# Chapter 79 Bring Your Own Device (BYOD): The Power of the Tablet to Pocket Size Mobile Device on Learning and Assessment – Possibilities and Impacts on University Faculty, Students, and Staff

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# ABSTRACT

In this chapter we look at how BYOD in educational "classroom" environments is touching each individual where they communicate, get their information, and connect socially and globally. We aim to provide perspectives which include the learner, faculty, and staff in higher education. Additionally, teaching methods, use and needs of faculty and staff are considered, as well as privacy, security and policy. This is an investigative look at the trends and possibilities of BYOD and its future, and a consideration of the impact on faculty, students, and staff in university settings.

## INTRODUCTION

Technology and its speed of change affects all. Students as consumers are perhaps looking more to "Ivory Tower" modernized educational experiences which incorporate innovative and effective use of mobile devices. Mobile learning is on the rise and is deemed an acceptable, relevant, powerful and effective use of technology to which most teachers and students have access (Johnson, Adams, & Haywood, 2011; Franklin & Peng, 2008; Hooft & Vahey, 2007; Liu, 2007; Myers & Beigl, 2003; Traylor; 2009; Trot-

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ter, 2009). The Universal Design for Learning (King-Sears, 2009) supports new design and delivery of teaching, such as mobile technology, using mobile devices for students with diverse learning needs.

Bring Your Own Device (BYOD) is a global, universal technological language available to educators, learners and companies of today. While BYOD may be thought of by some as a distraction for the learner, more and more there is a desire and curiosity to discover how to build capacity in engagement, content management, and ease and convenience of use as the traditional physical classroom is moving more towards the virtual classroom experience. Generationally, people have different values and ways of viewing and using technology. Generation Y, and the Millennials, carry this idea of "having one life, persona" not the "work – life balance" of the prior generation. This generation has their "digital experience, which encompasses work, their family, their home, their social life and they don't want to have to change depending on where they are and what they are doing" (McCue, 2013, para. 15).

In light of the continual emergence of digital tools and technology, we must ask how the Bring Your Own Device (BYOD) era affects institutional policy, access, security, consumer demand, and compliment the needs of faculty, staff, and students. diFilipo (2013) states, "Higher education faces a unique set of challenges when addressing the consumerization of technology. Those challenges are differentiated as students, faculty, and staff. Each user group brings with it unique demands" (p. 60). According to Trotter, 2009, "It is no longer a question whether we should use these devices to support learning, but how and when to use them" (p. 1) With an increase in online education, hybrid classes, and the use of learning management sites, the individual Bring Your Own Device (BYOD) is a factor in how we design learning environments and curricula, engage the individual learner, assess outcomes, and provide speed and convenience for individuals, instructors, institutions, and companies. Students are increasingly packaging multiple aspects of their lives into a single device. The lines between work/school and personal are increasingly blurred for mobile device users as services, social, education, entertainment and communication can occur in the palm of a hand. The ECAR Study of Undergraduate Students and Information Technology (Dahlstrom & Bichsel, 2012) shows that 66% of students use their mobile device to "access course websites or syllabi" and 64% "use course or learning management systems". This also lends to reviewing existing policies on campuses, wireless capabilities, and use of wireless standards and practices. Further issues are privacy and security. We believe it is imperative to consider these devices in relation to learning in higher education. Access to learning management sites and course materials at any time, engagement in curricular activities through technology for students outside of real classroom time, and the cost effectiveness and mainstream use by those that have these devices, are examples of the cost effectiveness of BYOD for institutions. With good wireless capabilities, institutions are able to use mobile learning devices for intentional engagement in learning while sparing the expense of providing devices for all learners. The rise of online, hybrid, and collaborative environments means learning is no longer relegated to a physical space and exact time, giving the learner and instructor more flexibilities and benefits. Intentionally building capacity with the mobile device naturally provides an avenue for lifelong learning across generations and outside traditional forms of education.

More research is being conducted on success, student achievement, global connections to information, and learner engagement in the K-12 grades; we will be examining studies of experience and impacts at the college/university level. Cristol & Gimbert (n.d.), refer to Bring Your Own Devices as mobile learning devices (MLDs) and state "when effective mobile learning is incorporated into a receptive learning environment, student achievement will increase", and use of "mobile devices prepares students for the globalized economy because the devices are consistently used for the communication and informational needs of students and teachers inside and outside of learning environments" (p. 1)

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