

**ЎЗБЕКИСТОН РЕСПУБЛИКАСИ  
ОЛИЙ ВА ЎРТА МАХСУС ТАЪЛИМ ВАЗИРЛИГИ**

**ОЛИЙ ТАЪЛИМ ТИЗИМИ ПЕДАГОГ ВА РАХБАР КАДРЛАРИНИ ҚАЙТА  
ТАЙЁРЛАШ ВА УЛАРНИНГ МАЛАКАСИНИ ОШИРИШНИ ТАШКИЛ  
ЭТИШ БОШ ИЛМИЙ - МЕТОДИК МАРКАЗИ**

**ЎзДЖТУ ҳузуридаги чет тилларини ўқитишнинг  
ИННОВАЦИЯВИЙ МЕТОДИКАЛАРИНИ РИВОЖЛАНТИРИШ  
РЕСПУБЛИКА ИЛМИЙ-АМАЛИЙ МАРКАЗИ**

**ФИЛОЛОГИЯ ВА ТИЛЛАРНИ ЎҚИТИШ: ИНГЛИЗ ТИЛИ**

**“ХОРИЖИЙ ТИЛЛАРНИ ЎҚИТИШДА  
АХБОРОТ-КОММУНИКАЦИЯ  
ТЕХНОЛОГИЯЛАРИ”  
МОДУЛИ БЎЙИЧА  
ЎҚУВ-УСЛУБИЙ МАЖМУА**

**Тошкент – 2017**

**Мазкур ўқув-услугий мажмуа Олий ва ўрта махсус таълим вазирлигининг 2017 йил \_\_\_\_\_-сонли буйруғи билан тасдиқланган ўқув режа ва дастур асосида тайёрланди.**

**Тузувчи: Л.Қаршибоев - ЎзДЖТУ хузуридаги РИАИМ катта илмий ходими**

**Такризчилар: Кристин Смарт (АҚШлик волонтер-мутахассис)  
Шахло Саъдуллаева – ТАТУ, ф-м ф.н., доцент**

*Ўқув - услубий мажмуа ЎзДЖТУ хузуридаги РИАИМ Кенгашининг 2017 йил \_\_\_\_\_ даги \_\_\_\_-сонли қарори билан нашрга тавсия қилинган.*

## МУНДАРИЖА

<b>I. ИШЧИ ДАСТУР .....</b>	<b>4</b>
<b>II. МОДУЛНИ ЎҚИТИШДА ФОЙДАЛАНИЛАДИГАН ИНТРЕФАОЛ ТАЪЛИМ МЕТОДЛАРИ .....</b>	<b>11</b>
<b>III. НАЗАРИЙ МАТЕРИАЛЛАР.....</b>	<b>12</b>
<b>IV. АМАЛИЙ МАШҒУЛОТЛАР МАТЕРИАЛЛАРИ.....</b>	<b>40</b>
<b>IV. КЕЙСЛАР БАНКИ.....</b>	<b>43</b>
<b>V. МУСТАҚИЛ ТАЪЛИМ МАВЗУЛАРИ: .....</b>	<b>46</b>
<b>VI. ГЛОССАРИЙ .....</b>	<b>47</b>
<b>VII. АДАБИЁТЛАР РЎЙХАТИ.....</b>	<b>49</b>

## I. ИШЧИ ДАСТУР

### КИРИШ

Замонавий талаблар асосида қайта тайёрлаш ва малака ошириш жараёнларининг мазмунини такомиллаштириш ҳамда олий таълим муассасалари педагог кадрларининг касбий компетентлигини мунтазам ошириб боришга қратилган мазкур ўқув дастури Ўзбекистон Республикаси Президентининг 2015 йил 12 июндаги “Олий таълим муассасаларининг раҳбар ва педагог кадрларини қайта тайёрлаш ва малакасини ошириш тизимини янада такомиллаштириш чора-тадбирлари тўғрисида” ги ПФ-4732-сон Фармонидаги устувор йўналишлар мазмунидан келиб чиққан ҳолда яратилган. Ўз мазмунига кўра дастур олий таълимнинг илғор таълим технологиялари ва педагогик маҳорат, таълим жараёнида ахборот-коммуникация технологияларини қўллаш, стилистик таҳлил ва қарор қабул қилиш асослари, стилистика фани негизида илмий ва амалий тадқиқотлар, ўқув жараёнини ташкил этишнинг замонавий услублари бўйича сўнгги ютуқлар, педагогнинг касбий компетентлиги ва креативлиги, глобал Интернет тармоғи, мультимедиа тизимлари ва масофадан ўқитиш усулларини ўзлаштириш бўйича билим, кўникма ва малакаларини шакллантиришни назарда тутди.

Бугунги кунда мультимедиа технологиялари инсон фаолиятида, яъни бизнес, таълим, тиббиёт, харбий ва бошқа соҳаларда кенг қўлланилиб келинмоқда. Бу фаолият йўналишларида мультимедиа маҳсулотларини яратиш учун кенг қўламдаги дастурий воситалар мавжуд. Уларнинг айримлари мультимедианинг алоҳида компонентлари билан ишлашга мўлжалланган.

Қайта тайёрлаш ва малака ошириш йўналишининг ўзига хос хусусиятлари ҳамда долзарб масалаларидан келиб чиққан ҳолда дастурда тингловчиларнинг махсус фанлар доирасидаги билим, кўникма, малака ҳамда компетенцияларига қўйиладиган талаблар ўзгартирилиши мумкин.

### Модулининг мақсади ва вазифалари

**Модулниң мақсади:** Педагог кадрларни қайта тайёрлаш ва малака ошириш курс тингловчиларини янги ахборот коммуникация технологиялари, уларнинг дастурий воситалари, интернет сервислар, масофавий таълим ва унинг моделлари, LMS тизимлари ва уларда таълим олиш масалалари ҳақидаги билимларини такомиллаштириш. **Курс тўлиқ инглиз тилида ўтилади.**

**Модулниң вазифаси:** Электрон кўринишдаги ўқув материалларини кўриб чиқиш ва таҳлил қилиш; Ушбу материалларни саралаб олиш ва мазмуний блокларга бўлиш;

-Тингловчиларнинг ўқув материални ўзлаштириши учун мотивация йўллариини ўйлаб топиш;

-тингловчиларга замонавий ахборот-коммуникация технологиялари билан ишлашда кўмак бериш, интернет орқали мулоқот ва маълумотни етказиш давомида юзага келаётган қийинчиликларни бартараф этиб бориш;

-назорат вазифаларини, баҳолаш мезонларини, хатоларни таҳлил қилиш услубларини ишлаб чиқиш, онлайн ёки офлайн тест тузиш дастурларидан фойдаланган ҳолда тест саволлари тузиш;

-тингловчилар томонидан курсни АКТ орқали ўзлаштириш, шахсий, таълим олиш ва мулоқот қилиш жараёнида юзага келаётган қийинчиликлар бўйича маслаҳий ёрдам кўрсатиш;

-тингловчиларнинг ҳар бирининг ўзлаштириш жараёнини АКТ орқали кузатиш ва мониторингини амалга ошириш каби кўникмаларни ҳосил қилиш.

### **Модул бўйича тингловчиларнинг билими, кўникмаси, малакаси ва компетенцияларига қўйиладиган талаблар**

“Хорижий тилларни ўқитишда ахборот-коммуникация технологиялари” модулини ўзлаштириш жараёнида амалга ошириладиган масалалар доирасида тингловчилар:

Компьютерни, компьютер қурилмаларини (монитор, клавиатура, сичқонча, принтер, сканер, USB-флешка ва USB-порти орқали уланадиган бошқа қурилмалар) улашни, ўрнатишни, улардан фойдаланишни билади, компьютер ахборот ҳажмларини тўғри тушунади, электрон ахборот хавфсизлигидан хабари бор;

Windows операцион тизимида асосий функцияларни бажаришни билади. Асосий функцияларга: ўз паролини ўзгартириш, файллар яратиш, очиш, кўчириш, ўчириш, ишчи столини (Рабочий стол), “ПУСК” менюсини, созлаш, компьютер IP-адреси ва тармоқ адаптери параметрларини созлаш, дастурларни ўрнатиш/ўчириш/созлаш, Операцион тизим ёки клавиатура тилини ўзгартира олиш, кўшимча шрифтларни ўрнатиш, компакт дискка маълумот ёзиш, аудио/видео файлларни ўйната олиши, аудио/видео плеерларни созлаш, компьютер дисклари, флешкалар, оператив хотира, файллар ва папкаларни вируслар ва зиён етказувчи программалар предметига текшириш ва ҳ.к. Ушбу функцияларни бажаришда муаммолар чиққан ҳолларда - ўзи бартараф эта олади.

Office амалий дастурлар пакети таркибига кирувчи дастурлардан (Word, Excel, PowerPoint, Outlook) эркин фойдалана олади. Эркин фойдаланишга: ҳужжат/электрон жадвал/ презентация/ электрон хатларни яратиш, форматлаш, формулалар/анимациялар билан ишлаш, электрон почта орқали жўнатиш, принтерда чоп этиш, дастурларнинг ташқи кўриниши, функционаллиги ва ички настройкаларини созлаш ва ҳ.к. Ушбу дастурлардан фойдаланиш давомида муаммолар чиққан ҳолларда - ўзи бартараф эта олади.

Интернет браузерлари орқали бир неча саҳифа билан параллел ишлашни, уларнинг букмарк ва кенгайтмаларни созлашни, турли мавзуларга оид веб-ресурсларни турли қидирув хизматлари орқали қидириш, топиш,

таҳлил қилиш, контент яратишга мўлжалланган веб-ресурслардан фойдаланиш, булутли ҳисоблаш технологиялари ҳақида тушунчага эга.

- таълимни ташкил этиш принциплари, таълим методларининг турлари, таълимни ташкил этиш шакллари, таълим жараёнида қўлланиладиган ўқитиш воситалари, ўқитиш жараёнида ишлатиладиган техник-дастурий воситаларнинг турлари, таълим жараёнида интернет тизимини қўллаш бўйича кўникмаларига эга бўлиши зарур;

- мутахассислик фанлари бўйича машғулотларни ташкил этишда мультимедиа воситаларидан кенг фойдаланиш, масофавий таълим тизимлари имкониятларидан, интернет тармоғида мавжуд электрон ахборот ресурсларидан фойдалана олиш, очик онлайн курсларидан фойдалана олиш бўйича малакаларини эгаллаши лозим.

### **Модулнинг ўқув режадаги бошқа модуллар билан боғлиқлиги ва узвийлиги**

Модул мазмуни ўқув режадаги инновацион таълим технологиялари ва педагогик компетентлик, электрон педагогика асослари ва педагогнинг шахсий, касбий ахборот майдонини лойиҳалаш ўқув модуллари билан узвий боғланган ҳолда педагогларнинг касбий педагогик тайёргарлик даражасини орттиришга хизмат қилади.

### **Модулни ташкил этиш ва ўтказиш бўйича тавсиялар**

“Хорижий тилларни ўқитишда ахборот-коммуникация технологиялари” курси маъруза, амалий машғулот ва лаборатория машғулот шаклида олиб борилади.

Курсни ўқитиш жараёнида таълимнинг замонавий методлари, ахборот-коммуникация технологиялари қўлланилиши назарда тутилган:

- маъруза дарсларида замонавий компьютер технологиялари ёрдамида презентацион ва электрон-дидактик технологиялардан;

- ўтказиладиган амалий машғулотларда техник воситалардан, экспресс-сўровлар, тест сўровлари, ақлий ҳужум, гуруҳли фикрлаш, кичик гуруҳлар билан ишлаш, коллоквиум ўтказиш, ва бошқа интерактив таълим усулларини қўллаш назарда тутилади.

### **Модулнинг олий таълимдаги ўрни**

Ҳозирги вақтга келиб, Олий таълимда ахборот-коммуникация технологияларидан фойдаланган ҳолда чет тили ўқитиш ўқув жараёнларини ташкиллаштиришда, айнан ушбу ўқув модули катта аҳамиятга эгадир.

### Модул бўйича соатлар тақсимоти

№	Модуль мавзулари	Тингловчи ўқув юкламаси				Мустақил
		Ҳаммаси	Аудитория ўқув юкламаси			
			Жами	Жумладан		
				Назарий	Амалий	
1	Technology-enhanced language teaching	6	4	2	2	2
2	Web-based language learning	8	6	2	4	2
∑	Жами	14	10	4	6	4

## HAZARIY MASHFULOTLAR MAZMUNI

### I. Technology-enhanced language teaching (Технологиялар ёрдамида тил ўқитиш) (2 соат)

Режа:

1. IT and platforms. Hardware and software. Computer aided learning methods (Ахборот технологиялари ва платформалар. Аппарат ва дастурий воситалар. Компьютер ёрдамида тил ўрганиш)

2. Network and infrastructure. Information sharing vs. Knowledge sharing. (Тармоқлар ва инфраструктура, Ахборот алмашиш ва Билим алмашиш)

3. Multimedia. Components and Design. Developing lesson scenario using MM (Мультимедия, Компонентлар ва дизайн. Дарс сценарийсини яратиш)

Қисқа мазмуни: This lecture reviews the common IT utilization in our daily life as well as in teaching activity. The different devices using different operating platforms, interaction between them and common standards. Three different scenarios will be discussed using three different platforms, which is PC, Tablet and smartphones. This topic flows into networking and infrastructure (in common sense, not in detail), searching, finding and analyzing information. Finding and sharing different types of information such as images, audio and video. Multimedia pre-designed lesson components. Pre-designed quizzes and mini-games influence on the language lesson. Designing a scenario out of materials, MM components in accordance with student knowledge acquisition peculiarity.

