BUXORO DAVLAT UNIVERSITETI HUZURIDAGI PEDAGOG KADRLARNI QAYTA TAYYORLASH VA ULARNING MALAKASINI OSHIRISH MINTAQAVIY MARKAZI

TEXNOLOGIYAGA ASOSLANGAN TIL O'QITISH

2023

Nazarova G.P. katta o'qituvchisi, (PhD)



OʻZBEKISTON RESPUBLIKASI OLIY VA OʻRTA MAXSUS TA'LIM VAZIRLIGI

BUXORO DAVLAT UNIVERSITETI HUZURIDAGI PEDAGOG KADRLARNI QAYTA TAYYORLASH VA ULARNING MALAKASINI OSHIRISH MINTAQAVIY MARKAZI

TEXNOLOGIYAGA ASOSLANGAN TIL OʻQITISH

MODULI BO'YICHA

O'QUV-USLUBIY MAJMUA

Filologiya va tillarni oʻqitish: ingliz tili

Buxoro-2023

Modulning oʻquv-uslubiy majmuasi Oliy va oʻrta maxsus ta'lim vazirligining 2020 yil 7 dekabrdagi 648-sonli buyrugʻi bilan tasdiqlangan oʻquv dasturi va oʻquv rejasiga muvofiq ishlab chiqilgan.

Tuzuvchi: G.P.Nazarova - katta o'qituvchisi, (PhD).

Taqrizchi: Z.I.Rasulov – filologiya fanlari nomzodi, dotsent.

O'quv -uslubiy majmua Buxoro davlat universiteti Ilmiy Kengashining qarori bilan nashrga tavsiya qilingan (2022 yil "30" dekabrdagi 5-sonli bayonnoma)

МУНДАРИЖА

I. IS	SHCHI DASTU	IJ R	••••••	5
II.	MODULNI	O'QITIShDA	FOYDALANILADIGAN	INTERFAOL
TA	LIM METOD	LARI		10
III.	NAZARIY MA	ATERIALLAR		15
IV.	AMALIY MA	SHGʻULOT MA	TERIALLARI	22
V. (GLOSSARIY	•••••	••••••	83
VI.	ADABIYOTL	AR ROʻYXATI .		120

I. ISHCHI DASTUR

Kirish

Texnologiyaga asoslangan til oʻqitish moduli til bilish darajasini baholash tamoyillari, baholash mezonlarini yaratish va ulardan samarali foydalanish, baholash va material toʻplash, kommunikativ va vazifaga asoslangan til oʻrgatishda baholash mezonlarini qoʻllash, alternativ baholash, sinfni tadqiq qilish, fidbek berish, oʻz oʻzini baholash, testlar yaratish usullari, test prinsiplari, audio matnlarni tanlash va matn xaritasini yaratish, tinglab tushunish, oʻqish, yozuv, gaplashish koʻnikmasi boʻyicha testlar taxlil qilish va yaratish koʻnikmasini shakllantirish masalalarini qamraydi.

Modulning maqsadi va vazifalari

Oliy ta'lim muassasalari pedagog kadrlarini qayta tayyorlash va ularning malakasini oshirish kursining **maqsadi** pedagog kadrlarni innovatsion yondoshuvlar asosida oʻquv-tarbiyaviy jarayonlarni yuksak ilmiy-metodik darajada loyihalashtirish, sohadagi ilgʻor tajribalar, zamonaviy bilim va malakalarni oʻzlashtirish va amaliyotga joriy etishlari uchun zarur boʻladigan kasbiy bilim, koʻnikma va malakalarini takomillashtirish, shuningdek ularning ijodiy faolligini rivojlantirishdan iborat.

Kursning **vazifalariga** quyidagilar kiradi:

- "Filologiya va tillarni oʻqitish: ingliz tili" yoʻnalishida pedagog kadrlarning kasbiy bilim, koʻnikma, malakalarini takomillashtirish va rivojlantirish;
- pedagoglarning ijodiy-innovatsion faollik darajasini oshirish;
- mutaxassislik fanlarini oʻqitish jarayoniga zamonaviy axborotkommunikasiya texnologiyalari va xorijiy tillarni samarali tatbiq etilishini ta'minlash;
- maxsus fanlar sohasidagi oʻqitishning innovasion texnologiyalari va ilgʻor xorijiy tajribalarini oʻzlashtirish;
- "Filologiya va tillarni oʻqitish: ingliz tili" yoʻnalishida qayta tayyorlash va malaka oshirish jarayonlarini fan va ishlab chiqarishdagi innovatsiyalar bilan oʻzaro integrasiyasini ta'minlash.

Kurs yakunida tinglovchilarning bilim, koʻnikma va malakalari hamda kompetensiyalariga qoʻyiladigan talablar:

Modul boʻyicha tinglovchilar quyidagi yangi bilim, koʻnikma, malaka hamda kompetensiyalarga ega boʻlishlari talab etiladi:

Tinglovchi:

- til oʻqitishning umumevropa standartlari talablarini;
- chet tilini oʻqitishning nazariy va kommunikativ yondashuv asoslarini;
- tilshunoslikda tizimli tahlil etish mexanizimlarini;
- til oʻqitish tamoyillari va metodlarini;
- oʻquv materiallarining qiyinchilik darajasini aniqlash va taxlil qilishni;
- chet tili ta'limida CEFR tamoyillarining o'rnini;
- kommunikativ kompetensiya tamoyillarini;
- kommunikativ va vazifaga asoslangan til oʻrgatishda baholash mezonlarini;
- tillarni masofaviy va ananaviy oʻrganish va oʻqitishda metodologik yondashuvlarni;
- raqamli texnologiyalarning imkoniyatlari va muammolarini;
- blended (aralash) ta'limning prinsiplari va amaliyotini;
- masofaviy va ananaviy darslarni integratsiya qilish va podkastlar, vikilar va bloglar kabi veb-texnologiyalarda oʻqish va yozish tajribasini *bilishi* kerak.

Tinglovchi:

- til oʻqitishga oid ilgʻor tajribalardan foydalanish;
- axborot texnologiyalarining zamonaviy vositalaridan foydalanib ilmiy-tadqiqotlarni oʻtkazish;
- til oʻrganish va oʻqitishda Web 2.0 vositalaridan samarali foydalanish;
- an'anaviy baholash va CEFRga asoslangan til kompetensiyalarini baholash tizimi oʻrtasidagi farqlarni aniqlay olish;
- oʻz ustida ishlab, fanning yangi tadqiqotlarini oʻqitish tizimini qoʻllash;
- til oʻqituvchilari malakasini oshirishda aralash ta'lim, zamonaviy qarash va yondashuvlardan foydalanish;

- pedagogik jarayonda muloqot uslublarini toʻgʻri qoʻllay olish *koʻnikmalariga* ega boʻlishi lozim.

Tinglovchi:

- til va nutq materiallarini tanlash tamoyillari, autentik manbalar bilan ishlash;
- til oʻqitish metodikasi boʻyicha oʻrgangan ma'lumotlarni amalda qoʻllay olish;
- tinglovchilarning bilish qobiliyatlarini baholay olish;
- oʻquv jarayonini rejalashtirish, baholash, fidbek mexanizmlarini amalga oshirish;
- tinglovchilarning oʻz-oʻzini baholashga qaratilgan portfoliosini ishlab chiqish *malakalariga* ega boʻlishi zarur.

Tinglovchi:

- me'yoriy-huquqiy hujjatlar asosida ta'lim va tarbiya jarayonini tashkil etish va boshqarish;
- filologiya va tillarni oʻqitish: ingliz tili sohasida kasbiy faoliyat yuritish uchun zarur boʻlgan bilim, koʻnikma, malaka va shaxsiy sifatlarga ega boʻlish;
- interaktiv multimedia vositalaridan foydalanish;
- o'zaro darslarni kuzatish va fidbek berish;
- chet tili ta'limida ta'lim texnologiyalarni qo'llash;
- ilg'or axborot-texnologiyalarida ishlash;
- videodarslarni tayyorlash;
- egallangan tajribani tanqidiy koʻrib chiqish qobiliyati, zarur boʻlganda oʻz kasbiy faoliyatining turi va xarakterini oʻzgartira olish;
- til oʻrganish va oʻqitishda masofaviy ta'lim va platformalarda tinglovchilarni baholash;
- chet tili ta'limida baholashga oid qarorlar qabul qilish *kompetensiyalariga* ega bo'lishi zarur.

Modulning oliy ta'limdagi o'rni

Modulni oʻzlashtirish orqali tinglovchilar ilgʻor xorijiy mamlakatlarda oʻqitishni tashkil qilishning xorijiy tajribalarni oʻrganish, amalda qoʻllash va baholashga doir kasbiy kompetentlikka ega boʻladilar. Soʻnggi yillarda xorijiy

tillar sohasidagi yutuqlar va istiqbollar oliy oʻquv yurtlaridagi ta'lim jarayonining mazmunini boyitishga xizmat qiladi.

Modul boʻyicha soatlar taqsimoti:

№	Modul mavzulari		Tinglovchining oʻquv yuklamasi, soat Auditoriya oʻquv yuklamasi jumladan		
			Jami	Nazariy	Amaliy mashgʻulot
1.	Mavjud tijorat va bepul dasturlar asosida multimedia materiallarini yaratish va ulardan foydalanish xususiyatlari.	4	4	2	2
2.	Internetni qoʻllashda asosiy koʻnikmalar: forumlar, konferensiya va hokazolar orqali bogʻlanadigan vebsahifalarni qidirish, yaratish va baholash. Podkastlar bilan ishlash, Vikilar va bloglar kabi vebtexnologiyalarda oʻqish va yozish tajribasi.	2	2		2
3.	Dars rejalari, elektron oʻquv materiallari, veb-sayt dizayni kabi kichik masshtabdagi loyihalarni yaratish va bajarish vositalari.	2	2		2
4.	Raqamli texnologiyalarning imkoniyatlari va muammolari. Vebsahifalar va veb-platformalarni yaratish va ulardan samarali foydalanish	2	2		2
5	Tillarni oʻqitishda blended (aralash) ta'lim Blended (aralash) ta'limda auditoriya va undan tashqarida texnologiyaning oʻrni.	2	2		2
6	Til oʻrganish va oʻqitishda multimediadan samarali foydalanish.	2	2		2

Aralash ta'limda mashq, vazifa va loyihalar. Til oʻrganish va oʻqitishda Web 2.0 vositalaridan samarali				
foydalanish.				
Jami:	14	14	2	12

NAZARIY MAShGʻULOT MATERIALLARI

1-Mavzu: Mavjud tijorat va bepul dasturlar asosida multimedia materiallarini yaratish va ulardan foydalanish xususiyatlari.

Til korporasiga kirish, moslikni ishlatish va matnni tahlil qilish dasturlaridan auditoriyada qoʻllash uchun til materiallarini yaratish.

AMALIY MAShG'ULOTLAR

- **1-Amaliy mashgʻulot.** Mavjud tijorat va bepul dasturlar asosida multimedia materiallarini yaratish va ulardan foydalanish xususiyatlari.
- **2-Amaliy mashgʻulot.** Internetni qoʻllashda asosiy koʻnikmalar: forumlar, konferensiya va hokazolar orqali bogʻlanadigan veb-sahifalarni qidirish, yaratish va baholash. Podkastlar bilan ishlash, Vikilar va bloglar kabi veb-texnologiyalarda oʻqish va yozish tajribasi.
- **3-Amaliy mashgʻulot.** Dars rejalari, elektron oʻquv materiallari, veb-sayt dizayni kabi kichik masshtabdagi loyihalarni yaratish va bajarish vositalari.
- **4-Amaliy mashgʻulot.** Raqamli texnologiyalarning imkoniyatlari va muammolari. Veb-sahifalar va veb-platformalarni yaratish va ulardan samarali foydalanish.
- **5-Amaliy mashgʻulot.** Tillarni oʻqitishda blended (aralash) ta'lim. Blended (aralash) ta'limda auditoriya va undan tashqarida texnologiyaning oʻrni.
- **6-Amaliy mashgʻulot.** Til oʻrganish va oʻqitishda multimediadan samarali foydalanish. Aralash ta'limda mashq, vazifa va loyihalar. Til oʻrganish va oʻqitishda Web 2.0 vositalaridan samarali foydalanish.

II. MODULNI OʻQITISHDA FOYDALANILADIGAN INTERFAOL TA'LIM METODLARI

ASSESSMENT

The measurement of the ability of a person, the quality or success of a teaching course. Assessment may be by test, interview, questionnaire, observation and so on.

BAHOLASH metodi

Shaxsning qobiliyatini, oʻqitish kursining sifati yoki muvaffaqiyatini oʻlchash va baxolash demakdir. Shuningdek, baxolash test, suxbat oʻtkazish, savol javob, kuzatish va xokazolar orqali amalga oshirish mumkin.

AUTHENTIC TASK

An authentic task is a task that native speakers of a language would do in everyday life. When learners do an authentic task they are doing something that puts real communicative demands on them. A task which replicates or resembles a real-life task, e.g. scanning an article for particular information; this may be contrasted with a task which is specifically designed for, and only relevant in, the classroom.

AUTENTIK VAZIFA

Mahalliy tilda soʻzlashuvchi kishi kundalik xayotida bajaradigan doimiy vazifalar boʻlib, til oʻrganuvchi ana shunday vaziyatlardan haqiqiy soʻzlashuvda foydalansa, samaraliroq boʻladi. Dars jarayonida tilni oʻrganishda yeal xayotda uchraydigan voqea-xodisalar ifoda etilgan matnlarni qoʻllash foydalidir. Autentik materiallar darsliklarda berilmaydi.

BRAINSTORMING

(in language teaching) a group activity in which learners have a free and relatively unstructured discussion on an assigned topic as a way of generating ideas. Brainstorming often serves as preparation for another activity.

AQLIY HUJUM uslubi

Bevosita jamoa boʻlib "fikrlar xujumi" ni olib borish demakdir. Bu uslubdan maqsad, mumkin qadar katta miqdordagi gʻoyalarni yigʻish, talabalarni ayni bir xil fikrlashdan holi qilish, ijodiy vazifalarni yechish jarayonida dastlab paydo boʻlgan

fikrlarni yengishdir.

CASE STUDY

It is about a person, group, or situation that has been studied over time. The case study method often involves simply observing what happens to, or reconstructing 'the case history' of a single participant or group of individuals (such as a school class or a specific social group)

"KEYS-STADI"uslubi

Bu uslub aniq vaziyat, hodisaga asoslangan oʻqitish uslubi hisoblanadi. Shuningdek, vaziyat bilan tanishish, axborotlarni umumlashtirish, axborot tahlili va har bir yechimning afzal va zaif jihatlarini belgilash demakdir.

CLUSTER

Is the task of grouping a set of objects in such a way that objects in the same group (called a **cluster**) are more similar (in some sense or another) to each other than to those in other groups (clusters).

TARMOQLAR uslubi

Fikrlarning tarmoqlanishi-pedagogik strategiya boʻlib, u talabalarning biron-bir mavzuni chuqur oʻrganishiga yordam berib, ularni mavzuga taaluqli tushuncha yoki aniq fikrlarni erkin va ochiq uzviy bogʻlagan ketma-ketlikda tarmoqlashni oʻrgatadi.

DISCUSSION METHOD

It demands that students come to class well prepared. Compelling them to think out their arguments in advance and to answer their peers' questions and counter arguments, it sharpens their powers of reason, analysis and articulation. It thus provides them with fundamental skills necessary for success in any discipline or profession.

BAHS-MUNOZARA

Usulida guruh a'zolari biror muammoni yechish maqsadida o'z g'oyalarini og'zaki taklif etadilar. Usuldan samarali foydalanish uchun ishtirokchilar muhokama predmetiga oid yetarli bilim va tajribaga ega bo'lishlari lozim. Bu usul kattalar ta'limida ko'proq samara beradi.

ICE-BREAKER

An activity to make learners feel less nervous or inhibited when they first meet.

"MUZYORAR" metodi

Qizdiruvchi, faoliyatga jalb qiluvchi mashq. Talabalarning oʻzaro tanishishi va ishchi muhit yaratish maqsadida qoʻllaniladi. Bu metodxonadagi ruhiy taranglikni yengish, guruxning shakllanish jarayonini tezlatish, muloqot va axborot almashinuvini yoʻlga qoʻyish, shuningdek, samimiylik va hamkorlik muhitini yaratishga yordam beradi.

INFORMATION GAP ACTIVITY

an activity in which a pair or two groups of students hold different information, or where one partner knows something that the other doesn't. This gives a real purpose to a communication activity. An information gap activity is an activity where learners are missing the information they need to complete a task and need to talk to each other to find it.

AXBOROT ALMASHISH METODI

Bu uslub shundayki, talabalar juft yoki ikki gurux boʻlib turli xil axborotga ega boʻlishadi, yoxud biri bilgan axborotni ikkinchi talaba bilmaydi. Bu esa suxbatlashish uchun xaqiqiy maqsad paydo qiladi. Bu uslub asosan chet tilida gapirish, muloqotga kirish uchun yordam beradi. Shuningdek, rasmlardan ham foydalanish mumkin.

INTERACTION PATTERN

Mode of work (individual work, pair work, group work) used in learning or teaching.

INTERFACILIK

Oʻzaro harakat qilmoq ma'nosini beradi. Oʻzaro harakat turlari: Oʻqituvchi-talaba; talaba-talaba; oʻqituvchi-talabalar; talalar-talabalar; talabalar-oʻqituvchi.

JIG-SAW ACTIVITY

A type of co-operative activity in which each member of a group has a piece of information needed to complete a group task. Often used in reading work when each learner or group of learners reads and understands a part of a text, then takes

part in pooling information to establish the meaning or message of the whole text.

"ARRA" METODI

Bu usulda asosan guruh boʻlib ishlanadi. Har bir guruh a'zosining qoʻliga matnning bir boʻlagi beriladi, soʻngra mazmunini oʻqib bilib olgandan soʻng, barcha qatnashchilar tomonidan butun matn tuziladi. Bunday metod oʻqitishni oʻrganishda qoʻllaniladi.

MULTIPLE-CHOICE

In testing or teaching: a device in which the learner is presented with a question along with four or five possible answers from which one must be selected. Usually the first part of a multiple-choice item will be a question or incomplete sentence. This is known as the stem. The different possible answers are known as alternatives. The alternatives typically include one correct answer and several wrong answers or distracters.

KO'P TARMOQLI TANLOV TESTLARI

Bu metod asosan, testda qoʻllaniladi. Oʻrganuvchi uchun tuziladigan testlardagi savolda 4 yoki 5 ta javoblar beriladi. Bitta berilgan savoldagi 4 yoki 5 ta javobining bittasi toʻgʻri boʻladi, qolganlari esa oʻxshash javoblar tariqasida beriladi.

PRESENTATION

The way which something is offered, shown or explained others. A formal monologue presents ideas, opinions or a business proposal.

TAQDIMOT

Axborot, nazariya yoki tamoyillarni talabalarga yetkazish maqsadida ekspert tomonidan oʻtkaziladigan tadbir. U turli (ma'ruza, savol berish, munozara yuritish) shakllarda oʻtkazilishi mumkin. Taqdimotning mazmuni uslub sifatida oʻqituvchiga koʻproq bogʻliq boʻladi.

WARM-UP ACTIVITY

An activity used to orient learners to a new topic or area of focus in a lesson.

"CHIGILNI YOZISH"

Darsga berilgan yangi mavzuni yoritish va talabalarni mavzuga jalb qilish

maqsadida qoʻllanadigan uslublardan biridir.

TRUE-FALSE ACTIVITY

It is a strategy of teaching students, where a teacher allows students to compare two different historical perspectives to the same question. It allows students to see differing opinions to the same problem and go about doing history. It is designed to add inquiry into the teaching of history.

"TO'G'RI-NOTO'G'RI"

Talabalarni oʻqitishda qoʻllaniladigan shunday yondashuvki, unda oʻ talabaga berilgan bitta savolni ikkita turli xil tomonini taqqoslashiga imkon yaratadi. Shuningdek, bu metod talabalarga bir xil muammoga turli xil berilgan fikrlarni koʻrib chiqish va tanlashga huquq beradi. Oʻqitish usulini yana takomillashtirish va mavzuni yoritishga yordam beradi.

GAP FILL ACTIVITY

A gap-fill is a practice exercise in which learners have to replace words missing from a text. These words are chosen and removed in order to practise a specific language point. Gap-fill exercises contrast with cloze texts, where words are removed at regular intervals, e.g. every five words.

NUQTALAR O'RNIGA QO'YISH

Bu usul asosan, talabalarni matn bilan ishlash jarayonida gaplarda berilgan nuqtalar oʻrniga kerakli soʻzlarni qoʻyish uchun ishlatiladi. Bu esa til oʻrganuvchi uchun tushirib qoldirilgan soʻzlarni mukammal oʻrganishlari uchun foydali. Bunday mashqlar koʻpincha yopiq matnlarda beriladi.

III. NAZARIY MATERIALLAR

CREATING DISCOURSE AND PRESENTATION PROGRAMS FOR LANGUAGE TEACHERS

The plan

- 1. The role of technology in teaching languages
- 2. Creating presentation programs for teachers
- 3. Presentation programs for teachers

Key words: global village, Google presentation, Prezi, Web 02 applications, Apple Keynote, Tellegami, Powtoon

Today the new technologies have transformed the world into a 'global village'. It is increasingly becoming clear that the global village would need a global lingua franca and English has emerged as the preferred language for global communication. Whereas languages have traditionally been taught from the viewpoint of their cultures, we will now have to think of new techniques and materials so that global language learners can meet the challenges of the emerging global civilization and use the global language for their diverse needs. For the last decade, advances in technology in the classroom have paved the way to a more engaging and modernized teaching. Educators are embracing improvements in traditional teaching and are very much willing to try new methods of imparting knowledge to students. Standard classroom lectures that use tried-and-tested presentation tools such as PowerPoint and other blackboard or whiteboard methods can now be upgraded into a more interesting, more effective, less expensive, and less time-consuming ways of presenting lessons.

The integration of traditional and modern methods of teaching, or blended education, improves efficiency in the classroom. Most students have unique learning styles, and this strategy can help cater to the individual needs of students. Blended learning styles vary, but they all involve the utilization of new tools in creating innovative, highly informative, and more engaging presentations that go beyond the basic slideshow. For years, PowerPoint has been regarded as the greatest choice for classroom presentations, but what else is out there?

We are now looking for other options and tools that offer better features when creating presentations.

- 1. Emaze. A growing online presentation software boasts a remarkable upgrade to the traditional PowerPoint presentation. Its easy-to-use interface lets you choose from a wide array of templates and create awesome visual learning aids, including 3D presentations in minutes, so you can provide your students a better learning experience. Since it is cloud-based, it also allows you to edit or update your presentations on any computer, mobile device, and other tech devices with an internet connection.
- 2. Google Presentation. If you are out looking for a fresher and seamless alternative to PowerPoint, Google Presentation might be the best choice. It has everything that PowerPoint lacks. It is equipped with a Google research tool that you can use if you need to conduct research about your presentation. The search bar has a drop-down menu that lets you specify the type of research or information you are looking for in terms of images, videos, quotations, etc. You can freely and accurately express yourself through its thousands of unique presentation themes, fonts, and color options for more creative control. It also features animations and video embedding capabilities you can use in designing your presentation, speech, and other significant projects. It's cloud-based but also gives you the option to work even when you are not connected to the internet just by enabling offline editing.
- **3. Apply Keynote.** When it comes to creating presentations, the most common software is Microsoft PowerPoint and Apple Keynote. Although PowerPoint reigned for years, it is not indicative of quality. Apple's Keynote can take your presentation to the next level. Here are some of its advantages:
- Keynote is simpler and easier to use. It is also available for PC or Chromebook users.

- PowerPoint's iPhone and iPad apps offer limited features. Keynote, on the other hand, lets you fully maximize its features so you can create, modify, and present your presentations anywhere once you download the app.
- You can sync your presentations on all your iOS devices. It means that even if you create your presentations on your Macbook, you can still continue or edit your presentation using your iOS devices on the go.
- You can quickly export your presentation to HTML, which automatically turns your presentation into a website.

Apple Keynote wins over Microsoft PowerPoint when it comes to compatibility, accessibility, and ease of use. At the end of the day, you can create quality presentations for your students to keep them engaged and to enhance their learning experience.

- **3. Prezi.** Prezi is another great tool you can use to create better presentations. Compared to other presentation software, Prezi is web-based and completely free. It allows you to create a presentation and manipulate content anywhere on the page. You can also opt to import your PowerPoint presentations if you want to add other features like dynamic text or movements to your images for a better visual presentation for your students.
- **4. Nearpod.** Nearpod is a great presentation tool for teachers. Its benefits include:
- Easy-to-use, interactive features that can bring the classroom to life.
- Teachers can easily create interactive classes using different multimedia content like images, videos, quizzes, polls, and other activities that are relevant to the lesson.
- Teachers can also monitor students in real time and allow distance learning.
 This means that students from anywhere can join your Nearpod learning sessions.
- It's compatible with different platforms and can work on any device.
- 5. Tellagami. Tellagami is a free app that you can use to create animated video

presentations with a character that resembles you. You can create tutorials and instructional videos to keep things interesting. Even when your students miss your class, they can easily access your videos, and it would feel like a face-to-face lecture.

