
P2997

Submitter Email: shelly@yetanalytics.com**Type of Project:** New IEEE Standard**Project Request Type:** Initiation / New**PAR Request Date:** 03 May 2021**PAR Approval Date:** 16 Jun 2021**PAR Expiration Date:** 31 Dec 2025**PAR Status:** Active

1.1 Project Number: P2997**1.2 Type of Document:** Standard**1.3 Life Cycle:** Full Use

2.1 Project Title: Standard for Enterprise Learner Record

3.1 Working Group: Enterprise Learner Record(C/LT/ELR)**3.1.1 Contact Information for Working Group Chair:****Name:** Brent Smith**Email Address:** brent.smith.ctr@adlnet.gov**3.1.2 Contact Information for Working Group Vice Chair:****Name:** Shelly Blake-Plock**Email Address:** shelly@yetanalytics.com**3.2 Society and Committee:** IEEE Computer Society/Learning Technology(C/LT)**3.2.1 Contact Information for Standards Committee Chair:****Name:** Richard Tong**Email Address:** richard@yixue.us**3.2.2 Contact Information for Standards Committee Vice Chair:****Name:** James Goodell**Email Address:** jgoodell2@yahoo.com**3.2.3 Contact Information for Standards Representative:**None

4.1 Type of Ballot: Individual**4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot:** Sep 2022**4.3 Projected Completion Date for Submittal to RevCom:** Sep 2023

5.1 Approximate number of people expected to be actively involved in the development of this project: 20**5.2 Scope of proposed standard:** The proposed standard consists of two parts.

The first part of the standard defines the Enterprise Learner Record (ELR) data model for the various data objects that are used in the standard. The ELR data model preserves data ownership and integrity by providing indications to where raw learner data is stored and by providing the ability to track:

- the learner's path through different organizations
- the variety of learning experiences
- demonstrated competencies
- conferred credentials
- employment history

The data model describes the different ELR data elements and allows the expression of rules for how schema elements are populated and how this data is stored within a Learner Profile for auditing purposes within an organization.

The second part of the standard defines the transfer methods and application programming interface (API) for communicating learner records between services that adhere to the specification. This includes the format of requests and the expected responses. The Learner API enables privacy and security of learner data as it is transmitted between connected systems through formal information exchange agreements (e.g., Interservice Connection Agreement). The Learner API follows the guidelines of the Representational State Transfer (REST)

software architecture style and is transferred via HTTP requests and responses.

5.3 Is the completion of this standard contingent upon the completion of another standard? No

5.4 Purpose: The purpose of this Standard is to define a data model and API for communicating learner data between connected systems and across organizational boundaries in the enterprise.

Current learner record standards are focused on the transfer of a learner's credentials across organizational boundaries. Throughout lifelong learning and across industry, academia, and government, individual learner data is stored by different organizations, software systems, and storage formats. This proposed standard defines how raw learner data is stored, managed, and connected within an organization.

The purpose of the ELR data standard is to aggregate and manage learner data generated from connected systems available within an organization so that it can be shared with other systems or organizations that require it. The data model defines a ledger of learner records generated by a variety of different systems used across the enterprise. It provides linkages to learner performance data (i.e., evidence of learner performance), descriptions of learning activities that generate this evidence, and the definition of competencies or credentials that each learning experience is aligned to. The ELR standard also defines how this data is shared with other systems required throughout the human capital supply chain.

5.5 Need for the Project: This standard fills in a gap that exists in current data model standards. The gap is in the population of the properties of a learner data model. While it is the norm that property names are listed, the process for populating the value of a property is absent. At best there may be a restricted or recommended vocabulary or data type, but the proposed standard will provide a process for the population of data model fields that leverages linked data and ledger technologies.

5.6 Stakeholders for the Standard: The ELR standard provides value to organizations across industry, government, and academia & research. The standard provides a key component in the successful implementation of current enterprise projects under development by these stakeholders.

6.1 Intellectual Property

6.1.1 Is the Standards Committee aware of any copyright permissions needed for this project?

No

6.1.2 Is the Standards Committee aware of possible registration activity related to this project?

No

7.1 Are there other standards or projects with a similar scope? No

7.2 Is it the intent to develop this document jointly with another organization? No

8.1 Additional Explanatory Notes: