

()

Distr.
GENERAL

E/ESCWA/ICTD/2007/16
14 December 2007
ORIGINAL: ARABIC

()

E/ESCWA/ICTD/2007/16
ISSN. 1810-3448
ISBN. 978-92-1-628064-2
07-0496

Sales No. A.08.II.L.6

- :
- 1 :
- 1 :
- 5 :
- 10 :
- 15 :

- 19 :
- 19 :
- 23 :
- 30 :
- 34 :

- 38 :
- 38 2007

- 41 :
- 41 :

- 44 :
- 44 :
- 47 :

.2015

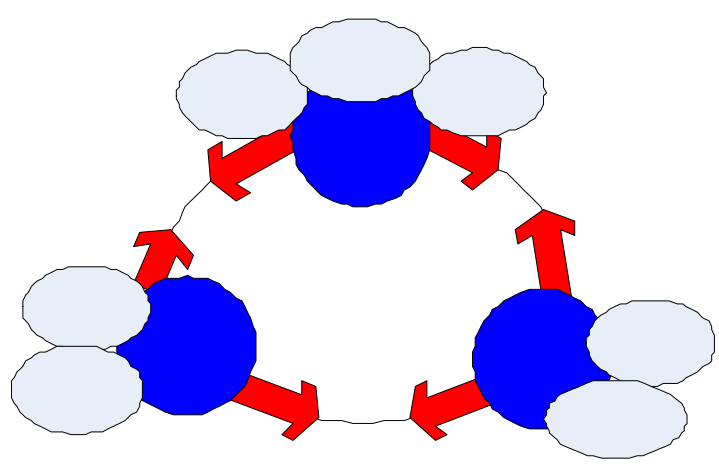
(Information and communication

.ICT4E

technology for education)

:

(3) (2) (1)



James Edwyn. 2001. *Schooling for Tomorrow, Learning to Change: ICT in Schools*. OECD. Available at: www.sourceoecd.org

(1)

Trucano, Michael. 2005. *Knowledge Maps: ICT in Education*. Washington, DC: infoDev/World Bank. Available at: (1) <http://www.infodev.org/en/Publication.8.html>

(5) (4) (3) (2)

(OECD)

:

:

•
•
•

•
•
•
•

(Broadband)

Department for Education and Skills/British Educational Communications and Technology Agency (Becta) UK. *ICT in Schools Survey 2004*. Available at: www.teachernet.gov.uk. (2)

Victoria L. Tinio. 2003. *ICT in Education*. UNDP-APDIP. Available at: <http://www.apdip.net/publications/iespprimers/eprimer-edu.pdf>. (3)

James Edwyn. 2001. *Schooling for Tomorrow, Learning to Change: ICT in Schools*. OECD. Available at: www.sourceoecd.org. (4)

Trucano, Michael. 2005. *Knowledge Maps: ICT in Education*. Washington, DC: infoDev/World Bank. Available at: <http://www.infodev.org/en/Publication.8.html>. (5)

:

•
•
•

25 20

(modules)

(learning objects)

) ()

(

-1

:

(6)

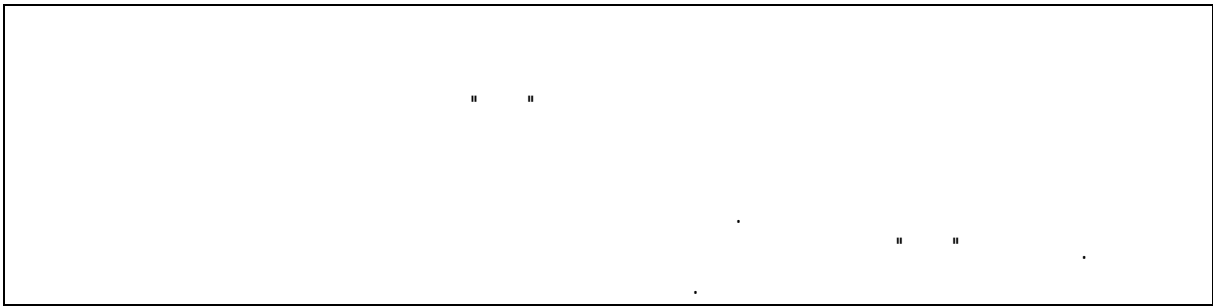
:

(7)

:

(wiki)

(blogs)



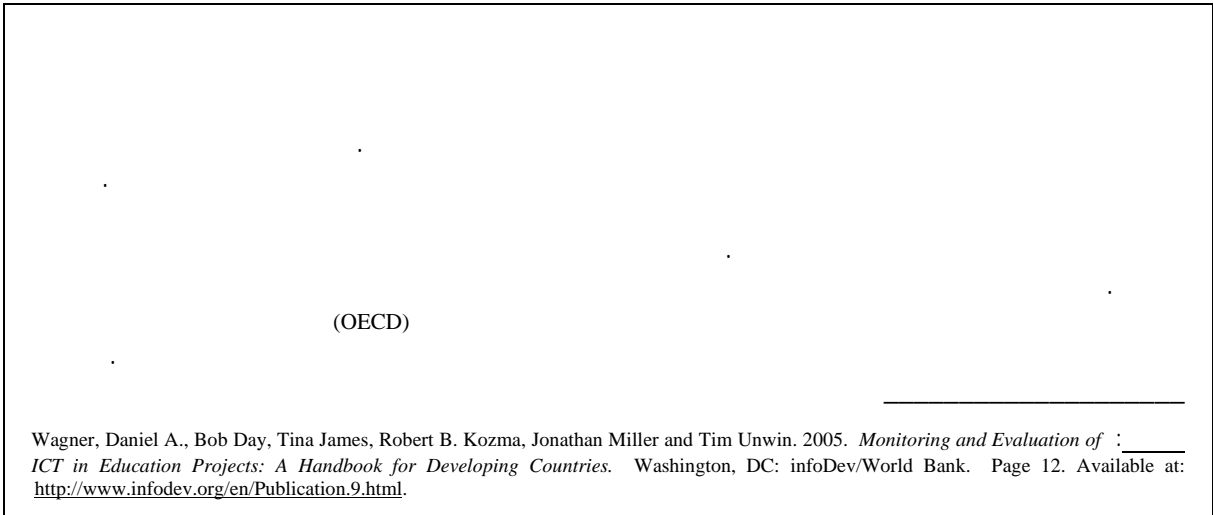
Department for Education and Skills, UK. 2004. *Hands On Support. Guidance and support materials for HOS providers - primary*. Available at: www.teachernet.gov.uk/_doc/7947/primary.pdf. (6)

Becta Research, UK. January 2007. *The impact of ICT in schools – a landscape review*. Available at: <http://publications.teachernet.gov.uk>. (7)



-2

(8)



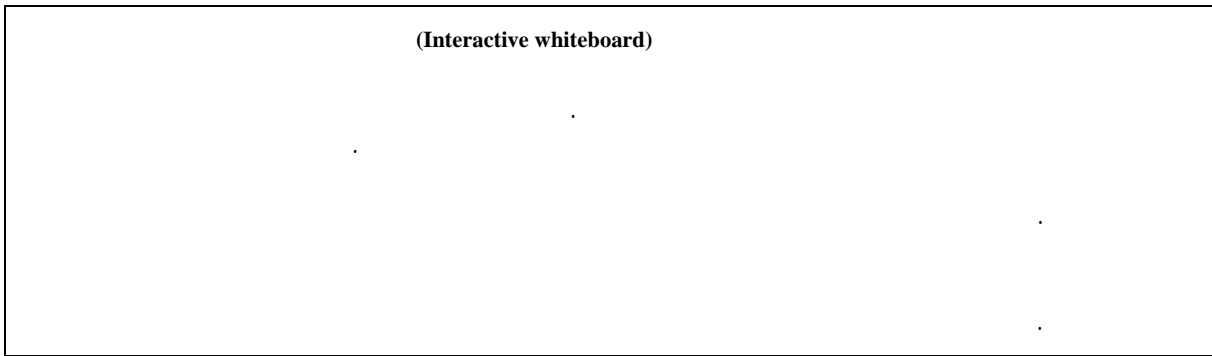
(OECD)

Wagner, Daniel A., Bob Day, Tina James, Robert B. Kozma, Jonathan Miller and Tim Unwin. 2005. *Monitoring and Evaluation of : ICT in Education Projects: A Handbook for Developing Countries*. Washington, DC: infoDev/World Bank. Page 12. Available at: <http://www.infodev.org/en/Publication.9.html>.