### II. Интернетга асосланган тил ўрганиш (Web-based language learning)

Режа:

1. Condition. Availability – materials, equipment, Internet connection, printing and displaying. (Шароит. Материаллар, техника, интернет, чоп ва намойиш этиш)

2. Preparation. Using different platforms for maximum effort. Using cloud-based applications. (Тайёргарлик. Турли платформалардан фойдаланиш, офис ва чизиш дастурларидан фойдаланиш. Интернет сервислардан фойдаланиш)

3. Planning. About lesson integrity, studying class needs and information acquisition methods. (Режа тузиш. Дарс яхлитлиги, ўқувчиларнинг маълумот қабул қилиш хусусиятини ўрганиш)

4. Action. A demonstration of full-length interactive web-based lesson in example of a secondary school English curriculum. (дарс жараёни, Интернетдан фойдаланган холда ўрта мактаб инглиз тили дастури бўйича дарс намойиши)

Қисқа мазмуни: This lecture deals with the 4 stages of any lesson design. Beginning with necessity of equipment and ending with the analysis of demonstrated lesson. In “Condition” stage students learn how to work with equipment or deal with the lack of so. In “Prep”, stage students will be introduced with features of office apps that they barely use and Google cloud apps. In “Planning”, stage students introduce to so called lesson integrity, matching



materials for maximum absorption of materials by learners. “Action” stage demonstrates a full-length (40 min) lesson, students take role of learners and in their own skin experience a web-based blended education.

## **АМАЛИЙ МАШҒУЛОТЛАР МАЗМУНИ**

### **I. Technology-enhanced language teaching (2 coar)**

1. Difference between PC and Tablets, accordingly Windows and Android
2. Networking basics, connecting to internet using cable, Wi-Fi, 3G/LTE.
3. Design basics of multimedia applications, using image (Photoshop), audio (SoundForge) and video (Premiere) editing tools.
4. Compiling a multimedia app using iSpring (PowerPoint add-on)

### **II. Web-based language learning (4 coar)**

1. Materials searching, using Google advanced search, Google Translate, Google Scholars, ESLbasics, Many Things, and BBC Learning English.
2. Survey and quiz design, using Breakingnewsenglish, Google Forms, Survey monkey, poll maker
3. Using Microsoft Word, Microsoft Sway for printed and visual media.
4. Using Microsoft PowerPoint: Things they didn't know, cloud-based presentation app: Visage and Prezi
6. Teacher-student collaboration: Google Docs, Google Slides, Hangouts, cloud based file sharing: Google Drive, Microsoft OneDrive, DropBox, YouTube
7. Class activity design: Designing Lesson Activities using social networks such as Facebook, Twitter, PowTon, Reddit, and Tumblr
8. LMS basics, difference between OSS and proprietary LMS, Moodle vs. Canvas

### **III. Web-based language learning (4 coar)**

1. Materials searching, using Google advanced search, Google Translate, Google Scholars, ESLbasics, ManyThings, BBC Learning English.
2. Survey and quiz design, using Breakingnewsenglish, Google Forms, Surveymonkey, pollmaker
3. Using Microsoft Word, Microsoft Sway for printed and visual media.
4. Using Microsoft PowerPoint: Things they didn't know, cloud-based presentation app: Visage and Prezi
6. Teacher-student collaboration: Google Docs, Google Slides, Hangouts, cloud based file sharing: Google Drive, Microsoft OneDrive, DropBox, YouTube
7. Class activity design: Designing Lesson Activities using social networks such as Facebook, Twitter, PowTon, Reddit, Tumblr
8. LMS basics, difference between OSS and proprietary LMS, Moodle vs. Canvas

## ЎҚИТИШ ШАКЛЛАРИ

Мазкур модул бўйича қуйидаги ўқитиш шаклларидан фойдаланилади:  
-ноанъанавий ўқитиш (интерактив, гуруҳлар шаклда ишлаш, дебат);  
-давра суҳбатлари (муҳокама этилаётган муаммо ва унинг ечими бўйича мантиқий хулосалар чиқариш);  
-баҳс ва мунозаралар (лойиҳалар ечими бўйича асосли далиллар тақдим қилиш, эшитиш ва муаммолар ечимини топиш қобилиятини ривожлантириш).

## БАҲОЛАШ МЕЗОНИ

№	Баҳолаш мезони	Максимал балл	Изоҳ
1	Портфолио яратиш- 1балл Кейс тузиш - 1,5 балл	2.5	PowerPoint/Prezi фойдаланган ҳолда кейс тақдимотини яратиш - 1,5 балл PollMaker/iSpringдан фойдаланган ҳолда тест тузиш – 1 балл

## **II. МОДУЛНИ ЎҚИТИШДА ФЙДАЛАНИЛАДИГАН ИНТРЕФАОЛ ТАЪЛИМ МЕТОДЛАРИ**

### **Муаммоли маъруза**

Ўқитувчи ўқув материални баён этиши давомида талабалар учун муаммоли ҳолатлар яратади ва уларни таҳлил қилишга чорлайди. Муаммоли ҳолатлардаги қарама-қаршилиқларни ҳал қилиш орқали талабалар ўз идроки билан хулосалар чиқаради, ушбу хулосалар ўқитувчи томонидан янги билим эканлиги етказилади.

### **Провокатив маъруза**

Ўқитувчи маъруза ёки машғулот мавзусини эълон қилганиан сўнг, унинг бир неча жойларида атайин хатоларга йўл қўйишини таъкидлайди. Бу хатолар турлича бўлиши мумкин: услубий, лексик, принципиал ва ҳ.к. Талабалар хатоларни аниқлаб, уларнинг таҳлил этиб хулоса чиқарадилар.

### **Визуал лекция**

Тегишли курилмалар ёрдамида (проектор, интерактив доска) талабаларга визуал материаллар тақдим этиб борилади: Булар расмлар, тизимли-мантиқий схемалар, диаграммалар, иқтибослар, слайдлар, видео ва ҳ.к.

### **Брифинг**

“Брифинг”- (инг. briefing-қисқа) бирор-бир масала ёки саволнинг муҳокамасига бағишланган қисқа пресс-конференция.

Ўтказиш босқичлари:

1. Тақдимот қисми.
2. Муҳокама жараёни (савол-жавоблар асосида).

Брифинглардан тренинг яқунларини таҳлил қилишда фойдаланиш мумкин. Шунингдек, амалий ўйинларнинг бир шакли сифатида қатнашчилар билан бирга долзарб мавзу ёки муаммо муҳокамасига бағишланган брифинглар ташкил этиш мумкин бўлади. Талабалар ёки тингловчилар томонидан яратилган мобил иловаларнинг тақдимотини ўтказишда ҳам фойдаланиш мумкин.

## III. НАЗАРИЙ МАТЕРИАЛЛАР

### I. Technology-enhanced language teaching (2 соат)

Режа:

1. IT and platforms. Hardware and software. Computer aided learning methods
2. Network and infrastructure. Datamining. Information exchange
3. Multimedia. Components and Design. Developing lesson scenario using MM

Калит сўзлар: IT, ICT, hardware, software, network, infrastructure, computer-aided, multimedia, MM, design, lesson scenario, information exchange,

#### 1.1. Information Technologies

According to Wikipedia, Information technology (IT) is the application of computers to store, retrieve, transmit and manipulate data, often in the context of a business or other enterprise. IT is considered a of information and communications technology (ICT). In 2012, Zuppo proposed an hierarchy where each hierarchy level "contain degree of commonality in that they are related to technologies that facilitate the transfer of information and various types of electronically mediated communications."<sup>1</sup> Business/IT was one level of the ICT hierarchy.



subset

ICT  
some

The term is commonly used as a synonym for computers and computer networks, but it also encompasses other information distribution technologies such as television and telephones. Several industries are associated with information technology, including computer hardware, software, electronics, semiconductors, internet, telecom equipment, engineering, healthcare, e-commerce and computer services<sup>2</sup>.

Humans have been storing, retrieving, manipulating and communicating information since the Sumerians in Mesopotamia developed writing in about 3000 BC<sup>3</sup>, but the term information technology in its modern sense first appeared in a 1958 article published in the Harvard Business Review; authors Harold J. Leavitt and Thomas L. Whisler commented that "the new technology does not yet have a single established name. We shall call it information technology<sup>4</sup> (IT)." Their definition consists of three categories: techniques for processing, the application of statistical and mathematical methods to decision-making, and the simulation of higher-order thinking through computer programs.

<sup>1</sup> <http://www.airccse.org/journal/ijmit/papers/4312ijmit02.pdf>

<sup>2</sup> <http://www.oxfordreference.com/view/10.1093/acref/9780199568758.001.0001/acref-9780199568758>

<sup>3</sup> <http://www.tcf.ua.edu/AZ/ITHistoryOutline.htm>



<sup>4</sup> <https://hbr.org/1958/11/management-in-the-1980s>

Based on the storage and processing technologies employed, it is possible to distinguish four distinct phases of IT development: pre-mechanical (3000 BC – 1450 AD), mechanical (1450–1840), electromechanical (1840–1940) electronic (1940–present), and IT as a service. This article focuses on the most recent period (electronic), which began in about 1940.

Other term used synonymously is ICT (information and communications technology - or technologies) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. ICTs are often spoken of in a particular context, such as ICTs in education, health care, or libraries. The term is somewhat more common outside of the United States.<sup>1</sup>

### 1.2. Platforms, Computer vs. Tablet (or Smartphone)

When looking for a computing device, there are many options out there. Two of those options include a full-fledged computer system (either desktop or laptop) and a tablet. Both can provide computing capabilities, run software and perform other tasks, but there are many factors to consider between the two options. Below is a chart to highlight some important factors to consider including the pros and cons of each device. (computerhope.com)

Topic		
Power	Powerful computing processors with the necessary power to cool high-end processors.	Tablets are much more compact and cannot offer the same amount of processing power as a computer.
Cost	Prices for a computer (desktop or laptop) can vary widely, depending on its capabilities, storage, and other features Prices can range from \$400 to \$2000.	Tablets can also vary in price based on power and various features, but not as much as computers. Prices can be \$150 to \$500 in most cases, with a few models ranging up to \$600 to \$800.
Screen size	Desktop computers almost always have a screen sizes of at least 17" with support for a TV or projector. Laptops typically feature screen sizes up to 17".	Tablets, due to their more compact size, feature smaller screen sizes ranging from 5" to 10". However, most can still connect to an external display.
Portability	Desktop computers are not portable. Laptop computers are portable, lightweight, and easy to place in a backpack, but laptops with larger screens (17") can become bulky and more difficult to carry around, weighing several pounds.	Tablets are more portable than any computer or laptop. They are very lightweight and can fit in a purse or small bag with relative ease. They are designed to be taken everywhere with you, thus the very definition of portable.
Storage	Computer hard drives can be over one	Tablets come with built-in storage

<sup>1</sup> <http://searchcio.techtarget.com/definition/ICT-information-and-communications-technology-or-technologies>

	terabyte (TB). Even the most basic computer comes with a 250-gigabyte (GB) hard drive, which for many is more than enough storage for most users.	ranging from 8 GB to 128 GB. In some cases, an expansion slot may be available for adding additional storage.
Battery life	The battery life even for the most efficient laptop is still not close to the battery life of a tablet.	A tablet has a much smaller screen and has fewer components than a laptop computer, which makes for a longer battery life.
Operating System	Desktop and laptop computers come with more fully featured operating system due to having the computing power and memory requirements. These operating systems support more than any tablet operating system.	Tablets come with a more slimmed down operating system because of the limited computing power and memory. The Android OS and Apple iOS are adequate operating systems for tablet users, but not as complete as computer operating systems.
Boot time	The latest computers running the latest operating systems have improved a lot on their boot time. However, are still slower than a tablet.	Generally speaking most tablets are much faster at booting than most computers.
Data entry and user input	A computer uses a keyboard for data entry that most users are familiar with and comfortable using. The mouse is also available for easy scrolling and right clicking.	Tablets use an on-screen keyboard that is smaller than a standard computer keyboard, takes time to learn, and users with bigger fingers may have a hard time typing. Some tablets allow for an external keyboard, providing a more comfortable and familiar medium for typing.
Touchscreen	Although some laptops and desktops now support touch, most still have no touchscreen support.	All tablets support a touchscreen, which can be easier for new computer users.
Upgrade	All computers have some form of hardware upgrades including easy upgrades like adding more memory, disk storage, or even a new expansion card.	Some tablets do offer the ability to expand the storage capacity with an additional memory card, but that is pretty much it when it comes to upgrade options.
Software	Most software is designed for the computer, so you have an almost endless supply of options. Programs on the computer are also usually more feature rich than apps designed for tablets.	Although there are millions of apps available for a tablet, it is nothing compared to the available programs, games, and utilities available for a computer.
Accessories	Computers have thousands of peripherals and accessories that can be connected to them.	Most tablets offer a limited amount of accessories that usually include input devices such as a keyboard and access to some printers.

