

A LONGITUDINAL STUDY ON THE DEVELOPMENT OF THE PROFESSIONAL IDENTITY OF FUTURE PHYSICS TEACHERS

Jéssica dos Reis Belíssimo^a and Roberto Nardi^b

Presenting Author: Roberto Nardi (r.nardi@unesp.br)

^aSão Paulo State University (Unesp), School of Sciences, Postgraduate Program in Science Education, Bauru, São Paulo, Brazil

^bSão Paulo State University (Unesp), School of Sciences, Education Department, Bauru, São Paulo, Brazil

KEYWORDS: Physics Teacher Training, Teachers Identity, Longitudinal Study, Physics Teaching

This presentation derives from a Master's thesis that aimed to understand some aspects of the conceptions of undergraduates in Physics on topics such as scientific knowledge, science teaching, and the process of constitution of knowledge for teaching. This study is longitudinal; data were taken from admission to completion of the course and looks for understanding the influence of the pedagogical project and the structuring of the course in the formative profile of future Physics teachers.

To assist in the investigative process, the following question was established: How do the conceptions of future Physics teachers regarding scientific knowledge, science teaching, and the process of constitution of knowledge for teaching change throughout the course and outline their professional identity?

The production context of this study took place in the Physics teacher training course at a Brazilian public university. The constitution of the research data occurred through questionnaires answered by the undergraduates annually, from university admission until the completion of the course. In addition, semi structured interviews were also carried out at the end of graduation.

The theoretical and methodological references that supported the development of this research were the Pecheutian Discourse Analysis (Orlandi, 2015; Pêcheux, 2002) and the references in the area of teacher education (Freire, 2020; Goodnough, 2010; McIntyre, 2005; among others).

From the analysis of the interviews and questionnaires, it was possible to understand that the pedagogical project of the course and the curricular structure have an important role in the changes in the conceptions of future Physics teachers and in the construction of their teaching identity.

In addition, it was identified that the teachers' conceptions about the teaching profession are inserted in the perspective of the reflective teacher, which corroborates the constitution of a professional teaching identity in the perspective of the naturalization of an instrumental model of reflective practice, making it impossible for the teacher to reflect critically about the world.

REFERENCES

Freire, P. (2020). Pedagogia da autonomia: saberes necessários à prática educativa (63th ed.). São Paulo: Paz e Terra.
Goodnough, K. (2010). Teacher Learning and Collaborative Action Research: Generating a "Knowledge-of-Practice" in the Context of Science Education. Journal of Science Teacher Education, 21, 916-935.
McIntyre, D. (2005). Bridging the gap between research and practice. Cambridge Journal of Education, 35(3), 357-382.
Orlandi, E. P. (2015). Análise de Discurso: Princípios & Procedimentos (12th ed.). Campinas: Pontes.
Pêcheux, M. (2002). O discurso: estrutura ou acontecimento (3th ed.). Campinas: Pontes.

Proceedings of the IUPAP International Conference on Physics Education, ICPE 2022 5-9 December 2022, page 55, ISBN: 978-1-74210-532-1.