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Conference Abstract

FAIR Points: From sdo:LearningResource to FAIR Digital Object

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Abstract

The FAIRPoints organization, co-founded by the authors, aims to provide a platform for conversations to take place around realistic and pragmatic implementations of the FAIR (Findable, Accessible, Interoperable, Reusable) principles. The uniqueness of the FAIRPoints effort stems from an additional aim: to capture conversation contributions in the form of "bite-sized" objects – "points" – in a way that facilitates dynamic composition by instructors for the delivery of audience-customized training experiences. Thus, FAIRPoints aims to cultivate pragmatic learning resources to help realize the FAIR principles in practice, both through

1. inviting speakers to prime and lead discussions focused on choices/challenges regarding FAIR, and
2. amplifying downstream value potential by serializing "points" made during such events as FAIR resources.

Currently, event outcomes are serialized as LearningResource-typed JSON-LD objects in the schema.org sense, i.e. sdo:LearningResource, where @prefix sdo: ., and conform to the bioschemas.org TrainingMaterial profile. However, any differences in participant perspectives must be reconciled, via git revision control, towards a single "view" of a sdo:LearningResource. This situation is at odds with other explicit aims of the FAIRPoints

organization such as including diverse voices and collecting heterogeneous input from a global perspective.

Using the FAIR Digital Object (FDO) approach, a FAIRPoints sdo:LearningResource instance may be the Object to which an Identifier points, through an FDO Identifier Record, and sdo:LearningResource may be the FDO Type. Crucially, there may be a multiplicity of Metadata records pointed to by an FDO Identifier Record and thus a formal mechanism to cultivate and publish diverse perspectives.

This presentation will outline FAIRPoints' approach to FDO implementation for learning resources and its relation to published practice. Specifically, in relation to the FAIR Digital Twins approach*[1], our approach may be seen as the stewardship of a "fluid graph" of learning-resource "knowlets" with support for "qua" projection in service of e.g. an instructor's dynamic composition of training material for a targeted workshop.

Keywords

schema.org, community, instruction, learning, education, collaboration

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Endnotes

*[1]   E. Schultes *et al.*, "FAIR Digital Twins for Data-Intensive Research," *Front. Big Data*, vol. 5, p. 883341, May 2022, doi: 10.3389/fdata.2022.883341.