### 1.3. What are the differences between hardware and software?

Computer hardware is any physical device used in or with your machine, whereas software is a collection of code installed onto your computer's hard drive. For example, the computer monitor you are using to read this text and the mouse you are using to navigate this document is computer hardware. The program that allowed you to open this document and the operating system that the program is running on is considered software.

All software utilizes at least one hardware device to operate. For example, a video game, which is software, uses the computer processor (CPU), memory (RAM), hard drive, and video card to run. Word processing software uses the computer processor, memory, and hard drive to create and save documents.

In a computer, hardware is what makes a computer work. A CPU processes information and that information can be stored in RAM or on a hard drive. A sound card can provide sound to speakers and a video card can provide an image to a monitor. All of this is hardware.

On that same computer, software can be installed and allow a person to interact with the hardware. An operating system, like Windows or Mac OS, is software. It provides a graphical interface for people to use the computer and other software on the computer. A person can create documents and pictures using software.

Can a computer run without software? In most situations, yes, a computer can run without software being installed. However, if an operating system or interpreter is not found on the computer, it either generates an error or doesn't output any information. Installing programs onto the computer in addition to an operating system gives the computer additional capabilities. For example, a word processor is not required, but it allows you to create documents and letters.

Can a computer run without hardware? This depends on the hardware. Most computers require at least a display, hard drive, keyboard, memory, motherboard, processor, power supply, and video card to function properly. If any of these devices are missing or malfunctioning, an error is encountered, or the computer will not start. Adding hardware such as a disc drive (e.g. CD-ROM or DVD), modem, mouse, network card, printer, sound card, or speakers are not required, but give the computer additional functionality.

#### **1.4. Computer aided language learning (CALL)**

Computer-assisted language learning (CALL) is succinctly defined in a seminal work by Levy as "the search for and study of applications of the computer in language teaching and learning"<sup>1</sup>. CALL embraces a wide range of information and communications technology applications and approaches to teaching and learning foreign languages, from the "traditional" drill-and-practice programs that characterized CALL in the 1960s and 1970s to more recent manifestations of CALL, e.g. as used in a virtual learning environment and Web-based distance learning. It also extends to the use of corpora and concordances, interactive

---

<sup>1</sup> Levy M. (1997) CALL: context and conceptualization, Oxford: Oxford University Press.



whiteboards, Computer-mediated communication (CMC), language learning in virtual worlds, and mobile-assisted language learning (MALL)<sup>1</sup>.

The term CALI (computer-assisted language instruction) was in use before CALL, reflecting its origins as a subset of the general term CAI (computer-assisted instruction). CALI fell out of favor among language teachers, however, as it appeared to imply a teacher-centered approach (instructional), whereas language teachers are more inclined to prefer a student-centered approach, focusing on learning rather than instruction. CALL began to replace CALI<sup>2</sup> in the early 1980s and it is now incorporated into the names of the growing number of professional associations worldwide.

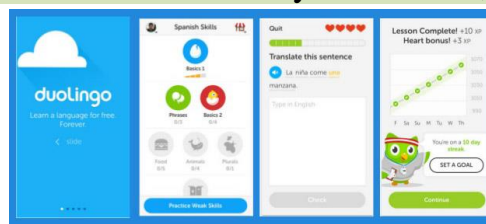
An alternative term, technology-enhanced language learning (TELL), also emerged around the early 1990s: e.g. the TELL Consortium project, University of Hull.

The current philosophy of CALL puts a strong emphasis on student-centered materials that allow learners to work on their own. Such materials may be structured or unstructured, but they normally embody two important features: interactive learning and individualized learning. CALL is essentially a tool that helps teachers to facilitate the language learning process. It can be used to reinforce what has already been learned in the classroom or as a remedial tool to help learners who require additional support.

The design of CALL materials generally takes into consideration principles of language pedagogy and methodology, which may be derived from different learning theories (e.g. behaviorist, cognitive, constructivist) and second-language learning theories such as Stephen Krashen's monitor hypothesis.<sup>3</sup>

A combination of face-to-face teaching and CALL is usually referred to as blended learning. Blended learning is designed to increase learning potential and is more commonly found than pure CALL.<sup>4</sup>

**Software design and pedagogy** Above all, careful consideration must be given to pedagogy in designing CALL software, but publishers of CALL software tend to follow the latest trend, regardless of its desirability. Moreover, approaches to teaching foreign languages are constantly changing, dating back to translation, through the direct audio-lingualism and a variety of approaches, to the more recent communicative approach and constructivism.<sup>5</sup>



grammar-method, other

<sup>1</sup> Shield L. & Kukulska-Hulme A. (eds.) (2008) Special edition of ReCALL (20, 3) on Mobile Assisted Language Learning.

<sup>2</sup> Davies G. & Higgins J. (1982) Computers, language and language learning, London: CILT.

<sup>3</sup> [https://en.wikipedia.org/wiki/Input\\_hypothesis](https://en.wikipedia.org/wiki/Input_hypothesis)

<sup>4</sup> Pegrum M. (2009) From blogs to bombs: The future of digital technologies in education, Perth: University of Western Australia Press.

<sup>5</sup> Decoo W. (2001) On the mortality of language learning methods. Paper given as the James L. Barker lecture on 8 November 2001 at Brigham Young University [Online]:<http://web.archive.org/web/20080208190123/webh01.ua.ac.be/didascalía/mortality.htm>



Designing and creating CALL software is an extremely demanding task, calling upon a range of skills. A team of people usually manages major CALL development projects:

A subject specialist (also known as a content provider) - usually a language teacher - who is responsible for providing the content and pedagogical input. More than one subject specialist is required for larger CALL projects.

- A programmer who is familiar with the chosen programming language or authoring tool.
- A graphic designer, to produce pictures and icons, and to advise on fonts, color, screen layout, etc.
- A professional photographer or, at the very least, a very good amateur photographer. Graphic designers often have a background in photography too.
- A sound engineer and a video technician will be required if the package is to contain substantial amounts of sound and video.
- An instructional designer. Developing a CALL package is more than just putting a textbook into a computer. An instructional designer will probably have a background in cognitive psychology and media technology, and will be able to advise the subject specialists in the team on the appropriate use of the chosen technology.

CALL inherently supports learner autonomy, the final of the eight conditions that Egbert et al. (2007) cite as "Conditions for Optimal Language Learning Environments". Learner autonomy places the learner firmly in control so that he or she "decides on learning goals"<sup>1</sup>.

It is all too easy when designing CALL software to take the comfortable route and produce a set of multiple-choice and gap-filling exercises, using a simple authoring tool<sup>2</sup>, but CALL is much more than this; for example, describes the creation and management of an environment incorporating a constructivist and whole language philosophy. According to constructivist theory, learners are active participants in tasks in which they "construct" new knowledge derived from their prior experience. Learners also assume responsibility for their learning, and the teacher is a facilitator rather than a purveyor of knowledge. Whole language theory embraces constructivism and postulates that language learning moves from the whole to the part, rather than building sub-skills to lead towards the higher abilities of comprehension, speaking, and writing. It also emphasizes that comprehending, speaking, reading, and writing skills are interrelated, reinforcing each other in complex ways. Language acquisition is, therefore, an active process in which the learner focuses on cues and meaning and makes intelligent guesses. Additional demands are placed upon teachers working in a technological environment incorporating constructivist and whole language theories. The development of teachers' professional skills must include new pedagogical as well as technical and

<sup>1</sup> Egbert J., Chao C.-C., & Hanson-Smith E. (2007) Introduction: Foundations for Teaching and Learning. In Egbert J. & E. Hanson-Smith (eds.) CALL environments: Research, practice, and critical issues (2nd edition). Alexandria, VA: TESOL. (pp. 1-14)

<sup>2</sup> Bangs P. (2011) Introduction to CALL authoring programs. Module 2.5 in Davies G. (ed.) Information and Communications Technology for Language Teachers (ICT4LT), Slough, Thames Valley University [Online]:[http://www.ict4lt.org/en/en\\_mod2-5.htm](http://www.ict4lt.org/en/en_mod2-5.htm)

management skills. Regarding the issue of teacher facilitation in such an environment, the teacher has a key role to play, but there could be a conflict between the aim to create an atmosphere for learner independence and the teacher's natural feelings of responsibility. In order to avoid learners' negative perceptions, Stepp-Greany points out that it is especially important for the teacher to continue to address their needs, especially those of low-ability learners.

## 2.1. Network and Infrastructure

Network and infrastructure refers to the hardware and software resources of an entire network that enable network connectivity, communication, operations and management of an enterprise network.

Network infrastructure provides the communication path and services between users, processes, applications, services and external networks/the Internet.<sup>1</sup>

Network infrastructure is typically part of the IT infrastructure found in most enterprise IT environments. The entire network infrastructure is interconnected, and can be used for internal communications, external communications or both. A typical network infrastructure includes:

Networking Hardware	Networking Software	Network Services
Routers Switches LAN cards Wireless routers Cables	Network operations and management Operating systems Firewall Network security applications	T-1 Line DSL Satellite Wireless protocols IP addressing

## 2.2. Information Sharing vs. Knowledge sharing

The term information sharing<sup>2</sup> has a long history in information technology. Traditional information sharing referred to one-to-one exchanges of data between a sender and receiver. These information exchanges are implemented via dozens of open and proprietary protocols message and file formats. Electronic data interchange (EDI) is a successful implementation of commercial data exchanges that began in the late 1970s and remains in use today.

Initiatives to standardize information sharing protocols include extensible markup language (XML), simple object access protocol (SOAP), and web services description language (WSDL).

From the point of view of a computer scientist, the four primary information sharing design patterns are sharing information one-to-one, one-to-many, many-to-many, and many-to-one. Technologies to meet all four of these design patterns are evolving and include blogs, wikis, really simple syndication, tagging, and chat.

One example of United States government's attempt to implement one of these design patterns (one to one) is the National Information Exchange Model

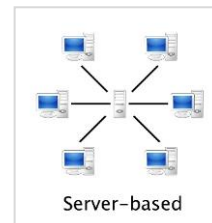
<sup>1</sup> <https://www.techopedia.com/definition/16955/network-infrastructure>

<sup>2</sup> [https://en.wikipedia.org/wiki/Information\\_sharing](https://en.wikipedia.org/wiki/Information_sharing)

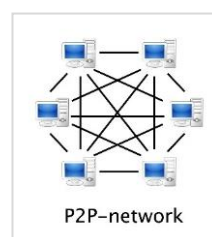
(NIEM). Unfortunately, one-to-one exchange models fall short of supporting all of the required design patterns needed to fully implement data exploitation technology.

Advanced information sharing platforms provide controlled vocabularies, data harmonization, data stewardship policies and guidelines, standards for uniform data as they relate to privacy, security, and data quality.

Peer-to-peer (P2P) computing or networking is a distributed application architecture that partitions tasks or workloads between peers. Peers are equally privileged, equipotent participants in the application. They are said to form a peer-to-peer network of nodes.<sup>1</sup>



Peers make a portion of their resources, such as processing power, disk storage or network bandwidth, directly available to other network participants, without the need for central coordination servers or stable hosts. Peers are both suppliers and consumers resources, in contrast to the traditional client-server model in which the consumption and supply of resources is divided. Emerging collaborative P2P systems are going beyond the era peers doing similar things while sharing resources, and are looking for diverse peers that can bring in unique resources and capabilities to a virtual community thereby empowering it to engage in greater tasks beyond those that can be accomplished by individual peers, yet that are beneficial to all the peers.



While P2P systems had previously been used in many application domains, the architecture was popularized by the file sharing system Napster, originally released in 1999. The concept has inspired new structures and philosophies in many areas of human interaction. In such social contexts, peer-to-peer as a meme refers to the egalitarian social networking that has emerged throughout society, enabled by Internet technologies in general.

**Knowledge sharing**, on the other hand, is an activity through which knowledge (namely, information, skills, or expertise) is exchanged among people, friends, families, communities (for example, Wikipedia), or organizations.<sup>2</sup> Organizations have recognized that knowledge constitutes a valuable intangible asset for creating and sustaining competitive advantages.<sup>3</sup> Knowledge sharing activities are generally supported by knowledge management systems.<sup>4</sup> However, technology constitutes only one of the many factors that affect the sharing of knowledge in organizations, such as organizational culture, trust, and incentives. The sharing of knowledge constitutes a major challenge in the field of knowledge management because some employees tend to resist sharing their knowledge with the rest of the organization.

<sup>1</sup> <https://en.wikipedia.org/wiki/Peer-to-peer>

<sup>2</sup> Bukowitz, Wendi R.; Williams, Ruth L. (1999). *The Knowledge Management Fieldbook*. FT Press. ISBN 978-0273638827.

<sup>3</sup> Miller, D.; Shamsie, J. (1996). "The resource-based view of the firm in two environments: The Hollywood film studios from 1936 to 1965". *Academy of Management Journal* 39 (5): 519–543.[doi:10.2307/256654](https://doi.org/10.2307/256654)

<sup>4</sup> <http://www.crunchbase.com/company/bloomfire>

Although knowledge is commonly treated as an object, Snowden<sup>1</sup> has argued it is more appropriate to teach it as both a flow and a thing<sup>2</sup>. Knowledge as a flow can be related to the concept of tacit knowledge, discovered by Polanyi which was later further explicated by Nonaka. While the difficulty of sharing knowledge is in transferring knowledge from one entity to another, it may prove profitable for organizations to acknowledge the difficulties of knowledge transfer and its paradoxicality, adopting new knowledge management strategies accordingly.

