The Knowledge Practice Environment - Collaborative virtual space for work on shared knowledge objects

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Knowledge Practices Laboratory

- 5-year R&D project since Feb 1, 2006
- 22 partners from 14 countries in Europe
- Financed by EU’s 6th Framework Program for Research and Technological Development
- Total funding 11,2 M€
- Aims at developing theoretical approaches, practical pedagogical models and software tools that facilitate innovative knowledge practices of working with knowledge in education and workplaces
Technology mediated epistemic practices (Knowledge practices)

- Epistemic practices: new kinds of knowledge-centered activities in education and work contexts (Knorr-Cetina 2001)
- Work with ‘epistemic objects’ (unfolding and dynamic character of knowledge objects)
- Practices themselves taken as epistemic objects (Miettinen & Virkkunen 2005)
- KPE: aims at re-tooling practices in both of these senses (work with knowledge objects but also to transform knowledge practices)
How to support collaboration for developing shared, "authentic" objects (practices and artifacts) instead of individualistic approaches or approaches emphasizing just participation and communication.

**Trialogical approach on learning**

**Shared objects:**
- Knowledge artefacts
- Practices
- Drafts of ideas

"Authentic" use of the object

Tools – KPE

Shared objects – their development

Individual subjects

Learning community
Shared Spaces of KP-environment

- Virtual environment with integrated tools to support collaborative ways of developing shared knowledge objects and practices

- To support “cross-fertilizing” of various knowledge practices (educational institutions – workplaces) and to support transformation of existing practices to have more trialogical elements

- To develop flexible technology that goes beyond information genre and communication genre (see Enyedy & Hoadley 2006) to support collaboration genre
Shared Spaces of KP-environment

• SSp aims at combining in a flexible way work with knowledge objects:
  • sharing, structuring, linking, describing, elaborating, making visible and reflecting the work on knowledge artefacts ("epistemic aspect),
  • planning, organizing and coordinating the process ("pragmatic aspect"),
  • managing social, networked relations around shared objects ("social aspect")
Epistemic aspect

- Shared knowledge objects (papers, models, notes) at the centre with flexible ways for developing them collaboratively
- “Object-bound” commenting & ”Object-bound” chat
- Drafting, versioning supported
- Support for re-using knowledge objects and structures
- Tags can be added flexibly by the users
- Structures, semantic relations can be added and modified by the users
- History on content development and work processes to be seen
- Flexible combinations between different types of Knowledge
Notes and commenting

- Note-editor tool:
  - for brainstorming, initiating hypothetical questions
  - ideas can be sketched directly in the Content View and linked to other relevant material
  - easy to use and enables colouring and versions to enhance collaborative work on the ideas

- Commenting
  - helps general commenting on the whole and particular knowledge object
  - is threaded to help to see the comment growth
SSp Content view – Comments & Notes
Pragmatic aspect

• Flexible ways of/for planning the process and defining processes: ”Tailored views”, GANTT chart, ToDo list, Calendar …

• Easy ways of/for drafting visual structures

• Integrated environment but openness to interoperability with various other tools (not a closed ”learning environment”)
Content item visual arrangement
Tailored View for arranging particular selection
Benefits

• KP-environment provides support for:
  ‣ Organising work around shared objects,
  ‣ Visualising relations between objects and tasks,
  ‣ Well established means for reflection on iteration,
  ‣ Planning and organising joint working process,
  ‣ Holistic view on working progress and responsibility taking in the planning and commenting practices.
Process View on the tasks

Different views: current the process view

Task