

IEEE Orange County Section

Brian.Hagerty.US (at) ieee.org

EAC: Educational Activities Committee

(K12/STEM/CTE Outreach & Development);

**HE/CPE: Higher Education &
Continuing Professional Education**



2014 Continuing and Professional Education Report

Michael Lightner, 2014 Past VP

IEEE-USA Educational Activities Board (EAB)

Professional Training Market



Professional Training
Market makes up 26%
of the entire Education
& Training Market
\$16.9 billion in 2012
5.6% growth expected

Source: 2012 Market Size,
Share, Forecast and Trend
Report, © 2012 Outsell,
Inc.

Competitive Landscape

Company Name	2012 Professional Training Revenue (\$ in Millions)	% Change from 2011	2012 Professional Training Market Share
Pearson Education	627	2%	4%
GP Strategies Corporation	412	24%	2%
Benesse	390	8%	2%
NIIT Limited	278	4%	2%
Reed Elsevier	226	6%	1%
Thomson Reuters	223	6%	1%
McGraw-Hill Education	196	-5%	1%
CFA Institute	210	5%	1%
INVESTools	196	18%	1%
FranklinCovey	181	13%	1%
Total Top 10	2,938	7.6%	17%
Total Market (estimate)	16,930	5.6%	-

Source: Outsell's Information Industry Databases

Education & Training Value Chain

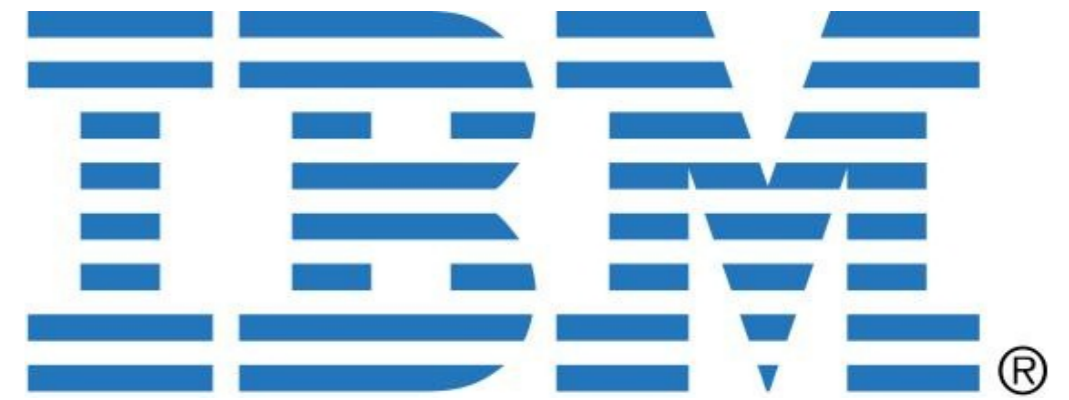
Largest Companies	Instructional Content	Assessment	Data Management Systems	Learning Management Systems (LMS)	Institutional Management Services
Pearson plc	▲	▲	▲	▲	▲
Benesse Corporation	▲	▲			●
McGraw-Hill Education	▲	▲	◆	◆	◆
Cengage Learning	▲	▲	◆	●	
Grupo Planeta	▲	●			●
PRISA	▲	●			
Houghton Mifflin Harcourt Publishing	▲	▲		●	
Kaplan, Inc.	●	▲			
Educational Testing Service		▲	◆		
Verlagsgruppe Georg von Holtzbrinck	▲			◆	

Key : ▲ = Heavy Concentration ● = Moderate Concentration ◆ = Minimal Focus BLANK = No Concentration/Focus

Source: Outsell analysis



AMBOW EDUCATION



Google

NIIT

amazon.com



CPE in Other Professional Societies

- AIAA
- ACM
- ACS
- AIChE
- ASME
- IET
- ...

