![CIT logo] Institiúid Teicneolaíochta Chorcaí
Cork Institute of Technology

Freeware Educational Technologies

1 Introduction

Freeware technologies can be quite wide and diverse in relation to their functionality and effectiveness. Prior to using these technologies or indeed searching for them on the Internet, I would advise that you are conscious of potential malware that may be bundled with the freeware software. Malware is software that would not be traditionally categorized as a virus, but nonetheless may impact negatively on your personal computer. An example of this would be Browser Redirect Software. This kind of software redirects your home page to a commercial website and can be quite difficult to uninstall. At the time of writing this, the software showcased below does not have malware bundled with it. Nonetheless, I would advise you to exercise caution when installing any freeware application and pay particular regard to the terms and conditions of the software prior to installing them. Please note also that I use the term "Freeware" liberally in the context of online-based service orientated applications.

2 Reading Software Tools

Reading software tools are basically narration software that enables the playback of text by the software application. The software can be particularly useful for students who have a literacy difficulty or students who speak English as a foreign language.

2.1 Spreeder

This is a new form of software which enables the user to read each word individually on the screen. It basically helps users to speed up the whole process of reading a document much quicker than the traditional lateral reading. The objective is to build up the speed-reading capability. It is claimed that speed-reading can be much more efficient than the traditional lateral reading method.

http://www.spreeder.com/

2.2 Natural Reader

Natural reader is an online-based narration software system which enables users to paste text into the text field on the website, and the software will read back the text in audio format. The selection of voices to play back the document is quite diverse. One of the most leading natural voices on the market today would be US Heather by Acapela. This is available free on the natural reader website.

http://www.naturalreaders.com/

2.3 Ginger Software

Ginger software is a proofreading and grammar checking software which automatically checks for grammar and spelling mistakes in documents. Although it is not 100% accurate, it is nonetheless an excellent tool in helping to reduce the amount of grammatical and spelling mistakes documents. The licensing for this software has changed recently. I understand there is no longer a free version of the software. Instead, there is a trial period of this product. Nonetheless, I have highlighted the software as I have found this to be an excellent software tool.

http://www.gingersoftware.com/

2.4 Dyslexic Font

Dyslexic Font is an innovative software font package which you can plug into Microsoft Word and also OpenOffice documents. It is claimed that this type of font helps certain students with dyslexia. To use this software, you simply download the package of the dyslexic font, and install it. After installing it, you would open up a Microsoft Word document, for instance, and select OpenDyslexic font.

http://opendyslexic.org/

3 Dictation Software

Windows 7 and Windows 8 have dictation software packaged within it. The software is called Windows Dictate. Although it is not as accurate as the proprietary software like the market leader in dictation software-Dragon NaturallySpeaking, it is nonetheless, it is an excellent software tool to introduce one to the world of dictation software. The Windows dictate software is located under Start- In the search box, type-in "Speech Recognition". You would then select the setup microphone option to make sure that your microphone is calibrated correctly. You would also need to ensure that the microphone is the only input source as a recording device. Following on from that, I would recommend that you select the take speech tutorial option which would provide you with a familiarity of how to use the basic function commands of Windows dictate.

4 Mind Mapping Software

There are a large number of open source and freeware mind mapping software technologies. One of them would be FreeMind. Mind maps are useful for revision purposes and idea generation. As well as that, you can also use the mind map to create structure to an essay, report, or assignment and thus significantly reduce the composition time. You can do the above tasks with free mind.

http://freemind.sourceforge.net/wiki/index.php/Main_Page

5 Smart Phone Apps

The educational applications available on smart phones are quite wide and diverse. Depending on the platform, iPhone or Android, both have a significant amount of applications tailored towards educational needs. The following applications have been used by the author on the android Smartphone platform. If you are using an iPhone, you could do a search for these same or similar applications.

