

# Distant learning, content and process

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# Jarmo Tanskanen

## Education

- *MSc -92, Tech. Lic -98, Electrical Engineering, Tampere University of Technology*
- *Pedagogical Qualification -06, Vocational Teacher Education Unit, HAMK University of Applied Sciences*
- *Pedagogy, cum laude -08, University of Tampere*

## Thesis

- *Licentiate in Technology, New methods of information technology for teaching and learning, -98*

## Experience

- *Lecturer, instructor and research project manager at Tampere University of Technology, 1989-95, 2000-10*
- *Activities and Societies: Member of IEEE, President of Tampere Branch of Finnish Society of Electronics Engineers (1997 - 2000)*

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- *Board member, The Association of Finnish eLearning Center*
- *Teacher, Speaker, Coach, Consultant and Promoter of eLearning with social software*
- *CEO, founder, owner, entrepreneur at Valopi Ltd.*
- *Moodle services, consultation, Infosticker - QR mobile code services, audiovisual content design and service*



# Topics

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- *Principles of formation of educational content for distance learning*
- *Process analytics and evaluation, and their influence on the optimization of the educational content*
- *Motivation factors in students' participation in the process of distance learning*



# Educational content

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- *Generally the internet is full of content*
- *Educational content has to be found and decide what is appropriate for the topic*
- *Think about should you do all the content again*
- *The key success factor is that students should also participate of doing learning materials and educator will just guide in the learning process.*



# Chunks of knowledge

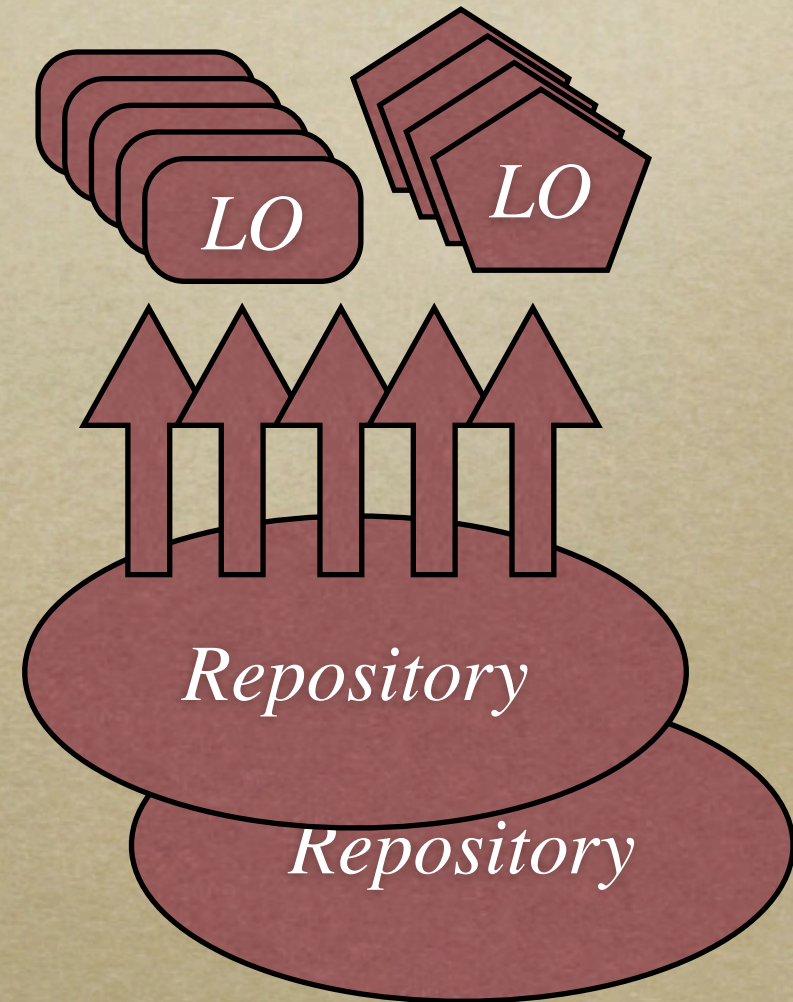
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- *Learning material - divide and conquer*
- *Individual learning objects*
  - *including goal, theory, practice and assessment units with metadata*
- *Mostly small, portable, instructional and re-usable objects for self-study*
- *Questions, lecture videos, slideshows etc.*



# Use metadata

- *data about data content*
- *is used for management and searching content*
- *description of data content*
  - *Means of creation of the data*
  - *Purpose of the data*
  - *Time and date of creation*
  - *Creator or author of data*
  - *Location on a computer network where the data was created*
  - *Standards used, etc.*





# The process of content production

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1. *Decide what are learning outcomes (goals)*
2. *Answer: what and how? Ideas, brainstorming, mind maps*
3. *Do the pedagogical design, manuscript*
4. *Divide material into small knowledge chunks (modules) including lots of audiovisual elements and exercises*
5. *Use metadata*



