

KINDERGARTEN STEAM TRAINING IN CHONGQING

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THEME:

STEM, STEAM, STEMM, STEM+C and STEM+ education

BACKGROUND AND AIMS

Kindergarten in China begins at age three and continues for three years until elementary school. It is the western equivalent of two years of pre-school and the traditional view of kindergarten. Elementary then beginning in all settings at grade 1. In recent years a number of deans and principals of Chongqing kindergartens have expressed interest in receiving professional development in Science, Technology, Engineering, Arts, and Math (STEAM) curriculum activities. Looking at STEAM training among Chinese teachers, let alone, kindergarten teachers is likely the first of its kind. In turn one of the chief aims is to see how this type of training is received among participants. The introduction of STEM/STEAM has only been a recent occurrence in the Chinese educational system. This study shares findings from three separate professional development sessions ran for different groups of Chongqing kindergarten teachers and administrators. The sessions were all face-to-face and hands-on learning experiences. Lengths of time varied somewhat as did the size of each group. Chinese language translation was provided for all sessions. Activities will be further explained. At session conclusions, participants were provided a link for an online survey, however, the first training session were given a paper version. Completion was voluntary and 148 responses were received from participants.

METHODOLOGY

A survey of 60 5-point Likert scale questions and six open response items was given. Likert scale items address interest in STEAM, perceptions of STEAM, STEAM self-efficacy, science class and teacher support, and overall view of the professional development. Open response items address the view of the session. There were also four demographic questions included identifying age, years taught, school, and gender.

RESULTS AND CONCLUSIONS

Administrators clearly have stated they see the value and importance of STEAM becoming part of their school curriculum. Many have sought out further and sustained STEAM training for their faculties. Survey responses were extremely positive. Open-ended responses showed that participants found the training interesting, fun, and hands-on. Participants suggested improvements along the lines of demonstrating in front of actual children, conduct further training, and expressed some limited concerns about language barriers. All but one respondent felt that STEAM is needed in the preschool classroom. The majority did not feel prepared to plan STEAM lessons for their students.