(2)

(8)

⁽⁹⁾ micro-system and process in science



(10)

(2) (9)

-3

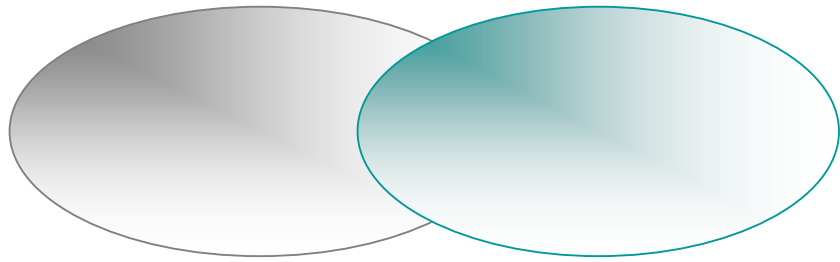
()

:

:

-4

(11)



2003 /

•

•

•

•

:

100



:

:

-1

:

•

•

•

•



:

-2

.(Blended Learning Approach)

:

-3

ICDL Intel Microsoft World links

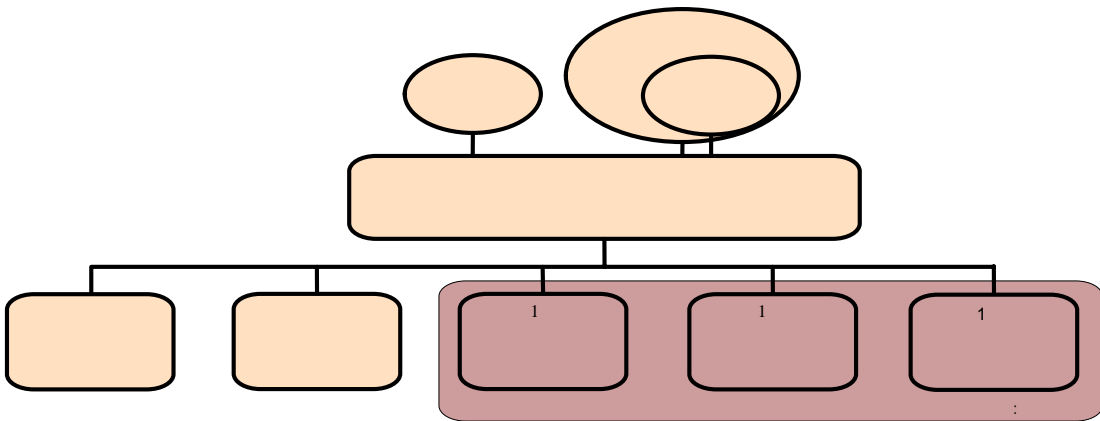
"

"

:

26

(USAID)



:

:

-
-

-
-
-

2006

:

-
-
-
-
-
-

:

-
-
-
-

(Global Education Initiative)



(12)

" " (ICT4E)

" "

ICT4E

:

ICT4E

ICT4E

ICT4E

-
-
-
-

ICT4E

•

ICT4E

•

•

ICT4E

:

:

•

:

•

:

•

:

•

ICT4E

() :
(•)

()

()

()

_____ -1

ICT4E

:

_____ -2

.ICT4E

_____ -3

/	
()	

_____ -4

		•
		•

.ICT4E

2007 / 15-12

2005
(Internet Governance Forum-IGF)

2010 2006

(13)

/ 30

2006 / 2

18-16

<http://www.itu.int/wsis/> : .79 72 68
[documents/doc_multi.asp?lang=en&id=2267|01](http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=2267|01).

(13)
WSIS-II/TUNIS/DOC/6(Rev.1)-A 2005 /

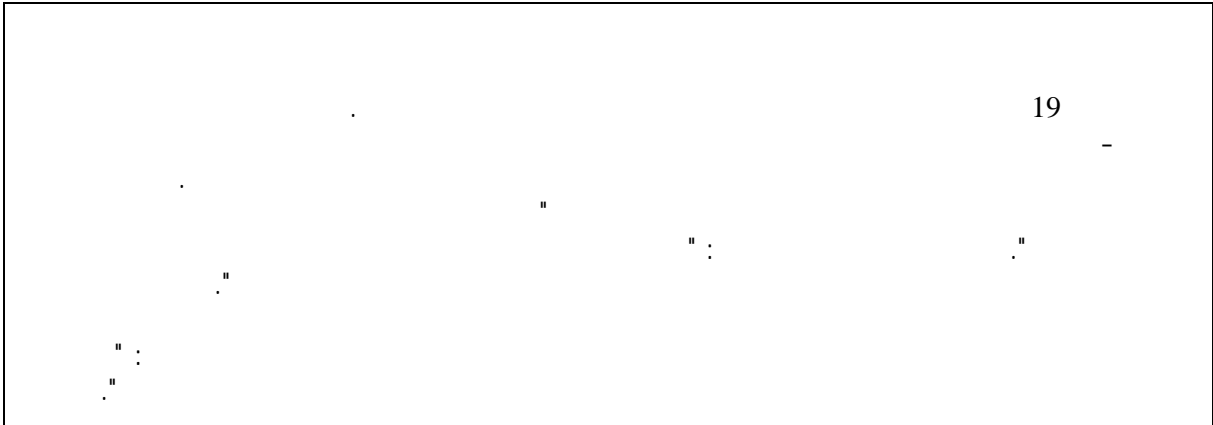
15 12

(14)2007 /

“ ”

” :

84



19

109 100 700 2100 300 400 550 100

1 363

:

2010

.2008 / 11 8

(Internet Corporation for Assigned Names and Numbers-ICANN)

.ICANN

ICANN

(backbones)

:

2.0

Moodle

_____ : -1

:

•

•

-
-
-

Blackboard WebCt

(Open Source Software) -2

(source code)

- :
- :
-
- :
-
- :
-

-3

.Sakai ILIAS Clarolin Ganesha Moodle
 2002 / Moodle 1.0 Moodle
 9326 Moodle .Moodle 1.8
 65 470 Ganesha 196 330
 Claroline 4 000
 Sakai . ILIAS
 2004 /
 (MIT)

Moodle : 58 .Blackboard WebCt

9	WebCt
4.5	Blackboard
4	Moodle
2	ATutor
1	Brix
1	EMU-LMS
1	FirstClass
1	ILias
1	Janison
0.5	TopClass
20	

WebCt

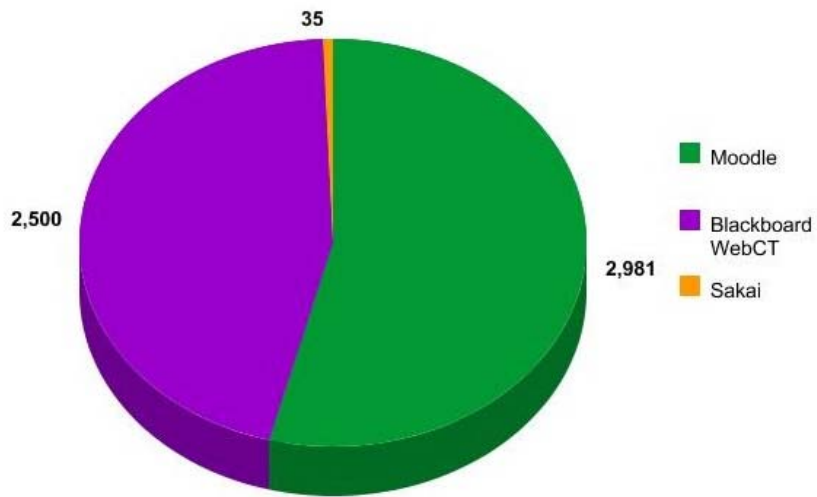
Moodle Blackboard

WebCt Moodle (15) Moodle WebCt

23

WebCt 15 Moodle Sakai WebCt Moodle Sakai 6

Sakai



<http://www.zacker.org/higher-ed-lms-market-penetration-moodle-vs-Blackboard-vs-Sakai> :

