EDUCATIONAL TECHNOLOGY FOR TEACHING AND LEARNING

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ABSTRACT

Educational Technology in Teaching and Learning is an important and challenging aspect in higher education. The first theories on human behavior as behavior affected by technology are discussed in this essay. These learning theories are behaviorism, cognitivism, and constructivism. They provide a pedagogical and/or andragogical basis for understanding how students learn. Also, some of the approaches to teaching with technology, use of the best technological tools and appropriate type of instruction to enhance learning under Bloom's taxonomy are included. A general perspective is given of the advantages and disadvantages that technology offers for education.

RESUMEN

La Tecnología educativa en la enseñanza y el aprendizaje es un aspecto importante y desafíante en la educación superior. Las primeras teorías sobre el comportamiento humano como afectado por la tecnología de comportamiento se discuten en este ensayo. Estas teorías de aprendizaje son el conductismo, cognitivismo y constructivismo. Estas proporcionan una base pedagógica o andragógica para la comprensión de cómo aprenden los estudiantes. También, algunos de los enfoques de enseñanza con tecnología, el uso de las mejores herramientas tecnológicas y el tipo apropiado de instrucción para mejorar el aprendizaje de acuerdo con la taxonomía de Bloom. Se da una perspectiva general de las ventajas y desventajas que ofrece la tecnología para la educación.

KEY WORDS


EDUCATIONAL TECHNOLOGY FOR TEACHING AND LEARNING

Technology for improving and facilitating learning processes is everywhere. This includes for increasing performance within the educational system. Technology begins to change our vision of education at the moment a teaching-learning program with technology begins. It has been used in about every classroom, as becomes a part of the courses in universities, high schools and middle and elementary schools all over the world. Thus, technologies as learning and teaching tools force teachers and students to use them, similar to learning a new task. For this reason, technology application in classrooms is essential to ensuring its efficiency and effective integration. Technology has now changed how teachers and students access, gather, analyze, present, and transmit information by giving them more power in the classroom (Dooley, 1999).

1. BEHAVIORISM, COGNITIVISM AND CONSTRUCTIVISM THEORIES
Part of this analysis deals with behaviorism, Cognitivism, and Constructivism theories which identify the andragogical basis for understanding how students learn effectively. These theories suggest that learning should take place in a dynamic and multi-dimensional context and perhaps in combination. They could be incorporated into an instructional design process to provide optimal learning.

John B. Watson (1878-1958) and B. F. Skinner (1904-1990) define human learning as the acquisition of new behavior or as “a universal learning process,” focusing on objectively observable behaviors. Watson believed that human behavior resulted from specific stimuli that elicited certain responses. Watson’s basic premise was that conclusions about human development should be based on observation of overt behavior rather than speculation about subconscious motives or latent cognitive processes (Shaffer, 2000). Skinner’s major contributions to society were his writing on improvements of teaching based on his functional analysis of “Verbal Behavior” and “The Technology of Teaching.” These two psychologists developed, described and experimented a kind of philosophy of learning, for practical classroom application which are still useful. Among these contributions it is possible to mention: contracts, consequences, reinforcement, extinction, and behavior modification. In Cognitivism, the leading researchers, Jean Piaget and Lev Vygotsky, investigated the concepts of working memory: short term and long term memory, by using specific technology from the field of Computer Science. These concepts are at the same time central to understanding educational technology. But, when dealing with language acquisition, one of the most influential representatives is Noam Chomsky. As a linguist, he introduces transformational grammar, or the formal grammar of a language. Chomsky proved that language is entirely innate and that there is a “universal grammar” (UG). In fact, Chomsky simply observed that although both a human baby and a kitten are capable of inductive reasoning, if they are exposed to exactly the same linguistic data, the human child will always acquire the ability to understand and produce language while the kitten will never acquire either ability (http://en.wikipedia.org/wiki/Noam_Chomsky). In comparison with behaviorism, cognitive theories go beyond behavior to explain brain-based learning in the same way. Theorists consider how human memory works to promote learning. On the other hand, in Constructivism, some of the researchers in education are John Dewey, Jerome Bruner, and Lev Vygotsky who would demonstrate their knowledge through creativity and collaboration. According to their theories, students should be provided with opportunities to think by themselves and articulate their thoughts (http://www.edwebproject.org/constructivism.dewey.html). Dewey proposed a method of “directed living” in which students would engage in real-world, practical workshops. Moreover, if it compared to Chomsky’s observations in language exposure, Dewey’s proposal in constructivism is important to point out that both agree on how a learner is able to produce or create after being exposed to linguistic data, prior knowledge or experience. This means that as human beings, it is possible to construct meaning from new information in order to formulate new concepts in learning. For Noam, schools should not focus on repetitive and rote memorization. Instead, they should center on the production of good habits of thinking to develop creativity. This proposal emerged from his view about how students learn. In this respect, it is important to consider Bloom's taxonomy to understand how and why individuals, groups and societies behave the way they do.

