

Elementary School Science Teachers' Belief about Science and Science Teaching in Constructivist Landscape

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ABSTRACT

This study explored the proximity of the science teachers' beliefs (both practicing and prospective science teachers) to the constructivist principles of learning for finding the Japanese practicing/prospective elementary school science teachers' beliefs about science and science teaching against the constructivist principles. A comparison of Japanese practicing/prospective science teachers and Pakistani practicing science teacher's beliefs about science and science teaching was also studied to allow comparison with another countries teacher will inform about the relative positioning of Japanese teachers and will help in determination of the extent of constructivism-compatibility of instructional practices currently. Five domains were identified in which teacher's beliefs were more likely to affect the classroom practices. A questionnaire was made based upon the questions prepared in each of the domains above to collect the data. The questionnaire comprised of 28 statements. The data was collected form 314 teachers/prospective teachers, which include 159 Japanese practicing teachers from nine different districts of Japan, 85 students (will be referred as prospective science teachers) studying in teacher training undergraduate course in Tokyo Gakugei University, and 70 Pakistani science teachers from Lahore metropolitan area From results it was evident that the assumption about different types of science teachers' having different beliefs about science and science teaching was valid There were differences among different types of teachers and across different domains of beliefs. But overall there was pro-constructivist tendency among Japanese teachers of all categories as compared to Pakistani science teachers.