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THE ROLE AND IMPORTANCE OF AUDIO-VISUAL AIDS IN TEACHING

The given paper is an attempt to explore the role and importance of audio-visual aids in teaching. The choice of the topic is dictated by the rapid development of new technologies and their interference into educational process. The aim of the paper is to identify the most widespread types of audio-visual aids used in classroom. The practical purpose of the study is to help teachers to integrate efficiently some new classroom technology in teaching.

Key words: *hi-techs, audio-visual aids, PowerPoint, visual stimuli, technical skills, projector, multimedia presentation, slide, animated video clips*

Teaching process, including methods, materials, techniques and attitudes, depend on particular time requirements. It is a consistently changing and flexible activity, which is shaped and adapted based on current social, economic, cultural, educational and technological developments. Nowadays it is impossible to imagine a teaching process without hi-techs and various audio-visual aids. Technology is almost everywhere, it touches every part of our lives. We use it in our homes, workplaces, travel and social life. In the 21st century people witnessed a boom of technological advances. Of course, educational establishments have not been left out in these advancements. Classroom technology has become increasingly more popular in recent years. Today most teachers all over the world have access to the internet at home and at their teaching institutions. Research is the number one reason to use the internet in education. Both teachers and students have a wealth of information. Often, when they are doing research on various topics, libraries do not have the needed books and materials. And here comes the internet to solve this problem. If used properly technology will help students to open vast horizons of opportunities to obtain knowledge, information and acquire skills necessary to survive and thrive in this technological knowledge-based world. “In the coming decades as these technologies are further developed, many believe that there will emerge a new learning environment that will require future teachers to shift roles and that will provide more in depth and independent study for future students”, says Gina Ferolino /Ferolino, 1990/.

In the given paper we will explore the role and importance of audio-visual materials in teaching process, identify the most widespread types used in classroom and give some advice to integrate them in teaching, highlight some advantages and

disadvantages of high-techs in class, as well as some tips on how to make a successful PowerPoint presentation. Keeping students motivated and actively engaged in their classes can be a challenging task. By using visual stimuli we are more likely to maintain students' attention and encourage active participation. Few things catch the attention of our students like the use of audio-video resources. Of course they are very useful and desirable but hampered by non-availability, user incompetence, poor funding or lack of class hours.

Students today spend a considerable amount of time online. Teachers too can surf this world of high-tech to find useful resources and integrate them into their teaching. However, for video and other audio-visual aids, equipment to be effective, it must be available, easy to use, and teachers must have necessary technical skills. Many universities still have lack of equipment like projectors, smart boards, classroom PCs, headphones for listening. Another reason of inefficiency is lack of necessary skills, without which it is impossible to reveal the whole potential of the abovementioned teaching tools. Most teachers and students fall far behind when it comes to integrating technology into classroom learning. Many are just beginning to explore the true potential tech offers for teaching and learning. Moreover, some students have surpassed many teachers in technology use. Thus, to effectively utilize technology in the classroom, teachers should be properly trained.

Teaching makes acquisition of knowledge and skills possible through systematic interactions between teachers and learners. It happens when teacher, learner, methodology and materials are involved. Aynde opined that an intelligent use of audio-visual aids will save time and stimulate students' interest /Aynde, 1997/. Alaku stated that teacher's effectiveness depends on his use of appropriate instructional strategies and audio-visual aids. Appropriate instructional strategies portray good teaching techniques and successful learning. They assist students to enjoy and understand the materials easily. And it is undeniable that positive atmosphere and enjoyment increase the efficiency of teaching /Alaku, 1998/.

Fakunle /Fakunle, 2008/ declared that people generally remember 10% of what they read, 20% of what they hear, 30% of what they see, 50% of what they hear and see, 70% of what they say and 90% of what they say as they do a thing. National Teacher Institute /2006/ quoted a Chinese proverb "I hear; I forget, I see; I remember, I do; I understand." Undoubtedly, people find a speaker's message more interesting, grasp it more easily and retain it longer when it is presented visually as well as verbally. Visual aids increase the persuasiveness of a speech, heighten audience interest, by shifting attention away from the speaker, give him/her greater confidence in the presentation as a whole /<http://higher.ed.mcgraw-hill.com/>. Let us look first at the types of visual aids teachers are most likely to use in classroom. Then some guidelines for preparing and using visual aids will be offered.

Objects While explaining some objects it is possible to bring in the object or model. Bringing the object of your speech to class can be an excellent way to clarify your ideas and give them an impact. The activity is frequently practised especially in science classes, but not only. During our business English lessons students are asked

to advertise different objects teachers bring in to class. Their task may be to offer them to their group mates persuading to buy it or prepare an advertisement for the given products. Some objects, however, cannot be used effectively in classroom speeches. Some are too big, others are too small to be seen clearly, still, others may not be available. No matter what kind of model or object you use, make sure the audience can see it.

