



Astronomy Education and the role of primary and high schools science teachers



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Introduction

In order to develop student's scientific literacy in primary and high school, pre-service science teacher education programs should incorporate astronomy subjects.

In Chile, as part of the 2009 curriculum reform, "Earth and Universe" was included as a transversal learning axis in natural sciences curriculum.

Both, in service science teachers and university training programs, had to adapt to this new challenge (Huerta-Cancino, 2017).

For in service science teachers, several workshops on curricular appropriation about "Earth and Universe" were implemented at U. de Santiago de Chile (2008 - 2011).



Implementation

To properly prepare pre-service Physics and Mathematics teachers at U. de Santiago, there are two compulsory subjects: "Earth Sciences" and "Physics of the Universe" (since 2005). In 2013, two specific elective subjects were created: "Astronomy in the Classroom", and "Astronomical Observation with Telescopes". This served as the basis for structuring a specialization in astronomy (Educational Astronomy Minor) for pre-service teachers, which came into effect in 2020.

Results

To date, about 60 pre-service teachers have completed the requirements to obtain this specialization in Astronomy.

Minor in Educational Astronomy

Pedagogy in Physics and Mathematics
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