



United Nations
Educational, Scientific and
Cultural Organization



UNESCO Institute
for Information Technologies
in Education

Personalized Learning and the New Generation Textbooks for ASPnet Schools

POLICY ADVOCACY
AND RESEARCH

TECHNICAL ASSISTANCE

TEACHER
PROFESSIONAL
DEVELOPMENT

DIGITAL PEDAGOGY

OPEN EDUCATIONAL
RESOURCES AND
LEARNING MATERIALS

NETWORKING AND
PARTNERSHIP



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<http://iite.unesco.org>



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UNESCO IITE



**POLICY, RESEARCH
and TECHNICAL
ASSISTANCE**

**TEACHER
PROFESSIONAL
DEVELOPMENT
and NETWORKING**

**DIGITAL
PEDAGOGY, OER
and LEARNING
MATERIALS**

IITE. Networking and Partnership



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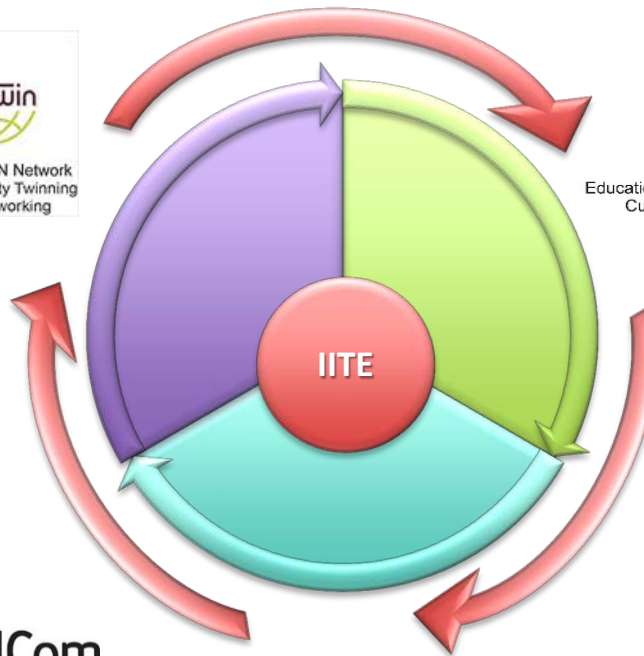
UNITWIN Network
• University Twinning
and Networking



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UNESCO
Associated
Schools



جامعة حمدان بن محمد الذكية
Hamdan Bin Mohammed Smart University



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International Centre
for Technical and Vocational
Education and Training



an
NTT Communications
Company



IITE –ASPnet Pilot Project “Learning For the Future” (LFF). 2012-2014



Participants:

42 ASPnet Schools from 14 UNESCO member-states

<http://lff.iite.unesco.org/eng/>

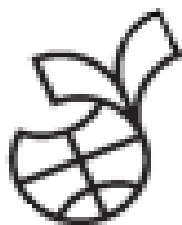


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Deployment of LFF. 2015-2017



UNESCO
Associated
Schools

Indicators 38/C5:
100 ASPnet Schools from
25 member-states



Our plans:
14 National LFF-Projects
11 New countries
500 ASPnet Schools



The overall aim of LFF

Fully integrate modern ICT into the educational process, to renew pedagogy and enhance the learning experience, both now and in a sustainable future in the framework of three main areas of joint activities :

- ICT for Inclusive, Equitable and Quality Education
- ICT in Education for Sustainable Development
- ICT, Global Citizenship and New Humanism





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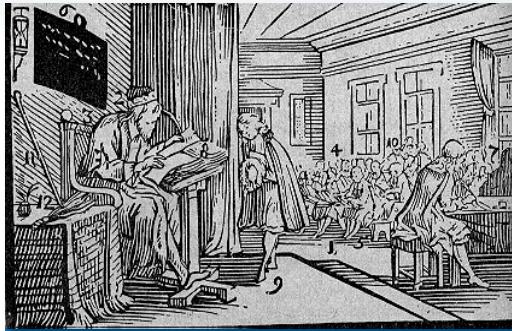


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Education: towards personalization



Socrates,
1:1 but just for a few



XVIII Century
1:M but for Elite



IX Century
1:M and for many



XX Century
1:MM and massive



XXI Century
1:MMM but not personalized
yet



PERSONALIZED LEARNING



IS DIFFERENT

IS THIS A BOOK?????? THIS IS A BOOK !!!!!!!!!!!!!!!

