

Casenet PT3 – Year Three Report – Appalachian State University

For the third year of this project, we set two goals. The first goal was to create a third and final web-based case for middle school level students – with particular emphasis on integrating science, technology, and society competence using case-based methods. The second goal was to expose another group of teachers to the case-based, web-based methodology of teacher development.

In our third case – *The Mystery of the Killer Lake* – we extend the characters developed in the first case, *Lenny Learns His Lesson – And So Does Steve* by telling the true story of Lake Nyos in Cameroon through a series of email interactions between our two protagonists – Lenny and Steve. A set of teaching notes to aid teachers with implementation was also developed. The teaching notes include a content introduction, online and offline resources, suggestions and links to cross-curricular extension activities, and model lesson plans. Additionally, each activity is specifically mapped to national standards set forth by the science education professional community. The story of Lake Nyos as conveyed through *The Mystery of the Killer Lake* provides an opportunity for students to explore content within a more global context - supporting the development of critical skills so important to the post-9/11 world. This case will be field-tested with middle school students in the Fall 2002 semester in selected schools.

Additionally, approximately 50 teacher education students are engaging in case-based development via the Casenex website. This summer, we have two sets of students interacting within environment: undergraduates in our introductory teaching course and graduate students in our Computers in Educational Settings course. The students will finish their participation the first week of July 2002 – at which time assessment data will be gathered.