Reflection on Learning

Kimberly S. Ward

University of West Georgia

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Dr. Jennifer Smolka

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Introduction

Public school educators have a responsibility to educate all children. The mandates of the No Child Left Behind Act (NCLB) require students to make gains in order for schools to remain in good standing or meet Adequate Yearly Progress (United States Department of Education, 2009). Many times educators follow the most recent education trend desiring student achievement. Unfortunately, many of these trends are not research based and are not proven effective. Quality research based on empirical evidence is essential in determining instructional methods that positively influence learning.

Currently, I am a Title I support teacher in an elementary school computer lab. Students enter my classroom yearning for enjoyable technology interaction while teachers and administrators desire correlation between technology and the Georgia Performance Standards (GPS). My goal is to implement the National Educational Technology Standards while adhering to the GPS and student desires for enjoyment. With the reduction of technology support staff within my school system, my administrators and teachers look to me as a technology leader and my leadership role has increased. I hold a certificate in Educational Leadership, and I desire a leadership role within the school system within the next several years. Integrating effective technology will play a major role in student achievement as our society increasingly uses technology. As a school leader, my responsibility to provide sound advice in using technology is pertinent. Investigations of quality research can provide a foundation for technology related decisions.

Review of Learning

Many activities assisted in obtaining more knowledge about quality research for technology decision making. In reviewing the course objectives, distinguishing between the three

types of research designs was very valuable. Qualitative, quantitative, and mixed research methods are needed for a variety of educational issues. Even though qualitative research has a place in education, government officials and school administrators desire numerical data in evaluating the success of students, teachers, and instructional methods. Quantitative or mixed methods of research seem to be the most beneficial in providing the desired empirical evidence for technology decision making.

Student achievement and success is the aim for all educators, parents, government officials and community members. The literature review chart provided an opportunity to dissect empirical studies and determine the validity of each study in relation to instructional technology. Each area of the chart provides information to an educator as to the affect of a teaching method on student achievement.

The results area of the chart proved to be the most useful in determining the significance of the results. Even though many studies showed students gains, the significance in the gains should be examined closely. Educators want to feel comfortable in using technology to increase learning. Significant gains in learning can give confidence to educators that technology is worthwhile as an instructional method. If the gains are not significant, an instructional method may not be a valuable asset. The significance in gains assists educators in making knowledgeable decisions.

In addition to the results area of the literature review chart, the methods portion of the chart provides valuable information to educators in technology decision making. Determining the independent and dependent variables shows educators exactly what is being altered and measured in order to determine student gains. Educators should examine the variables to determine if the study truly relates to the student learning they need to affect.

The participants area of the chart was another area in need of examination in technology decision making. Determining the students affected by the variables is of the utmost importance. Educators should avoid implementing instructional methods that are not proven to be effective in certain student populations. In two studies, higher achieving students did not appear to make the gains that lower achieving students made (Montali & Lewandowski, 1996; Sorrell, Bell & McCallum, 2007). Different instructional methods are needed in order to make gains in students at different levels of proficiency.

The literature review research project provided an opportunity to synthesize the information accumulated from the research gathered. Even though the chart dissected the information, actually determining the patterns in the data was useful in preparing the literature review research project. A review of research literature gives educators a snapshot of studies and the ability to make informed decisions before implementing instructional methods. My literature review showed computer-assisted instruction (CAI) to be effective in word recognition and phonological awareness, but not effective in reading comprehension. This information allows educators to consider CAI in those instructional areas carefully.

Conducting, analyzing, and reviewing research is a time intensive task. My dissection of the studies for the chart was detailed and descriptive. After reading the text and completing assignments, I would like to improve in discussing the text and assignments with classmates. Discussion is an excellent way to learn more about a topic. As educators, we are often our own best resource if we take the opportunity to discuss and share ideas with one another. The Georgia Department of Education (GaDOE) recognizes the need for teachers to share as required in the Georgia Assessment of Performance on School Standards (GAPSS) review process (2008). Teacher teams are encouraged to meet regularly for planning, problem solving, and learning

(Georgia Department of Education, 2008). The GAPSS review process assesses a school's use of current research on school improvement (GaDOE, 2008). Information to positively affect student learning is available, but educators need to search for the information and apply the information accumulated when making instructional decisions.

Implications

Quality decision making is crucial for an educational leader. Research is a fundamental element when considering student learning and instructional methods. Before implementation, research should be reviewed to determine the value of instruction. A plan is necessary before an instructional method is put into practice to measure student learning gains and the effectiveness of the instruction. Formative assessments can measure the student learning gains in even the simplest lesson. Continual assessment can indicate the instructional methods or activities that are most effective in reaching student achievement goals. Educators have a responsibility to investigate the effectiveness of an instructional method rather than assuming something in an article or website is true. Even though research does not provide proof, research can provide evidence needed to make informed decisions about instructional methods (Johnson & Christensen, 2008).

Conclusion

State and federal mandates require research based instructional methods. The United States Department of Education (2004) and the Georgia Department of Education (2008) require research in determining effective instructional methods. Review of current research allows educators to make informed decisions and be hopeful the decisions will result in student gains. Independent and dependent variables in a study should be examined as well as the population of students affected in order to implement effective instructional methods. As educators, we should

desire life-long learning and research is an integral part of learning about new and effective

educational methods.

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