

## Appendix 1: Implementing Teaching Standards

This curriculum unit will include science, math, and technology standards (North Carolina Department of Public Instruction):

Science standards that are addressed are:

4.L.1.1, 4.L.1.2, 4.L.1.3, 4.L.1.4, 5.L.2.1, 5.L.2.2, 5.L.2.3, 6.L.2.1, 6.L.2.2, 6.L.2.3.

The background knowledge along with the information given to students about coral reefs and bleaching has to do with the understanding of the structures and systems of these organisms and what they need to do to perform those functions that are necessary for life. They will learn about, discuss, and research the coral reef ecosystems and how they are affected by the varying temperatures of the ocean and other factors. They will also learn about the interdependence of the plants and animals in this environment.

The review of 4<sup>th</sup> grade standards along with the movement up to 6<sup>th</sup> grade standards goes along with Irwin's accelerated and rigorous curriculum.

Math standards that are addressed are:

5.MD.2, 6.MD.2

In the beginning of the unit, students will review parts of a graph and basic vocabulary. As the unit goes on, students will learn to further this knowledge by learning how to interpret, organize, display, and analyze data. The data will be given directly to the students (pre-made by the teacher) and will also be live as students go online to research more on coral bleaching.

Technology standards that are addressed are:

5.SI.1, 5.SI.2, 5.SI.3, 5.L.2.1, 5.TT.1.1, 5.TT.1.2, 5.TT.1.3, 5.RP.1, 5.SE.1.1, 5.SE.1.2, 5.SE.1.3

Throughout the unit, technology will be integrated in various ways. Students will be creating documents which will be shared with those in their groups. They will apply research criteria as they collect and interpret both data and other information. Using the internet in a safe and responsible way along with properly giving credit to that information will be expected. Students will also determine how they will present their information using a technology based program.