Explicit knowledge sharing occurs when explicit knowledge is made available to be shared between entities. Explicit knowledge sharing can happen successfully when the following criteria are met:

- Articulation: the knowledge provider can describe the information.
- Awareness: the recipient must be aware that knowledge is available.
- Access: the knowledge recipient can access the knowledge provider.
- Guidance: the body of knowledge must be defined and differentiated into different topics or domains so as to avoid information overload, and to provide easy access to appropriate material. Knowledge managers are often considered key figures in the creation of an effective knowledge sharing system.
- Completeness: the holistic approach to knowledge sharing in the form of both centrally managed and self-published knowledge.

Tacit knowledge sharing occurs<sup>3</sup> through different types of socialization. Although tacit knowledge is difficult to identify and codify, relevant factors that influence tacit knowledge sharing include:

- Informal networks such as daily interactions between people within a defined environment (work, school, home, etc.). These networks span hierarchies and functions.
- The provision of space where people can engage in unstructured or unmonitored discussions, thereby fostering informal networks.
- Unstructured, less-structured or experimental work practices that encourage creative problem solving, and the development of social networks.

### 3.1. Multimedia

Following the arrival of multimedia CALL, multimedia language centers began to appear in educational institutions<sup>4</sup>. While multimedia facilities offer many opportunities for language learning with the integration of text, images, sound and video,



<sup>1</sup> Edward Joseph Snowden (born June 21, 1983) is an American computer professional, former Central Intelligence Agency (CIA) employee, and former contractor for the United States government who copied and leaked classified information from the National Security Agency (NSA) in 2013 without prior authorization.

<sup>2</sup> Snowden, D. (2002). "Complex acts of knowing: paradox and descriptive self-awareness". *Journal of Knowledge Management* 6 (2): 100–111. doi:10.1108/13673270210424639

<sup>3</sup> <http://www.emeraldinsight.com/doi/abs/10.1108/14777281011010497?journalCode=dlo>

<sup>4</sup> [http://www.liquisearch.com/language\\_software/multimedia](http://www.liquisearch.com/language_software/multimedia)

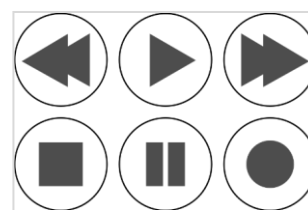
these opportunities have often not been fully utilized. One of the main promises of CALL is the ability to individualize learning but, as with the language labs that were introduced into educational institutions in the 1960s and 1970s, the use of the facilities of multimedia centers has often devolved into rows of students all doing the same drills. There is therefore a danger that multimedia centers may go the same way as the language labs. Following a boom period in the 1970s, language labs went rapidly into decline. lays the blame mainly on the failure to train teachers to use language labs, both in terms of operation and in terms of developing new methodologies, but there were other factors such as poor reliability, lack of materials and a lack of good ideas.<sup>1</sup>

Multimedia is content that uses a combination of different content forms such as text, audio, images, animation, video and interactive content<sup>2</sup>. Multimedia contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material.

TEXT	AUDIO	STILL IMAGES
ANIMATION	VIDEO FOOTAGE	INTERACTIVITY

Multimedia can be recorded and played, displayed, dynamic, interacted with or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia devices are electronic media devices used to store and experience multimedia content. Multimedia is distinguished from mixed media in fine art; by including audio, for example, it has a broader scope. The term "rich media" is synonymous for interactive multimedia. Hypermedia scales up the amount of media content in multimedia application.

Multimedia may be broadly divided into linear and non-linear categories. Linear active content progresses often without any navigational control for viewer such as a cinema presentation. Non-linear uses interactivity to control progress as with a video game self-paced computer based training. Hypermedia is an example of non-linear content.



and  
the  
or

Multimedia presentations can be live or recorded. A recorded presentation may allow interactivity via a navigation system. A live multimedia presentation may allow interactivity via an interaction with the presenter or performer.

Multimedia presentations may be viewed by person on stage, projected, transmitted, or played locally with a media player. A broadcast may be a live or

<sup>1</sup> Davies G. (1997) "Lessons from the past, lessons for the future: 20 years of CALL". In Korsvold A-K. & Rüschoff B. (eds.) New technologies in language learning and teaching, Strasbourg: Council of Europe, p. 28. Also on the Web in a revised edition (2009):<http://www.camsoftpartners.co.uk/coegdd1.htm/>

<sup>2</sup> <https://en.wikipedia.org/wiki/Multimedia>



recorded multimedia presentation. Broadcasts and recordings can be either analog or digital electronic media technology. Digital online multimedia may be downloaded or streamed. Streaming multimedia may be live or on-demand.

Multimedia games and simulations may be used in a physical environment with special effects, with multiple users in an online network, or locally with an offline computer, game system, or simulator.

The various formats of technological or digital multimedia may be intended to enhance the users' experience, for example to make it easier and faster to convey information. Alternatively, in entertainment or art, to transcend everyday experience.



Enhanced levels of interactivity are made possible by combining multiple forms of media content. Online multimedia is increasingly becoming object-oriented and data-driven, enabling applications with collaborative end-user innovation and personalization on multiple forms of content over time. Examples of these range from multiple forms of content on Web sites like photo galleries with both images (pictures) and title (text) user-updated, to simulations whose coefficients, events, illustrations, animations or videos are modifiable, allowing the multimedia "experience" to be altered without reprogramming. In addition to seeing and hearing, Haptic technology enables virtual objects to be felt. Emerging technology involving illusions of taste and smell may also enhance the multimedia experience.

### 3.2. Designing a Multimedia lesson

Reviewing Multimedia web resources for creating a full-length lesson:

**Youtube** is a service that provides watching or uploading user-created video content into the cloud storage for accessing via web.<sup>1</sup>

**Duolingo** is the world's largest online language learning platform. Duolingo's adaptive experience has gamified elements to make language learning more fun and effective. 100 million students are learning a language with Duolingo.

**TED.com** TED is a nonprofit devoted to spreading ideas, usually in the form of short, powerful talks (18 minutes or less). TED began in 1984 as a conference where Technology, Entertainment and Design converged, and today covers almost all topics — from science to business to global issues — in more than 100 languages. The advantage of this resource is that all talks are short in length and come with built-in subtitles.

**BBC Learning English** As part of the BBC World Service, BBC Learning English has been teaching English to global audiences since 1943, offering free audio, video and text materials to learners around the world. From mobile English courses in Bangladesh and Latin America to our online offer for millions of

<sup>1</sup> <http://realityworks.com/documents/resources/using-youtube-to-create-multimedia-facs-lessons.pdf>

Chinese learners, BBC Learning English provides multimedia English language teaching materials to meet learners' needs.

### Questions:

1. What is the correct term to use, IT or ICT?
2. What is your preferred device?
3. What's the difference between hardware, software and firmware?
4. Give an example of using computer while teaching passive voice.
5. What are some popular software that aids language learning?
6. What kind of specialists needed to develop a language learning software?
7. What's the difference between physical and virtual network?
8. What are four main information sharing patterns?
9. What is "torrent"?
10. Who is Edward Snowden?
11. List 10 web-sites that share knowledge.
12. What method social networks use to share knowledge?
13. What are main components of multimedia?

## II. Web-based language learning (2 coat)

Режа:

1. Condition. Availability – materials, equipment, Internet connection, printing and displaying.
2. Preparation. Using different platforms for maximum effort. Using cloud-based applications.
3. Planning. About lesson integrity, studying class needs and information acquisition methods.
4. Action. A demonstration of full-length interactive web-based lesson in example of a secondary school English curriculum.

### 1.1. Condition/Equipment/Printing and Displaying

There are a few devices or equipment that work especially well English as a second language. They will you more versatility in the modern classroom. These pieces are the Smartboard, document camera, and overhead projector. With these three you can take your students to a variety settings and add more dialogue to your class.

**Smartboard.** For those that may familiar, the smartboard is a window into the digital universe. It simultaneously functions as a writing surface/computer. This means that you can draw, write, and explore on a large enough surface that all of your class can see clearly. This is critical for ESL students for a number of reasons. Unlike a PowerPoint slideshow, the interactivity of the Smartboard allows for



teaching  
allow

mounted  
items,  
of  
ESL

not be  
into the

higher levels of engagement in real time. There is an ever-growing database of lessons from excellent teachers found at [Prometheanplanet.com](http://Prometheanplanet.com).<sup>1</sup> This means you can really cut back on the time you spend creating your ESL lessons--not to mention you can always change the content of these lessons to fit your needs. On this Promethean site alone, there are over 800 lessons specifically for ESL classrooms designed by ESL teachers. There are thousands of lessons for every other content area, which as an ESL teacher you realize are fair game. Take an elementary lesson on the stages of water for example; you could easily use that same content for a junior high ESL class at the appropriate level.

**Document Camera** The document camera is a modern evolution of the old school transparency projector. Unlike its predecessor, it can project images of anything that you and I can see and therefore does not require transparencies. The document camera is a real time video that can be projected onto a screen or Promethean board. The benefit of this handy tool is that you have the ability to show student work before and after. You can highlight points that students are doing well as well as bring attention to great artwork. This camera can be used in the morning to display work that all students need to complete. It can be used to share pictures of students and to correct work. It can draw students' focus onto specific parts of the books that you are reading and help transition to new topics easily.

**Mounted Overhead Projector.** This helpful tool makes visuals large enough for your entire class to enjoy--and for an ESL classroom, you really do need images! Having a mounted projector will give you access to the many millions of photos and artwork that the Internet has to offer. Now, you simply need to splice those images into a presentation and your visuals will help your ESL students connect the dots. The mounted overhead projector is becoming more and more commonplace in our schools due to its effectiveness as a teaching tool. If you don't have one yet, see if your administration has thought about installing them.

**The Three Combined.** By combining these three technological devices, you can explore any part of the globe. Information that was previously unreachable is now within your grasp.

However, it is important to remember that the essence of great ESL teaching is relating to the students and understanding where they are coming from. Despite the advances in technology, it is still incredibly important to focus on the individual needs of your students (see in Planning stage) as best you can. These technologies can help you do that, but they will not do it for you.

## 1.2. Condition/Internet Connection

Internet connection is becoming ever essential requirement for organizing language classes. Be it searching for a word definition, or retrieving an article from Wikipedia, or demonstration illustrations and images during the lesson, you need to be connected. Moreover, nowadays, most of the learners have their own devices – such as tablets and smart phones. Instead of denying them to bring to class, what

---

<sup>1</sup> <http://www.prometheanplanet.com/en/search/resources/subject-area/english/language/english/>



does it take us to encourage them to bring their lovely gadgets and use them for maximum effort? For this, the educational institution must have a stable high-speed connection to internet, or else every material that we designed with the mind that internet will be available – will fail. At least, a teacher himself can go for a little sacrifice and bring his own 3G/LTE<sup>1</sup> connection to the class.

We are seeing more evidence that broadband and cloud computing are revolutionizing education. The traditional teaching tools that we grew up with — chalky blackboards and hardback books - are being replaced with interactive digital content delivered through high-speed broadband. This means third-graders can explore the surface of the sun through high-definition video as they learn about the solar system. It means learners can experience history lessons through interactive videos.

Here are 5 reasons<sup>2</sup> why internet is a common requirement in a modern classroom:

**Reason No. 1: Professional Development.** As the world continues to embrace and evolve the Internet, businesses and organizations are increasingly looking to tap into this resource. It is in the best interest of educators, and professionals in general, to be aware of what the Internet has to offer. We can choose to sit back and wish it would all just go away because it's too hard to find the time for it, or we can choose to embrace it, and look for simple ways to learn more about it. Another unavoidable fact is the growing desire for experience and familiarity with the Internet and other computer technologies as a hiring requirement in the educational field.

**Reason No. 2: The Power to Engage Internet tools can be fun! Internet tools are interactive!** What a great way to engage students in the classroom. Many of the tools are collaborative, and they are all hands-on. Applications that allow for the creation of cool looking timelines, videos, or other dynamic presentations can be a lot of fun, and when a student realizes that they can easily make the resulting creation available for viewing on the Internet, it can be pretty exciting!

**Reason No 3: Students use them already** “Meet them where they live!” We've all heard this, and there is a solid undercurrent of wisdom in it. Many students use Internet tools on a regular basis. If you use some of them in the classroom, you will be talking to them in their language. And for those who have not been exposed to a given technology, you'll be teaching them something they are probably predisposed to learning more about.

**Reason No. 4: it's not going away** (it will only grow) The Internet is here to stay. It's been well over a decade now that 'average users' have had access to the Internet, and we're now knee deep in the Social Media revolution that has defined Web 2.0. It isn't going away. It isn't a fad. It's only going to grow and evolve. It's already woven into the fabric of the daily lives of millions of people. Yes, a lot of folks are wasting a lot of time doing things on the Internet that don't contribute to society or offer much in the way of personal growth, but at the same

---

<sup>1</sup> <http://www.ianswerguy.com/what-is-3g-4g-lte/>

<sup>2</sup> <http://www.emergingedtech.com/2009/05/5-reasons-why-educators-need-to-embrace-internet-technologies/>

time, there are countless ways in which the multitude of tools and technologies available on the Internet are being used in wonderfully constructive ways. Come and be a part of it, and contribute your voice.

