Educational Leadership Program Faculty as Technology Leaders: What Support Will They Need?

Marcus P. Howell
Ellen H. Reames
Carey E. Andrzejewski
Auburn University

Abstract

Educational leadership programs have the responsibility of preparing and supporting school leaders to embrace technology. The purpose of this study was to examine the relationship between educational leadership higher education faculty beliefs about the importance of technology integration and the extent they felt prepared to model best technology practices in their preparation of future school leaders. Educational leadership faculty perceived it important to model technology best practices with their students but reported a deficit between this measure and the overall preparedness of their program to fulfill these duties.

The Internet is changing the way we conduct business, socialize, and learn. Wikis, Facebook, and Google are just a small part of the vast digital resources that are changing how we interact and perceive the world around us (Bennett & Maton, 2010; Madden & Fox, 2006; McLeod, 2011; Prensky, 2009; Silva, 2009). The skills necessary to participate in this digital landscape are now considered to be part of the instructional goals of K-12 educational institutions (Charamlambous, Ioannou & Tsounta, 2011; O'Reilly & Battelle, 2009; Williams, Foulger, & Wetzel, 2009) and the nation's educational leadership programs (ISTE, 2009; Keengwe, Kidd, & Kyei-Blankson, 2009; Nyirongo, 2009). These skills, often referred to as 21st century skills, include consuming available data in discriminating ways, collaborating, communicating, and problem-solving (Prensky, 2009; Silva, 2009; Williams, Foulger & Wetzel, 2009).

Educational leadership programs and their faculty have the responsibility to prepare K-12 school leaders to serve as technologically savvy leaders for both teachers and students (Meier & Mineo, 2011). School leaders will need training and ongoing support in order to provide this kind of leadership, develop 21st century skills, and successfully implement technology initiatives in their schools (Flanagan & Jacobsen, 2003). To accomplish preparing school leaders in the 21st century the more than 500 university leadership preparation programs across the United States offer Master's (M.Ed.), Specialists (Ed.S), and Doctoral (Ph.D, Ed.D) degrees (Young & Brewer, 2008). Educational leadership programs do the lion's share of leadership professional development through their advanced degree programs. Because technology is so critical to K-12 student learning outcomes, teacher pedagogical practices, and school leadership, university professors are tasked to stay abreast of current technological trends. The professors must adopt technology best practices to engage in productive programming (Keengwe, Kidd, & Kyei-Blankson, 2009), but the extant literature suggests they may not be providing best practices models for technology leadership (Sahin & Thompson, 2006; Schrum et al, 2003). Moreover, Javeri and Persichitte (2010) argued that college faculty may be "lacking in technology integration skills and knowledge outside their content specialty" (p. 615).

Review of Related Literature

The Technology Role of Educational Leadership Programs

In order to prepare school leaders to serve as technology chiefs in their schools, educational leadership programs have the responsibility of preparing and supporting present and future ranks to fully utilize technology in schools (Schrum, Skeele, & Grant, 2003). Onguko, Abdalla and Weber (2008) stated:

> With the current trends in use of technology in education, it is imperative for the preparation programmes to incorporate aspects of the use of technology in educational leadership. The use of new information communications technology such as social networking software that incorporates both synchronous and asynchronous communication in the preparation programmes would be ideal. This would provide the principals an opportunity to use the technology while achieving the twin objectives of principal preparation and acquisition of more skills and knowledge about the utilization of technology for later use in their schools. (p. 722)

Schrum and colleagues (2003) argued that the faculty of institutions of higher learning will need to serve as models for technologically enhanced instruction in the classroom. Before this can occur, some institutions of higher learning may need to remove barriers to the integration and use of technology in the college classroom (Brzycki & Dudt, 2005; Javeri & Persichitte, 2010; Sahin & Thompson, 2006; Schrum et al, 2003). According to Brzycki and Dudt (2005) these barriers were preparation and planning time; lack of support; and lack of access to technology.

