

Student-Driven Content Creation for e-learning

Jorg Entzinger

j-entzinger@t-adm.t.u-tokyo.ac.jp

Kumiko Morimura

morimura@t-adm.t.u-tokyo.ac.jp

Shinji Suzuki

tshinji@mail.ecc.u-tokyo.ac.jp

Institute for Innovation in International Engineering Education, School of Engineering, The University of Tokyo

Platform

SNOWBALLS® is an e-learning system developed by and for students of the University of Tokyo. It offers a game-like environment with various forms of user-user and user-system interaction to increase active learning and to raise learner motivation. The development started in 2009 and we presented the platform at OCWC2010 in Hanoi [1].



Students start studying an online textbook module and do practice questions. Then they can ask questions or post comments in the forum, play multi-user battle games, or do time trial quizzes to gather snowballs (points). Snowballs can be spent in the shop to buy clothes for one's avatar.

Avatars provide both anonymity and motivation.

Quizzes
Games
Forum
Shop

Content

The main objective is to teach technical English vocabulary to Japanese university students, to prepare them for taking lectures in English and joining the international research community. Additionally, we aim to create SNOWBALLS content for international students to learn Japanese, and for faculty and administrative staff to learn to communicate with international students and researchers.

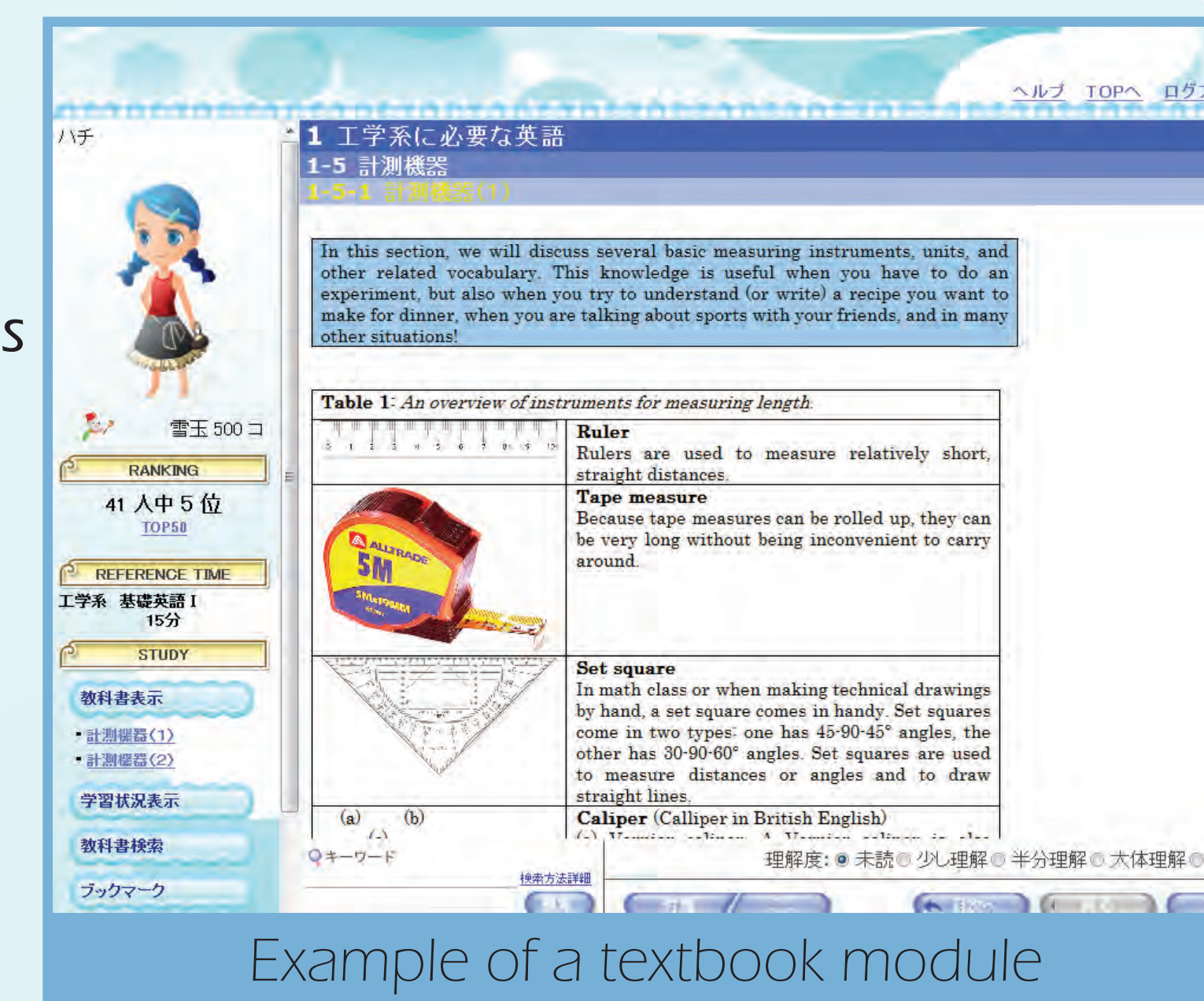
Current topics:

