# NETS-A Standard 4 Brief Paper

Samantha Justice

Coastal Carolina University

EDIT 760 Section D1

July 5, 2019

## Introduction

As stated by Metcalf and LaFrance (2013), NETS-A standards help leaders develop the knowledge and skills necessary to lead technology rich schools. Specifically, NETS-A Standard four states, "educational administrators provide digital-age leadership and management to continuously improve the organization through the effective use of information and technology resources". It is essential that leaders be able to support students and teachers to ensure that optimal benefits from technology are in place (Knezek, 2009). At St. James Elementary (SJE) it is evident that standard four is exhibited.

## Performance Indicators

As stated by Hess and Kelly (2007), school leadership is the key to school improvement. Standard four indicator one requires educational administrators to lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources. At St. James Elementary School I have observed educational administrators lead purposeful change to maximize the achievement of learning goals. This change has been implemented through the use of technology and media-rich resources.

At SJE digital-age leadership is exhibited on a daily basis. What I find interesting is that leadership is observed in many forms and by multiple people. Educational administrators (the principal, vice principle, and curriculum coaches) model digit leadership through the promotion and utilization of digital resources. Digitally-fluent teachers exhibit digital leadership by modeling, sharing, and providing trainings on the utilization of media- rich resources and technologies. In addition, all teachers model digital leadership for their students. In utilizing technologies and showing students how to utilize technologies, all teachers are maximizing the achievement of learning goals.

During my interview at SJE I was asked how I would use data to improve instruction. As a new teacher two years ago, I did not realize how much data was collected on a daily basis. I also underestimated technology's role in data collection. Through the use of web-based and app-based programs, data is collected continuously at SJE. Data is used continually throughout the school year. Formative and summative assessments are administered on a weekly bases and analyzed for lesson effectiveness. Technologies are then added or modified to fit learner needs. Benchmark tests are also given frequently through the use of unit tests, map tests, DORF tests, and tests designed to determine student's progress towards learning outcomes. Once data is collected and analyzed, plans for further instruction based on data results are developed. Educational leaders review the data and analysis. They then review the formulated plans. Leaders make adjustments to plans and explain ideas that will benefit learners.

After speaking with fellow teachers (fourth grade teachers at SJE) there is a consensus that technology is necessary to maximize the achievement of learning goals. It is perceived that students are more engaged when appropriate technologies and media-rich resources are used to enhance student learning. It was also noted that technology is also a useful tool when collecting data. Google Forums was specified as being a great data collecting tool. When used for assessments (formative and summative) data is collected, organized by students, and represented in charts and graphs. In addition to Google Forums, Google Drive has made sharing data a much easier task. Data can be shared between teachers and with administration. This allows for quick and valuable feedback from educational administrators.

As addressed in standard four indicator two, it is essential that educational administrators collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning.

Collaboration is essential for a school to run efficiently. As stated by Ronfeldt in the study, *Teacher Collaboration in Instructional Teams and Student Achievement,* collaboration quality is related to student achievement (2015). Teachers and schools that engage in better quality collaboration have better achievement gains At SJE collaboration is consistent throughout the day. Collaboration is used to develop lessons, establish metrics for grading, collect data, interpret results, and share findings. I think the most beneficial purpose for collaboration at SJE is its ability to improve performance and student learning. Teachers are enthusiastically open to collaborating with their colleagues.

Standard two indicator three under the ISTE NETS-A guidelines states that educational administrators must recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals.

At SJE highly competent personnel who use technology creatively and proficiently are being recruited. During my interview at St. James Elementary School I was asked a series of questions. Among these questions were questions specifically pertaining to technology. I was asked how I would implement technology within Math, Math Stations, Science, Social Studies, Writing, English Language Arts, and ELA Stations. I was also asked what technologies I was proficient in. This is one of the main reasons I chose SJE as the school I wanted to teach at. From the beginning, they voiced their commitment to technology and their desire to improve their current technological conditions.

The addition of highly competent personnel who use technology creatively and proficiently to the SJE staff is welcomed by staff members. I was surprised to observe first-hand how excited seasoned professionals were to have newer teachers (versed in technologies) join their teams. There were welcoming and receptive. Teachers were eager to learn new ways to

incorporate technologies to assist data collection and overall student learning. In regards to the administrator's perspective on this issue, they were leading the way for new (technology literate) teachers. I was informed after my interview (by a fellow teacher) that I was hired because of my knowledge of technology integration within the elementary classroom.

The fourth indicator under standard four of the ISTE NETS-A guidelines requires educational administrators to establish and leverage strategic partnerships to support systemic improvement. In terms of technology, strategic partnerships have been formulated to support systemic improvement. SJE has partnered with Horry County School's Digital Integration Specialists (DIS) to provide professional developments that equip teachers with the technological tools and media-rich resources needed to improve student learning. Both teachers and administrators are excited and eager to learn when DIS visits SJE to share information pertaining to new technologies. Teachers are then expected to implement the newly learned technologies within their classroom instruction.

Administrators must "work to see technology support the needs of students' learning and teachers' instruction" (Anderson & Dexter, 2005, p. 51-54). As addressed in standard four indicator five, it is essential that educational administrators establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning.

At SJE, a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning is established. Teachers store classroom technologies within their classrooms (technologies do not go home with students). Teachers are to store and update devices and programs as needed. In terms of maintenance, there are varying levels. Teachers are to trouble shoot issues when applicable. If

devices still require maintenance they are sent to SJE's media specialist. If the media specialist is not able to provide the desired maintenance, the device/devices are sent to HCS's main office to be maintenance by a technology specialist. This system works well most of the time. However, it is perceived by many teachers that maintenance is a task they are usually not capable of completing. Whenever a device is sent to a technology specialist, it is also perceived as taking a long time for operable devices to be returned.

**Summary**

Standard four as stated by ISTE NETS-A states, "educational administrators provide digital-age leadership and management to continuously improve the organization through the effective use of information and technology resources". At St. James Elementary it is evident that standard four is being addressed on a daily basis. Today's administrators need to have a strategic vision supported by technology to help tomorrow's students compete globally. This standard was "meant to inspire administrators to become 21st century leaders and provide guideposts to get there" (Sykora, 2009, p. 48). At SJE there are many levels of leadership. Administrators, curriculum coaches, HCS digital integration specialists, and teachers all play important roles in fostering an environment that encourages technological innovation. Data collection, evaluation, and articulation is essential in producing technological growth as discussed in standard four.

References

Anderson, R. E., & Dexter, S. (2005). School technology leadership: An empirical investigation of prevalence and effect. *Educational Administration Quarterly*, *41*(1), 49-82.

Hess, F. M., & Kelly, A. P. (2007). Learning to lead: What gets taught in principal preparation programs. *Teachers College Record*, *109*(1), 244-274.

International Society of Technical Educators. (2009). *International Society of Technical Educators National Educational Technology Standards for Administrators.* Retrieved from http://cnets.iste.org/administrators/a_stands.html

Knezek, D. (2009, March 1). Updating tech standards for administrators [Web log interview]. Retrieved from http://www.youtube.com/watch?v=82AtD9frGnM

Metcalf, W., & LaFrance, J. (2013). Technology leadership preparedness: Principals' perceptions. Journal of Research in Education, 23(1), 58-75.

Ronfeldt, Matthew, et al. "Teacher collaboration in instructional teams and student achievement." *American Educational Research Journal* 52.3 (2015): 475-514.

Sykora, C. (2009, March/April). Building ed tech leadership. Learning & Leading with Technology, 48.