CPE in the IEEE-USA!, USA!, USA!

a. IEEE Xplore®

Digital library subscriptions deliver IEEE journals, conference proceedings, standards, eBooks, and tutorials that define technology today. Subscriptions to Xplore® are available to organizations of all sizes as well as independent researchers. IEEE is the most cited publisher in new technology patents, and according to the Thomson Reuters Journal Citation Reports, IEEE publishes 17 of the top 20 journals in electrical and electronic engineering, along with the top journals in many other fields of technology. The primary source of journal and conference material in IEEE Xplore is the technical societies of the IEEE.

b. IEEE eLearning Library

More than 500 hours of interactive online learning is available. The content is based on peer-reviewed material from IEEE subject matter experts and includes technical and professional development skill areas. Many of the modules have been developed in collaboration with IEEE technical societies or with subject matter experts identified by those societies.

c. University and Corporate Partner Programs

IEEE partners with continuing education providers through the *IEEE Continuing Education Providers Program (CEP)* to provide IEEE members with access to over 6000 courses. Companies and universities are approved Providers and offer a minimum discount of 10% on courses to IEEE Members world-wide. As suggested, none of these programs are internal to the IEEE.

CPE in the IEEE

d. IEEE Section or Region Continuing Education offerings

IEEE Sections or Chapters may host short courses, tutorials, and workshops locally for their membership; others host metro workshops which are open to students and the general public to capture larger audiences. Some may focus on professional topics, while others are more technical in nature, concentrating on new and emerging technologies. This material is sourced through our Member and Geographic Services units.

e. Virtual Continuing Education Platform (VCEP)

A virtual education event platform/learning environment that offers the opportunity to collaborate with external organizations and other IEEE OUs to provide continuing education solutions for existing and new offerings. This offering is currently in a pilot phase.

f. IEEE English for Engineering

A series of interactive online training modules designed to develop communication skills and knowledge of the English language for engineers and technical professionals whose native language is not English.

g. Professional Certification and Certificate Programs

IEEE certifications are exam-based assessments, developed by industry practitioners and leading subject-matter experts that offer an unbiased, third party recognition of an individual's knowledge and abilities. IEEE has only a small number of certifications at the present time.

CPE in the IEEE

h. Continuing Education Units (CEUs) and Professional Development Hours (PDHs)

IEEE is an authorized provider of CEUs and PDHs for technical professionals looking for professional development opportunities. Applications for the IEEE Certificate Program are available online. CEUs and PDHs are often necessary to maintain professional licensure.

i. IEEE iTunes U

IEEE participates in the *Beyond Campus Program* through iTunes U to make its education content accessible to more people. In addition to tutorials, IEEE offers audio and video programs, PDFs, and e-books. Also contains free (shorter length) versions of full-length modules in the eLearning Library.

j. Conferences

IEEE sponsors or co-sponsors more than 1,300 annual conferences and meetings worldwide. IEEE is also highly involved in the technical program development of numerous trade events, training workshops, job fairs, and other programs. The technical papers appear in IEEE Xplore.

k. Conference Workshops

IEEE's technical societies host conferences and workshops that offer a unique opportunity to participate in the advancement of technology in their related research base through interaction with other professionals, and engage in expert panel discussions tutorial sessions, short courses, supplier exhibits and social events with the leaders and innovators of their industry.

CPE in the IEEE

I. **Webinars – Some Examples Include:**

IEEE Spectrum Tech Insider Webinars - Learn from industry experts about the latest technology advances. These live, 'on demand' webinars are archived and are available for 12 months.

IEEE Graduates of the Last Decade (GOLD) - Webinars for members on topics related to professional development, humanitarian efforts, and technical knowledge. GOLD webinars are scheduled quarterly and are recorded for on-demand viewing.

IEEE-USA - Webinars to help you find your next job, maintain your career, negotiate an appropriate salary, understand ethical considerations in the workplace, and learn about many other career-building strategies.

IEEE Communications Society Live Webinars - Free online panel sessions open to all. They are presented with audio/slide show downstream and text (for Q&A) upstream. Webinars focus on technologies, systems and services of current interest to communications engineers.

IEEE Computer Society Webinars - Advance the practice of software engineering and computer science by delivering insights from some of the profession's leading thinkers. They include cutting-edge topics of use to today's technology professionals, software developers, and computer architects.