2. BLOOM’S TAXONOMY AND ITS DOMAINS

In 1956, Benjamin S. Bloom headed a large committee of educational psychologists who developed a method of taxonomy or “classification” of global educational goals and/or possible objectives in the classroom. This taxonomy consists of three domains: cognitive (knowledge), affective (attitude), and psychomotor (skills) which identifies and classifies the levels or steps of skills students need to be successful in learning. Thus, the cognitive domain consists of six levels, the affective consists of five levels, and psychomotor consists of six levels. During the 1990’s a new group of cognitive psychologists, led by Lorin Anderson (a former student of Bloom’s), updated the taxonomy reflecting relevance to 21st century work (http://www.fitsuny.edu/files/pdfs/CET_TL_BloomsTaxonomy.pdf).

The (New version) changed from Nouns to Verbs to describe the different levels of the taxonomy:

(Original version)                                           (New version)

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These levels of complexity or intellectual behavior are important in learning, to the extent that students enjoy the learning experience. In other words, when they are engaged in the process, they become more productive. Bloom has depicted those levels as a stairway which looks like “the Food Guide Pyramid.” This stairway leads many teachers to encourage their students to “climb to a higher level of thought” where creativity is the most important level to develop thinking.

The presentation of the Taxonomy as a pyramid (in both the original and revised versions) suggests that one cannot effectively begin to address higher levels of thinking until those below have been thoroughly addressed so that a learner can easily follow the process, and continue developing (http://plpnetwork.com/2012/05/15/flipping-blooms-taxonomy/). Nevertheless, there are some professors who suggest starting at any level.

Bloom’s taxonomy is probably the most widely applied one in use today. Besides, it has had a considerable impact on educational thought and practice all over the world. Furthermore, it also has been most often transformed into a basic reference for almost all educators.

To evaluate Bloom’s taxonomy and technology when teaching and learning a foreign language, it’s important to remember the three domains of learning and technology as a learning tool. For instance in pronunciation, the cognitive aspects are learned by having them presented in an organized and interesting way, and can be tested by traditional pen-and-paper examinations (Griffiths, 2008). But in psychomotor aspects of pronunciation, learners are required to speak. Tests are clearly listening tests rather than tests of pronunciation. For example, learners are asked to discriminate recordings of phonemes, words, and sentences. The affective domain relates to the learners’ feelings about what is being learned and the learning situation (Griffiths, 2008). In many respects, affective considerations must be the most important issues for pronunciation teaching, for several reasons. Primarily, many teachers pay little attention to the affective side of language teaching. As a result, there is great potential of embarrassment, ridicule and loss of face, especially with such a physical activity as pronunciation (Richards, 1994). When learning the English language, it is much better if students are helped by technology. No matter if it is a CD player or a Rosetta stone CD-ROM, the point is that all students in the classroom have the opportunity to be immerse in an English-Speaking environment. Rosetta stone has online sessions where students are tutored by native speakers who will help master the English language. If students have a computer to practice pronunciation, listening, and recording of their voice, besides spelling, their second language acquisition will be a success. Most of today’s universities have equipped labs to improve their students’ competence and skills in language acquisition. Naturally, listening is crucial for language learning and the use of technology is essential to reach this goal. Altogether with technology, good language learners need to apply other skills such as concentration, motivation and empathy (self-encouragement or setting up rewards for their progress) to become effective listeners. In fact, successful learners take advantage not only of pre-recorded material on audio, video tapes, DVD or the Internet, but also, use TV and movies, or listen to native speakers to learn English. Nevertheless, they have to be aware of the role of a professor in the context of the classroom, because teaching and learning may also be influenced by the approach or methodology of the teacher.

