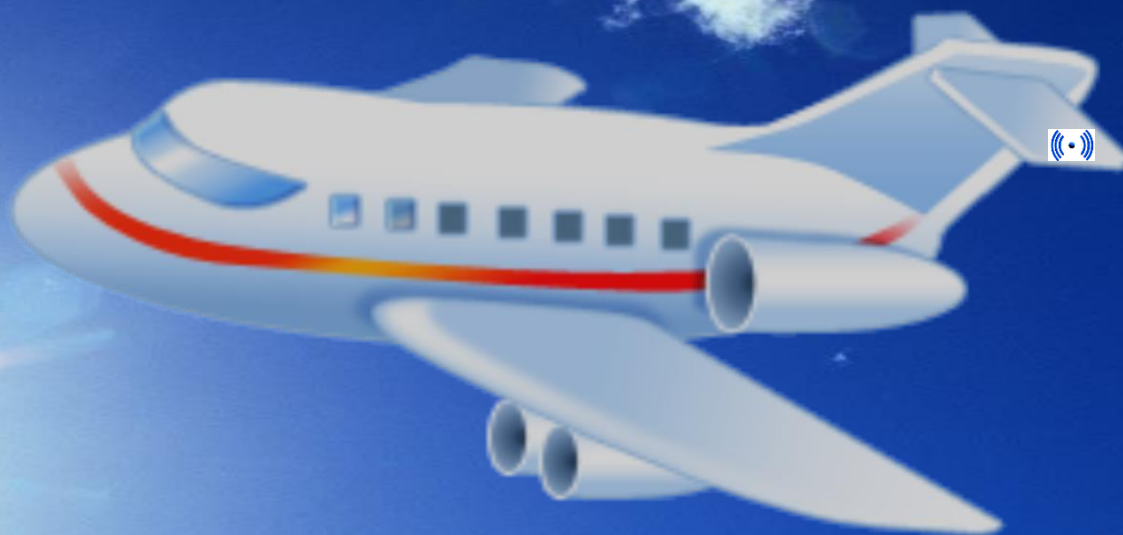




Уеббазирано интердисциплинарно проектноориентирано обучение по информационни технологии

доц. д-р Иван Шотлеков
**КАТЕДРА „ОБУЧЕНИЕ ПО МАТЕМАТИКА, ИНФОРМАТИКА
И ИНФОРМАЦИОННИ ТЕХНОЛОГИИ“**

СЪДЪРЖАНИЕ

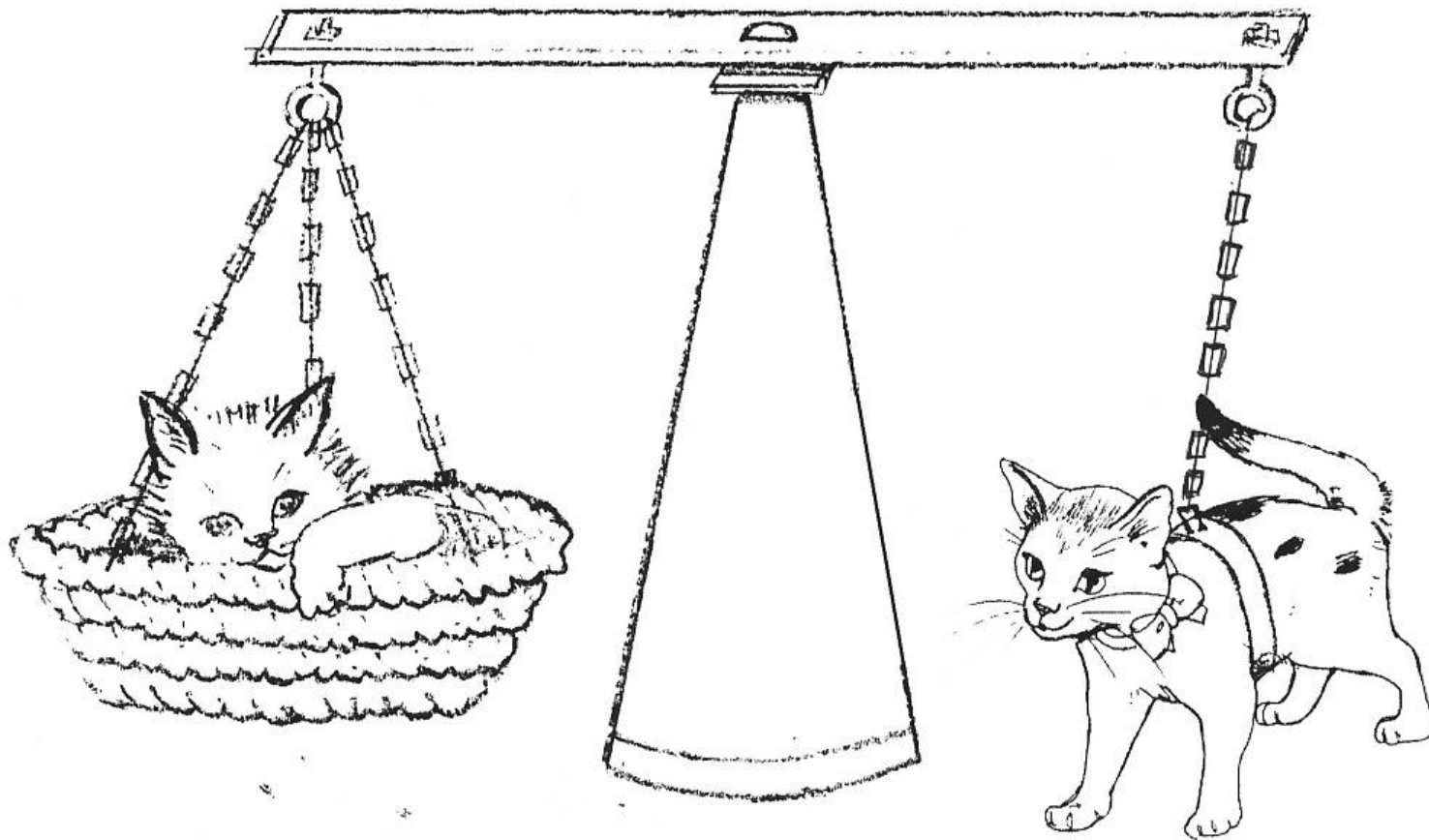
- Увод
- УБИПРОО
- О4 – 1ви етап
- О4 – 2ри етап
- Заключение

ИНТЕРДИСЦИПЛИНАРНОСТ

Из Учителско поръчение от 1971 г.

