

Explaining the Process of Socialization of Learning in the Experimental Sciences: A Qualitative Research

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Introduction

Deep and meaningful learning of learners in educational environments is influenced by various factors, each of which can somehow affect the improvement of learners' learning. In this regard, considering the principles and views of constructivist theories, especially social constructivism, which has attracted the most attention among constructivist theories, it is necessary to have a social to the learning process and learning environments and organized learning environments in a way that allows learners to actively interact and participate. On the other hand, many factors have led to the socialization of learning in our schools, especially in theoretical subjects such as the experimental sciences. In this regard, the purpose of this study was to design a model of social constructivist learning environment in the experimental sciences .

Method

Qualitative research approach with use of grounded theory research method is utilised. The target group consisted of all prominent professors who have mastered the constructivist approach and teachers of experimental sciences selected from the best teaching models in the academic year 1397-98 in the country, who were selected using theoretical purposive sampling. Using semi-structured interviews, 13 interviews were conducted with professors and teachers in the field of social constructivism and theoretical saturation was obtained.

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Results

Data were analyzed by "coding" and "categorization" in three levels of open, axial and selective coding. Also, to determine the validity of the data, the "Triangulation". Overall, the findings confirmed the six dimensions of the grounded theory. The results showed that the "central phenomenon" of the research is "social constructivism as a model of socialization of learning". Also, the most important "causal conditions" included: active student participation, designing a student-centered learning environment, laying the groundwork for student-centered learning, continuity of teaching and experience, and interactive learning. In addition, "contextual conditions" include: Teacher professional development, removal of structural, administrative and physical barriers, and "intervening conditions" including mechanical and quantitative education systems, teacher quality, Learners quality and family quality. "Strategies" also included: social interaction in learning, emphasis on question and research, the art of motivating, Self-directing learners in learning, and the fit between content, place, and time of instruction. Finally, "outcomes" showed positive effects on learning and knowledge, increasing motivation and confidence in the learning environment, strengthening high-level abilities and skills, improving the quality of social life and changing learners' attitudes.

Discussion

In general, the model of education based on social constructivism is a systematic, indigenous and practical way to identify important elements in the socialization of learners' learning that should be considered by teachers, school principals and educational policy makers in general, because in this case we can consider Causal factors affecting the socialization of learning with regard to contextual and interventionist conditions by applying appropriate strategies paved the way for the formation of desirable educational outcomes for learners.

Keywords: Social Constructivism, Experimental Science instruction, learning, Methodology Grounded Theory, Qualitative Research.

Authors' contributions: Author 1, data collection and analysis. Author 2, designing the research and supervising the data analysis, Author 3, 4, in analyzing the data and adjusting the writing tips of the article.

Acknowledgments: The current research is the result of a specialized doctorate in educational psychology, and thanks are hereby given to all the participants in this study.

Conflict of interest: No conflict of interest has been expressed by the authors

Funding: This article is extracted from the dissertation and has been supported by the Vice Chancellor for Research of Shahid Chamran University of Ahvaz in the form of a grant number SCU.EP99.29204, for which this organization is gratefully acknowledged.