Geometrical figures & shapes
Line types & styles
Angles
Reading of equations
Types of graphs/charts
Figures & tables
Measurement tools
Units

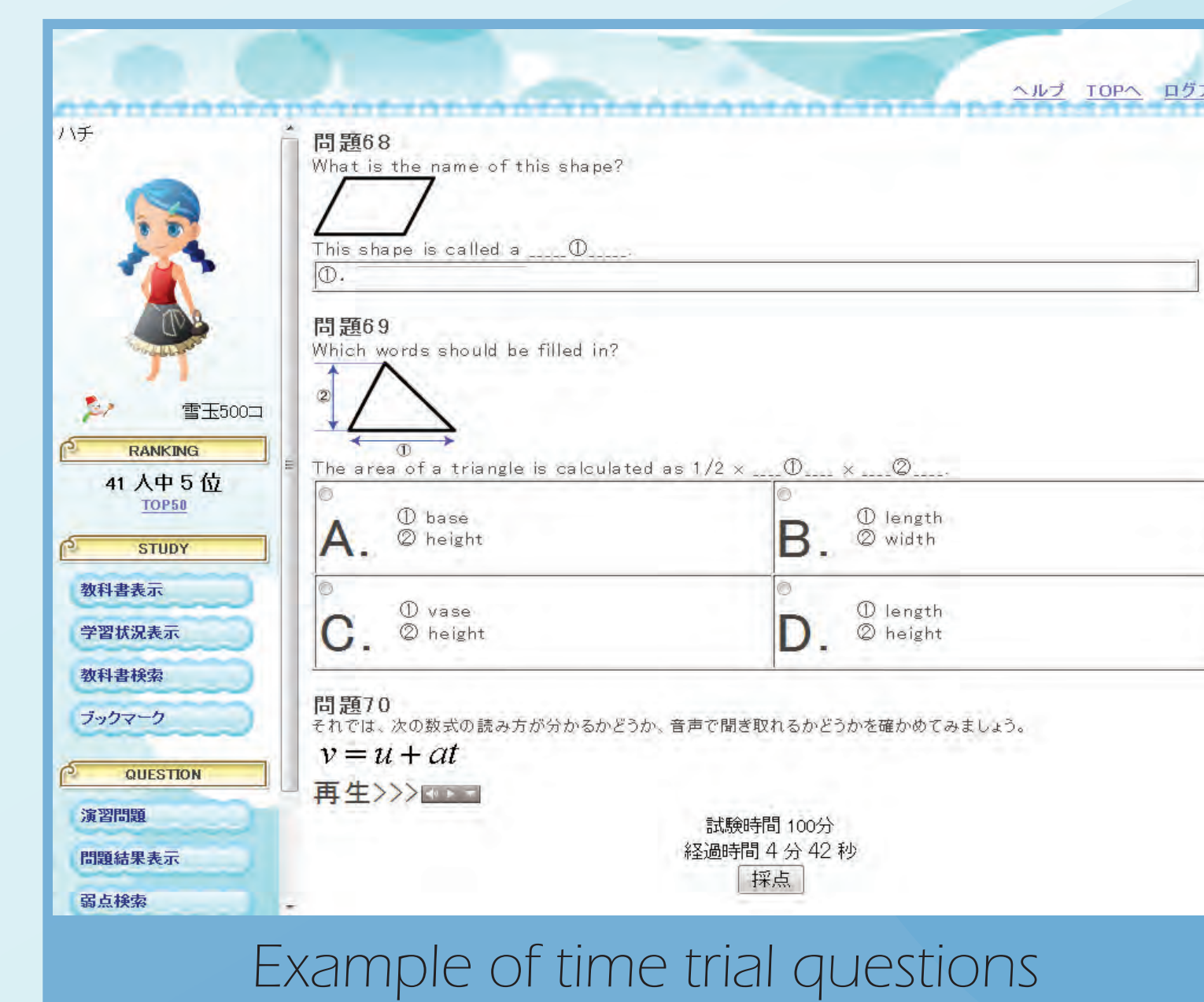
Materials
Linear algebra
Robotics
Manufacturing tools
Statistics

Pollution & climate change
World energy problem
Life cycle assessment

Students play a central role in creating the courseware. They discuss about the platform features, topics to be taught, vocabulary per topic, and the presentation style. Finally they create texts and quiz questions for use in SNOWBALLS.



Example of a textbook module



Example of time trial questions

Idea

A student in the development team suggested we could make a "virtual studying abroad" program, offering e-learning modules based on open courseware of overseas universities in SNOWBALLS. Students who successfully complete these courses could be awarded a badge for their avatar indicating their achievements in internationalization.

- How to make this "virtual studying abroad" appealing to students without violating the non-endorsement rules of the OCW creator?
- What experiences of studying abroad can we teach through e-learning? (Except course content of overseas universities.)
- What kind of OCW could we develop to assist international students in their preparation to come to study abroad in Japan?



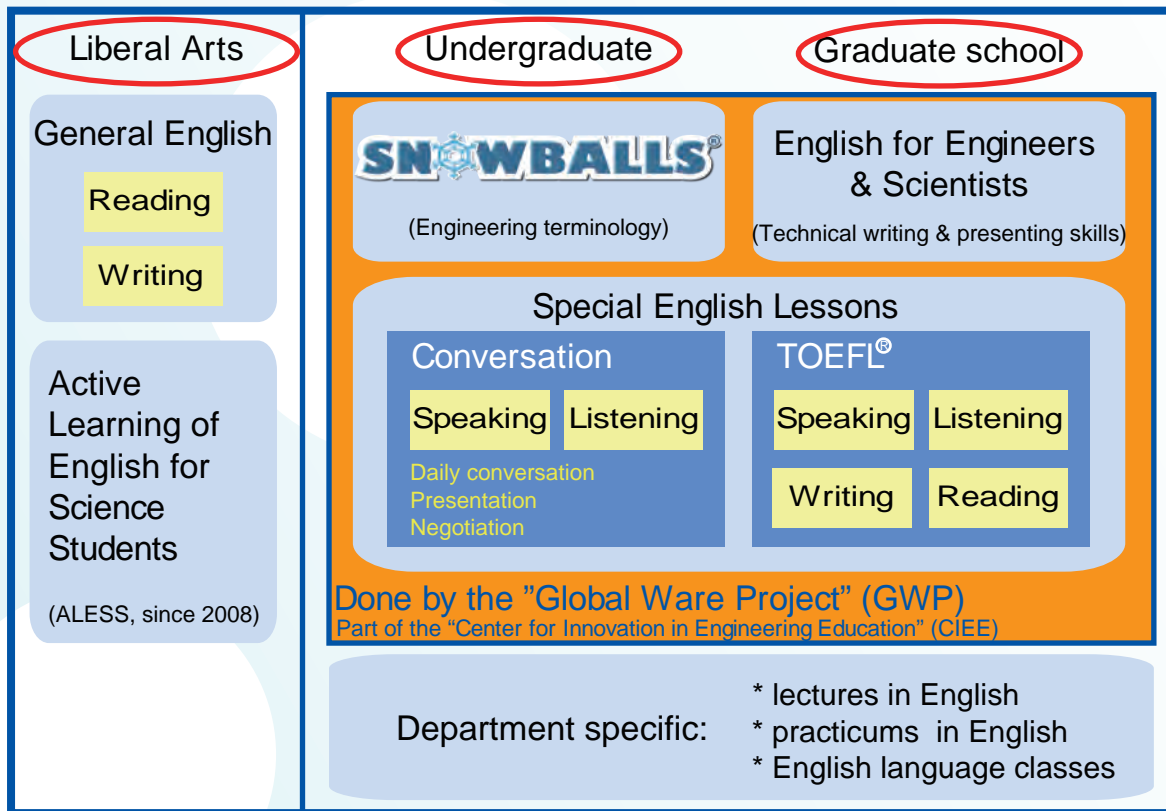
We like to discuss about topics for literacy learning, how or where to find useful courseware resources, and possible rights issues. Please contact us at the conference or by email!

