

# Device Neutral Assignments for Mobile Learning in an English Language Classroom

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## ABSTRACT

The cloud of skepticism around mobile devices and their use in education is rapidly dispersing. Educators have come to embrace mobile devices as powerful tools that enable continuous, lifelong learning. The type of mobile device makes little difference to the educational process since all types have capabilities that enhance learning. Hence, adopting a BYOD/BYOT (Bring Your Own Device/Technology) policy in the classroom can shift the focus from the device to the learning outcomes.

Device neutral assignments are assignments and lesson plans that can be completed on any device. It comes as a solution for the multi platform challenge in a BYOD policy. This action research is intended to examine how Device Neutral Assignments can be used to integrate mobile learning into English Language classes where students are using their own mobile devices. Some language assignments were redesigned according to DNA guidelines. Description of the assignments is provided along with the results and observations of the completed assignments.

## Author Keywords

Device Neutral Assignments, DNA, Mobile Learning, BYOD, BYOT, Bring Your Own Device, Bring Your Own technology, mLearning, Educational Technology, mobile devices in education

## INTRODUCTION

The controversy around the use of mobile devices in the classroom is now being replaced by 'how-to' guides. Current literature no longer discusses the 'if' but the 'how' and 'when' to use mobile devices for learning. Now, educational Institutions are more involved in policy making/policy changing to ensure that they are on track with mobile learning. In the United Arab Emirates, the 2012/2013 academic year was marked by the iPad initiative for federal universities. (Gitaski, 2013) reports that the Ministry of Higher Education took the decision in April 2012 to equip all faculty and students in the Foundation programs with iPads for the academic year starting in September 2012. Other universities in the country have not adopted a unified device policy but are also involved in mobile learning in some degree through the innovative practices of their instructors.

The type of mobile device makes little difference to the educational process since all types have capabilities that enhance learning. Hence, adopting a BYOD/BYOT (Bring Your Own Device/Technology) policy in the classroom can shift the focus from the device to the learning outcomes. This is possible through designing device neutral assignments (DNA) to enable technology integration in teaching and learning regardless of what portable, digital device the students are using.

## METHODOLOGY:

This action research was intended to address the challenge of having different mobile devices in the classroom by designing Device Neutral Assignments, and examine how DNA can be implemented in an English language classroom to improve students' engagement and/or achievement. Language lessons and assignments were designed to be compatible with any mobile device. Students were instructed to use any devices they already had, and the administration was not required to provide new devices nor additional IT support. There were three types of assignments, namely a vocabulary assignment, a book summary assignment and some speaking assignments. Completed assignments were collected and examined for quality, diversity, and display of learning outcomes to assess level of achievement. Students were also asked to provide feedback in the end of year course evaluation which was used to determine degree of engagement.

## BACKGROUND AND LITERATURE REVIEW

### BYOD Policy and the Challenge of Diversity

A BYOD or BYOT policy allows educational institutions to utilize mobile learning at lower costs. It is also referred to as the consumerization of IT (Converge, 2012). In a situation where BYOD is enabled, students are allowed to bring to the classroom any handheld and/or portable digital device they have. A recent UNESCO Report notes that the percentage of mobile device ownership among people is unprecedented since the majority of people can afford to buy personal ICT, particularly mobile phones (Vosloo, 2012). Students are tech savvy and use their devices in their everyday life. They use social networks, search and access information, stay connected, collaborate, etc (CDW.G, 2012). Students not only have their own devices, they also have their own Internet data packages and purchase their preferred apps. Since the

technology is so readily available and affordable, it makes sense to use it for learning. (Probert, 2012) refers to an increasing array of smart devices owned by students who prefer to use social media- based applications for consuming services. He asserts that to be able to engage students, we have to “leverage tools and technology that they can use and can relate to.”

Since Educational Institutions seem to be on an ever tightening budget, adopting a BYOD policy ensures a shift towards mobile learning in a cost effective way. Students and staff need to be able to access the university network (Cherwell Software, 2012). On a smaller scale, BYOD can still be implemented even when access to the university network is limited. Students can be instructed to use their mobile devices outside of the classroom in a flipped classroom situation.

There are many benefits for implementing a BYOD program such as lower cost technology integration, better student engagement, teaching 21<sup>st</sup> century skills, anytime, anywhere access, personalized learning, learner independence, and high speed of implementation (Al-Okaily, 2013). However, there are challenges too. One major challenge that makes instructors hesitant to embrace mobile learning and BYOD is the diversity of devices or platforms. There are different devices ranging from mobile phones to tablet computers to notebooks with different operating systems such as apple’s iOS, Android, Blackberry, and Windows. (Hockly, 2012) discusses the issue of multi-platform management pointing that it is a worry that needs to be addressed. Instructors tend to feel uncomfortable knowing that they have to deal with so many devices in the classroom. One major consideration to keep in mind when dealing with this problem is that students are quite tech savvy and are capable of dealing with their day to day technical issues which reduces the demand for IT support. Instructors should take into account that students are dealing with their own devices and they tend to know how to handle these devices. They also tend to support each other when a technical problem arises.