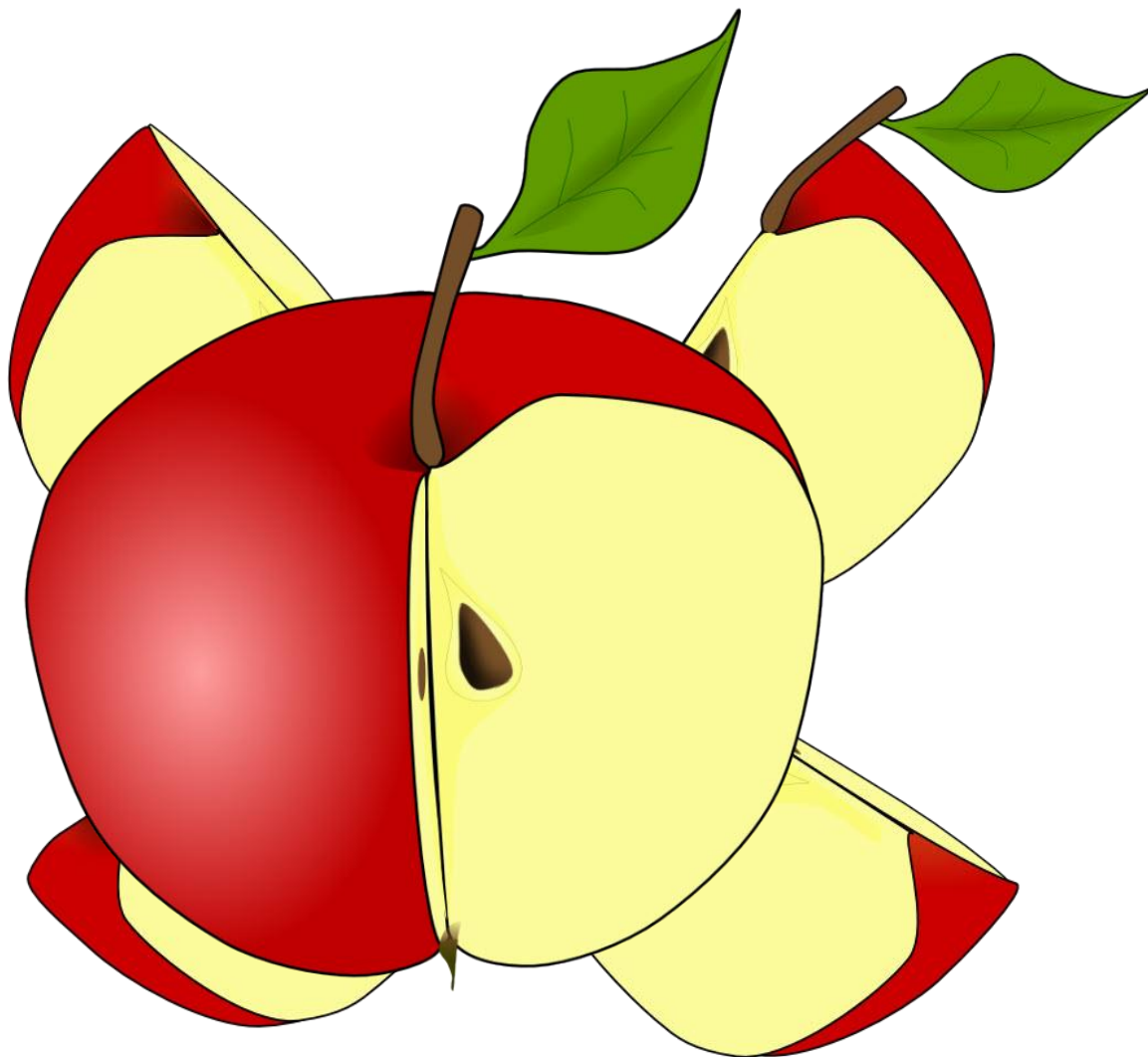
- 1) Междупредметни връзки
- 2) Самостоятелност
- 3) Социална ангажираност

АКТИВЕН ПОДХОД



Илюстрация по Held R & Hein A (1963) Movement-produced stimulation in the development of visually guided behaviour.

КРИТИЧНО МИСЛЕНЕ



?



We deliver more than we promise

ELT





(2004)

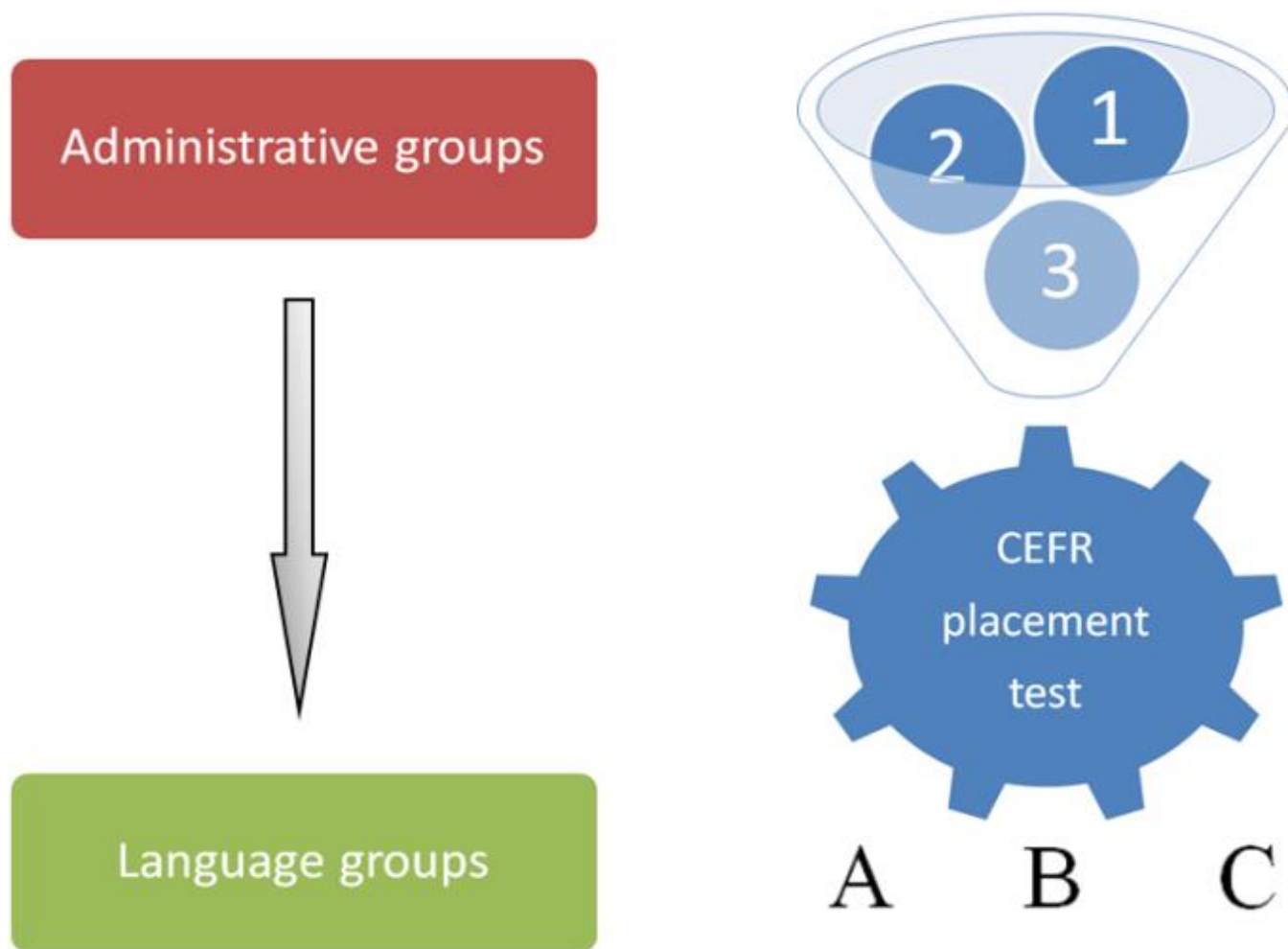
ENGLISH LANGUAGE TEACHING AT FMI Plovdiv University

MISSION STATEMENT

The ELT Unit at FMI, University of Plovdiv, will endeavor at all times:

- ✦ to deliver academic and research services of the highest possible quality to all FMI students,**
- ✦ to create an innovative and effective language learning environment to help FMI students develop learner autonomy throughout and beyond their University experience.**

КЛЮЧ - КЛЮЧАЛКА



МОДЕЛЪТ УБИПРОО

Уеббазирано

интердисциплинарно

проектноориентирано обучение

ОБЕКТ НА ИЗСЛЕДВАНЕТО

Учебно-познавателната дейност на студентите от първи курс в информатичните специалности в интегриран уводен курс по информационни технологии на английски език.