3. LANGUAGE TEACHING METHODS AND APPROACHES TO TEACHING WITH TECHNOLOGY

Nowadays, language teaching methods and approaches, especially in foreign language learning and teaching practices, have been innovated, to facilitate language acquisition. Learning involves understanding how one learns and how a person interacts to learn a language. This means that professors must ensure that the tools they use have a proper fit with their teaching goals and their intended learning outcomes. They have to encourage
independent learning and individual learner creativity to facilitate learning. They have also to encourage learners to assume some of the responsibilities for their own learning. But, students who learn a foreign language require more than traditional methods of teaching. They require some other teaching techniques focusing on the promotion of the use of technology in education. For this reason, when technology is carefully and thoughtfully integrated into a course, it can make a superb contribution. Both teachers and students can benefit from technology’s presence and its impact on how the course material is received and understood (Dunn, Wilson, Freeman, Stowell, 2011).

Educators who take advantage of technology encourage their students to sign up for e-mail updates or text message alerts to receive homework assignments and reminders for activities in the classroom. There are others who use free download computer software available online to develop language skills and most of these softwares allow teachers to track their students' progress. As a result, most of the students respond well to these types of communication and teaching methods. This happens because students are familiar with technology.

By definition, technology can involve any of the following:

- **Hardware** (i.e., laptop or desktop computers, projectors, monitors)
- **Software** (i.e., word processing, presentation, statistical, and networks)
- **Portable handheld devices** (i.e., audio/video players, digital books, smart phones, and personal response systems)
- **Web connections** (i.e., online course, course-management systems, social networks, RSS feeds, wikis, blogs, podcasts) (Dunn, Wilson, Freeman, Stowell, 2011).

The importance of technology in teaching methods is that there is no interruption in the delivery of the message. Some characteristics are to instantly ask questions, address doubts and get immediate feedback. Technology has the potential to benefit teaching and learning, helping professors to explore and use a variety of current programs, tools and resources available online for free. The web now allows users to modify existing content, create new content, personalize their web experience, and build online education networks and share interests (the write web) (Lightle, 2011).

The WWW has made it easy to access information from vast Internet resources for many educational reasons (Hefzallah, 2000). And, Netscape, from netscape communications and Internet Explorer, from microsoft are their graphic interface for searching the web, known as “web browsers.” Nunn, Wilson, Freeman, and Stowell (2011) show off the following list of up-to-date technologies to gather information: Blackboard Academic Suite 8.0, PowerPoint 2007, Adobe Presenter 7, Respondus 4.0, Google Blogger, GarageBand 3.0, and Adobe Acrobat 9, but readers should always check on availability of the latest versions of such technologies. Also, the use of social networking sites such as YouTube, MySpace, Twitter, are some of the most common ones. Friendster is the first global online social network to support Asian languages (http://en.wikipedia.org/wiki/) and LinkedIn is a site used for professional purposes as well as Blog, Delicious, Wiki, Podcast or even Skype. There are other tools that are an excellent source for teaching, such as Camtasia Studio, Animoto, Picture Trail, for producing video tutorials, or Power Bullet a flash movie creator, or web sites for sharing presentations, documents, PDFs, videos and webinars such as Docstoc and Slideshare. As a result of the use of these technological tools and resources, students who use computers are familiar with tools such as spelling and grammar checks, as well as Web search engines such as Google, without realizing that they involve aspects of computational linguistics (Fasold and Connor-Linton, 2006). There are courses online that have been designed for students with no previous knowledge of English, or any other language, that would help students to learn. For example there is: English for Spanish speaking students, whose websites are http://duolingo.com/, www.emagister.com, www.mansioningles.com, and also online translators and dictionaries such as www.traducegratis.com and http://www.wordreference.com/, and others that can be used for students and people in general to study languages and translate real content.

4. **APPROPRIATE TYPE OF INSTRUCTION TO ENHANCE LEARNING**
In some countries years ago, education was not accessible to students living in rural areas or at a distance from their educational centers. Students did not have access to vast resources or learning trends. With new technology, it’s pretty easy accessing a Web site and using a headset. Distance learning courses online (virtual classroom) and flexibility to manage academic, personal and professional commitments transgress the barriers of time and place. Around the world, students at all levels and professors have interest in digital learning opportunities such as “Virtual Learning Environments” in which e-learning platforms such as: Educativa or Moodle are used to train users how to manage a virtual information environment by using Web 2.0 tools that make exploration possible. These tools introduce teachers in the integration of technology in their everyday teaching. In an online environment, learners pursue learning in an individualized and self-paced way. It's more of a self-directed learning where the knowledge is not just transferred but emerges on its own via a virtual classroom (http://www.etni.org.il/etnirag/issue5/mark_cruthers.htm). The online sessions are far more convenient and effective as the tutor and student can connect from anywhere with just a requirement of an internet connection. In a virtual class, content is primarily text-based (digital textbook – E-books) and delivered through chats and presentations. Moreover, links and websites can be shared in an online session. Universities offer seminars about how to use educational platforms and produce educational videos such as Prezi, Camtasia studio, and Power Bullet.

