Minnesota Principals Academy – Action Learning Project - Tony Greene

Teacher Benefits and Barriers of Technology Integration in Secondary Schools

Abstract

The purpose of this Action Learning Plan was to examine the relationship between teachers' self-reported technology competency and their ratings of the frequency with which they used technology, the quality of their use of technology, and the value of technology to them in supporting their teaching at Franklin Middle School. Further, study respondents were requested to identify barriers to technology integration at Franklin Middle School and the school district.

Four years ago, the Thief River Falls School District seized the opportunity to utilize technology in a one-to-one (1:1) student format using iPads or laptops. As the district moved forward on this initiative many barriers faced the secondary teachers of the district. Conversely, the expected benefits for going 1:1 were exciting with the hopes of higher student achievement. Various systems and professional development accompanied the opportunity with mixed results.

_____

School Vision/Alignment: Nurturing all students to become responsible and respectful with a passion for learning. The end goal using technology by the teacher is to engage students at a higher level more efficiently and productively.

Project Description: The study intends to examine the perceptions of a select sample of FMS teachers on their technology competency and the support technology provides them in the teaching process. Further, the study proposes to ascertain those barriers to technology integration respondents encounter and the need for and types of professional development they identify as most valuable to them in the teaching process.

Current Context: Franklin Middle School is a 6-8 middle school with 470 students in rural Northwestern Minnesota. The student population includes a 35% FRL; 8 % students of color; 16 % special education and 1 % ELL. We have 35 teachers in our seven period schedule that includes team-time for core teachers.

Purpose and Background: The purpose of the study was to examine the relationship between teachers' self-reported technology competency and their ratings of the frequency with which they used technology, the quality of their use of technology, and the value of technology to them in supporting their teaching.

Why investigate: Our staff was "forced" to take on change and reflecting on the past four years what was the net gain of our process? Moving forward, what systems should we have in place to have our staff become more effective in what they do? The investigation is done in hopes of meeting our students where they are at in a way that comes at the highest level of learning (Bloom's Taxonomy).

What I Did: I conducted a survey of FMS teachers that were here from the inception of the 1:1 program to current. It is desired that the results of the study may provide an understanding of professional development and training that might be identified to embolden teachers in their use of technology at the classroom level.

What I found out: The findings of the study established mixed results whether or not a relationship exists between teachers' self-assessment of their technology competencies, the quality of technology professional development they received and, further, the technology integration barriers they encountered.

Conclusion: Similar to teachers approach to their students, professional development needs to meet the teacher at their level, support their efforts, and allow the time needed for them to become successful. Multiple barriers are in play, but all agreed that professional development was essential to making technology integration meaningful in the classroom setting.