ПРЕДМЕТ НА ИЗСЛЕДВАНЕТО

Възможностите за повишаване
успеваемостта и мотивацията по отношение
на усвояване на учебното съдържание по
ИТ.

ЦЕЛ НА ИЗСЛЕДВАНЕТО

Оптимални варианти за обучение на студенти от информатични специалности, които да повишат успеваемостта от своята дейност при овладяване на ИТ, както и тяхната мотивация за изучаване на ИТ.

ЗАДАЧИ НА ИЗСЛЕДВАНЕТО

1. Да се проучат теоретичните основи на изследвания проблем
2. Да се разработи система от педагогически техники и подходи
3. Да се разработи и проведе експериментална проверка на ефективността на системата от педагогически техники и подходи.

ОСНОВНА ХИПОТЕЗА

Повишаване на успеваемостта на студентите в овладяване на ИТ и мотивацията им за изучаване на ИТ може да се осъществи чрез уеб-базирано интердисциплинарно проектно-ориентирано обучение.

УЧЕНЕ ЧРЕЗ ОПИТ (Колб)



Учебно съдържание



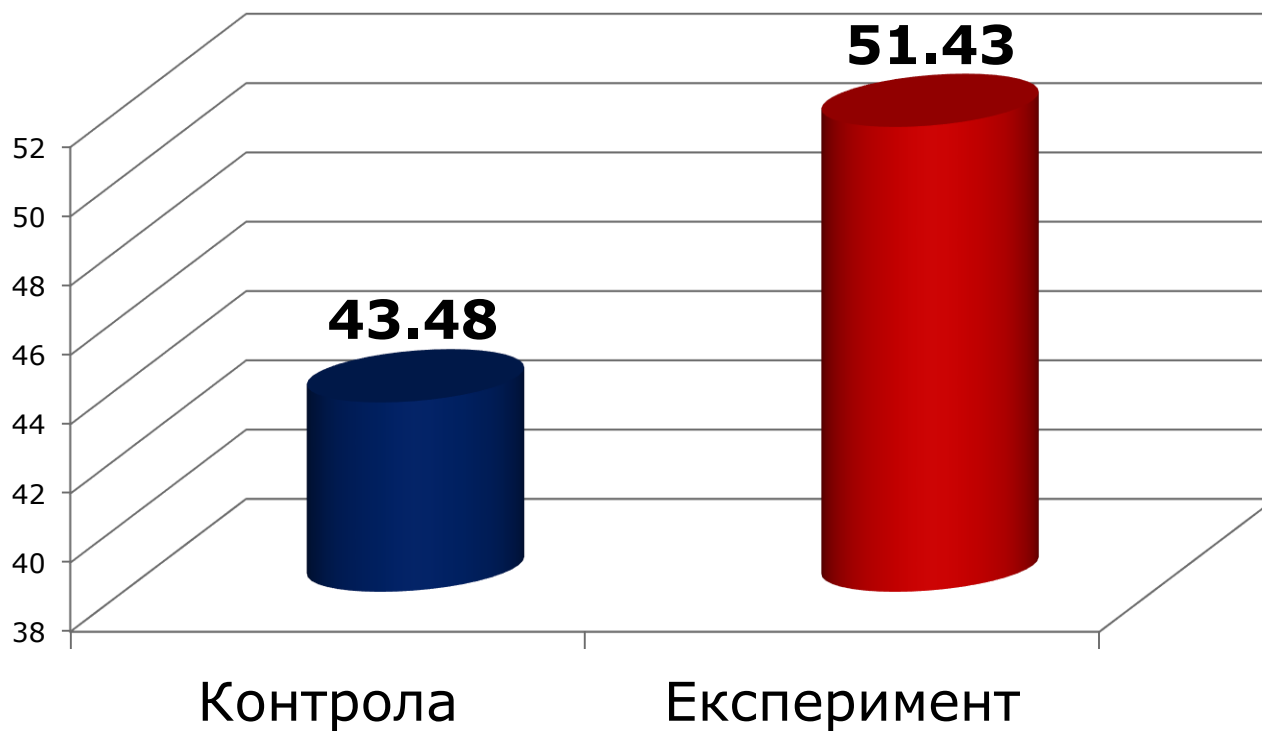
Чужд
език

WWW

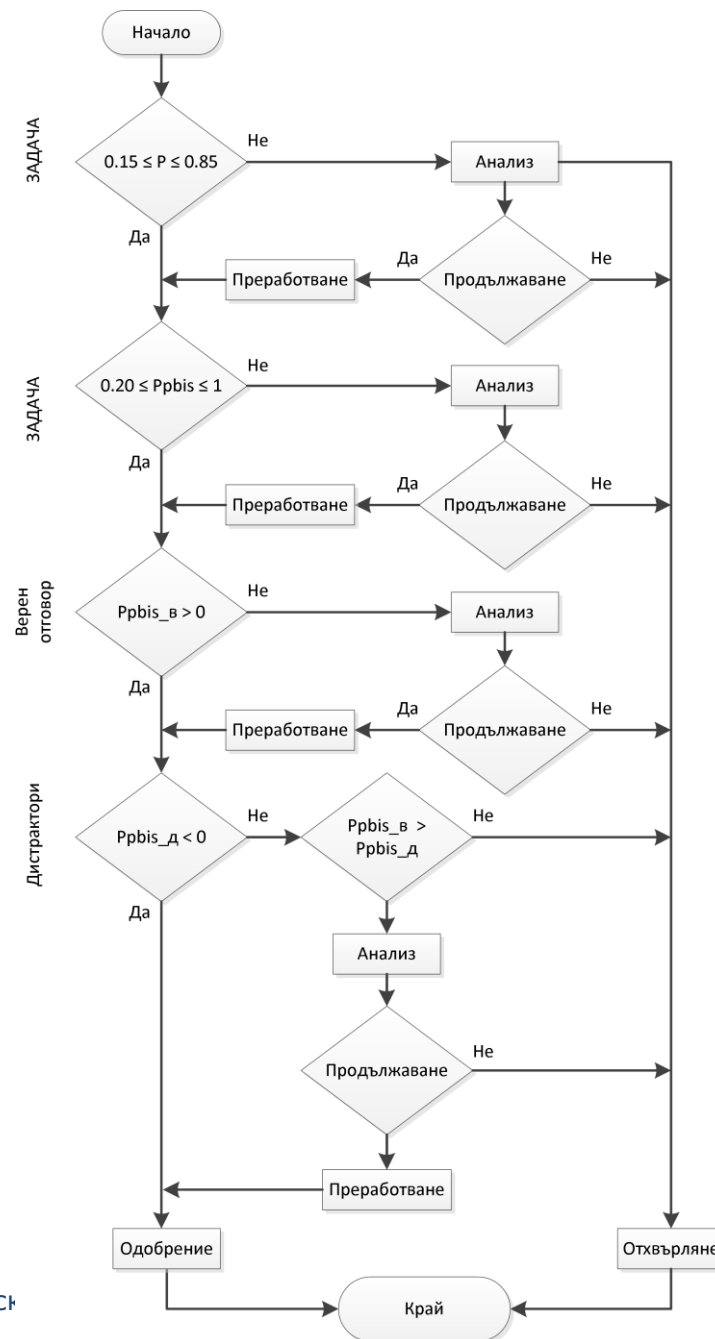
Фасилитиране

УСПЕВАЕМОСТ

Среден бал



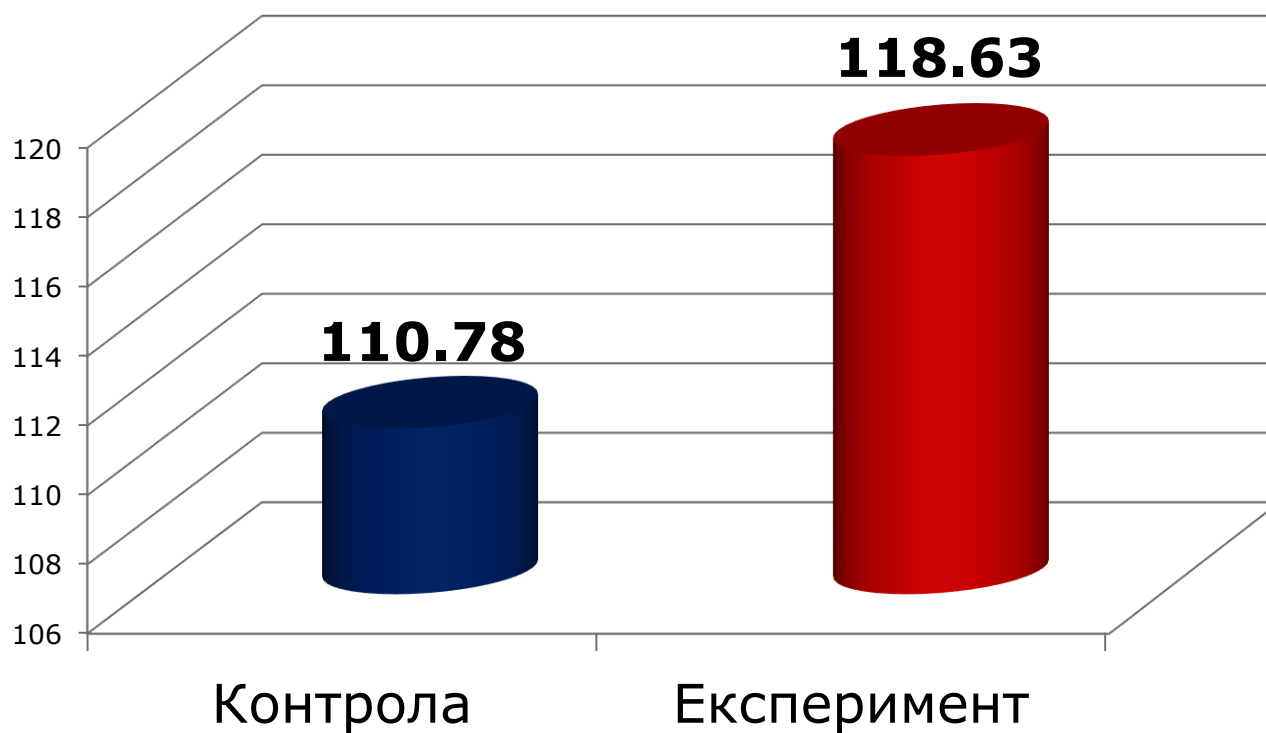
($p=0.009$, $t=2.695$, $df=53$, $r=0.347$, $\beta=0.84$)



Шотлеков И., *От пилотен до окончателен вариант на онлайн тест по информационни технологии*, електронно списание „i продължаващо образование“, 2015, ISSN 1312-899X.