CARICATURA.RU





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What is the most important in learning?

– Quality and Personalization!



Until recent time, the only tools to guarantee the same quality of learning for all, including socially disadvantaged groups, were textbooks.

We do not compete with textbooks. The textbooks that match quality requirements represent a good mechanism to maintain a high quality even today.



But textbooks are
obsolete.





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What is the most important in learning?

- Visibility and Personalization

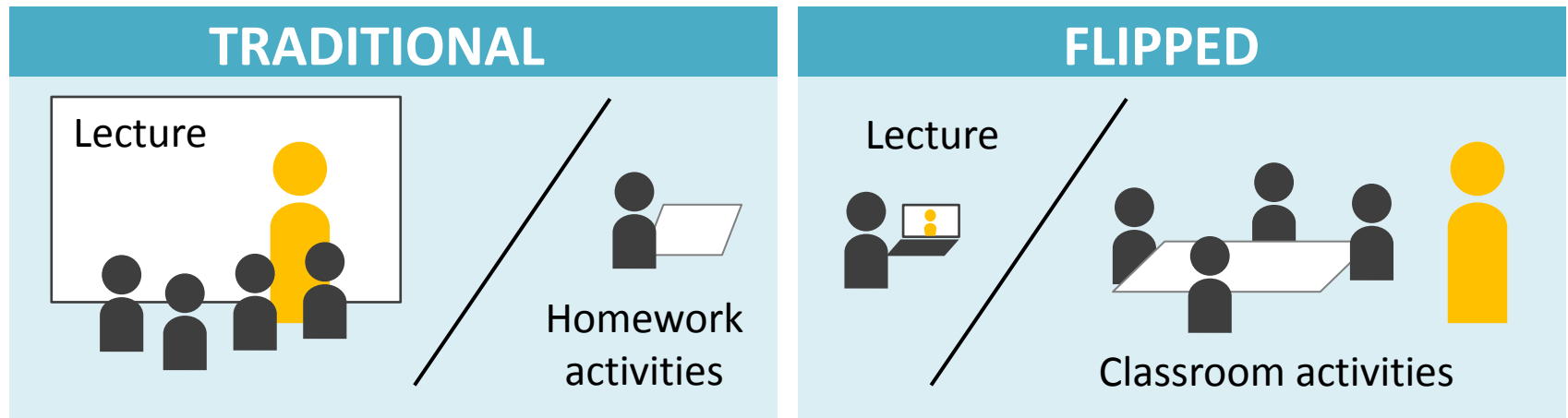
MOOC are visual and allow to access lectures of the best teachers in the world; to learn - when convenient and where convenient.



But MOOCs are mostly for well organized people than school students
A lot of videos are embedded into text. But students memorize better when they not only hear and see, but also read the material.

What is the most important in learning? – New technologies and innovation approaches

A flipped classroom concept is very innovative.



