

**MEASURING LEARNING ACTIVITIES FOR 21ST CENTURY SKILLS – Daniel Rorai**

# Workshop Description:

Are we preparing students for the demands of the 21st century work force? Information, technological, and media literacy; creative thinking; flexibility; and complex communication skills are a few of the skills identified as necessary for success in the 21st century work force. The challenge of developing these skills in the educational setting requires us to carefully evaluate the learning activities we use in the classroom. How can we be confident that the learning activities we design provide the experience for students to develop these advanced skills?

In this session, we will explore a framework to assess the degree to which our learning activities encourage the development of 21st work skills. The 21CLD Learning Activity Rubrics, developed by ITL Research and SRI International, provides a mechanism to numerically assess our prepared learning activities against six essential criteria – collaboration, knowledge construction, use of technology for learning, self-regulation, skilled communication, and real world problem solving/innovation. The use of activity rubrics allows us to fine-tune learning activities to ensure they meet outcomes, and they provide a solid foundation for the development of student assessment instruments. Participants will examine various classroom learning scenarios for indications of the presence of the essential rubric criteria and then practice applying the rubrics to a sample learning activity.

# Learning Outcomes:

Through active engagement in this workshop, participants will:

* Recognize the differences between 20th and 21st century learning skills.
* Develop a working definition for “active learning” to guide the development of effective learning activities.
* Identify the six criteria and associated levels of competency for 21st Century Learning Activity Rubrics.
* Examine classroom learning activities for indicators of rubric criteria.
* Apply 21st Century Learning Activity Rubrics to learning activities.

**Facilitator:** Daniel Rorai, St. Clair College

**For more information**: [drorai@stclaircollege.ca](mailto:drorai@stclaircollege.ca)

# Resources:

[21st CLD Learning Activity Rubrics](http://fcl.eun.org/documents/10180/14691/5.3x+-+21cld+learning+activity+rubrics+2012.pdf/e240da11-07c2-4633-a86e-06c12f00d8ad?version=1.0). (n.d.). Microsoft Partners in Learning, 21st Century Learning Design

Bonwell, C. C., & Eison, J. A. (1991). [Active Learning: Creating Excitement in the Classroom](http://files.eric.ed.gov/fulltext/ED336049.pdf). ASHE-ERIC Higher Education Report No.1. Washington, DC: George Washington University.

Freeman, S., et al. (2014) [Active learning increases student performance in science, engineering, and mathematics](http://www.pnas.org/content/111/23/8410.full). PNAS.

Millis, B.J. (N.D.). [Active learning strategies in face-to-face courses](http://ideaedu.org/research-and-papers/idea-papers/53-active-learning-strategies-face-face-courses). The Idea Center, University of Texas at San Antonio.

Mishra, P. & Kereluik, K. (2011). [What 21st Century Learning? A review and a synthesis](http://punya.educ.msu.edu/publications/21stCenturyKnowledge_PM_KK.pdf). In M. Koehler & P. Mishra (Eds.),Proceedings of Society for Information Technology & Teacher Education International Conference 2011 (pp. 3301-3312). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

R.M. Felder and R. Brent, ["Active Learning: An Introduction."](http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Papers/ALpaper(ASQ).pdf) *ASQ Higher Education Brief, 2*(4), August 2009. A short paper that defines active learning, gives examples of activities and formats, and answers frequently-asked questions about the method.