**Reason No. 5: Businesses** want to hire workers who understand the Internet. Yes, they do. If you introduce your students to technologies like Blogs, RSS Feeds, Wikis, and so on, you will be helping to build their resume. Businesses and organizations are more interested in these types of tools every day. They're thinking about how to get on board and get ahead of the curve, and how they can offer value in the workplace. Blogs are being used to provide updates about new developments, Wikis are being used as knowledge bases, RSS Feeds are being used to capture a steady stream of information about topics of interest, Social Bookmarking tools are being used for research, and the list goes on and on. Name any Internet technology, and there is a growing list of business applications for it. Go to Google and search "Twitter for business" and see the list of articles on the subject. Businesses want to hire workers who understand the Internet.

## 2.1. Platforms: Tablets or PC in classroom

**Computers** in the classroom include any digital technology used to enhance, supplement, or replace a traditional educational curriculum. As computers have become more accessible, inexpensive, and powerful, the demand for this technology has increased, leading to more frequent use of computer resources within classes, and a decrease in the student-to-computer ratio within schools.

The shift in worldwide computer usage and the need for computer skills in today's workforce have pushed the Uzbekistan government to create guidelines for educators to ensure that students are prepared to meet the demands of the 21st century. The National Program for Training Personnel is aimed at preparing students with such skills demanded of those entering the 21st century learning environment as well as the 21st century and work environment.<sup>1</sup>

Changes such as this, along with the changes in the ways that 21st century learners communicate, have impacted the ways that classroom computers are utilized. Currently, teachers are tapping into the enhanced abilities of current classroom computer technology by utilizing various Web 2.0 tools to enhance their instruction. Such tools are also being used to extend classroom communication outside of the campus through online collaborative tools. Centered primarily on collaboration and sharing, Web 2.0 computer applications encourage student self-expression; interaction with peers, and opportunity for authentic learning experiences Through the implementation and integration of Web 2.0 computer technologies into the classroom setting, authentic and meaningful learning experiences are now able to occur in ways that have been previously unimaginable. Currently, the learning that



<sup>1</sup> <http://www.uzbekistan.be/events/06%20March%202007/irgashev.pdf>

is taking place is not simply about typical concepts or facts as laid out in school curricula. Instead, it is about the process of building connections. As a result, the awareness of the importance and the value of communication is becoming instilled into children. Today, with a single laptop, Webcam, projector, and an Internet connection, a teacher can broadcast and begin collaboration with any other classroom. As groups of learners coalesce around shared passions online, they experience something that is difficult to replicate in physical space.

Applications Classroom computer access to Web 2.0 applications such as online learning communities and interactive educational tools offer a more dynamic learning experience, with direct benefits to students. Web 2.0 technologies that are being utilized within the classroom have made it possible for essential learning to be introduced to students during their elementary levels of education and to be refined through their middle, high school and collegiate experiences. As classroom computer technology is being used for different types of communication—for presentation, for class interaction, and for collaboration, students are required to be readers and writers, editors and publishers; and must be willing to collaborate and co-create with others, working closely together to learn even more in the process. Web 2.0 Interaction involves not only sharing ideas or information with someone else, but also receiving feedback<sup>1</sup>. The collaboration engages groups of people in not only sending and receiving feedback but working together for creating, building, and editing, these skills are a necessity for students' futures as they grow and enter the workplace.



The goal of using such computer applications is to increase peer-to-peer interactions through digital means, in order to replicate real-life 21st century communication skills. One such technology that has gained significant recognition within K-12 education is the Weblog. Weblogs, or blogs, are frequently accessed on classroom computers due to their positive effects upon students. These online journals are primarily used to support communication in the form of presentation, and they provide a useful tool for class interaction. Weblogs allow students to present their own findings and discoveries to an authentic audience. Receiving feedback about course work not just from your teacher but from your peers, or possibly from the outside world, can be very empowering to students. In their eyes, having the ability to publish their writing on a blog suddenly transforms them into authors and publishers. Blogs make students are of careful and conscientious writing. Students are no longer writing for an audience of one. Instead, their words face an audience of their peers as well as countless others whose primary goal is not only to read, but also to provide commentary, feedback and even to critique and criticize their words. By using classroom computers for such means, students become increasingly more cautious and aware of their



discoveries to an authentic audience. Receiving feedback about course work not just from your teacher but from your peers, or possibly from the outside world, can be very empowering to students. In their eyes, having the ability to publish their writing on a blog suddenly transforms them into authors and publishers. Blogs make students are of careful and conscientious writing. Students are no longer writing for an audience of one. Instead, their words face an audience of their peers as well as countless others whose primary goal is not only to read, but also to provide commentary, feedback and even to critique and criticize their words. By using classroom computers for such means, students become increasingly more cautious and aware of their

---

<sup>1</sup> Driscoll, K (May–June 2007). "Collaboration in Today's Classrooms: New Web Tools Change the Game". *Multimedia & Internet @ Schools* 14 (3): 9–12.

grammar, spelling and word-choice knowing that they are the authors of a published piece of writing that will reach a wide audience.

Similarly, Wikis are commonly accessed on classroom computers due to their positive impacts<sup>1</sup>. The collaborative environment that wikis facilitate can teach students much about how to work with others, how to create community, and how to operate in a world where the creation of knowledge and information is increasingly becoming a group effort. The implementations and uses of wikis range from the development of group-based writing projects, to collaborative note taking, to brainstorming. Teachers can set up wikis for groups of students, giving them the opportunity to all join in on equal footing to give feedback, to make suggestions and changes, and to jot down ideas. With a wiki, everyone is an author of the wiki at the same time. Additionally, Wikis afford students the opportunity to express themselves using multiple modalities. Therefore, children who struggle to express themselves through the written word are now at ease due to ability to insert music, graphics, video, and photos into their writing. With the help of this technology, students who struggle with language are now able to create multimodal compositions, allowing them to communicate meanings that were once inaccessible or not fully expressed through their printed word<sup>2</sup>. These ongoing collaborative efforts also reinforce the notion of careful, contentious writing. Students' words are no longer for an audience of one, but instead for an audience of countless individuals. The awareness of this global reach reminds students to be cautious with grammar, word choice and style as they know that others will be expanding upon their written ideas.

Because of their versatility, Podcasts<sup>3</sup> are also commonly accessed on classroom computers. These downloadable, portable files allow listeners to subscribe to digitally recorded audio clips and replay them at their own convenience. Similarly, the use of Vodcasts<sup>4</sup> has become almost as common, as they allow for students to view digitally recorded video on classroom computers. Accessing Podcasts and Vodcasts on classroom computers allows for differentiated instruction within the classroom environment. These technologies provide students with the opportunity to learn at their own pace and the freedom to go back whenever possible and as frequently as necessary in order to check their understanding. Podcasts are offering ESL students, and those with learning disabilities, the chance to review lectures at their own pace for increased comprehension. Many ELL and ESL students need additional support with defining commonly used language as well as with the pronunciation of new vocabulary. Other students, such as those with special needs have difficulty reading and reviewing complex texts. Accessing Podcasts and Vodcasts on classroom computers can easily provide helpful tools to address these students' needs.

---

<sup>1</sup> Achterman, D (December 2006). "Beyond "Wikipedia"". *Teacher Librarian* 34 (2): 19–22.

<sup>2</sup> McPherson, K (December 2006). "Wikis and Student Writing". *Teacher Librarian* 4 (2): 70–72.

<sup>3</sup> Podcast (n) a digital audio file made available on the Internet for downloading to a computer or portable media player, typically available as a series, new installments of which can be received by subscribers automatically.

<sup>4</sup> Vodcast (n) similar to podcast, but with video recording.



**Tablets** have permeated the classroom in the last few years. Companies including Microsoft, Apple and Samsung have issued free devices, software and services to insinuate themselves into the classroom -- not only giving students more access to technology no matter their background, but potentially also to influence the next generation of consumers toward a particular brand or operating system.

However, no matter the reasons, technology has the potential to enrich a learner's experience in the classroom and give teachers more access to resources, lesson ideas and subject matter. Tablets, due to their portability and app support, remove the need to trudge over to a computer room to access the Web - and can store safely away after a lesson.

So, why, and how should tablets be integrated into lesson plans? Let's start with some general tips concerning these products.<sup>1</sup>

- A global learning platform. Far beyond the days of pen-pals and letters, the Internet gives students the chance to access a global network, and far more resources than the local library or a school's intranet.
- Reaching out. Writing a paper on a local news story or scientific article no longer has to be prescribed to the source material -- instead, emails or messages can be sent in real-time, enriching student projects.
- Free, in-depth and interactive resources. From e-books to articles and apps, repositories of educational content are easy to find online. Tablets, due to app support, can be used to host educational games in class, and teachers can use tablet software to organize lessons and projects -- as well as lift media to be shown to students without resorting to a VCR.
- Distance learning. Coursera, Apple's iTunes U and edX are only some of many online courses available to tablet users. Whether you're teaching primary, high school or at college, the materials and courses which can be accessed and stored on a tablet can prove invaluable for today's teachers.
- The resource range. Tablets, due to their size and portability, can be easily incorporated within a learning space. Lessons which involve moving around a classroom and trying out different activities in each are compatible with tablets -- for example, why not set your students an educational game in one corner, and a discussion point or quiz in another? Or set them loose to take photos in school grounds?
- Content generation. It is not just about what resources you can lift from apps and the Internet - projects no longer have to be limited to colored pens and paper, and students themselves can use many applications to create their own content and collaborate with others on projects. From using the tablets to take photos or Google Drive to work on a document at the same time, the possibilities are endless.
- The arts and music. Writing music, downloading clips, experimenting with color or exploring interior design -- all of these ideas can be integrated within lessons through tablets and applications.

---

<sup>1</sup> <http://www.zdnet.com/article/50-resources-for-using-an-ipad-android-tablet-in-class/>

- Culture and broadened horizons. Using tablets and video communication software can be a sure-fire way to introduce your students to different cultures and learners. Why not set up a digital pen-pal scheme, or organize a Google Hangout, Face Time or Skype with a class in another country?
- Presentations and writing. From submitting work to creating student forums, tablets have a variety of uses -- least of all acting as a reliable communication method when students have to work together on writing or projects.
- Adaptation. For children with special needs or those who face communication challenges, many apps are available for tablets which can adapt lessons to different levels and needs. Touch-screen tablets help with children that find eye contact difficult, and apps can help with basic life lessons, words and math.

## 2.2. Using cloud based apps, Google for Education

Google for Education has Google Drive varied distribution tools as its core. Through the Google Docs, Drive, mail, calendar, and more, teachers can create virtual classes, track document changes, participate in discussions, more--what many teachers have been doing for years, but in a formal package that can also serve alignment across classrooms and schools.

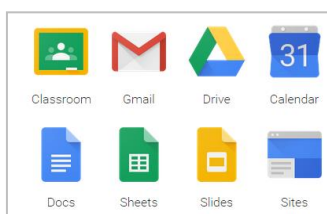


and its use of

and

Google for Education made news recently when New York announced that it had approved Google's Chrome books for use in their schools. It's nothing revolutionary, but it doesn't seem like revolution is very much in demand in most schools. In that way, Google apps and Google for Education make a lot of sense for schools and districts trying to unify their digital practice under a single #edtech ecology.

Google Apps is a core suite of communication and collaboration applications that allow students to work from any device on documents and projects. Once a school registered email address is registered with Google Apps for Education, teachers and students can unlock Google's apps with one login. An "office suite" of tools - Docs, Sheets, Slides, and more - that offers the ability to work from any device as well as share and collaborate. Because all Google Apps save to the cloud, teachers and students gain the flexibility to work from any computer or device. Students and teachers can seamlessly save work and collaborate both synchronously and asynchronously.



**About Google Drive** Much like a computer has a hard drive full of folders and files, Google Drive is a cloud-based storage system that can be accessed from anywhere, and anything, with Internet access. Think of Google Drive as the home base of Google Docs, Spreadsheets, Forms, Presentations, Drawings, and other

files. Google Drive lets you store and access these files anywhere - on the web, on your computer hard drive, or on an iPad or Android tablet. Any file in Drive can be saved and shared either to another Google account user or to the world. Offline features allow you to work on documents even when Internet access is not available and work automatically syncs when the devices go back online.

In addition to being able to store files in Drive, teachers and students can create using the Google Docs Suite - similar to Microsoft Office or Apple's iWork. These docs automatically save and allow you to create, access, and collaborate in a version-free world. Unlike Office or iWork, Google Drive can create Forms and Drawings.

**Google Classroom** is a blended learning platform for schools that aim to simplify creating, distributing and grading assignments in a paperless way. It was introduced as a feature of Google Apps for Education following its public release on August 12, 2014. Its aim is to be a paperless educational system.

Google Classroom ties Google's many products together to help educational institutions go to a paperless system. Assignment creation and distribution is accomplished through Google Drive while Gmail is used to provide classroom communication. Students can be invited to classrooms through the institution's database, through a private code that can then be added in the student interface or automatically imported from a School Information Management System. Google Classroom integrates with students and teachers Google Calendar. Each class created with Google Classroom creates a separate folder in the respective Google product where the student can submit work to be graded by a teacher. Communication through Gmail allows teachers to make announcements and ask questions to their students in each of their classes. Google Classroom will not show any ads in its interface for students, faculty, and teachers. Teachers can add students directly from the Google Apps directory or can provide a code that can be entered for access to the class by students.