Photographs You may also use photographs. Of course they will not be efficient enough unless they are large enough for the audience to view without straining. Normal-size photos cannot be seen unless they are passed around and it diverts students' attention from what the teacher is saying.

Drawings Sketches, diagrams, charts can be easily designed to illustrate what you are saying. They can be efficiently demonstrated with flip charts. The only disadvantage is that they may lack in realism.

Graphs Scientists accumulate vast amounts of data by observing events and making measurements. After they organize data in tables, they may display the data in a graph. A graph is a diagram that shows the relationship of one variable to another, a visual aid to show statistical trends and patterns. A graph makes interpretation and analysis of data easier and gives a graphical or image based representation that is more easily understandable as compared to the complex tabular or numerical data. One of the most valuable uses for graphs is to show data collected during an experiment. Graphs must be accurate and convey information efficiently. "Graph", "chart" and "diagram" are ambiguous terms, sometimes used equivalently. Four of the most common charts are: 1) histogram, 2) bar chart, 3) line chart, and 4) pie chart. Other common charts are timeline chart, organizational chart, flow chart, area chart. For more information on chart types see www.en.wikipedia.org/wiki/chart. Graphs are widely used in all academic disciplines, especially in mathematics, economics, statistics, sociology, environmental studies, business, and computer sciences.

Video Video is a very important example of audio-visual instructional material. The detail, vividness and immediacy of video are hard to match. Oguntuase defined it as a record on any medium through which a moving image may be produced. When used effectively, it stimulates interest among students and induces longer retention of factual ideas /Oguntuase, 2008/. So, will students who were exposed to video presentation perform better than those who were not?

Fatunmbi stated studies have shown that video can help the teacher to work more closely with the learner and reduce the need for repeated explanation /Fatunmbi, 2005/. Isaka, who researched on the effectiveness of video as a media, found that the group using video presentation performed better than the one without instructional media /Isaka, 2007/.

Now that video is readily available in digital formats – on DVDs, networks and sites like YouTube – it is easier than ever to incorporate them in speech. Despite

video's advantages, one must be careful with it. If it is not done properly and expertly, video can do more harm than good. First, make sure the clip is not too long. Longer video clips distract attention from the main subject instead of illustrating the ideas in a memorable way. Second, make sure the video is cued to start exactly where you want it. And third, beware of low-quality videos, which may look fine on a computer, but be blurry and distorted on a larger screen.

Multimedia presentations Multimedia presentations allow you to integrate a variety of visual aids – including text, charts, graphs, photographs, sound and the video – in the same talk. Microsoft PowerPoint is the most widely used multimedia program for presentations, both by teachers and students. A survey of 300 professional speakers showed that 94 percent use PowerPoint during at least part of their talks, and Microsoft estimates that 30 million PowerPoint presentations are given every day /<http://www.shkaminski.com/Classes/Handouts/powerpoint.htm/>. Supporters say that the ease of use of presentation software can save a lot of time for people who otherwise would have used other types of visual aid - hand-drawn or mechanically typeset slides, blackboards or whiteboards, or overhead projections. Many large companies and branches of the government use PowerPoint as a way to brief employees on important issues that they must make decisions about /<http://en.wikipedia.org/wiki/PowerPoint/>. Opponents of PowerPoint argue that it has negatively affected the society. The terms "death by PowerPoint", "PowerPoint hell" and "PowerPoint death march" refer to the poor use of the software /Garber, 2001/.

When used well the benefits of PowerPoint to delivering efficient communication are great. However, PowerPoint is not always efficiently used. Some speakers let the PowerPoint to dominate their presentation, suppressing their audience with technical proficiency, at the same time losing the message in the flow of sounds and images. Another problem is that some speakers use PowerPoint to illustrate every point of their talk, so the speaker is virtually reading the speech to the audience as the words appear on screen. This is no more effective than reading dully from a manuscript, and it seldom produces genuine communication.

Some Guides for Using PowerPoint

PowerPoint presentations consist of a number of individual pages or "slides" that are shown with an overhead projector, although they are in decline now. Slides may contain text, graphics, sound, movies, and other objects, which may be arranged freely. The presentation can be printed, displayed live on a computer, or navigated through at the command of the presenter. For larger audiences the computer display is often projected using a video projector. The recent PowerPoint versions for Microsoft include: Office PowerPoint 2007, PowerPoint 2010, PowerPoint 2013 /http://en.wikipedia.org/wiki/Microsoft_PowerPoint/. Instead of Office button in 2007 version, 2010 version has File tab with advanced set of features. The Transitions tab has been separated from Animations tab in 2010 version. There are more animation effects provided to a user in 2010 version as compared to PowerPoint 2007. The user interface of PowerPoint 2007 has changed in 2010 ver-

sion with advanced set of features. New version usually enables you to keep yourself abreast of the latest technology. The PowerPoint 2010 allows to create aesthetically-pleasing presentations with more advanced options as compared to 2007 version. If you are just learning to use PowerPoint you can find vast amount of online tutorials, beginner's guides on the basics of 'how to use' presentation software, expert-taught PowerPoint training videos also for intermediate and advanced users. Here we focus on some principles for the use of colour, text, fonts, images, space, and animation.

