MEFANET after four years of progressing:

4-D MODEL FOR DIGITAL CONTENTS QUALITY ASSESSMENT

Schwarz D., Komenda M., Šnábl I., Šustr R. & Dušek L.
Outline

1. Why MEFANET?

2. The common portal platform in the MEFANET project
   - three fundamental elements
   - central gateway

3. Introduction of the new 4-D model for digital contents quality assessment

4. Discussion
Why MEFANET?

REASONS & MOTIVATION

• to develop and to strengthen the cooperation among Czech and Slovak medical faculties

• to support a progress in education of medical and health care disciplines using modern ICT.

• to facilitate the cooperation among teams from different schools,

• to ensure a horizontal accessibility of electronic teaching and learning tools for both teachers and students.

- to share educational resources

• Czechs and Slovaks are traditional academic partners with similar languages.
Educational web portal at a medical faculty

Diagram showing the educational web portal of a medical faculty connected to a user through the internet. The portal includes digital videos, author pedagogy works, e-courses, and learning matters. The portal is accessible from a closed zone, university INTRANET and a closed zone, faculty hospital INTRANET. The INTRANET includes faculty or university information systems with e-courses, tests, learning matters, study agenda, and automated checking of written exams. The INTRANET also includes images from CT, MRI, US, etc., structured reports, and an educational archive DICOM/PACS.
Educational web portal at a medical faculty

**Purpose & Objectives**

- to help academic staff members with publishing their educational works,
- to help authors of multimedia teaching and learning tools to communicate with users of these tools,
- to help people involved in the lifelong learning of physicians and health care professionals,
- to help students of medicine and health care disciplines with navigating through various tools for electronic support of their education.
Educational web portal at a medical faculty

- Central learning management system LMS
- E-publishing system
E-publishing system

- Central hosted system for all faculties
- Standalone instances of the same software
MEdical FAculties NETwork

portal.mefanet.cz

MEDICAL STUDY WIZARD
1. Medical disciplines linker

2. Authentication / authorization framework

3. Digital contents quality assessment
The medical disciplines linker

The only obligatory structure common to all portal instances.
Fundamental elements of the web portal platform

1. Medical disciplines linker

2. Authentication / authorization framework

3. Digital contents quality assessment
Authentication / authorization framework

User roles

Authors of the educational contents (published attachments) can choose from the following user groups, in order to permit/deny access to their materials:

- non-registered anonymous user,
- registered anonymous user, who accepts the terms of use
- user of MEFANET network, i.e. student or teacher from any Czech or Slovak medical faculty,
- user of local university
- user of local medical faculty
- user to whom attachments are made available only on the author's explicit consent.
Authentication / authorization framework

Czech academic identity federation

Client (MEFAPerson)

SP: service provider

WAYF

IdP: Identity provider

Shibboleth.

Federative single-sign-on authentization framework which allows to share web resources among institutions.
Fundamental elements of the web portal platform

1. Medical disciplines linker

2. Authentication / authorization framework

3. Digital contents quality assessment
Digital content quality evaluation before and today

Two different approaches to quality assessment until 11/2010:

1) OPPONENCY ACTION

2) GUARANTEE SIGNATURES

- Accept
- Reject
- Undefined state
One common general solution for quality assessment from Nov 2010 (ver. 1.8).
4-D model for digital contents quality assessment

Contribution

- no review
- review with positive conclusions

- undergraduate
- graduate
- advanced
- complex

Textbooks and manuals
Websites and atlases
Digital video
Presentations, animations
Image Casuistry
Elearning courses (LMS)

<33% >66%

TYPE LEVEL REVIEW SELFSTUDY SCORE

MFANET 2010 © Institute of Biostatistics and Analyses
Guarantees, reviewers, authors

One guarantee

Many guarantees
Guarantees, reviewers, authors

One guarantee

Many guarantees

Invite reviewers

Reviews (XML template)
Guarantees, reviewers, authors

One guarantee

New properties, functionalities:
- Guarantee does not check the contents.
- Guarantee selects suitable reviewers.
- Guarantee creates reviewers’ accounts.
- Reviewers fill a structured review-forms based on XML-template.
- Guarantee checks that required corrections have been made by authors.
- Guarantee provides the final conclusion.
- Everything is in the backoffice.

Ver. 1.8 = MAJOR UPGRADE

Contribution, author

Invite reviewers

Reviews (XML template)
Implementation details

metadata: description

links, attachments

metadata: keywords, disciplines

4-D quality assessment visualization

licence, authors

4-D quality assessment:
Export to the central gateway is subject to application of the 4-D quality assessment!

Names and affiliations of the reviewers.

70.0%
selfstudy score

RATe IT
Future vision: WITH A TUTOR!

4-D quality assessment implementation

Invite tutors from expert medical societies

Paranoic schizophrenia 25%
General and special psychiatry 93%
Eating disorders 60%
Imaging methods 59%

General and special psychiatry 93%
Psychiatry with a tutor!
Workshop for administrators

Thursday 25th Nov (tomorrow) 13:00-14:30

• Installation and operation of educational portals, upgrades
• Upcoming Features in version 1.8
• 4-D model of quality evaluation of published articles
• EduID.cz - News from the source (CESNET)
• New style of portal platform's documentation, a repository of resources for download
Thanks to...

WEB STUDIO IBA MU

Ivo Šnábl
Radim Šustr
Martin Komenda
Jakub Gregor
Lenka Šnajdrová

PORTAL ADMINISTRATORS

... for cooperation and patience
"Newer technologies such as computers and video conferencing are not necessarily better (or worse) for teaching or learning than older technologies... they are just different... The choice of technology should be driven by the needs of the learners and the context in which we are working, not by its novelty."

Bates AW. *Technology, open learning and distance education.*
London: Routledge, 1995

Questions, remarks, suggestions, complaints....

schwarz@iba.muni.cz