<http://diuu.bg/emag/2919/>

МОТИВАЦИЯ

Среден бал



($p=0.039$, $t=2.115$, $df=513$, $r=0.284$, $\beta=0.89$)

УБИПРОО:

- По-висока успеваемост по ИТ
- По-силна мотивация за изучаване на ИТ
- „Добавена стойност“
- Приложимост
- Преподавателят vs Интернет

ПРАКТИЧЕСКА ЗНАЧИМОСТ

- Бакалавърски и магистърски програми
- Изборни курсове или практикуми
- Преквалификация на учители
- Чуждестранни студенти
- Обучение през целия живот
- Дистанционно обучение
- Автономно учене
- В средното образование
- Други дисциплини и езици

5 PRINCIPLES OF CONSTRUCTIVIST PEDAGOGY

J. Brooks and M. Brooks, *In Search for Understanding: The Case for Constructivist Classrooms* (2005):

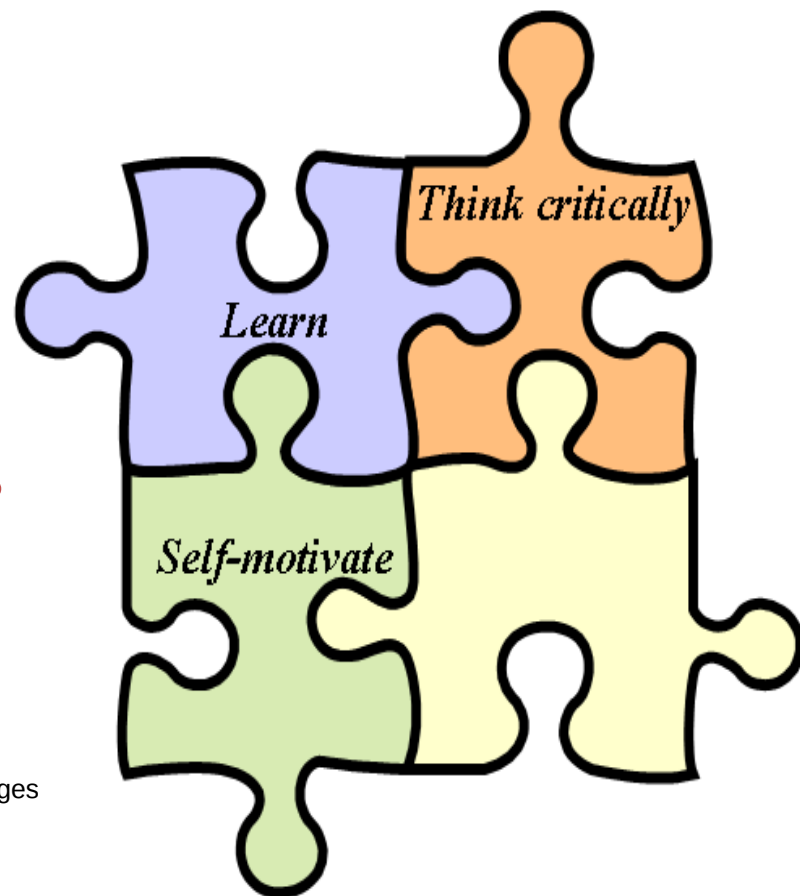
- (a) posing problems of emerging relevance to learners;
- (b) structuring learning around “big ideas” or primary concepts;
- (c) seeking and valuing students’ points of view;
- (d) adapting curriculum to address students’ suppositions; and
- (e) assessing student learning in the context of teaching.

LEARNER AUTONOMY

“the competence to develop as a

- **self-determined,**
- **socially responsible** and
- **critically aware**

participant in (and beyond)
educational environments
within a vision of education as
(inter)personal empowerment
and social transformation.”

