SPACE OPERATIONS SYMPOSIUM (B6)
Training Relevant for Operations (3)

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ASTRONAUT TRAINING DEVELOPMENT & IMPLEMENTATION SYSTEM (ATD) CONTENT MODEL AND MAPPING TO LEARNING OBJECT / METADATA (LOM)

Abstract

Learning Objects are any entity -digital or non-digital- that may be used for education, learning or training. Learning Object Metadata (LOM) are used to facilitate the search, evaluation, acquisition, and use of learning objects, by learners, instructors or automated software processes, as well as the sharing and exchange of learning objects. The Astronaut Training Development and Implementation System (ATD) is a web-based tool used at the European Astronaut Center to support the development, certification and implementation of the training provided to the astronauts and ground controllers involved in the International Space Station program. The ATD tool is a repository for the training material itself as well as for all the metadata necessary during all phases of instruction (from development to feedback evaluation). In this article, the Astronaut Training Development and Implementation System (ATD) content model is first described and briefly compared with existing content models implementing Learning Objects. The possibility of objective-based or lesson-based learning objects is then discussed. The compliance of the ATD metadata structure with the LOM standard is assessed and a possible mapping is proposed. Missing fields and/or mapping difficulties are identified and discussed. Perspectives are given for both potential ATD updates and/or potential use of ATD learning objects outside the International Space Station program.