

## **A model for Pre-service Science Teacher (PST) Professional Identity Development**

**Dr. Belinda A. Liwanag**

<https://orcid.org/0000-0003-3712-2629>,

[belindaliwanag@gmail.com](mailto:belindaliwanag@gmail.com) , [belinda\\_liwanag@sdca.edu.ph](mailto:belinda_liwanag@sdca.edu.ph)

Research Development Officer

St. Dominic College of Asia, Bacoor City, Cavite, Philippines

International Organization of Educators and Researchers Inc. (IOER)

### **Abstract**

This research is focused on developing a model for Pre-service Science Teacher (PST) Professional Identity Development. The respondents included 13 pre-service science teachers from a private teacher education institution. It employed a descriptive narrative design with the qualitative method of collecting data using interview questionnaires and focus group discussion guidelines as instruments. The findings showed that the 19 affordances and 13 constraints culled from the experiences narrated by the PSTs, reflected both strengths and weaknesses in the competencies stipulated in the Philippine Professional Standards for Teachers (PPST). Nevertheless, all the shared experiences were perceived to contributory to the development of the professional identity of the pre-service science teachers. Results of the interview done individually and as a group revealed how PSTs perceived their professional identity, which is essentially like the competencies of, a stage 1 Beginning Teacher. This includes 1) flexibility with the diverse learners; 2) active collaboration with colleagues and participating school community; 3) pursuit of continuous professional development; 4) consistency in reporting and monitoring learners' progress; 5) exhibit of mastery of science concepts and pedagogy; 6) efficiency in lesson planning; 7) proficiency in ICT utilization; 8) effective communication of the science lessons; and 9) forging wholesome collaboration with colleagues. The first 2 findings led to the formation of a well-crafted model for Pre-service Science Teacher Professional Identity Development. It proposes 4 key procedures of curriculum enhancement, improvement of the learning environment, PST up-skilling and re-skilling, and extended engagement with the school community and beyond which will all lead to the formation of a competent beginning science teacher in the 21st century.

*Keywords: pre-service science teachers, professional identity development, affordances, constraints, and perceptions*