**Google Docs, Google Forms, Google Sheets and Google Slides** are a word processor, a spreadsheet and a presentation program respectively, all part of a free, web-based software office suite offered by Google within its Google Drive service. The suite allows users to create and edit documents online while collaborating with other users in real-time.

The three apps are available as web applications, as Chrome apps that work offline, and as mobile apps for Android. The apps are compatible with Microsoft Office file formats. The suit also consists of Google Forms (survey software), Google Drawings (diagramming software) and Google Fusion Tables (database manager; experimental). While Forms and Tables are only available as web applications, Drawings is also available as a Chrome app.

The suite is tightly integrated with Google Drive. All files created with the apps are by default saved to Google Drive. While Google Docs has been criticized for traditionally lacking the functionality of Microsoft Office, it has received praise for its simplicity, ease of collaboration and frequent product updates. In 2011 The

Next Web described Google Docs as a "pretty robust set of free tools that are improving every month"<sup>1</sup>.

**Google Hangouts** is a communication platform developed by Google which includes instant messaging, video chat, SMS and VOIP features. It replaces three messaging products that Google had implemented concurrently within its services, including Google Talk, Google+ Messenger (formerly: Huddle), and Hangouts, a video chat system present within Google+. Google has also stated that Hangouts is designed to be "the future" of its telephony product, Google Voice, and integrated some of the capabilities of Google Voice into Hangouts. In current versions of Android, Hangouts is the default application for text messaging.

### 3.1. Lesson integrity

A lesson plan is a teacher's detailed description of the course of instruction, or 'learning trajectory' for a lesson. A daily lesson plan is developed by a teacher to guide class learning. Details will vary depending on the preference of the teacher, subject being covered, and the needs of the students. There may be requirements mandated by the school system regarding the plan. A lesson plan is the teacher's guide for running a particular lesson, and it includes the goal (what the students are supposed to learn), how the goal will be reached (the method, procedure) and a way of measuring how well the goal was reached (test, worksheet, homework etc.).<sup>2</sup>

A well-developed lesson plan reflects the interests and needs of students. It incorporates best practices for the educational field. The lesson plan correlates with the teacher's philosophy of education, which is what the teacher feels is the purpose of educating the students.<sup>3</sup>

Secondary English program lesson plans, for example, usually center around four topics. They are literary theme, elements of language and composition, literary history, and literary genre. A broad, thematic lesson plan is preferable, because it allows a teacher to create various research, writing, speaking, and reading assignments. It helps an instructor teach different literature genres and incorporate videotapes, films, and television programs. Also, it facilitates teaching literature and English together. Similarly, history lesson plans focus on content (historical accuracy and background information), analytic thinking, scaffolding, and the practicality of lesson structure and meeting of educational goals.<sup>4</sup> School requirements and a teacher's personal tastes, in that order; determine the exact requirements for a lesson plan.

Unit plans follow much the same format as a lesson plan, but cover an entire unit of work, which may span several days or weeks. Modern constructivist teaching styles may not require individual lesson plans. The unit plan may include

---

<sup>1</sup> Paul Sawers (2 September 2011). "15 tips to get the most of Google Docs". The Next Web.

<sup>2</sup> "What Is A Lesson Plan?". English Club. Retrieved 15 October 2014.

<sup>3</sup> Mitchell, Diana, and Stephen Tchudi, Exploring and Teaching the English Language Arts (4th Ed.). Boston, MA: Allyn & Bacon, 1999.

<sup>4</sup> Lesson Plan Reviews Introduction. Teachinghistory.org. Accessed 15 June 2011



specific objectives and timelines, but lesson plans can be more fluid as they adapt to student needs and learning styles.

Unit Planning is the proper selection of learning activities which presents a complete picture. Unit planning is a systematic arrangement of subject matter. Samford "A unit plan is one which involves a series of learning experiences that are linked to achieve the aims composed by methodology and contents". Dictionary of Education: "A unit is an organization of various activities, experiences and types of learning around a central problem or purpose developed cooperatively by a group of pupils under a teacher leadership involving planning, execution of plans and evaluation of results".

#### Criteria of a good Unit Plan

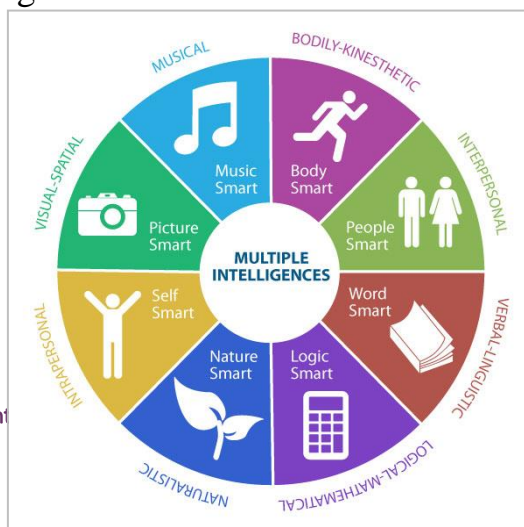
1. Needs, capabilities, interest of the learner should be considered.
2. Prepared on the sound psychological knowledge of the learner.
3. Provide a new learning experience; systematic but flexible.
4. Sustain the attention of the learner till the end.
5. Related to social and Physical environment of the learner.
6. Development of learner's personality.

It is important to note that lesson planning is a thinking process, not the filling in of a lesson plan template. Lesson plan envisaged s a blue print, guide map for action, a comprehensive chart of classroom teaching-learning activities, an elastic but systematic approach for the teaching of concepts, skills and attitudes.

### 3.2. Student’s needs and information acquisition methods

Discussing the utilizing of modern information-communication technologies, we should consider student’s information acquisition (or absorption) methods, on which we may rely on the H. Gardner’s theory of multiple intelligences. The theory of multiple intelligences is a theory of intelligence that differentiates it into specific (primarily sensory) 'modalities', rather than seeing intelligence as dominated by a single general ability. Gardner articulated eight criteria for a behavior to be considered intelligence.<sup>1</sup> These were that the intelligences showed: potential for brain isolation by brain damage, place in evolutionary history, presence of core operations, susceptibility to encoding (symbolic expression), a distinct developmental progression, the existence of savants, prodigies and other exceptional people, and support from experimental psychology and psychometric findings.

Gardner chose eight that he held to meet these criteria: rhythmic, visual–spatial, verbal–logical–mathematical, bodily kinesthetic, interpersonal, intrapersonal, and naturalistic. He suggested that existential and intelligence may also be worthy



abilities  
musical–  
linguistic,

later  
moral  
of

al on 25 November

<sup>1</sup> Gilman, Lynn (2012) [2008]. "The Theory of Multiple Intelligences". Retrieved 14 November 2012.

inclusion. Although the distinction between intelligences has been set out in great detail, Gardner opposes the idea of labeling learners to a specific intelligence. Gardner maintains that his theory of multiple intelligences should "empower learners", not restrict them to one modality of learning. According to Gardner, intelligence is "a bio psychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture."

What you may not be as familiar with is how to apply a multiple intelligence approach to learning in your classroom using information-communication technologies. The activities that can be accomplished using pc, tablets or any other IT equipment shown in *italics*

Start with the checklist. Use it to refresh your memory on each of the intelligences and pinpoint learning activities that will appeal to your students based on their particular strengths. To involve students in identifying their multiple intelligences, invite them to complete The Connell Multiple Intelligence Questionnaire for Children.<sup>1</sup> They will find it exciting to see the areas they are strongest in, and to understand how these might be affecting their schoolwork.

#### **Verbal-Linguistic Intelligence (Word Smart)**

Description: Verbal-linguistic students love words and use them as a primary way of thinking and solving problems. They are good writers, speakers, or both. They use words to persuade, argue, entertain, and/or teach. Learning Activities and Project Ideas:

- *Completing crossword puzzles with vocabulary words*
- *Using digital resources such as electronic libraries, desktop publishing, word games, and word processing.*
- *Studying the habits of good speakers.*

#### **Logical-Mathematical Intelligence (Math Smart)**

Description: Logical-mathematical students enjoy working with numbers. They can easily interpret data and analyze abstract patterns. They have a well-developed ability to reason and are good at chess and computer programming. They think in terms of cause and effect. Learning Activities and Project Ideas:

- *Searching for patterns in the classroom, school, outdoors, and home.*
- *Conducting experiments to demonstrate science concepts.*
- *Using math and science software such as Math Blaster, which reinforces math skills, or King's Rule, a logic game.*
- *Using science tool kits for science programs.*
- *Designing alphabetic and numeric codes.*
- *Making up analogies.*

#### **Spatial Intelligence (Picture Smart)**

Description: Students strong in spatial intelligence think and process information in pictures and images. They have excellent visual receptive skills and excellent fine motor skills. Students with this intelligence use their eyes and hands to make artistic or creatively designed projects. They can build with Legos, read

<sup>1</sup> <http://www.ctevh.org/Conf2015/Workshops/412/412a.pdf>

maps, and put together 1,000-piece jigsaw puzzles. Learning Activities and Project Ideas:

- *Taking photographs for assignments and classroom newsletters.*
- *Taking photographs for the school yearbook, school newsletter, or science assignments.*
- Using clay or play dough to make objects or represent concepts from content-area lessons.
- *Using pictorial models such as flow charts, visual maps, Venn diagrams, and timelines to connect new material to known information.*
- *Taking notes using concept mapping, mind mapping, and clustering.*
- Using puppets to act out and reinforce concepts learned in class.
- *Using maps to study geographical locations discussed in class.*
- *Illustrating poems for the class poetry book by drawing or using computer software.*
- *Using virtual-reality system software.*

### **Musical Intelligence (Music Smart)**

Description: Musical students think, feel, and process information primarily through sound. They have a superior ability to perceive, compose, and/or perform music. Musically smart people constantly hear musical notes in their head. Learning Activities and Project Ideas:

- Writing their own songs and music about content-area topics.
- Putting original poems to music, and then performing them for the class.
- Setting a poem to music, and then performing it for the class.
- Incorporating a poem, they have written with a melody they already know.
- *Listening to music from different historical periods.*
- *Recording a poem over "appropriate" background music (i.e., soft music if describing a kitten, loud music if they are mad about pollution).*
- Using rhythm and clapping to memorize math facts and other content-area information.

### **Bodily-Kinesthetic (Body Smart)**

Description: Bodily-kinesthetic students are highly aware of the world through touch and movement. There is a special harmony between their bodies and their minds. They can control their bodies with grace, expertise, and athleticism. Learning Activities and Project Ideas:

- Creating costumes for role-playing, skits, or simulations.
- Performing skits or acting out scenes from books or key historical events.
- Designing props for plays and skits.
- Playing games like Twister and Simon Says.
- Using charades to act out characters in a book, vocabulary words, animals, or other content-area topics.
- Participating in scavenger hunts, searching for items related to a theme or unit.

- Building objects using blocks, cubes, or Legos to represent concepts from content-area lessons.
- *Using electronic motion-simulation games and hands-on construction kits that interface with computers.*

**Interpersonal (People Smart)** Students strong in interpersonal intelligence have a natural ability to interact with, relate to, and get along with others effectively. They are good leaders. They use their insights about others to negotiate, persuade, and obtain information. They like to interact with others and usually have many friends. Learning Activities and Project Ideas:

- *Working in cooperative groups to design and complete projects.*
- Working in pairs to learn math facts.
- *Interviewing people with knowledge about content-area topics via hangouts or Skype*
- Tutoring younger students or classmates
- Using puppets to put on a puppet show.

**Intrapersonal Intelligence (Self Smart)** People with a strong intrapersonal intelligence have a deep awareness of their feelings, ideas, and goals. Students with this intelligence usually need time alone to process and create. Learning Activities and Project Ideas:

- Writing reflective papers on content-area topics.
- Writing essays from the perspective of historical figures, such as Civil War soldiers or suffragettes.
- Writing a literary autobiography, reflecting on their reading life.
- Writing goals for the future and planning ways to achieve them.
- *Using software that allows them to work alone, such as Decisions, Decisions, personal choice software, or the Perfect Career, a career choice software.*
- *Keeping journals or weblogs throughout the year.*
- Making a scrapbook for their poems, papers, and reflections.

**Naturalistic Intelligence (Nature Smart)** This intelligence refers to a person's natural interest in the environment. These people enjoy being in nature and want to protect it from pollution. Students with strong naturalistic intelligence easily recognize and categorize plants, animals, and rocks.

- Caring for classroom plants.
- Caring for classroom pets.
- Sorting and classifying natural objects, such as leaves and rocks.
- *Researching animal habitats.*
- Observing natural surroundings.
- Organizing or participating in park/playground clean-ups, recycling drives, and beautification projects.

#### 4.1. Action

A demonstration of full-length interactive web-based lesson in example of a secondary school English curriculum.

To tackle the all the behavioral peculiarities discussed above, we should design a lesson that includes almost all of the strength categories kids may fall into. This sample lesson may clearly demonstrate the learners the clear advantages of using web-based learning method.

For the demonstration of lesson material, we will use cloud-based presentation tool called “Prezi”. Preparing material for this lesson using this tool may take from 45 to 60 minutes.

Prezi’s unique slick “zooming” function offers an increasingly popular alternative to the traditional PowerPoint presentations in education and business alike. Prezi is an online, similar Flash-based presentation creator who shares functionalities with other information presentation programs such as Microsoft PowerPoint and Apple Keynotes. It is a visual learning tool, which allows you to create maps of texts, images, videos, graphics, etc... and present them in a nonlinear way. The menu for adding elements has a unique navigational approach



#### LESSON ACTIVITY SCRIPT

Demonstration will be shown in a cloud-based multimedia-presentation application called Pezi. This demo will compare 2 animals – a dog and a cat, detailed in their origin, genetic relationships with other animals, body parts, behavior, reproduction, with a vocabulary set of about 40 words. The lesson will include 3 computer-based games (1 individual and 2 team-based) to strengthen vocabulary.

Lesson starts with activity of guessing the image on the projected screen-the part of their head illustrated to learn new words and demonstrate on image (new words: nostrils, nose leather, whiskers, wet nose, fur, muzzle, snout, flews, fangs etc.) as well as corresponding verbs (sniff, sweat, scent, lick, cooldown etc.) Activity paused and learners given time to discuss new words. End of section one. Every section reveals a new part of animals’ body illustration and compares them, revealing thus new vocabulary, facts about their nutrition, genetic origins and behavior.

At the end of activity, learners will play team based game, where learners split into groups and choose the numbers on screen to reveal a question and have 5 seconds to answer it (vocabulary related question).

...shown on screen...

and is easy to master.

Prezi’s most noticeable feature is its zoom in and out function which really brings your message to life. Instead of “flicking” from one slide to the next – as you would do in your good old PowerPoint presentation – Prezi gives you a chance to explore a canvas of ideas by focusing on minute detail as well as allowing you to see the big picture. Instead of a slide show which offers information in accumulation, Prezi favors visual learning and works very much like a graphic

organizer or a mind map. Therefore, it highlights the way concepts are interconnected.

In many classrooms these days it is fair to say that PowerPoint has become the default setting for information to be communicated. As effective as it may be in presenting ideas to students, overuse of PowerPoint tends to lead to disengagement, to that “not another PowerPoint” feeling your learners may experience at times. Prezi on the other hand has the WOW factor.

- Prezi creates stunning visual impact. Import pictures, maps and PDFs and use them as a canvas. With the cinematic experience of the zooming function, your students will feel like they are transported into a “world” that you have designed yourself.
- Prezi is interactive whiteboard friendly. Designed in 2009 with the iPad in mind, it allows you to create exciting and interactive presentations with touch navigation.
- Prezi offers more freedom of navigation. Your Prezi can be kept in the public domain and therefore accessed by your students on the Internet. At home, they can navigate the Prezi themselves, observe connections of ideas and visualize concepts.
- Prezi is a great tool for interactive classroom sessions or group projects. Students can cooperate in real time with up to ten others, in the classroom or at home, to brainstorm and build a presentation on one shared virtual whiteboard.
- If you already have all your notes in PowerPoint, you don’t need to start all over again. Use the PowerPoint Import feature to transfer your existing content directly into your Prezi.

### Questions

1. What equipment can you use at classroom?
2. What other web resources do you know for acquiring Smart board-adapted learning materials?
3. What software do you use for creating presentational/ interactive materials?
4. What should be done to provide an Internet connection to your school?
5. How often do you copy/paste learning materials from Internet?
6. What web-services do you use to interact with students?
7. In what social networks are you registered? How digitally socially active are you?
8. What is the blog? To what benefits it can be used for?
9. What is wiki? Why should everyone distribute to community-driven wiki pages?
10. Does your school have enough computers or tablets to conduct a lesson using them? How often are they used?
11. What is the percentage of your students that own tablets and use them during lessons?

12. What Google services do you use constantly? To what effect?
13. What benefits does Google Drive offer?
14. Can you describe 2 scenarios of teacher-student collaboration using Google services?
15. What does lesson dis-integrity may lead to?
16. Do you study your students' information acquisition strengths and weaknesses? How deep does your studies go?
17. Did you ever use H.Gardner's theory of multiple intelligences in developing lesson plans or activities? To what effect?
18. Can you think of any other uses of computers/tablets in lesson activity according to 8 intelligences, rather than shown in the text?
19. What presentation topics can you think of using slick zooming effect of Prezi?

## IV. АМАЛИЙ МАШҒУЛОТЛАР МАТЕРИАЛЛАРИ

### I. Technology-enhanced language teaching (2 соат)

1. Difference between PC and Tablets, accordingly Windows and Android  
Students are given a list of possible functions that PC running Windows and tablets running Android offer. They will choose the best that fits them as each list item adds points to the platform they prefer working with.






Form: Please underline what you need more and calculate points taken in the according cell

<b>Windows (PC, laptop)</b>	<b>Pts</b>	<b>Android (Tablet, Smartphone)</b>	<b>Pts</b>
Working with/creating text documents (Word)	2	Reading books, documents, spreadsheets, etc.	2
Working with/creating Presentations (PowerPoint)	2	Social networking (Facebook, twitter, Instagram)	1
Downloading video/audio content	1	Shooting photos, recording videos	2
Working with/creating Presentations (Excel)	1	Voice communication, Messaging/Instant messaging	1
Typing fast	2	Quick web searching, touch-screen web-browsing	2
Plug-and-play Flash-drives, Hard-drives etc.	1	Instant sharing photos/videos	1
Editing images (Photoshop)	1	Taking/managing notes, idea sharing, creating memes	2
Editing video/audio (Premiere etc.)	1	Portable e-mailing	1
High-end 3D gaming	1	Casual gaming, educational gaming	1
Creating interactive lessons (iSpring etc.)	2	Watching videos	1
Burning/recording CDs	1	GPS tracking, navigating maps	1
Organizing your files	1	Downloading/purchasing apps	1
<b>Total points for PC</b>		<b>Total points for Tablet</b>	


You prefer PC/TABLET (please underline)

2. Networking basics, connecting to internet using cable, Wi-Fi, 3G/LTE.

Please write description to each pictogram, representing networking in different platforms:

<b>Icon</b>	<b>Description</b>
	It represents the local area network in different platforms
	
	
	
	



3. Design basics of multimedia applications, using image (Photoshop), audio (SoundForge) and video (Premiere) editing tools.

Please sort the file formats listed in the table 1) by their types 2) by the size they generate, smallest to largest.

Image	Audio	Video
JPG	MP4	AIFF
AVI	MKV	BMP
OGG	PSD	TIFF
WAV	FLV	GIF
		PNG

#### 4. Compiling a multimedia app using iSpring (PowerPoint add-on)

Create a interactive dialogue using iSpring Conversation Maker with following topics with conversation possibility branching no less than 3 variants: 1) At the dressmakers; 2) At car saloon 3) Surprise meeting in street.

Choose appropriate actors and background.

Example of dialogue flow

K<sup>0</sup>: Hey Sam, hello, fancy that!

S<sup>1</sup>: Hello yourself, Kate, how's it?

K: Yeah, I'm fine, but you look gorgeous, are you dressing up for wedding or something?

S: Thank you! Not wedding. Just a for a new job that I got just yesterday.

K: Congratulations! That must be very high-paying job if you are suiting up like this!

S: Kind of. Remember the Schneider & Schreiber Architecture? I'm their Senior Architect now.

S: Well thank you, you yourself shining and glamouring I see.

K: Oh you always had something nice and quick to say, thank you!

S: You were always like that. I remember you could spend eons in front of the mirror making up the atoms of your face.

S: You got me. I'm suiting up for a wedding. You know, after we broke up I haven't been wasting much time.

K: Seriously? OMG. I thought... I was actually testing you to see if you will call me back...

S: Yeah, I think you just test the shit out of yourself. I hope you won't do that to your future boyfriend.

S<sup>2</sup>: Hey Kate, what are you doing in men's dressing saloon?

K: Why I can't enter men's saloon? I was actually looking up a necktie and a belt for my boyfriend, for his birthday.

S: Bitch please. You are not going to present him 2 things to hang himself, are you? Present him a Playstation4.

K: I don't think so. I don't want him to become a videogame junkie like you, do I? Building and crafting virtual worlds? Like you said, "Bitch please."

S: Videogame junky that works as a Senior Architect for Schneider & Schreiber Architecture? I think games pay off.

K: Seriously?!? Whoa! I... I'm speechless.

S: You have got a boyfriend already? Who is that bastardo afortunado?

K: He's a nice guy. He's drummer and got his own rock band.

S: A drummer? What, are you like 15? Kate I worry for you. I hope it's not Aerosmith.

K: Hahaha. no it's called "Satan's Whiskers"

S: W.T.F. [facepalm]

S<sup>3</sup>: Kate? WTF? Have you been following me?

K: What? Me following you? No! God! Good to see you too Samuel. Well, since you've asked, I saw you at the mall entrance and followed you a little. No worries, just to say hi.

S: Hi then.

K: Sam I'm missing you. I saw you the other day with Gwen, and I realized how much I love you. I love you so much.

S: I'm missing you too, Katniss, but we are not compatible material. I heard you've been seeing a guy that looks like a Curt Cobain.

K: Yes, he's a drummer in the rock band, he is so sexy and hot, but he's little unstable...

S: Kate, just turn around and be gone. I'm attending very important matter right now. This time I won't let you mess up my life.

## II. Web-based language learning (4 coat)

### 1. Google advanced searching

Open Google Chrome web-browser and accomplish following searches using advanced search syntax.

a) Find several images of red and green apple using only word "apple" in searchbox, preferred resolution not smaller than 1600×1200

b) Find a sentence "study painting, poetry, music, architecture, statuary, tapestry, and porcelain", keeping the word order, use quotation marks

c) Search for word "mustang" so that result is not the car neither the movie

d) Search for word "assessment" in englishtips.org website

e) Search using wildcards, which means use asterisk for the word that you don't know, for example lyrics of the song, "Shine \* like a diamond"

f) Find websites that is related to englishtips.org with "related" syntax

g) Convert certain amount of inch to centimeter, foot to meter, US Dollar to Uzbekistan Sum using google

h) Solve mathematical problems in google search box, e.g.  $(86/4)*(14*6+12)/3$

i) Try to search several words using syntaxes "and" and "or"

j) Try to find out weather or time in certain location of the planet

k) Command your Android smartphone using "Ok, Google" voice request to set an alarm to 15:30, open calendar, remind you to buy a milk at 18:10.

l) ask your Android smartphone using "Ok, Google" voice request what is Welcome in Russian (or in any other language)

## IV. КЕЙСЛАР БАНКИ

**Situation 1.** You are a Technical assistance specialist (such as Genuis) and had to explain IT-illiterate customers the steps they must take to troubleshoot a laptop. It is easier to design a simple troubleshooting chart than explaining every occasion separately, so that making a telephone call or video-chatting is the last resort for the most complicated situations. Troubleshooting chart looks like below. Your task is to continue the Problem and Solution section adding at least 15 more items and matching them correctly with “●” mark.

Troubleshooting chart for laptop

Problem	Solution							
	Check power cable	Check if battery properly connected	Check if there external drive connected	Check if power button pressed	Check if there is an obstacle	...	...	...
Device won't turn on	●	●		●				
Device won't boot				●				
Device beeping on power on		●						
“No booting device found” error			●	●				
Cd-drive won't open				●	●			
...								

**Instructions:** Learners may add in Problem items section the cases they have come across or experienced, found solution with the help of somebody or by themselves.

**Practical application:** This kind of charts may be applied to troubleshoot devices or equipment as well as other problematic occurrences besides IT. For example, why is certain student having trouble in acquisition of certain material?

**Result:** In most traditional courses, there are problems occurring with student's equipment such as not connecting to Wi-Fi or not loading a specific application, where they interrupt the flow of lecture or lesson to engage the instructor with these problems. Making up charts as above help students apply every possible solution to solve their equipment problem, rather than stealing lesson time.

**Situation 2.** You are a CEO of a scientific R&D institution (that possibly deals with language learning), consisting of departments described as below. If there is a necessity of designing business processes for every department in order to accelerate the typical workflow, what kind of tasks should be computerized? Propose at least 5 tasks for each department involving IT services that would ease off some typical tasks (and give more time for creativity for departments).

#	Department	Typical duties	Your proposal to computerize tasks
1	Foreign Experience Dept.	-Studying foreign methods of learning languages -Finding partners in foreign countries to cooperate	1) Using skype or videoconferencing with foreign partners 2) ... 3) ...
2	Standardization Dept.	-Conducting R&D on educational standards -Proposing standards enhancement -Publishing standards and requirements	1) Using World ISO information system to study standards 2)... 3) ...
3	Materials Design Dept.	-Conducting R&D on educational materials design -Forming curriculum for learners	1) ... 2) ... 3) ...
4	Testing Dept.	-Forming IELTS/TEFL type tests adapted for different stage learners -Studying different testing systems	1) ... 2) ... 3) ...
5	Accounting Dept.	-Assigning budgetary funds for conducting R&D -Managing budget and salary	1) ... 2) ... 3) ...
6	HR Dept.	-Managing HR records -Managing contractual procedures -Hiring/Dismissing staff	1) ... 2) ... 3) ...
7	IT Dept.	-Managing and maintaining IT Infrastructure of institution -Studying possibilities of implementing IT into company tasks	1) ... 2) ... 3) ...
8	Monitoring Dept.	-Monitor and assess each department activities -Manage incoming/ outgoing correspondence	1) ... 2) ... 3) ...

