

Examining the Digital Divide between Rural and Urban Schools: Technology Availability, Teachers' Integration Level and Students' Perception

Pei-Yu Wang (2013)

Summary

This paper investigates the technology integration gap between urban and rural schools based on the Will Skill Tool model. The study considered differences in technology availability, teachers' attitudes, skill in technology integration, and students' attitudes and experiences with technology integration. Separate questionnaires on technological facility access, attitudes, competency, and integration experiences were distributed to teachers and students from typical urban and disadvantaged rural schools.

Overall, the analysis illustrates that there is a considerable variation in technology availability between rural and urban schools, as well as in teachers' overall high-tech integration level and students' experience and preference in using technology to learn.

Familiarity

Moderate. I have read quite a few papers in this area.

Strengths & Weaknesses

Strengths:

- This paper is well-written, detailed, and easy to understand.
- Primary research questions are explicitly specified, and quantitative and qualitative data collection methods are described in depth.
- Focus on Teacher and Student Perspectives: By examining both teacher and student views, the study provides a comprehensive picture of technology integration in schools. It explores not only the attitudes and competence of teachers but also the experiences and preferences of students.
- The author provided the comparison of results between urban and rural schools for each of the research questions, whenever feasible.

Weaknesses:

- Limited Sample Size: The study acknowledges its limitation in terms of sample size, which may affect the generalizability of the findings.
- Reliance on Self-Reported Data: The study relies on self-reported data from surveys and interviews, which introduces the potential for bias. Supplementing self-report data with classroom observations could provide a more comprehensive assessment.
- Only four participants (two from rural and two from urban schools) were chosen at random to be interviewed for qualitative data collection.

Research Papers

Motivation/Research Questions

Research questions are clearly stated and defined.

Prior & Related Work

The instruments and variables utilized in the study are described in depth, but not the questionnaire itself.

Scientific Approach

The scientific approach used seems valid for the research questions and data analyzed. T-tests and Chi-Square tests were used as data analysis methods.

Evidence

The evidence collected and the analysis done by the author seems to answer the research questions and support their overall findings.

Impact

This study adds to current understanding that there is a considerable variation in technology availability between urban and rural schools. There are some new findings about instructors' and students' attitudes and competency, which did not differ, but experiences differed across urban and rural schools. I believe that the study's findings will undoubtedly drive future research on the next steps for successful integration of high-tech facilities.

Presentation/Grammar

No major issues found.

Audience

The primary audience is likely to be academics and researchers in the field of education, specifically those interested in educational technology, school environments, and learning outcomes. This could include professors, researchers, and professionals in the field of education. Additionally, policymakers and educators involved in making decisions about educational technology implementation in urban and rural schools could also find this research paper relevant and informative. The insights from the study may help inform policy decisions, and instructional practices to improve educational outcomes.

Overall

Overall, I recommend this paper. It gives a clear set of research questions and does an excellent job of answering each one. I believe that data collecting (self-reported survey data and only four interviews) could have been improved.

It investigates both instructors' and students' perspectives on technology integration, as well as their attitudes, competency, and experiences. Some new insights are gained regarding teachers' and students' attitudes and technological competencies.