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Motivation and Communication in the Cyber Learning Environment

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Abstract

In the Internet age, we are saddled with an educational system that was designed for the industrial age, modelled on mass production and designed for efficiency, not for high standards. The adoption of the individual learning style preferences format by English language as second language teachers in the Faculty of Informatics and Management, University of Hradec Kralove has sparked discussion about the future of linguistic education, or at the minimum, the future of academia’s role in it. The evaluation of student's learning style gives a strong insight about the students' ability to capture the teacher's message. Data shows that while a typical Professional English language course may attract hundreds of participants, less than 10% will complete the course. This paper examines how learning styles can affect motivation of Professional English language course participants, and how individual learning styles can be included the design and implementation of such courses.

Keywords: Motivation, communication, cyber learning environment, learning style preferences;

1. Introduction

A lot of education scientists have been talking about “changing education paradigm” (Robinson, 2011) recently, pointing out that the power of technology has caused fundamental changes in all aspects of our lives, including education process. To reflect the upcoming changes is important as the need to modify the standardised type of learning and teaching has been growing. Respecting the changes in learning and teaching environment and in the attempt to raise education standards, we have decided to implement the theory of learning styles into our e-courses of Professional English language in Blackboard learning environment (BB) at the Department of Applied Linguistics, Faculty of Informatics and Management, University of Hradec Kralove since 2012. Learning style is one of the concepts that are postulated by researchers to depict learners’ differences and varied needs. Therefore, the present paper aims, among others, to identify learning style preferences of first and third year students of Management of Tourism. Out of plenty of learning style models we have used the Felder-Silverman model, as

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professor Felder is focused on technically orientated students, and thus his Index of learning style seems to be most appropriate for our students of Tourism Management. Felder’s learning styles inventory was administered to students in winter semesters 2012 and 2013. Descriptive statistics identified that participants do vary in their preference for particular learning styles with a great variety of learning style preferences. In this paper, we aim not only to assess the learning style preferences of our students, but also to suggest relevant teaching materials, based on the results of our last research considering the BB learning environment.

Research questions:
1. How do English as foreign language students in the Faculty of Informatics and Management vary in their preference for particular learning styles?
2. How can be the knowledge of students’ LS preferences used in relation to teaching materials used in BB environment?

2. Methodology

2.1. Classification of preferences of LS dimensions

The idea of learning styles usually refers to a preferred way of learning. It implies that each individual has a natural inclination toward learning of some kind and, that if that preference can be identified, teaching and learning experiences can be provided to learn more effectively. Professor Felder states that “the ways in which an individual characteristically acquires, retains, and retrieves information are collectively termed the individual’s learning style” (Felder, 2012). The author is focusing on professor Felder’s model of learning styles preferences, as this model has been chosen and used in the Faculty of Informatics and Management. Felder’s model describes five dichotomous learning style dimensions, which indicate the students’ preferences for certain poles of the dimensions. (see Fig.1) In this model five basic questions are followed: 1) What type of information is preferentially perceived: sensory—sights, or intuitive—memories? 2. Through which modality is sensory information most effectively perceived: visual—pictures, or verbal—written and spoken words? 3. How is the information processed: actively—through physical activity or discussion, or reflectively—through introspection? 4. How is understanding progressed: sequentially—in logical steps, or globally—in large jumps, holistically? 5. With which organization of information is the student most comfortable: inductive—facts and observations, or deductive—principles are given, consequences and applications are deduced? The last named dimension is not assessed in ILS because as Felder states it “…the "best" method of teaching is inductive, whether it be called problem-based learning, discovery learning, or inquiry learning.”

Fig. 1. Learning style dimensions
2.2. Research methods – Index of Learning Styles (ILS)

The instrument used in this study to assess students’ learning style preference was the Index of Learning Styles questionnaire (ILS) developed by Felder and Soloman, (2005). The ILS is a self-scoring web-based instrument consisting of forty-four multiple choice questions that reflect the psychological and behavioural characteristics of four dichotomous dimensions of LS. Questions in this questionnaire are written in English and the two choices in each question reflect the two dichotomous learning styles. After submitting their answers, students are provided with Learning Style Results, where if their score on the scale is 1-3, they are considered fairly well balanced on the two dimensions of that scale. If their score on the scale is 5-7, they have a moderate preference for one dimension of the scale and will learn more easily in a teaching environment which favours that dimension and if their score on a scale is 9-11, they have a very strong preference for one dimension of the scale and are classified as purely single style learners, which may cause struggling and suffering when learning in an environment which does not support their preference. The ILS was installed in Blackboard Professional English language on-line courses and it took students an average of around 40 minutes to complete it.

