

An EPIC Evaluation:

A NC Pilot of the EPIC Learning System

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The Launch

- “Students in Hertford County High School will be on the cutting edge of educational technology, thanks to a special grant by the AT&T Foundation that is providing \$25,000 to fund an e-book pilot project to deliver instruction to students in the school.”
- "AT&T has a long-standing commitment to supporting our communities and nothing is more important to a community than the education of its children," said Cynthia Marshall, President AT&T-NC. "We are excited to be participating in this innovative project that will use technology to fan the flame of learning and academic achievement."

The Launch (cont.)

- State Superintendent June Atkinson thanked AT&T for its support of this project. "We know that students today are enthusiastic about using technology to network, to learn and to experience new things. AT&T is making this possible in Hertford County, and I am excited about the opportunity to try e-books in a rural North Carolina public school," Atkinson said. She added that lessons learned would be shared with public schools across the state.

The District

- “Low wealth” district, included in court case involving resources and quality
- Challenges with teacher recruitment and retention

The School

- A rural northeastern high school
- Moderate size – about 1100 students
- A former “turnaround” high school
- “Priority school,” expected growth, 15 of 17 AYP goals (NCLB)

Origin of the Evaluation Study

- NC DPI requested an evaluation design from SERVE
- NC DPI requested support from ECU
- ECU contacted SERVE
- Conference Call – ECU, SERVE, & District
- ECU visit to the district

Research Questions

- 1. How was EPIC implemented in the two participating classrooms?
 - Student survey
 - Teacher interview
 - Observations (if desired)
- 2. How did the students participating in EPIC perform when compared to non-participating students?
 - Pre-and post-tests of EPIC content
 - Analysis of End-of-Course test scores

Results - Implementation

- Comments and responses to open-ended questions were more likely to address technical and logistical issues than to describe how the software was used to enrich instruction.
- Mixed responses concerning training and support
- Instructors felt that alignment with NC SCOS not strong
- Neither instructor felt that the e-book helped with teaching.
- Students were split (12 to 13) regarding whether the e-book helped with their studies.
- In a log entry, the algebra teacher described special education students who were “totally engaged” with EPIC, but the other students were bored.
- One student thought EPIC took too many “pages” to work an algebra problem.
- Another student described how easy it was to cheat and get the answer right without really learning.

Results - Implementation

- Challenges for Teachers
 - Hours outside of class learning the system, setting up activities, etc.
 - Problems downloading the course materials
 - Lost class time dealing with technical problems
 - Slow connections and navigation
- Challenges for Students
 - Understanding the online instructors
 - Keeping up with the EPIC hardware – “EPIC is like keeping up with a baby!”
 - Playing with them in other classes
 - Not having a choice – “Next year students should not be made to use EPIC, but should be able to choose.”

Results – Student Performance

Algebra I	EPIC	Other	Other
% Proficient	23%	23%	39%
Scale Score	128-152	129-156	137-162
Average Scale	142.7	143.6	145.4
Civics/Econ	EPIC	Other	Other
% Proficient	43%	40%	30%
Scale Score	142-152	142-157	140-161
Average Scale	146.6	146.0	146.6

Results – Student Performance

- Comparisons not meaningful
 - Minimal evidence of comparability of class sections
 - Several students who were not proficient were within 1 SEM of Level III cutoff score.
 - Missing pre-test data
 - Continuing concerns with alignment with NC SCOS, technical problems (including one lost month for algebra), and mixed opinions of the technology and the software
- This presentation is more about the challenges of the evaluation effort than about the results.

Evaluation Challenges

- Concept/Content
 - Questions are important when designing the pilot project.
 - These questions might have been addressed when considering EPIC.
 - Is the proposed program a good match with the goals of the school or district?
 - Are expectations realistic?
 - Are there prerequisite knowledge and skills that teachers must possess to effectively integrate e-books software into classroom instruction and course content?
 - What type of infrastructure is needed to support the technical requirements of EPIC?
 - If regional internet access is primarily dial-up, will that slow downloading and navigation and limit the effectiveness of the features of the EPIC software?
 - Is the technical support sufficient?
 - Is it possible “teach” students what they need to know and be able to do in these two courses using EPIC?
 - Could EPIC become a distraction?

Evaluation Challenges (cont.)

- Timing
 - The evaluation plan needs to be in place before implementation begins.
 - Meaningful comparison groups are needed.
 - Mooneyhan (2008) challenged educators to remember that methods and programs are not ends in themselves. He noted that there is very little assessment to show taxpayers what they are getting for their dollars. While programs may be having their intended effects on student success, “no one should be afraid to find out, to the extent possible, exactly how well each is meeting its goals” (p. A5).

Evaluation Challenges (cont.)

- University Institutional Review Board Approval
 - Absence of choice/permission to participate
 - Confidentiality of evaluation information
 - Inability to assure that data collection above and beyond required testing would not interfere with instructional time
 - Requested approval for study using existing (district) data
 - “Solution” limited the evaluator’s participation in the evaluation.
- Unexpected Challenges
 - An automobile accident involving the evaluator
 - A difficult recovery