6. Haiku Deck. Haiku Deck helps you focus on creating powerful presentations. You can unlock your creativity and use its fantastic charts, stunning graphs, incredible fonts, and amazing layouts designed by great designers worldwide. It also allows free access to millions of free common images you can add to your presentations. Millions of users prefer Haiku Deck for its simple-yet-seamless interface. Presentations can be saved in the cloud and accessible to users anywhere.

7. Powtoon. Powtoon is another online presentation software that allows users to create animated videos and presentations to capture students' attention and increase engagement. This undoubtedly helps students avoid unnecessary distractions and to focus on the discussion. The rapid changes in modern technology that are now deeply integrated into our society should be a marker that teaching, sharing of information, and imparting of knowledge should also evolve to keep up with the fast-changing times. These modern technologies are here to stay and will only keep on improving. It is imperative that both teachers and students embrace these changes and take advantage of the benefits. Do not stick to what's familiar. Explore other tools that can help you better reach your goals.

Educational technology is playing an important role in the English language classrooms in the context of globalization and as a result of the emergence of English as a global language. As such instructors cannot ignore educational technology altogether. However, it does not mean that instructors should be totally dependent on educational technology but they can incorporate the use of technology to teach as a way to add variety into classroom procedures so learners get encouraged and motivated and do not get bored. It could be a form of motivation for the learners and also the teachers themselves.

The World Wide Web is a rapidly evolving medium—Hydra-like in its ability to

replenish fading applications (e.g., bulletin boards) with more robust variations of itself (e.g., social media and social networking sites). And the Internet and World Wide Web are still taking shape. Though most of these new Web-based applications have yet to find a stronghold in teacher education, two in particular are worth exploring as potential distance education tools: Web 2.0 applications and immersive environments. Though these two emerging applications would seem, at first blush, to have little in common, they do indeed share several connections. First, they are creative and highly engaging media that, if structured well, allow users to have both individualized and collaborative learning experiences and tap into the collective wisdom of multiple sets of virtual colleagues. Next, they are applications with which many young people, including younger and novice teachers, are quite familiar and fluent. Finally, Web 2.0 applications and immersive environments are often used in tandem in order to exchange information, build teams, and strengthen team building among virtual partners. They also serve as a channel to provide induction, guidance, and support for new members of an immersive environment (Kopfler, 2009).

Web 2.0 Applications

The World Wide Web, like distance education itself, is referenced according to "generations." Web 1.0 is the first-generation, more "established" World Wide Web. Web 2.0, the second- generation Web, is a broad term that refers to the World Wide Web as a platform where users can not only access but also create and share content. (And yes, there is a Web 3.0 under development.) Since it can often be difficult to differentiate between the two Web generations, figure 6.1 attempts to outline these differences. The heart of Web 2.0 technologies is "social networking," the ability to connect and collaborate with networks of individuals or groups. Social networking occurs via the use of *social media*. Though social media are considered a subcategory of Web 2.0 applications, we would argue here that all Web 2.0 applications are in effect social media, since they all to some degree involve both content creation (using various media) and socialization around such

content/media.

Examples of some common education-related Web 2.0 tools include the following: **Blogs.** Blogs ("Web logs") are online journals usually maintained by one person, though several people can maintain a blog. Typically free, they allow subscribed users to read, comment on existing ideas, and share new ideas. The *Top 100 Education Blogs*157 is a Web compendium of the most frequently read education blogs. Blogger158 is an example of a free blogging tool.

Wikis. Wikis are akin to group journals. They allow multiple users to collaboratively create and edit webpages using a Web browser. The best-known example of a wiki is *Wikipedia*.159 Wikispaces160 and Wetpaint161 are free wikicreation tools.

Media sharing/file sharing. These are sites that allow users to post media (e.g., images and video), tag media, have conversations around media, and form interest groups. These are also often called "peer-to-peer" or P2P sites. Examples include Flickr162 and YouTube.

Social media. Social media are Web applications that use simple composition and publishing techniques allowing users to interact and communicate, as in the case of micro-blogging. Examples include Twitter163 and Facebook.164

Social bookmarking. Users annotate websites through "tags," share Web-based resources, and communicate and form communities around such resources. Examples include Digg,165 Stumble Upon,166 and del.icio.us.167

Conferencing. Web conferencing sites such as VYew168 allow users to meet and collaborate in real-time.

Location-based services. Available through the Global Positioning Service (GPS) function of mobile devices, these services or "applications" can be downloaded to smart phones or tablets. They pinpoint a user's geographic position as well as the position of others, and allow users to send text messages and communicate with one another. Two examples include FourSquare169 and Scoville.170 Far examples that are more powerful are Web 2.0 applications that allow users to view, edit, and use geographical data in a collaborative way from anywhere on Earth, such as

OpenStreetMap171 and Ushahidi.172

Data-visualization services. These sites, also available via apps downloaded onto a smart phone, tablet, or computer, allow users to generate, share, and communicate data in a variety of visual formats. One such example is Daytum.

Immersive Environments

One of the most recent and rapidly developing examples of Web-based teacher training and professional development is "immersive environments." As their name suggests, immersive environments allow people to become totally immersed in a self-contained artificial or simulated environment while experiencing it as real. Immersive environments can offer learners rich and complex content-based learning, while also helping them hone their technical, creative, and problem-solving skills. Because immersive environments are so rich and visual, users tend to be highly engaged.

There are numerous subcategories of immersive environments. Indeed, the whole taxonomy of immersive environments can be confusing for the layperson (and even for those involved in educational technology). Since immersive environments encompass a number of Web-based applications, the term means different things to different people. For example, immersive environments include virtual worlds (Najafi, 2009), virtual-reality programs, Web-based games, Multi-user Virtual Environments (MUVEs) and Massively Multiplayer Online Games (MMOGs).

Questions to check:

- 1. To what extent is technology important in teaching languages?
- 2. What presentation programs do you use in teaching?
- 3. What is the difference between PPT and Prezi programs?
- 4. What are the examples of some common education-related Web 2.0 tools?
- 5. What do you understand by immersive environments?

IV. AMALIY MASHG'ULOTLARINING MAZMUNI

DESIGNING MULTIMEDIA MATERIALS USING FREE AND CHARGED PROGRAMS

Activity 1. Read the following information. Prepare a short presentation What is Multimedia?

There are many definitions, altogether they almost all agree on the aspect that multimedia contains texts, graphics, animations, video and sound in an integrated way, the content can be structured and presented differently. One of the most crucial characteristics is the aspect of interactivity of the multimedia products. Rhodes and Azbell (1985, cited in Schulmeister 1997) distinguish three forms of interactivity:

Reactive interaction: Learners give responses on a presented stimulus. The order of tasks is determined very strongly and the individual influence on the programme is very small

Proactive interaction: Learners control the programme. The learners decide by themselves the order of tasks or where to go within the application.

Mutual interaction: Learners and programme are able to adapt to each other - as in virtual reality.

According to these, three interactivity levels the learners' level of control are rather different. At the reactive level, the producer/designer has total control over the content, its presentation, the sequences, the practice level. On the proactive and mutual levels, the control and manipulation are much more in the hands of the users. According to Reimann (1997), interactivity contains a broad range of possibilities for influencing the learning and content of information:

- -Manipulating objects on the screen by mouse activities;
- -Linear navigating: turn over forward/backward on the screen;
- -Hierarchic navigating: select sites/contents by using special menus;
- -Interactive help function. Such help function can be available by special menu buttons. Help functions are most effective if they are adapted to the topical

information presentation

Why Do We Use Multimedia in Education?

Using Multimedia for Knowledge. Construction Multimedia can be considered a learning tool and a means of communication. Within the learning situations, the multimedia products and on-line services can be used creatively and reflectively in order to prepare the students to deal with the new demands in the learning or networking society. Furthermore, multimedia can be used to foster learning regarding subject matters and cross-curricular topics. Present goals of education function as prerequisites for this use of multimedia in education. Of course, there are different perspectives on the conceptualization of the present goals of education. Important current goals of education are the following ones (Weinert, 2000): Construction of meaning fit and understood knowledge which means the development of a well-structured, disciplinary, interdisciplinary and daily-life-ori- ented, net-organized system of flexibly usable competencies, abilities, skills and content knowledge. Construction of applicable knowledge: How to transfer meaningful and under- stood knowledge into applicable knowledge? Construction of knowledge about learning (reflection metacognition of learning processes) is a very helpful and effective way to support the construction of meaningful and understood knowledge as well as applicable knowledge. This important competence enables students to be an expert of their own learning processes. Learning to learn means to find out and to apply specific successful ways and strategies in every subject. One aim is to increase the knowledge of every student about the idea of learning in itself and about his/her own memory Students can reflect and use metacognitions by asking the following questions: How can I control my own learning processes? How do I plan my learning? How do I divide a certain task into units? How can I observe myself when learning? How do I check and evaluate my learning results? What do I think, what learning is? For what? Why does learning (with multimedia) make sense?

Some Advantages of Using Multimedia in Education

Multimedia is very helpful and fruitful in education due to its characteristics

of interactivity, flexibility, and integration of different media that can support learning, take into account the individual differences amongst the learners and increase their motivation. The provision of interaction is the biggest advantage of the digital media in comparison with other media. Interaction refers to the process of providing information and response. The interactivity allows control over the presented content to a certain extend: learners can change parameters, observe the results or respond to choices offered. They can also control the speed of the application and the amount of repetition to meet their individual needs. Furthermore, the ability to provide feedback tailored to the tasks of the students distinguishes the multimedia computer from any other media without a human presence. However, many aspects need to be taken into consideration when using multimedia in education. Even if multimedia is spread over the world, there are not the same opportunities of students concerning access to learning material and hardware. In addition, the use of the multimedia by students needs to be supported by very skilled teachers in order to release the learning potentials. The teachers must, among the rest, be able to guide the students through the learning processes provide them with appropriate and effective learning strategies (metacognition).

Like the use of textbooks, the use of educational multimedia fosters teaching strategies where the teachers' role is not just an information provider but a guide, a supporter, and a facilitator. Multimedia allow for a variety of media usually combined in a meaningful manner. This gives the opportunity to use the digital computer to present ideas in different ways including by means of:

- -Images including scanned photographs, drawings, maps, and slides;
- -Sounds i.e. voice tracks, (heard) sounds and music;
- -Video, including complex procedures and 'talking heads';
- -Animation and simulations.

Often, presentations supported by attractive images or animations are more visually appealing than static texts, and they can support the appearance of emotions to complement the information presented. Multimedia can appeal to

many learning styles and multiple intelligences (Gardner) - some students prefer to learn by reading, some like hearing and some like watching, etc. In addition, the use of multimedia allow different ways of working - the students can decide on their own how to explore the materials and to use the interactive and collaborative tools. The students, thus, become actively involved in their learning processes. The students can adjust their own learning processes according to their abilities and preferences. They can work on their interests, repeat the learning as much as they want, and this can reduce embarrassment concerning their learning presentations. The use of a proper constructed multimedia can, thus, be tailored to the students' differences in social and cultural backgrounds, learning styles, learning rates and interests. The individual learning can promote active, self-directed learning where the students decide about the questions to answer or the themes to study. Multimedia application can also be used to facilitate group work. Small groups of students can work through multimedia applications together, that supports learning by improving dialogue between students.

Some Disadvantages of Use of Multimedia in Education

Self-regulated Learning. Some learners are not able to handle the freedom, hyper-based multimedia provides. Distraction. Often, confused presentations of the material can cause dis- traction of the user from the content because of conflicting messages. Furthermore, the most non-linear structure of the content in multimedia invites to follow the supplied links which can distract from the topic to be learned. The massive amount of information provided by the multimedia application may distract our attention during learning. Furthermore, the human short-term memory is limited; usually it can hold around seven pieces of information. When there are several media presented at the same time, the learner might need to selectively attend to some of them and to ignore others. This could result in ignoring important information. Moreover, humans are limited to use all channels available si- multaneously which might limit the full use of the potential of multimedia. Low interactivity. The interactivity between learner and multimedia application is still on a low level and much less than in human-human interactivity. No selective

feedback. Feedback is generally very limited within a computer-assisted learning package. Computers generally can not substitute for person-to-person teaching, only enhance encounters. Often, the feedback provided is just a right/wrong feedback, and it does not support in learning strategies or further content explanations. The multimedia application cannot identify individual needs or problems of the learner, so multimedia applications cannot respond like people. Simulations are not always enough. It may be important for students to have true hands-on experience. For example, studying insects in biology, it is necessary to go out in nature, to see insects living within their natural environments. Lack of skills - pupils and teachers. Many students, particularly mature-age students, may not have used computers before. There may be a degree of concern over using the medium, as well as simple skills that need to be acquired, such as typing or use of the mouse. Also teachers lack many skills which are needed to learn effectively with multimedia. Difficult to do. Creating audio, video and graphical material can be more challenging than creating an ordinary text. Time consuming. Both - the use of multimedia as an end-user and as a producer - is very time-consuming. Especially, the production of multimedia takes much time. Access. Not all students have appropriate access to hardware and software. This may limit the scope of the teaching. Social in/exclusion. Not all members of a society can be involved in the use of multimedia technology due to lack of access to the Internet or lack of software or hardware to make full use of the educational material on the web. Equipment problems. Hardware and software need to be configured in a way that their usage is as simple as straight-forwarded as possible. Multimedia re- quires more expensive computers to view than simple computer activities such as text production, etc. Bandwidth issue. A limited bandwidth means slow performance for sound, graphics, video causing long waits for download which can effect the ease of learning. Multimedia is not readily portable. Paper-based notes can be read everywhere, on the tram, at the beach, but web-based material or multimedia material is not so easy to bring with. Computer screens are not paper. Screens are not as easy to read as paper. If there are large chunks of information which need to

be read from top to bottom, it is probably best to view the documents on paper. Books and journal articles are still best to read in paper. Often technology may be used to search for the appropriate piece of information, with the user printing it out before reading it. In summary, the multimedia products can be used to represent and process various types of knowledge. They can be used as means of representation and communication of knowledge. The use of these products, thus, can foster the students' construction of their own knowledge. The students can construct knowledge and develop skills related to various subjects by accessing or producing digital representations of knowledge. In particular, they can develop literacy and other core competencies. For example, they can develop motivation for learning activities, communication abilities, social competencies as well as learning competencies, values and ethics.

Designing a Multimedia Application

Lehrer (1993) developed a framework for building hypermedia applications in the classroom. His framework contains four major processes:

- **I- Planning** This process demands from the learners to make different decisions on the major goals of the knowledge base who is the audience?, what should be learnt? topics and content of the knowledge base; relationships amongst the topics; interface design functions.
- II- Accessing, transforming and translating information into knowledge
 This process contains the following activities searching for and collecting
 relevant information; selecting and interpreting information sources;
 developing new interpretations and perspectives; allocating information to
 nodes and making decisions on the representation forms.
- III- 3 Evaluating the knowledge base. During this process, the course participants assess the work on different dimensions. They evaluate compromises in what was represented and how; they assess the information coverage and its organization; they must test the browser and application with users and consider feedback concerning the con- tent for integrating it.

IV- Revising the knowledge base. In this stage the course participants have to consider all feedback and revise their application, accordingly - correcting content errors and reorganizing and restructuring the content.

Activity 2. Create a presentation using Prezi.

Prezi is a web-based tool for creating presentations (called **prezis** for short). It's similar to other presentation software like Microsoft PowerPoint, but it offers some unique features that make it a good alternative. In recent years, it has become popular in schools and businesses. If you're looking to create a presentation that's a bit more eye-catching and engaging, Prezi may be for you.

How does a prezi work?

Most types of presentation software use a slide-based approach, where you move back and forth between individual slides, kind of like pages in a book. Prezi, however, uses a **canvas-based** approach. Instead of using slides, Prezi has one very large canvas that your presentation moves around on, zooming in and out to view various **frames**. This concept is much easier to describe with a visual aid, so we've embedded a sample prezi below. Simply select **Start Prezi**, then use the **arrows** at the bottom to navigate through the presentation.

Why use Prezi?

You might be wondering what makes Prezi different from other presentation software, like **PowerPoint** or **Keynote**. For one thing, Prezi is completely **free** to use. There are upgrades you can pay for to unlock additional features, but everything you need to create and share a dynamic prezi is available free of cost. Another great reason to use Prezi is that it is run entirely through your web browser, meaning there will be fewer compatibility issues than with other programs like PowerPoint. Your prezi will **always look the same**, no matter what computer you're viewing it on. Because of its unique presentation style, Prezi can use movement and metaphor to help communicate a point you're trying to make. If you want your audience to really feel a sense of space and distance between

locations, you could use a **map template**. Or maybe you want to illustrate how there's more to a certain topic or viewpoint than there appears to be. In this case, perhaps an **iceberg template** would be more effective.

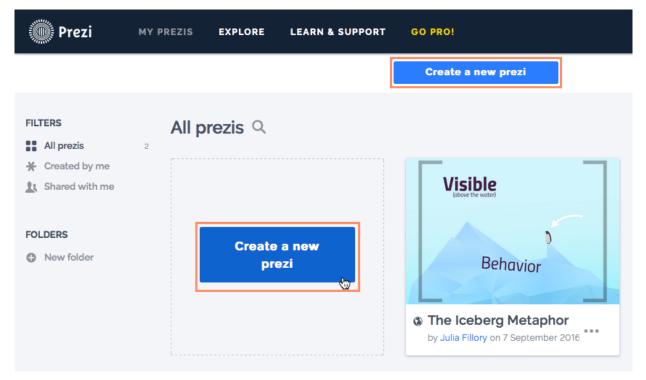
Creating a prezi

Before creating your very own prezi, you'll need to make sure you have an account. It's easy to sign up for one, and as long as you don't mind your presentations being available to the public, it's completely free. There are options to <u>upgrade your account</u>, which along with various features allows you to make your prezis private.

To create a new prezi:

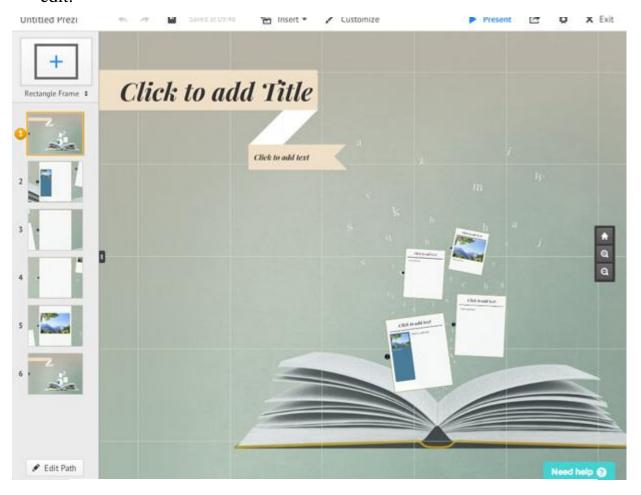
In our example, we'll be creating a prezi from a **template**. Templates are predesigned canvases from which you can build presentations. While it is possible to build a prezi from scratch, it's fairly time consuming and can be pretty difficult. Prezi offers a variety of templates to fit most presentation needs.

1. From the Prezi Dashboard, click **Create a new prezi**.



2. A new tab will open with a **Choose your template** menu. Select a template you want to use, then click **Use template**. In our example, we'll be using the **Literature** template.

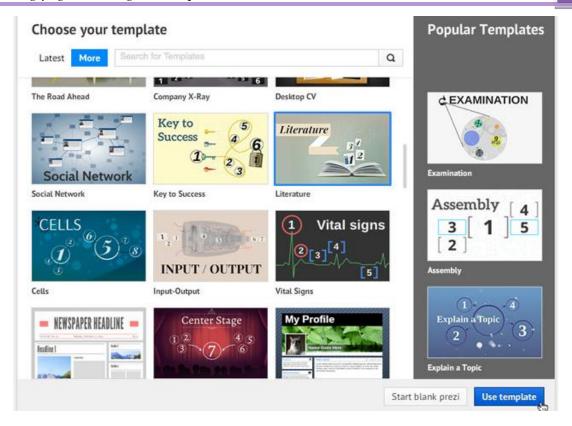
3. A prezi with the template you've selected will appear, ready for you to edit.



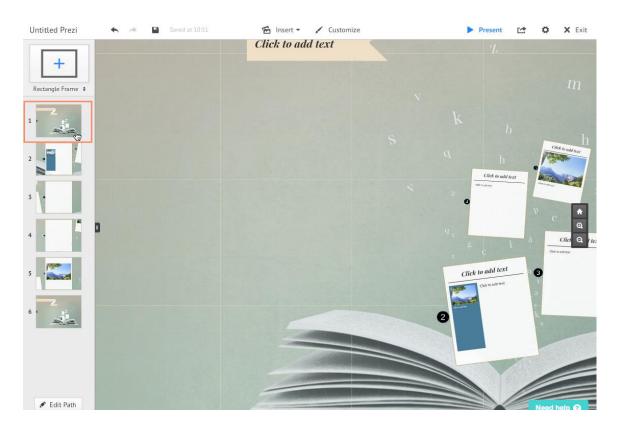
Getting to know Prezi

Before we move forward with editing our first prezi, let's get to know Prezi's interface. It probably looks different from other presentation software you may have used in the past. While Prezi is relatively simple to use, its interface has several features you'll want to become familiar with.

Click the buttons in the interactive below to become more familiar with the Prezi interface.

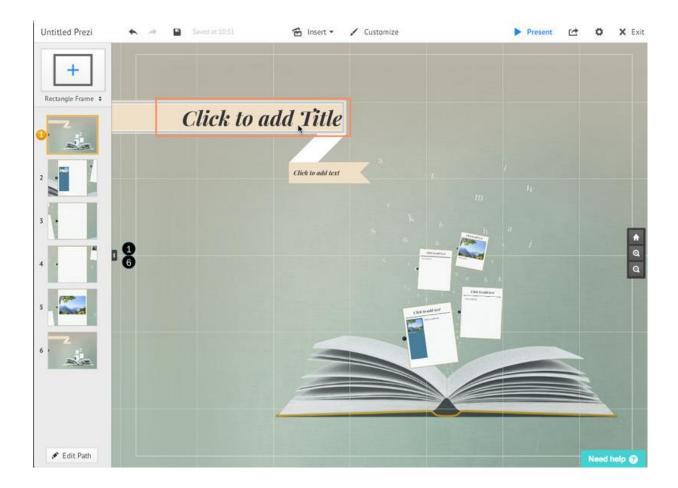


To edit placeholder text:

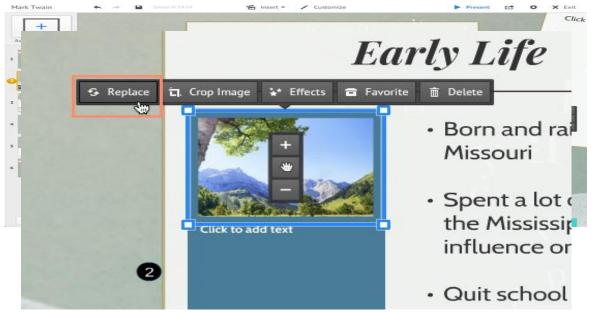


Prezi templates have preset frames, as shown in the frame navigation pane.

Within these frames, there's something called **placeholder text**. This is text you can replace with your own content.

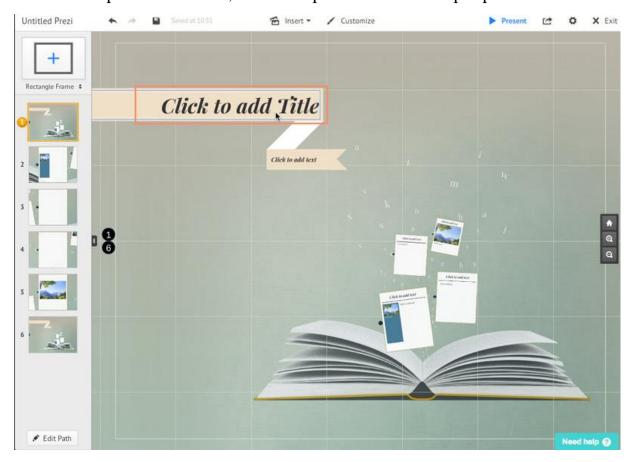


- 1. Click the **first frame** in the frame navigation pane. The screen will then zoom in or out to show you how the frame will appear in your prezi.
- 2. Click any of the **placeholder** text and start typing to replace the text. In our example, we'll change the **title**.
- 3. Click the next frame. Prezi will then zoom in to that frame, and you can edit the placeholder text there. Continue working through each frame until all text is complete.



