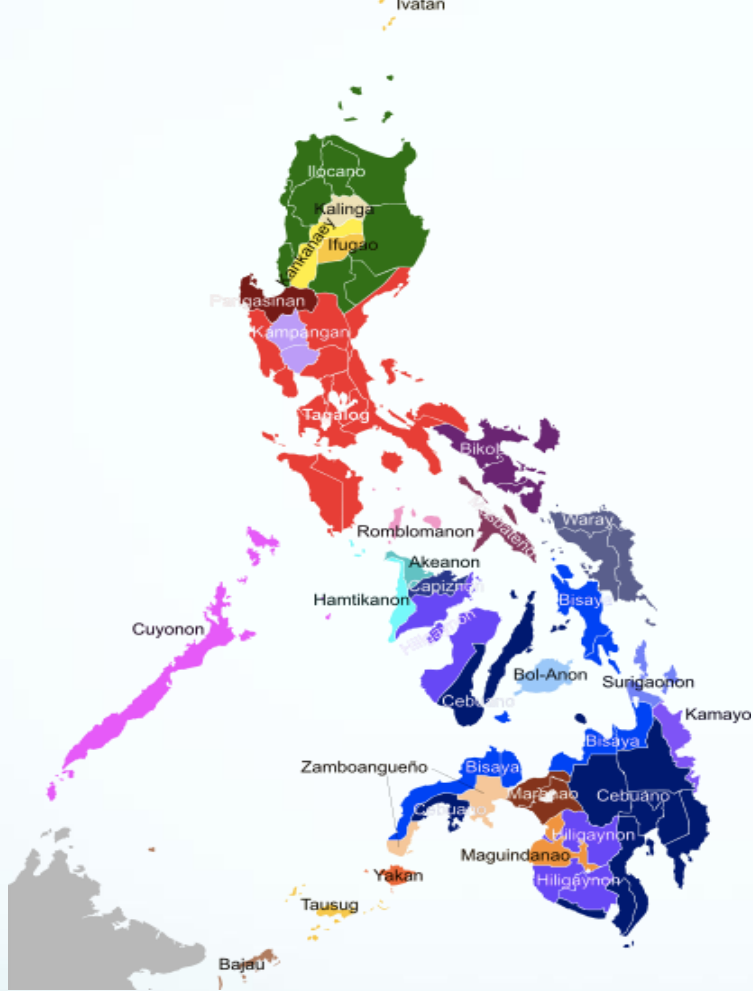


*WATER-BASED VALUES
EDUCATION FOR THE
PROMOTION OF
INNOVATION IN SCIENCE
EDUCATION*

INTRODUCTION

- In 2009, the Department of Education of the Philippines issued Memorandum Order No. 74 stating the use of Mother Tongue-Based Multilingual Education (MLE). The issuance of this memorandum aimed to promote the cognitive development of the learners.



Dominant Ethnic group by province



Ilocano speaking density by province



Area where Pangasinan is spoken according to Ethnologue

OBJECTIVE OF THE STUDY

- This study was conducted in order to develop a model for the institutionalization of Mother Tongue-Based Multilingual Education.
- The place-based curriculum model was utilized to incorporate the inclusion of water-based values education in a science curriculum for the K-3.

- Specifically, this study attempted to answer the following questions:
- 1) What language is being used by the learners in-school and off-school settings?
- 2) How do teachers select the language used in teaching science (i.e., biology, chemistry, physics) subject to suit the need of the learners?
- 3) What curriculum model did the teachers use in teaching the Mother Tongue-Based Multilingual Education?

METHODOLOGY

- The designed model is envisioned to guide teachers and administrators in promoting lesson study in science (i.e., geology, biology, chemistry, physics) various science areas.
- This study made use of descriptive qualitative method of educational research, and was conducted in Pangasinan, Philippines

- The researchers observed classes from Kindergarten to Grade 3.
- The teachers made use of the spiral and concentric curriculum models to help the learners understand the concepts on water-based values education.
- Teachers developed their lesson using the cooperative lesson planning approach.

Result and Discussion

- It was found out in this study that majority of the pupils from Kindergarten to Grade 3 speak the Filipino language more than mother-tongue in the in-school setting.
- The selection of the language that is used in teaching, their practice shows that the teachers use the language that is easily understood by the learner.

- The curriculum models in teaching the mother tongue-based multilingual education include transitional, immersion, two-way bilingual and developmental maintenance.
- In transitional, mother tongue (L1) is utilized solely as a bridge to the second language (L2).
- Immersion allows the use of both mother tongue (L1) and second language as languages with equal importance so that parents could provide support to their children to become multilingual.

- The use of two-way bilingual enables native speakers of two varied language groups in a classroom so that they could learn from each other.
- The skill in bilingualism is strengthened based on longitudinal development of both mother tongue (L1) and second language (L2) skill in promoting developmental maintenance.

- The implementation of the language selected as medium of instruction in teaching in the school has these forms:
- 1) small to large scale,
- 2) top-bottom instructions through legislation, and
- 3) bottom-up instruction through off-school practices. The language acquisition model that the teachers utilized consist of language, cognitive, and academic development that is centered on societal, cultural and political processes.

PHOTOS



Thank you for listening...