

Attitudes of religious science teachers towards the teaching of earth science topics that are controversial in terms of science and religion, with an emphasis on the issue of geological time

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Abstract:

This study examines the attitudes of religious teachers from the religious-public stream regarding the teaching of controversial topics in terms of science and religion in general and regarding the teaching of geological time in particular. The work includes suggestions for tools and materials for teaching geological time as a controversial science and religion topic.

The research questions focused on identifying and understanding the difficulties in religious teachers in teaching controversial topics. More specifically, it included the following questions: What are the approaches of religious teachers in dealing with controversial issues? What influences the teacher's scientific and religious knowledge on his/her views on controversial science and religion issues?

The research used the mixed approach methodology (a combination of quantitative and qualitative methods) and included attitude questionnaires and interviews with religious teachers and scientists. The sample was 65 teachers from the religious-public stream and 16 religious earth scientists.

The study also included developing and implementing tools for dealing with the teaching of geological time as a controversial topic.

The findings indicate that the vast majority of the religious science teachers perceived the controversial topics as relevant for their teaching practice. They find the Earth Age and geological time conflict as the least religiously problematic issue. They have shown greater openness to it than to the evolutionary conflict and the universe formation conflict.

The analysis of teachers' responses shows that only a few teachers hold a clear and cohesive philosophy similar to one of the accepted religious philosophies. The vast majority of teachers do not have a solid attitude towards one of the approaches. They hold more than one approach, and their position is a mixture of components of different approaches. Contrary to their ambiguous position regarding the different approaches in Judaism towards science and religion, their positions regarding the essence of scientific research are pretty solid.

It has been found that unfounded religious and scientific knowledge leads to teachers' difficulty dealing with time. In contrast, correct religious and scientific knowledge about the age of the world helps to build a positive perception towards the conflict. Also, a clear distinction between the scientific and the religious methods helps to understand that these methods do not contradict each other and complement each other. It has been found that scientists have solid opinions towards the science-religion conflict, while established scientific knowledge and religious knowledge found among scientists helps them to better deal with the interaction between science and religion. It was found that rabbinic authority and religious scientists have an important place in the teacher's confidence in confronting students in matters of religion and science.

It is proposed to use the tools developed in this work for teaching geological time at the teaching level. And to strengthen teachers' confidence in religion and science issues through the personal story of the religious scientists working in the boundary between science and religion.