



ICES 2017報告

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画像電子学会国際標準化教育研究会 2017-01-19

ICESの紹介

- 2006年東京会合から始まる
- International Cooperation for Education about Standardization – <http://www.standards-education.org/>
- ボランティア・ベース ; virtual
- ICESボード : 3人
- 年1回のワークショップ

ICES historical overview

- 2006年2月 東京(一橋大学丸の内)J. Hill, 栗原史郎,黒川
- 2007年2月 Delft (デルフト工科大学)
- 2008年2月 Gaithersberg (NIST)
- 2009年3月 東京(KKRホテル), Simulation Game
- 2010年6月 Geneva, ISO/IEC/ITU-T WSC Academic Week
- 2011年6月 杭州, WSC Academic Day
- 2012年5月 Indonesia, Bali, ISO DEVCO/KATS Workshop for developing countries
- 2013年6月 ETSI
- 2014年8月 Ottawa (Chateau Laurier), Society of Standards Professionals (SES) annual conference
- 2015年8月 Seoul、KSA
- 2016年10月 Frankfurt, Germany, IEC総会
- 2017年8月 Chicago, USA, SES年次大会

ICES 2006-2014

参加者数の推移(国;メンバー会議)

- 2006 – 15[6]
- 2007 – 30[11]
- 2008 – 60[11];20
- 2009 – 150(80)[10];20
- 2010 – 95[28];20
- 2011 – 50[16];20
- 2012 – 213[32];20
- 2013 – 62[23];15
- 2014 - 71[14];10
- 2015 – 80[12];15
- 2016 - 50
- 2017 – 40[12]; 15

ICES Workshop Themes

- 2006 - Share ideas, experiences and vision for education about standardization
- 2007 - Promote and support the development of standardization education worldwide
- 2008 - Global Perspectives and Strategies for Education about Standardization
- 2009 - Evolutions of Standards Education in the World
- 2010 - Dialogues between academic institutions and the international standards community
- 2011 - Research and Academic Teaching about Standardization
- 2012 - Promote quality and attractiveness of education about standardization
- 2013 - Industry Needs Standards. What Does Industry Expect from STANDARDS EDUCATION?
- 2014 - Developing Standards Professionals Across Borders
- 2015 – Towards Developing Common Competency Requirements for Standards Professionals
- 2016—What industry needs from education on standardization
- 2017-***Standards in Context: Skill Requirements, Pedagogy and Research***

ICESの課題の変貌

- 2006年 興味・関心を持った人/グループは存在していたが、情報交換・意見形成の場がなかった — 黒川のレポート(2005)
- 2008年 法人化, 恒久化見送り, SDOとの関係, 教材
- 2010年 指導体制, 学生層の取り込み, 地域特性にあった取り組み
- 2012年 EURAS, SSS (Society for Standards and Standardization)などとの関係
- 2014年 若手育成、職業規定
- 2015年 Standards Professionals Competency
- 2016年 産業界との連携
- 2017年 継続性と新分野
 - SESのテーマはBuilding Alliances in Standards and Conformity Assessment

8:45 Defining standards skill requirements: government and industry perspective

Donggeun Choi (KSA) – on new APEC career path initiative)

Alec McMillan (Rockwell Automation)

Ko Ozaki (METI), Toshiaki Kurokawa (ICES founder)

Tim West (John Deere)

10:20 Training and University Course/Program current and emerging examples and models

Steve Elliot (Purdue University –reviewing standards in engineering courses)

Manabu Eto (Hitotsubashi University), Kunimitsu Iwadare (Japan Standards Association)

Anne Layne-Farrar (NU Law – reviewing masters in science in law standards component)

Tom Smith (Michigan State University –standards and workforce development projects)

Anne Wilcock (University of Guelph standards in business courses; NAC)

1:50 Literature and Research

Justus Baron (Searle Center, NU Pritzker School of Law);

Knut Blind (Technische Universität Berlin) - video presentation

Henk DeVries (Erasmus University) “Standardisation - What should managers know?”

Ivana Mijatovic, University of Beograd, Serbia (standardization text book and course)

3:20 A fun challenge – evolving a text-free standard

Tim West, Jeff Strauss (Northwestern Buffett Institute)

4:00 Pedagogy: cases, stories and simulations

Signe Annette Bøgh (Danish Standards – various simulations)

Daniele Gerundino (ISO, ISO simulation)

Stephen Kwan (San Jose State University (competition, cases and IEEE MOOC)

Jennifer McCain, IEEE (IEEE simulation)