American University of Beirut. *Some differences between Moodle and Web CT*. Available at: [http://www.aub.edu.lb/~a cc/Moodle/MoodleFaculty/MoodleFac_Tutorials/Moodle_vs_Web CT_8June06.pdf](http://www.aub.edu.lb/~a cc/Moodle/MoodleFaculty/MoodleFac_Tutorials/Moodle_vs_Web_CT_8June06.pdf). (15)

Moodle

Modular Object-Oriented Dynamic Learning :

.mysql

php

Moodle Environment

)

php

Moodle (

Moodle

Moodle

Moodle

php Moodle

70 Moodle

Moodle	
	•
	•
(•
" "	•
:	•
	•
	•
	•
	•

.Moodle •

Moodle

Moodle

(Chat)

(Assignments)

:

(Journals)

(Forums)

(Choices) (16)

.(Workshops)

(Resources)

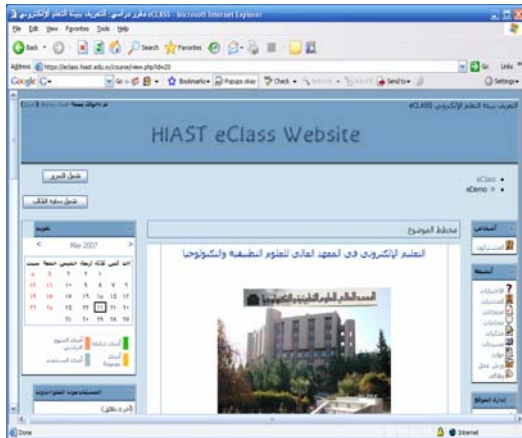
(Quizes)

Moodle -4

Moodle
(17) eclass
eclass

250

30



(16)

<http://www.eclass.hiast.edu.sy> (17)

-
-
-

eclass

eclass

Moodle



" "

⁽¹⁹⁾(Gartner Dataquest)

.2010

⁽¹⁸⁾

15

50

.(delivery solutions)

53

12

2004

35

⁽²⁰⁾

http://www.knowledgeanywhere.com/OurCompany_ViewPR.aspx?PressReleaseId=139 (18)

www.gartner.com (19)

.Madar Research Group, April 2005. Available at: www.madarresearch.com (20)

/

:

" " "

(21) SCORM

(23) IMS (22) AICC

.
.
.

(storyboarding)

:

[.http://en.wikipedia.org/wiki/Scorm](http://en.wikipedia.org/wiki/Scorm) (21)

[.http://www.aicc.org/](http://www.aicc.org/) (22)

[.http://imglobal.org/](http://imglobal.org/) (23)

:

" " (metadata) (keywords)

(24)XML

:

HTML
CGI JavaScript Java

:





2002 / 2 (25)

(Bellevue Community College)
 (Robert (Ohio University)
 (University of Applied Science-Heidelberg)
 (University of (University of York)

(Baker college Online)
 (Ohio Learning Network)
 Gordon University)
 (University of Ulster)
 .Greenwich)

(26)
 331

42

702

82

[.http://www.svuonline.org/sy/eng/index.html](http://www.svuonline.org/sy/eng/index.html) (25)
[.http://www.svuonline.org/sy/eng/about/facts.asp](http://www.svuonline.org/sy/eng/about/facts.asp) (26)



2002 (27)

.2003 /

50

2002

30

(28)2010

Tempus

.2009

(AUF)

(29)



(AUB)

[.http://www.uvt.rnu.tn](http://www.uvt.rnu.tn) (27)

[.http://www.afkaronline.org](http://www.afkaronline.org) (28)

[.http://www.aub.edu.lb](http://www.aub.edu.lb) (29)

(Clemson University)

(ACC)

2001 WebCT

.Moodle

2007-2006

644 Moodle

115

(30)

(31)

E, Cloete. 2000. *Challenges for Virtual Universities*. The 24th Annual International Computer Software and (30) applications Conference.

P. Anastasiades. 2002. *Virtual Universities: A critical Approach*. Proceedings of the International Conference on (31) Computers in Education.

