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Proceedings of the 1st International Workshop on Interoperability of Web-based Educational Systems

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### Preface

Nowadays learning resources are increasingly available via web-based educational systems, such as learning (content) management systems, brokerage platforms for learning materials and courses, or knowledge repositories. With the dawn of various specialised e-learning tools, learning resources became more and more stored in closed environments, restricting accessibility to a closed user community. Due to the lack of interoperability quite often unwanted restrictions on the way knowledge is disseminated have been created. However, even in closed environments the demand for interoperability has reached a new level. Providers of learning management solutions are increasingly asked to interface with other systems, in order to exchange budget restrictions, learning resource descriptions, course bookings or report on newly acquired competency.

While standardization bodies and consortia such as ADL, CEN/ISSS, IEEE, IMS, and ISO have already identified the need for interoperability of web-based educational systems, wide spread adoption of standards and quasi-standards proposed by those institutions is still missing.

This workshop addresses the need for more consolidated research on interoperability of web-based educational systems. The workshop brings together researchers and practitioners from different communities such as e-learning, information systems, databases, and semantic web that are interested in making educational systems interoperable.

The workshop has managed to deliver a state-of-the-art overview of successful interoperability cases and provides guidelines for future research. In total 15 Papers have been submitted, from which 8 were selected as full papers. Additional 4 papers were accepted as short papers. Having received contributions from four continents the workshop has also shown that interoperability is truly a global phenomenon.

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The ELENA research project follows the vision of creating Smart Spaces for Learning<sup>™</sup>. A Smart Spaces for Learning<sup>™</sup> connects knowledge repositories and online market places for the purpose of enriching an institution's learning offerings. Personalization techniques and support for goal-oriented learning management yield in highly effective learning environments.

Knowledge Markets is a spin-off of the Vienna University of Economics and Business Administration. Based on open source software the company provides services for the enhancement of learning management processes. On a consultancy basis leading technological expertise is offered on interoperability issues of learning technologies.

PROLEARN is a 'Network of Excellence' financed by the IST (Information Society Technology) programme of the European commission dealing with technology enhanced professional learning. PROLEARN's mission is to bring together the most important research groups in the area of professional learning and training, as well as other key organisations and industrial partners.

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