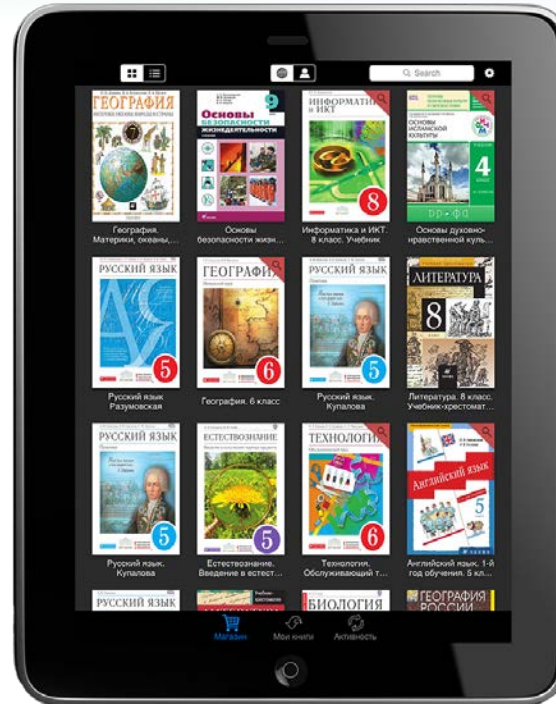
But hardly implemented in practice - it requires from teachers special skills and a lot of time to prepare relevant video content.

What solution do we offer?

Good Textbooks



Placed in context videos of the best teachers from UNESCO ASPnet schools



Teaching concept from the “flipped” classroom



Highly interactive the
New Generation
Multimedia
e-Textbooks
(The “Active” Text-Books)



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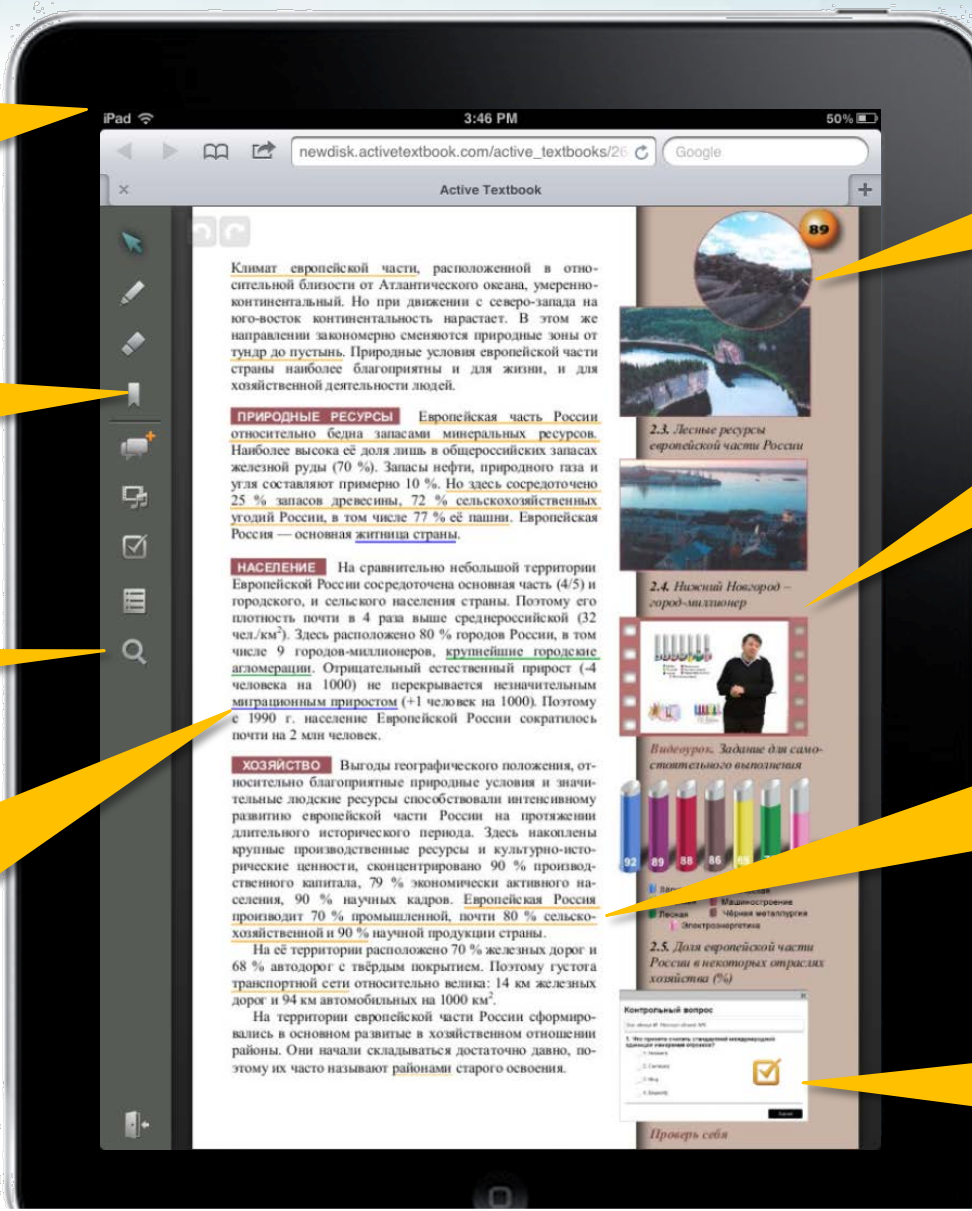
Let us introduce the interactive e-textbook to you