2007

-1

(32)

29 .2007 / 6 5



(34)

(33)

() :

()

<http://www.escwa.org.lb/information/meeting> :

(32)

[.details.asp?referenceNum=531E](http://www.escwa.org.lb/information/publications/edit/upload/ictd-04-4.pdf)

:

E/ESCWA/ICTD/2004/4 2005

(33)

[.http://www.escwa.org.lb/information/publications/edit/upload/ictd-04-4.pdf](http://www.escwa.org.lb/information/publications/edit/upload/ictd-04-4.pdf)

[.http://isper.escwa.org.lb/isper/](http://isper.escwa.org.lb/isper/) (34)

()
()

(•)

()

-2

.2007 / 4 3

2006



25

(Cyberspace Legislation)

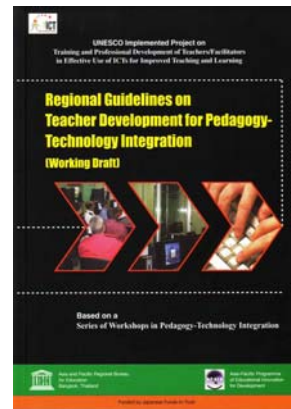
" 2007 / 12 11 "

9 26

Regional Guidelines on Teacher Development for Pedagogy-Technology Integration

2005

-



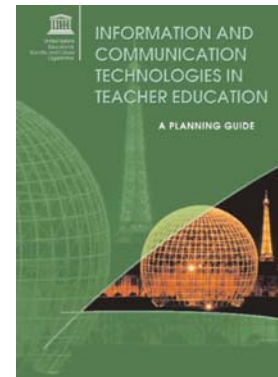
*Information and Communication Technologies in Schools: A Handbook for Teachers
or How ICT Can Create New, Open Learning Environments*

2005



Information and Communication Technologies in Teacher Education: a Planning Guide

2002



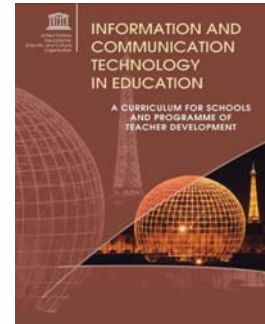
:

-4

*Information and Communication Technologies in Education: A Curriculum
for Schools and Programme of Teacher Development*

2002

:

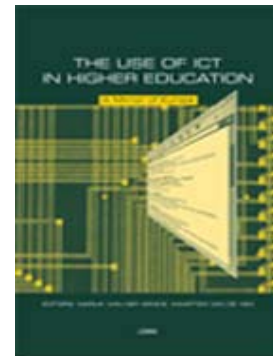


-5

The Use of ICT in Higher Education
Edited by Marijk van der Wende, Maarten van de Ven

12

:



(OpenCourseWare)

(MIT)

2002

()



(OpenCourseWare-OCW)

(Massachusetts Institute of Technology-MIT)

1999

2001

2007

-1

1999

MIT

MIT

"

"

2000

(Andrew W. Mellon Foundation)

(William and Flora Hewlett Foundation)

-2

.2007

MIT

2001 /
1 800

<http://ocw.mit.edu>

2002 /

900

500

50

.2007
200

1 800 2006

1 550 2004 /
2008

-3



(Utah State University -

<http://ocw.usu.edu/>)

(Johns Hopkins Bloomberg School

of Public health - <http://ocw.jhsph.edu/>)

2005

(OCW Consortium)

<http://ocwconsortium.org/>

(35)

(Mirror Site)

(hard drive)

70



3 000
300

(OCW Finder - <http://ocwfinder.com/>)

-4

:

()

() MIT

()
(Learning Management Systems - LMS)

MIT

-5

(36)

2005 /

MIT

MIT OpenCourseWare, Middle East/North Africa statistics. Available at: <http://ocw.mit.edu/OcwWeb/web/about/impact/me/me.htm>. (35)

MIT OpenCourseWare. 2005 Program Evaluation Findings Report. Available at: http://ocw.mit.edu/ans7870/global/05_Prog_Eval_Report_Final.pdf. (36)