Colour PowerPoint offers a wide selection of colours, and you may be tempted to try all of them. But to produce effective slides, you need to stick to a limited number of colours and use them consistently. Use high contrast between background colour and text colour. Today, dark text on a light background is more often used.

Text Text can be used by itself or in conjunction with photographs, charts, drawings, images or animation. Whatever kind of text you include, it should be brief. One of the biggest mistakes people make when using PowerPoint is putting too much text on a single slide. A general rule for slides that contain only text is to include no more than a half-dozen lines of type [/http://highered.mcgraw-hill.com/](http://highered.mcgraw-hill.com/). If you are combining text with images, you may need to limit yourself to fewer lines to keep the text from getting too small. If you have a number of important points to cover, spread them out over multiple slides. Keep your text simple by using bullet points or short sentences.

Fonts PowerPoint has dozens of fonts to choose from, but they all fall into one or another of two basic categories - serif or sans-serif. Serif fonts are easier to read in large patches of text, while sans-serif fonts are better for headings and short bursts of text. Most multimedia experts recommend sans-serif fonts for titles and headings. Serif fonts include: **Times New Roman, Bookman Old Style, MS Reference Serif, Book Antiqua, Palatino Linotype.**

Sans-serif fonts are: **Arial, Antique Olive, MS Reference Sans Serif, Tahoma, Verdana.**

When choosing fonts, keep the following guidelines in mind:

- Choose fonts that are clear and easy to read.
- Avoid using ALL CAPS because they are difficult to read.
- Don't use more than two fonts on a single slide.
- Use the same fonts on all your slides.
- Put titles and major headings in 44- to 36-point type; make subheads and other text 32- to 24-point [/http://highered.mcgraw-hill.com/](http://highered.mcgraw-hill.com/), p. 219/.

Images There is a great deal of research showing that extraneous images distract listeners and reduce comprehension of the speaker's point. Here are some guidelines to keep in mind:

- Make sure images are large enough to be seen clearly.
- Choose high-resolution images that will project without blurring.
- Keep graphs and charts clear and simple.

- In most cases, include a title above charts and graphs so the audience knows what they are viewing.
- Edit video so it is integrated seamlessly into your slides.
- Include copyright information when applicable <http://highered.mcgraw-hill.com/>.

Animation In PowerPoint, however, animation refers to the way objects enter or exit a slide. Without animation, all the items on a slide appear at the same time when the slide is displayed. With animation, you can control when words, pictures, even parts of graphs show up on screen. When working on your speeches, think about ways you can use animation to help communicate your message. Beware of animation effects that might distract the attention of listeners. Stick with a limited number of animation effects and use them consistently from slide to slide.

Tips for Delivering an Effective Presentation

Once you have created your slides, it is time to get ready for the delivery of the speech.

1) Check the room and equipment, make sure that everything is connected and running. It is very important to get the computer and projector work properly, lighting should be suitable for slides to be seen clearly.

2) Before rehearsing your speech, you should double-check your slides.

3) When delivering your speech, you should be able to move effortlessly from slide to slide, as well as among animation effects on individual slides. To do so you have to know the computer commands for these operations.

4) Display slides only while discussing them.

5) Practise your speech with PowerPoint, preferably in the room where the speech is going to be delivered.

6) Develop a back-up plan. It is possible that technology will fail. What do you do if this happens? You cannot just cancel the speech. This is why you always need a backup plan - especially for speeches outside the classroom. One option is to copy your slides to a CD, network or flash drive so you can project them on another computer if something happens to yours. Many experienced speakers e-mail themselves the slides as an extra precaution. Another option is to print a hard copy of your slides to carry with you.

7) During the presentation ask your audience to hold questions until the end. Questions are an excellent indicator that people are engaged by your subject matter and presentation skills. But if you save questions until the end of the presentation, you will get through your material uninterrupted. Also, early questions are often answered by ensuing slides and commentary [/http://office.microsoft.com/en-001/powerpoint-help/](http://office.microsoft.com/en-001/powerpoint-help/).

8) When you are not using the pointer, remove your hand from the mouse. This helps to stop you from moving the pointer unconsciously, which can be distracting.

9) Practise the presentation so that you can speak from bullet points. The text should be a cue for the presenter rather than the full message for the audience.

