



Indigenous

"Validating Indigenous Knowledge Systems"

Indigenous Knowledge

CESLA is cognizant that our assistance in educational and scientific literacy is based on quality communication. As such, communication is an interactive process, and educators and science communicators who think only of the "message" and not of the "audience" are likely to fail. For "communication" to be effective, it is as much a matter of listening as it is of "communicating." Consequently, CESLA is utilizing indigenous knowledge, incorporating it into programming wherever practical, to promote relevancy and understanding.

In the quest for "relevancy," as a foundation on which to build educational and scientific literacy, indigenous knowledge is a "reference to an already existing piece of knowledge or experience." The "western approach" to education often dismisses any emphasis on intuitiveness and/or analogy to promote understanding of aspects of scientific methodology. This complicates the already difficult task of communicating some scientific principles. CESLA's approach is to provide learners the opportunity to make sense of what they have learned by giving that information additional meaning. By comparing what is already known within the learner's cultural paradigm, to new experiences, a logical connectivity is established.

Compared to all others, the rural communities appear to be some of the most disenfranchised. The use of relevant indigenous knowledge systems can link "the old with the new" when it comes to teaching and to learning scientific principles. One such example will be a program using the Zulu "star stories" to lead into a study of astronomy, thus connecting the elder and his "star stories" to the young students' quest for knowledge of the stars and planets in our universe. This will provide an added bonus of involving all persons of a community, not just the student learners.

Rural KwaZulu-Natal, South Africa

This is a brief clip of a Zulu Elder telling "star stories" that make up a portion of the astronomical cultural history of the Zulu people. The entire video clip is 21 minutes in length and is presently in isiZulu only. This video will also have subtitles added in English for non-isiZulu speaking learners. This video presentation will precede "traditional science center" astronomy shows on planetarium sciences.

Other Indigenous Knowledge to be used by CESLA

The Zulu of KwaZulu-Natal have a long history of pot making and basket weaving. The indigenous knowledge of selecting clays and their firing temperatures, or of the collecting, natural dyeing and weaving of baskets all have a background in the natural sciences. Aspects of these knowledge systems will also be used in new programming, along with new exhibits, in the UNIZUL Science Centre.