

# USING ETHNOMATHEMATICS TO ENHANCE ELEMENTARY CLASSROOM TEACHING IN GUAM

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Counting games such as *chonka* played by Chamorros and number games that compare numbers from different cultures can help Pre-K to 2 students to practice counting and to develop number sense.

IF early elementary students use nonstandard units such as body parts when they first study measurement, they will develop some understanding of units and will eventually realize why it is necessary to use standard units in order to communicate their ideas regarding measurement with others. Both the ancient Chamorros and the Yapese used body parts for measuring.

Designs of various artifacts in Guam and throughout the rest of Micronesia can be used to introduce plane figures to Pre-K to 2 students: the Carolinian star compass can be used to introduce the circle; the two parts of the *latte* stone of the Marianas, the cap or *tasa* and the column or *haligi* can be used to introduce the half circle and the rectangle, respectively; the top of the “A” on the A-frame *latte* house can be used to introduce the triangle; the turtle shell can be used to introduce the oval; and Yap stone money can be used to introduce circles of different size.

Classifying facilitates young students’ work with data, geometric shapes, and patterns. Traditional Palauan money or *udoud* is classified into two categories: pottery or fired clay and glass beads. Numerous pottery pieces (yellow or red) are crescent in shape and are called bar gorgets. The glass beads are either opaque or clear green.

## References

- Cunningham, L. J. (1992). *Ancient Chamorro society*. Honolulu, HI: Bess Press.
- Gilliland, C. C. (1975). *The stone money of Yap: a numismatic survey*. Washington, DC: Smithsonian Institution Press.
- National Council of teachers of Mathematics, (2000). *Principles and standards for school mathematics*. Reston, VA: NCTM, Inc.
- Ritzenthaler, R. E. (1954) Native money of Palau. [Second printing]. Milwaukee, WI: Milwaukee Public Museum.
- Zaslavsky, C. (2001, February). Developing number sense: what can other cultures tell us? *Teaching Children Mathematics*, 7, 312-319.