Study and Non-study Related ICT Use of Flemish Students in Higher Education

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Abstract. Numerous higher education institutions have during the last decennia invested in electronic learning management systems (e.g., Blackboard). While the widespread use of information and communication technologies is well-documented, it is far from clear what the meaning of these technologies is for students especially when their studying is concerned. This study investigates students' self-reported ICT-use as well as students' own account for the reasons of that use. The central research question is: *How do institution-provided applications relate to more popular applications like social networking sites and mobile phones in terms of frequency, time and (educational) use of students?* 15 students from different bachelor programmes at K.U.Leuven (Belgium) participated in at least two in-depth interviews. At K.U.Leuven a specific Blackboard-based learning management system was installed: TOLEDO. Findings suggest indications that students functionally employ institution-provided applications in their study-activities which are totally separate from their social (and non-study related) functioning in social networking sites.

Keywords: Higher Education; ICT; Institution-provided applications; Social Networking Sites; Students' Self-reports

Summary

Introduction

Numerous higher education institutions have during the last decennia invested in electronic learning management systems (e.g., Blackboard, Moodle, WebCT) in order to facilitate the implementation of blended learning environments. Notions such as "digital natives" as well as the increased use of web 2.0 applications such as social networking sites (SNSs e.g. Facebook, Skype) point to the observation that for the current student population ICT-based environments are part of their regular life (Prensky, 2001). The use of electronic learning environments is assumed to fit the regular approach of today's students and consequently evokes educational research attention (e.g. Peluchette & Karl, 2010). While the widespread use of information and communication technologies is well-documented, it is far from clear what the meaning of these technologies is for students especially when their studying is concerned. Whereas some authors have highlighted that the study-related use of ICT is far from

optimal (Kennedy, Judd, Churchward, Gray, & Krause, 2008), others have stressed that the use of study-related applications is mediated by the meaning students attribute to these applications (Kirkwood & Price, 2005).

Research question

In line with the cognitive mediational view (Lowyck, Elen, & Clarebout, 2005) the current study investigates students' self-reported use of information and communication technologies as well as students' own account for the reasons of that use. Given the huge investments in learning management systems by educational institutions, we are especially interested in students' use of institution-provided systems for both study and non-study related activities. The study compares the self-reported use of these institution-provided applications with the self-reported use of other applications and more specifically web 2.0 applications. The study compares when and how institution provided applications and applications freely available or acquired by the students themselves are used for study and non-study related purposes. Can we notice for example a different pattern regarding the frequency and time between the use of an institution-provided learning management system and the attendance and actions on SNSs? And how do students themselves explain such a difference? The central research question can hence be formulated as follows: *How do institution-provided applications relate to more popular applications like SNSs and mobile phones in terms of frequency, time and (educational) use of students?*

Methodology

From a purposive sample, 15 students (five boys, ten girls) from different programmes at K.U.Leuven (Belgium) participated in at least two in-depth interviews over the semester. At K.U.Leuven a specific Blackboard-based learning management system was installed: TOLEDO. The semi-structured interviews allowed us to systematically explore the research questions, while leaving room for participants to elaborate on their particular experiences and points of view. Furthermore, the structured nature of the interviews allowed us to gather comparable data from each interview. A qualitative data analysis tool, NVivo 8.0, was used to assist with the coding of the data into themes and subcategories which reflects the research question.

(Preliminary) findings

Findings show that the sample in this study consists of "digital natives" as far as their ICT use is concerned. All of the students own a mobile phone and a computer. Students mostly use their mobile phone for sending and receiving text messages. During the week the computer is used daily as students daily consult TOLEDO. SNSs are accessed daily as well. With respect to TOLEDO as well as for SNSs, it seems that the use is declining over the week. In other words, students indicate to jointly use TOLEDO and web 2.0 applications. These patterns seem to suggest that ICT use is linked to study-related activities.

However, the interviews show that the use of web 2.0 applications is hardly study related. TOLEDO is mainly used as an information channel. For instance, one student said: '*For me, the main goal of TOLEDO is to provide very clear all and correct information*[1]*'* (respondent 6). Students use

[1] All citations are translated as accurate as possible from Dutch

TOLEDO to see where and when teaching events take place and to download course related slides or texts. The use of interactive features of TOLEDO (e.g. discussion fora) is very limited. Students indicate that most of their studying involves studying texts and doing exercises. They also report limited usage by university teachers of more interactive features (e.g. wiki, blog, discussion fora) of TOLEDO.

The interviews reveal that students clearly distinguish between the use of TOLEDO (as an official application that is provided by the university) and the use of other more informal applications: '*I think TOLEDO is a learning environment (...) and people wouldn't ask on TOLEDO things like 'oh, party, will you join us'* (respondent 3)? ' *(...) Because I associate TOLEDO to lessons and stuff that I need to do'* (respondent 5). Similarly, students make a clear distinction (also in the use of particular applications) between ICT use for study and non-study related purposes. '*The e-mails about study-related things come in on TOLEDO, that is very separated.'* (respondent 5). While the use of TOLEDO is highly functional and immediately related to study-related information activities, the use of other –mostly web 2.0 – applications is more integrated in their 'regular' social life. '*I associate Facebook with pure entertainment, and if this suddenly emerges with school.... I don't look forward to it'* (respondent 6).

Conclusion and discussion

The findings appeal to questions about the meaning and the effectiveness of institution-provided applications and about students' attitude comparing these ICT-applications as support for their study-activities. There are indications that students functionally employ institution-provided applications in their study-activities which are totally separate from their social (and non-study related) functioning in SNSs.

The data presented here suggest that students (purposefully) clearly distinguish between their studies and their private lives. In our opinion, and as a topic for further research, the focus of current research on technological innovations in higher education could be blurring this distinction. Moreover, we need more respondents, and students of younger ages, to assess (-whether or not-) we can generalize our findings.

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