Instructions: Students should search web if they are not familiar with the activities that departments are conducting. Adding unsophisticated tasks such as “Use HR software” for HR Department is not acceptable.

Practical application: This type of planning gives the clear idea to learners how IT may be applied to accomplish different tasks (not only for word processing, presenting, printing). It may be useful for the occasions of managing (or creating) projects, to formulate the general idea of computerization.

Result: The course participants have different professional background, most of them not familiar with the typical tasks of their respective institution’s respective departments. This situational case gives them an opportunity to project and measure what can be done to computerize their institution.

**Situation 3.** You are a concerned parent of middle school (age 14-17) child(ren). You want to educate your child so that he is able to accomplish his school tasks and personal development using the IT gadgets. The list of gadgets is given below. Due to your budget limitations, you can only choose 2 gadgets and

you should clearly know for what purposes your child will use it. Check the 2 gadgets with checkmark and write down at least 5 purposes in purposes field.

Gadgets that I want to buy for my children

chk	Gadget or device	Function	For what purpose?
	Desktop computer	Office applications, web browsing, casual gaming	1) To learn how to use Office apps and OS 2) ...
	Laptop computer	Office applications, web browsing, Portable	1) To work anywhere 2) ...
	Gaming rig	Office applications, web browsing, high-end 3D gaming, video editing, 3D designing	1) ... 2) ... 3) ...
	Tablet (iPad, Galaxy Note 10.1)	Web-browsing, planning, social networking, taking photos or videos, reading books, casual gaming	1) ... 2) ... 3) ...
	Smartphone	Voice calls, messaging, web-browsing, social networking, taking photos or videos, casual gaming	1) ... 2) ... 3) ...
	Gaming console (PlayStation, Xbox)	High-end 3D gaming, multiplayer social networking, watching HD videos	1) ... 2) ... 3) ...

Instructions: Students must search web if they are not familiar with some gadgets or devices. The purpose field should not copy functionality, instead there should be written clear educational purposes.

Practical application: A lot of people never use their gadgets or device for its full potential, so there is a lot of possibilities remain uncovered. Watching a newly-released gadget commercial, we want it, but do we really need it? This situational case helps to understand the purposes for which we need gadgets.

Result: The students will become more considerate of using their existing devices or buying new ones. This situational case not only help using devices for its full potential, but warn them of their undesirable side-effects for the children.

## V. МУСТАҚИЛ ТАЪЛИМ МАВЗУЛАРИ:

### 1. “10 things you didn’t know about...” мавзусига инфографик тақдимот материали тайёрлаш.

- a) Тақдимот 1 дона слайддан иборат бўлади,
- b) Исталган соҳага таалукли 10 та фактни ўз ичига олган бўлади
- c) Қизиқарли визуал намоишини акс эттириши шарт.

### 2. Анкета ва тестлар тайёрлаш

- a) Google Forms’дан фойдаланган ҳолда 10 та саволдан иборат анкета тайёрлаш, анкетада ҳар бир жавоб турларидан фойдаланилган бўлиши керак (Multiple choice, Checkbox, Dropdown, Multiple row, Marking),
- b) PollMaker’дан фойдаланган ҳолда 15 та саволдан иборат интерактив онлайн тест тузиш, тест натижасини баҳолаш мантиқини ишлаб чиқиш.

## VI. ГЛЮССАРИЙ

3G/LTE	When describing smartphone data networks, you commonly hear the terms 3G, 4G, and LTE. This refers to the generation of network technology. The third generation network, known as 3G, is the oldest technology of the group. 4G is the fourth generation data network and LTE stands for Long Term Evolution.
Absorption	the fact or state of being engrossed in something
Acquisition	the learning or developing of a skill, habit, or quality
Add-on	an accessory device or piece of software designed to increase the capability of a computer or hi-fi system
Android OS	The Android OS is an open source operating system primarily used in mobile devices. Written primarily in Java and based on the Linux operating system, it was initially developed by Android Inc. and was eventually purchased by Google in 2005.
App	a self-contained program or piece of software designed to fulfill a particular purpose; an application, especially as downloaded by a user to a mobile device
Blend	a mixture of different things or qualities
Boot	the process of starting a computer and putting it into a state of readiness for operation
Cloud	a network of remote servers hosted on the Internet and used to store, manage, and process data in place of local servers or personal computers
Design	the art or action of conceiving of and producing a plan or drawing
ESL	A student whose primary language or languages of the home, is other than English and would require additional English language support to develop reading, writing, listening and speaking skills.
Hierarchy	an arrangement or classification of things according to relative importance or inclusiveness
Integrity	the condition of being unified, unimpaired, or sound in construction
Interaction	reciprocal action or influence
iSpring	Freeware PowerPoint plug-in iSpring converts your PowerPoint presentation to an interactive Flash video with the click of a button.
LMS	A learning management system (LMS) is a software application for the administration, documentation, tracking, reporting and delivery of electronic educational technology (also called e-learning) courses or training programs.
Photoshop	Photoshop, the proprietary name of a software package for the digital editing of photographic images
Platform	a standard for the hardware of a computer system, determining what kinds of software it can run.
Portability	the ability to move or be moved freely and easily
Premiere	Adobe Premiere Pro is a timeline-based video editing software application. It is part of the Adobe Creative Cloud, which includes video editing, graphic design, and web development programs.
Quiz	a test of knowledge, especially a brief, informal test given to students
Satellite	an artificial body placed in orbit around the earth or moon or another planet in order to collect information or for communication
Scenario	a postulated sequence or development of events
Sharing	gain access to somebody's own resource to others post or repost (something) on a social media website or application.
Smartphone	a cellular phone that performs many of the functions of a computer,

	typically having a touchscreen interface, Internet access, and an operating system capable of running downloaded applications
Social Network	a dedicated website or other application that enables users to communicate with each other by posting information, comments, messages, images, etc.
Sound Forge	Sony Sound Forge (formerly known as Sonic Foundry Sound Forge) is a digital audio editing suite by Sony Creative Software which is aimed at the professional and semi-professional markets.
Storing	keep or accumulate (something) for future use
Survey	investigate the opinions or experience of (a group of people) by asking them questions
Tablet	a computer that accepts input directly onto an LCD screen rather than via a keyboard or mouse
Touchscreen	a display device that allows a user to interact with a computer by touching areas on the screen
Utility	a utility program
Video-conferencing	Videoconferencing (VC) is the conduct of a videoconference (also known as a video conference or videoteleconference) by a set of telecommunication technologies which allow two or more locations to communicate by simultaneous two-way video and audio transmissions.
Wi-Fi	a facility allowing computers, smartphones, or other devices to connect to the Internet or communicate with one another wirelessly within a particular area.
Windows OS	The most widely used operating system for desktop and laptop computers. Developed by Microsoft, Windows primarily runs on x86-based computers (the ubiquitous PC), although versions have run on Intel's Itanium CPUs



## VII. АДАБИЁТЛАР РЎЙХАТИ

### Махсус адабиётлар

1. Cho, Y. (1995). Learner-control, cognitive processes, and hypertext learning environments. In *Emerging Technologies, Lifelong learning, NECC 95*. (ERIC Document Reproduction Service No. ED 392 439).
2. Chou, S.W., & Liu, C.H. (2005). Learning effectiveness in a Web-based virtual learning environment: a learner control perspective. *Journal of Computer Assisted Learning*, 21, 65–76.
3. Liou, H.C. (1997). The impact of WWW texts on EFL learning. *Computer Assisted Language Learning*, 10(5), 455–478.
4. Schunk, D.H. (2003). *Self-efficacy for reading and writing: Influence of modeling, goal setting, and self-evaluating*. North Carolina: University of North Carolina at Greensboro.
5. Wang, L.C., & Sutton, R.E. (2002). Effects of learner-control with advisement on English-as-a-second-language students in a web-based learning environment. *International Journal of Instructional Media*, 29(3), 317–324.
6. Zimmerman, B.J. (2002). Achieving academic excellence: A self-regulatory perspective. In M. Ferarri (Ed.), *The pursuit of excellence through education* (pp. 85–110). Mahwah, NJ: Erlbaum.
7. Kung, S.-C., & Chuo T.-W. (2002). Students' perceptions of English learning through ESL/EFL Websites. *TESL-EJ*, 6(1), p. A-2. Retrieved March 3, 2005, from <http://writing.berkeley.edu/ TESL-EJ/ej21/a2.html>
8. Son, J.-B. (2005, September). Making web-based language learning meaningful. Paper presented at the Second International Conference on Pedagogies and Learning, The University of Southern Queensland, Toowoomba, Australia.
9. Stepp-Greany, J. (2002). Student perceptions on language learning in a technological environment: Implications for the new millennium. *Language Learning & Technology*, 6(1), 165–180.
10. Abrami, P. C., Bernard, R. M., Wade, A., Schmid, R. F., Borokhovski, E., Tamim, R., et al. (2006). A Review of e-Learning in Canada: A Rough Sketch of the Evidence, Gaps and Promising Directions. *Canadian Journal of Learning and Technology*, 32, 3.
11. David Merrill. First principles of instruction. *Educational technology, research and development*, 50(3), 2002. Available from [http://cq-pan.cqu.edu.au/david-jones/Reading/papers/3/first\\_principles.pdf](http://cq-pan.cqu.edu.au/david-jones/Reading/papers/3/first_principles.pdf)
12. Dudeney, G., Hockley, N. *How to teach English with Technology*. Pearson Longman, 2007
13. RC Clark and RE Mayer. *E-learning and the science of instruction*. Pfeiffer Press, 2003. Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. *Teachers College Record*, 108(6), 1017-1054.
14. Ҳамдамов Р.Ҳ., Масофадан ўқитиш тизимларини яратишдаги юзага келадиган муаммолар ҳақида. «Фан ва таълимда ахборот-коммуникация технологиялари» Республика илмий-техник конференциясининг материаллари. Тошкент. 6-7 апрел 2006 й.
15. Электрон университет. Масофавий таълим технологиялари. Олий таълим муассасалари учун/ А.Парпиев, А.Марахимов, Р.Ҳамдамов, У.Бегимкулов, М.Бекмурадov, Н.Тайлоқов. ЎЗМЭ давлат илмий нашриёти. -Т.: 2008
16. Cuban, Larry (2001). *Oversold and Underused: Computers in the Classroom*. Cambridge, MA: Harvard University Press. p. 82. ISBN 978-0-674-00602-7. Retrieved May 19, 2010.
17. United Press International (February 4, 1971). "Computers Employed as Teaching Aids". *Reading Eagle*.
18. Murdock, Everett (2007). "History, the History of Computers, and the History of Computers in Education". Retrieved May 19, 2010.

19. Haney, Daniel Q (August 28, 1977), "Computers in the classroom- no match for real live teacher", The Modesto Bee
20. Johnstone, Bob (2003). Never Mind the Laptops: Kids, Computers, and the Transformation of Learning. Lincoln, NE: iUniverse, Inc. pp. 1–8. ISBN 0-595-28842-1. Retrieved May 19, 2010.
21. Associated Press (August 28, 1989). "Most teachers think computers are boon to schools, poll says". The Deseret News.
22. "Interactive Computer Whiteboards Create Winning Combination" (PDF). Innovatis. October 2002.
23. Suggs, Ernie (September 7, 1999). "Georgia Tech Harnesses Technology for Learning". The Tuscaloosa News.
24. 40+ FREE online language learning resources, <http://www.fluentin3months.com/free-links/>
25. 50 resources for using an iPad, Android tablet in class, <http://www.zdnet.com/article/50-resources-for-using-an-ipad-android-tablet-in-class/>
26. Reasons Why Educators Need To Embrace Internet Technologies, <http://www.emergingedtech.com/2009/05/5-reasons-why-educators-need-to-embrace-internet-technologies/>
27. Explaining Google Apps, <http://edtechteacher.org/gafe/>
28. O'Bannon, B. (2008). "What is a Lesson Plan?". Innovative Technology Center \* The University of Tennessee. Retrieved May 17, 2011.
29. "What Is A Lesson Plan?". English Club. Retrieved 15 October 2014.
30. "Writing Lesson Plans." Huntington University: a Christian college ranked among America's best colleges. 15 Mar. 2009.
31. Mitchell, Diana, and Stephen Tchudi, Exploring and Teaching the English Language Arts (4th Ed.). Boston, MA: Allyn & Bacon, 1999.
32. Lesson Plan Reviews Introduction. Teachinghistory.org. Accessed 15 June 2011.
33. Wong, Harry K. (1998). The First Days of School: How to be an Effective Teacher. Mountainview, CA : Harry K. Wong Publications
34. Biggs, J. (1999) Teaching for Quality Learning at University (pp. 165-203). Buckingham, UK: SRHE and Open University Press.
35. Use these ideas for learning activities that will appeal to your students based on their particular strengths. <http://www.scholastic.com/teachers/article/clip-save-checklist-learning-activities-connect-multiple-intelligences>
36. Using Prezi In Education,
37. <http://www.bbcactive.com/BBCActiveIdeasandResources/UsingPreziInEducation.aspx>