### **Device Neutral Assignments (DNA) as a Solution**

Device neutral assignments are assignments and lesson plans that can be completed on any device. Such assignments focus on results more than on medium or type of product. It comes as a solution for the multi platform challenge in a BYOD policy and shifts the focus from the device to the lesson. In addition, it carries a reassuring promise that instructors do not need to worry about the device nor do they need to prescribe assignments that require a particular application. In fact, instructors need to set learning goals for their assignments and allow students to be creative in representing these assignments. (Forston, 2013) reports on Ron Milliner, director of the Kentucky Academy of Technology Education, that he reassures teachers regarding the move towards mobile learning. He asserts that there is no need to change the assignments that were previously created. Instead, convert them in such a way that allows students to use different devices. This can be done by changing the wording of the assignment to give students the freedom to find the relevant app or software to do it. There are many websites and applications that work on any device regardless of the operating system. To deal with IT related issues, Milliner suggests the “ask three before me” rule. Students have to ask classmates or friends. If three people could not help, then they turn to the instructor. This rule ensures that students share expertise and help solve each others’ IT issues. It also helps in reducing pressure on instructors since students are most likely going to find the answer they need from one of the tree people they asked (Forston, 2013).

### **DNA Guidelines**

Creating Device neutral assignments is quite simple. There are two key concepts in designing DNA; the first one is to be flexible in accepting different representations from students, the second is to use the resulting assignments as a learning experience to build upon and use as examples for future assignments. Instructors need to be aware of the possibilities to be able to direct students but do not need to be experts in all different devices and different applications. Each student will use the device and application he/she is most familiar with. They also tend to share expertise and take pride in assuming the role of IT support for their peers.

(Campo, 2013) recommends some strategies for DNA:

**Allow choice of product.** Can students show their learning through a video, website, screencast, essay or presentation?

**Co-construct success criteria.** If products will be different, what makes a successful product? How will it meet the curriculum expectations?

**Use generic descriptions.** Instead of requiring "PowerPoint", use "presentation". Instead of requiring "Word", use "text-based" or "word-processing".

**Suggest cross-platform services.** Many apps and services can be used on all devices. [...]

**Group students purposely.** An activity may require a camera and a computer/laptop: pair a student with a smartphone with another who has a laptop. Conversely, group students with similar devices.

**Use the classroom technology.** Your document camera can be used to create images, video, etc. During group work, one group can use the class desktop computer.

## DEVICE NEUTRAL ASSIGNMENTS FOR ENGLISH LANGUAGE LEARNING

Some pre-existing language assignments were redesigned according to the above mentioned guidelines set by (Compo 2013). Students were given the freedom to choose the product and were given a number of suggestions for different representations. The assignment rubric emphasized that grading depends on any demonstrations of the required learning outcomes. Description of the assignments was generic enough to allow choice of device and product. Examples and samples were shared and classroom technology was made available for students' use. The completed assignments were collected and assessed against the pre-set learning outcomes.

### Vocabulary Assignments

Each student was required to explain an assigned vocabulary item showing its meaning, part of speech, example sentences, relevant pictures and/or video. They could choose any way to present it as long as it was digital and preferably with multi-media. Responses from students took different shapes depending on their preferred application or software. Some students presented video recording of an act which gives the meaning ([bit.ly/1dtqX7s](http://bit.ly/1dtqX7s)) and ([bit.ly/145PPPr](http://bit.ly/145PPPr)). Others used Movie Maker to put together different slides that show the meaning, part of speech, and relevant pictures or sentences accompanied with background music ([bit.ly/12y9p3w](http://bit.ly/12y9p3w)). Still others used PowerPoint to show the meaning ([slidesha.re/17olnPz](http://slidesha.re/17olnPz)). All submitted assignments were made available online. Students were provided with a link to the full list of words so that they can learn them by watching the videos or the PowerPoint presentations.

### Book Summary Assignments

Each student was required to read a story (in the reading class) or listen to a story (in the listening class), then retell the story in any form they like. The main objective of this assignment was to show their understanding of what they read (or listened to). They were given the option of presenting a short summary in writing, in pictures, in video, in audio, or any combination of them. Some students used VoiceThread to retell the story with pictures adding their voice to describe the events according to the picture sequence ([bit.ly/143scpS](http://bit.ly/143scpS)). Some put together a collage of pictures with captions that tell the story and presented it as a simple word document; others did the same but with a PowerPoint presentation ([slidesha.re/19Pz3mO](http://slidesha.re/19Pz3mO)). A couple of students gave an audio recording of themselves summarizing the story.

### Speaking Assignments

Speaking assignments are usually presented in class, but they tend to take too much of the class time. Therefore, for some assignments, students were asked to record themselves speaking on a given topic and hand in the recording either through VoiceThread, Edmodo, or by email. Some assignments required that they verbally respond to a VoiceThread rubric ([bit.ly/12PqLWF](http://bit.ly/12PqLWF)). Students recorded their responses using their mobile phones, tablet devices, or from their laptop computers.

## RESULTS AND OBSERVATIONS:

In the three sample assignments mentioned above, the focus was not on the device, rather on meeting the assignment requirements. The completed assignments were collected and assessed against the pre-set learning outcomes. The diversity and quality of these assignments showed a relatively high level of engagement and achievement compared to previous traditional assignments. It was also observed that students were enthusiastic and often wanted to exhibit their digital expertise since they were using the tools they are most familiar with: their own mobile devices. Assessment was based on the predefined criteria for each assignment. As for students who were less tech-savvy, they were grouped with students who had the required skills and were able to learn possible ways for completing the assignments. There were few technical problems that were dealt with through the students' technical expertise. In the end of year evaluation of the course, some students expressed that they have learned new digital skills that will be helpful for them later on in their study and future job. Other students expressed that they wished future courses in the university will integrate technology as well. This comment can be taken as an indicator of higher levels of engagement. The results can be viewed as an indication that a BYOD policy is both practical and can be effectively implemented in an English Language program. Device Neutral Assignments is a practical solution that can be adopted by language instructors.

### SOME CROSS PLATFORM APPS:

A good number of mobile applications work on different platforms. Some of the most common ones are: Evernote, Edmodo, VoiceThread, Study Stack, Socrative, Angel, QR codes, Dropbox, and many more.

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