Effective Learning Strategies for the On-line Learning Environment: Including the Lost Learner

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ABSTRACT
Much has been said about different learning styles, but it is not always clear how learning strategies should be adapted to accommodate different learning styles in the on-line learning environment. The question arises as to how does one ensure that there are no lost learners, especially working with extremely heterogeneous groups in the South African context, where learners may be from eleven different cultural and language groups, urban or deep rural settings, varying computer abilities and often from disadvantaged educational backgrounds. It indeed proves to be a very challenging task, and including first year learners from the subject Journalism Practice at the Technikon Pretoria, with the cooperation of the lecturer, Ms Wiida Fourie, I attempted to firstly design activities (instead of using an on-line survey) which in a fun way assessed these learner characteristics, and secondly using this information by giving students a choice of activities and assessments instead of limiting them to one or two methods. This study was aimed at encouraging learner autonomy, increasing learner confidence and trying to include the lost or “invisible” learner. This paper will report on the findings and conclusions from this study.

Introduction
The education literature suggests that students who are actively engaged in the learning process will be more likely to achieve success (Dewar 1995; Hartman 1995, Leadership Project 1995). It is therefore the continuing challenge of any instructional program to ensure that learners are involved, and one way to achieve this is to be familiar with the characteristics and learning styles of the learners.

There are a number of very well formatted on-line surveys available to determine learning styles, namely the Felder-Solomon Index of Learning Styles Questionnaire, the Modality Preference Inventory (Middlesex Community College) and many others, but they require one important ability, namely a good grasp of language and computer ability, which many of the new entrants to the Technikon Pretoria does not necessarily have, even though they will be included in the online training programs. Although the official modes of instruction are English and Afrikaans, the learners may be from eleven different cultural and language groups, urban or deep rural settings, varying computer abilities and often from disadvantaged educational backgrounds.

Instead of utilizing existing on-line surveys, I attempted to design easy-to-do activities based on the theories of learning styles to determine learner characteristics and learning styles. It was important not to stop there, but to incorporate this knowledge in the courseware by using different activities based on the results of these activities. Learners were then asked to compile an electronic portfolio of the specific activities which they have chosen, and this in turn was compared to the initial results to see whether or not the activities chosen indeed correlated with their learning styles. Learners also had to complete a learner evaluation during and after the course. Although not scientifically tested over a longer period of time and with different courses to establish validity and reliability, it may prove to be a more accurate way of determining learning styles when working with learners of this specific profile.

Looking at Learning Styles
The underlying theories related to learning styles which was considered for this study was namely the following. First Kolb showed that learning styles could be seen on a continuum. Hartman (1995) took Kolb's learning styles and gave examples of how one might teach to each them. Again, each of us uses some of these styles when learning, but we tend to prefer a small number of methods to the rest. The MBTI has also been a very useful tool in contributing to our understanding of the role of individual differences in the learning process. Paulsen (1995) has organized the world of instructional strategies into four main types (based on the number and type of interaction there is between students, teachers and among students). Below you will find an outline of just some of the strategies he discusses in The Online Report on Pedagogical Techniques for Computer-Mediated Communication (1995).
Research

Including first year learners from the subject Journalism Practice at the Technikon Pretoria, with the co-operation of the lecturer, Ms Wiida Fourie, I attempted to firstly design activities (instead of using an on-line survey) which in a fun way assessed these learner characteristics, and secondly using this information by giving students a choice of activities and assessments instead of limiting them to one or two methods. This study was aimed at encouraging learner autonomy, increasing learner confidence and trying to include the lost or “invisible” learner.

Examples from the designed activities

Following are some extracts of the activity survey that the learners had to complete:

- An audio script was included about the Mississippi River Boat. Some Web-based examples were also included, and the Solomon-Felder Index was used as a verifier.

Findings

In general, students who prefer sensing learning patterns prefer the concrete, the practical, and the immediate (Schroeder, 1996). These students often lack confidence in their intellectual abilities and are uncomfortable with abstract ideas. They have difficulty with complex concepts and low tolerance for ambiguity. Furthermore, they are often less independent in thought and judgement and more dependent on the ideas of those in authority. They are also more dependent on immediate gratification and exhibit more difficulty with basic academic skills, such as reading and writing. The path to educational excellence for sensing learners is usually a practice-to-theory route, - not the more traditional theory-to-practice approach.

Using the instructional strategies of Paulson as guidelines, the activities and assessments were designed to suit the different learners, by allowing the learners choice. These choices, however, had to be structured and planned carefully by the lecturer and the instructional designer. With slight variation, the learners seemed to prefer activities which related to their preferred learning style and characteristics, and the learners reported the learning experience as positive and gratifying. The learners felt that they were able to execute choices which made them feel more comfortable with the learning process. Some learners however, preferred a more structured approach and felt uncertain at times at to which activity was the more “suited” one, although all activities were designed to reach the same outcome, just in different ways.

It would be recommended that this study be repeated by different learner groups of the same heterogeneous background to ensure further scientific value.

Bibliography


Cantor, Jeffrey A. 1992. Delivering Instruction to Adult Learners. Toronto: Wall & Emerson. (pp. 35-43.)