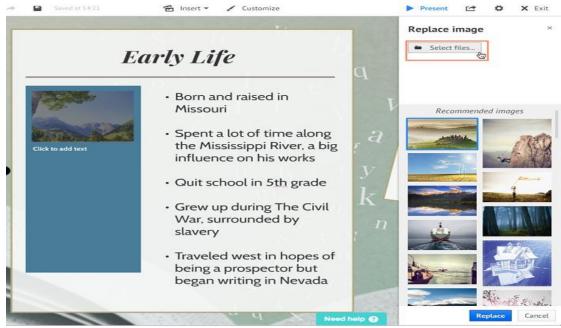
replace images:

In addition to placeholder text, some templates include sample pictures in certain

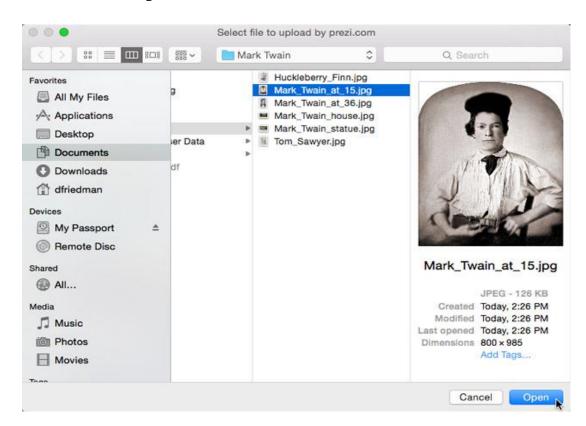


frames. You'll probably want to replace these with pictures more relevant to the content of the prezi you're creating.

1. Click the picture you want to replace, then select **Replace**.



- 2. A **Replace image** pane will appear on the right side of the window. You can either choose from recommended images or upload one of your own. In our example, we'll upload our own picture by clicking **Select files...**
- 3. In the menu that appears, locate and select the image you want to use instead, then click **Open**.



4. The picture will be replaced.



5. Continue going through frames until you've filled all of the frames with content.

Working with frames

As mentioned previously, Prezi uses things called **frames** instead of slides. When creating a prezi, it's important to know how to add, delete, and reorder frames to

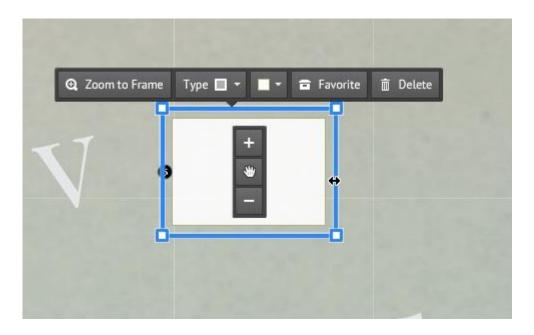


make sure your prezi is a good fit for the information you want to communicate.

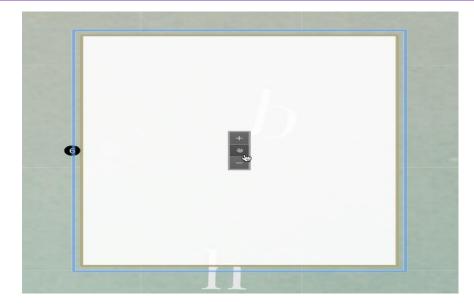
Adding frames

Sometimes a template may have less frames than you need for everything you'd like to include in your prezi. Luckily, Prezi makes it easy to add frames to your presentation.

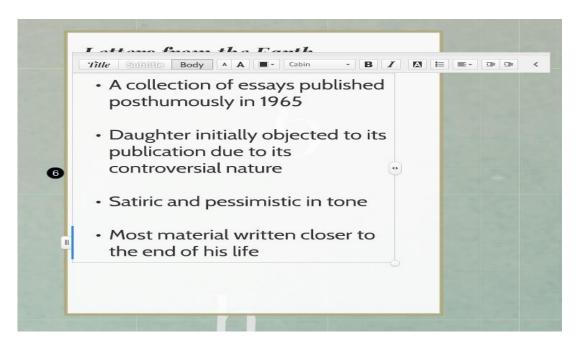
- 1. Locate and zoom in or out to the area where you'd like to add a frame, then click the **add new frame** button located at the top of the frame navigation pane. Below the add new frame button, you have the option of choosing from rectangle, circle, brackets, or an invisible frame.
- 2. A new frame will appear. Click and drag the **blue sides** and the **corners** to resize the frame to the shape you want.



3. Once you've finished resizing your frame, drag the frame to your desired location using the hand icon in the center. In our example, we want the new frame to be slightly smaller than the current final frame and placed next to it at a slight angle. This placement aligns with and continues the current path of this template.



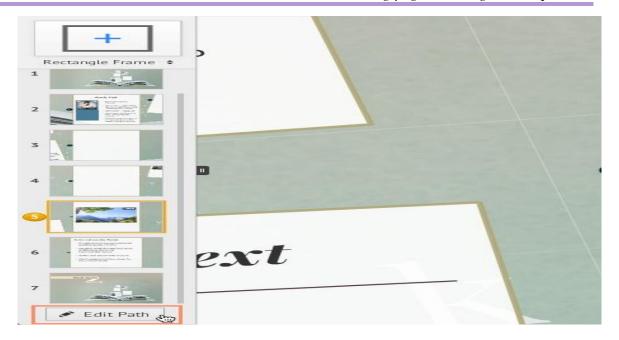
4. From here, you can double-click anywhere on the frame to bring up the text editor to type any information you want to include in your prezi.



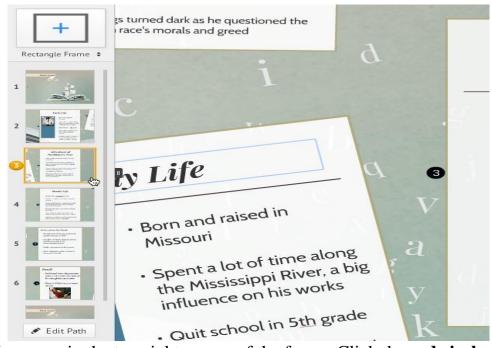
Deleting frames

Sometimes a template may have too many frames for the prezi you want to make, or you may not like one of the preset frames.

1. Select **Edit Path** at the bottom of the frame navigation pane.



2. Locate the frame you'd like to delete on the frame navigation pane and hover your cursor over it. You'll notice that a **red circle with an**



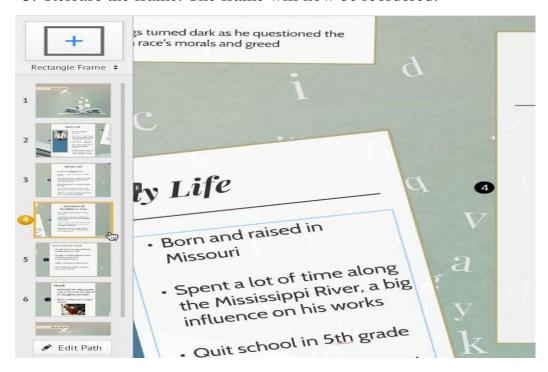
X appears in the top-right corner of the frame. Click the **red circle**.

3. The frame will be deleted from the path of your prezi.

To change the frame order:

Once you've completed your prezi, you may find that you want to reorder the frames.

- 1. In the frame navigation pane, select the frame you'd like to move.
- 2. Click and drag the frame to the position you would like to order it.
- 3. Release the frame. The frame will now be reordered.

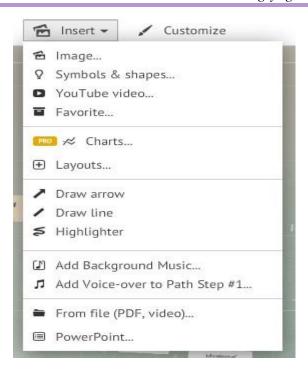


Customizing your prezi

In order to communicate an idea most effectively, you may want to include pictures, videos, or background music. You may also find that you want to change the color scheme of your prezi to better reflect the theme of your content. Prezi makes customizing things easy with the help of two buttons in the editor's interface: the **Insert** button and the **Customize** button.

Adding pictures, videos, shapes, and more

When creating your prezi, you may want to include more than just words to get your point across. Prezi has an **Insert button** that allows you to insert pictures, videos, shapes, and background music. These can help to both communicate ideas more effectively and to make your prezi more engaging to your audience.



Prezi provides a variety **pictures** and **shapes** for you to choose from, and you can include also include **YouTube videos**. You'll also find **premade layouts** for frames and paths in the Insert menu.

Changing the background and theme

Located at the top of the Prezi interface, the **Customize button** opens a pane on the right side of the window that lets you change the **background** and **theme** of your prezi. The Customize tool allows you to keep the physical layout and look of the template you chose while **changing only the color scheme and font**. There are more than 24 themes to choose from, and you always have the option of clicking **Revert to original** if you don't like the changes you've made.



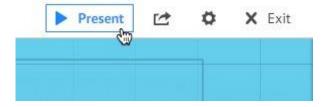
Lesson 3: Presenting with Prezi

Presenting with Prezi

Whether you've finished your prezi or you'd like to preview it while working on it, Prezi makes presenting easy to both access and navigate. While you've been creating your prezi, you've been using **Edit mode**. In this lesson, we'll go over how to open and use **Present mode**. In Present mode, all of the menus and tools from Edit mode will be gone, leaving only the frames you've created.

To switch from Edit mode to Present mode:

If you're working on a prezi and you want to preview how it will look when you present, simply click the **Present** button in the top toolbar.

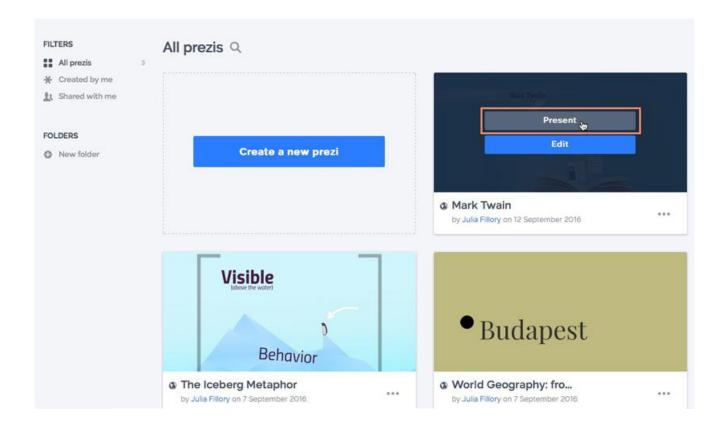


This will open your prezi in **Present mode.** You'll be able to switch between your frames and zoom in and out of the areas of your choice. To switch back to Edit mode, simply press the **Escape** key.

To open your prezi in Present mode from your Prezi dashboard:

You can also open your prezi from your Prezi dashboard without having to enter Edit mode.

1. From your dashboard, hover over the prezi you'd like to open in Present mode. Click the **Present** button.



- 2. This will open your prezi in a new tab.
- 3. You can present it from the tab as is, or you can present it in full-screen view by clicking the **full-screen** button in the bottom-right corner of your prezi.
- 4. Your prezi will enter full-screen mode. Press the **Escape** key to come back to your prezi in a tab.



Navigating Present mode

While in Present mode, there are several ways to move between frames and navigate your prezi:

• Clicking the forward and back arrows: There are two arrows at the bottom of the screen. You can click these arrows to go along your prezi's path.



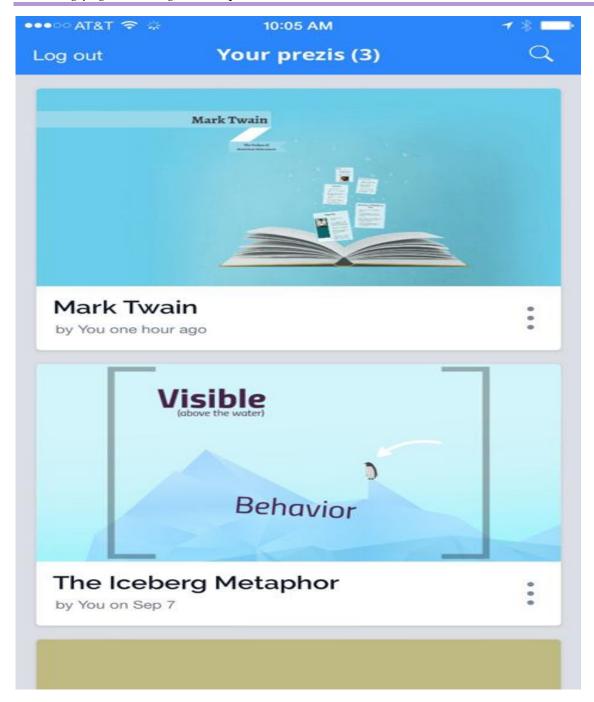
- Pressing the forward and back arrow keys: You can travel along your prezi's path the same as the above method by pressing your keyboard's arrow keys.
- Clicking where you'd like to view: You can click any object to zoom in on it, then click any empty space to zoom out again.
- Using the home and zoom buttons: The menu containing the home and zoom buttons is hidden automatically, but the menu will appear if you move your mouse to the right side of the screen. This menu will allow you to zoom in and out, while clicking the home button will zoom out to view your entire canvas.



To practice navigating in Present mode, experiment with the prezi below.

Presenting on a mobile device

If you're on the go and want to share or view your prezi from a mobile device, you can access <u>Prezi</u> on your device's web browser. There's also a Prezi Viewer app available for both <u>iOS</u> and <u>Android</u>.



You can also use your mobile device as a **presentation remote** or **clicker** to present your prezi. By using a mobile device, you won't be stuck behind a computer while giving your presentation. You'll have more mobility, and you'll be able to see your presentation the same way your audience does. However, this feature is only available if you have a **Pro account**.

AMALIY MASHG'ULOT 2

INTRODUCTION IN LANGUAGE CORPORA, USE OF DISCOURSE ANALYSIS PROGRAMS IN LANGUAGE TEACHING CLASSES

Activity 1. Read the following information and give a brief summary.

What is a corpus?

McEnery *et al.* (2006: 4) provide the following definition of what is normally meant by the word corpus:

The term corpus as used in modern linguistics can best be defined as a collection of sampled texts, written or spoken, in machine-readable form, which may be annotated with various forms of linguistic information.

Corpora provide a body of data, which is representative of the language at a particular point in time. The British National Corpus is perhaps the best-known example of a corpus with representative texts gathered from the 1980s-1993. Arising out of Quirk's Survey of English Usage, the BNC contains a 100-million-word text corpus of samples of written and spoken English from a wide range of sources. The project to create the BNC involved the collaboration of three publishers (with Oxford University Press as the lead collaborator, along with Longman and Chambers), two universities (Oxford and Lancaster) and the British Library. The creation of the BNC started in 1991 under the management of the BNC consortium and the project was finished by 1994. There have been no additions of new samples after 1994, but the BNC underwent slight revisions before the release of the second edition BNC World (2001) and the third edition BNC XML (2007). A new project has been launched, funded by the ESRC, in a collaboration between Lancaster University and Cambridge University Press, to create a further spoken corpus (http://cass.lancs.ac.uk/), the BNC Spoken Corpus 2014. 90% of the BNC is made up of samples of written language use. These samples were extracted from regional and national newspapers, published research journals or periodicals from various academic fields, both fiction and non-fiction books, leaflets, brochures, letters, essays written by students of differing academic levels, speeches, scripts and many other types of texts. The remaining 10% of the BNC is composed of samples of spoken language. The spoken corpus consists of two parts: one part is demographic, containing the transcriptions of spontaneous natural conversations

produced by volunteers of various age groups, social classes and originating from different regions. The second part comprises « context-governed » samples such as transcriptions of recordings made at specific types of meetings and events. These are sub-divided into Business, Leisure, Education and Institutional, and the latter contain extracts from courts of law, amongst other institutional contexts. The original recordings transcribed for inclusion in the BNC have been deposited at the British Library Sound Archive and the sound-files are now being linked to the electronic transcriptions by researchers at the University of Lancaster and may be accessed via http://bncweb.lancs.ac.uk. As the BNC is a large mixed corpus which set out to be representative of British English as a whole, it is unsuitable for the study of highly specific text-types or genres, as any one of them is likely to be inadequately represented. Those wishing to explore their specific conventions of particular genres would do better to compile a small corpus including only texts of those types.

A corpus is generally understood to be a collection of:

- authentic texts (including transcriptions of spoken data) which have been sampled so that they are
- representative of a particular language or variety of a language, and which are
- machine-readable.

What do we mean by language teaching?

Before turning to the more general question of what might be covered by the broad term language teaching and learning, let us consider the two general ways in which corpus material can be used in language teaching. Firstly, publishers and researchers can use corpus samples to create language-learning syllabuses and materials. The learners themselves do not have access to the corpus but the corpus informs the way that language is presented to students in learning materials. Secondly, the analysis of corpus data can be incorporated directly into the language teaching and learning environment. With this method, language learners are given the opportunity to categorize language data from the corpus and subsequently form

conclusions about the patterns and features of the target language from their categorizations. This method involves a greater amount of work on the part of the language learner and is referred to as « data-driven learning » or as « hands-on » corpus use (see Frankenberg-Garcia, this volume). Thirdly, in a « hands-off » approach, a tutor can use corpus examples to illustrate particular language points. This demands considerable insight and work on the part of the tutor. A large representative corpus like the BNC is particularly useful as a reference source when studying the use of individual words in different contexts, so that learners become familiar with the different ways to use particular words in context. As Hunston (2009) points out, however, explanations of this sort only accentuate our perceptions of the complexity of language rather than providing the type of straightforward « rule » that learners crave. Arguably, a representative corpus can show what company a word keeps (its collocations) and also its frequency, so that translators, for example, could select a word which is equally frequent in the target language as in the source language.

The theory and practice of language teaching and language learning is a vast field which it would be inappropriate to attempt to encapsulate here. In general, we can say that, since the 1960s, the field has moved from a focus on grammar-translation (the aim of learning a language was to read its literature) towards an interest in communicative competence (the aim is to be able to function practically in daily interactions of different types). This communicative revolution took hold in the 1970s and 1980s and there was a strong focus on « authentic » language which I will come back to in Section 1.3. Most language teaching materials take an eclectic approach which covers the acquisition of grammar and vocabulary in everyday and thematic situations which are relevant to the student body in question. Most syllabuses also highlight the four skills (listening, speaking, reading and writing) and are adapted to the level of the student (beginner, intermediate or advanced, to give but the broadest categories). Over the last 40 years, the focus in language syllabuses has shifted from grammar to situations, themes, functions and notions, to task-based learning, the lexical syllabus and more learner-centred

approaches built around needs analyses. It was, however, back in the 1980s that these developments were beginning to shape language teaching and learning. As Nunan (2007: 10) suggests:

The 1980s was the decade in which the principles of communicative language teaching, which had evolved in the preceding decade, began to gain traction in the classroom. We began to see curricula and materials that took as their point of departure an analysis of learners » communicative needs, rather than inventories of language systems. Needs analysis procedures and needs based programming emerged to support the development of differentiated curricula to meet different learner needs.

Theories of language learning and corpora came together particularly forcefully in the early 1980s when I began my French text-book writing career: the focus was on « authenticity », the provision of samples of language which were produced in the target culture in real communicative situations. This was due in part to a reaction against the unnatural model sentences favoured by the grammar-translation approach which were fabricated to illustrate particular aspects of structure. As far as I was aware, there was no material of an authentic sort of this type which was easily available for adaptation for the teaching of French in schools, though researchers/teachers from the University of Reading had been trail-blazers in this area in creating the *Enquête Sociolinguistique sur Orléans* Corpus in 1968.

What is authenticity?

Authentic texts are generally described as spontaneous, spoken, non-scripted texts produced in a real communicative situation. For a learner, however, in order to be « authentic », a text must be both relevant and accessible. As Widdowson (1998: 714-715) pointed out, language learning tasks "must take account of the interests, attitudes, and dispositions of the learners... the appropriate language for

learning is language that can be appropriated for learning". Rühlemann (2008: 685) remarks that:

authenticity in Widdowson »s sense does not depend on the text being invented by a materials designer or captured in a spoken corpus, but on the successful mediation through careful selection and motivating teaching.

The notion of authenticity, then, is not something which is inherent to the text but is a negotiation between the teacher and the learners. Authentic materials were expected to be not only relevant but also motivating for students.

The exploitation of authentic material is being increasingly recommended both because of the obvious relevance of such things as menus and tourist information brochures and for the effect they have on students » motivation. It has been shown that motivation is one of the factors – if not the factor – which is crucial in learning a foreign language. The national criteria for GCSE French stress that examination tasks should be of value outside the classroom and that the material used should be carefully selected authentic materials. (Beeching, 1985: 3).

Not only were the recordings collected for this particular purpose but the exploitation of them is carefully graded, and teachers are enjoined to adapt the way that the texts are presented to suit the level of proficiency of the students. The notion of « gist » listening was at that time quite a new one and the caveat is issued that the student is not expected to understand every word. Various tactics are deployed to ensure that students are supported in their understanding, however: the provision of vocabulary lists to be presented before listening, followed by « sign-post » questions, a range of multiple-choice, gap-fill, matching or other types of activity in English or in French. « Authenticity » is thus constructed as being both naturally-occurring French speech (and writing) and a negotiation which involves a careful consideration of learner proficiency and learner needs.

Activity 2. Watch the following video and do the quiz.

https://study.com/academy/lesson/the-role-of-discourse-in-language-development.html

What is the main focus of discourse?

Communication

O

Explicit instruction

С

Learning

O

All of the answers are correct

In the context of Stephen Krashen's theory, how does discourse aid language development?

- a. It helps with language learning
- b. It is a subset of explicit instruction
- c. Discourse cannot be applied to Krashen's theory
- d. It encourages language acquisition
 - 2. Which of the following is an example of a communication strategy?
- a. Acquisition
- **b.** Explicit instruction
- c. Circumlocution
- d. Discourse

What Is Discourse?

Whenever you communicate with someone about a topic, either in writing or speaking, you are participating in **discourse**. Since communication happens all the time, discourse is a huge part of our everyday lives. It's absolutely vital, especially as part of the language learning process.

There are two overarching types of language instruction. The first is **explicit**, or formal instruction. This is probably the type of instruction you think of automatically that involves vocabulary lists and looking at specific tenses or conjugations. The second is **implicit**, or communication-based instruction. When

using discourse as a tool in the classroom, it falls under the implicit instruction umbrella because the focus is on fluid communication rather than specific grammar or a subset of vocabulary.

Language Acquisition

There has been a lot of research about language acquisition. One of the most famous theories on the topic is one by Dr. Stephen Krashen, from the University of Southern California. As part of his Theory of Second Language Acquisition, he argues that there are two systems involved in language learning: acquisition and learning. **Acquisition** is a product of subconscious processes, such as what occurs through implicit instructions, while **learning** is a product of explicit instructions.

What Krashen's theory tells us is that discourse, as part of implicit language instruction, actually plays a different role in language learning than explicit instruction. The emphasis in discourse is communication. As students practice more discourse, their language use becomes more fluid. Discourse also helps them practice communication strategies for when they need to discuss a concept they are less familiar with.

Strategies

Whether you're communicating in your native language or a second language, sometimes you are going to want to talk about something that you just don't have the words for. In these situations, people fall back on different communication strategies to get their point across. These can include paraphrasing, substitution of a known word or phrase, or circumlocution. **Circumlocution** is when you go the long way around the concept. For example, if you didn't know the word "blueberry," you might say 'small blue round fruit that grows on bushes.' It takes more effort, but with circumlocution you can use words you do know to get the point across regarding a word you don't know.

With more discourse and communication practice, the need for these strategies dwindles. However, regardless of your fluency in a language, there will always come a time when you need to use them. That's why it is important to practice them as part of fluid communication, so that you can continue your conversation even if you can't find exactly the right word.

Discourse in the Classroom

Discourse is a useful tool in both native and second language classrooms. In either case, the communication strategies tend to be the same, and implicit instruction is equally important for any language learning. In a classroom setting, of course, it's best used to compliment explicit instruction. Communication activities can easily be tailored to suit the topic being taught at the time.

Activity 3. Read the following article by Dr Nicola Woods, University of Sussex on the topic of "Learning and teaching discourse analysis" and write a review.

The most widely used online corpora. **Tour** (**new: Nov 2020**), overview, search types, variation, Virtual Corpora, corpus-based resources.

The links below are for the online interface. But you can also \bigcirc download the corpora for use on your own computer.

Corpus (online access)	Downl oad	# words	Dialect	Time period	Genre(s)
iWeb: The Intelligent Web-based Corpus	•	14 billio n	6 countrie s	2017	Web
News on the Web (NOW)	•	11.4 billi on+	20 countrie s	2010- yesterday	Web: News
Global Web-Based English (GloWbE)	•	1.9 billio n	20 countrie s	2012-13	Web (incl blogs)
Wikipedia Corpus	•	1.9 billio n	(Various	2014	Wikipedia
Corpus of Contemporary American English (COCA)	①	1.0 billio n	America n	1990-2019	Balanced
Coronavirus Corpus	①	717	20	Jan 2020-	Web: News

		million+	countrie s	yesterday	
Corpus of Historical American English (COHA)	①	400 million	America n	1810-2009	Balanced
The TV Corpus	•	325 million	6 countrie s	1950-2018	TV shows
The Movie Corpus	•	200 million	6 countrie s	1930-2018	Movies
Corpus of American Soap Operas	•	100 million	America n	2001-2012	TV <u>s</u> hows
Hansard Corpus		1.6 billio n	British	1803-2005	Parliament
Early English Books Online		755 million	British	1470s-1690s	(Various)
Corpus of US Supreme Court Opinions		130 million	America n	1790s-present	Legal opinions
TIME Magazine Corpus		100 million	America n	1923-2006	Magazine
British National Corpus (BNC) *		100 million	British	1980s-1993	Balanced
Strathy Corpus (Canada)		50 million	Canadia n	1970s-2000s	Balanced
CORE Corpus		50 million	6 countrie s	2014	Web
From Google Books n- grams (compare)					
American English		155 billion	America n	1500s-2000s	(Various)
British English		34 billion	British	1500s-2000	(Various)

AMALIY MASHG'ULOT 3

USE OF INTERNET IN TEACHING: ORGANIZING WEBINARS, ONLINE CONFERENCES

Activity 1. Read the following information and write briefly about the differences between web conferencing, webinar and webcast.

