March 24 13:30 ~ 15:00 Bldg.#6 Sakai Memorial Hall

Plenary Session 1

Robert Songer

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In addition to teaching engineering classes in English, Robert W. Songer's duties at KTC include roles pertaining to educational reform, such as the Collaborative Learning in Engineering and English program, as well as participation in the CDIO Worldwide Initiative. With a background in software engineering and globalization services, his ever-expanding interests are presently focused on research into the combination of game studies and learning theories to discover new ways of teaching and learning for the coming generations of globally-connected, media-savvy students.

Engineering Education Initiatives at KTC

In December 2010, Kanazawa Technical College (KTC) became the first school from Japan to join the CDIO Initiative. As a Japanese College of Technology (a.k.a., Kosen), KTC admits students from the age of 15 to complete a five-year intensive engineering program in one of three departments while simultaneously fulfilling certification requirements for their secondary education. While the member schools of the CDIO Initiative are primarily universities and colleges at the tertiary level of education, the unique role of the Kosen system arguably enables and very nearly requires the adoption of the principles behind the CDIO Framework. This presentation will make the argument for why CDIO is appropriate for the purposes of the engineering education at a Kosen in addition to other institutes of higher education in Japan. Practical examples of the CDIO principle in educational programs at KTC will be shown to further elaborate the initiatives for improving student mastery of fundamental and technical skills, creativity and ingenuity in the development of new systems, and awareness of their responsibilities as engineers within society.