Brzycki and Dudt (2005) surveyed three universities and from the results identified five barriers that higher education faculty face when attempting to include technology into lessons. The most predominant barrier identified in their research was lack of time (Brzycki & Dudt, 2005). The majority of the participants reported not having enough time to plan and prepare with technological resources. One of the participants stated that the amount of time needed to incorporate technology was becoming an "imposition on their academic freedom, their personal time, and their teaching competency" (Brzycki & Dudt, 2005, p. 621; see also Schrum et al, 2003). Sahin and Thompson (2006) noted in their study "workload and time required for computer use were a concern among the participants" (p. 88).

Brzycki and Dudt (2005) also found that lack of support was a significant barrier to the use of technology in college classrooms. Similarly, Sahin and Thompson (2006) noted in a study of 157 college faculty members that support was a frequently cited barrier. The researchers identified, using survey methods, that both instructional and technical support were linked with the use of technology in teaching. Fitzallen (2005) noted that educator confidence fluctuates with the quality and amount of support provided. Support is a product of culture (Zhao, Pugh, Sheldon & Byers, 2002) and people are the most important resource in providing support (Lane & Lyle, 2009). If the culture is not receptive to or supportive of the integration of technological tools, educators may face difficulty in adapting technological tools for their teaching (Archambault, Wetzel, & Foulger, 2010; Ertmer & Ottenbreit-Leftwich, 2010). Goldstein and colleagues (2010) argued that support can also involve incentives such as opportunities for promotion and leadership. These incentives as well as peer pressure and collegial support can influence teacher usage and success with technology (Sahin & Thompson, 2006; Sime & Priestley, 2005).

Lack of access to technology can discourage potential users. A robust infrastructure must be in place to support technological needs (Brzycki & Dudt, 2005; Keengwe, Kidd & Kyei-Blankson, 2009; Kopcha, 2008). Maintaining a technology infrastructure requires leadership, a shared vision, and budgeting to meet educational needs (Ertmer & Ottenbreit-Leftwich, 2010; Grey-Bowen,

2010; ISTE, 2009; Javeri & Persichitte, 2010). Higher education institutions are the largest and the most frequently used means of preparing school leaders and should serve as technology pathfinders for driving systematic improvement in schools.

Technology Standards

The International Society for Technology in Education (ISTE) is composed of more than 100,000 leaders and advocates for the advancement of learning through technology. ISTE (2009) provides a framework called the National Educational Technology Standards (NETS) that serves as a guidepost for school leaders and educational leadership faculty to follow. These standards provide educational leadership faculty a "roadmap" for modeling best technology practices.

According to the NETS there are five guiding principles, which should be modeled. First, school leaders need to inspire others through a shared vision that uses all technological resources in meeting student needs (ISTE, 2009). A shared vision should align the short and long-range goals of the school for the integration and use of technology across the curriculum (Grey-Bowen, 2010). Principals should serve as visionary leaders by empowering stakeholders to establish and achieve goals (Luthra & Fochtman, 2011; Richardson & McLeod, 2011). College educators can serve as models for administrators by supporting technologically enhanced student-centered activities in college classrooms. Empowered administrative students may derive a sense of ownership and confidence, which may carry over to their workplace (Charalambous et al, 2011).

Second, school leaders should strive to create a culture that supports technology use, experimentation, and collaboration among peers (ISTE, 2009; Dexter, 2011). Teacher beliefs can affect the acceptance of technology into the classroom (Starkey, 2010). Assumptions and bad experiences can severely hamper the integration of technology (Ottenbreit-Leftwich, Glazewski, Newby, & Ertmer, 2010). Educational Leadership classes should serve as technologically enhanced test grounds for collaborative learning and research. School leaders returning to their workplaces can infuse newly acquired concepts into their school's culture, which may improve the teaching faculty's beliefs and attitudes towards technology.

Third, school leaders should also serve as effective technology leaders by providing time and resources that encourage professional development, networking, and learning communities (Gao, Wong, Choy, & Wu, 2010; ISTE, 2009). Professional development, such as is offered in educational leadership preparation programs, provides school leaders with growth in understanding technological tools and trends. Also, teacher professional development and networking allow the teacher to move beyond their own classroom to witness best practices, receive timely support to problems in the classroom, and to problem-solve with colleagues. It is the school leader's responsibility to lead this technology learning by committing time away from the classroom for professional development and by providing resources that may improve learning strategies (Kopcha, 2008; Riel & Becker, 2008). Educational Leadership faculty will also need professional development resources in order to model up-to-date technology usage in their instruction (Brzycki & Dudt, 2005; Nyirongo, 2009).