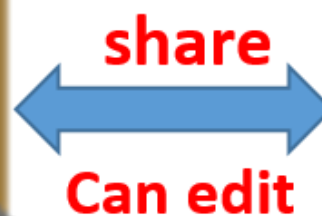
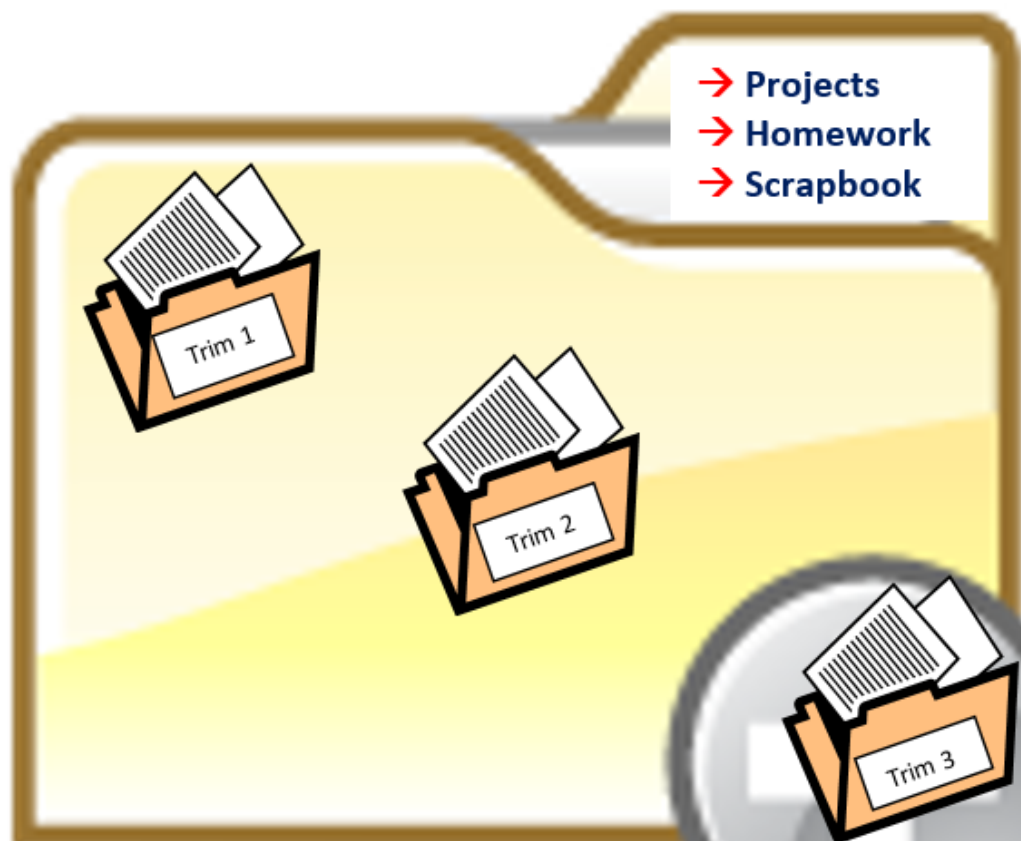


Jiménez Raya, M. & Lamb, T. (eds) (2008). Pedagogy for Autonomy in Modern Languages Education in Europe: Theory, practice and teacher education. Dublin: Authentik.

