The Use of Google Apps to Support Teaching and Learning: 
A UAE Case Study

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ABSTRACT

This study was designed to examine pre-service teachers’ proficiency, use, and their perceptions of the benefits and barriers to the use of Google Apps to support their teaching and learning practices. Quantitative and qualitative methods were used. The findings showed that almost two-thirds (63%) of participants were advanced or expert users of Google Apps whereas almost one-fourth (24%) reported that they had intermediate experience and 13% reported possessing poor experience. It was found also that participants used Google Apps the most for communication purposes, backing up and sharing data, and accessing teaching materials. The findings also revealed that participants perceived Google Apps as a valuable tool to improve teaching and learning. However, their use of Google Apps was hindered by several barriers, such as deficiency of access to reliable technology, increasing workload, lack of collaboration skills, cheating and plagiarism, and lack of integration skills.

KEYWORDS

Gender, Google Apps, Learning, Pre-Service Teacher, Teaching

INTRODUCTION

Currently, there is growing interest in integrating Internet-based applications into teaching and learning. One example of these applications is Google Apps. The suite of Google Apps for education includes Google Mail (Gmail), Google Sites, Google Calendar, Hangouts, Google Docs, and Groups (Google, 2015; Mansour, 2013). Such applications afford a variety of resources and services which include communication, backing up files, creating Websites, and creating, editing or collaborating on documents and presentations (Alshwaier, Youssef & Emam, 2012; Erkoç & Kert, 2011; Google, 2015).

Previous research revealed that integrating Google apps in education has the power to improve teaching and learning by facilitating an effective, flexible and interactive learning environment and support social theories of learning (Cahill, 2014; Ionita, Pastae & Stoica, 2014; Ishtaiwa & Aburezeq, 2015; Paliktzooglou, Stylianou & Suohon, 2014; Railean, 2012; Suwantarathip & Wichadee, 2014; Taylor & Hunsinger, 2011; Zhou, Simpson & Domizi, 2012). Given that pre-service teachers are future teachers; they have a significant role in the accomplishment or failure of Google Apps integration. Pre-service teachers are college students enrolled in a teacher education program who are working toward teaching professional qualification (Braud, 2007). In this study, pre-service teachers are...
graduate students registered in Professional Diploma in Teaching Program. Those students who also called interns and practice teachers involve in a school-based field experience under a supervision of a cooperating teacher. Pre-service teachers progressively embrace more classroom management and teaching responsibilities. They begin with observing teaching and end up teaching whole sessions. Pre-service teachers in such environment seek to identify what teachers need to know and do in the teaching profession.

The research literature has asserted the importance of acknowledging pre-service teachers’ perceptions regarding a given application as an urgent need to improve their use of this application (Oz, 2015; Salyers, Carter, Carter et al., 2014). Therefore, this study aimed at investigating pre-service teachers’ perceptions of the use of Google Apps as a tool to support their teaching and learning practices.

LITERATURE REVIEW

Google Apps for Education

Google Apps for Education is a set of web-based tools that are always on and running in a web browser, without buying or installing software. By using an email address as a login to the service, users can easily access different types of tools and services from any computer with an Internet connection (Educause, 2008). For instance, Gmail which is entirely compatible with POP and IMAP enables teachers and students to communicate via email and provide each user with 7GB of storage. Google Hangouts is a communication platform which includes instant messaging, video chat, SMS, and VOIP features. The third communication tool is Google Calendar which is a time-management web tool to share schedule instantly that puts everyone on campus “on the same page” (Mansour, 2013).

Google Drive is an additional service that provides users with unlimited space to create Google Docs including text files, spreadsheets, presentations, and forms. It is a real-time collaboration tool that allows teachers and students to work on the same document from remote locations, and automatically save every change made. The Drive also gives 5GB of additional storage. The Group App is another service that enables students to create groups and work in teams. Additionally, Google Sites offers teachers an easy tool for making and managing educational Sites without having knowledge of HTML or any other programming language (Google, 2015; Mansour, 2013). Furthermore, teachers can utilize a wide range of extra services, e.g., Google Plus, Blogger, YouTube, and Translate. Not only does Google provide these apps at no cost, but also allows educational institutions to use their own domain name with the service. Google also allows institutions to customize the Google Apps interface to mirror and meet their branding objectives (Educause, 2008).

Benefits of Using Google Apps in Teaching and Learning

The use of Google Apps in education could lead to many instructional benefits (Al Waely & Aburezeq, 2013; Cahill, 2014; Ishtaiwa & Aburezeq, 2015; Koval, 2009; Nevin, 2009; Paliktzoglou et al., 2014, Zhou et al., 2012). The key instructional benefit of Google Apps is improving communication. For example, Cahill (2014) reported that Google Apps allowed instructors and students to communicate simultaneously and meet virtually instead of face to face which is sometimes difficult to be scheduled. Another instructional benefit to the use of Google Apps is enhancing collaboration and sharing content (Lakshminarayanan, Kumar & Raju, 2013). According to Kop and Hill (2008), sharing knowledge among learners is a vital element for an effective learning experience. Effective learning requires open discussions, exchanging ideas, sharing opinions, distributing knowledge, and dynamic participation (Su & Beaumont, 2010). Google Apps can be used as an online collaborative authoring tool to engage students in shared learning practices which extends learning beyond the classroom walls. It was found that this innovative approach led to positive change in students’ learning practices, and it contributed to developing critical attitudes towards knowledge and authority (Rowe, Bozalek & Frantz, 2013).
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