Fourth, school leaders should facilitate the integration and use of technology by managing resources effectively as student needs change (ISTE, 2009). Managing technological resources requires direct observation of use and analyzing and sharing of data with stakeholders in order to improve instruction and allocation of resources (Halverson & Smith, 2010). The systematic improvement of technological resources will require that principals maintain the technological infrastructure in order to stay current with student need and technological trends. Part of the maintenance of the infrastructure may revolve around locating local resources and establishing

partnerships within the community (Hess & Kelly, 2007; Warren, 2005). In order to serve as models for administrative students, Educational Leadership faculty will need to establish and maintain partnerships with outside networks to be used in locating technological resources. They will also need ongoing professional development so that they too remain up-to-date with regard to technological trends and changing student needs.

Finally, school leaders need to model the safe and ethical use of technology at school and abroad (ISTE, 2009). They will need to serve as advocates for establishing policies that encourage and support student-centered instruction and the empowerment of all stakeholders in the educational process. Students will need to be provided guidance as they venture into the digital realm. By providing ethical instruction, students can become discerning travelers and hopefully avoid some of the pitfalls on the information highway. Educational Leadership faculty will need to model ethical use of technology in their college classrooms and guide educational leadership students toward the safe and ethical use of all available educational technology.

Purpose of the Study

The purpose of this study was to examine the relationship between Educational Leadership faculty's beliefs about the importance of technology integration and the extent they felt prepared to model best technology practices in their preparation of future school leaders. In addition, the researchers wanted to explore the perceived supports and barriers to implementation of technology best practices in educational leadership programs.

Method

This study used a survey design. Analysis of variance (ANOVA) was used to analyze the quantitative data. Open and a priori coding was used in examining the open-ended answers from the survey. The following research questions guided the study:
1. What is the relationship between higher education leadership faculty's beliefs regarding the importance of modeling technology integration and their preparedness to model technology best practices?
   a. Do higher education Educational Leadership faculty believe it is important to model best practices for leadership students?
   b. Do higher education Educational Leadership faculty believe their program faculty are prepared to model technology best practices for leadership students?
2. What supports are critical to the success of faculty and programs in regards to modeling technology best practices? What current supports are in place for university faculty?
3. What barriers do higher education leadership faculty face?

Sample

Educational Leadership faculty from universities across the southeastern United States received an email invitation to participate in the survey. From the group of 154 who received the invitation, 39 completed the online questionnaire.

Instrument

The researchers created a 24-item instrument. The questionnaire was divided into three parts. First, Educational Leadership program faculty at southeastern universities and colleges were asked to respond to the importance of modeling technology best practices (i.e., research question 1(a)). There were 16 five-point Likert items ranging from unimportant to very important. Second, the

faculty participants were asked to share how prepared they felt their educational leadership program was in regards to teaching technology best practices (i.e., research question 1(b)). There were five items included. The third part of the study included three open-ended questions. These questions were designed to determine supports and barriers the respondents perceived as important in implementing best practices in their respective Educational Leadership programs (i.e., research questions 2 and 3).

Data Collection

The questionnaire was constructed and sent to participants using Qualtrics, an online survey tool. The greatest strength of Internet survey data collections is the potential to collect a large amount of data in a relatively short period of time. Online data collection methods also have the potential to improve the quality of the data collected because data from web-based questionnaires can also be automatically validated. If a data value is entered in an incorrect format, or outside the defined range, the web-based program can return an error message requesting the respondent to change their answer immediately (Coomer, 1997; Smith & Leigh, 1997). Online survey tools also improve the quality of the data by eliminating errors introduced when researchers enter or process the data because data entry and processing are done by the online program.

