

Strategic plans for Professional Standard and Education (PSE) committee of IEA

Note: Updated information as of end of September is shown in red.

We are now trying to frame some value-added demands made by each member for taking initiatives during the period of 2022-2024. Please note that the following are tentative, as a first step in making plans based on the P2DT framework.

1. Development of education tool kit for HFE core competencies collaborating with CNAM (Paris) and JES/CPEJ (Japan), proposed by Takeshi Ebara(chair) and Tahar Hakim Benchekroun (co-chair)

- Develop and conduct “hands-on training” with a real-world problem collaborated with Prof Hakim, CNAM, and JES/CPEJ, by multidisciplinary teams working together with inviting various domain specialists/practitioners such as accident prevention, occupational safety and health, and human-centered design.
- The new HFE core competencies put stress on applying the systems approach, and recent social demands in Japan focus on so-called "Society 5.0", building a human-centered society that balances economic advancement with the resolution of ecological problems by a system that highly integrates cyberspace and physical space. Such disruptive technologies using AI, VR/AR, and/or MetaVerse will transform the traditional work into quite new ones. HFE needs to provide an education tool kit for professionals based on new HFE core competencies through hands-on training to quickly respond to such demands for harmonizing disruptive technologies and human well-being.
- Monthly meetings with CNAM (Paris) and JES/CPEJ (Japan) are held from March 2022. Members are Takeshi Ebara (PSE chair) and Tahar Hakim Benchekroun (PSE co-chair), Takashi Toriizuka (President of JES), Yoshiko Yagi (President of CPEJ), Akiko Ide (Vice-president of CPEJ), Yushi Fujita (past president of IEA), and Jose Orland Gomes (president of IEA).
- We are exchanging information on practices of education and HFE projects conducted in France and Japan to share local needs and characteristics of HFE practices. At the first meetings, Prof. Hakim introduced us to the HFE education at CNAM and its practice activities in France. Then, each member from CPEJ introduced their ergonomics projects at their companies. Prof Toriizuka, the president of JES introduced general education system at Japanese universities and general HFE education program in bachelor, master, and Ph.D. courses. This is a long-term (within the next 24 months) project. After sharing our local situations of HFE education and practices in France and Japan, we'll make the P2DT plan. We will discuss how to proceed with our project or what is the effective way to train professionals or practitioners in Japan, referring to the advanced CNAM approach based on the activity theory and systems approach.

2. Moderation Processes for HFE Education Programmes, proposed by Marion Edwin (sub-committee chair)

- Develop and implement an independent system and/or supportive structure for the moderation/accreditation of HFE education programs that lead to HFE certification by IEA endorsed certifying bodies.
- The bodies that carry out HFE certification rely on the outputs of HFE education programmes. These HFE education programmes are (often) under the control of academic institutions, with programs dependent on the expertise of teaching staff and influenced by many other factors in the education system. Despite that the certification of HFE professionals has reliance on educational outputs, there is little guidance on how HFE certification bodies might verify that the HFE education programme meets the standards for HFE professional certification.
- "ISO/IEC 17024:2012 Conformity Assessment – General requirements for bodies operating certification of persons" suggests that certifying bodies must have means of establishing that the education bodies providing HFE education are educating to the standards required by the HFE certifying body.

3. Potential Projects in Indonesia (similar to Malaysia & Thailand), proposed by Yassierli (co-chair)

1) Set-up Certification Body in Indonesia

- No certification body yet for Professional Ergonomist (like BCPE). Only 3 persons have CPE.
- Learning from the leading Malaysia ergonomics society working on the establishment of certification body.

2) Increasing Quality of Ergonomics Education

- For Master/PhD program, ergonomics is an option under Industrial Engineering/Public Health Program
- No standard ergonomic courses yet
- IEA standard core-competencies have not yet disseminated
- Meetings on a Collaborative Ph.D. Programme in HFE for Asia (ID committee, PSE committee, and Strategic Development Committee) were held at the initiative of Prof Anindya K. Ganguli (Chair, International Development Standing Committee) on 07 June, 22 July, and 22 September. Members are Anindya Ganguli (ID chair), Jennifer Gutierrez (ID co-chair), Liang Ma (ID co-chair), Andrew Todd (SD chair), Takeshi Ebara (PSE chair), Yassierli (PSE co-chair), and José Orlando Gomes (President).
- In the meetings, we discussed the possible ways forwards regarding this initiative, which should be carried out as per the P2DT model. We are now discussing the needs and the stakeholders to be identified.

3) Increasing research impact

- About 500 active members of the Indonesian Ergonomics Society. Of these, about 40 members hold Ph.D.
- Need to discuss ideas for conducting high-impact research for those without a Ph.D. degree.

4. How to establish master/PhD programs in HFE, proposed by Mario Vidal (co-chair)

1) How to build up and structure a master's degree in HFE in Argentina

2) How to establish a national program composed of master's courses in Ph.D in Brazil

- Building up a national Ph.D. program in Brazil by collaborating with professors in architecture, health science, human science, etc. is the new challenge for Brazil, for ABERGO.

3) Support the continuation of the PhD program in Colombia

- Mario Vidal (PSE co-chair) and Takeshi Ebara (PSE chair) are joining the meetings for new ULAERGO members to support to be federated members of IEA.
- We are looking for another co-chair for Latin America to help Prof Mario because he deals with the high demand for education in Latin America.

5. Maintenance and update of HFE Educational map

<https://iea.cc/global-hf-e-education-map/>

- IEA provides global educational institution map of HFE on the IEA website, developed by Max Chang, past PSE chair.
- To date, the current map provides only information about which institution can educate HFE in PhD, master, or undergraduate course.
- We want to figure out how to provide it to the stakeholders more effectively. What kind of information should be added? or what kind of function is needed for stakeholders?

6. Discussion with the Promotion and Development committee (PDC)

- In response to the request for the Implementation of the IEA Congress Model (CM), we had a meeting with PDC members (Elina, Yushi, and Aleksandr) and Takeshi (PSE chair) on 8 August.
- Some ideas on how to make the triennial congress attractive were exchanged in terms of the possible plan as PSE committee. With the full cooperation of Yushi, a P2DT plan will be prepared.

Cochairs

Mario Vidal (Latin America, Brazil), Yassierli (Asia, Indonesia), Tahar Hakim Benchekroun (Africa, Paris),

Certification sub-committee chair

Marion Edwin (Oceania, New Zealand)