

SYM-10*Abstract Number: 20189***Cultural Aspects of School-wide Assessment and Pedagogy: A Follow-up Study of Teaching Gap***Masahiro Arimoto, Tohoku University**Janet Looney, European Institute of Education and Social Policy (EIESP)**Sae Yamamoto, Teikyo Heisei University**Shin Hamada, Akita University**Ian Clark, University of Washington*

We see in the OECD (2016) statistical report that Japan scores significantly above the average levels related to performance and outcome equity. However, it is perhaps the ethnographic research conducted by Shinkawa and Arimoto (2012), as they documented the very challenging after-math of the 2011 Fukushima cataclysm, that foregrounds the themes. They observed the social reproduction of "altruism even in adversity", noting that Japanese inter-relationships (*kankei*) are, "rooted in thousands of years of Japanese tradition and has withstood outside influences". For schools located in regions that suffered damage from the Great East Japan Earthquake and schools that have since accepted children and students affected by the disaster, challenging issues include providing learning assistance to children and students affected by the disaster, and providing special guidance for their mental and emotional wellbeing. The OECD's report on the 2015 PISA states that, "the Japanese school system ensures equity in education opportunities" (2016, p. 1). Further, it makes the connection between examination performance and outcome equity, "Japan, ...achieves high levels of performance and equity in education outcomes as assessed in PISA 2015, with 10% or less of the variation in student performance attributed to differences in students' socioeconomic status" (p. 6). This finding emphasises the cultural importance attached to outcome equity. Sato (2012) proposes five outward formations of lesson-study, which inevitably vary in their internal composition in order to respond to local conditions and circumstances. Generally then, lesson study is: 1) conducted as in-house workshops at the initiative of schools, 2) conducted collaboratively with university researchers, 3) promoted by the teachers' union and voluntary teachers' study groups, 4) conducted by progressive teachers and educational researchers, and 5) conducted by MEXT and the local boards of education in designated research schools. Here again, we see that while MEXT may conduct research on lesson-study, it does not routinely intervene in school procedures regarding lesson-study. Since Stigler and Hiebert published *The Teaching Gap* in 1999, describing the Japanese approach to lesson-study, teachers and educational researchers worldwide have reacted well to this practice. While the lesson-study process is transformative, greatly facilitating the enactment of formative and interactive assessments, we posit that the existing literature does not give sufficient emphasis to the first-order issue of democratic school culture, created when teachers participate in collaborative practices such as lesson-study. Crucially, communities of teaching practice form without central government or local education board funding, and so are largely free from external control. This innovative combination of politically sanctioned activities, but without the external accountability associated with spending public funds nurtures sustainable pedagogical improvement. Lesson-study

practices are therefore projected from inside schools by highly committed civil servants, who are willing to take on and share the task of their own professional development. Further, the inhouse coordination of lesson-study removes the need to prove some kind of causal link with examination results, or PISA rankings - a meaningless focus to the holistic practitioner. It is this notion of 'cultural constructivism' that leads us into the Japanese mathematics classroom, The purpose of this paper is to describe in 'optimal definition' the culturally produced classroom processes associated with the collection and use of learning evidence inside the mathematics classrooms of Japanese elementary schools using the word of *neriage* (in-depth dialogic interaction) in the contexts of school-wide assessment and pedagogy . This is done in comparison with renewal of the European Key Competence Framework and the OECD's International Working group for the 2030 Education agenda.