Technology is highly important to everyone. Integrating technology in the classroom motivates students. In today’s world, if there isn’t time to study a career, in a physical location it is possible to do it through the Internet which is the key access to distance or virtual learning. There are some private universities considered pioneers in distance education. They offer online degree programs through global learning or e-learning platforms. On many campuses, students come to college with cellphones, laptops, iPods, and more knowledge about recent technological advances than many of their professors (Dunn, Wilson, Freeman, Stowell, 2011). And, this fact is shaping a new system of education that encourages and promotes the acquisition of technology. This challenge is compulsory to develop e-learning skills that enable the proficient use of the Internet and other technologies for learning and educational practice.

Educational technology is also a way for teachers to deliver content to students and research within the classroom. Students have to know how to use software even more programs/applications to do several tasks. It can be said that the best technological advances and the most useful technological tools engage teaching for the better. Since technology is not only the access to master a foreign language, but a tool of being more effective in the use and application of existing technology. The best technological tools in use today are tablets, laptops, smartphones and cellphones –blackberry or android. The online services known as Google Apps are the typical example of today’s innovation and explosion, users just have to download iPhone apps from Apple App Store and Android apps from the Android Market and that’s it. They can communicate with other people everywhere inside or outside their country, share photos or videos. Teachers and students have to take advantage of the many benefits softwares have to develop a positive attitude towards learning. Nowadays, educational softwares have crucial functions to enhance learning and most of them are free download, and teachers can make good use of them but they have to select which ones can be incorporated into the EFL classroom. Teachers who are integrating technology find that students are more motivated to learn, apply their knowledge to practical problems, and take ownership of their learning. Teachers also report that by using technology, students are developing key 21st-century skills including creativity, collaboration, and skills in problem solving and critical thinking. Teachers also see changes in their teaching practice as a result of technology integration instruction (Lightle, 2011).

5. USE OF THE BEST TECHNOLOGICAL TOOLS (softwares)

Following, there are three types of software to evaluate their usability and learnability as a tool in the teaching and learning process and the potential benefits they offer in education. In this evaluation thirteen points are considered: objectives, documentation & supplementary materials, program content, presentation, effectiveness, audience appeal & suitability, practice/assessment/feedback, user interface and media quality, educational value and other benefits, ease of use, students’ use, teachers’ use, and steps to design a task. Moreover, there are three models of lesson plans from the software.
1. **Dicter**: The program translator Dicter always helps to complete the transaction in a single click of mouse from any application Windows. You can also listen to the translated text, or copy it to clipboard (http://www.dicter.net/).

2. **Google Earth**: Google Earth can help you bring a world of information alive for your students. It can be used with all grade levels, and the possibilities are endless, depending on your imagination! (http://sitescontent.google.com/google-earth-for-educators/classroom-resources).

3. **Youtube downloader**: Search, Preview, Download videos from YouTube, Dailymotion, Google. You can also use this application to extract music from videos. The music will be saved as mp3 or AAC on your phone (http://www.androlib.com/android.application.com-koyotesoft-tubedownloader-wAFA.aspx)

1. **SOFTWARE EVALUATION FORM**

   **Dicter**: Latin root *Dicto* means *say or speak*. The suffix-er (an object used for a purpose. It is used as a Bilingual Dictionary.

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<th>Dicter 3.05</th>
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<td>Weight</td>
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<tr>
<td>Publisher:</td>
<td>ITV, <a href="http://dicter.net">http://dicter.net</a>, Google</td>
</tr>
<tr>
<td>Type of software:</td>
<td>Free translation tool based: Educational and Language</td>
</tr>
<tr>
<td>Platform:</td>
<td>Windows XP, Windows Vista 7</td>
</tr>
<tr>
<td>Subject Areas:</td>
<td>Education, EFL, Business, Global Communication</td>
</tr>
</tbody>
</table>

1. **OBJECTIVES:**

   - To detect original languages and translate those into more than 42 languages.
   - To save time reading a foreign language text.
   - To produce effective communication in foreign contexts.

2. **DOCUMENTATION & SUPPLEMENTARY MATERIALS:**

   - Technical documentation
   - Clearly stated objectives
   - Integration curriculum with learning activities
   - Enrichment and remedial activities

3. **PROGRAM CONTENT:**

   - Instruction matches
   - Instructional strategies
   - Instruction addresses various learning styles and intelligences
   - Current and accurate information
   - Stereotype-free program

4. **PRESENTATION:**

   - Appropriate and logical way presentation of information
   - Relevant examples and illustrations
• Screen display variety
• Target audience text type
• Correct spelling, punctuation, and grammar

5. EFFECTIVENESS:
• Students recall and apply target information
• Students are prepared for future real-world experiences
• Students develop further interest in topic from using program
• Students respond optimally to instructional software

6. AUDIENCE APPEAL & SUITABILITY:
• Program matches interest level of indicated audience
• Expected input is appropriate for indicated audience
• Reading level is appropriate for indicated audience
• Examples and illustrations are suitable for indicated audience
• Required time is compatible with student attention
• Program branches to remediation or enrichment

7. PRACTICE/ASSESSMENT/FEEDBACK:
• Practice is provided to accomplish objectives
• Practice is appropriate for topic and audience
• Feedback is relevant to student responses
• Feedback is immediate
• Feedback is varied
• Feedback gives remediation
• Reinforcement is positive and dignified
• Assessment is aligned with objectives
• Open-ended responses and/or portfolio opportunities are promoted
• Learning experiences are collaborative

8. USER INTERFACE AND MEDIA QUALITY:
• Write-up will be strictly based on the criteria applicable
• Interface provides user with an appropriate environment
• Graphics, audio, video, and/or animations enhance instruction
• Graphics, audio, video, and/or animations stimulate student interest
• Graphics, audio, video, and/or animations are of high quality

9. EDUCATIONAL VALUE AND OTHER BENEFITS

A. Educational value:
• Learn new topics and study material in any language
• Help students understand international standardized tests
• Communicate ideas to foreign people around the world
• Useful in EFL/ESL contexts

B. Other Benefits of Dicter software:
• Works in any text, including Web sites, documents, and programs
• Retranslates texts into other languages selected from a long menu of choices
• Sets a language for default translations from English
• Provides language auto detection

10 EASE OF USE:
• User can navigate through program without difficulty
• Screen directions are consistent and easy to follow
• Help options are comprehensive and readily available
• Program responds to input as indicated by directions
• Title sequence is brief and can be bypassed
• User can control pace and sequence
• User can exit from any screen
• Only one input is registered when key is held down

11. STUDENTS’ USE:
• Fast and easy text entry
• 48 language menu
• Voice features

12. TEACHERS’ USE:
• Involve students in proactive engagement
• Add voice features for listening to translated source texts
• Can enter text requiring translation

13. STEPS TO DESIGN A TASK:
1. Read the manual.
2. Choose a text.
3. Activate the Dicter icon and select the language.
4. Click on clipboard and then paste the translated text using Ctrl+C.

2. SOFTWARE EVALUATION FORM

Google Earth: Its name is related to the Google engine. Earth represents the global navigation over planet Earth.

<table>
<thead>
<tr>
<th>Type:</th>
<th>Google Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight:</td>
<td>8.3 MB</td>
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<tr>
<td>Publisher:</td>
<td>Google Inc.</td>
</tr>
<tr>
<td>Type of software:</td>
<td>Geo-referential navigator; a satellite view of rivers, roads, etc</td>
</tr>
<tr>
<td>Subject Areas</td>
<td>Scientific, Commercial, Educational</td>
</tr>
</tbody>
</table>
1. OBJECTIVES:
   - To visit any place of the world immediately
   - To see satellite photographs from any part of the world.
   - To bring a world of information alive.
   - To explore topics.