Validity and Reliability

Content validity is based upon the extent to which a measurement reflects the specific intended domain of content (Carmines & Zeller, 1991). For the first phase, the researcher derived the items for the scales from a review of the literature in regards to technology in Educational Leadership programs and technology standards. To establish content validity, the researchers employed a panel of three educational leadership faculty members from other institutions and one K-12 administrator who was not associated with any higher education Educational Leadership programs. This panel reviewed 50 potential items for inclusion in the questionnaire while being conscious that the number of questions on the survey could limit participation. In their analysis, the panel noted that some of the questions appeared to be repetitive or similar and, therefore, reduced the final survey to twenty-four items.

According to Field (2005), reliability refers to the ability of a measure to produce consistent and repeatable results. The researcher calculated preliminary reliabilities for the survey by using Cronbach's alpha, the most commonly used "measure of the reliability of a scale" (Field, 2005, p. 727). A Cronbach's alpha of .70 or higher is considered adequately reliable for an attitude or belief measure. The analysis indicated the twenty-one Likert items, which were included in the two dimensions (Importance of Modeling Best Practices and Preparedness of Program Faculty) yielded high reliability coefficients (Ary, Jacobs, & Razavich, 1996).

Alpha internal consistent reliability coefficients were computed for the two dimensions using responses from all 39 participants. The overall reliability for this dimension was a Cronbach alpha of .95. The correlation coefficients between each of the sixteen items and the total score on the Importance of Modeling Best Practices Scale ranged from .58 to .83, thereby verifying that each of the items consistently measured what the total Importance of Modeling Best Practices dimension was measuring. The coefficient alpha if item deleted was reduced or remained the same for all sixteen items, further verifying that each of the items increased the reliability of the Importance of Modeling Best Practices scale (Field, 2005).

Dimension two, the Preparedness of Program Faculty dimension had an overall Cronbach alpha of .97. Alpha internal consistent reliability coefficients were computed using responses from

all 39 participants. The overall reliability for this dimension was a Cronbach alpha of .97. The correlation coefficients between each of the five items and the total score on the dimension ranged from .84 to .95, thereby verifying that each of the items consistently measured Preparedness of Program Faculty dimension. The coefficient alpha if item deleted was reduced or remained the same for all five items, further verifying that each of the items increased the reliability of the dimension.

Data Analysis

To analyze the open ended responses the researchers used open coding (Strauss & Corbin, 1990) during the initial examination of the data. Open coding provided a means of identifying emergent themes in the data (Creswell, 2007; Glaser & Strauss, 1967; Strauss & Corbin, 1990). Subsequent analysis of the data involved using a priori codes derived from five components of the technology adoption "E-Learning Support Activities" (p. 68) and integration framework proposed by Moser (2007): time commitment, competence development, course design, teaching with technology, and reflection.

Results

The purpose of this study was to examine the relationship between educational leadership faculty's beliefs about the importance of modeling best practices in instructional technology integration and the extent to which they felt prepared to provide technology integration models for their students. The researchers also aimed to explore educational leadership faculty's perceptions regarding the supports and barriers to implementation of technology present in their educational leadership programs. The respondent mean for the Importance of Modeling Best Practices scale was 3.9 and the SD was .89. The respondent mean for the Preparedness of Program Faculty scale was 3.6 and the standard deviation was .99. The F value was 670, partial Eta Squared was .95 at the .001 level. Educational leadership faculty thought it was important to model technology best practices with their students but reported a deficit between this measure and the overall preparedness of their program to fulfill these duties. Professors think technology best practices is important to model but there appears to be a disconnect with perceptions of the programs preparedness to do so.

Table 1.

	Mean	Standard Deviation	F	Partial Eta Squared	p	Power
Modeling Best Practices Scale	3.9	0.89	670	0.95	0.001	0.93
Preparation of Leaders Scale	3.6	0.99	670	0.95	0.001	0.93

The researchers asked three open-ended questions at the end of the survey to gain a deeper understanding of supports and barriers educational leadership faculty believed were important. The following questions were asked of participants:
1. What types of support are critical to the success of your program in regards to technology best practices?

2. How does your institution currently support faculty in regards to technology best practices?
3. What types of barriers do you face from the institution? From colleagues? From self? From the community outside the institution?

