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Student teachers' multi representations on heat transfer in solid and liquid from the inquiry activities.

The goals of science are to understand natural phenomena and to explain how they may be changing over time by described the workings of the universe. However, many natural phenomena are extremely complex and may never be fully understood in terms of physical laws. The teaching concepts of energy and heat are difficult for teachers because the students are not able to link kinetic theory and molecular motion to the explanation of heat and energy transfer. The idea that heat is transferred from one object to another via conduction is a concept of science in the national standard indicators of Thai curriculum. To successfully construct the activity for helping students understand about heat transfers, the understanding of the concept of teachers is very important. The aim of this study is to present the natures of student teachers' multi representation capabilities when constructing explanations about heat transfer in solid and liquid through the inquiry activities. There were forty-nine teacher students in this study. They were asked to explain about heat transfer during two inquiry activities of heat transfer in liquid and solid. The worksheets of the activities were analyzed to investigate how the student teacher explained heat transfer.
The results showed that teacher students show their explanations about heat transfer in multi representation ways such as the color of picture from hot and cool tones to represent the heat transfer, the arrow shows dynamic movement in both heat and conduction particles and words in explanation about heat transfer are different.

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