

Become involved with the E-LEN project...

E-LEN is working with the e-learning community to construct a knowledge base for educational design. We are focusing on re-usable design knowledge, methods of sharing design experience and supporting the work of multi-disciplinary e-learning design teams.

Most of our work will be expressed in terms of design patterns for e-learning, which will be placed in the public domain. We will be inviting people to participate in critiquing and refining the design patterns. The more views we can incorporate from members of the e-learning community, the richer this resource will be.

Please register your interest on the E-LEN website, and we will email you to let you know how you can participate.

<http://www.tisip.no/E-LEN>

Also on the website you will find a detailed description of progress on the project to date, as well as working papers and links to other useful resources.



E-LEN project team

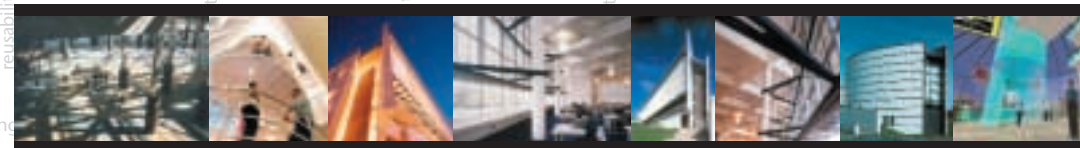
E-LEN is a European network of institutions with e-learning expertise. The network was established to share and develop information and design patterns regarding e-learning. An important activity of the network is the dissemination of design patterns to interested parties.

The E-LEN project is part-funded by the European Union through the Minerva programme. The E-LEN partners are:

- University of Cyprus (co-ordinator)
- The Learning Lab, University of Maastricht (NL)
- CSALT, University of Lancaster (UK)
- A Priori Ltd (UK)
- Ilmenau Technical University (DE)
- Hypermedia Open Center – Politecnico di Milano (IT)
- InterMedia, University of Bergen (NO)
- NITOL (NO)
- National Technical University of Athens (GR)
- Open University (NL).



Design expertise for e-learning centres



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- e-learning centres
- design patterns
- pattern language
- reusability

The E-LEN project

E-LEN involves a network of European institutions with expertise in e-learning. The aims of the project include the development and dissemination of design knowledge tailored to the needs of people who are professionally involved in e-learning, such as the staff of *e-learning centres*. Our approach involves the production of *design patterns*, laying the foundations for a *pattern language* for e-learning.

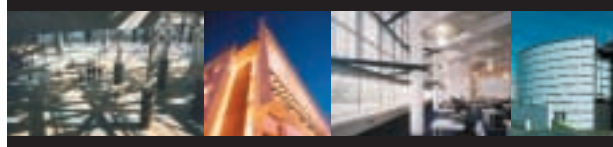
E-learning centres

We use the term 'e-learning centre' to describe a unit within a larger organisation (such as a university or a company) that has the role of helping the members of the organisation to create e-learning opportunities (courses, resources, learning communities, tools, etc.).

The staff of an e-learning centre normally work with subject specialists to design and set in place the e-learning infrastructure for a course. This infrastructure includes such things as learning materials, study guides, specifications for individual and group learning tasks and the various ICT tools needed by the learners and their teachers.

Few subject specialists have formal training in educational design or educational technology. Collaborative design and implementation work is complex. It needs support from robust and flexible concepts and methods. E-LEN seeks to provide some of this support through the use of pedagogical design patterns embedded in a pattern language.

Design patterns



Design patterns originate in the work of the architect Christopher Alexander. They have been adopted in software engineering and are now flowing into other areas, such as educational design. A pattern 'describes a problem which occurs over and over again in our environment, and then describes the core of the solution to that problem, in such a way that you can use this solution a million times over, without ever doing it the same way twice' (Alexander *et al.*, 1977, *A Pattern Language*, Oxford University Press, p.x).



Alexander was concerned with patterns in the built environment. It's easy to see how his ideas can help with the design of virtual environments. In fact they go beyond this and allow us to capture the essence of a wide variety of areas of pedagogical and design experience.

Design patterns provide a structure for integrating the analysis and solution of a problem, in a way that is sensitive to context and informed by theory and evidence. A pattern suggests rather than prescribes a solution. Solutions are intentionally incomplete: they offer guidance but require embellishment.

A pattern language

Design patterns make best sense when they are seen in relationship to one another. A pattern language is a structure for design patterns. It allows a design team to move from large scale to more detailed patterns, managing the complexity of the design task and refining and embellishing design solutions as the nature of problems and context becomes more certain. As the members of a design team become immersed in the pattern language, they find better ways to talk about their educational beliefs – sharing and examining their intuitions about good learning and teaching.

Research roadmap

Design patterns are always open to improvement. We can annotate patterns to give some indication of our sense of their status. Some patterns feel as if the solution captures something essential and complete. Other patterns have much more tentative solutions. Since the evolution of a pattern language is a collective endeavour, we invite you to participate in the process and welcome your suggestions and criticisms. In particular, we welcome suggestions that strengthen the more tentative design patterns. To help you locate these, we maintain a 'research roadmap' which can be found on the E-LEN website.