Moser (2007) proposes five categories of "E-Learning Support Activities" (p. 68) that coincide with her "E-Learning Behavior Process" (p.68). The first support category, "Outreach" aligns with a commitment towards providing a variety of sources of support. Moser (2007) argued that professors preparing administrators to be technologically savvy may need to incorporate a "different mode of teaching to understand the full potential of educational technology" (p. 69). College administrators and professors may have to utilize support outside the normal channels of information technology (IT) specialist. Librarians, pedagogical support such as vendors, and online web sites may provide timely support and resources (Moser, 2007). A participant in the survey stated a need for support for the "latest versions of qualitative and quantitative software, Blackboard, PeopleSoft, Weave Online, Wimba, Netvision, Smartboards, etc." Educational technology is often supported by a plethora of company-produced resources, such as FAQs, webinars, and documents that assist in implementing these tools.

Outreach

Moser's (2007) *Outreach* also involves providing ample time to train and prepare technologically enhanced lessons. One professor plainly commented: "Time. It takes an incredible amount of time to create and manage high quality technology use." Another participant in a similar vein identified the need for "time to view technology in use in the schools in order to stay current." A third participant mentioned, "release time to focus on preparation" as a critical element in meeting success. Numerous researchers have identified the lack of time to learn and prepare lessons with technology as a major barrier to the use of technology (Brzycki & Dudt, 2005; Flanagan & Jacobsen, 2003, Kopcha, 2008; Rutkowski, Rutkowski & Sparks, 2011). One participant from the survey identified the need for "an additional computer lab" to better prepare administrative students using "INOW student management" software. Another participant shared a similar sentiment:

> I have found out first-hand that we really need the support of our Dean. He nixed an idea on iPads and we are falling behind because of this. The principals out in the field are evaluating with their iPads. We aren't allowed to purchase any for our program, so we are left out in the cold.

A third participant stated: "We need funding to support the acquisition of necessary technologies, including but not limited to, online delivery platforms, applications, software, and external devices; additional server space would also be useful."

Competence Development

Moser's (2007) *Competence Development* involves similar types of support as was identified in *Outreach* with the exception of an increase in the training and assistance provided by IT. Of the 29 responses to the question of support being critical to the program, 16 of the respondents identified training and 12 designated technical support as key to success. Responses such as "time for training," "hands on experience," and "modeling use of equipment" permeated the majority of the responses. One participant summed up the need for:

> Help desks that are open 24/7 to assist us and students with technology problems. I do not use some interactive programs with students because I know that there is no one to help should something go down after 4:30…and it always does!

In order for Educational Leadership faculty to reach level of confidence and expertise with technology, training and support will need to be timely and reliable (Brzycki & Dudt, 2005, Ertmer & Ottenbreit-Leftwich, 2010; Kopcha, 2008; Sahin & Thompson, 2007).

Course Preparation and Teaching Support

Course Preparation and *Teaching Support*, according to Moser (2007), vary with subject and project size. Twenty-eight participants' were of similar accord in responding that they were supported in using innovative technology practices in preparing and presenting course materials. One participant stated:

> Our institution provides regular training related to the use of technology within the classroom. Every effort is made to provide technology platforms to candidates with an appropriate use of technology. We recently hired a professor in IL who is an expert with tech and the preparation of instructional leaders.

Another participant echoed: "We have IT staff who work individually with faculty if needed, as well as online professional development in various technology practices." A third participant noted: "This year every member of the College of Education faculty was issued an iPad2 and monthly training sessions are provided as well as other opportunities to experiment, publish, and create." A fourth participant reported: "We host an annual technology conference, have a staff that provides support, and provides grants to professors who desire to learn about and use on-line learning to deliver instruction." On the other side of the coin, four of the participants answered that their support was "minimal" and their use of technology "is not supported in the ways that need to be for our individual programs. We need support from the Dean on down the ladder."

Reflection

Finally Moser (2007) identified support for *Reflection* as being extremely scarce at the three universities researched. Moser (2007) argued that pedagogical support should include "multifaceted evaluation activities" and "competent advice … in keeping with the adoption process" (p. 69). One participant, in answering about barriers faced from the institution and from colleagues stated: "Too many negative attitudes toward technology integration. We should be the leaders and yet we seldom employ technology in our instruction." None of the participants reported an assessment and reflection as a barrier to technology use in the collegiate classroom.