04

Обучаеми
обучават
обучаеми в
Облака

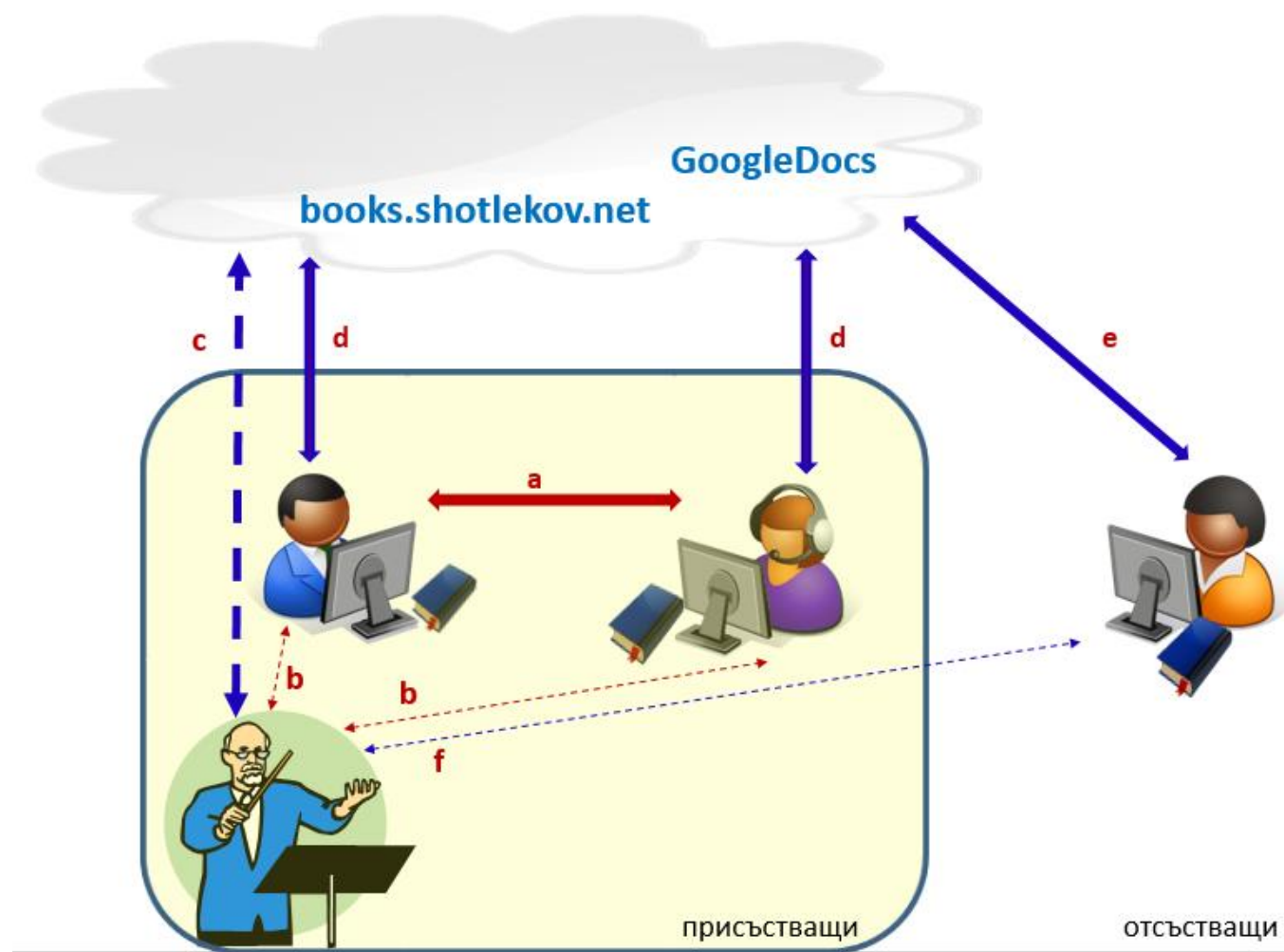
CloudPortfolio



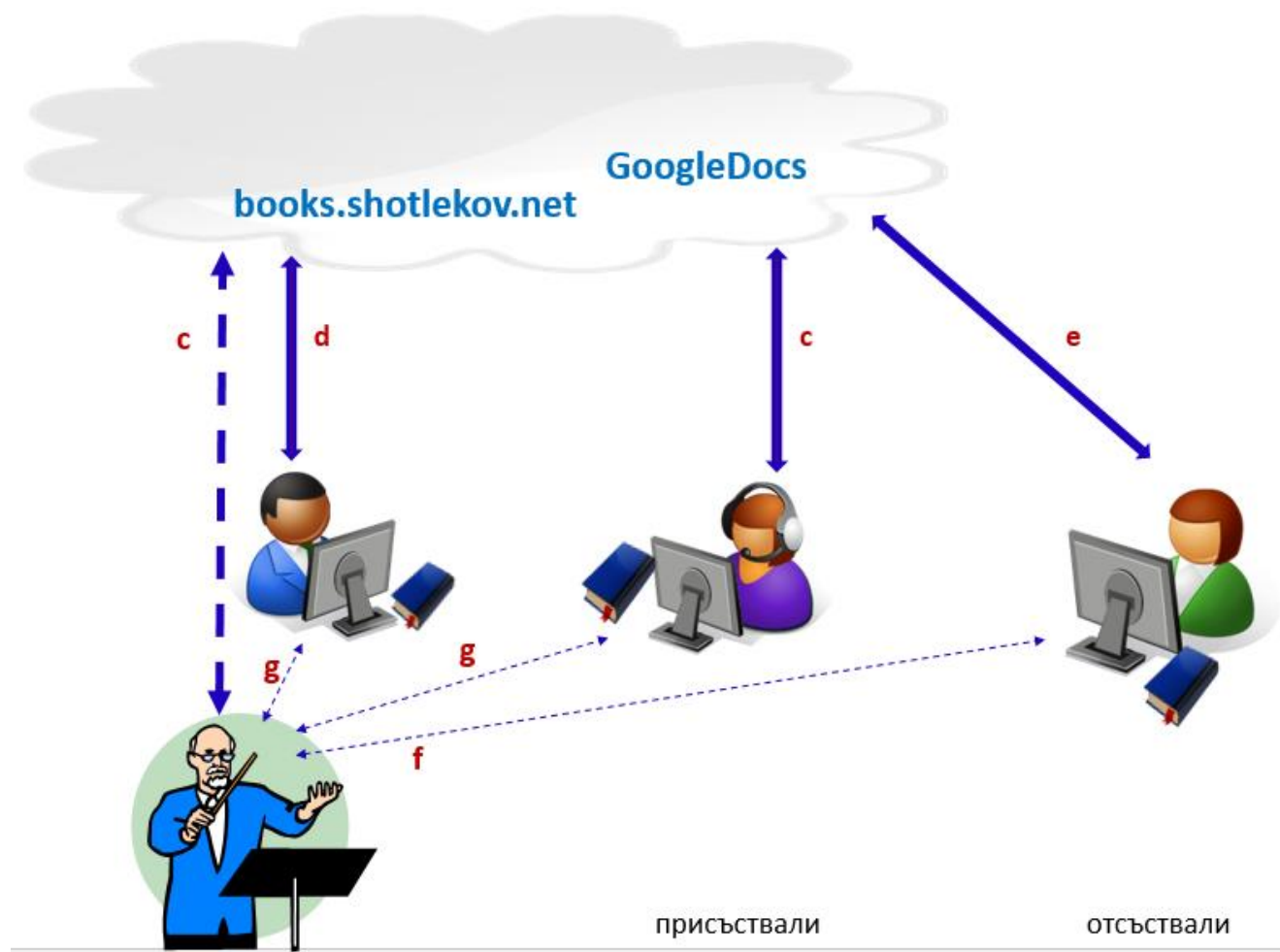
fmienglish@gmail.com

Student #

В учебната зала



Извън учебната зала



04 – ПЪРВИ ЕТАП

Unit 1. NOTE TAKING

Unit 2. PARAPHRASING AND CITING

Unit 3. PARAGRAPHS

Unit 4. ESSAYS

Unit 5. CVS AND COVER LETTERS

Unit 6. SUMMARIES

Unit 7. WRITING FOR THE WEB

Unit 8. TECHNICAL REPORTS

Unit 9. EFFECTIVE PRESENTATIONS

4	Software modeling and analysis
4.1	Modeling foundations
4.2	Types of models
4.2	Analysis fundamentals
5	Requirements analysis and specification
5.1	Requirements fundamentals
5.2	Eliciting requirements
5.3	Requirements specification and documentation
5.4	Requirements validation
6	Software design
6.1	Design concepts
6.2	Design strategies
6.3	Architectural design
6.4	Human-computer interaction design
6.5	Detailed design
6.6	Design evaluation
7	Software verification and validation
7.1	V&V terminology and foundations
7.2	Reviews and static analysis
7.3	Testing
7.4	Problem analysis and reporting
8	Software process
8.1	Process concepts
8.2	Process implementation
8.3	Project planning and tracking
8.4	Software configuration management
8.5	Evolution processes and activities
9	Software quality
9.1	Software quality concepts and culture

Етични норми

PLAGIARISM Copy & Paste	THE ORIGINAL	
In 1993, IBM and telephone company BellSouth team up to release Simon, a cellphone that one 1993 press release describes as “a wireless machine, a pager, an electronic mail device, a calendar, an appointment scheduler, an address book, a calculator and a pen-based sketchpad.” It is the first product to combine touch-screen technology with a telephone. /From a student’s technical report./		

Етични норми

PLAGIARISM Copy & Paste	THE ORIGINAL	
In 1993, IBM and telephone company BellSouth team up to release Simon, a cellphone that one 1993 press release describes as “a wireless machine, a pager, an electronic mail device, a calendar, an appointment scheduler, an address book, a calculator and a pen based sketchpad.” It is the first product to combine touch-screen technology with a telephone. /From a student’s technical report./	 The screenshot shows a web browser window with the URL www.npr.org/2011/12/23/144185699/timeline-. The article is titled "1993 Simon Personal Communicator Phone" and contains the text: "In 1993, IBM and telephone company BellSouth team up to release Simon, a cellphone that one 1993 press release describes as 'a wireless machine, a pager, an electronic mail device, a calendar, an appointment scheduler, an address book, a calculator and a pen-based sketchpad.' It is the first product to combine touch-screen technology with a telephone."	

Етични норми



PLAGIARISM Copy & Paste	THE ORIGINAL	ACCEPTABLE VERSION
In 1993, IBM and telephone company BellSouth team up to release Simon, a cellphone that one 1993 press release describes as “a wireless machine, a pager, an electronic mail device, a calendar, an appointment scheduler, an address book, a calculator and a pen-based sketchpad.” It is the first product to combine touch-screen technology with a telephone. /From a student’s technical report./		PARAPHRASE & SUMMARY The first machine that had both touch-screen technology and telephone was introduced in 1993 by IMB & Bellsouth. The media coverage at the time described it had many of the features of a PDA (Personal Digital Assistant), among them paging, sending email, etc. (Cohen, 2012). ... REFERENCES ... Cohen N. (2012) Timeline: A History Of Touch-Screen Technology. Available at http://www.npr.org/2011/12/23/144185699/timeline-a-history-of-touch-screen-technology (Accessed 25 October 2012) ...