2. DOCUMENTATION & SUPPLEMENTARY MATERIALS:
   - Technical documentation
   - Clearly stated objectives
   - Integration curriculum with learning activities
   - Enrichment and remedial activities

3. PROGRAM CONTENT:
   - Instruction matches
   - Instructional strategies
   - Instruction addresses various learning styles and intelligences
   - Current and accurate information
   - Stereotype-free program

4. PRESENTATION:
   - Appropriate and logical way presentation of information
   - Relevant examples and illustrations
   - Screen display variety
   - Target audience text type
   - Correct spelling, punctuation, and grammar

5. EFFECTIVENESS:
   - Students recall and apply target information
   - Students are prepared for future real-world experiences
   - Students develop further interest in topic from using program
   - Students respond optimally to instructional software

6. AUDIENCE APPEAL & SUITABILITY:
   - Program matches interest level of indicated audience
   - Expected input is appropriate for indicated audience
   - Reading level is appropriate for indicated audience
   - Examples and illustrations are suitable for indicated audience
   - Required time is compatible with student attention
   - Program branches to remediation or enrichment when appropriate

7. PRACTICE/ASSESSMENT/FEEDBACK:
   - Practice is provided to accomplish objectives
   - Practice is appropriate for topic and audience
   - Feedback is relevant to student responses
   - Feedback is immediate
   - Feedback is varied
   - Feedback gives remediation
   - Reinforcement is positive and dignified
• Assessment is aligned with objectives
• Open-ended responses and/or portfolio opportunities are promoted
• Learning experiences are collaborative

8. **USER INTERFACE AND MEDIA QUALITY:**

• Write-up based on the criteria applicable
• Interface provides user with an appropriate environment
• Graphics, audio, video, and/or animations enhance instruction
• Graphics, audio, video, and/or animations stimulate student interest
• User friendly

9. **EDUCATIONAL VALUE AND OTHER BENEFITS**

C. Educational value:
• Useful in plotting multiple addresses
• Help students and teachers in their outreach efforts to make geospatial travel
• Research and create virtual tours
• Obtain maps to discover locations
• Useful in EFL/ESL contexts

D. Other Benefits of Google Earth software:
• Offers multiple subjects
• Tracks routes to explore
• Takes students on a ecology research mission
• Contains images, links, and descriptions to explore global themes
• Creates placemarks detailing the earth
• Uses real –time coordinates to demonstrate distance calculations, verify results, calculate the volume, explore distance velocity and wave properties of tsunamis

10. **EASE OF USE:**

• User can navigate through program without difficulty
• Screen directions are consistent and easy to follow
• Help options are comprehensive and readily available
• Program responds to input as indicated by directions
• Title sequence is brief and can be bypassed
• User can control pace and sequence
• User can exit from any screen
• Only one input is registered when key is held down

11. **STUDENTS’ USE:**

• Explore the animal kingdom and endangered species with the National Geographic layer
• Create annotated place markers indicating location of school and points of interest such as the local fire and police stations
• Study climate change and the effects of global warming
• Create tours
• Track earthquakes in real-time

12. **TEACHERS’ USE:**
• Set the scene for geography, astronomy and other lessons
• Involve students in pro-active engagement
• Adapt traditionally abstract lessons to the “real-world” by having students interact with virtual “real-time” data

13. STEPS TO DESIGN A TASK:
1. Select the topic in Google Earth: “Explore your town”
2. Take a feature tour.
3. Check out learning features, interacting learning games.
4. Search, navigate, use layers, create placemarks to learn about the most popular places.
5. Master these basics; tackle Google Earth through any of themed areas of interest

3. SOFTWARE EVALUATION FORM

Tube Downloader: Tube means television (video transmission). It comes from the video sharing service YouTube. It is used to download videos from that service.

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<thead>
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<td>Weight:</td>
<td>4.3 MB</td>
</tr>
<tr>
<td>Publisher:</td>
<td>Download.com</td>
</tr>
<tr>
<td>Type of software:</td>
<td>A software that allows you to download videos, music and others.</td>
</tr>
</tbody>
</table>
| Platform:           | • Intel Pentium 233 Mhz (or equivalent processor, such as AMD) or better  
                     | • Windows 2000/XP/Vista/7           
                     | • Internet Explorer 5.0 or higher   
                     | • 64 MB of RAM                      
                     | • Adobe Flash Player                |
| Subject Areas:      | Education, EFL, Business, Personal use |

1. OBJECTIVES:
• To download videos on different subjects and formats.
• To extract music from videos.
• To share visual representation with others.

