

# PRE-SERVICE SCIENCE TEACHERS PERCEPTIONS OF THE NATURE OF SCIENCE

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## **Abstract**

The study aimed mainly to explore the perceptions of pre-service science teachers of the nature of science. The study sample consisted of (40) pre-service science teacher education at diploma level in the Faculty of Education at the University of Taif in Saudi Arabia. The study used a scale nature of science (MOSQ). The study found the most following results: owning pre-service science teachers perceptions are true to the nature of science represented in: First: scientific knowledge: they believe that scientific theories less stable than the laws, and that scientific knowledge is changing, and the proportion (34%) of the posts do not believe that scientific model reflects a copy of reality. Second: the scientific method: they think that science and the scientific method cannot answer all the questions, and that knowledge is not to come from the experiments. Third: the work of scientists: they believe that scientists are using creativity and imagination in the development of scientific knowledge, and open-minded scientists without bias. Fourth: the scientific enterprise: believe that the scientific enterprise is not a single institution, and to develop scientific knowledge influenced society, politics and culture. And results indicate the existence of false perceptions of the nature of science to pre-service science teachers was to: First: scientific knowledge: they believe that the assumptions are developed to become theories only, and that scientific theories can be developed to become law, and that the accumulation of evidence makes scientific knowledge more stable, and (38%) of pre-service science teachers believe that the scientific model reflects a copy of reality. Second: the scientific method: they think that The scientific method is a fixed step-by-step process. Third: the scientific enterprise: believe that science and technology are identical. And study recommended the preparation of science teachers to gain sufficient understanding of the nature of science should be a prerequisite for science teacher preparation program in Educational Diploma Program.

**Key words: pre-service science teachers, the nature of science.**