04 – ВТОРИ ЕТАП

TEAM_i (four members)

Weeks_1,2,3

Topic_m

Subtopic_{m1}
(Student_1)
team leader

Subtopic_{m2}
(Student_2)

Subtopic_{m3}
(Student_3)

Subtopic_{m4}
(Student_4)

Weeks_4,5

Topic_n

Subtopic_{n1}
(Student_1)

Subtopic_{n2}
(Student_2)
team leader

Subtopic_{n3}
(Student_3)

Subtopic_{n4}
(Student_4)

Weeks_6,7

Topic_p

Subtopic_{p1}
(Student_1)

Subtopic_{p2}
(Student_2)

Subtopic_{p3}
(Student_3)
team leader

Subtopic_{p4}
(Student_4)

Weeks_8,9

Topic_q

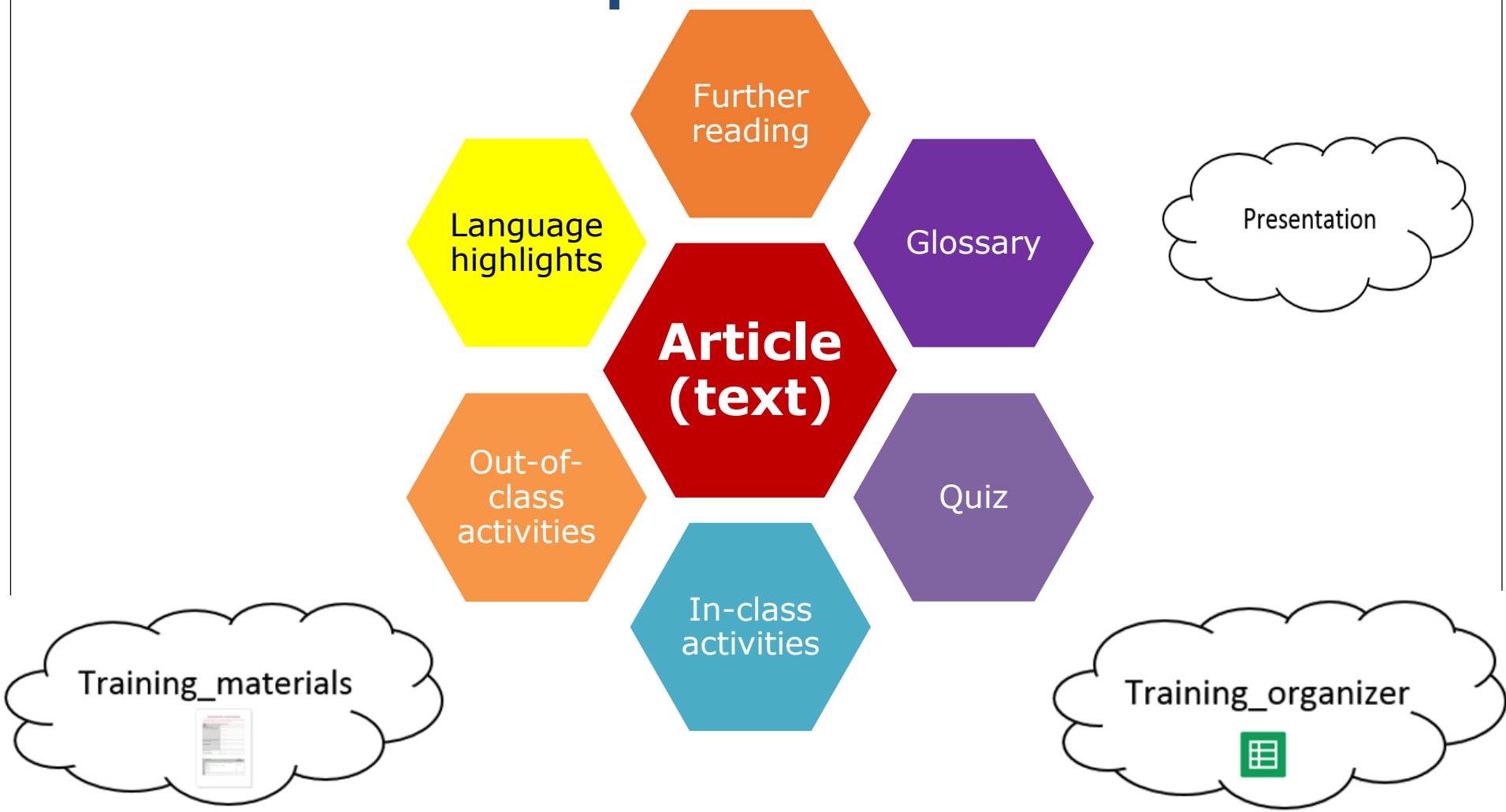
Subtopic_{q1}
(Student_1)

Subtopic_{q2}
(Student_2)

Subtopic_{q3}
(Student_3)

Subtopic_{q4}
(Student_4)
team leader

SUBTOPIC_i





Intro to the whole topic

SUBTOPIC 1
student 1



+ Discussion

.....

Questions, discussion on the whole topic

Quiz on the whole topic

Website layout

HOME = TOPIC (intro to training module)

SUBTOPIC1

Article

Source(s):

Glossary:

In-class-activities:

Language highlights: (Article1, In-class-activities1, Presentation1)

Presentation:

Further reading:

Out-of-class activities:

SUBTOPIC2

.....

Quiz

About

Cloud Computing

Search this site[Home](#)[Home](#)

▼ 1. Characteristics & advantages

- [Article](#)
- [Further reading](#)
- [Glossary](#)
- [In-class activities](#)
- [Language highlights](#)
- [Out-of-class activities](#)
- [Presentation](#)
- [Sources](#)

▼ 2. Service models

- [Article](#)
- [Further reading](#)
- [Glossary](#)
- [In-class activities](#)
- [Language highlights](#)
- [Out-of-class activities](#)
- [Presentation](#)
- [Sources](#)

▼ 3. Deployment models

Home

Introduction



Sources: <http://velocityagency.com/wp-content/uploads/2013/08/go.jpg>

Cloud computing is a phrase used to describe a variety of computing concepts that involve a large number of computers connected through a real-time communication network such as the Internet. In science, cloud computing is a synonym for distributed computing over a network, and means the ability to run a program or application on many connected computers at the same time.

The phrase is often used in reference to network-based services, which appear to be provided by real server hardware, and are

Зимен'2015

[HCI](#)

[Top 8 Gadgets](#)

[MOBA Games](#)

[Internet Security](#)

[Graphics and Design](#)

[Programming Languages](#)

[Internet Marketing](#)

[IAS - Information Assurance and Security](#)

[MMORPGs](#)

[Indie Game Development](#)

[Operating Systems](#)

[Software Engineering](#)

[Web Design](#)

[Visual effects](#)

[Weird Gadgets](#)

[Cryptocurrency](#)

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[Digital Painting](#)

[Cloud Computing](#)

[Social Networking](#)

[Networks](#)

[Single player games](#)

[Operating systems](#)

[Graphics and design](#)

[Internet marketing](#)

[Communication systems](#)

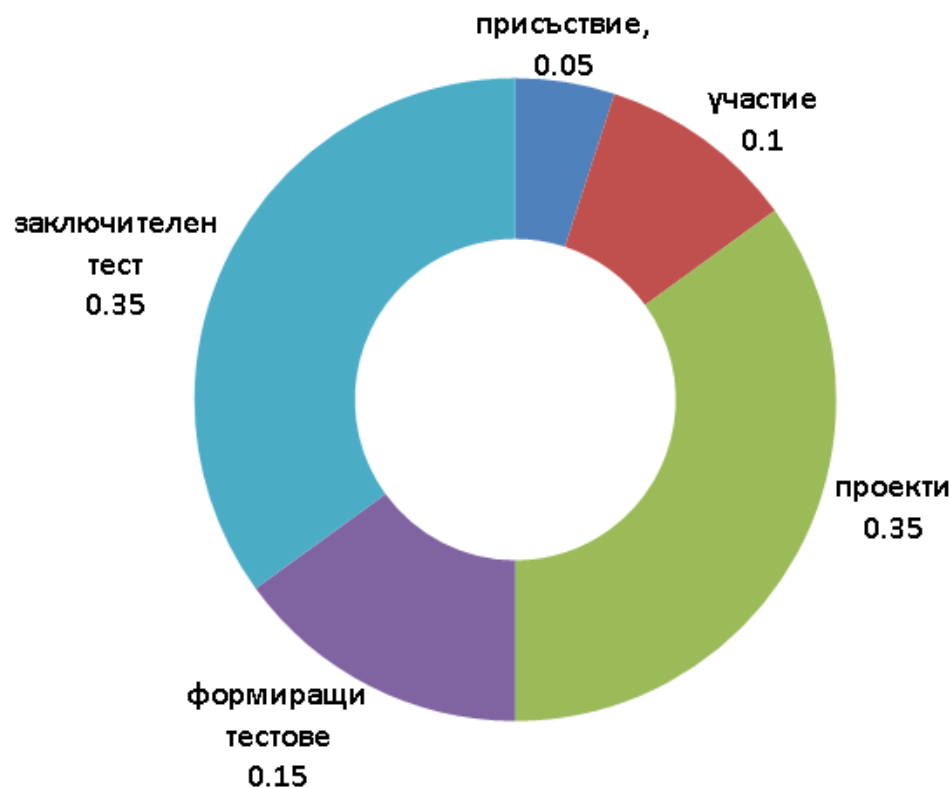
[Best gadgets of the year](#)

