Title
EDU2: CENS Pre-College Application: Supporting the Educational Pipeline

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CENS Pre-College Application: Supporting the Educational Pipeline

What is CENS Pre-College Application?

A reciprocal relationship between CENS technology and education

- Inquiry Modules
- Nest Box Activity
- Professional Development
- Acoustic/Imaging Application
- Educational Research

Field Test Results for Plant Adaptation Guided Inquiry Module

Tested in Three Local Schools
- 4 CENS teachers used our module.
- 4 comparison teachers taught the same CA standards.

Greater learning gains for CENS students

School 1 (n=25) School 2 (n=73)* School 3 (n=52)

Sensing the Environment: Plant Adaptation
An interface to organize and display sensor data.

Numbers in parentheses are percentage of students receiving free or reduced lunch

School Demographics

School 1 (75%)
- White 9%
- African American 11%
- Hispanic 7%
- Asian 7%

School 2 (36%)
- White 11%
- Hispanic 22%
- African American 6%
- Asian 7%

School 3 (3%)
- White 16%
- Asian 9%
- Hispanic 6%
- Other 34%

“Thought that more experiments and hands-on learning is more interesting than just reading a textbook” – CENS student

“I was interesting because I made a hypothesis and tested it out with actual data” – CENS student

CENSci: CENS Education cyberInfrastructure (NSF ESI-0352572)

Web portal to middle school life science modules in ecology (using JR data)

- Students - access sequence of inquiry-based curricular modules
- Teachers - access to curricular materials and support
- Researchers - access to longitudinal performance data

Guided Module
Common Question
Shared data set
Multiple Answers
Focus on:
Interpreting, Evaluating Data

Open Module
Common Question
Multiple data sets
Multiple Answers
Add’l Foci:
Designing tests, Selecting data

Self-Directed Module
Individual Questions
Multiple data sets
Multiple Answers
Add’l Focus:
Posing testable questions

Portal rollout scheduled for August, 2005

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