# Tools for content creation

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- *Wiki is collaborative method in where many creators and contributors can create same material together*
- *There are tools for creation of learning objects. Objects can be shared for example in SCORM modules.*
- *Moodle is great tool for course management, also moderately suitable for content management*



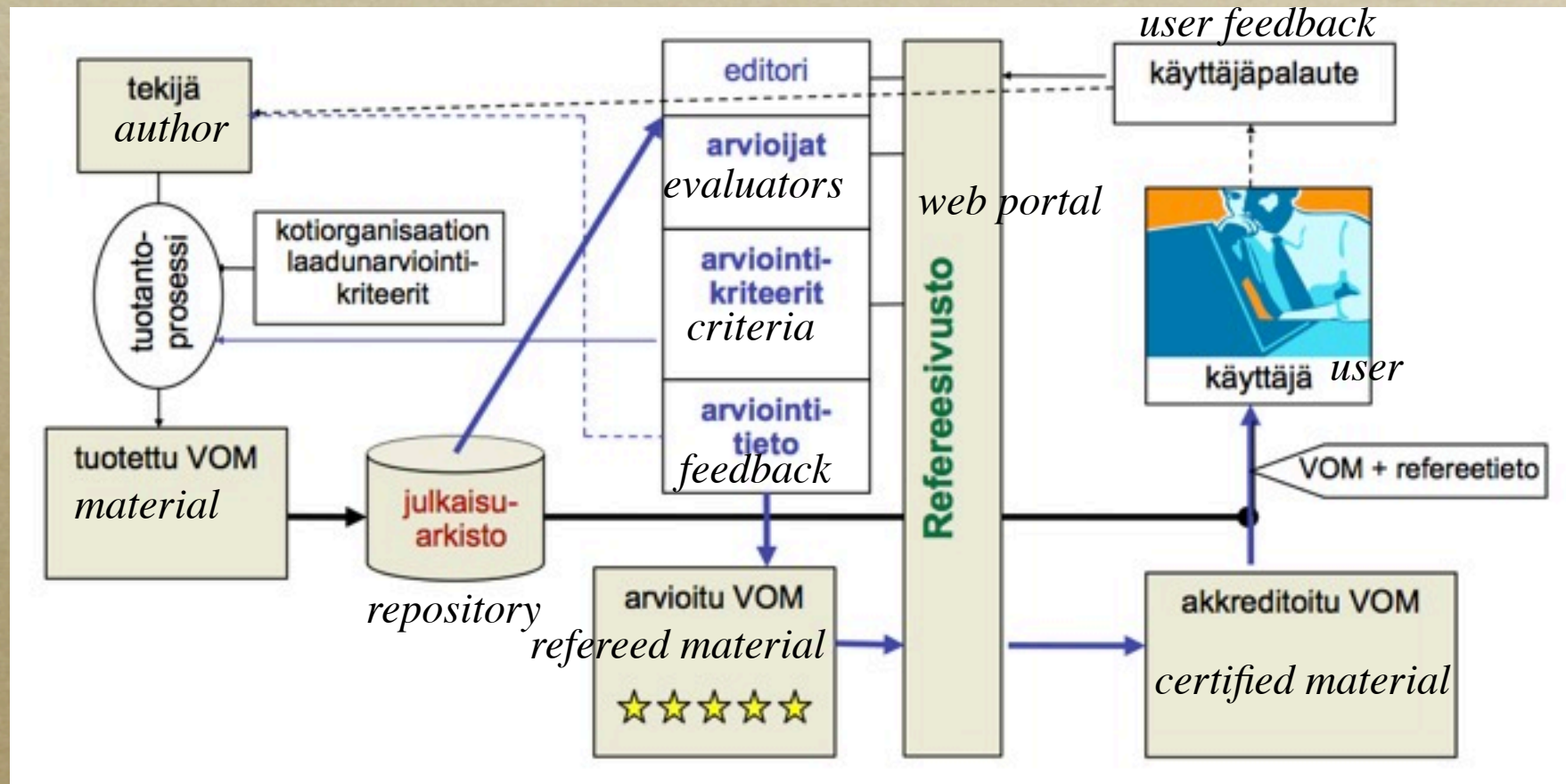
# Content referee process

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- *Web based content for learning can be evaluated by experts*
- *There are criterias for pedagogy, common use, context, and technical aspects (developed by Referee-project, 2006)*
- *Improving the content is iterative process*