It works everywhere:
on devices supported
by Windows, Linux,
MacOS,
iOS, Android,
Windows 8

It allows to actively
work with texts
through annotations,
notes,
bookmarks, etc.

Text search function

Integration of
additional multimedia
images in the
electronic textbook
that will be available
on all devices together
with the text of the
book.



All illustrations are
active. They can be
zoomed in and viewed
in detail.

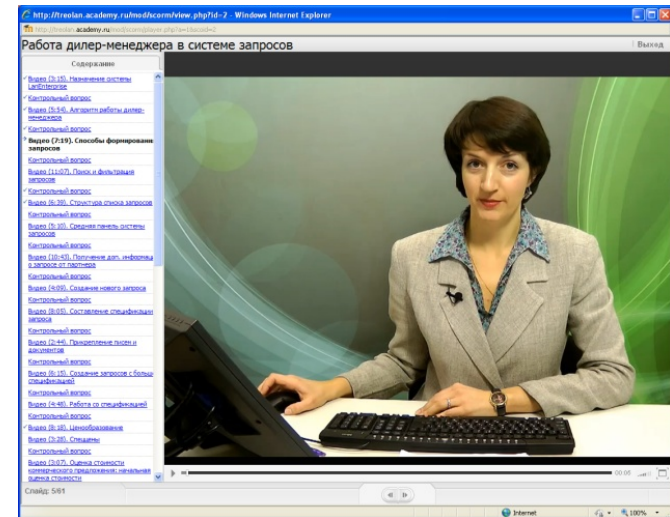
The text of the book is
supplemented with
video lessons by the
best ASPnet
teachers. And with
other video materials.

The textbook is
provided with
interactive links to the
content on the Internet
that extend and
complement the text of
the book.

The material is
provided with the
means of assessment
and self- assessment
(texts, exercises,
tasks).

What should be the video for e-textbooks in order to change the learning process for the better?

- The content should be recorded in the equipped TV studio
- It is necessary to use special techniques that increase attention, for example, the constant change of shots
- The learning material should be divided into small parts of information – the duration of one fragment should be 3-7 minutes



E-textbook is not just a book

Content protection



Information in the Active Textbook is reliably protected through its own software system DRM.

Additional hardware devices are not required to work with the system.