2.3. Cyber learning environment

Cyber learning environment is represented by Blackboard (BB) environment at Faculty of Informatics and Management. BB was introduced at the faculty in 2012 and since than most of the subjects, including professional English language e-courses have been innovated. To achieve effective foreign language learning within the cyber learning environment means to balance instructional methods, structuring the teaching and learning environment so that all learning styles are simultaneously, or at least sequentially accommodated. The author focuses in her e-course of English language on assessing key language competences and the learning style model plays an important role in the course innovation process. BB teaching platform offers to students a relatively quick and easy way to gain new knowledge. It provides more choice and is delivered via technology that most of them use daily. Out of 906 Faculty of Informatics and management students majority expressed their satisfaction with the content of BB e-courses and their content. (See Fig.2.) This fact is important as one of the most common criticisms of online courses is quality. The loose structure of many of e-courses makes quality assurance or even measuring obtainable learning goals difficult, as is the case with much self-directed learning.

Fig. 2. BB e-course evaluation by faculty students
3. Results

The participants in this study were 215 first and third-year university students of Tourism management at Faculty of Informatics and Management, University of Hradec Kralove. Most students were 19 to 23 years of age. Among the participants, 81 were males and 134 were females. (see Fig.3.)

![Fig. 3. Total number of students](image)

Figure 4 indicates that the students do vary in their preference for particular learning styles. A large number of students share preference to Sensing dimension of learning style (97 students – 27%) and Visual dimension of learning style (82 students – 23%), there are, however, considerably large groups of students displaying preference to Active (45 students – 13%) and Sequential (47 students – 13%) dimensions of learning style (LS). Reflective (35 students – 10%), Global (22 students – 6%), Intuitive (16 students – 5%) and Verbal (12 students – 3%) LS preferences are represented by less than 10% out of total number 215 students.

![LS preferences](image)

Each learning style is special but at the same time, each learning style has its strengths and weaknesses. This means that in order to prepare our students adequately, we must help them to adjust and work in styles that may not
be their most comfortable. There are 16 (24) learning styles in the proposed framework and it would be very difficult to accommodate 16 diverse LS in the Professional English language course. However, we must be aware of the fact that “the point is not to place all students into one or another style category and to teach each student exclusively according to his or her preferred style… it would not be desirable, for reasons to be discussed. Rather, the goal is a balanced teaching style, in all classes at all levels.” (Felder, 2005)

The second research question which considered the practical use of students’ LS preferences in relation to teaching materials implemented in BB environment, was part of the research project FIMINO ESF conducted at Faculty of Informatics (number of students involved 906) within the years 2011-2013. Based on the results of this project (see Figure 5.) we can clearly see that visual materials are appreciated by the students more than any others, which supports the findings of our students LS preferences results.

4. Conclusion

To conclude, based on recently collected data from Felder’s ILS, which was implemented into on-line Professional English language courses in Blackboard in winter semester 2013, the author identified that students vary in their preference for particular learning styles with a great variety of learning style preferences. A considerably large number of students showed preference to Sensing and Visual learning styles. Within the FIMINO project the author confirmed that students prefer especially visual materials. These findings show that variability and interactivity which are inevitable part of sensing and visual learning materials should be part of teaching environment in BB courses. New technology and corresponding teaching styles will consequently result in higher quality of learning. Students appreciate new e-courses in BB environment as their content respects the model of learning style preferences. Helping students to identify the ways that they learn best and providing them with opportunities to use all their senses and different intelligences is one of key challenges. That is why further research focusing on balanced teaching materials used in BB environment to support quality communication and thus to enhance the students motivation will be concluded in summer semester 2014.

References