to coach them slowly' (T21029) in the interview to describe how she managed her teaching and the methods she used to guide the weak students to work independently to complete the task. From her perspective, her students were not ready to be autonomous learners. T1 said about her students:

T11046: depends on the level of the students, level of you know the language... sometimes there are students who are not confident enough, so they come back to the teacher, so it depends on the level of the students also...

Furthermore, there were differing levels of autonomy demonstrated by the students in the classroom observations. Students with high proficiency levels of English are found to be more independent compared to students with low levels of English proficiency. These students were able to complete their work on their own and they knew their learning goals. Whereas, the latter group were able to complete the task but only with the teacher's help. The teacher needed to be there to guide them all the time. Proficiency in the language also plays an important role in the level of autonomy in the students.

Both teachers acknowledged that being in the IT (Information Technology) world was an important reason for students to be autonomous. They said that the role of technology in the classroom created opportunities for the students to be independent and responsible for their own learning, and they considered computers as tools to help students to be independent in many ways. Thus, the teachers acknowledged the need for students to be autonomous learners. They found that they could cover the syllabus faster if students were autonomous learners.

Factors that Contribute to Learner Autonomy

The findings of this study supported the findings of studies undertaken by Muir-Herziq (2004) and Newby et al. (2000) that the syllabus and the examination requirements were the most important factors influencing the use of computers in the classroom context and contribution of computers to developing learner autonomy. In addition, this study found that the syllabus and the requirements of the examinations also affected the teachers' and students' attitudes towards the use of computers in the classroom to promote learner autonomy. The teachers' not only stressed how important it was for the students to complete the syllabus, but also commented on the influence exerted by the examinations on defining their roles as teachers.

T21021: ...we need to make sure that our class finish the syllabus before the exam...we are afraid if the students cannot answer the questions, because let say you don't finish what you are suppose to teach them

T11053: ...the topic in the syllabus...we have to follow the scheme of work...

Arguably, another factor that contributed to the level of autonomy among the students was the pressure of covering the curriculum and the focus on examinations. Not only did it affect the students' autonomy but it also inhibited the teachers' ability to be adventurous when integrating computer activities into their lessons. Students were highly concerned about passing their examinations with high grades. Because of these concerns and preconceived ideas about the way in which subjects should be taught and learnt some students rejected computer-based activities, which are by nature not examination based and not teacher oriented.

Although the teachers said that they were encouraging the students to be autonomous learners, it is evident that the teachers were not fully prepared to let the students work totally without guidance. Furthermore, the needs of the syllabus hinder the teachers from giving autonomy to the students. In other words, students are not

able to make their own decisions or choices for their learning as it is dictated by the curriculum and the syllabus learning objectives. Besides that, the students learning objectives are actually set from the beginning, namely, to pass the examinations.

Conclusion

When promoting learner autonomy in a computer-based learning environment, there are important elements that need to be considered: the teacher, students and the requirement of the curriculum and syllabus. These three elements play important but interrelated roles for the promotion of learner autonomy.

This study provides insight into the perceptions of teachers and students towards learner autonomy and the use of computers in classes to promote learner autonomy. Furthermore, both teachers' and students' attitudes towards learning independently should be looked into more seriously for the objective of the educational system not only in Malaysia but elsewhere. Teachers should be more flexible in choosing the activities in the classroom. In addition, the more exam-oriented syllabus should also be more flexible to the students' needs, in order to have a more learner-centered classroom. Although, the syllabus indicated that one of the objectives is to have independent students who will take responsibility for their own learning, in reality the level of students' independency is very low. In reality, the teachers and the syllabus are the main factors that contribute to the level of students' autonomy.

The Author

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