ACKNOWLEDGEMENTS

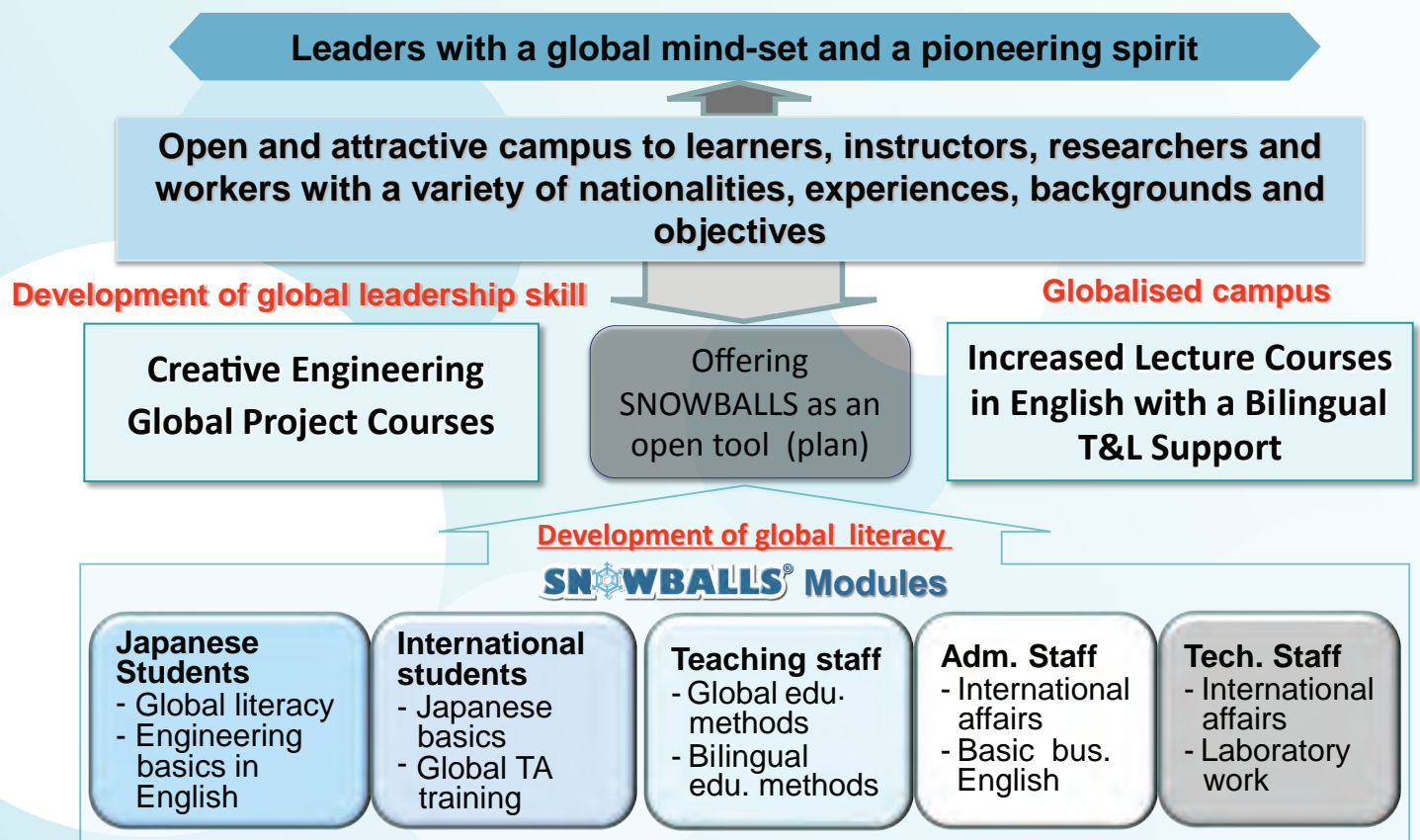
We wish to thank all the students involved in the SNOWBALLS project as part of the e-learning seminars, as well as the ICOM Corporation (<http://www.icomcorp.jp/>) for the professional implementation they made from our ideas.

[1] Kumiko Morimura, Makoto Yoshida, and Shinji Suzuki, "SNOWBALLS (Self Navigation Web-Based Literacy Learning System) and Utilization of OCW resources in Global Education," Open Course Ware Conference (OCWC) 2010, May 6th, 2010, Hanoi.

English Education Engineering Students Receive at the UT



SNOWBALLS® in the Bilingual Campus Action Plan



*SNOWBALLS = Self Navigation Web-Based Literacy Learning System

