

Chapter 42

Teaching with a Tablet PC

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ABSTRACT

The modern Tablet PC, such as the Surface Pro® is a flexible teaching tool. It can be used to increase the lecturer's productivity in note taking and in assignment marking. It can be used in the lecture room with increased interaction. With a few minor accessories it can be used to record many aspects of a lecture or presentation. It can also be used to record short topic segments that can be used as references or summaries by students. Containing the abilities of both a tablet device with multi touch, a pen interface for accurate drawing and handwriting and with the power of a full PC, it is a complete teaching studio.

INTRODUCTION

When it comes to technological teaching tools it's hard to go past the Tablet PC. When discussing the Tablet PC, the author includes laptops and tablets that have touch capability with both finger and pen. One type of Tablet PC, (and the one which the name Tablet PC was derived), is a fully capable laptop with a screen that can swivel and fold down face up so that it doubles as a tablet. Today the laptop version is being replaced by tablets with attachable keyboards such as the Surface Pro®. The screen of an ideal Tablet PC allows both multi-touch with the fingers and interaction with a pen. This allows one to do anything that can be done with a tablet and it allows precision writing with a pen device. If we add a web cam and some screen recording software we have a very flexible package indeed. This is a system that will allow one to record lectures, to prerecord videos and even assignment marking to be done in a quick and efficient manner. With this system there is no need to have a lecture recording system such as iLecture® or Echo360® in a classroom. All that is required is a data projector.

Using a Tablet PC for the classroom or lecture hall is becoming more and more common. (R. Anderson et al., 2003; R. J. Anderson, Anderson, VanDeGrift, Wolfman, & Yasuhara, 2003; Gill, 2007; Hulls, 2005; Mock, 2004)

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The uptake of the laptop style Tablet PC still seems to be slow. Anecdotally, this is due to a perceived effort to learn a new system. However, if an increase in productivity is seen, a faculty will be willing to spend time on the Tablet PC's introduction to the faculty. (J. E. Anderson, Schwager, & Kerns, 2006) This has been alleviated with the new Surface Pro® tablets which have seen a much larger uptake.

Various studies have been undertaken that show that the student productivity and interaction does indeed increase with the use of the Tablet PC. (Koile & Singer, 2006; Willis & Miertschin, 2004).

Understanding that the Tablet PC can enhance student productivity is well and good, but do the students see this? A survey done at Deakin University's school of Engineering thought so. (Joordens, Chandran, & Stojcevski, 2012)

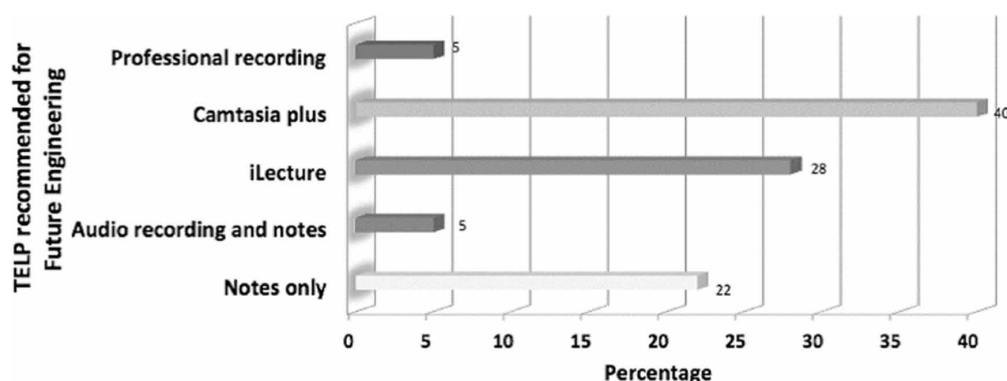
Figure 1 shows the result of third year engineering students' thoughts on Technology Enabled Learning Practices (TELP). These students had seen various different teaching styles and were asked to indicate their preferences. It is interesting that 22% just wanted the lecture notes alone while only 5% wanted audio with those notes. 5% of students preferred professional recording which were videos taken of the lecturer by a professional crew. Most significant was that 28% preferred iLecture® and 40% liked Camtasia® plus. Camtasia® plus was defined as a recording of all that occurred on the lecturers PC screen and a voice overlay, like iLecture®, but also an external camera view of the lecturer and any equipment demonstrations. The Tablet PC, with an external web cam can create both iLecture® like recordings and the Camtasia® plus recordings. This gives the Tablet PC a wide range of appeal.

Tablet PCs enhance most presentation package with the ability to write directly on the screen during the presentation. That hasn't stopped the development of software designed to build on the capabilities of the Tablet PC. The Classroom Presenter and the Ubiquitous Presenter are two such packages. (R. Anderson et al., 2004; Simon, Anderson, Hoyer, & Su, 2004; Wilkerson, Griswold, & Simon, 2005) These packages are based on slide presentations but integrate the capability of handwriting. They also have the ability to interact with student Tablet PCs so that the lecturer can send a problem to the students and receive solutions which can be selected, display by the lecturer and discussed allowing for increased interaction.

However, as this requires, for the most effective use, that the students each have a Tablet PC, they are outside the scope of this article.

The Tablet PC then, seems to be the complete package. It can function like a whiteboard, it can use web camera and can record sessions.

Figure 1. TELPs recommended for future Engineering lectures (Joordens, et al., 2012)



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