Moser (2007) argued Educational Leadership faculty need five categories of activities in order to help prepare administrative students. Professors may need to adjust their teaching practices to match current technological trends. The instructors may also need more preparation time and greater access to cutting edge resources. College professors in preparing administrative students will need to model expertise with technology. This will require a steady round of training and support in conjunction with technologically diverse learning activities. Finally, Educational Leadership faculty will need to reflect upon their own learning experiences as they strive to improve the quality of instruction delivered.

Conclusions

Educational Leadership programs will have to serve as technological leaders in order to successfully model 21st century skills for present and future administrators. Technology users and leaders require timely support, adequate training opportunities, and time in order to prepare technologically laden lessons. Educational Leadership faculty will need visionary leadership, empowerment, resources, and timely support in order to successfully meet the needs of future

administrators. In the qualitative data, eight of participants identified a breakdown in communication between the college administration and technological needs in Educational Leadership classrooms. One participant stated that there was "weak communication about implementing new technology and fair access for all faculty to new developments." This aligns with the quantitative results identifying a lack of readiness in meeting administrative student needs. Faculty and student needs coupled with current trends will have to help drive the selection of technological tools, allocation of resources, and training available to Educational Leadership faculty and students. College administrators will need to include faculty and student voices in deciphering the rapidly changing, technological movement and needs within K-12 environment.

Empowerment of faculty and student voices will help support a technologically rich culture that is flexible to current trends and changing student needs. Empowerment can lead to a sense of ownership and support that promote positive beliefs about the role of 21st century tools in the Educational Leadership classroom. Educational Leadership faculty will need to help lead the use of technology by modeling best practices in the classroom. Professors will need expertise and confidence in order to set an example for students. Confidence comes from experience and success. Training and support are essential to the forward progress of Educational Leadership programs.

Twenty-one of the participants identified the need for timely training, current resources, and support in order to meet student needs. Educational Leadership programs need a steady level of training opportunities and increased preparation time in order to stay current with the revolving door of technological tools available. College administrators will need to provide adequate resources and time. College leadership will need to maintain a robust technological infrastructure that is malleable to current trends and student needs. Educational Leadership programs will need to enlist outside entities to assist in securing timely resources. One of the participants noted that there was a lack of learning opportunities in the college classroom for administrative software that is used exclusively in K-12 schools in one southern state. Partnerships with vendors could assist in better preparing administrators to serve as technological leaders.

