TENCompetence:
A new e-learning strategy

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Workshop Leopold-Franzens-Universität
Innsbruck, Austria, 15 December 2005
TENCompetence Project

- EU IST–Technology Enhanced Learning Integrated Project
- 4 years: December 2005 – December 2009
- Budget 13.8 million euro + additional for pilots
Partners

- Open Universiteit Nederland (co-ordinator)
- ALTRAN (Software de Base, S.A. Madrid)
- LogicaCMG
- Universitat Pompeu Fabra Barcelona
- GIUNTI Interactive Labs
- Centre for Research and Technology - Hellas
- L3S (Universität Hannover)
- INSEAD (Institut Europeen d'Adm. Des Affaires)
- The University of Bolton, representing The JISC
- Universiteit van Amsterdam
- Sofia University "St. Kliment Ohridski"
- SURF
- Synergetics
Objective

• Development of an European Infrastructure for lifelong competence development
• Develops and integrates new pedagogical & organisational models for lifelong competence development
• Infrastructure is based on integrated open source components, integrated into a SOA
• To be used by any individual, school, team or organisation to develop competences
• We build on existing methods, open standards & open source tools
Pilots & Associated Partners

Pilots:
• Training for digital cinema
• Lifelong learning for health care workers
• Lifelong learning for people responsible for the water management in the Nile region in Africa
• Antwerp Lifelong Learning City

Building a growing network of associated partners:
- bring in use cases
- early access to software and documentation
- organise additional pilots
- develop business

You are invited to participate!

TEN Competence
Building The European Network for Lifelong Competence Development
A European Infrastructure
For Lifelong Competence Development

Why?
Problems to be solved by TENCompetence

- Current **Pedagogical & Organisational Models** for learning *do not meet the demands* and possibilities of lifelong competence development and the new learning technologies that are available.

- For individuals, groups and organisations it is hard to get an overview of all the possible formal and informal learning opportunities that are available, and to identify the most appropriate ones.

- For an organisation it is hard to **assess the competencies** of applicants, employees and learners who have studied and worked in a variety of settings or multiple countries.

- The availability of support is crucial for effective task performance. Current e-learning environments provide too little effective and efficient support to the users.

- Worlds of knowledge management, education, training and informal learning are **not integrated well enough**: many fragmented methods & tools.
Key role for 'competences'

• The concept of competence can bridge the world of education, training, knowledge management, human resource management & informal learning
• Many definitions, problem for system development
• Difference:
  - Competence: Effective performance in a domain at different levels of proficiency
  - Competency: Skill (synonym)
• Initial definition of 'competence' and 'competence development' in the project (next slides...)

TEN Competence
Building The European Network for Lifelong Competence Development
Elaboration of the Infrastructure
The Vision: how will it work in future?

• One learning network per occupation/domain of expertise
• A competence framework for each learning network that specifies effective performance in the field for different proficiency levels
• Formal or Informal Competence Development Programmes (including dynamically created learning routes) that are aimed at the attainment of proficiency for one or more competences in the competence framework
• Learning activities or units of learning that are available/shared in the network and are the building blocks of the programmes
• Knowledge resources that are available/shared in the network and are used in the learning activities and units of learning
How will it work? <continued>

• Members of the learning network:
  - People in the profession (from very beginners to experts)
  - Suppliers of formal and informal programmes/courses
  - Suppliers of materials, tools, etc. needed in the profession
  - Employers and professional associations

• Functions to be performed by the members:
  - find & perform knowledge/learning activities/programmes
  - share & discuss knowledge/learning activities/programmes
  - support trainees in the profession
  - provide feedback on quality of programmes/courses
  - provide feedback on quality of tools from suppliers
  - define professional competences at different proficiency levels

• Facilitated by: Social Exchange Mechanisms; Support Agents
Requirements for the infrastructure

1. Based on **new pedagogical & organisational models**
2. Supports users to **find** adequate learning resources to develop their competence
3. Support to facilitate the **pro-active sharing** of resources
4. Support for competence **assessment**
5. Support agents to **help users**
6. Includes principles and policies of **self-organisation**
7. **Integrate** isolated open source tools
Integration of 4 'worlds'
Core Services in Infrastructure

- Open Standards for Data
  - Networks & communities for lifelong learning
  - Formal & informal programmes for competence development
  - Learning activities & units of learning
  - Knowledge resource sharing & management

Common Services

Meet Requirements:
1. New models
2. Find best solution
3. Pro-active sharing
4. Assessment
5. Support tools
6. Decentralized mgt
7. Integrate isolated tools

Test in Pilots

Integrated TENCompetence Infrastructure for Lifelong Competence Development
Examples of Common Services (From ELF)

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<tr>
<th>Common Services</th>
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<td>AV conferencing</td>
<td>Alert</td>
<td>Archiving</td>
<td>Authentication</td>
<td>Authorisation</td>
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<td>Calendaring</td>
<td>Chat</td>
<td>Content Management</td>
<td>Context</td>
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<td>E-mail management</td>
<td>Federated Search</td>
<td>Filing</td>
<td>Format Conversion</td>
<td>Forum</td>
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<tr>
<td>Group</td>
<td>Harvesting</td>
<td>Identifier</td>
<td>Logging</td>
<td>Mapping</td>
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<td>Messaging</td>
<td>Metadata Management</td>
<td>Metadata Schema Registry</td>
<td>Packaging</td>
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<tr>
<td>Person</td>
<td>Presence</td>
<td>Rating / Annotation</td>
<td>Resolver</td>
<td>Role</td>
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<tr>
<td>Rules</td>
<td>Scheduling</td>
<td>Search</td>
<td>Service Registry</td>
<td>Terminology</td>
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<td>User Preferences</td>
<td>Whiteboard</td>
<td>Workflow</td>
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Example: Learning Activities & UOLs Services

- Edit Learning Activity,
- Add Learning Objects, Common Services ('lower' service layer!)
- Sequence Learning Activities to a Unit of Learning
- Personalise a Learning Activity or a Unit of Learning
- Classify Learning Activities and UOLs
- Store Learning Activities and UOLs
- Search Learning Activities and UOLs
- Rate the quality of Learning Activities and UOLs
- Get users (community) that use a certain LA or UOL
- Contact user via (skype, chat, mail, etc.)
- ...
Knowledge Resource Sharing & Knowledge Management

Learning Activities & Units of Learning

Competence Development Programmes

Learning Networks for Competence Development

Common Services

Clients:
- Web Clients
- Richt Clients
- Dedicated Clients (primary, secondary, post-secondary education, training, gaming, etc.)
References

• www.tencompetence.org (project) (also for becoming an associated partner)

• email: info@tencompetence.org rob.koper@ou.nl

• Thanks!