(<http://mit.sudatek.net>) MIT

1 550



MIT

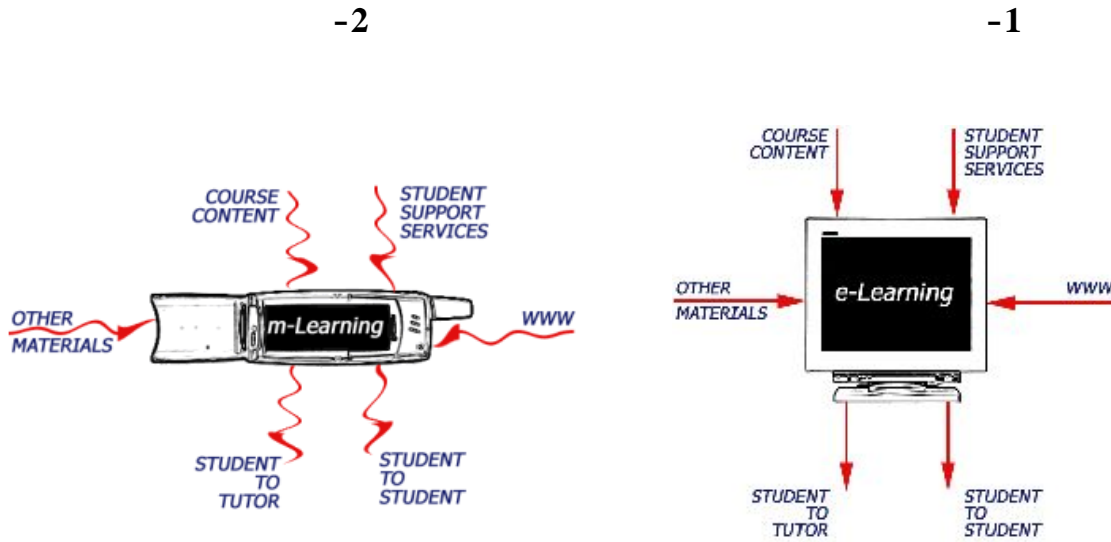
(Mobile Learning/m-learning)

(37)»

(smart phones)

(Personal Digital Assistant - PDA)

(38)



From e-learning to m-learning. *The Future of Learning*. Available at: http://learning.ericsson.net/mlearning2/project_one/thebook/chapter1.html.

1

2

2000 1995
2000

(39)

Traxler, 2007. *Defining, Discussing and Evaluating Mobile Learning*. The International Review of Research in Open and Distance Learning, Vol. 8, No 2. (38)

Barker, Krull and Mallinson. 2005. *A Proposed Theoretical Model for M-Learning Adoption in Developing Countries*. Available at: <http://www.mlearn.org.za/CD/papers/Barker.pdf>. (39)

)

(



(40)

(41) (SMS)

[.http://blog.epic.co.uk/?p=83](http://blog.epic.co.uk/?p=83) :

.2003 1998

1 000

J. Marshall, 2007. *Smartphones are the PCs of the developing world*. New Scientist online magazine. Available at: (40) www.newscientist.com.

Commonwealth of Learning. Learning for Development. *Mobile Learning in Developing Countries*. Available at: (41) <http://www.col.org/colweb/site/pid/4591>.



<http://www.shareideas.org/index.php/Mobiled> : audio wiki in classroom.

(42) Freedom HIV/AIDS ZMQ
.2005 / 1

(43) Mobiled audio wiki Wikipedia
: Mobiled audio wiki . wiki

- 1
- 2
- 3
- 4

<http://www.freedomhiv aids.in/> (42)

<http://dev.mobiled.org/> (43)

.2006 /



2008 /

(International Conference on Interactive Mobile and
(44) Computer Aided Learning)

[.http://english.etnews.co.kr](http://english.etnews.co.kr) : _____

) " "

.() (

I am afraid from spiders :

" "

.I am afraid of spiders :

" "

(45)

[.http://www.imcl-conference.org/](http://www.imcl-conference.org/) (44)

I. Zualkernan and R. Raddawi. 2006. Exploring Game-based m-Learning for First Language Interference Problems (45)
in Higher Education. IEEE Computer Society publication.