Fourteen of the participants noted a disconnect between college administrators and 21st century classroom needs will have to be breached. The researchers believe that in institutions where participants reported strong support and infrastructure, a culture is present that embraces technology. One of the participants noted that the change toward a technologically rich culture started with leadership. The dean, the participant reported, worked with the faculty over a period of several years to create a shared vision that embraced technologically laden instruction and flexibility in course offerings. The shared vision came about because the dean had a clear understanding that more and more tech savvy working professionals are returning to college classrooms. The participant reported that "in order to stay competitive in their offerings, their educational leadership program would need to embrace technology used in schools and offer hybrid and online classes in order to meet the needs of working professionals."
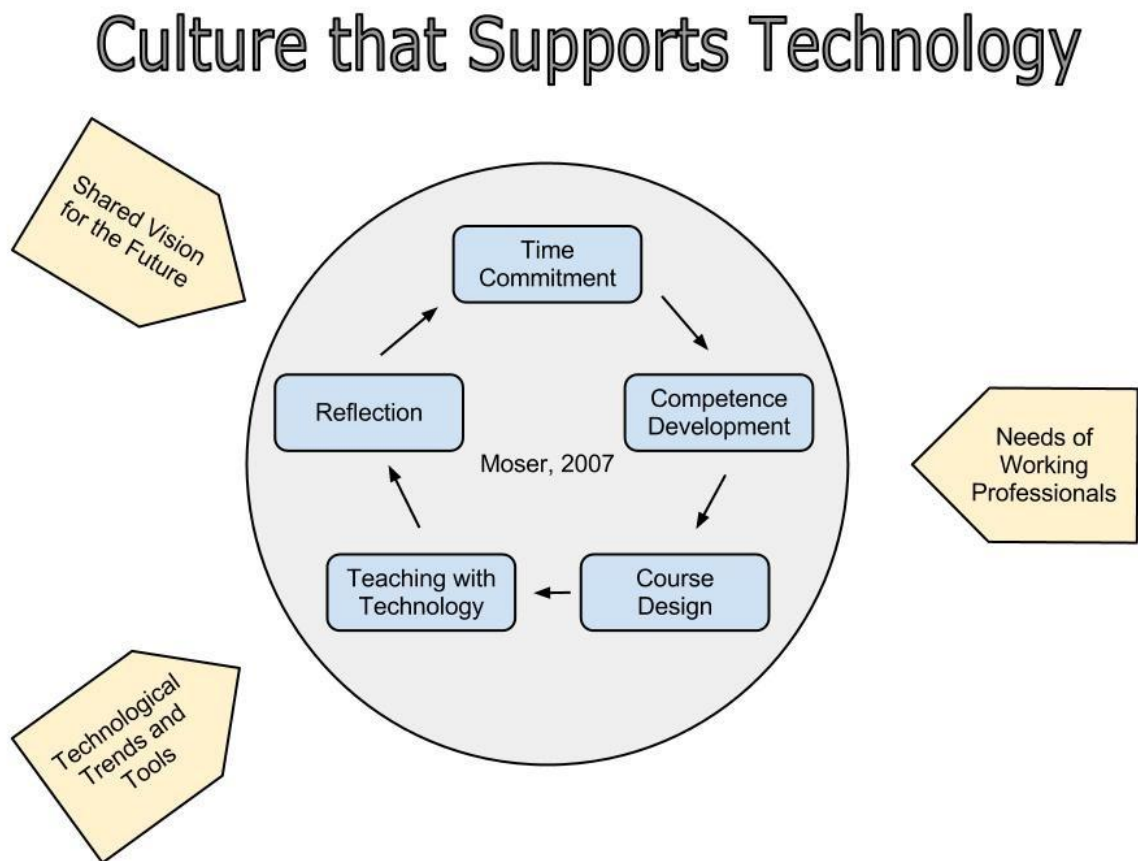
Figure 1. Culture that Supports Technology

Culture that Supports Technology

Shared Vision for the Future

Time Commitment

Competence Development

Reflection

Moser, 2007

Needs of Working Professionals

Teaching with Technology

Course Design

Technological Trends and Tools

Figure 1 represents the researcher's belief that strong leadership shapes a culture that supports educational leadership faculty. Leaders must be in tune with current technological trends. Digital tools that school administrators have access to will have to be incorporated into the curriculum of educational leadership classes (Keengwe, Kidd, & Kyei-Blankson, 2009). Leaders also need to create a shared vision for the future that centers on the needs of school administrators as technology leaders (Flanagan & Jacobsen, 2003; McLeod, 2011; Richardson & McLeod, 2011). Finally, leadership will need to stay in tune with the needs of students who are working professionals to ensure that course offerings are relevant and attractive. Educational leadership programs are responsible for preparing school administrators to be technologically savvy practitioners and leaders. In order to accomplish this task educational leadership faculty will need to incorporate technology best practices into classroom instruction. Educational leadership faculty will need support that arises from a culture that realizes the open-ended nature of technology and that flexibility and adaptability are the new norms.

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Appendix

Educational Leadership Faculty as Technology Leaders

Auburn University
Educational Foundations of Leadership & Technology
Auburn University, Alabama 36849-5221
Telephone: (334) 844-4460
Fax: (334) 844-30724036 Haley Center

Review Board has approved this document for use from September 5, 2011 to September 4, 2012. Protocol #11-263 EX 1109
INFORMATION LETTER FOR A RESEARCH STUDY ENTITLED

Educational Leadership Faculty as Technology Leaders: What Support Will They Need?