10) If you plan a certain amount of time for your presentation, do not go over. If there is no time limit, take less time rather than more to ensure that people stay engaged.

11) Each time that you deliver a presentation, monitor your audience's behaviour. If you observe people focusing on your slides, the slides may contain too much data or be confusing or distracting in some other way. Use the information you learn each time to improve your future presentations.

12) You may use copyrighted materials for a PowerPoint presentation that you create for a specific class. You must credit your sources and display the copyright symbol—©—when using copyrighted material. Make sure to mention the author/creator, title, and date of publication [/http://office.microsoft.com/en-001/powerpoint-help/](http://office.microsoft.com/en-001/powerpoint-help/).

The first PowerPoint presentation does not have to be an intimidating process. Everyone has to start at the beginning, and luckily, PowerPoint is a really easy software to learn. No one can dispute that PowerPoint is the most popular presentation tool. In the business world, education PowerPoint is the absolute standard. However, if you are looking for PowerPoint alternatives, you may be interested in some new presentation software. The most popular ones are **PowToon**, **Prezi**, and **Keynote** [/http://www.powtoon.com/blog/10-best-powerpoint-alternatives/](http://www.powtoon.com/blog/10-best-powerpoint-alternatives/).

If you really want to inspire your audience with a great pitch, story and emotional hooks. Powtoon allows you to present using animated characters and introduce “story telling” rather than “fact telling” that PowerPoint presentations are so good at. Most importantly, with just a few modifications you can create short animated video clips from your presentations to put on your website.

Prezi, sometimes known as non-linear, zooming presentation tool, is already widely used for educational purposes. Prezi is a cloud-based presentation software and storytelling tool for presenting ideas on a virtual canvas. The product employs a zooming user interface (ZUI), which allows users to zoom in and out of their presentation media, and allows users to display and navigate through information within a 2.5D or parallax 3D space on the Z-axis. Prezi was officially established in 2009 by co-founders Adam Somlai-Fischer, Peter Halacsy and Peter Arvai. Prezi is a bit much with the motion but it's the best tool for those who need to constantly jump from one part of their presentation to another. One of the drawbacks of this software is that Prezi gives some motion sickness, and some people claim that it can induce nausea [/http://sumo.ly/UEK](http://sumo.ly/UEK) via @powtoon/.

Keynote is only available as a software download for Mac users. It allows everything PowerPoint does but is just much easier to use.

No matter what kind of audio-visual aid you use, you need to prepare everything in advance, obtain necessary skills and expertise for using video and other multimedia tools. In addition to being designed with care, visual aids need to be presented skillfully. Above all, practise with your visual aids so they fit into your speech smoothly and expertly.

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Լ. ԲԱՐՍԵՂՅԱՆ – *Տեսալսողական միջոցների դերն ու կարևորությունը ուսուցման մեջ*. – Հոդվածում քննության են առնվում ուսուցման մեջ օգտագործվող տարատեսակ տեսալսողական միջոցները: Համակարգչային տեխնոլոգիաների զարգացման զուգընթաց, ընդլայնվել են նաև դրանց կիրառման շրջանակներն ու ազդեցությունը կրթական գործընթացում: Տեսալսողական տեխնոլոգիան միաժամանակ օգտագործվող մի շարք տեղեկատվական միջոցների ամբողջությունն է՝ տեքստ, լուսանկար, գրաֆիկա, վիդեո, անիմացիա, ձայնային էֆեկտներ: Այդ միջոցների պատշաճ օգտագործումը կարող է զարգացնել ուսանողների ուշադրությունը, երևակայությունը, հիշողությունը, հետաքրքրություն արթնացնել ուսումնասիրվող նյութի նկատմամբ՝ նպաստելով դրա յուրացմանն ու ամրապնդմանը:

Բանալի բառեր. բարձր տեխնոլոգիաներ, տեսալսողական միջոցներ, PowerPoint, տեսողական խթաններ, տեխնիկական հմտություններ, պրոյեկտոր, մուլտիմեդիա ներկայացում, սլայդ, խաղարկային տեսահոլովակներ

Լ. ԲԱՐՏԵԳՅԱՆ – Роль и значение аудиовизуальных средств в обучении. – В статье рассматриваются разные аудиовизуальные средства используемые в обучении. С развитием компьютерных технологий участилось их применение и возросло влияние на образовательный процесс. Аудиовизуальные технологии – это совокупность технологий, одновременно использующих несколько информационных средств: текст, фотографию, графику, видео, анимацию, звуковые эффекты. Правильное применение этих средств может пробуждать интерес к изучаемому вопросу, развивать внимание, воображение, память учащихся, способствуя запоминанию и укреплению материала.

Ключевые слова: высокие технологии, аудиовизуальные средства, PowerPoint, визуальные стимулы, технические навыки, проектор, мультимедийная презентация, слайд, анимационные видеоклипы