Active work with a book



Modern technologies, for example, Active Textbook allows not only to view the book, but also to actively work with it. Available features:

- Handwritten notes
- Bookmarks
- Opportunity to add and share comments
- Viewing interactive elements (videos, pictures, tests, exercises and etc.)
- Interactive content
- Search
- Use of dictionary

Producing reports



All activities of users in books are recorded and available in the form of reports:

- **For teachers:** information about students' activities, posted comments, tests results
- **For students:** exchange of comments (if it is allowed by a teacher)

Time for personal communication between teacher and student



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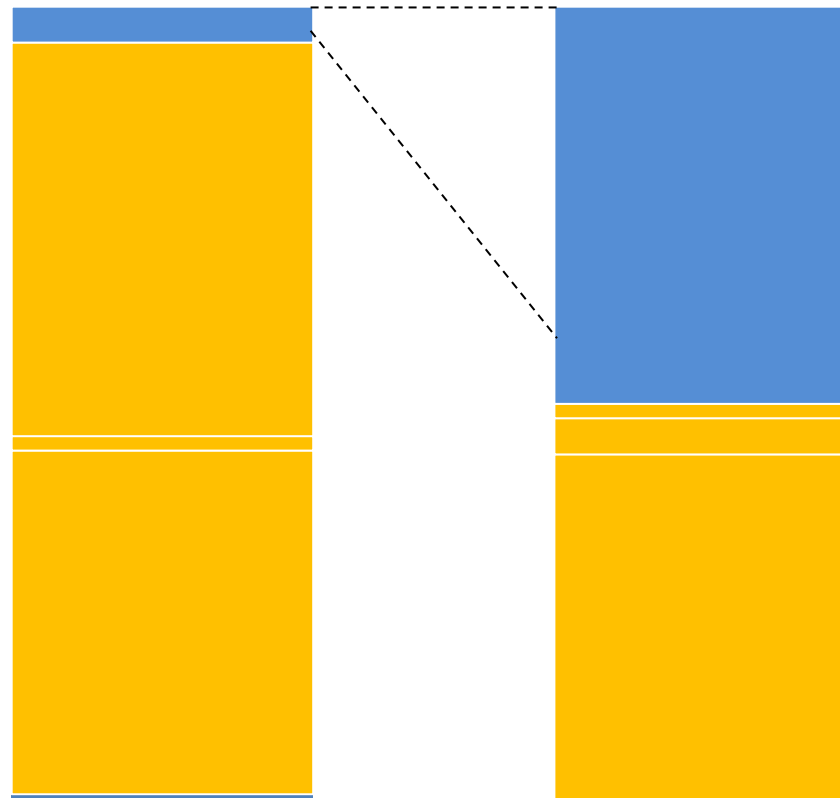
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Time for communication
with students