You are invited to participate in a research study about preparation and support of teachers as technology leaders. Marcus Paul Howell is conducting the study, under the direction of Dr. Ellen H. Reames, Professor in the Auburn University Department of Educational Foundations, Leadership and Technology. You were selected as a possible participant because of your position with education leadership in an institution of higher learning. What will be involved if you participate? If you decide to participate in this research study, you will be asked to read this information letter and answer a number of survey questions. Your total time commitment will be approximately ten minutes. There will be no known risks or discomforts associated with this research. If you participate in this study, you can expect to identify the possible role some teachers may play in leading the integration and usage of technology in schools. There will be no cost or expenses if you choose to participate in this research. If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, or your respective institution, school or department. Any data obtained in connection with this study will remain anonymous. Information collected through your participation may be used to fulfill an educational requirement, published in a professional journal, and/or presented at a professional meeting. If you have any questions about this study, please email me at mph0005@auburn.edu or call me at (334) 464-0863. You may also contact my advisor, Dr. Ellen H. Reames at (334) 844-3067 or reamseh@auburn.edu. If you have questions about rights as a research participant, you can contact the Auburn University Office of Human Subjects Research or the institutional Review board by phone (334) 844-5966 or email at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

Q1 Our educational leadership faculty maximize the use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of leadership students in our program.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q2 Our educational leadership faculty teach leadership students how to develop, implement and communicate technology strategic plans with the organization's vision.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q3 Our educational leadership faculty advocate on local, state and national levels for policies, programs, and funding to support implementation of technology-infused vision and strategic plans.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q4 Our educational leadership faculty prepare our students to focus on continuous improvement of digital-age learning.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q5 Our educational leadership faculty model and promote the frequent and effective use of technology for learning.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q6 Our educational leadership faculty promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital-age collaboration.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q7 Our educational leadership faculty provide learner-centered environments equipped with technology and learning resources to meet the diverse needs of all learners in our program.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q8 Our educational leadership faculty are allocated time, resources, and access to ensure faculties ongoing professional growth in technology fluency and integration.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q9 Our educational leadership faculty use digital-age tools to promote and model effective communication and collaboration among stakeholders.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q10 Our educational leadership faculty stay abreast of educational research and emerging trends regarding effective use of technology and encourage our students to evaluate new technologies for their potential to improve student learning.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q11 Our educational leadership faculty model how to lead purposeful change in organizations through the appropriate use of technology and media-rich resources.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q12 Our educational leadership faculty recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q13 Our educational leadership faculty are supported by a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q14 Our educational leadership faculty model appropriate dispositions for ensuring equitable access to appropriate digital tools and resources in order to meet the needs of all learners.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q15 Our educational leadership faculty promote, model and establish policies for safe, legal, and ethical use of digital information and technology.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q16 Our educational leadership faculty model and facilitate the development of a shared cultural understanding in global issues using contemporary communication and collaboration tools.

	Unimportant	Of Little Importance	Moderately Important	Important	Very Important
Please select one answer					

Q17 Our educational leadership program inspires and leads the development and implementation of a shared vision for comprehensive integration of technology in order to promote excellence and support transformation throughout the organization.

	Not Prepared	Slightly Prepared	Moderately Prepared	Prepared	Very Prepared
Please select one answer					

Q18 Our educational leadership program creates, promotes, and sustains a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students.

	Not Prepared	Slightly Prepared	Moderately Prepared	Prepared	Very Prepared
Please select one answer					

Q19 Our educational leadership program promotes an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources.

	Not Prepared	Slightly Prepared	Moderately Prepared	Prepared	Very Prepared
Please select one answer					

Q20 Our educational leadership program provides digital-age leadership and management in order to continuously improve the organization through the effective use of information and technology resources.

	Not Prepared	Slightly Prepared	Moderately Prepared	Prepared	Very Prepared
Please select one answer					

Q21 Our educational leadership program models and facilitates understanding of social, ethical and legal issues and responsibilities related to an evolving digital culture.

	Not Prepared	Slightly Prepared	Moderately Prepared	Prepared	Very Prepared
Please select one answer					

Q22 What types of support are critical to the success of your program in regards to technology?

Q23 How does your institution currently support faculty in regards to innovative technology practices?

Q24 What barriers do you face from the institution? From Colleagues? From yourself? From the community outside the institution?