# Visio for Referee-service



Source: Finnish virtual university



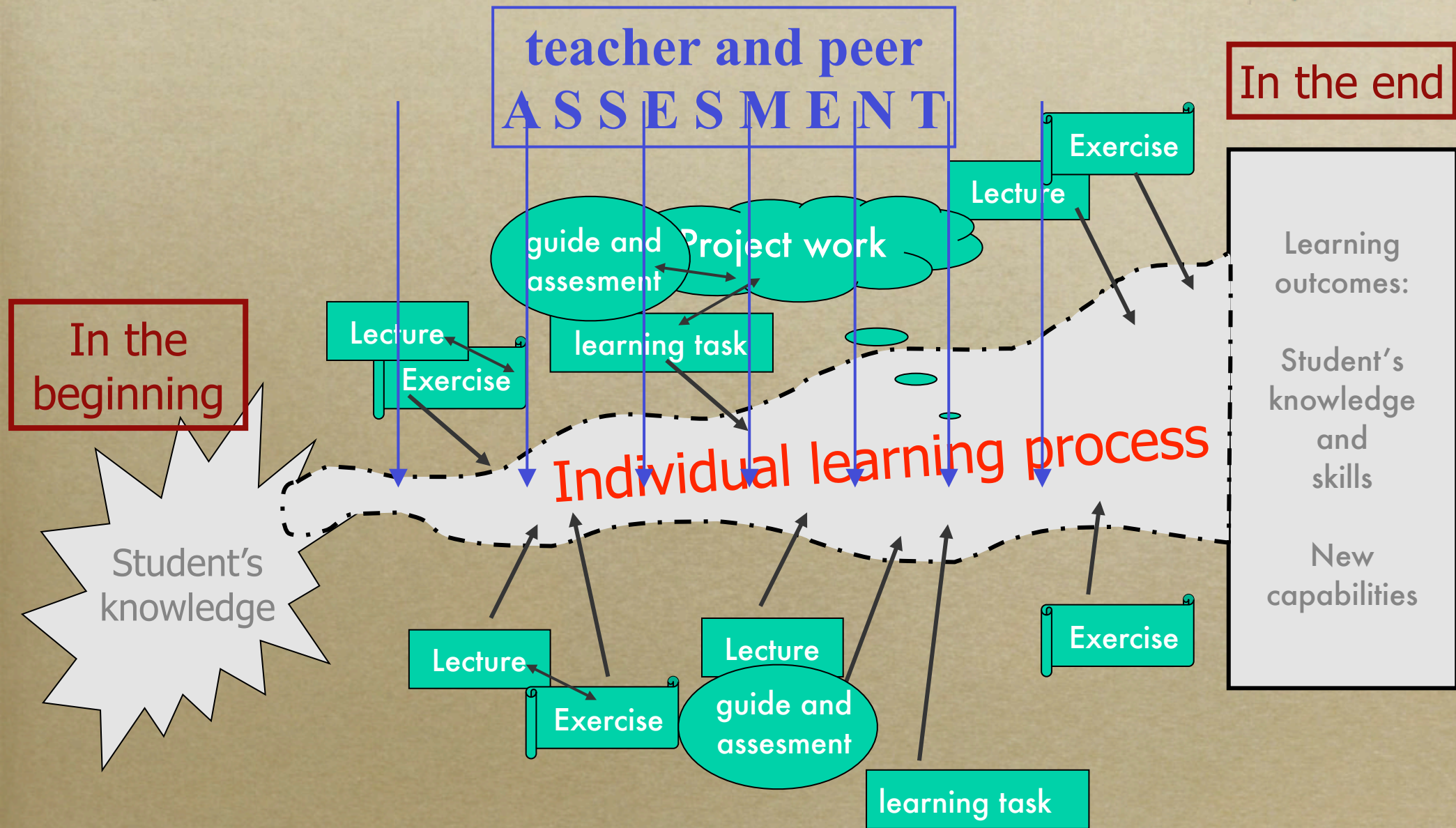
# Design of distance learning

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- *The most important thing is to design and decide the goals*
- *In every formal learning process the student is watching the goals. What are expected to do? What I have to do to pass a course? As a student.*



# Course process





# Blended learning, more motivation

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- *Many different kind of materials and methods are pedagogically used in the course*
- *Materials: texts, photos, illustrations, sound, animations, videos, simulations*
- *Methods: student activation, wikis, blogs, discussions, exercises via internet*



# Tools for distance learning

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- *Webinars = web based seminars using communication softwares or services*
  - *all can participate with voice and chat*
  - *educator can show slides and voice can be heard over the network*
- *Students can communicate using chat or discussion forums*
- *Moodle can be used also for exercises*

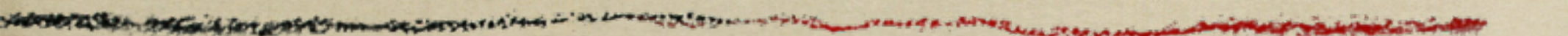


# How can I help you?

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- *Forming educational material for distance learning, helping your own educators*
- *In the design of web based courses*
- *Evaluation of the quality of the material and education methods*
- *Consultancy for web based education, for example with Moodle*
- *To offer other experts via The association of Finnish eLearning center*



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- *Thank you for listening!*

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