2. DOCUMENTATION & SUPPLEMENTARY MATERIALS:
• Technical documentation
• Clearly stated objectives
• Integrated curriculum with learning activities
• Materials for enrichment and remedial activities

3. PROGRAM CONTENT:
• Instruction matches
• Instructional strategies
• Instruction addresses various learning styles and intelligences
• Current and accurate information
• Stereotypes-free Program
4. **PRESENTATION:**
   - Appropriate and logical presentation of information
   - Relevant examples and illustrations
   - Screen display variety
   - Target audience text type
   - Correct spelling, punctuation, and grammar

5. **EFFECTIVENESS:**
   - Students recall and apply target information
   - Students are prepared for future real-world experiences
   - Students develop further interest in topic from using program
   - Students respond optimally to instructional software

6. **AUDIENCE APPEAL & SUITABILITY:**
   - Program matches interest level of indicated audience
   - Expected input is appropriate for indicated audience
   - Reading level is appropriate for indicated audience
   - Examples and illustrations are suitable for indicated audience
   - Required time is compatible with student attention
   - Program branches to remediation or enrichment

7. **PRACTICE/ASSESSMENT/FEEDBACK:**
   - Practice is provided to accomplish objectives
   - Practice is appropriate for topic and audience
   - Feedback is relevant to student responses
   - Feedback is immediate
   - Feedback is varied
   - Feedback gives remediation
   - Reinforcement is positive and dignified
   - Assessment is aligned with objectives
   - Open-ended responses and/or portfolio opportunities are promoted
   - Learning experiences are collaborative

8. **USER INTERFACE AND MEDIA QUALITY:**
   - Write-up will be strictly based on the criteria applicable
   - Graphics, audio, video, and/or animations enhance instruction
   - Graphics, audio, video, and/or animations stimulate student interest
   - Graphics, audio, video, and/or animations are of high quality
   - Intuitive and friendly

9. **EDUCATIONAL VALUE AND OTHER BENEFITS**

   **A. Educational value:**
   - Useful in classrooms where YouTube is blocked
   - Useful in EFL/ESL contexts
   - Provides students world perspective throughout the curriculum
   - Helps students engage more deeply with the subject matter,
   - Longer recall of learned information

   **B. Other Benefits of Tube downloader software:**
• Converts downloaded videos for iPod, iPhone, PSP, Cell Phone, Windows Media, XVID and MP3
• Provides the ability to cut and select the output quality of converted videos
• Plays videos downloaded in Flash

10. EASE OF USE:
• User can navigate through program without difficulty
• Screen directions are consistent and easy to follow
• Help options are comprehensive and readily available
• Program responds to input as indicated by directions
• Title sequence is brief and can be bypassed
• User can control pace and sequence
• User can exit from any screen
• Only one input is registered when key is held down

11. STUDENTS’ USE:
• Create videos for class projects, presentations or graphic design work
• Turn in assignments
• Share video content for free
• Search for videos using a Web browser
• Refer students to videos outside of the classroom as an at-home study aid

12. TEACHERS’ USE:
• Valuable resource for teachers looking to inject digital learning into their classrooms
• Enhance PowerPoint presentations
• Share video tutorials
• Embed YouTube videos on any site or social media profile
• Play YouTube videos in PowerPoint without internet
• Get videos from Google Docs into PowerPoint
• Translate videos into different languages

13. STEPS TO DESIGN A TASK:
1. Read the online manual.
2. Choose a video from YouTube.
3. Copy the URL in the software
4. Convert it into a selected format
5. Save videos in media files.

EDUCATIONAL VALUE AND OTHER BENEFITS

Dicter, Google Earth and Youtube Downloader have features which provide educators with tools that can be used for personal, and commercial purposes, too. However, in an educational aspect, it is the instructor who decides the best way to use the software in order to obtain benefits in a given learning situation. Users may take advantage of using a translator with Dicter, a video on Youtube or travel and locate features of the earth by using Google earth software. The teacher can use software as a supplement in a learning course. In this way, teachers may present, reinforce or evaluate a class. The following chart is a model of a software lesson plan.

SOFTWARE-BASED LESSON PLAN 1: DICTER
Topics:
- Global Communication
- International Agreements

Grammar points/language functions:
- Spelling
- Word Choice
- Exchanging information

Learning Objectives:
Students will be able to:
- Write letters to a foreign visitor.
- Interpret official documents in a specific language.
- Read foreign articles easily.

Activities: (Presentation, Practice, Production)
- Show students a comparative model of a letter in two languages.
- Ask students to follow the procedure outlined in the worksheet to translate their text or Internet.
- Create a short story or document from one native tongue into another language.

Texts/Materials/Resources (Computer-based)
Name of the Software: DICTER 3.05
Type of Software: TRANSLATOR/Non commercial
Online Dictionary (Internet)

Assessment:
- Ask students to do a translation on their own in English and then use Dicter to revise it.
- Present a story in the foreign language.

