

Podcasts: How do podcasts affect academic performance?

Summary:

Based on the following articles, research findings are positive regarding the use of podcasts as a teaching and learning tool. Podcasts can help to increase student engagement and performance and can even replace in-class lectures that students might have missed. In addition, including varied technology, such as podcasts, blogs, wikis, and videos, can provide access points in a course for students with different learning preferences.

Reference

Beylefeld, A. A., Hugo, A. P., & Geyer, H. J. (2008). More learning and less teaching? Students' perceptions of a histology podcast. *South African Journal of Higher Education*, 22(5), 948-956.

Population

The population consisted of 148 first-year medical students (75 English-speaking and 73 Afrikaans-speaking).

Purpose/Questions

The purpose of this study was to evaluate the acceptability of this novel mode of learning by determining:

- a) whether students did in fact, on their own, avail themselves of the podcast facility as a learning opportunity;
- b) whether they were satisfied with the use of podcasts as a supplementary teaching tool;
- c) the impact of the intervention on their academic performance.

Findings

Generally speaking, the concept of podcasts was received well by both the English and Afrikaans-speaking students. Eighty-six percent and 87 percent of students described the learning experience as meaningful. Furthermore 71 percent of the whole group indicated that they would want to see the podcast method taking root in other modules too.

Statistical analysis of examination results obtained in the histology paper of the first semester revealed that students' positive experience of the podcast method of teaching and learning also manifested in their academic performance.

More than half of the class (58 percent) obtained higher grades on the questions that tested material covered in the podcast than on the questions covered using traditional means of delivery.

Reference

Saeed, N., Yang, Y., & Sinnappan, S. (2009). Emerging web technologies in higher education: A case of incorporating blogs, podcasts and social bookmarks in a web programming course based on students' learning styles and technology preferences. *Educational Technology & Society*, 12 (4), 98–109.

Population

Two hundred and four students in a web programming course, studying toward the completion of Bachelors or Master's of IT degrees. One hundred and nineteen students responded to learning styles survey, including 101 (84.9%) males and 18 (15.1%) females. 85.7% was aged between 21 and 29. One hundred and five students responded to the technology preference survey which included 90 (85.7%) males and 15 (14.3%) females.

Purpose/Questions

The study set out to find if student learning styles made them lean towards using certain technologies over others and, by including these technologies in coursework, whether or not performance in the course would be improved.

There were two hypotheses:

H1: Preference/use of instructional technology is influenced by student's learning style.

H2: Academic performance is positively influenced by the use of appropriate instructional technology.

Findings

Students of varying learning styles did fall into preference of online technology— sequential students preferred podcasts, visual students reportedly preferred vodcasts, sensing students liked communicating via email rather than blogs and wikis, and intuitive learners liked blogs and wikis.

There was no difference in performance related to gender or age.

After having incorporated the above technologies into the course, performance was evenly balanced amongst students of different learning styles, leading the researchers to believe that, by adding these technologies, they had made the class evenly accessible to a range of different learning styles amongst the students.

Reference

McKinney, D. Dyck, J.L. & Luber, E. S. (2009). iTunes university and the classroom: Can podcasts replace professors? *Computers & Education*, 52, 617-623.

Population

The overall population of the study was 66 undergraduate general Psychology students belonging to a small, liberal arts college in New York State.

The study was divided into two conditions, the podcast condition and the in-class lecture condition, and each student completed two sessions. Thirty-two students completed both sessions of the in-class lecture condition and 34 students completed both sessions of the podcast condition

Purpose/Questions

How do students use these podcasts lectures? Taking notes vs. merely listening; listen once vs. listen multiple times

What impact do these choices have on educational outcomes?

Findings

The results indicated that there was no detriment to learning outcomes of students who listened to a podcast lecture of an in-class lecture they missed. Actually, there was an advantage. The students in the podcast condition performed significantly better than the students attending the in-class lecture condition.

Most of the students in the podcast condition group reported taking notes while listening to the podcast as well as listening to the podcast more than once to review for the exam.