Academic Day

- 9:00 Welcome Mr. Ross Wraight, Chief Executive, Standards Group Limited (SGL) and IFAN
- FIRST SESSION Introduction to the theme, with views from IEC, ISO and ITU
 - 9:10 ISO View Mr. Daniele Gerundino, ISO Academy Director, and Academic Fellow, University of Geneva
 - 9:30 IEC View Mr. Jan-Henrik Tiedemann, IEC Community Manager
 - 9:50 ITU View Ms. Alissia Magliarditi, Programme Coordinator, ITU
- SECOND SESSION National Standards Bodies and other SDOs' perspective
 - Ms. Erniningsih Haryadi, Deputy Chairman of Information and Promotion -BSN (Indonesia)
 - Mr. Li Xuanqin, Deputy Director General of General Office - SAC (China)
 - Mr. Daniel Masso Aguado, Head of Knowledge and Education – UNE(Spain)
 - Mrs. Lisa Rajchel, Senior Director – ANSI (USA)
 - Ms. Mojdeh Rowshan Tabari – ISIRI (Islamic Republic of Iran)
 - Mr. Donggeun Choi, Chief Manager - KSA (Korea) and Chair, International Cooperation for Education about Standardization

- Tim West (John Deere) Engineering Standards Skills Requirements

What skills are essential?

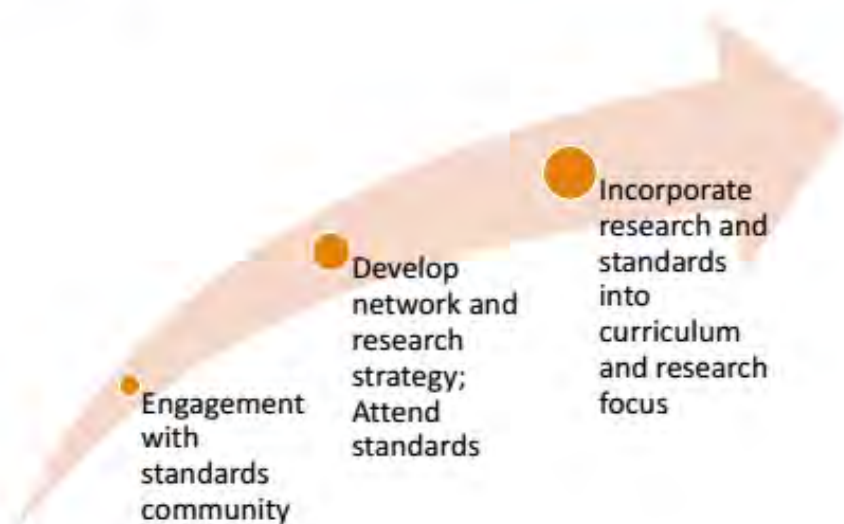
<u>Skills</u>	<u>Competencies</u>	<u>Behaviors</u>
<ul style="list-style-type: none">• Technical• Negotiating Skills• Consensus Building• Project Management• Leadership	<ul style="list-style-type: none">• Process Driven• Prioritization• Decision Making• Maturity	<ul style="list-style-type: none">• Think Globally• Act Locally• Connect the dots between: Standards Safety Regulation Compliance• Business Case

Stephen Elliott (Purdue Univ.) The Integration of Academic Research and Standards - Benefits for Both Communities

- ICES Board member – 2017-19
- JavaBioAPI, JTC 1/SC37
- SES April 2016 Webinar – same title

Our model matures

2001 - 2012



2012 - PRESENT



Anne Layne-Farrar (Charles River Associates VP and Northwestern Univ. School of Law) - Teaching Standard Setting at Northwestern University's MSL Program

- MSL = Masters of Science in Law
- The MSL program targets STEM students
 - Students who want/need to learn about how to use the law, not become lawyers
- The class focuses on business, strategic, and legal issues in standards development
- Know the antitrust risks involved in standards development
- Course Materials
 - NIST materials
 - Karen Bartleson, *The Ten Commandments of Standard Setting*
 - A large collection of papers published by business school professors, economists & lawyers on standard setting strategies, competition issues, and antitrust problems
- **Practitioner Interviews**

Tom Smith (Michigan State Univ. Institute of Agricultural Technology) - Standards and Workforce Development

- **Standardization** of job descriptions and competencies on a national level will enhance the capability of education and training providers, students/employees, and businesses to all be on the same page, leading to improved outcomes for all
- **Occupational Competencies (OC) for the Grape and Wine Industry (GWI)**
- **Skill standards** specify the level of knowledge, skills, and abilities needed for success, as well as potential measurement criteria for assessing competency attainment.
- **Department of Labor – Bureau of Labor Statistics
Standard Occupational Classification System**

Anne Wilcock (University of Guelph, Canada) - Standards in Business Courses & CSA Group Academic Challenge Program

- At the University of Guelph, standards and standardization are taught as a major component of the Quality Management course
- There is no course on standards or standardization *per se* in the curricula of the top business schools in Canada
- **CSA Group Academic Challenge**
 - Annual competition for undergraduate students