5.1 CamScanner

This software uses OCR-Optical Character Recognition software. This essentially enables your phone to be a mobile scanner that can allow you to convert any hard copy text document into a PDF document. You can save the document on to your mobile phone and also transfer the PDF document onto your computer. I have used the software to convert my handwritten revision notes into a PDF document thus enabling me to revise any time any where and without the need for bringing large pages about. The free version of this software can be used off-line(without connecting to the Internet on your smart phone).

https://www.camscanner.net/

Mark Burleigh-Assistive Technology Service - May 2014

5.2 SuperCard

This software enables you to create electronic flashcards. These electronic flashcards are very useful if you require learning off various tasks or concepts. For instance, it is a very useful tool in learning new languages and phrases. There is a free version of this software which can be used off-line on your smart phone. As well as creating text flashcards you can also create image flashcards or draw your own flashcards diagrams.

http://www.appbrain.com/app/supercard-flashcards/com.hillman.supercard

5.3 QuickOffice

This software is essentially an office suite that is available on the android platform. It has been developed by Google and can be used off-line to access documents on the smart phone. It includes a word processor, spreadsheet, and a PDF reader.

http://www.appbrain.com/app/quickoffice/com.quickoffice.android

6 OpenOffice

OpenOffice is an open-source office suite which has a word processor, spreadsheet, and PDF reader among some of its applications. It is free to use as an alternative to the Microsoft office application on your desktop computer or laptop.

https://www.openoffice.org/

7 Touch Typing Software

There are many online typing tutorial-based software applications. As with all typing software, the supervision of the student's progress is imperative as students can very easily slack off in progress and motivation. This would entail setting up a one-hour (minimum) typing club per week and monitoring each student's progress during that one hour.

7.1 BBC Typing Tutorial

The BBC website has a colorful and animated website to teach students from a young age how to practice their touch typing skills. It is free for use and is an excellent introductory online typing tutor aimed at primary, secondary school students.

http://www.bbc.co.uk/schools/typing/

7.2 Typing Web

Typing Web is also an online free typing tutor software application. It would be aimed more towards secondary school students and also adults. Prior to using this application, you would first need to change the keyboard to the United Kingdom (QWERTY keyboard).

http://www.typingweb.com/

8 My Study Bar

My study bar is a software application which contains many features which may help students with dyslexia or visual impairments. It also has some features that may help students who are learning English as a foreign language. As a software package, it would be an alternative to the proprietary software like Read Write Gold and Claro Read. Although it would lack in certain features in comparison to the proprietary software, nonetheless, it would be considered an excellent tool for students and them with their literacy.

http://eduapps.org/?page_id=7

9 Classroom Response Systems

Classroom Response Systems (or Polling software) are an innovative way of helping teachers and instructors receive real-time feedback from a class. This type of technology would be considered Audience Participation Technology and can reap many benefits for instructors/teachers. Consider a teacher teaching a class on a complex topic. The teacher wants to get feedback from the class to know whether or not the class understands the topic. The traditional show of hands or verbal communication may not be the most accurate way of getting true feedback from a class. An alternative would be to use a polling system. This would be comprised of the teacher providing a web link to a website. On the website, the class would answer one or more questions that would be provided by the teacher in near real-time e.g. Do You Understand The Concept So Far? The student would reply to the question anonymously, [true or false], via text message or Web link. As well as providing real-time feedback from the class, these forms of polling systems can also be used to complement the traditional methods of survey for quality assurance.

9.1 Poll Everywhere

Poll Everywhere is one of the leading online audience participation systems. At the time of writing this document, the application was available free for a maximum of 40 responses per question. In other words, every time the teacher posted a question to their class, only the first 40 replies would be considered. If the teacher wished to upgrade their account, then amount of responses allowed would increase. In order to use this application, you would need to create a user account. The task of creating polls and publishing them is fairly straightforward. First, you create your poll by designing a type of question and response for your class. You would then "Push" your poll onto a dedicated short link website and then provide the link to your class. The response is immediate and can be quite enlightening in relation student-teacher interaction.

http://www.polleverywhere.com/

Mark Burleigh-Assistive Technology Service - May 2014