

Article 1: Motivation and ability: which students use online learning and what influence does it  
have on their achievement?

Article 2: Impact of web based flexible learning on academic performance in information  
systems.

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### **Article 1 Summary**

The premise of the Hoskins & van Hoof study was to determine which kinds of students voluntarily used web-based learning, and how it influences their academic achievement (Hoskins & van Hoof, 2005, p.180). Using a sample of 110 British, undergraduate second-year psychology students, the researcher examined their age, gender, academic ability and approaches to studying, in relation to their use of a web-based learning environment. The sample consisted of 93 women and 17 men ranging in age from 19 to 43 years old. “Overall performance in the first year of their degree ranged from 40% to 78%” (Hoskins & van Hoof, 2005, p.180). Entwistle and Rambden’s Approaches to Studying Inventory (ASI) was used to measure studying orientation. Students’ use of the supplementary online learning environment was monitored through WebCT’s tracking system and was measured by “the number of times the course home page was accessed by each student” (Hoskins & van Hoof, 2005, p.180). The following are the research findings:

1. Not all students are likely to utilize the opportunities offered by online support.
2. A larger proportion of males than females entered into dialogues with their peers and teachers (via use of the bulletin board).
3. General web use (number of home page hits and period of access) increased with age, as did the use of the bulletin board.
4. Active bulletin board users were those with superior ability and higher achievement orientation scores than passive or non-users.
5. Active bulletin board use was related to higher performance in the essay element of the assessment, and

6. Dialogue via online learning environment, can influence achievement. (Hoskins & van Hooff, 2005, p.187-190).

### **Reflection**

Since becoming interested in online learning and educational psychology, I have wondered about the extent to which factors such as age and gender influence students' use of online learning environments. This study has provided me with some invaluable insights to some aspects of this area of research, and made me aware of the opportunities for research in the areas of designing effective online learning environments, as well as, studying which types of resources engage specific student segments. I was surprised to find out that a larger proportion of males participated in online discussions with their peers and teachers. It did not surprise me however, that older students accessed the home page more, for longer time periods, or that active bulletin board users exhibited higher orientation scores.

### **Article 2 Summary**

The premise of Campbell's & Kerr's study, which was conducted at two Australian universities, was to explore the following research question "What impact does a web-based flexible learning mode of delivery have on the academic performance of students studying information systems?" (Bryant, Campbell & Kerr, 2005, p. 43). Two groups of students, who voluntarily participated in this study were enrolled in the first-year core course, Business Information Systems (BIS-F), which was offered as a flexible learning course (BIS-F) at one school and a traditional course (BIS-NF) at another. For both groups the lecturer, textbook, course content and assessments were the same. A course website was provided for the BIS-F students containing exclusive support material such as a Frequently Asked Questions (FAQ) section and Notice board. The BIS-NF

course was taught in the traditional manner and lectures were scheduled for two hours per week. The research findings indicated that a web-based course provided an effective learning environment, and that not all assessment methods are suited for a flexible learning environment (Bryant, Campbell & Kerr, 2005).

### **Reflection**

This study supports the use of the web and its related tools in education. Several bodies of research acknowledge the positive impact of web-based learning on academic performance, but tend to focus on the lack of, or presence of a significant difference in academic performance. This study takes an additional approach at this issue. It takes a look at online assessment methods which I believe is quite pertinent, since passing the course is contingent on passing the assessments. Having had the opportunity to enroll in web-based courses I can appreciate the fact that the BIS-F students did worse in the Group Project. A detail which can quite easily be due to the fact, that the BIS-F students have far less opportunity to meet face-to-face with their group members. Since this study investigates a research question similar to the one on which I am working, it gave me a lot of insight on how to design my research and the limitations that I will encounter.

### References

- Bryant, K., Campbell, J., & Kerr, D., (2003). Impact of web based flexible learning on academic performance in information systems. *Journal of Information Systems Education*. 14(1), 41-50. Retrieved September 29, 2006, from <http://www.jise.appstate.edu/Contents/Contents-14-1.htm>
- Hoskins, S.L., & van Hooff, J.C. (2005). Motivation and ability: which students use online learning and what influence does it have on their achievement? *British Journal of Educational Technology*. 36(2), 177-192. Retrieved September 29, 2006, from WilsonSelectPlus.