

STUDY OF THE PROFESSIONAL PROFILES AND TEACHER TRAINING OF PHYSICS TEACHERS BETWEEN CHILE AND MEXICO

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PHYSICS TEACHER TRAINING

The physics teachers require, in addition to knowledge of the discipline, development of skills that allow them to plan and implement teaching strategies that help students acquire knowledge of the different branches of physics and their usefulness in different contexts (Arriaga et al., 2017). Thus, teacher training plays a fundamental role and can be approached from two perspectives: initial training (profile) and in-service training (teacher training) (Gómez et al., 2020; Campos, 2020). In Latin America, particularly in Chile and Mexico, the training of physics teachers focuses on their professional profile, so it is necessary to deepen teacher training, so that an ideal profile is achieved to teach physics classes (Ramírez & Medina, 2022). In general, the teaching of teachers can be divided into two: 1) courses on the didactics of physics; and 2) courses on the educational model of the school (Arriaga et al., 2017). In the work we are presenting, a study was conducted about the training of the physics teacher, creating indicators to know the ideal profile of the teacher, and proposing training tools that allow the teacher to approach the ideal profile, and a comparison of the results of the study between teachers of Chile and Mexico.

MATERIALS AND METHODS

For the preparation of the teacher and authorities' evaluation instrument, work was carried out during the summer of 2019, taking as a sample authority from the Universidad de Guadalajara and Instituto Politécnico Nacional (both from Mexico) and the Universidad Austral de Chile (Chile). The expert validation methodology (Hernández-Sampieri et al., 2018) was used for the instrument validation and reliability process. The group of experts was made up of 7 doctors in physics education from Mexico, Chile, and Colombia. Application of instruments has been online both in México and Chile in 2022 and using software MAXQDA for the qualitative analysis.

RESULTS

Up to this moment, the project continues, however there are already some interesting results. The physics teacher requires continuous training, both disciplinary and teaching. The profile of the physics teacher in Mexico is more disciplinary, while in Chile it is a little closer to the teaching profile, therefore, the training options have a different orientation. The impact of both the profile and teacher training in the development of skills in students is still under investigation.

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