Extended Activity:
In pairs, create a Bilingual Dictionary. Choose two different languages.

SOFTWARE-BASED LESSON PLAN 2: GOOGLE EARTH

Topics:
- Getting around a community

Grammar points/language functions:
- Simple Present
- Preposition of place
- Giving directions

Learning Objectives:
Students will be able to:
- Locate given places using the Google Earth software
- Apply prepositions of places to locations

Activities: (Presentation, Practice, Production)
- Present the World Map to the class using the Google Earth software.
- Organize work teams to locate geographical areas.
- Make a list of places to visit.
- Apply the prepositions of places studied.

Texts/Materials/Resources (Computer-based)
Name of the Software: Google Earth
Type of Software: Commercial and Educational
Texts, computer with internet connection.

Assessment: (on-going visual and auditory)
• Take turns asking and answering questions about locations.
• Give detail of your travel.

Extended Activities:
• Choose a place of preference, travel and then save it.

SOFTWARE-BASED LESSON PLAN 3: TUBE DOWNLOADER 2.0

<table>
<thead>
<tr>
<th>Topics:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Styles : Lecture on Psychology</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Grammar points/language functions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Simple present tense</td>
</tr>
<tr>
<td>• Wh-questions</td>
</tr>
<tr>
<td>Exchanging information</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning Objectives:</th>
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</thead>
<tbody>
<tr>
<td>Students will be able to:</td>
</tr>
<tr>
<td>• Identify concepts from a lecture on a video.</td>
</tr>
<tr>
<td>• Develop listening accuracy based on guided tasks.</td>
</tr>
<tr>
<td>• Organize the information from the video lecture.</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Activities: (Presentation, Practice, Production)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Read the words aloud before watching the video.</td>
</tr>
<tr>
<td>• Ask students to mark on words they listen and understand from the video.</td>
</tr>
<tr>
<td>Make a write up of the answers you get from the video.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Texts/Materials/Resources (Computer-based)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the Software: <strong>Tube Downloader 2.0</strong></td>
</tr>
<tr>
<td>Type of Software: Commercial and Non Commercial use</td>
</tr>
<tr>
<td>Data Show and a laptop</td>
</tr>
<tr>
<td>Speakers.</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Assessment:</th>
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<tbody>
<tr>
<td>• Ask students to identify unknown words from media videos</td>
</tr>
<tr>
<td>• Answers the questions given in the worksheet.</td>
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<table>
<thead>
<tr>
<th>Extended Activity:</th>
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<tbody>
<tr>
<td>In pairs, create a Bilingual Dictionary. Choose two different languages.</td>
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</tbody>
</table>

6. ADVANTAGES AND DISADVANTAGES
The advantages of technology use inside and outside the classroom will depend upon the creativity, ingenuity, and initiative of professors as learning facilitators who affect their students, and not without the input of software programmers who must be aware of the educational needs of today. Learning facilitators assume a host of responsibilities to provide a rich, exciting and enjoyable learning environment. They endeavor to organize and make easily available the widest possible range of resources for learning (Hefzallah, 2000). However, students actively engage with contents when these are adequate to their needs and expectations, and presented in an interactive and dynamic fashion. Most importantly, the way software programmers display a visually stimulating method will lead students to gain a better understanding of the content and increase their involvement of the learning experience.

In higher education, the use of technology in the classroom requires time, money, and training. But, education is changing as technology is changing through the years. There may be some barriers found when dealing with technology for teaching and learning. The first one is the lack of technology mainly in the classrooms in universities. The second one is the need for professionals trained in technology use so that the integration of technology will work within the curricular system. The third one is that students are not aware of the purpose of software tools for learning purposes. All digital innovations have multiple uses, but unless the specific technology is not applied for learning, it is not going to influence positively in students’ academic performance.

CONCLUSION

New innovation of technology is shaping the future of higher education and influencing teaching methodologies. The globalization of technology continues to change the way we live and work. Teaching and learning are more effective when technology is added to the classroom and when used to improve students' learning and to help them reach their goals. Effective use of technology will also benefit the learning process if it motivates the learner and provides an authentic learning experience that continues beyond the virtual or physical classroom. Also, teachers have to be aware of the interest students have in the technological world, and take this interest and use it as a means to develop competitive individuals for society, the country and the world.

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