CPE in the IEEE

m. Metro Area Workshop Series

IEEE Smart Tech Metro Area Workshops provide participants with a unique learning experience with topics on the cutting-edge of technical innovation today. These two-day seminars are focused on providing an opportunity for participants to learn first-hand from the field experts. Each workshop is a springboard to a deeper understanding of technology and its myriad applications and potential for innovation.

n. Distinguished Lecturer Series

IEEE Distinguished Lecturers are engineering professionals who help lead their fields in new technical developments that shape the global community. These experts, often leaders in their technical Society or Council, and identified and supported (in part) by the Society or Council, travel to various local chapters of societies to present lectures and interact with members and local professionals.

o. IEEE Online Education Portal

The IEEE Online Education Portal is a content management system available specifically for IEEE eLearning materials. It is available free of charge to any IEEE Organizational Unit that wishes to host content. The content price is set by the unit providing the material and quality control is strictly up to the providing unit.

p. Industry-Standard Workshops and On-Line Learning Modules

IEEE Educational Activities partners with the finest training organizations and technical conferences to present high-quality, practical workshops for students and global engineering and technology professionals to help maintain their communication skills.

CPE in the IEEE

q. IEEE-tv

An award winning, internet-based television network, made possible by the members of IEEE. IEEE.tv produces and delivers special-interest programming about technology and engineering for the benefit of IEEE's members and the general public.

The continuing and professional education products and services operate under a diverse set of business models. In many cases the focus is on providing a member benefit and the providing unit absorbs the costs. In other cases, the products are a formal business within IEEE supported by IEEE Marketing & Sales and with goals to breakeven or even return revenue to support future growth. There is no aggregate accounting of IEEE continuing and professional education investments, costs and revenues, and no coherent analysis of customer/user satisfaction.

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Grants!

Region, Councils, Sections as

Applicants, Co-Applicants, Principal Investigators, Co-PIs, Support ...

2014 Regional Innovation Strategies Program

Overview

EDA is committed to helping foster connected, innovation-centric economic sectors which support commercialization and entrepreneurship as described in the America COMPETES Reauthorization Act of 2010. Working with regions across the country to develop regional innovation strategies, including regional innovation clusters, is also a Strategic Goal of the DOC's FY 2014-2018 Strategic Plan and a keystone of the Secretary's commitment to building globally competitive regions. As part of this strategy, funding is available for capacity-building activities that include Proof of Concept Centers and Commercialization Centers as well as scaling of existing commercialization programs and centers; feasibility studies for the creation and expansion of facilities such as science and research parks; and supporting opportunities to close the funding gap for early-stage companies. To that end, EDA's existing and highly successful i6 Challenge is being joined by additional grant opportunities to create the Regional Innovation Strategies (RIS) Program. Under this program, EDA is soliciting applications for three separate competitions. There is no requirement for applicants to submit proposals for more than one component grant under this program.

Key Dates:

FFO released: **First week of Sept, 2014**

Responses due: **Nov 3, 2014**

Award Announcement: **Jan 2015**

Note that previous grants and competitions administered by EDA have been governed by the Public Works and Economic Development Act of 1965, as amended (42 U.S.C. § 3121 *et seq.*) (PWEDA). The authorization for the 2014 RIS Program is provided under the America COMPETES Reauthorization Act of 2010 (P.L. 111-358), which does not include a requirement that grants be focused in economically distressed communities.

Structure

- i6 Challenge:** The 2014 i6 is relatively the same as prior challenges but it has been broadened to include scaling of existing centers or programs and consider funding for later-stage Commercialization Centers. Special consideration will be given to programs which include initiatives focusing on innovative manufacturing and exports per Senate appropriations request.
- Science / Research Parks:** This Challenge provides funding for feasibility and planning for the construction of new or expanded Science / Research parks or renovation of existing facilities.
- Cluster Grants for Seed Funds:** This new grant program provides funding for technical assistance to support feasibility, planning, formation, or launch of cluster-based seed capital funds that are offered to innovation-based, growth-oriented start-up companies in exchange for equity. Funds must include job creation in their consideration for issuing capital. Special consideration for programs focused on innovative manufacturing and exports per Senate appropriations request.

Total amount of funding is \$15M. Proposed break out and specific are proposed for discussion and include:

Program	Total Amount	Max Grant	Match	Timeframe
i6 Challenge	\$8M	16+ grants up to \$500K	Min 50%	3 years
Science Parks	\$5M	10+ grants up to \$500K	None	12 months
Seed Funds	\$2M	8+ grants up to \$250K	Min 50%	2 years



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Recommendations: “THINK BIG!” (mike andrews)

- >> Sections, Areas, Regions:
 - 1> Form Section-level *EA Cmtes*,
& R6, SSW *EA Council*;
 - 2> Work Together
& with *IEEE-USA EAB*;
 - 3> Apply for Related Grants