"Webinars," "webcasts," and "web conferencing" are all broadly similar online activities in that they involve web-based, face-based, real-time communication. But in terms of their specific purposes, they are quite different—primarily in terms of their purpose, size, scale, and degree of interactivity. *Thus, though they are similar, they are not identical.*

Web conferencing is a real-time, "face-based" meeting, conference, or training among people in different locations. Web conferences may or may not have a leader/presenter, and since web conferencing platforms generally support smaller numbers than webinar platforms (see below), they tend to be more collaborative and interactive than webinars and webcasts. Web conferencing platforms include products, such as RingCentral, and Voice over IP systems, like Skype, Google Hangouts, or FaceTime. Similar to webinar platforms, web conferencing typically integrates audio and video, has whiteboards, can be recorded, allows screen sharing and file sharing, etc. Web conferences are best for smaller groups and for one-to-one or one-to-small group interactions.

Webinars are quite similar to web conferencing in that they are essentially remote, live, virtual seminars, online conferences, or training web meetings with larger groups (like students dispersed across a district). While web conferencing tools are best suited for meetings, webinar technologies are best suited to simulate physical classrooms and accommodate large groups of people across dispersed locations. Webinars typically involve instructors, an audience and, ideally, a high degree of real-time interaction webinar between each. Some commonly used platforms/technologies include Adobe Connect and WebEx as well as free opensource platforms, such as BigBlueButton (reviewed below).

Webcasts are often conflated with webinars, but there's an important distinction. Webcasts are "web broadcasts," and like broadcasts, they can reach the largest size audiences. They are either (1) one-way video transmissions in which a presenter or instructor presents audiovisual information via a web-based platform live to a very large audience (thus with almost no interaction or (2) a broadcast of pre-recorded webinars via video (for example, an MP4 file) over the internet. Thus, unlike which (theoretically) interactive webinars. are and involve two-way communication, webcasts use one-way communication (presenter-audience) and, like all forms of broadcast, tend toward didactic and passive learning. A good rule of thumb is that webinars are about instruction and webcasts are about content.

Though by far the least interactive of the three, webcasts have been traditionally popular educational tools because they are multimodal (using text, audio, and video), can be archived and viewed at the learner's convenience, and they can push out content to a much larger audience [1].

Figure 1 summarizes some of the key features of web conferences, webinars, and

Online activity	Good for:	Synchronous /Asynchronous	Reach	Degree of Interaction
Web conferencing	Meetings Brainstorming, interaction, collaboration One-to-one/one-to-small group presentations Flexible interactions	Synchronous	Small groups	Very high
Webinar	One-to-many presentations Virtual classrooms Teaching/presenting to multiple groups/multiple locations Structured lessons/presentations Virtual verbal discussions	Synchronous	Very large, dispersed groups	Variable: Webinars can be highly interactive if planned well. However, many end up being oneway transmission of information.
Webcast	Presenting information and content Reviewing information Convenience—Unlike web conferences and webinars they are can be viewed at a time convenient to learner	Asynchronous	Very large and more geographically dispersed audience	Very low

webcasts.

Webinar Platforms. Most webinar platforms do more or less the same things. They have a speaker (or speakers) who present information, typically via PowerPoints or shared videos, to a group of learners. Technically, most platforms have integrated group video, audio and instant messaging (chat); screen sharing and whiteboards; allow for custom branding (a school district logo, for example);

and, can be recorded and archived and stored in the cloud (for example, YouTube) for later viewing as a webcast. Every webinar platform that I know of requires a "host" who sets up the webinar and invites attendees (through a URL or code). Functionally, most webinar platforms allow learners to comment, ask questions, "raise hands," share their views (often through polls), and engage in ongoing chats (discussions). The differences among different types of webinar platforms are customization, features, and the number of seats (learners) allowed, which means differences in pricing. Almost all companies will offer free trial versions. (If you can, it is well worth taking advantage of this.) Some, like WebEx and Adobe Connect, will set up "persistent environments" or "classrooms" you can keep going back to, which have a stable URL and a common look and feel. Most have common language versions (Spanish, French, Russian, Arabic). Many will *not* offer customer support, so you'll need trained administrators to run your webinar.

Specific Webinar Tools. There are tons of webinar platforms that schools and universities can use; GoToMeeting, EzTalk Webinar, and WebEx are all popular webinar platforms, but there are tons more. I'll focus here on the 3 webinar platforms I know best: Adobe Connect, Zoom, and BigBlueButton.

1. Adobe Connect

Adobe Connect is a powerful and versatile webinar platform that supports 100-1000 seats (attendees) as well as multiple presenters who can share screens. I don't know of any webinar platform that does as much as Adobe Connect. But, because it does a lot, it costs a lot. Adobe Connect currently offers free 90-day access.

Adobe Connect's drawbacks are the flip side of its power and versatility, which make it more expensive, as mentioned, and complex to administer. You will need in-house support and a trained Adobe Connect administrator to run virtual classes. It does not have integrated audio so you'll need an external audio system.

Figure 2 outlines some of the main features of Adobe Connect.

Features Persistent environment (set up a room and keep going back to it) Record for archiving Chat (private and public) Transcript of chat Branding Randomizer – so you can call on participants randomly Cloud or desktop application Whiteboard Works on Windows or iOS Track attendees Can share PDFs and rich media at same time (but not MS Word) Mobile apps Registration Attendee status Reports and analytics Schedule meetings in Outlook Breakout rooms Customizable pods Different layouts

Figure 2: Adobe Connect

2. Zoom

Zoom has become the go-to webinar platform for many school districts and educational institutions during the coronavirus pandemic. And for a number of reasons, its popularity is well deserved: It is easy to use; has a simple, clean interface; has breakout rooms; you can self-host; and, it allows free 1:1 meetings and/or up to 100 participants for 40-minute sessions (soon to be 35). (For longer sessions and more participants, you must pay.) Its full pay plan is affordable. You don't need an administrator, as with Adobe Connect. It's easy to record sessions, and you can save sessions as video or audio files. Zoom also, unfortunately, has a number of security and privacy issues that should make potential users carefully consider whether it should be their de facto webinar platform. There include vulnerabilities in the way Zoom converts URLs into hyperlinks that hackers can use to collect your Windows login credentials and potentially access your desktop remotely. Further, one of Zoom's data-mining features allows participants to surreptitiously access LinkedIn profile data about other users—without Zoom asking for their permission or even notifying them that someone else was snooping on them—during a meeting.

Figure 3 outlines some of the main features of Zoom.

Features

- Desktop and application sharing
- Integrated audio
- · You can still participate by calling in or audio only
- Zoom .API provides a primary access point for third-party developers to securely interact with the Zoom platform and build private services and public applications on the Zoom App (e.g., Slack, HipChat)
- Works with Windows and iOS
- Customer support

- Global toll-free numbers
- Cloud-based and desktop application
 - Meeting scheduler
- Whiteboard
- 7 day free trial
- Generous pricing plan
- · Lots of good, free training resources
- Good for web conferencing, webinars, webcasts and podcasts
- To use, all attendees have to download Zoom application/plug in on their computers

Figure 3: Zoom

3. Big Blue Button

If your school or district has no technology budget or no line item for webinar platforms, you'd be well advised to explore Big Blue Button. Though not as common or well known as Adobe Connect or Zoom, Big Blue Button is a free open-source webinar and web conferencing (but not webcast) platform. (There is a paid version which allows you to record and download conferences.) BBB does require a fair bit of set up. It's a fairly robust platform, possibly residing between Zoom and Adobe Connect in terms of robustness. It has a host of apps and works well with Moodle. If your school or district is unsure about virtual learning, has a very limited budget, or is unsure about which webinar platform to use, Big Blue Button might be a good starting point.

Figure 4 outlines some of the main features of Big Blue Button.

eatures					
Developed for education	 Robust support community 				
Open source and open .API	 Lots of good, free training resources 				
Public and private chat	 Can be integrated with LMSs such as Canvas, Moodle and MOOC platform 				
Simple interface	such as Open EdX				
Share documents					
Multiuser whiteboard					

Figure 4: Big Blue Button

Webinar Tips

Teaching via webinars presents a number of logistical and pedagogical challenges. Thus, it's important to keep a few points in mind as you start to teach classes via webinars.

Differentiate

Web conferencing is good for small, intimate meetings. Webinar technology is better suited for large group interactions and events with robust audiences. Webcasts are good for blasting out content to a large group of learners.

• Plan, plan, plan

Webinars are more structured and require additional planning, scheduling and designing methods to make participants active. For your webinar, make sure you have an administrator who is registering students and making sure they can see and call in. You can do this 15 minutes before the webinar starts. Once students are registered, they can go to an online "lobby" area where they have a "guiding question" to think about and discuss before the webinar starts.

Remember, it's about the students, not the instructor

Unfortunately, a lot of our models of online learning have been "talking head" MOOCs or corporate webcasts that focus (literally) on the teacher. The most important thing we can do in teaching via webinars is to constantly focus on how we make this about students and how we can make learning as active as possible for students.

Channel silent films

If you've ever watched a silent movie, you'll see that facial expressions are highly exaggerated. Since the screen real estate in a webinar platform is so small, think about exaggerating your facial features so students can see when you are happy, agreeing, thinking, etc.

• Have a Plan B

The internet is showing some strain under the weight of all this virtual activity, so have a Plan B (for example, chat-based discussion or an alternative

asynchronous platform like FlipGrid) if your connectivity can't keep up.

Engage your students

Per the point above, it's easy for students to disengage during webinars, so make sure to keep them engaged through polling, questions, cold calling (Adobe Connect's randomizer can help here), discussions, small break-out sessions, and having students run part of the webinar.

Pedagogy

Running a webinar isn't as simple as opening the platform and talking. You'll quickly lose students if the webinar becomes transmission only. **Organization**

Particularly with multiple sites, there's a lot of organization that needs to happen. Make a webinar outline of the sequence of events and who does what; practice sessions before the webinar to ensure that slides and materials work, that audio works, that presenters can hear and be heard; and orient online learners to the webinar platform and to webinars in general.

• Online learning is better than this

As teachers scramble to "go online," we'll see a lot of bad online learning and virtual teaching because of the lack of time and preparation to plan and design.

Don't use this as your model of online and virtual teaching. It is better than this!

• Patience not perfection

The coronavirus has upended education and teachers everywhere are scrambling to get courses online. Virtual discussions are a substitute for face-to-face discussions and generally pale in comparison, but it may be all schools can do at the moment. It's important that teachers are patient and do not have overly high expectations. You'll have some "flat" webinars, you'll make mistakes, and you'll get better at this. You'll also learn some virtual-teaching techniques that you can take back to your classes when we all emerge from self-isolation.

Taken from [1] Burns, M. (2011). Distance Education for Teacher Training: Modes, Models and Methods.

AMALIY MASHG'ULOT 4

USE OF INTERNET IN TEACHING: WORKING WITH PODCASTS Activity 1. Read the following information and create a podcast.

Podcasts are digital media files (audio and video) that can be subscribed to and downloaded by listeners via RSS (Really Simple Syndication). The RSS technology enables to identify and download new entries automatically to an aggregator program, enabling automatic download of new podcasts once listeners have subscribed to the "feed" source (Abulencia, 2006; Frydenberg, 2006; Richardson, 2006; Kaplan-Leiserson, 2005). Once subscribed to a site for automatic download every newly MP3 file made available can be received and played directly on the computer or loaded onto a portable player such as MP3, mobile phone or PDA. It is also possible to podcast video. Podcasting is the method of distributing multimedia files over the Internet. The term podcasting results from the combination of two words: iPod, the popular digital music player from Apple, and broadcasting. We agree with Geoghegan and Klass (2005) point of view: "podcasting is not simply a new way to distribute audio recordings; it is a form of expression, of interaction, of community building" (p. 5). Due to its facility in editing and distributing, what started as a radio-style show over the Internet rapidly evolved to different uses (Richardson, 2006) and education is no exception. Principals can periodically record messages to community or teachers or even students, supervisors can record descriptions of their departments, language teachers can record and publish daily practice lessons that students can listen to at home or may download to their MP3 players, students can do oral histories, seminars or interviews, and the possibilities extend far from these few examples indicated by Richardson (2006).

Podcasts, originally coined from a combination of the words "iPod" and "broadcasts," have long since moved beyond their MP3-player roots. Some podcasts, such as *Serial* and *This American Life*, became well known even beyond podcast listeners, spawning true-crime listen-alikes and even TV shows.

Podcasts can take many forms. Some are like talk radio, where hosts converse unscripted about a topic. Others are documentarian, sharing information via scripts and high production values. Regardless, there are so many podcasts on so many topics, it's difficult to not find *something* fun, or interesting, or useful. Podcasts can also share diverse voices, many of which are usually overlooked.

Podcasts can be downloaded or streamed. Some shows have websites where you can download episodes. If you use a dedicated podcast app such as Pocket Casts, you can subscribe to podcasts and have episodes queue up for downloading or streaming as they're released.

The Benefits of Podcasts

Podcasts can be helpful for remote learners. For one, they're often entertaining. Some podcasts use music and sound to great effect, enhancing the information they share. Others rely on snappy writing and engaging hosts.

Podcasts are often short, which is particularly good for younger kids. While audiobooks and podcasts are similar, podcasts are more episodic and usually run for an hour or less. There's no need find a particular chapter of a particular audiobook.

Most podcasts are free, supported by ad messages or fan fundraising efforts. They're easy to embed or incorporate into learning-management systems, and students who have limited bandwidth can likely eke out a podcast stream or download a 15- to 30-megabyte file.

Podcasts + Assessment = ?

Podcasts can be used to deliver lecture content. Some podcasts talk about a single topic per episode, and you can find an episode that suits your lesson for the day. Students can listen to information and use it to supplement readings. They can write about how a podcast enriched their understanding of a text, comparing and

contrasting the two sources. For younger students, podcasts can be a way to increase literacy.

Likewise, you can find a podcast about a subject as it's been applied to the real world. For example, NPR's *Planet Money* talks about economics and news, combining the two concepts in ways that connect with society at large. In this case, students could create their own analyses, similar to a podcast episode or story.

If entertainment is a goal — with learning happening in tandem — perhaps students could take a metacognitive approach. They could write what they know about a topic beforehand, listen to a podcast and then write about how their understanding changed. They could even listen to the podcast with a critical ear, approaching the audio as "text" to be explored.

Accessibility Concerns with Podcasts

There is a downside to podcasts: by nature of the medium, they rely on audio.

Having audio-only lesson content could affect many students, such as those with auditory processing issues or those who are deaf or hard of hearing. Additionally, technology can still be a problem — does a student's home computer have speakers? — as can living spaces, which don't guarantee quiet spots for listening. Students who are non-native speakers of English or English as a second language (ESL) learners might find listening to audio without body language or visual cues challenging.

Many larger-scale podcasts offer transcripts to go with their audio. For these shows, all students can still have access to the core content of a podcast, and as such could still learn from a podcast assignment. Transcribed podcasts are particularly good for improving literacy. For smaller podcasts without transcripts, using a voice-recorder

tool such as Google Docs's mic or a transcription tool like Otter might be necessary.

If you're unsure of whether or not students will be affected, offer choice. Instead of making a podcast your sole means of delivering content, or the sole requirement for an assignment, offer other options. Captioned videos, slides, infographics — there are many ways to both share information and assess student learning in a mediarich way.

Using Podcasts as Part of Your Curriculum

There are a million different ways to incorporate podcasts into your curriculum. For every age group, subject and language, there's a podcast, so it's just a matter of finding the one that's right for your class and what you're trying to teach. Using podcasts in the classroom is a great way to really bring your lessons to life. Once you've found a podcast episode that aligns with your lesson, you have two options for listening:

- 1. Ask students to listen individually on their smartphones or tablets with their headphones, either in class or for homework.
- 2. Listen as a group in class.

For option number one, you can go one step further by uploading the podcast of your choice to Edpuzzle and embedding comprehension questions to keep your students engaged. You'll just need to download your podcast, run it through an online MP3>MP4 converter (a quick Google search will turn up plenty of options) and upload it into Edpuzzle.

That way you'll ensure that your students are actively listening and not spacing out!

If you decide to go with option number two, consider projecting the transcript for the podcast episode (if available) as you listen. Some great podcasts with transcripts include StoryCorps, This American Life and Serial.

In a fantastic article on podcasts in the classroom from The Atlantic, high school English teacher Michael Godsey stated: "I asked each of my own students to write down what they'd honestly like to do for the rest of the semester: read a good book together, listen to another podcast, or listen to a podcast with the words on the screen. Sixty-two voted for the latter, while just two voted for podcasts alone, and one for reading alone."

That's some powerful proof for using transcripts with your podcasts!

Great Podcasts for Students by Age Group

Podcasts for High School Students:

- Star Talk with Neil DeGrasse Tyson (science)
- Serial (criminal justice)
- Radiolab (science)
- StoryCorps (language arts)
- Stuff You Missed in History Class (history)

... and this is just a taste! Now all you have to do is start listening and planning your lessons. If you need any help in that department, check out all the podcast resources on Teachers Pay Teachers.

Have Students Create Their Own Podcasts

After you've introduced podcasts in the classroom and have your students hooked (and trust us, they will be!), it might be time to turn the tables and have them create their own podcasts. Just look at the success of the student podcasts contests held by The New York Times and NPR – the quality of the content is astounding! (And make sure you check out last year's winning entry in the NPR contest, "Murderous Mary and the Rise of Erwin.") A fantastic alternative to a research paper, a podcast will inspire your students and bring their research to life. By using some simple free software or the built-in microphones in their smartphones or laptops, your students can become podcast hosts in no time.

AMALIY MASHG'ULOT 5 PRACTICE OF READING AND WRITING IN WEB-TECHNOLOGIES

Activity 2. Answer the following questions

- 1. Have you ever used any technology for teaching reading and writing?
- 2. Do you think reading and writing can be improved with the help of technology? How?
- 3. Which of the following tools do you think is suitable for your learners to teach writing and reading?

Reading and writing are two of the most fundamental skills for students to learn, however, many **ed tech tools** segregate the two, focusing on just reading or writing. When you combine, into one app or tech tool, you get a powerful combination that prepares your students for success. These five tech tools are some of the only ones available that combine these two successfully, providingan engaging and educational experience for students. Bring them into your classroom and empower your students to read more and write better.

Kidblog

While reading blog posts aren't considered a traditional method of reading, it's one that's becoming more and more popular for everyone, kids and adults alike. Allowing students to both read and write within the blogging medium not only gets them excited to learn but prepares them for a digital future. Many writers in your classroom may end up as professional bloggers or web content producers, and this classroom experience may be what steers them in that direction. With Kidblog, a safe and simple blogging platform for the classroom, students can write their own blog posts, spend time reading their peers' posts, and comment on them to start a discussion.

This is a great tool for free reading and writing time; use these 50 creative blog prompts to spark your students' creativity.

What makes it special: Unlike other blogging platforms, Kidblog is completely education-based. As such, it's integrated with Google Drive and Google Apps for Education. It also comes integrated with Common Core standards, lessons and unit plans, and allows students to create their own personalized themes.

Whooo's Reading

Whooo's Reading inspires students to read and write every single day. Being able to earn Wisdom Coins and Badges, and "like" and comment on their peers' responses in their Facebook-like newsfeed, motivates students to read more than ever before. With a variety of comprehension question options, including the book review, question response or blog post, students are also excited to write. Not to mention, all of these writing options encourage students to use higher-level thinking. Other important writing features include:

- Teacher scoring
- Immediate and private teacher feedback
- The option to re-write their response for a higher score
- Speech-to-text input option

What makes it special: With this tool, teachers can track student progress, mastery of standards, reading comprehension and writing proficiency. They can also set reading and response goals to keep students on track with their independent reading.

PocketPhonics

This app, geared toward younger students who are just learning to read and write, does a great job of combining the two in an engaging way. Letter sounds are taught in small groups and include audio and physical cues for learning—students will hear the sounds and can also trace the letters with their finger or a stylus. The app includes a spelling game and sends and weekly update emails for parents and teachers.

What makes it special: Independent research found that students learn nine times faster using PocketPhonics compared to a classroom lesson, as cited on their website.

Bookopolis

While this student-only reading website isn't directly promoting, nor does it require, student writing, it still encourages it in one special way: students can write book reviews that are seen by their peers in the classroom and around the country. This review writing is what leads to more reading. Education professionals will agree that reviews from students' peers are the most influential. With Bookoplis, students have access to thousands of these reviews, in addition to the "Book Quest," which takes them on a journey to discover their next favorite book.

What makes it special: With Bookopolis, where students are writing reviews that can be seen by students outside of their classroom, students are given an authentic audience to write for.

Gerty

This e-reader, iOS app is perfect for encouraging students to both read and write on their own time, as opposed to being assigned it.

With Gerty, students are able to open ebooks in EPUB format and access a variety of unique features that encourage them to become better readers and writers. Some of these features include:

- A built-in journal, for writing thoughts while reading
- A timeline for adding definitions they want to learn or look up
- One-tap Dropbox access
- In-book reading timers
- Sound effects

What makes it special: There are dozens of features that can make a significant impact in the classroom, but one that's especially helpful for students is the daily reading and journaling reminder. These are a small sampling of a small group of

tech tools and apps that bring reading and writing together in an effective and engaging way. Consider bringing them into your classroom, empowering your students to read and write as much as possible. See more recommended classroom ed tech tools here.

Newsela



Newsela is a great way to incorporate it into your curriculum. It is chockfull of informational articles on topics such as war, health, science, kids, law, money, arts, and sports. Each article can have the Lexile level adjusted for readability. If it's too hard, adjust it down. If it's too easy, go harder. The kids get the same information. Some of the articles even have quizzes at the end.

Activity 2. Watch the following video and write a brief summary.

https://www.ldatschool.ca/video-building-reading-skills/

Activity 3. Choose one of the following websites and prepare a presentation.

Digital storytelling websites

1- Story Wars

Good for collaborative writing on digital storytelling projects.

2- Story Bird

Join a creative community of story tellers and get inspired to write your own stories.

3- Zimmer Twins

'The Zimmer Twins website invites kids to create and share their own animated stories.'

4- StoryWeaver

It offers a great story creator tool that allows students to write their own stories and share them with others.

Websites to publish students writing

1- Book creator

An excellent educational platform to help students create, published share their writing creations.

2- Google Sites

Share your writing in a website you create and publish on the web

3- Google Docs



Another great option to publish one's writing in various formats including a web link.

4- Edubblogs

Share your writing in the form of blogposts.

AMALIY MASHG'ULOT 6

TYPES OF LEARNING: BLENDED LEARNING, CASE-STUDY, DISTANCE LEARNING

Activity 1. Read the following information and write a brief summary.

Blended or hybrid learning involves a blend of face-to-face and online instruction—from 30 to79 percent of the latter (see figure 5.1). As online learning has increased in popularity, so too have blended learning programs and "dual-mode" institutions, as many formerly exclusively face-to-face programs for teacher pre-and in-service professional development offer an online component. Dual-mode universities are those that allow teacher candidates to learn the craft of teaching online as well as in person.

Models of Blended Learning

There is not one model of blended learning but several. Horn & Staker (2011) identify six models of blended learning that institutions can employ:

- 1. Face-to-Face Driver Model: The face-to-face teacher delivers most of the curriculum and uses online materials to supplement. This model often occurs in a computer lab.
- 2. Rotation Model: Students rotate equally between face-to-face and online components of the course on a fixed schedule. They have the same teacher for each component. The online component occurs remotely.
- 3. Flex Model: The online component delivers most of the information, with an inclass teacher present to provide flexible support as needed. This model includes lots of individual and small-group, face-to-face tutoring.
- 4. Online Lab Model: The online teacher delivers the course in a brick-and-mortar classroom, but with paraprofessional or teacher aides supervising students.
- 5. Self-blend Model: Individual students take online courses à la carte. Online learning is remote, but traditional instruction is brick-and-mortar.
- 6. Online Platform Model: Instruction and materials are all online, with students taking the course remotely. Weekly check-ins with a face-to-face supervisor or

teacher are required.

Bersin (2004) identifies two main models of blended learning:

- >> Programme flow model: Learning activities are organized in a linear, sequential order and learners have deadlines to accomplish the various assignments; this is similar to traditional training, but some of the activities are conducted online.
- >> Core-and-spoke model: A major course (e-learning or F2F) is provided and a set of supplemental materials are available to reinforce the main course; these



materials are optional and not scheduled.

The case method combines two elements: the case itself and the discussion of that case. A teaching case is a rich narrative in which individuals or groups must make a decision or solve a problem. A teaching case is not a "case study" of the type used in academic research. Teaching cases provide information, but neither analysis nor conclusions. The analytical work of explaining the relationships among events in the case, identifying options, evaluating choices and predicting the effects of actions is the work done by students during the classroom discussion.

What are Cases?

Cases are narratives that contain information and invite analysis. Participants are put in the position of making decisions or evaluations based on the information available. Cases can be acquired from the formal, purpose written material available from such sources as the Harvard Business School and the Kennedy School or constructed by faculty members from newspaper articles, cartoons, radio stories and even grocery store coupons and fliers. (See the examples collection.)

