In her 2012 keynote speech Mria Grigoriadou explained how innovations in education may emerge from using familiar technologies in innovative ways or from the development of new e-learning environments. Learning Environments designed on modern learning theories, aim at enhancing the interaction with learners in order to support them fulfill their learning goals in multiple ways: (i) introducing students to a wide range of materials, activities and learning tasks, (ii) supporting students in experimentation/observation, (iii) encouraging participation in collaborative activities and facilitate students’ communication, (iv) providing students the appropriate means to externalise their thoughts, to elicit any misconceptions and restructure their knowledge.

A variety of learning environments/tools, some of them with adaptive capabilities, have been lately developed based on various learning theories in order to promote pedagogically meaningful and effective interactions with learners and enable them to take control over their own learning. Alternative designs for learning have been adopted focusing on the design of content including multiple representations targeted at various levels of performance and learning styles, on collaborative learning, on assessment as an opportunity for learning, on text comprehension, etc. In the keynote speech the following learning environments will be presented and discussed as representatives of learning environments inspired by alternative learning theories.