QUALITY ASSESSMENT OF ELECTRONIC LEARNING MATERIAL

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E-learning aspects

- **Technological** (Information and communication technology, information platform, media)
- **Organizational** (human resources, content, tools, administration)
- **Didactical** (new methods of teaching, technology in teaching, new learning – “collaborative learning”)

**From the functional point of view:**
- Technology
- Content
- Services
Knowledge transfer environment of higher education institutions

- Demand for high quality content
- Demand for cost savings
- Increasing Partnerships with corporate world
- Internationalisation of student body and learning
- National and international alliances
- Increasing variety of educational offerings
- One of the major consequences is exponential growth of e-learning

Knowledge transfer environment of higher education institutions (Hansen 1998)

- Political Environment
- Negotiating strength of funding bodies
- Economic Environment
- New providers
- Sociodemographic Environment
- Empowered customers
- Increased Competition
- Alternative modes of study
- Technological Environment
Education challenges & constraints

IT for Education - Terminology and global situation

- E-learning, Open&Distance (UNESCO), Flexible, Distributed, Blended, Collaborative, Intelligent, eLearning (EC), M-Learning
- USA (very strong private sector)
- Europe
  - EDEN, EAEDTU (network initiatives)
  - Open Universities in GB (1969), Germany, Spain, Netherlands, Portugal
E-learning shifts in learning processes
New types of e-content!

- From linear to hypermedia learning,
- from instruction to construction and discovery,
- from teacher-centred to learner-centred education,
- from absorbing to learning how to navigate and how to learn (autonomous learning!!!),
- from school to lifelong learning,
- from one-size-fits-all to customized learning,
- from the teacher as transmitter to the teacher as facilitator,
- from learning as torture to learning as fun

Blended learning: 3-C
E-learning and academic environment (in Slovenia)

- Technology is ready – bandwidth (ATM, ADSL, Cable internet) – but not for quality video
- Procedure of “standardization” in EU – eLearning, eContent, eEurope(+)
- Developed tools (software) and procedures
- Motivation for the university: higher quality, flexibility, higher number of students...success and income.

Task: national quality assessment system for the evaluation of e-learning material

- Objectives:
  - To collect the experience of home and foreign establishments that already use a similar system
  - To form a national information access point where quality e-material could be accessed
  - To implement an evaluation system and then a certification system of e-learning material
  - To spread awareness of quality of electronic learning material.
What do we actually want?

- A variety of high quality e-learning resources recommended by experts AND users
- Effective Assessment system
- Quality mark

Types of learning material

- Technical parts
- Learning units (clear didactical aim)
- Learning entities (prescribed learning path)

Technical parts consist of:
- Text
- Picture
- Animation
- Video
- Sound record
- Programme supported presentation of the contents
Evaluation process - levels

- **applied** – a user applies material that seems generally interesting
- **sifted** – electronic material that has appropriate content and is appropriately described and has been chosen on the basis of different indicators (statistics, polling, recommendations)
- **evaluated** – materials that have gone through the evaluation system and have thus been evaluated according to technical (computer, design, user) and content (factual credibility, expert, content, didactics) merits
- **certified** – materials that have gone through evaluation procedures and have proven to be of the quality demanded in electronic material

Evaluation 1

- **Technical implementation and compatibility**
  - Quality of production, installation, upgrading, and uninstallation in different systems and environments: availability of learning materials, installation / use preparation, registration, starting the programme / environment / use of material; uninstallation / end of use, interoperability;
Evaluation 2

• Production quality
  − The use of techniques and technologies for reaching the aim of the e-material (text quality, graphics quality, quality of visual presentation, use of multimedia ...): legibility and clarity of the text, grammatical correctness of the text, consistent use of styles, clarity and organization of presentation on the screen, good use of frames, hyperlinks, lists;

Evaluation 3

• User interface
  − E-education interface is specific in the fact that in order to ensure quality it has to enable both the view of the learner and the educator. Therefore the following points are evaluated separately: orientation, possibility of tracking, navigation, additional navigation / organization services, support.
Evaluation 4

- **Content and didactical merit**
  - learning content, connections between learning aims, content, methods, and the learner, definition of the learning aims, the conformity of learning aims and the content of the learning material, presentation and clarity of the topic, use of diverse learning methods, the possibilities of testing and implementing knowledge, possibilities for evaluation and high-quality self-evaluation of the newly acquired knowledge.

Conclusion

- Quality of e-material is one of the crucial points in e-learning
- A national evaluation system in Slovenia is being developed
- Clear quality criteria have to be made
- Public and relevant quality mark will be very beneficial for the development of e-learning