Cases can involve situations in which decisions must be made or problems solved, or they can involve evaluation or reconsideration of existing policies, practices or proposals. Effective cases are usually based on real events, but can be drawn from both the present and the past, even the distant past. Cases require students to make choices about what theory or concepts to apply in conducting the analysis, which is distinct from the one to one correspondence between theory and application that they see in their textbooks or hear in lectures.

How do Cases differ from other kinds of examples?

Unlike examples from textbooks or those we insert in lectures, cases include information but provide no analysis. Cases present students with complex, unstructured problems that may include extraneous or irrelevant information and often don't include every piece of information an analyst would like to have. Unlike problem sets, they do not break the problem down into clear steps, and frequently have no single "right" answer. Cases provide a rich contextual way to introduce new material and create opportunities for students to apply the material they have just learned. The same overarching case can even can be used several times in the same course, as students return to the story of the case with new analytical techniques and tools. Cases require students to make choices about what theory or concepts to apply in conducting the analysis, which is distinct from the one to one correspondence between theory and application that they see in their textbooks or hear in lectures.

What happens in a Case Method classroom?

In classroom discussion, students analyze the information in the case and use it to solve the problem set up by the case. The discussion can take many forms, including closely directed questioning by faculty to help students draw out the information from the case and identify the central decisions or evaluations that need to be made, more open-ended questions and discussions as students evaluate options and weigh the evidence, and small group work by students focused on specific analytical tasks. Many faculty members use role-play as a technique to put students completely in the case environment. Ideally, case method discussions involve mostly conversation between and among students, rather than discussion centered on direct participation by the faculty member. Many case method teachers describe their role as conductor, facilitator, or guide, drawing attention to their role in setting up discussion in which students are the primary participants.

In what contexts are cases used?

Faculty members use cases in any environment in which they can effectively manage discussion. There are faculty members using it successfully in very large courses (Steve Lamy at USC teaches cases to as many as 300 introductory IR students) and others who use it in very small graduate classes, though very large classes and very small classes can pose particular challenges in generating sufficient participation, focusing attention, or producing the diverse viewpoints that make discussion rich. Cases are used effectively to teach critical thinking and quantitative reasoning, and have been successfully applied in a wide range of disciplines including political science, economics, law, business, chemistry, history, and linguistics, and in both undergraduate and graduate classrooms.

Activity 2. Read the following article and write review

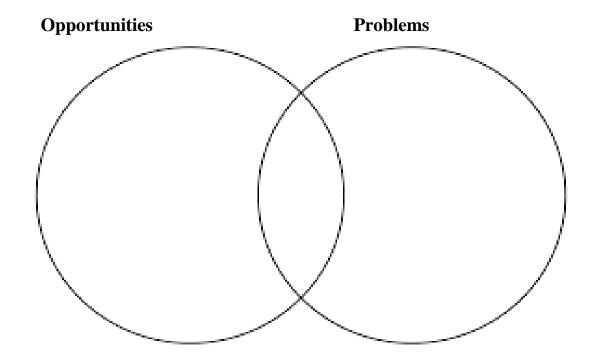
http://hozir.org/pars_docs/refs/49/48824/48824.pdf

Activity 3. Bring examples of case study in teaching EFL

AMALIY MASHG'ULOT 7

OPPORTUNITIES AND PROBLEMS OF DIGITAL TECHNOLOGIES: CREATING AND EFFECTIVE USE OF WEB PAGES AND WEBPLATFORMS

Activity 1. Fill in the Venn diagram



Activity 2. Read the following information and compare your answers

Technology is perhaps the strongest factor shaping the educational landscape today. Many school districts are showing support for increased levels of technology in the classroom by providing hardware such as tablets and computers, enhancing internet connectivity, and implementing programs designed to improve computer literacy for both teachers and students. Although teachers generally appreciate the benefits of educational technologies, they often find smooth and effective integration of new educational technologies challenging. From acquisition of new technology equipment to adaptation of curricula and teaching

techniques to incorporate new educational tools, technology integration presents significant challenges to educators at each level of school systems.

External Challenges to Classroom Technology

First-order barriers to the successful integration of technology into the classroom are factors external to teachers implementing technology. External barriers must be addressed at the institutional level and changes are typically incremental (e.g., rolling out access to technology one level at a time). Although there is growing evidence that, in the United States, first-order barriers are being tackled (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012), more effort is needed to entirely overcome these challenges. In this section, we introduce some of the external barriers to classroom technology integration and present strategies to address them. First, we address issues surrounding insufficient equipment or connectivity, termed the access constraint. If a teacher's school does not possess adequate computers and fast internet connection, the implementation of educational technology is not feasible. Next, we introduce the challenge of inadequate training related to technology. If teachers are not provided effective professional development on new technologies, they will not be capable of using it to its full potential. Finally, we discuss factors related to the support constraint. Support barriers to technology integration include inadequate technical support and administrative/peer support. Access Early accounts of technology integration focused much of their interest on increasing the availability of computers in schools (Fisher, Dwyer, & Yocam, 1996). Certainly, the most basic step toward effective technology integration is widespread access to equipment necessary to run educational computer programs. If computer lab time is limited to one hour per week, persistent use of educational technology is not viable. While many schools across the country are making the transition to one-to-one (1:1) computing (Warschauer, Zheng, Niiya, Cotton, & Farkas, 2014), many students do not have regular and reliable access to a computer. Inconsistent computer access makes it extremely difficult for instructors to integrate technology into existing lesson

plans. Routine access to hardware (i.e., laptops or tablets), software (e.g., reading and writing software, internet browsers), and internet connection is a fundamental requirement.

Training

According to Ertmer et al. (2012), the most commonly cited reason for lack of technology implementation in the classroom is inadequate professional development and training. The National Education Association (NEA) includes expanding professional development in technology as one of their policy recommendations (NEA, 2008). According to NEA results (2008) teachers today report increasing confidence using classroom technology, operating software, and searching the internet, but given that technology is constantly changing, it is more important than ever that teachers stay up-to-date with their technological expertise. Even if a school district were to hire only teachers who were literate in current classroom technology, countless new technologies will be developed during their teaching careers, and they will need to undergo additional training to keep their skills current. Without the necessary resources to provide continuous technological training, schools and districts will continue to cite inadequate professional development as a major barrier to technology implementation.

Support

Though we cannot say for certain how the future will impact professional development, it is clear that the teachers of today do not have optimal access to technological support. According to statistics reported by the U. S. Department of Education (2010), 68% of school districts reported having adequate support for educational technology. While it is encouraging to see that the majority of responding districts feel that they have access to adequate support, there is clearly room for improvement. With additional technology support, teachers can worry less about technological barriers and instead focus on teaching their students. Adopting a new educational technology can be a time-consuming process. If a

technology is adopted school-wide, teachers should have access to extended support from trained professionals, as opposed to a single hour long meeting before the school day begins. Of course, this will most likely require additional funding for schools, but creators of educational technologies should also place increased emphasis on user support. With high quality support from both creators of educational technologies and school employees, teachers will have access to the resources they deserve. The knowledge that support is readily available may in turn increase acceptance of classroom technologies.

Internal Challenges to Classroom Technology

In the previous section, we discussed external barriers to the classroom integration of educational technologies. Of course, as Ertmer points out (1999), even with first-order barriers removed, digital technology would not immediately and seamlessly appear within all classrooms using appropriate pedagogy. Individual educators are ultimately responsible for using technology, and thus even when given resources, they have choices about how to use technology. In this section, we describe barriers that relate specifically to teachers, their beliefs, and their knowledge. These issues are, by their nature, personal and thus vary greatly from teacher to teacher even within the same environment. Consequently, it is difficult to address these issues broadly. However, we attempt to provide an overview of common frameworks, provide examples of the research being done using these frameworks as guides, and discuss implications with regard to literacy technology. First, we will discuss educators' attitudes and beliefs, referred to as second-order barriers (Ertmer, 1999). If teachers do not expect new technology to be useful or do not think they have the required experience to use such technologies, they are more likely to persist using more traditional methods. Closely related to the attitudes and beliefs, teacher resistance may present a barrier to technology integration. Finally, we discuss the influence of teachers' skills and knowledge as they pertain to technology. Teacher Attitudes and Beliefs Teachers' attitudes and beliefs are crucial factors in determining the role and effectiveness of technology

in classrooms. Attitudes and beliefs about both educational technology and pedagogy in general will ultimately influence how teachers implement technology. In the following sections, we discuss these issues and ways to promote positive attitudes that can optimize technology use. Now that technology is being widely used in schools, perhaps the most important question is how to best implement technology, rather than whether technology will be used (Ertmer, 1999; Ertmer et al., 2012; Keengwe, Onchwari, & Wachira, 2008; Lowther, Inan, Strahl, & Ross, 2008).

Confidence in skills and knowledge

Given the abundance of available educational technology, it is essential that teachers feel comfortable and confident about their ability to use them effectively. Many current teachers grew up without access to technologies like the personal computer and the internet, but students today are raised in an environment saturated by computer technology. These "digital natives" can intimidate teachers, especially teachers with little technological experience. If teachers feel they do not have the necessary competencies when using technology, they may feel less in control of the class, use less technology, and be unlikely to explore new possibilities that utilize technology when designing their classes (Hughes, 2005; Rakes & Casey, 2002). By sticking to traditional teaching methods, teachers who are less fluent with technology maintain a feeling of control in the classroom and will not have to prepare to face the challenges of instructing digital natives in a digital environment. In a survey of 764 teachers, Wozney, Venkatesh, and Abrami (2006) found that one of the two strongest predictors of teachers' technology use was confidence in achieving instructional goals using technology. Teachers who believe they lack training can either decide to work with technology at their current level of expertise, or postpone the use of technology until they consider that they have sufficient competence (Ertmer, 1999). To build teachers' knowledge to a sufficient level, boosting confidence in the process, training and support from the educational administrators is necessary. About technology and learning Teachers

may use technology throughout the curriculum or to complement a specific lesson. Variations in technology usage reflect important differences in teachers' beliefs about the utility of technology in the educational process. Ertmer found that "teachers were able to enact technology integration practices that closely aligned with their beliefs." (Ertmer et al., 2012). These beliefs are greatly influenced by the teachers' philosophy regarding how students learn. If the teacher regards student learning as primarily dependent on explicit teacher teaching, classroom activities will be driven by the traditional chalk-and-talk approach. More traditional educational beliefs have been related to less integration of computer-based technology in classrooms (Hermans, Tondeur, van Braak, & Valcke, 2008). Thus, the use of technology will likely be limited to supplementary demonstrative activities within particular educational units. For teachers to achieve effective use of computers, they must experience a paradigm shift from the teacher centered classroom to the student-centered classroom (Adams & Burns, 1999; Bitner & Bitner, 2002; Hannafin & Savenye, 1993; Harris & Grandgenett, 1999; Mandinach & Cline, 2000). In this situation, educational technologies will likely have a more central role because they permit active student learning activities in which the teacher serves as facilitator of the learning process. Ravitz, Becker, and Wong reported that teacher implementation of constructivist learning (2000)environments were often limited by difficulties meeting individual student needs, balancing multiple objectives, and responding to external forces and expectations. Teachers in these situations will thus more frequently use technology when they believe that it connects directly with their specific content areas and/or grade levels, allowing them to more readily meet their classroom goals (Hughes, 2005; Snoeyink & Ertmer, 2001). The increasing acceptance of constructivist learning philosophies, along with intelligent learning technologies offer new possibilities to address individual differences of the student, one of the emphases of modern educational pedagogy. However, new technologies should incorporate student performance visualization tools that permit teachers to easily understand student progress on their educational objectives. Although technologies can be powerful

means to improve learning, the teacher remains the critical factor to student success, and must be informed of student progress in order to intervene directly with his/her students.

Teacher Resistance to Technology in the Classroom

Browsing online teacher forums makes it clear that implementing new technologies into lesson plans can be a difficult task. Perhaps the most common reason mentioned by teachers for not actively integrating new technologies is that many teachers are satisfied with their current lesson plans. A teacher's desire for their students to learn effectively drives classroom instruction, and if current lesson plans meet the needs of students, there is very little motivation for the teacher to alter them. Educators spend countless hours creating lesson plans that will hold attention and make learning exciting. Revising lesson plans means several hours of additional work for the teacher, which is problematic given an already demanding schedule. Simply revising lesson plans can occupy a great deal of time, but revising lesson plans to incorporate technology is even more labor intensive. When adopting new classroom technologies, educators face the problem known online as the "double innovation" problem (Cleaver, 2014). Double innovation essentially adds an additional layer of preparation teachers must work through. The teacher must first learn the technology well enough to utilize it in a classroom setting before deciding how to integrate the technology with classroom objectives and curriculum. While educational technologies are becoming easier to learn, the double innovation problem still results in additional preparation time. Data collected from teacher interviews conducted by Ertmer et al. (2012) showed time as being the sixth most influential barrier to integrating new classroom technologies. A teacher's time is extremely valuable, and it should come as no surprise that time is one of the most commonly cited barriers to integrating new technologies in the classroom.

V. GLOSSARIY

Termin	O'zbek tilidagi sharhi	Ingliz tilidagi sharhi
Accessible	Eshitish, ko'rish yoki	Materials, technology, and
	harakatlanishida nuqsoni	learning experiences that
	bo'lgan shaxslar nogironligi	individuals with auditory,
	bo'lmagan shaxslar bilan bir xil	visual, or motor disabilities can
	darajada foydalanishi,	use, understand, interact with,
	tushunishi, o'zaro aloqada	and learn from to the same
	bo'lishi va o'rganishi mumkin	degree as individuals with no
	bo'lgan materiallar,	disabilities.
	texnologiyalar va o'quv	
	tajribalari.	
Accreditation	Muayyan standartlarga javob	The systematic assessment of a
	beradigan dastur yoki	program or institution in
	muassasani muntazam ravishda	meeting certain standards.
	baholash. Akkreditatsiya	Accreditation is typically
	odatda ixtiyoriy bo'lib, qat'iy	voluntary and involves a
	tashqi, tengdoshlar va o'zini	rigorous external, peer, and self-
	o'zi baholash jarayonini o'z	assessment process. Once
	ichiga oladi. Dasturlar yoki	programs or institutions meet or
	muassasalar barcha	exceed all standards and
	standartlarga va baholash	evaluation criteria, they are
	mezonlariga javob beradigan	accredited by an accrediting
	yoki undan oshib ketgandan	agency (such as AdvancEd),
	so'ng, ular mukammallikni	which provides official
	rasmiy tan olishni	recognition of excellence. At
	ta'minlaydigan akkreditatsiya	the program level, accreditation
	agentligi (AdvancEd kabi)	focuses on the quality of a
	tomonidan akkreditatsiyadan	specific program or course of
	o'tgan. Dastur darajasida	study. At the institutional level,
	akkreditatsiya muayyan dastur	accreditation focuses on the
	yoki o'quv kursining sifatiga	quality of the entire institution.
	qaratilgan. Institutsional	
	darajada akkreditatsiya butun	
	muassasa sifatiga qaratilgan.	
Active learning	Talabalarga bilim yaratish va /	A broad variety of strategies or
	yoki qo'llash uchun asosiy	pedagogical projects designed
	mas'uliyatni yuklashga	to place the primary

	mo'ljallangan turli xil	responsibility for creating
	strategiyalar yoki pedagogik	and/or applying knowledge on
	loyihalar. Faol ta'lim	the students. Active learning is
	"bolalarga yo'naltirilgan",	also known as "child-centered,"
	"interaktiv", "o'quvchilarga	"interactive," "student-
	yo'naltirilgan" yoki	centered," or "learner-centered"
	"o'quvchilarga yo'naltirilgan"	instruction.
	ta'lim sifatida ham tanilgan.	
ADSL	ADSL (assimetrik raqamli	ADSL (Asymmetric Digital
	abonent liniyasi yoki qisqacha	Subscriber Line, or DSL for
	DSL) Internetga ulanishning	short) is a high-speed Internet
	yuqori tezlikdagi xizmati	access service that utilizes
	bo'lib, mavjud mis telefonlar	existing copper telephones lines
	liniyalaridan foydalanib,	to send and receive data at
	odatdagi dial-up modemlaridan	speeds that are far faster than
	ancha yuqori tezlikda	conventional dial-up modems.
	ma'lumotlarni yuboradi va	
	qabul qiladi.	
Analog	Raqamli bo'lmagan har	Any technology that is not
technology	qanday texnologiya. Bunga	digital. Examples include many
	ko'plab radio va televidenie	types of radio and television, as
	turlari, shuningdek	well as audiocassette players.
	audiokassetali pleyerlarni	These devices record sounds of
	misol keltirish mumkin. Ushbu	different frequency and
	qurilmalar magnit lentada turli	amplitude on magnetic tape.396
	xil chastota va amplituda	
	tovushlarni yozib olishadi.396	
Application	Bitta dasturiy ta'minot	A small software program that
Programming	boshqasi bilan o'zaro aloqada	allows one software program to
Interface	bo'lishiga imkon beruvchi	interact with another.
	kichik dasturiy ta'minot	
	dasturi.	
Applications	Smart telefonlarda,	Software applications that can
("apps")	planshetlarda yoki boshqa har	run on smart phones, tablets, or
	qanday ko'chma elektron	any other portable electronic
	qurilmalarda ishlashi mumkin	device.
	bo'lgan dasturiy ta'minot.	

Artificial	Kompyuterlarda inson	The branch of computer
Intelligence	darajasidagi fikrlarni	science dealing with the
(AI)	ko'paytirish yoki taqlid qilish	reproduction or mimicking of
	bilan shug'ullanadigan	human-level thought in
	informatika bo'limi. Kognitiv	computers. Encompassing
	ilm-fan, matematika va	cognitive science, mathematics,
	hisoblash lingvistikasini o'z	and computational linguistics,
	ichiga olgan sun'iy intellekt	AI breaks down human
	inson bilimlarini bir qator	knowledge into a number of
	mavzularga ajratadi - fikrlash,	topics—reasoning, knowledge,
	bilim, rejalashtirish, o'rganish,	planning, learning,
	aloqa, idrok va ob'ektlarni	communication, perception, and
	ko'chirish va boshqarish	the ability to move and
	qobiliyati - va ulardan	manipulate objects—and
	foydalanish orqali ularga taqlid	attempts to imitate these
	qilishga urinishlar. algoritmlar	through use of algorithms
Blog	("veb-jurnal" dan) Internetda	(from "web log") A publicly
	saqlanadigan va boshqalarning	accessible journal that is kept
	fikr-mulohazalarini	online and allows for others'
	bildiradigan ochiq jurnal. Blog	comments. The blog owner may
	egasi o'zini tanitishni yoki	choose to identify himself or
	anonim tarzda yozishni	herself or write anonymously.
	tanlashi mumkin.	
Blended	Masofaviy ta`limda yuzma-yuz	In distance education, an
learning	o'qitishni masofaviy yoki	instructional approach that
	texnologik o'qitishning biron	blends or combines face-to-face
	bir shakli bilan (onlayn kurslar,	instruction with some form of
	radioaloqa asosida o'qitish va	distance-based or technology-
	hk) aralashtirib yoki	based instruction (online
	birlashtirgan o'qitish usuli.	courses, radio-based instruction,
	Aralash ta'lim "gibrid ta'lim"	etc.). Blended learning is also
	deb ham ataladi.	called "hybrid learning."
Bluetooth	Uyali telefonlar,	A wireless protocol for
	minigarnituralar, kompyuterlar	exchanging data over short
	va boshqa elektron qurilmalar	distances among cell phones,
	o'rtasida qisqa masofalarga	headsets, computers, and other
	ma'lumot almashish uchun	electronic devices.
	simsiz protokol.	

Broadband	Ovozli aloqa uchun zarur	A range of frequencies wider
Dioadoand	bo'lganidan kengroq	than that required for voice
	chastotalar diapazoni. Keng	communications. Broadband is
	_	
	polosali, shuningdek, ushbu	also a term used to describe
	chastota diapazonini ko'tarishi	systems and equipment with
	mumkin bo'lgan yuqori	high bandwidth that can carry
	tarmoqli kengligi bo'lgan tizim	these ranges of frequency.
	va uskunalarni tavsiflash uchun	
	ishlatiladigan atama.	
Cable	Signal kabel orqali	A television subscription
television	tarqatiladigan televizion obuna	service in which the signal is
	xizmati (eshittirish yoki sun'iy	distributed via a cable (versus
	yo'ldoshga qarshi). Kabel juda	broadcasting or satellite). Cable
	ko'p sonli kanallarni o'tkazadi.	carries a much larger number of
	Borgan sari kabel televideniesi	channels. Increasingly, cable
	tomoshabinlari tarqatiladigan	television viewers can interact
	markaz bilan yoki yuklab	with the distribution center or
	olinadigan ilovalar, veb-saytlar	with content through
	va televizion xususiyatlar	downloadable apps, websites,
	orqali o'zaro aloqada bo'lishlari	and television features.
	mumkin.	
Compact disc	Raqamli audio va video kabi	An optical disc used to store
(CD)	raqamli ma'lumotlarni saqlash	digital data, such as digital
	uchun ishlatiladigan optik disk.	audio and video. A CD-ROM
	CD-ROM ("faqat o'qish uchun	("compact disc read-only
	ixcham disk") CD-ROM	memory") is readable by a
	drayveri bo'lgan kompyuter	computer with a CD-ROM
	yoki CD pleyerlar tomonidan	drive or by CD players.403
	o'qiladi.	
Code Division	Bir qator mobil aloqalarni	A generic term for a type of
Multiple	qo'llab-quvvatlaydigan raqamli	digital mobile telephony
Access	mobil telefoniya	technology that supports a
(CDMA)	texnologiyasining turi uchun	number of mobile connections.
	umumiy atama. Ushbu	This technique is used by some
	texnikadan GSM uchun ba'zi	alternative systems to GSM.
	muqobil tizimlar foydalanadi.	CDMA has been pioneered by
	CDMA Qualcomm tomonidan	Qualcomm to develop a second-
	kashshof bo'lib, ikkinchi avlod	generation digital cellular
	raqamli uyali telefoniya	telephony system and is very
	<u> </u>	1 3 3 3 3 3 2 2 2 3 2 2 3

	tizimini ishlab chiqdi va Amerika va Janubiy Koreyada juda mashhur. 404	popular in the Americas and South Korea. 404
Chat	AOL's Instant Messenger, ICQ yoki iChat kabi dasturiy ta'minot, bu foydalanuvchilarga bir vaqtda (bir vaqtning o'zida) Internetda bo'lgan va bir xil "chat" dasturiga kirgan odamlar bilan aloqa qilish imkonini beradi.	A piece of software, such as AOL's Instant Messenger, ICQ, or iChat, that allows users to communicate synchronously (at the same time) with people who are also online and are logged into their the same "chat" software.
Child-centered	Talabalarga yo'naltirilgan	See student-centered learning,
learning	ta'lim, faol o'rganish va	active learning, and learner-
_	o'quvchilarga yo'naltirilgan	centered instruction.
	ko'rsatmalarni ko'ring.	
Cloud	Ilovalar kompyuterning qattiq	Internet-based computing in
computing	diskida emas, balki serverlarda	which applications are stored
	(bulutda) saqlanadigan	not on the computer's hard
	Internetga asoslangan	drive but on servers (the cloud)
	hisoblash, shunda	so that users can access them as
	foydalanuvchilar ularga	needed without paying for a
	dasturiy ta'minot litsenziyasini	software license or devoting
	to'lamasdan yoki ularni saqlash	computer storage space to house
	uchun kompyuter xotirasini	them. Web 2.0 applications are
	ajratmasdan kerak bo'lganda	examples of cloud-based
	kirishlari mumkin. Web 2.0	applications and cloud
	dasturlari bulutga asoslangan	computing.
	dasturlar va bulutli hisoblash	
	misollari.	

Coding

Sifatli tadqiqotlarda tasniflash maqsadida bayoniy matn, audio yoki videodagi ma'lum bir bayonot, xatti-harakatlar yoki munosabatlarga (bu erda o'zgaruvchi deb nomlanadi) tayinlangan tavsiflovchi. Induktiv yoki ochiq kodlashda baholovchi o'zgaruvchiga kodni beradi va keyin mavzuni aniqlash uchun kod yoki tegishli kodlar to'plamining paydo bo'lish sonini sanab o'tish uchun o'zgaruvchilarni birlashtiradi. Bu "asosli" yoki induktiv tadqiqotning bir qismidir. Deduktiv yoki nazariy kodlash umumiy falsafiy asos yoki sifatli dizayn gipotezasidan kelib chiqqan kodlarni aniqlashni o'z ichiga oladi va farazni tasdiqlash uchun ishlatiladi. Gibrid kodlash induktiv va deduktiv kodlashdan foydalanishni birlashtiradi. Kodlash qo'l bilan yoki, odatda, sifatli tadqiqot dasturlari orqali amalga oshirilishi mumkin.

In qualitative research, a descriptor assigned to a particular statement, behavior or attitude (referred to here as a variable) in a narrative text, audio, or video for the purposes of classification. In inductive or open coding, an evaluator assigns a code to a variable and then combines variables to enumerate the number of occurrences of a code or related set of codes to identify a theme. This is part of "grounded," or inductive, research. Deductive or theoretical coding involves identifying codes derived from the overall philosophical framework or hypothesis of the qualitative design and is used to confirm a hypothesis. Hybrid coding combines the use of inductive and deductive coding. Coding can be done by hand or, more commonly, through qualitative research software.

Computeraided instruction (CAI)/Comput er-aided learning (CAL) Ko'rsatma kompyuter tomonidan etkazib beriladi. Kompyuter o'qituvchi vazifasini bajaradi va o'quvchi bilan aloqa qiladigan tarkib, muammolar to'plami va boshqalarni taqdim etadi. CAI dasturlari sifat jihatidan juda farq qiladi. Ba'zi dasturlar bixeviorizmga asoslangan,

Instruction delivered by a computer. The computer acts as a teacher and presents content, problem sets, and so on with which the student interacts. CAI programs vary greatly in quality. Some programs are behaviorist, drill-based applications, while others offer more iterative problem sets and

	mashqlarga asoslangan	feedback to address specific
	dasturlar, boshqalari esa	student weaknesses adjusted by
	kompyuter tomonidan	the computer.
	sozlangan talabalarning zaif	
	tomonlarini hal qilish uchun	
	ko'proq takrorlanadigan	
	muammolar to'plami va	
	mulohazalarni taklif qiladi.	
Computer-	Ikki yoki undan ortiq tarmoqqa	Any communicative transaction
mediated	ulangan kompyuterlardan	that occurs through the use of
communicatio	foydalanish orqali yuzaga	two or more networked
n (CMC)	keladigan har qanday	computers. This can involve the
	kommunikativ operatsiya.	use of e-mail, chat, bulletin
	Bunga elektron pochta, chat,	boards, discussion forums, or
	e'lonlar taxtasi, munozarali	any type of one- or two-way
	forumlar yoki tarmoq orqali	communication occurring over
	kompyuter orqali sodir	a computer via a network
	bo'ladigan har qanday bir yoki	_
	ikki tomonlama aloqalardan	
	foydalanish kiradi.	
Data	Vizual ma'lumotlarning har xil	Displays of small pieces of
dashboard	turdagi kichik qismlarini,	various types of visual data
	masalan, o'lchagichlar,	such as gauges, charts, and
	jadvallar va jadvallarni veb-	tables within a Web browser.
	brauzerda aks ettiradi. Ushbu	The concept is similar to the
	kontseptsiya avtomobillar	information provided by a car's
	paneli tomonidan taqdim	dashboard.
	etilgan ma'lumotlarga	
	o'xshaydi.	
Digital game	Ba'zi bir elektron vositalarni	A game played by manipulating
	(o'yin konsoli, uyali telefon,	some form of electronic media
	kompyuter) manipulyatsiya	(game console, cell phone,
	qilish orqali o'ynaydigan o'yin.	computer). Web-based digital
	Internetga asoslangan raqamli	games can be played across
	o'yinlar ommaviy axborot	media, time, and social
	vositalari, vaqt va ijtimoiy	spaces.408
	makonlarda o'ynashi	
	mumkin.408	
		<u>l</u>

Digital	O'yin-kulgi o'yinlaridan farqli	A game that, unlike
learning game	o'laroq, ma'lum bir sohada yoki	entertainment games, targets the
88	aqlning domenlari va	acquisition of knowledge in a
	odatlarida (ijodkorlik,	particular domain or set of
	muammolarni hal qilish,	domains and habits of mind
	kontsert qobiliyatlari, so'rovlar,	(creativity, problem solving,
	tarqatilgan idrok, evristik	conative skills, inquiry,
	usullar va boshqalar) bilimlarni	distributed cognition, heuristic
	egallashga qaratilgan barcha	methods, etc.) across all
	o'yin tarkiblari409	academic content areas.409
Digital rights	Mualliflik huquqi bilan	Protection of copyrighted
management	himoyalangan raqamli tarkibni	digital content to prevent
	ruxsatsiz ko'rish, nusxalash	unauthorized viewing, copying,
	yoki tarqatishning oldini olish	or distribution.410
	uchun	
Discussion	Foydalanuvchilar materiallarni,	An online or virtual message
forum	sharhlarni, g'oyalarni va	board where users post
	boshqalarni joylashtiradigan	materials, comments, ideas, and
	onlayn yoki virtual xabar	so on. Typically, discussion
	taxtasi. Odatda munozarali	boards are asynchronous.
	kengashlar asenkrondir.	
Distance	O'qitishning hammasi yoki	An educational process and
education	muhim qismini o'quvchi	system in which all or a
	tomonidan bo'shliq va vaqt	significant proportion of the
	ichida olib tashlangan kimdir	teaching is carried out by
	yoki biron bir narsa amalga	someone or something removed
	oshiradigan ta'lim jarayoni va	in space and time from the
	tizimi. Masofaviy ta'lim uchun	learner. Distance education
	tizimli rejalashtirish, yaxshi	requires structured planning,
	ishlab chiqilgan kurslar,	well-designed courses, special
	maxsus o'qitish texnikasi va	instructional techniques, and
	elektron va boshqa	methods of communication by
	texnologiyalar bilan aloqa	electronic and other technology,
	qilish usullari hamda aniq	as well as specific
	tashkiliy va ma'muriy tadbirlar	organizational and
	talab etiladi.	administrative arrangements.

Distance	Ta'lim oluvchilarni	A system and process that
learning	taqsimlangan o'quv resurslari	connects learners to distributed
	bilan bog'laydigan tizim va	learning resources. Distance
	jarayon. Masofadan o'qitish	learning can take a variety of
	turli shakllarda bo'lishi	forms, but all distance learning
	mumkin, ammo barcha	is characterized by (1)
	masofaviy o'qitish quyidagilar	separation/distance of place
	bilan tavsiflanadi: 1) o'qituvchi	and/or time between instructor
	va o'quvchi o'rtasida,	and learner, amongst learners,
	o'quvchilar o'rtasida va / yoki	and/or between learners and
	o'quvchilar va o'quv resurslari	learning resources; and (2)
	o'rtasida joy ajratilishi /	interaction between the learner
	masofasi va / yoki vaqti; va (2)	and the instructor, among
	o'quvchilar bilan o'qituvchi	learners, and/or between
	o'rtasida, o'quvchilar o'rtasida	learners and learning resources
	va / yoki o'quvchilar bilan bir	conducted through one or more
	yoki bir nechta ommaviy	media
	axborot vositalari orqali olib	
	boriladigan o'quv resurslari	
	bilan o'zaro munosabatlar.	
E-learning	Elektron shaklda saqlanadigan	A course that is digitized and
	va saqlanadigan kurs. "E"	stored in an electronic format.
	formatga ishora qiladi.	"E" refers to the format.
	"O'rganish" - bu	"Learning" is the content and
	o'quvchilarning ta'lim	the way students achieve
	maqsadlariga erishish	educational goals.413 E-
	mazmuni va uslubidir.413	learning typically, but not
	Elektron ta'lim odatda, lekin	always, refers to Web-based
	har doim ham emas, Internetga	learning, though in some
	asoslangan ta'limni nazarda	countries and contexts it refers
	tutadi, ammo ba'zi	to any technology-based
	mamlakatlarda va kontekstda	learning, whether online or
	bu har qanday texnologiyaga	offline.
	asoslangan o'qishni anglatadi,	
	xoh onlayn, ham oflaynda	
E-reader	Kindle yoki Nook singari	An electronic reader, such as
	yuzlab kitoblarni saqlaydigan	the Kindle or Nook, that stores
	va foydalanuvchilarga	hundreds of books and allows
	kitoblarni raqamli shaklda	users to read, bookmark,

	o'qish, belgilash, izohlash, sotib olish va saqlashga imkon beruvchi elektron o'quvchi.	annotate, purchase, and store books in a digital format. Text is displayed via electronic ink.
	Matn elektron siyoh orqali ko'rsatiladi.	
Education management information system (EMIS)	Ta'lim muassasalariga ro'yxatdan o'tish, resurslar, xarajatlar va boshqalar to'g'risida qaror qabul qilish uchun ma'lumotlarni saqlash, qidirish va olish imkonini beradigan apparat, dasturiy ta'minot (va odamlar) ning kompyuterga asoslangan	A computer-based system of hardware, software, (and people) that allows institutions to store, search, and retrieve data in order to make educational decisions about enrollment, resources, cost, and so on. An EMIS is typically a database program. There are
	tizimi. EMIS odatda ma'lumotlar bazasi dasturidir. EMISning ko'plab xilma- xilliklari mavjud, masalan, talabalarning axborot tizimlari (SIS) va boshqalar.	numerous variations of EMIS, for instance, Student Information Systems (SIS), etc.
Educational television	Jamoatchilik uchun, xususan, ma'rifiy xarakterdagi dasturlarni taqdim etadigan notijorat televidenie. Uning dasturlari odatda o'yin-kulgiga qaratilgan tijorat televideniyesidan farqli o'laroq, rasmiy sinf o'qitish va boyitishni ta'kidlaydi. Sesame Street va Blues Clues - bu ta'lim televizion dasturlarining namunalari. Shuningdek, ko'rsatma televizionga qarang.	Noncommercial television that provides programs, especially of an educational nature, for the public. Its programming emphasizes formal classroom instruction and enrichment, in contrast to commercial television, which generally focuses on entertainment. Sesame Street and Blues Clues are examples of educational television programming. See also instructional television.
Flexible assessment	O'quvchilarga bir qator ixtiyoriy baholash predmetlarini to'liq yoki qisman bajarishni tanlash imkoniyatini beradigan yoki o'quvchilarga baholash	A form of learner-centered, alternative assessment that gives learners the choice of completing all or some combination of a series of optional assessment items, or

	variantini tanlashga imkon	allows learners to select an
	beradigan o'quvchilarga	assessment option. Flexible
	yo'naltirilgan, muqobil	assessment can include
	baholash shakli.	checklists, portfolios, product
	Moslashuvchan baholash	assessment, oral or written
	tarkibiga nazorat ro'yxatlari,	exams, and computer-based or
	portfellar, mahsulotlarni	performance-based assessment.
	baholash, og'zaki yoki yozma	Flexible assessment is designed
	imtihonlar va kompyuter	to accommodate the learner's
	asosida yoki ishlashga	pace, style, and context of
	asoslangan baho kiradi.	learning.
	Moslashuvchan baholash	
	o'quvchining tezligi, uslubi va	
	ta'lim sharoitlariga mos	
	ravishda ishlab chiqilgan.	
Folksonomy	Axborotni osonlikcha qidirish,	A collaborative method of
	olish va baham ko'rish uchun,	categorizing information online,
	ko'pincha etiketlash orqali	often via tagging, so that it can
	onlayn tarzda tasniflashning	be easily searched, retrieved,
	birgalikdagi usuli. U	and shared. It is also known as
	shuningdek, ijtimoiy	social bookmarking.
	xatcho'plar deb nomlanadi.	
Formative	Doimiy va doimiy ravishda	Assessment that is ongoing and
assessment	amalga oshiriladigan va	continual and not used to certify
	o'zlashtirishni tasdiqlash yoki	mastery or assign grades.
	baholarni belgilash uchun	Formative assessment is
	foydalanilmaydigan baho.	instructional in nature; it
	Formativ baho xarakterli	provides information about the
	xarakterga ega; u o'quvchining	learner's progress and
	taraqqiyoti va ma'lum bir	understanding of a certain
	kontseptsiya yoki	concept or skill.
	ko'nikmalarni anglashi	
	to'g'risida ma'lumot beradi.	
Formative	Loyiha yoki uning	Evaluation that involves
evaluation	ishtirokchilari rivojlanishining	periodic or continual
	davriy yoki doimiy	monitoring of the progress of a
	monitoringini o'z ichiga olgan	project or its participants.
	baho. Formativ baho	Formative evaluation can be for
1		

	takomillashtirish maqsadida bo'lishi mumkin.	improvement purposes.
General Packet	Ikkinchi avlod mobil telefon	A mobile data service for
Radio Service	xizmatlari yoki simsiz kirish	second-generation mobile
(GPRS)	protokollarini, SMS matnli	telephone services or networks
	xabarlarini va Bluetooth-ni	that supports wireless access
	qo'llab-quvvatlaydigan	protocols, SMS text messaging,
	tarmoqlar uchun mobil	and Bluetooth (a standard for
	ma'lumotlar xizmati (simsiz	replacing wired connections
	ulanishlarni simsiz radio	between devices with wireless
	ulanishlari bilan almashtirish	radio connections).
	uchun standart).	
Global	Butun dunyo bo'ylab radio	A worldwide radio navigation
Positioning	navigatsiya tizimi 24 dan 27	system formed from a
System (GPS)	gacha bo'lgan sun'iy	constellation of 24 to 27
	yo'ldoshlardan tashkil topgan	satellites that constantly orbit
	bo'lib, ular doimo Yer atrofida	the Earth and their ground
	va ularning er usti stantsiyalari	stations, making two complete
	atrofida aylanib, har kuni ikkita	rotations each day. On Earth,
	to'liq aylanishni amalga	after locating four or more of
	oshiradilar. Yerda, ushbu	these satellites, GPS receivers
	sun'iy yo'ldoshlarning	employ a process of trilateration
	to'rttasini yoki undan ko'pini	to calculate the distance to each
	topgandan so'ng, GPS qabul	and then use this information to
	qiluvchilar har biriga masofani	deduce their own latitude and
	hisoblash uchun trilateratsiya	longitude. Many cell phones
	jarayonidan foydalanadilar va	now include a GPS, and hand-
	keyin ushbu ma'lumotdan	held GPS devices can be
	o'zlarining kenglik va	inexpensively purchased and
	uzunliklarini aniqlash uchun	used for educational activities.
	foydalanadilar. Hozirda ko'plab	
	uyali telefonlarda GPS mavjud	
	va qo'lda ishlatiladigan GPS	
	moslamalari arzon narxlarda	
	sotib olinishi va ta'lim faoliyati	
	uchun ishlatilishi mumkin.	

Global System for Mobile Communicatio n (GSM)	Dunyo miqyosida keng qamrovni qamrab olgan va Evropada uyali telefonlar uchun platforma bo'lgan ochiq, xususiy bo'lmagan raqamli simsiz texnologiya platformasi. CDMA singari, bu ikkinchi avlod raqamli mobil uyali aloqa texnologiyasi. GSM bir	An open, non proprietary digital wireless technology platform that covers a wide area of the globe and is the platform for cell phones in Europe. Like CDMA, it is a secondgeneration digital mobile cellular technology. GSM operates in several frequency
	necha chastota diapazonlarida ishlaydi: 400MHz, 900MHz va 1800MHz.	bands: 400MHz, 900MHz, and 1800MHz.
High Speed	Yuqori tezlikli paketli kirish	High Speed Packet Access
Packet Access	(HSPA) (va undan keyingi	(HSPA) (and a later version,
	versiyasi, Evolution HSPA) bu	Evolved HSPA) is an
	mavjud bo'lgan 3G / WCDMA	amalgamation of High Speed
	simsiz ishlashini	Downlink Packet Access
	kengaytiradigan va	(HSDPA) and High Speed
	yaxshilaydigan High Speed	Uplink Packet Access
	Downlink Packet Access	(HSUPA), that extends and
	(HSDPA) va High Speed	improves the performance of
	Uplink Packet Access	existing 3G/WCDMA wireless
	(HSUPA) ning birlashishi.	standard (WCDMA is the 3G
	standart (WCDMA - bu	standard that most GSM carriers
	ko'pgina GSM operatorlari	are moving to).
	ko'chib o'tadigan 3G standarti).	
Hybrid	Aralashtirilgan ta'limga qarang.	See blended learning.
learning		
Hypergrid	O'yinda foydalanuvchilar	In gaming, a mechanism that
	o'zlarining OpenSim-larini	allows users to link their
	Internetdagi boshqa	OpenSim to other OpenSims on
	OpenSims-lar bilan bog'lashga	the Internet, supporting
	imkon beradigan mexanizm,	seamless agent transfers among
	bu OpenSims-lar orasida	those OpenSims. It can be used
	uzluksiz agentlik	both in stand-alone mode and in
	o'tkazmalarini qo'llab-	grid mode. The hypergrid
	quvvatlaydi. U mustaqil	effectively supports the
	rejimda ham, grid rejimida	emergence of a web of virtual
	ham ishlatilishi mumkin.	worlds. Hypergrid enables

Gipergrid virtual olamlarning paydo bo'lishini samarali qo'llab-quvvatlaydi. Hypergrid mintaqalar / tarmoqlar ma'muriyatlariga o'zlarining xaritalarida boshqalar tomonidan boshqariladigan hipergridlangan hududlarga ko'priklarni joylashtirishga imkon beradi, bu foydalanuvchilar teleportatsiya qilishni tanlashi mumkin. Foydalanuvchilar ko'prikning orqasida joylashgan mintaqaga etib borganlarida, ular kelib chiqqan dunyodan chiqmasdan va o'zlarining inventarizatsiyasidan foydalanish huquqiga ega bo'lmasdan avtomatik ravishda boshqa virtual dunyo bilan o'zaro aloqada bo'lishadi.

region/grid administrations to place hyperlinks on their map to hypergridded regions run by others, to which users can choose to teleport. Once users reach the region behind the hyperlink, they are automatically interacting with a different virtual world without having to log out of the world from which they came and while still having access to their inventory.416

Immersive digital environments

Sun'iy, interaktiv, kompyuter tomonidan yaratilgan sahnalar yoki foydalanuvchilar o'zlari biron bir tajriba yoki faoliyat bilan shug'ullanishlari yoki "cho'mishi" mumkin bo'lgan dunyolar. Immersiv raqamli muhit virtual haqiqat bilan sinonim sifatida qabul qilinishi mumkin, ammo bu haqiqiy haqiqat taqlid qilinmaydi. Immeriv ragamli muhit haqiqat modeli, to'liq fantaziya foydalanuvchi interfeysi yoki abstraktsiya yoki qandaydir simulyatsiya bo'lishi mumkin.417 Immersiv

Artificial, interactive, computercreated scenes or worlds within which users can engage or "immerse" themselves in some experience or activity. Immersive digital environments may be thought of as synonymous with virtual reality, but without the implication that actual reality is being simulated. An immersive digital environment could be a model of reality, a complete fantasy user interface or abstraction, or some sort of simulation.417 Immersive environments are also known as multi-user virtual

	muhitlar ko'p foydalanuvchili virtual muhitlar (MUVE) yoki virtual olam deb ham ataladi. Bunday misollardan biri "Ikkinchi hayot" dir.	environments (MUVEs) or virtual worlds. One such example is Second Life.
Impact	Dastur ta'sirini va uning	An evaluation that measures the
evaluation	maqsadlariga qay darajada	program's effects and the extent
	erishilganligini o'lchaydigan	to which its goals were attained.
	baho.	
Instant	Yozilgan matn asosida ikki	A form of real-time
messaging	yoki undan ortiq kishi o'rtasida	communication between two or
(IM)	real vaqtda aloqa shakli. Matn	more people based on typed
	Internet kabi tarmoq orqali	text. The text is conveyed via
	ulangan qurilmalar (ish stoli,	devices (desktop, laptop, or
	noutbuk yoki qo'lda	hand-held computers)
	ishlaydigan kompyuterlar)	connected over a network such
	orqali uzatiladi. IM,	as the Internet. IM is also
	shuningdek, uyali telefonlardan	known as "chat" and
	ko'ra noutbuklar bilan	increasingly as "texting," even
	ishlatilgan taqdirda ham	when used with laptops rather
	"suhbat" va tobora ko'proq	than cell phones.
	"yozishmalar" deb nomlanadi.	

Interactive whiteboard (IWB)

Kompyuter va proektorga ulanadigan "aqlli taxta" yoki "elektron oq taxta" deb ham ataladigan katta displey, keyinchalik u kompyuterning ish stolini taxta yuzasida aks ettiradi, bu erda foydalanuvchilar kompyuterni qalam, barmoq bilan boshqarishi mumkin yoki boshqa qurilma. Kengash odatda devorga yoki polga o'rnatiladi. O'quvchilarning javob berish tizimlari kabi turli xil aksessuarlar (quyida ko'rib chiqing) qo'shimcha interaktivlikni ta'minlaydi va talabalar o'qituvchi kompyuterida saqlangan o'yinlar va multimediya dasturlarini ko'rishlari va tarkib bilan yakka o'zi yoki guruhlar bilan aloqa qilishlari mumkin. Onlayn muhitda "doskalar" boshqa dastur hisoblanadi, ammo ular jismoniy IWB bilan deyarli bir xil ishlaydi. Masalan, veb-seminarlarda yoki onlayn uchrashuvlarda ular ishtirokchilarga bir vaqtning o'zida ekrandagi doskada chizilgan bir yoki bir nechta foydalanuvchini ko'rish imkoniyatini beradi,

A large display, also known as a "smart board" or "electronic white board," that connects to a computer and projector, which then displays the computer's desktop onto the board's surface, where users can control the computer with a pen, their finger, or another device. The board is typically mounted on a wall or floor stand. Various accessories, such as student response systems (see below), enable additional interactivity, and students can view games and multimedia applications stored on a teacher's computer and interact with the content either alone or in groups. In an online environment "whiteboards" are a different application, though they function in much of the same way as a physical IWB. For instance, in webinars or online meetings they allow participants to simultaneously view one or more users drawing on an onscreen blackboard, presenting information, or running an application from their computers.

Internet

Butun dunyo miqyosidagi tarmoqlar tarmog'i, bu orqali millionlab kompyuterlar kompyuter protokollari to'plami orqali o'zaro A network of networks on a worldwide scale through which millions of computers are interconnected through a set of computer protocols.

	bog'liqdir.	
Learner-	O'quvchilarga yo'naltirilgan	See student-centered learning,
centered	ta'lim, faol o'rganish yoki	active learning, or child-
instruction	bolalarga yo'naltirilgan ta'limni	centered learning.
	ko'ring.	
Learning	Kurslarni boshqarish tizimini	See course management system.
management	ko'ring. Ta'limni boshqarish	A Learning Management
system	tizimi (LMS) - bu	System (LMS) is a digital
	o'qituvchilarga o'z o'quvchilari	platform that enables instructors
	uchun dars mazmuni	to organize and post course
	materiallarini Internet orqali	content materials over the
	tartibga solish va joylashtirish	Internet for their students.
	imkoniyatini beradigan raqamli	Examples include Moodle,
	platforma. Bunga Moodle,	Sakai, and Blackboard. Also
	Sakai va Blackboard kiradi.	known as a course management
	Shuningdek, kurslarni	system.
	boshqarish tizimi sifatida ham	
	tanilgan.	
Learning	O'rganish ob'ekti bo'lib xizmat	A small chunk of information
object	qiladigan Internet orqali	(text, video, audio, Flash
	etkazib beriladigan kichik	applets, etc.) delivered over the
	ma'lumot (matn, video, audio,	Internet that serves as an object
	Flash dasturlari va boshqalar).	of study. Learners and
	O'quvchilar va o'qituvchi	instructional designers can use,
	dizaynerlar bir qator turli xil	re-use, adapt, and save learning
	o'quv sharoitlarida o'quv	objects in a number of different
	ob'ektlaridan foydalanishi,	learning contexts.
	qayta ishlatishi, moslashtirishi	
	va saqlashi mumkin.	
Listserver	Listerver yoki 'e-list' - bu	A listserver or 'e-list" is a
	foydalanuvchilarga elektron	specific Internet application that
	pochta xabarlarini bir nechta	gives users the opportunity to
	manzillarga tarqatish	distribute e-mail messages to
	imkoniyatini beradigan maxsus	multiple addresses. Automated
	Internet-dastur.	mailing lists allow for online
	Avtomatlashtirilgan pochta	discussions conducted by e-
	ro'yxatlari elektron pochta	mail. E-lists are an
	orqali onlayn munozaralarni	asynchronous communication

	o'tkazishga imkon beradi.	technology.
	Elektron ro'yxatlar asenkron	
	aloqa texnologiyasidir.	
Media	Matn, audio, grafika va	Means and ways of distribution
Wicdia	animatsion grafikalardan tortib	and communication—from text,
	to to'liq harakatlanuvchi	
	_	audio, graphics, and animated
	videoga qadar tarqatish va	graphics to full-motion video.
	aloqa vositalari va usullari.	Multimedia is the mix or
	Multimedia - bu ommaviy	combination of media.
	axborot vositalarining	
	aralashmasi yoki birikmasi.	
Metadata	Ma'lumotlar to'g'risidagi	Data about data or a "data
	ma'lumotlar yoki ma'lumotlar	dictionary" that provides
	haqida ma'lumot beruvchi	information about data.
	"ma'lumotlar lug'ati". Bunga	Examples include information
	ma'lumotlar (masalan, turlari,	about data (for instance, types,
	muvofiqligi muammolari va	compatibility issues, etc.), about
	boshqalar), fayllar (versiyalar,	files (versions, date of creation
	yaratilgan yoki yangilangan	or updating, and author's
	sana va muallifning ismi)	name), or about content or
	to'g'risidagi ma'lumotlar yoki	applications (standards,
	tarkib yoki ilovalar	specifications, software, or
	(standartlar, spetsifikatsiyalar,	application versions, etc.).
	dasturiy ta'minot yoki dastur	Metadata are different from
	versiyalari), va boshqalar.).	tags, which are keywords that
	Meta-ma'lumotlar teglardan	allow users to improve their
	farq qiladi, bu	searching capacity, because
	foydalanuvchilarga qidiruv	metadata usually contain a set
	qobiliyatini yaxshilashga	of specifications and are
	imkon beradigan kalit	structured according to a
	so'zlardir, chunki	standardized concept using a
	metama'lumotlar odatda	well-defined metadata scheme.
	spetsifikatsiyalar to'plamini o'z	Metadata are particularly
	ichiga oladi va yaxshi	important for open educational
	aniqlangan metadata sxemasi	resources.
	yordamida standartlashtirilgan	resources.
	yordannda standardashtiringan	

	kontseptsiya asosida tuziladi. Metadata, ayniqsa, ochiq ta'lim manbalari uchun juda muhimdir.	
Micro- blogging	Abonentga xizmatning boshqa abonentlariga qisqa xabarlarni (140 belgigacha) tarqatish imkonini beradigan veb-xizmat. Mikro-postlar yoki "tvitlar" (agar Twitterdan foydalansangiz) veb-saytda	A web service that allows the subscriber to broadcast short messages (up to 140 characters) to other subscribers of the service. Micro-posts or "tweets" (if using Twitter) can be made public on a website and
	ommalashtirilishi va ushbu shaxsning postlariga alohida obunachilar kirishi mumkin.	accessed by individual subscribers to that person's posts.
Netbook	Daftar kompyuteriga qaraganda cheklangan foydalanish uchun maxsus ishlab chiqilgan kompyuter. Netbuklarda ko'pincha qattiq disk etishmaydi va shuning uchun bulutga asoslangan ilovalar bilan ishlashga yaroqlidir. Ular, shuningdek, o'yin yoki virtual olam kabi yuqori grafikli dasturlarga emas, balki yozish, elektron pochta orqali xabar yuborish va Internetda ishlash uchun juda mos keladi.	A computer designed specifically for more limited uses than a notebook computer. Netbooks often lack a hard drive and are therefore suitable for use with cloud-based applications. They are also better suited for writing, emailing, and surfing the Web rather than for high-graphics applications such as gaming or virtual worlds.
Network	Ob'ektlarning yoki odamlarning elektron tarzda o'zaro bog'liqligi. Telekommunikatsiyalarda tarmoqlar barcha mijoz va server stantsiyalarini bir-biriga bog'laydigan uzatish kanallari hisoblanadi.	An arrangement of objects or people interconnected electronically. In telecommunications, networks are transmission channels interconnecting all client and server stations.

Norm-	Talaba yoki guruhning	An assessment in which a
referenced	faoliyati "norma" guruhi bilan	student's or a group's
assessment	taqqoslanadigan baho. Sinov	performance is compared to that
	talabalarning yutuqlarini	of a "norm" group. The test
	mezon mezonlariga emas,	measures student achievement
	balki me'yorga - o'rtacha	against the norm—a mean level
	ishlash darajasiga qarab	of performance—not against a
	o'lchaydi.	criterion standard.
Notebook	Oddiy noutbukga qaraganda	A mini-laptop computer that is
	arzonroq va portativ bo'lgan	cheaper and more portable than
	mini-noutbuk.	a standard laptop.
Open	Yurisdiktsiyasiga qarab ko'p	A term with multiple meanings
enrollment	ma'noga ega bo'lgan atama.	depending on the jurisdiction.
	Masalan, ochiq ro'yxatdan	For instance, open enrollment
	o'tish, talabalar avvalgi malaka	may mean that students,
	va standart test natijalaridan	regardless of prior
	qat'i nazar, ochiq	qualifications or standardized
	universitetlarda bo'lgani kabi	test scores, may enroll in a
	o'quv dasturiga yozilishlarini	learning program as with open
	anglatishi mumkin. Qo'shma	universities. In the United
	Shtatlarda, ochiq ro'yxatdan	States, open enrollment often
	o'tish ko'pincha	refers to situations in which
	o'quvchilarning o'zlari	students may take classes
	bo'lmagan maktab tumanida	(typically online or via virtual
	(odatda onlayn yoki virtual	schools) in a school district that
	maktablar orqali) dars olishlari	is not their own. Finally, open
	mumkin bo'lgan vaziyatlarni	enrollment can refer to self-
	anglatadi. Va nihoyat, ochiq	placed, online classes in which
	ro'yxatdan o'tish o'z-o'zidan	a learner begins and finishes at
	joylashtirilgan, onlayn tarzda	any point in the course
	o'tkaziladigan darslarni	trajectory as he or she deems
	nazarda tutishi mumkin, u erda	necessary.
	o'quvchi zarur deb hisoblagan	
	holda kurs traektoriyasining	
	istalgan nuqtasida boshlanadi	
	va tugatadi.	

Open learning	O'quv jarayonining ko'p	An instructional system in
	qirralari o'quvchi nazorati	which many facets of the
	ostida bo'lgan ta'lim tizimi. Bu	learning process are under the
	o'quv imkoniyatlarini qaerda,	control of the learner. It
	qachon va qanday qilib	attempts to deliver learning
	o'quvchiga muhtojligini	opportunities where, when, and
	ta'minlashga harakat qiladi.	how the learner needs them.
Open source	Dasturiy ta'minotning asosiy	Software for which the
software (OSS)	kodi foydalanuvchilar uchun	underlying programming code
	mavjud bo'lib, ular uni	is available to users so that they
	o'qishlari, unga o'zgartirish	may read it, make changes to it,
	kiritishlari va o'zlarining	and build new versions of the
	o'zgarishlarini o'z ichiga olgan	software incorporating their
	dasturiy ta'minotning yangi	changes. OSS comes in many
	versiyalarini yaratishlari	types, differing mainly in the
	mumkin. OSS asosan	licensing term under which
	litsenziyalash muddatidan	(altered) copies of the source
	kelib chiqqan holda (manba	code may be redistributed.
	kodining nusxalari	Sometimes referred to as
	(o'zgartirilgan) qayta	Free/Libre Open Source
	taqsimlanishi mumkin) farq	Software (FLOSS), the big
	qiladigan ko'plab turlarga ega.	difference is that OSS is
	Ba'zan Free / Libre Open	usually, but not always, free,
	Source Software (FLOSS) deb	whereas FLOSS is always free.
	ataladi, ularning katta farqi	
	shundaki, OSS odatda har	
	doim emas, lekin FLOSS har	
	doim ham bepul.	
Performance-	O'quvchilarga tez-tez bilim va	A form of alternative
based	ko'nikmalarni hayotga tatbiq	assessment in which learners
assessment	etishni o'z ichiga olgan	are asked to create, produce, or
	sharoitlarda biror narsa	do something, often in settings
	yaratish, ishlab chiqarish yoki	that involve real-world
	biron bir narsa qilishni talab	application of knowledge and
	qiladigan muqobil baholash	skills.
	shakli.	

Parinharal	Qobiliyatini kengaytirish	Any type of computer hardware
Peripheral		Any type of computer hardware
	uchun asosiy kompyuterga qo'shiladigan har qanday	that is added to a host computer
		in order to expand its abilities.
	turdagi kompyuter texnikasi.	Examples of peripherals include
	Qo'shimcha qurilmalarga misol	printers and scanners and many
	sifatida printerlar va skanerlar	assistive technology devices
	va joystik kabi ko'plab	like joysticks.
	yordamchi texnologiyalar	
	mavjud.	
Personal	Odatda, ism va manzil	A hand-held computer for
digital assistant	ma'lumotlar bazasi, taqvim,	managing contacts,
(PDA)	ishlarning ro'yxati va	appointments, and tasks that
	eslatmalarni o'z ichiga olgan va	typically includes a name-and-
	shaxsiy ma'lumotlar menejeri	address database, calendar, to-
	sifatida xizmat qiladigan	do list, and note taker and
	kontaktlarni, uchrashuvlarni va	serves as a personal information
	vazifalarni boshqarish uchun	manager. Wireless PDAs may
	qo'lda ishlaydigan kompyuter.	also offer e-mail, Web
	Simsiz PDA-lar elektron	browsing, and cellular phone
	pochta, veb-brauzer va uyali	service.422 Given the increased
	telefon xizmatlarini ham taklif	popularity of smart phones,
	qilishi mumkin.422	PDAs are a highly threatened
	Smartfonlarning	technology species.
	ommalashganligini hisobga	
	olib, PDA-lar juda xavfli	
	texnologiya turlariga kiradi.	
Pipes	Yahoo! dan bepul onlayn	A free online service from
	xizmat. bu foydalanuvchilarga	Yahoo! that lets users remix
	ommalashgan ozuqa turlarini	popular feed types and create
	remiks qilish va ingl.	data mash ups using a visual
	tahrirlovchidan foydalanib	editor. Pipes can be used to run
	ma'lumotlar uzatishlarini	one's own Web projects, or
	yaratish imkonini beradi.	publish and share Web services,
	Quvurlar o'zlarining veb-	without ever having to write a
	loyihalarini amalga oshirish	line of code.423
	yoki veb-xizmatlarini nashr	
	etish va almashish uchun	
	ishlatilishi mumkin, bu esa	
	hech qachon kod satrini	
	neen quenon kou saunn	

	yozmasdan kerak.	
Place-shifting	Internetga keng polosali	A piece of firmware that allows
technology	ulanishga ega bo'lgan har	anyone with a broadband
	qanday kishiga o'z uy	Internet connection to forward
	televizoridan, DVR-dan yoki	live or prerecorded video
	boshqa video manbalaridan	streams from their home
	(DVD pleer kabi) jonli yoki	television set, DVR, or other
	oldindan yozib olingan video	video source (such as a DVD
	oqimlarni kompyuter, planshet	player) for remote viewing on a
	yoki mobil telefon orqali	computer, tablet, or mobile
	masofadan ko'rish uchun	phone at any location with a
	imkon beradigan dasturiy	high-speed Internet, cellular
	ta'minotning bir qismi. yuqori	data, or Wi-Fi connection.
	tezlikdagi Internet, uyali	
	ma'lumot yoki Wi-Fi ulanishi	
	bo'lgan har qanday joyda.	
Podcast (iPOD	Raqamli musiqa pleerida yoki	An audio broadcast that has
broadCAST)	kompyuterda ijro etish uchun	been converted to an MP3 or
	MP3 yoki boshqa audio fayl	other audio file format for
	formatiga o'tkazilgan audio	playback in a digital music
	eshittirish. Podkastlarda asosan	player or on a computer.
	matn, shuningdek musiqa,	Podcasts contain primarily text
	rasm va video mavjud (qarang	as well as music, images, and
	Vodcast). Podkastlarni	video (see Vodcast). Podcasts
	avtomatik ravishda obuna yoki	can be automatically
	RSS tasmasi orqali	downloaded to a computer via a
	kompyuterga yuklab olish	subscription or RSS feed
	mumkin	

Reliability

Baholashda bir-biriga o'xshash predmetlarning turli guruhlari bilan takroriy ishlatilishi mumkin bo'lgan va izchil natijalar beradigan asbobga berilgan o'lchov. Baholash vositasining ishonchliligini o'lchashning bir qancha usullari mavjud. Ulardan biri sinov / qayta sinov usuli: bir xil asbob bir xil guruhda, lekin har xil vaqtda qo'llaniladi va natijalar taqqoslanadi. Ikkinchi usul - buyumlarning ozgina o'zgarishi bilan bir xil asbobning ikkita shaklini yaratish, asbobni boshqarish va natijalarni taqqoslash. Uchinchi usul - asbobning yarmini bir guruh bilan, ikkinchisini esa bir xil yoki o'xshash guruh bilan boshqarish va keyin natijalarni taqqoslash. To'rtinchi usul qo'shma reaktor mashqlarini bajarish, unda ikkita shaxs bir xil testni bir guruhga o'tkazadi, so'ngra elementlarning javoblaridagi o'xshashlik va farqlarni tekshiradi.

In evaluation, a measure accorded to an instrument that can be used repeatedly with different groups of similar subjects and yield consistent results. There are a number of ways to measure the reliability of an evaluation instrument. One way is a test/retest method: the same instrument is used with the same group but at different times, and results are then compared. A second way is to create two forms of the same instrument with slight variations in items, administer the instrument, and then compare results. A third way is to administer half of the instrument with one group and the other half with the same or similar group and then compare results. A fourth way is to employ a joint-rater exercise, in which two individuals administer the same test to the same group and then examine the similarities and differences in item responses. Most reliability uses statistical methods such as Cronbach's Alpha or the Kuder-Richardson Formula 20 (KR20).

Rich media

Ovoz, video, matn va animatsiyani aralashtiradigan interaktiv vositalar uchun keng atama. Ko'pincha yuqori grafikli video yoki multimediyani tasniflash uchun A broad term for interactive media that mix audio, video, text, and animation. It is often used to classify high-graphics video or multimedia.

	ishlatiladi.	
Rubric	Ballarni aniqlash mezonlari,	A scoring tool that contains
	mezonlar tavsiflovchilari va	criteria for scoring, descriptors
	ballar shkalasini o'z ichiga	of the criteria, and a scoring
	olgan ballar vositasi.	scale. Rubrics are matrix-like in
	Rubrikalar o'zlarining tashkil	their organization and can be
	etilishlarida matritsaga	analytic (with highly detailed
	o'xshash va analitik (har bir	descriptors under each level of
	mezonga tegishli ballarning har	scoring pertaining to each
	bir darajasi bo'yicha batafsil	criterion) or holistic (more
	tavsiflovchilar bilan) yoki	general, with less descriptive
	yaxlit (umumiyroq, kamroq	information).
	tavsiflovchi ma'lumotlarga	
	ega) bo'lishi mumkin.	
Social	Rus psixologi Lev Vigotskiy	An aspect of constructivist
constructivism	tomonidan katta darajada ilgari	learning theory, advocated to
	surilgan konstruktivistik ta'lim	large degree by the Russian
	nazariyasining bir jihati, bu	psychologist Lev Vygotsky, that
	o'quvchining bilimdon	stresses the importance of the
	tengdoshlari yoki hamkasblari	nature of the learner's social
	bilan ijtimoiy o'zaro	interaction with more
	munosabatlarining mohiyatini	knowledgeable peers or
	ta'kidlaydi. Ijtimoiy	colleagues. Social
	konstruktivizm asosan ta'lim	constructivism essentially states
	shaxsiy munosabatlar va	that learning is developed
	umumiy o'quv tajribasi	through personal relationships
	ishtirokchilari orqali	and participants in a shared
	rivojlanadi, deb ta'kidlaydi.	learning experience.
Social media	Ijtimoiy muhitda nashr	User-created media (video,
	etiladigan va birgalikda	audio, text, or multimedia) that
	foydalanuvchi tomonidan	are published and shared in a
	yaratilgan ommaviy axborot	social environment, for
	vositalari (video, audio, matn	example, a blog, wiki, or video
	yoki multimedia), masalan,	hosting site. Examples include
	blog, viki yoki videoxosting	YouTube and Flickr.
	sayti. Bunga YouTube va	
	Flickr misollari kiradi.	

Social	Qiziqishlari va faoliyatlarini	Internet sites that enable the
networking	baham ko'radigan yoki	creation of online communities
sites	boshqalarning qiziqishlari va	of people who share interests
	faoliyatini o'rganishdan	and activities, or who are
	manfaatdor bo'lgan	interested in exploring the
	odamlarning onlayn	interests and activities of others.
	jamoalarini yaratishga imkon	Most social network services
	beruvchi Internet-saytlar.	are Web-based and provide a
	Ijtimoiy tarmoq xizmatlarining	variety of ways for users to
	aksariyati veb-ga asoslangan	interact, such as e-mail and
	bo'lib, foydalanuvchilarning	instant messaging services. The
	elektron pochta va tezkor xabar	best-known examples of social
	almashish xizmatlari kabi	networking sites are Facebook
	o'zaro aloqalarining turli	and Yammer, both of which
	usullarini taqdim etadi.	contain professional interest
	Ijtimoiy tarmoq saytlarining	groups, such as teachers.
	eng taniqli misollari Facebook	
	va Yammer bo'lib, ularning	
	ikkalasida ham o'qituvchilar	
	kabi professional qiziqish	
	guruhlari mavjud.	
Software	Kompyuter uchun ko'rsatmalar	A set of instructions for the
	to'plami. Muayyan vazifani	computer. A series of
	bajaradigan bir qator	instructions that performs a
	ko'rsatmalar dastur deb ataladi.	particular task is called a
	Dasturiy ta'minotning ikkita	program. Two major categories
	asosiy toifasi - bu tizimda	of software are system
	ishlaydigan dastur va dasturiy	operating software and
	ta'minot.	application software.
Student-	O'quvchilar o'quv jarayoniga	An instructional approach that
centered	noyob oldingi bilim, tajriba va	acknowledges that students
learning	e'tiqodni olib kelishini tan	bring unique prior knowledge,
	oladigan o'quv uslubi;	experience, and beliefs to a
	talabalarga turli xil haqiqiy	learning situation; helps
	vositalar, manbalar, tajribalar	students construct knowledge in
	va kontekstlardan foydalangan	multiple ways using a variety of
	holda bilimlarni ko'p jihatdan	authentic tools, resources,
	qurishda yordam beradi;	experiences, and contexts;
	ta'limni faol va aks ettiruvchi	promotes learning as an active

	jarayon sifatida targ'ib qiladi; va o'quvchilarni real hayotdagi muammolarni hal qilish va vaziyatlar to'g'risida o'z tushunchalarini yaratish uchun ijtimoiy aloqada bo'lishga va hamkorlik qilishga undaydi. Shuningdek, faol o'rganish, o'quvchilarga yo'naltirilgan ta'lim va bolalarga yo'naltirilgan ta'limga qarang.	and reflective process; and encourages students to interact socially and collaborate in order to solve real-world problems and create their own understanding of situations. See also active learning, learner-centered instruction, and child-centered learning.
Tablet	Foydalanuvchiga sensorli ekranda stylus yoki raqamli qalam bilan tabiiy qo'l yozuvi yordamida yozuvlarni yozishga imkon beruvchi simsiz kompyuter. Tablet planshet yuridik o'lchamdagi bloknotning kattaligi va qalinligi bo'lib, foydalanuvchining shaxsiy shaxsiy kompyuteri va yozuvlarni yozib olish qurilmasi sifatida ishlashga mo'ljallangan.	A wireless computer that allows a user to take notes using natural handwriting with a stylus or digital pen on a touch screen. A tablet is approximately the size and thickness of a legal-size notepad and is intended to function as the user's primary personal computer as well as a note-taking device.428
Tagging	Qidiruv va almashishni osonlashtirish uchun foydalanuvchilar veb-ga asoslangan tarkibdagi metama'lumotlarni (tarkib haqidagi ma'lumotlar) taqdim etadigan jarayon. Bu, ayniqsa, del.icio.us kabi ijtimoiy xatcho'plar saytlarida va Flickr kabi fotosuratlarni almashish saytlarida keng tarqalgan bo'lib, ular birgalikda etiketlash saytlari deb ham ataladi. Taglash metadata	A process by which users can provide metadata (data about content) about particular Webbased content in order to facilitate searching and sharing. It is particularly common in social bookmarking sites such as del.icio.us and photo-sharing sites such as Flickr, which are also called collaborative tagging sites. Though tagging can create metadata, metadata are not necessarily tagging.

	yaratishi mumkin bo'lsa-da,	
	metama'lumotlar teglash shart	
	emas.	
Telecollaborati	Internet orqali boshqa odam	An educational project that
ve project	yoki bir guruh odamlar bilan	involves sharing information
	ma'lumot almashishni o'z	with another person or group of
	ichiga olgan ta'lim loyihasi.	people over the Internet.
	Telekommunikatsion loyihalar	Telecollaborative projects range
	o'quvchilar va boshqa sinf	from simple key pal
	o'rtasidagi oddiy kalit	relationships between learners
	munosabatlaridan tortib,	and another class to involving
	dunyoning ko'plab sinflari va	many classrooms and experts
	mutaxassislarini birgalikda	from around the world in an
	ishlashni talab qiladigan	information-gathering project
	ma'lumot to'plash loyihasiga	that requires a collaborative
	jalb qilishgacha.429	effort.429
Teleport	Aloqa sun'iy yo'ldoshlari va	A regional telecommunications
	boshqa shaharlararo axborot	network that provides access to
	vositalariga kirishni	communications satellites and
	ta'minlovchi mintaqaviy	other long-distance media.
	telekommunikatsiya tarmog'i.	"Teleporting" is also used as a
	"Teleporting" shuningdek, bir	verb to describe users moving
	virtual olamdan yoki immersiv	from one virtual world or
	muhitdan boshqasiga	immersive environment to
	o'tayotgan foydalanuvchilarni	another.
	tasvirlash uchun fe'l sifatida	
	ishlatiladi.	
Telepresence	Masofani uzib qo'yadigan ba'zi	The ability to feel that one is
	texnologiyalar - Internetga	"present" in a situation through
	asoslangan konferentsiyalar,	the use of certain
	telekonferentsiyalar, telefon,	technologies—Web-based
	audio suhbat va boshqalarni	conferencing, teleconferencing,
	qo'llash orqali vaziyatda o'zini	telephone, audio chat, and so
	"mavjud" deb his qilish	on—that bridge distances.
	qobiliyati. Telepresence	Telepresence is also a
	shuningdek, mulkiy	proprietary videoconferencing
	videokonferentsaloqa tizimidir.	system.

Tethering	Uyali telefonni yoki boshqa mobil qurilmani va kompyuterni kabel yoki simsiz ulanish orqali ulash. Tetheringning maqsadi - mobil qurilmaning kompyuterga ulanishi orqali Internetga ulanishidir.	Connecting a cell phone or other mobile device and a computer via a cable or wireless connection. The purpose of tethering is for the mobile device to gain Internet access via the connection to the computer.
Total cost of	Muayyan dastur, sotib olish	The financial estimate of all
ownership	yoki aralashuv bilan bog'liq	costs associated with a
	barcha xarajatlarning	particular program, purchase, or
	moliyaviy bahosi.	intervention. Using technology
	Texnologiyani misol qilib	as an example, it includes all
	keltiradigan bo'lsak, u	capital and recurrent costs for
	uskunalar, ulanish, ta'minot,	equipment, connectivity,
	qo'llab-quvvatlovchi	supplies, supporting
	infratuzilma, o'qitish va	infrastructure, training, and
	belgilangan muddat (besh yil,	support for a fixed period (five
	o'n yil va hokazo) uchun	years, a decade, etc.).
	barcha kapital va joriy	
TIL:	xarajatlarni o'z ichiga oladi.	T
Ubiquitous	O'qish kursiga istalgan vaqtda	Learning via mobile
learning	va istalgan joyda kirish uchun	technologies so that a course of
	mobil texnologiyalar orqali	study can be accessed any time,
	o'rganish. Shuningdek, "u-	any place. Also known as "u-
	learning" nomi bilan ham tanilgan.	learning."
Universal	Loyihalash printsipi - binolar,	A design principle—for
design for	texnologiyalar, atrof-muhit,	buildings, technology, the
learning	sanoat mahsulotlari va	environment, industrial
(UDL)	boshqalar uchun - to'siqsiz	products, and so on—that aims
(CDL)	bo'lishga qaratilgan. UDL	to be barrier free. UDL
	adolatli foydalanish,	advocates equitable use,
	foydalanishda egiluvchanlik,	flexibility in use, simple and
	sodda va intuitiv foydalanish,	intuitive use, perceptible
	sezgir ma'lumotlar, xatolarga	information, tolerance for error,
	bardoshlik, kam jismoniy kuch,	low physical effort, and size and
	yaqinlashish va foydalanish	space for approach and use.430
	uchun o'lcham va makonni	

	himoya qiladi.	
USB flash	Kompyuterning USB portiga	A small, portable flash memory
drive	ulanadigan va ko'chma qattiq	card, also known as a thumb
	disk sifatida ishlaydigan	drive or pin drive, that plugs
	kichik, ko'chma flesh xotira	into a computer's USB port and
	kartasi, shuningdek, bosh	functions as a portable hard
	barmog'i yoki pin haydovchi	drive. USB flash drives are
	deb ham ataladi. USB flesh-	small and easy to use and can
	disklari kichik va ulardan	plug into any computer with a
	foydalanish oson va USB-disk	USB drive.431
	bilan har qanday kompyuterga	
	ulanishi mumkin	
Validity	Baholashda, odatda, "baholash	In evaluation, a measure that
	nimani o'lchashi kerak edi?"	typically addresses the question,
	Degan savolga javob beradigan	"Did the evaluation measure
	o'lchov. Odatda amal	what it was supposed to
	qilishning kamida uchta turi	measure?" There are generally
	mavjud. Tarkibning haqiqiyligi	at least three types of validity.
	- testning mazmuni o'quv	Content validity is the extent to
	maqsadlariga muvofiqligi.	which the content of the test
	Qurilishning haqiqiyligi - bu	matches the instructional
	ba'zi bir mantiqiy asoslar yoki	objectives. Construct validity is
	nazariyalar tomonidan taxmin	the extent to which a test,
	qilinganidek, test, vosita yoki	instrument, or assessment
	baholashning boshqa	corresponds to other variables,
	o'zgaruvchilarga mos	as predicted by some rationale
	keladigan darajasi.	or theory. Criterion validity is
	Kriteriyalarning haqiqiyligi -	the extent to which scores on
	test natijalari bo'yicha baholar	the test are in agreement with
	tashqi tomondan belgilangan	some externally established
	mezon yoki mezonlarga mos	criterion or criteria. Evaluators
	kelish darajasi. Baholovchilar	also talk about concurrent
	bir vaqtning o'zida amal qilish,	validity, predictive validity, and
	bashorat qilinadigan amal	face validity.
	qilish va yuzning haqiqiyligi	Evaluations primarily concern

	haqida ham gapirishadi. Baholash, avvalambor, amal qilishning ikki turiga tegishli:	themselves with two types of validity: internal (Did the innovation make a difference to the population under study?) and external (Can the effects of the evaluation be generalized to other populations, situations, or locations?).
Variable-bit- rate compression	Audio va videoning murakkab segmentlari uchun ko'proq ma'lumotni va oddiy tarkib uchun kamroq ma'lumotlardan	A compression technology that reduces the size of video files by using more data for complex segments of audio and video
	foydalangan holda videofayllar hajmini kamaytiradigan siqish texnologiyasi.	and less for simpler content.
Videocassette	Televizion dasturlarni yoki	A magnetic videotape recorder
recorder	oldindan yozib olingan videoni	for recording and playing back
(VCR)	yozib olish va ijro etish uchun	television programs or
	magnit videotasvir.	prerecorded video.
Videoconferen	Mahalliy tarmoq yoki Internet	Two-way, real-time
cing	kabi tarmoq orqali sun'iy	transmission of audio and video
	yo'ldosh (simsiz) orqali ikki	signals between specialized
	yoki undan ortiq joylarda	devices or computers at two or
	ixtisoslashgan qurilmalar yoki	more locations via satellite
	kompyuterlar o'rtasida audio va	(wireless) over a network such
	video signallarni real vaqtda	as a local area network or the
	ikki tomonlama uzatish	Internet