Ivana Mijatovic (University of Belgrade, Serbia) - Teaching about Standardization - experience, doubts and future -

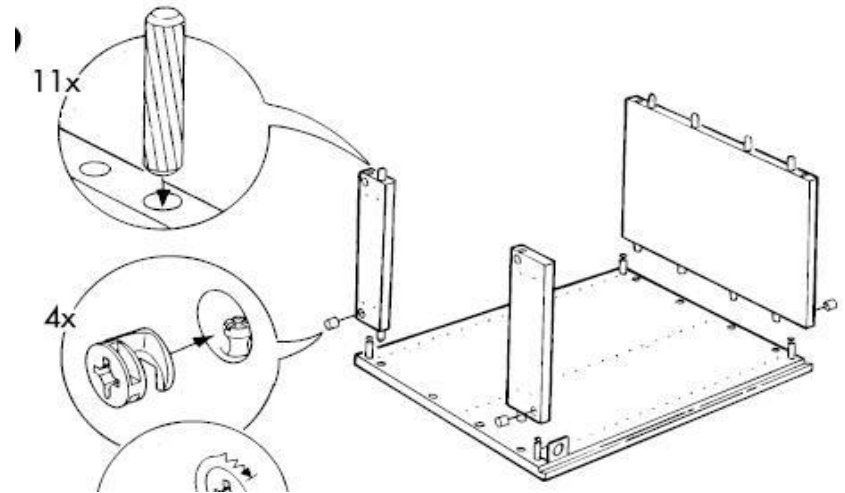
- Department of Quality Management and Standardization
- Study program: Quality Management and Standardization (QM&S) – established in 1998
- Standardization courses were not so rare in Eastern Europe at technical universities
- Transitional economies and quite dogmatic approach to standardization and factual learning
- Interest in IT standardization is growing

Research Programs

- Justus Baron (Searle Center, Northwestern Univ. Pritzker School of Law)
 - A new light on technological innovation: the Searle Center Database of Technology Standards and its research applications
- Knut Blind (Technische Universität Berlin)
 - Publishing-Patenting-Standardization Triple
 - German Standardization Panel
- Henk DeVries (Erasmus University)
 - “Standardisation - What should managers know?”
 - Innovation and standardization

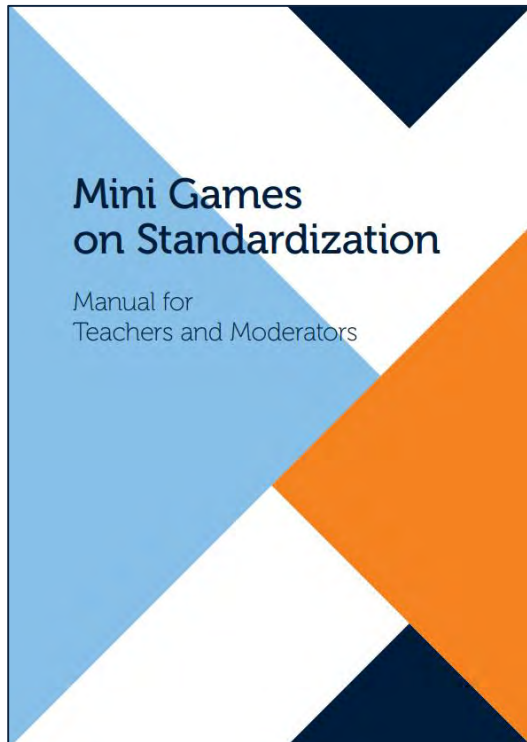
Jeff Strauss & Tim West - Potential for text-free/minimal text standards

- Most standards are **text intensive**
- Adapt to current/emerging social media orientation with minimal text
- Enhance understanding /communication across cultures/languages and varying levels of technical understanding
- **Planned ANSI competition**



Education using Games/Simulations

- Signe A Boegh - Danish Standards



- Jennifer McClain, IEEE
- Mars Space Colony: A Game of Standardization
- <https://www.standardsuniversity.org/game/>

What's New in 2017

- 初めての1日だけのセッション
- 米国の複数の大学からの発表
 - NISTの働きかけと支援
- 米国企業の参加
 - John Deere
 - Rockwell Automation

Membership meeting News

- New Board Member - Stephen Elliot, (Purdue University, US)
- ICES 2018 – ジョグジャカルタ、インドネシア
- 時期は未定
 - インドネシア 7月
 - 韓国 4月 ISO大会に連携してスキル標準の会議

いくつかの課題

- 運営は第2世代、どう継続するか？
 - ISOのGerundinoが担当を外れた影響は？
- 参加者減少にどう対処するか？
- Competency/Skill APEC SCSCでアンケートと提案のとりまとめが進む予定。ISOまで行くか？
- 東南アジアの活動が停滞しているように見える