As anticipated, the LTSC has launched several new standards projects in the last six months. Basically, we are responding to the rapidly expanding adoption of several new technologies in the various education and training markets. Technologies such as data analytics, personalized instruction, and AI tutors introduce many new possibilities, but they require complex infrastructure and sophisticated data management strategies in markets where technical resources are often limited. Interest in standards is apparent — the LTSC has more than doubled in size in the last 6 month. Our current monthly mailings go to 450 people.

Recently Approved PARs

- **SCORM Renewals (P1484.11.3, 1484.12.3, revisions)** This new workgroup will attend to the renewal of the enabling standards in the SCORM model. SCORM is in active use around the world. Revision of the first two of these SCORM standards has been approved. The intent here is to insure that SCORM remains a viable reference model and that all six of its component standards remain active. Chairs and new IEEE-SA members, Andy Johnson and Frank Polster.

- **Requirements for eReaders to Support Learning Application (P7919 .1).** This project is a follow-on to the Industry Connections Actionable Data Book project (ADB) and subsequent government contract work. The purpose is to develop a standard to enable eReader developers, eBook authors and publishers, and consumers to understand the capabilities and affordances offered by eReaders and required by eBooks that are used in learning, education, and training. In this standard, an “eBook” may range from an interactive traditionally organized document to a fully adaptive learning
and teaching system. The proposed standard will enable stakeholders to ensure that the capabilities and affordances offered by a tablet, for instance, match those that are required by the learning activities they want to deploy. Chair, Robby Robson.

- **Experience API (P9274.1.1).** The Experience API, or xAPI, is an open source specification developed by the US government in collaboration with several small learning technology vendors. It addresses the expanded data needs of modern learning technologies, tracking learner activity in some detail across multiple systems, institutions, and online providers. This recently approved project will standardize the data model format and communication protocol for learning experience data, thus allowing adopters to build multi-vendor solutions including the newest innovations. It is expected that the resulting standard(s) will reflect xAPI version 1.0.3 and the current state of the xAPI profiles. Chair and new IEEE-SA member, Jono Poltrack.

**Pending PARs**

- **Reusable Competency Definitions. P1484.20.1 (revision).** We are revising our ten-year-old specification for sharing competency information across systems. Competency is used to describe a student’s level of mastery, supporting evidence, learning objectives, learning activities and prerequisites, and so on. The proposed project will take advantage of recent work of the Credential Ecosystem Mapping Project which has identified the common elements across the several competency schemes used by its member organizations (PESC, CASE, CEDS, HR Open Standards Consortium, and CTDL). Chair and new IEEE-SA member, Jim Goodell.

- **Classification of Adaptive Instructional Systems (P2247.1).** After several months and a couple of workshops, the AIS study group proposed the first of several possible standards. This first task will define the capabilities and categories of adaptive
instructional systems — systems which use AI to teach, coach, answer questions, personalize learning paths, grade essays, make recommendations, and so on. Chair, Robert Sottilare.

We’ve also sponsored and helped launch the IEEE Industry Connections Industry Consortium on Learning Engineering, ICICLE. This two-year project will explore the idea of a new engineering discipline built around the application of learning science and new learning technologies in schools and colleges; in corporate, government, and military training; in professional certification; and in our everyday lives. Over a hundred people are now actively involved in 6 standing committees and 9 SIGs. Sixty-five organizations have signed up as entity members. ICICLE’s first face-to-face meeting is scheduled for August. An international conference is scheduled for May 2019 in Arlington VA. Chair and new IEEE-SA member, Shelly Blake-Plock.

Avron Barr, Chair
IEEE Learning Technology Standards Committee