Virtual reality

«Haqiqiy dunyoda, shuningdek, xayoliy olamlarda joylarni simulyatsiya qila oladigan omputer-simulyatsiya qilingan muhit. Hozirgi virtual haqiqat muhitining aksariyati, asosan, kompyuter ekranida yoki maxsus stereoskopik displeylarda namoyish etiladigan vizual tajribalardir, ammo ba'zi simulyatsiyalar qo'shimcha sensorli ma'lumotlarni o'z ichiga oladi, masalan, karnay yoki naushnik orqali ovoz. Ba'zi ilg'or, haptik tizimlar endi tibbiy va o'yin dasturlarida odatda kuch bilan qayta aloqa deb ataladigan dokunsal ma'lumotni o'z ichiga oladi. "433

"[C]omputer-simulated environments that can simulate places in the real world, as well as in imaginary worlds. Most current virtual reality environments are primarily visual experiences, displayed either on a computer screen or through special stereoscopic displays, but some simulations include additional sensory information, such as sound through speakers or headphones. Some advanced, haptic systems now include tactile information, generally known as force feedback, in medical and gaming applications."433

Virtual schools

Virtual maktab yoki kibermaktab bu kurslarni to'liq yoki asosan onlayn usullar orqali o'qitadigan muassasa. Internetda o'n minglab tijorat va akkreditatsiyadan o'tmagan kurslar mavjud bo'lishiga qaramay, "virtual maktab" atamasi, odatda, ilmiy darajaga erishish uchun mo'ljallangan kunduzgi (yoki deyarli kunduzgi) o'quv kursini o'qitadigan akkreditatsiyadan o'tgan maktablar uchun ajratilgan. . Boshlang'ich va o'rta darajalarda akkreditatsiya virtual maktablarning davlat tomonidan moliyalashtirilishini anglatadi. Ba'zi bir davlat

A virtual school or cyber school is an institution that teaches courses entirely or primarily through online methods. Though there are tens of thousands of commercial and non-accredited courses available online, the term "virtual school" is generally reserved for accredited schools that teach a full-time (or nearly full-time) course of instruction designed to lead to a degree. At the primary and secondary levels, accreditation means that virtual schools tend to receive public funding. Some publicly funded and private universities also provide accredited online

	tomonidan	degrees.434
	moliyalashtiriladigan va	
	xususiy universitetlar ham	
	onlayn darajadagi	
	akkreditatsiyadan o'tganlar	
Virtual world	O'z foydalanuvchilariga	A computer-based simulated
	avatarlar orqali yashashi va	environment intended for its
	o'zaro aloqada bo'lishi uchun	users to inhabit and interact in
	mo'ljallangan kompyuterga	via avatars. These avatars are
	asoslangan taqlidli muhit.	usually depicted as textual two-
	Ushbu avatarlar odatda matnli	or three-dimensional graphical
	ikki yoki uch o'lchovli grafik	representations, although other
	tasvirlar sifatida tasvirlanadi,	forms are possible—auditory
	ammo boshqa shakllar ham	and touch sensations, for
	mumkin - masalan, eshitish va	example. Some, but not all,
	teginish hissi. Ba'zilar, ammo	virtual worlds allow for
	barchasi hammasi emas, balki	multiple users. In a virtual
	virtual olamlar bir nechta	world the computer accesses a
	foydalanuvchilarga imkon	computer-simulated world and
	beradi. Virtual dunyoda	presents perceptual stimuli to
	kompyuter kompyuter	the user, who in turn can
	simulyatsiya qilingan dunyoga	manipulate elements of the
	kirib boradi va	modeled world and thus
	foydalanuvchiga sezgir	experience some degree of
	stimullarni taqdim etadi, ular	telepresence.435
	o'z navbatida modellashtirilgan	
	dunyo elementlarini	
	boshqarishi va shu bilan	
	ma'lum darajada	
	telepresensiyani boshdan	
	kechirishi mumkin.	
Vodcasts	Podkastlarning video	The video equivalent of
	ekvivalenti, bu orqali video	podcasts, whereby video is
	Jahon tarmog'idan MP3 pleer	distributed to an MP3 player or
	yoki kompyuterga tarqatiladi.	computer from the World Wide
	Podkastlar singari, vodkastlarni	Web. Like podcasts, vodcasts
	(bu illyustratsiya uchun	(this is a specialized term for
	maxsus atama - "podkast" - bu	the sake of illustration—
	MP3 pleerga yuklab olinadigan	"podcast" is the generally used

	barcha tarkib uchun odatda	term for all content
	ishlatiladigan atama) RSS-	downloadable to an MP3
	kanaliga obuna bo'lish orqali	player) can be obtained via
	olish mumkin.	subscription to an RSS feed.
Voice over	Ovozli aloqani Internet orqali	A transmission technology for
Internet	etkazib berish uchun uzatish	delivery of voice
Protocol	texnologiyasi, shuningdek	communications over the
(VoIP)	Internet-telefoniya deb ham	Internet, also known as Internet
	ataladi. Skype yoki CoolTalk	telephony. Using software such
	kabi dasturlardan foydalanib,	as Skype or CoolTalk, users can
	foydalanuvchilar Internetdan	use the digital audio features of
	raqamli audio xususiyatlaridan	the Internet to talk with another
	foydalanib, kompyuter	person using a computer.
	yordamida boshqa odam bilan	Typically, computer-to-
	suhbatlashishlari mumkin.	computer calls are free, and
	Odatda, kompyuterdan	computer-to-phone calls involve
	kompyuterga qo'ng'iroqlar	a nominal charge.
	bepul, va kompyuterdan	
	telefonga qo'ng'iroqlar nominal	
	to'lovni o'z ichiga oladi.	
Web 2.0	Butunjahon Internet	The second generation of the
	tarmog'ining ikkinchi avlodi.	World Wide Web. While Web
	Veb 1.0 asosan "o'qish"	1.0 was largely a "read"
	vositasi bo'lgan bo'lsa, Web 2.0	medium, Web 2.0 is a
	"o'qish / yozish" vositasi bo'lib,	"read/write" medium in which
	unda foydalanuvchilar veb-	users create and publish content
	dizayn dasturlari kabi	without complicated authoring
	murakkab mualliflik	tools such as Web design
	vositalarisiz tarkib yaratadilar	software. Examples of Web 2.0
	va nashr etadilar. Veb 2.0	content include blogs, wikis,
	tarkibiga bloglar, vikilar va	and social networking sites. The
	ijtimoiy tarmoq saytlari misol	term "Web 2.0" is often used
	bo'la oladi. "Web 2.0" atamasi	synonymously with "social
	ko'pincha "ijtimoiy media"	media," but this guide argues
	bilan sinonim sifatida	that social media are a category
	ishlatiladi, ammo ushbu	of Web 2.0 applications.
	qo'llanmada ijtimoiy tarmoqlar	
	Web 2.0 dasturlarining toifasi	
	ekanligi ta'kidlangan.	

Webinar	O'qituvchilar va o'quvchilar PowerPoint taqdimotlari, video, audio va chat vositalari kabi hujjatlar yordamida o'zaro aloqada bo'lgan interaktiv, veb-	An interactive, Web-based seminar in which instructors and learners interact using documents such as PowerPoint presentations, video, audio, and
	seminar.	chat tools.
Webcast	Internet orqali jonli efirda	The equivalent of traditional
	uzatiladigan an'anaviy	television and radio
	televizion va	broadcasting, transmitted live
	radioeshittirishlarning	over the Internet. Webcasts can
	ekvivalenti. Veb-	be used as stand-alone events
	translyatsiyalar ishtirokchilar	for which participants register
	ro'yxatdan o'tadigan mustaqil	or as a component of an online
	tadbirlar sifatida yoki onlayn	course, conference, or
	kurs, konferentsiya yoki	session.437
	sessiyaning tarkibiy qismi	
	sifatida ishlatilishi mumkin.	
Webquest	Talabalar bilan o'zaro aloqada	An inquiry-oriented activity in
	bo'lgan ma'lumotlarning bir	which some or all of the
	qismi yoki barchasi	information that students
	Internetdagi manbalardan kelib	interact with comes from
	chiqadigan so'rovga	resources on the Internet.
	yo'naltirilgan faoliyat. Veb-	Webquests provide models for
	so'rovlar o'qituvchilar uchun	teachers searching for ways to
	Internetga qisqa muddatli va	incorporate the Internet into the
	uzoq muddatli asosda	classroom on both a short-term
	Internetga qo'shilish yo'llarini	and long-term basis.438
	izlayotgan modellarni taqdim	
	etadi.438	
Widget	Grafik foydalanuvchi	In a graphical user interface, a
	interfeysida ma'lum bir	combination of a graphic
	funktsiyani bajarish uchun	symbol and some program code
	grafik belgi va ba'zi dastur	to perform a specific function.
	kodlarining kombinatsiyasi.	For example, Microsoft
	Masalan, Microsoft Windows	Windows OS comes with a
	OS kalendarlar, dunyo soatlari,	number of built-in widgets
	valyuta konvertorlari va	("gadgets") such as calendars,
	boshqalar kabi bir qator	world clocks, currency
	o'rnatilgan vidjetlar	converters, and so on. As

	("gadjetlar") bilan ta'minlanadi. Vidjetlarni yaratish osonroq va kuchliroq bo'lib, ular ma'lum bir kontseptsiya yoki bilim sohasida o'zini o'zi o'qitishning potentsial vositasi bo'lib xizmat qilishi mumkin.	widgets become easier to create and more powerful, they may serve as a potential self- teaching tool in a particular concept or knowledge domain.
Wiki	Oddiy formatlash qoidalaridan foydalangan holda, unga kirgan har qanday kishiga tarkibni qo'shishi yoki o'zgartirishi uchun mo'ljallangan sahifa yoki saytlar to'plami. Veb 2.0 texnologiyasining namunasi bo'lgan Vikislar (gavayi tilidagi "tez" so'zidan) ko'pincha hamkorlikdagi vebsaytlarni yaratish va jamoat veb-saytlarini boshqarish uchun ishlatiladi. Vikipediyaning birgalikdagi entsiklopediyasi vikining eng taniqli namunasidir.	A page or collection of sites designed to enable anyone who accesses it to contribute to or modify content, using simple formatting rules. Wikis, an example of a Web 2.0 technology (from the Hawaiian word for "quick"), are often used to create collaborative websites and to power community websites. The collaborative encyclopedia Wikipedia is the best-known example of a wiki.
World Wide Web	Foydalanuvchilarga yagona manba qidiruvchilar (URL) yoki boshqa kodlar bilan bog'langan axborot resurslariga kirish uchun Internet orqali ishlaydigan axborot tarqatish usuli. Veb-sahifalar ko'rish dasturlarida ko'rsatiladi va boshqa manbalarga havolalarni (ko'pincha "gipermatn" deb nomlanadi) o'z ichiga olishi mumkin.	An information distribution method that operates via the Internet to enable users to access information resources linked to uniform resource locators (URLs) or other codes. Webpages are displayed in browsing software and may contain links (often called "hypertext") to other resources.

XML	Butunjahon Internetida tizimli	A flexible text format for
(extensible	kompyuter hujjatlarini yaratish	creating structured computer
markup	uchun moslashuvchan matn	documents on the World Wide
language)	formati	Web

VI. ADABIYOTLAR RO'YXATI

- 1. Mirziyoyev Sh.M. Buyuk kelajagimizni mard va olijanob xalqimiz bilan birga quramiz. T.: "O'zbekiston", 2017. 488 b.
- 2. Mirziyoyev Sh.M. Milliy taraqqiyot yoʻlimizni qat'iyat bilan davom ettirib, yangi bosqichga koʻtaramiz. 1-jild. T.: "Oʻzbekiston", 2017. 592 b.
- 3. Mirziyoyev Sh.M. Xalqimizning roziligi bizning faoliyatimizga berilgan eng oliy bahodir. 2-jild. T.: "O'zbekiston", 2018. 507 b.
- 4. Mirziyoyev Sh.M. Niyati ulugʻ xalqning ishi ham ulugʻ, hayoti yorugʻ va kelajagi farovon boʻladi. 3-jild.— T.: "Oʻzbekiston", 2019. 400 b.
- 5. Mirziyoyev Sh.M. Milliy tiklanishdan milliy yuksalish sari. 4-jild.— T.: "O'zbekiston", 2020. 400 b.
- 6. Oʻzbekiston Respublikasining Konstitutsiyasi. T.: Oʻzbekiston, 2018.
- 7. Oʻzbekiston Respublikasining «Vijdon erkinligi va diniy tashkilotlar toʻgʻrisida»gi Qonunining yangi tahriri. T.: Adolat, 1998.
- 8. Oʻzbekiston Respublikasining 2020 yil 23 sentabrda qabul qilingan "Ta'lim toʻgʻrisida"gi OʻRQ-637-sonli Qonuni.
- 9. Oʻzbekiston Respublikasining "Korrupsiyaga qarshi kurashish toʻgʻrisida"gi Qonuni.
- 10. Oʻzbekiston Respublikasi Prezidentining 2015 yil 12 iyun "Oliy ta'lim muasasalarining rahbar va pedagog kadrlarini qayta tayyorlash va malakasini oshirish tizimini yanada takomillashtirish chora-tadbirlari toʻgʻrisida"gi PF-4732-sonli Farmoni.
- 11. Oʻzbekiston Respublikasi Prezidentining 2017 yil 7 fevral "Oʻzbekiston Respublikasini yanada rivojlantirish boʻyicha Harakatlar strategiyasi toʻgʻrisida"gi 4947-sonli Farmoni.
- 12. Oʻzbekiston Respublikasi Prezidentining 2017 yil 20 aprel "Oliy ta'lim tizimini yanada rivojlantirish chora-tadbirlari toʻgʻrisida''gi PQ-2909-sonli Qarori.
- 13. Oʻzbekiston Respublikasi Prezidentining 2017 yil 27 iyul "Oliy ma'lumotli mutaxassislar tayyorlash sifatini oshirishda iqtisodiyot sohalari va tarmoqlarining ishtirokini yanada kengaytirish chora-tadbirlari toʻgʻrisida"gi PQ-3151-sonli

Qarori.

- 14. Oʻzbekiston Respublikasi Prezidentining 2018 yil 21 sentabr "2019-2021 yillarda Oʻzbekiston Respublikasini innovatsion rivojlantirish strategiyasini tasdiqlash toʻgʻrisida"gi PF-5544-sonli Farmoni.
- 15. Oʻzbekiston Respublikasi Prezidentining 2019 yil 27 may "Oʻzbekiston Respublikasida korrupsiyaga qarshi kurashish tizimini yanada takomillashtirish chora-tadbirlari toʻgʻrisida"gi PF-5729-son Farmoni.
- 16. Oʻzbekiston Respublikasi Prezidentining 2019 yil 17 iyun "2019-2023 yillarda Mirzo Ulugʻbek nomidagi Oʻzbekiston Milliy universitetida talab yuqori boʻlgan malakali kadrlar tayyorlash tizimini tubdan takomillashtirish va ilmiy salohiyatini rivojlantiri chora-tadbirlari toʻgʻrisida"gi PQ-4358-sonli Qarori.
- 17. Oʻzbekiston Respublikasi Prezidentining 2019 yil 27 avgust "Oliy ta'lim muassasalari rahbar va pedagog kadrlarining uzluksiz malakasini oshirish tizimini joriy etish toʻgʻrisida"gi PF-5789-sonli Farmoni.
- 18. Oʻzbekiston Respublikasi Prezidentining 2019 yil 8 oktabr "Oʻzbekiston Respublikasi oliy ta'lim tizimini 2030 yilgacha rivojlantirish konsepsiyasini tasdiqlash toʻgʻrisida"gi PF-5847-sonli Farmoni.
- 19. Oʻzbekiston Respublikasi Vazirlar Mahkamasining 2019 yil 23 sentabr "Oliy ta'lim muassasalari rahbar va pedagog kadrlarining malakasini oshirish tizimini yanada takomillashtirish boʻyicha qoʻshimcha chora-tadbirlar toʻgʻrisida"gi 797-sonli Qarori
- 20. Oʻzbekiston Respublikasi Prezidentining 2019 yil 4 sentabrdagi "Diniyma'rifiy soha faoliyatini takomillashtirish boʻyicha qoʻshimcha chora-tadbirlar toʻgʻrisida"gi 4436-sonli Qarori
- 21. Belogurov A.Yu. Modernizatsiya protsessa podgotovki pedagoga v kontekste innovatsionnogo razvitiya obщеstva: Monografiya. М.: MAKS Press, 2016. 116 s. ISBN 978-5-317-05412-0.
- 22. Gulobod Qudratulloh qizi, R.Ishmuhamedov, M.Normuhammedova. An'anaviy va noan'anaviy ta'lim. Samarqand: "Imom Buxoriy xalqaro ilmiytadqiqot markazi" nashriyoti, 2019. 312 b.

- 23. Ibraymov A.Ye. Masofaviy oʻqitishning didaktik tizimi. metodik qoʻllanma/tuzuvchi. A.Ye. Ibraymov. Toshkent: "Lesson press", 2020. 112 bet.
- 24. Ishmuhamedov R.J., M.Mirsolieva. Oʻquv jarayonida innovatsion ta'lim texnologiyalari. T.: «Fan va texnologiya», 2014. 60 b.
- 25. Muslimov N.A va boshqalar. Innovatsion ta'lim texnologiyalari. O'quvmetodik qo'llanma. T.: "Sano-standart", 2015. 208 b.
- 26. Obrazovanie v sifrovuyu epoxu: monografiya / N. Yu. Ignatova; M-vo obrazovaniya i nauki RF; Nijnetagil. texnol. in-t (fil.). Nijniy Tagil: NTI (filial) UrFU, 2017. 128 s.
- 27. Oliy ta'lim tizimini raqamli avlodga moslashtirish konsepsiyasi. Yevropa Ittifoqi Erasmus+ dasturining ko'magida.
- 28. Sovremennыe obrazovatelnыe texnologii: pedagogika i psixologiya: monografiya. Kniga 16 / O.K. Asekretov, B.A. Borisov, N.Yu. Bu-gakova i dr. Novosibirsk: Izdatelstvo sRNS, 2015. 318 s. http://science.vvsu.ru/files/5040BC65-273B-44BB-98C4-CB5092BE4460.pdf
- 29. Usmonov B.Sh., Habibullaev R.A. Oliy oʻquv yurtlarida oʻquv jarayonini kredit-modul tizimida tashkil qilish. Oʻquv qoʻllanma.
- "Tafakkur" nashriyoti, 2020 y. 120 bet._English for Specific Purposes. All Oxford editions. 2010, 204.
- 30. Beresova, J. (2017). The impact of the CEFR on teaching and testing English in the local context. Theory and Practice in Language Studies, 7(11), 959-964.
- 31. Brown, H. D., & Abeywickrama, P. (2014). Language assessment. Principles and classroom practices. White Plains, NY: Pearson Education.
- 32. Coupland, N., & Jaworski, A. (2019). The New Sociolinguistics Reader. Palgrave: Macmillan.
- 33. Chomsky, N. (2014). Aspects of the theory of Syntax. Cambridge, MA: M.I.T. Press.
- 34. Croft, W. (2011). Radical construction grammar. Cambridge: Cambridge University Press.

- 35. Celce-Murcia, M. & Olshtain, E. (2015). Discourse and context in language teaching: A guide for language teachers. Cambridge: Cambridge University Press.
- 36. Cumming, A. and R. Berwick (Eds.). (2010) Validation in Language Testing. Clevedon, England: Multilingual Matters, Ltd.
- 37. David L.Chiesa (Ed), U.Azizov, S.Xan, K.Nazamutdinova, K.Tangirova. Reconceptualizing Language Teaching: An-In-service Teacher Education course in Uzbekistan. Baktria Press 2019. ISBN 978-9943-5809-9-2. 205.
- 38. Diane Larsen-Freeman, Marti Anderson. Techniques & Principles in Language Teaching (3rd edition). Oxford University Press. 2011.
- 39. Harding, L., & Kremmel, B. (2016). Teacher assessment literacy and professional development. In D. Tsagari & J. Banerjee (Eds.), Handbook of second language assessment: Volume 12 of handbooks on applied linguistics (pp. 413-428). Berlin, Germany: Walter de Gruyter GmbH & Co KG. doi: https://doi.org/10.1515/9781614513827-027
- 40. Henning, G. (2014). A guide to language testing: Development, evaluation, research. Newbury House Publishers.
- 41. Hughes, A. (2013). Testing for Language Teachers. 2nd ed. Cambridge: Cambridge University Press.
- 42. Langacker, R. W. (2011). Foundations of Cognitive Grammar (Vol. 2): Descriptive Application. Stanford: Stanford University Press
- 43. Gardener H. (2013) Multiple Intelligences: The Theory and Practice, New York: Basic Books.
- 44. Matthews, P. H. (2014). Syntax. Cambridge: Cambridge University Press.
- 45. McMilan, J.H. (2014). Fundamental Assessment Principles for Teachers and School Administrators. Practical Assessment, Research and Evaluation. Retrieved from https://pareonline.net/getvn.asp?v=7&n=8 [Accessed July 17, 2018]
- 46. Madsen H.S. (2014). Techniques in Testing. England: Oxford University Press.
- 47. McNamara, T. (2014). Language Testing. UK. Oxford: Oxford University Press.

- 48. Knight, P., & Yorke, M. (2013). Assessment, learning and employability. Maidenhead: Society for Research into Higher Education & Open University Press.
- 49. Jack C. Richards, Willy A. Renandya. Methodology in Language Teaching: An anthology of current practice. Cambridge university press. 2012.
- 50. Isaacs, T., Zara, C., Herbert, G., Coombs, S. J., & Smith, C. (2013). Assessment of learning. In The SAGE key Concepts Series: Key concepts in educational assessment (pp. 12-17). London: SAGE Publications Ltd doi: 10.4135/9781473915077.n4
- 51. Richards, C., & Rodgers, T. S. (2014). Approaches and methods in language teaching. Cambridge: Cambridge University Press.Stanley Kubrick. A narrative and stylistic analysis. AN imprint of Greenwood Publishing Group, Inc. Velikobritaniya (United Kingdom), 2011.
- 52. Stephen M. Alessi, Stanley R. Trollip. Multimedia for Learning: Methods and Development (3rd Edition). Pearson; 3 Edition (November 19, 2000), 580 pages, 2011.
- 53. Shohamy, E. (2011). The power of tests: A critical perspective on the uses of language tests. Pearson Education Limited.
- 54. Taylor, L. (2019). Developing assessment literacy. Annual Review of Applied Linguistics, 29, 21-36.
- 55. Weir, C. (2015). Language testing and validation: An evidence-based approach. Palgrave
- 56. Wardhaugh, R. (2016). An Introduction to Sociolinguistics. Sussex, U.K.: Wiley-Blackwell.
- 57. http://edu.uz Oʻzbekiston Respublikasi Oliy va oʻrta maxsus ta'lim vazirligi
- 58. http://lex.uz Oʻzbekiston Respublikasi Qonun hujjatlari ma'lumotlari milliy bazasi
- 59. http://bimm.uz Oliy ta'lim tizimi pedagog va rahbar kadrlarini qayta tayyorlash va ularning malakasini oshirishni tashkil etish bosh ilmiy-metodik markazi

- 60. www.Britishcouncil.org -Britaniya kengashi veb sayti
- 61. www.ziyonet.uz -Ta'lim portali
- 62. www.tefl.net- Til oʻrganish veb sayti
- 63. busyteacher.org -Til oʻrganish veb sayti