[Accessibility for people with disabilities](#)

[Internet Security](#)

ОЦЕНЯВАНЕ

$$G = G_a w_a + G_i w_i + G_p w_p + G_f w_f + G_s w_s$$



$$S_i = \frac{\sum_{j=1}^n C_{ij}}{\max(C)} 100$$

СЪВМЕСТНИ ПУБЛИКАЦИИ

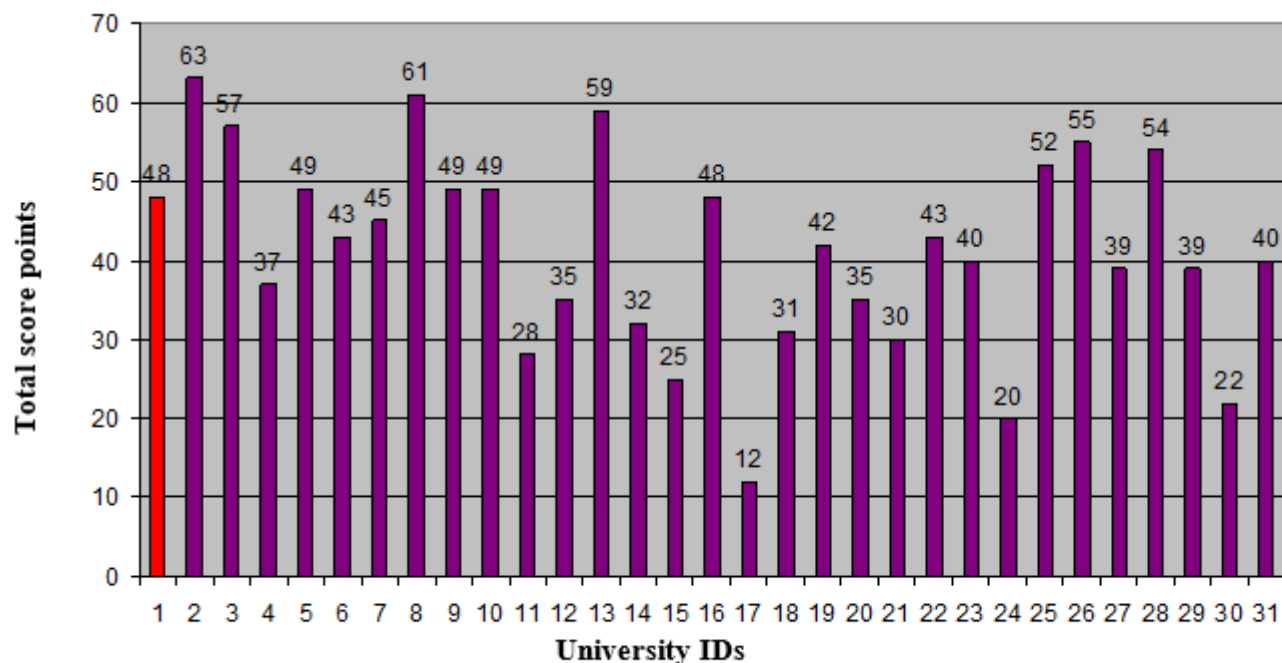


Figure 1. Web Accessibility Rankings of universities - sample made up of 31 universities

ОЦЕНКА НА КУРСА

Likes		Dislikes	
	n		n
Team work	17	Nothing	16
Cloud computing	7	Teamwork	11
Everything	7	Too much work	6
Topics ICT - content knowledge	4	ICT topics	4
Learners-Teach-Learners-in-the-Cloud aproach	3	n/a	3
Presenting information	3	Not enough teacher input	2
Training preparation	2	Early start at 9.15	2
Flexitime	2		
Meeting deadlines	2		

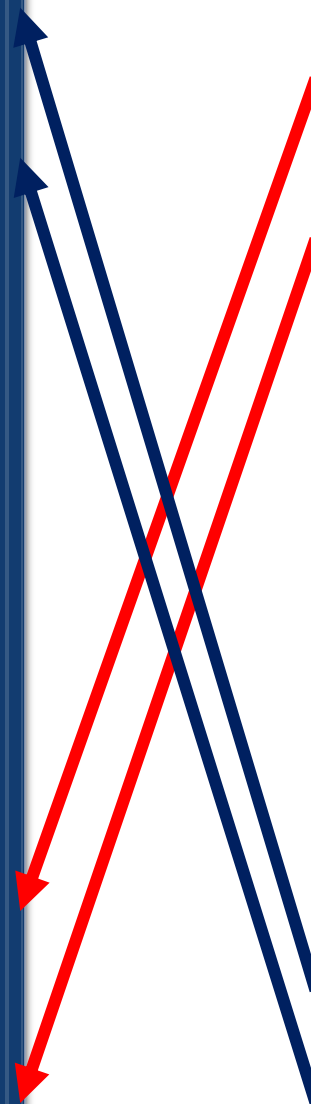
Students' likes and dislikes about the LTLIC course

UK

VERBAL COMMUNICATION	1
TEAMWORK	2
COMMERCIAL AWARENESS	3
ANALYSING & INVESTIGATING	4
INITIATIVE / SELF MOTIVATION	5
DRIVE	6
WRITTEN COMMUNICATION	7
PLANNING & ORGANISING	8
FLEXIBILITY	9
TIME MANAGEMENT	10
LANGUAGE & CULTURE	11
NEGOTIATING & PERSUADING	12
COMPUTING SKILLS	13
STRESS TOLERANCE	14
CREATIVITY	15

FMI students

TEAMWORK	1
COMPUTING SKILLS	2
PLANNING & ORGANISING	3
CREATIVITY	4
INITIATIVE/SELF MOTIVATION	5
LANGUAGE & CULTURE	6
ANALYSING & INVESTIGATING	7
FLEXIBILITY	8
STRESS TOLERANCE	9
TIME MANAGEMENT	10
WRITTEN COMMUNICATION	11
NEGOTIATING & PERSUADING	12
VERBAL COMMUNICATION	13
COMMERCIAL AWARENESS	14
DRIVE	15



University leavers lack the essential skills for work

**Такса
обучение
£27,000**



<http://www.telegraph.co.uk/education/educationnews/10306211/University-leavers-lack-the-essential-skills-for-work-employers-warn.html>

БЛАГОДАРНОСТИ



- проф. д-р Асен Рахнев и проф. д.п.н. Сава Гроздев
- Ръководството на ФМИ
- проф. д-р Коста Гъров
- доц. д-р Евгения Ангелова
- Катедра „Обучение по математика, информатика и информационни технологии“
- Колегите и студентите от ФМИ на ПУ „Паисий Хилендарски“

ВЪПРОСИ И КОМЕНТАРИ