Reading lectures

Tests

Laboratory works



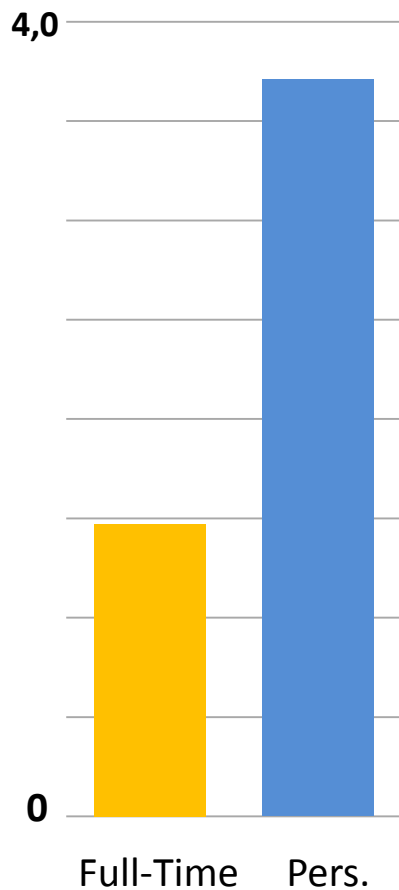
Learning in groups,
webinars

Personalized learning

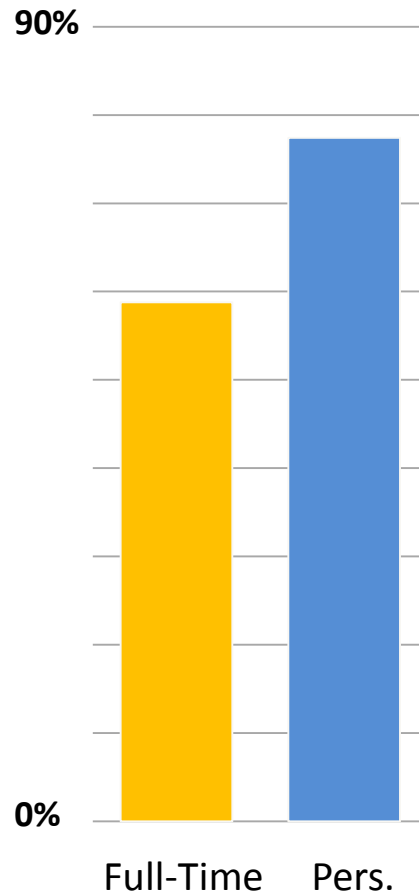
**10 x time for
personal
communication**

Teachers and students opinion. Experimental study results

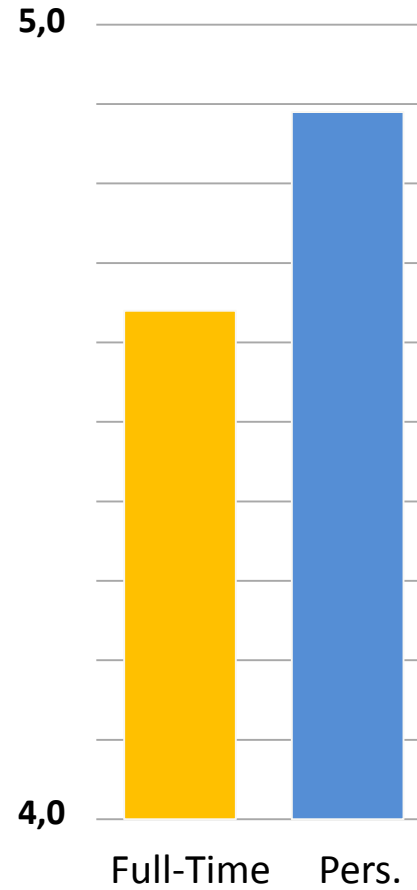
Subjective progress



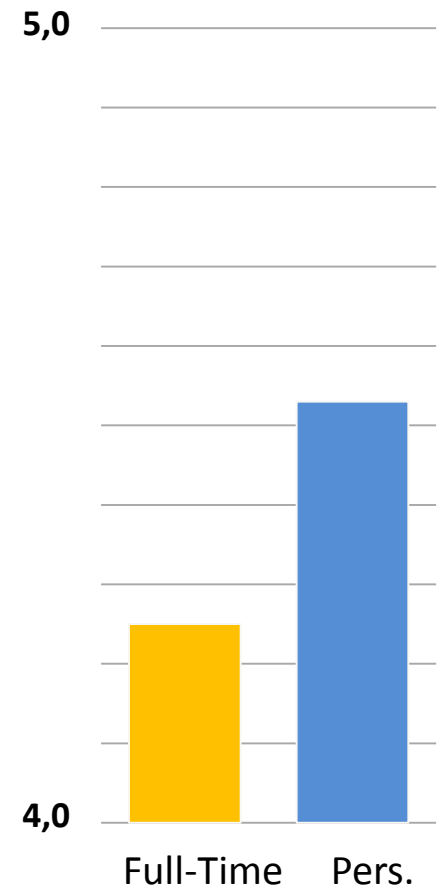
Tests



Teacher



Equipment





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UNESCO Institute
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UNESCO Mobile Learning Week-2016, Symposium, Track 4

Paris, France, March 09, 2016



Thank
You!

UNESCO IITE invites you for cooperation !



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