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Promoting Empowerment and Innovation: A Technology Initiative

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Project Executive Summary

      The Program developed the Strategic Plan to categorize strengths, weaknesses, opportunities, and threats. Treating opportunities as potential innovative strategies, the program began planning how to improve. The state of Illinois approved the state budget, marking a change in organizational culture. With a budget planned, the administrator worked with the College and District leadership to promote support for faculty empowerment and innovation. Faculty worked directly with students in the program and had a good understanding of how to improve Program delivery and outcomes. It was imperative that these highly skilled nurses/educators develop a plan to move forward. With the Strategic Plan data in hand, the administrator asked faculty a key question, "If money were no object, what would the Program look like?"

      After prioritizing feedback, faculty recommended a Technology Initiative as their innovation to address issues from the strategic planning session. The innovation required students to complete online testing to mimic NCLEX and to assist in meeting the demands of technology in the clinical setting, a transition to practice strategy. Students would use an iPad to test in a proctored setting. The iPad would also allow for both engaging and active learning strategies through updated textbook resources and application software (apps). Students would have the choice of a physical or an eBook option for textbooks. Faculty could use online resources to promote active learning and identify learning issues during instruction rather than after testing. Early detection of issues can improve retention through earlier remediation. Use of technology, throughout the program, aids in transition to practice post-licensure (Caputi, 2017; Clark et al., 2017; Doyle, Garrett, & Currie, 2013; George et al., 2013; Smith & Cambers, 2017). Students will utilize the technology for course work, communications, electronic documentation,

and evaluation through testing and surveys. These are similar technology concepts used in nursing practice and can help bridge transition to practice.

To support the innovation, the administrator garnered grant funding, with the assistance of college and district personnel, to provide faculty with iPads and keyboard cases. The district grant writer secured a Nursing School Improvement Grant to provide smart televisions in the nursing classrooms to connect the iPads to presentations and for utilization on online software through updated textbooks and resources. The district Information Technology (IT) Department provided a dedicated support person for the Technology Initiative. The IT person initiated iPad training and helped faculty load Office 365, set up emails, download textbooks, and answer general questions. IT personnel will also be at the student orientations to offer assistance during the transition. Textbook representatives made several trips to the college to train faculty on new resources. The testing software company provided training sessions to faculty. The administrator required iPads be brought to all meetings and approved personal use of games, book downloads, and videos to help with proficiency of the device.

The Technology Initiative is an innovation developed in response to a need for improved Program outcomes. Addressing the current organizational culture to encourage employee empowerment was necessary to facilitate the process of innovation and outcome improvement. The administrator used the Technology Initiative Survey to evaluate faculty perceptions of their role in innovating, feeling empowered, and how the technology initiative can improve program outcomes. They were asked if they "agree, somewhat agree, are neutral, somewhat disagree, or disagree" with the Technology Initiative and related components. The first section of the survey evaluates employee perceptions of empowerment to innovate. This section also asks about how faculty perceive components of the Technology Initiative will improve Program outcomes. The

second section discusses comfort with the actual technology and software utilized as components of the innovation.

The results of the survey showed that faculty, overall, agreed about empowering innovation and the impact of the Technology Initiative overall. Scores on questions one through six, averaged 92.86%, indicating thirteen out of fourteen faculty members feel empowered to innovate and the initiative will improve outcomes (see Table 1). The goal for faculty perception is 100% of faculty feel empowered to innovate by the end of the first year of implementation. The fact that they perceive they can innovate and be creative, is a good indicator that organizational culture is positive and has provided an opportunity for faculty to move forward with the Technology Initiative. The initial Strategic Planning session comments indicated that faculty did not appreciate a plan to move forward on innovative thinking. As time progressed, and the project became a regular discussion item at meetings, how faculty felt about the organization began to shift. When grant funds provided iPads for all faculty and staff, there was a sense that change was imminent and faculty began asking more questions, challenging the plan, and in general, challenging the change itself.

The administrator welcomed questions in order to counter the perception of the innovation as being solely a "perfect solution". Alternate ideas or concerns are conducive to planning for problems or challenges the plan may present as it progresses. The administrator assured faculty that challenges to the innovation provided information on potential pitfalls. Open communication allowed for verbalization of concerns and provided valuable input on planning and training needs. A 92.86% overall agreement by faculty on empowerment to innovate is a positive sign the culture had begun to change and faculty were ready to move forward with the Technology Initiative.

The survey also evaluated comfort level with components of the Technology Initiative. This is an area to improve upon. Overall 64.29% or nine out of fourteen faculty, felt comfortable with the device and the programs used with the initiative. Comfort level directly relates to how often each component is used and therefore faculty should improve over time as they become more adept with the iPad and software applications. Faculty have not had an opportunity to work with the products in real-time and the overall percentage for comfort was as expected. The majority of contact with the products was through review, training sessions, and the initial sign-up for products. Faculty voted for each component of the innovation. All votes were unanimous.

The administrator created a Technology Committee to help with transition. The faculty on this committee were innovators and early adopters on the innovation. As the initiative progressed and the expertise shared, other faculty started utilizing the technology. This follows Rogers' Diffusion of Innovation model where "Innovators" and "Early Adopters" lead the way in adopting innovations. Faculty who were "Innovators" and "Early Adopters" are comfortable with the innovation. "Early Majority" to "Late Majority" reflect "Neutral" or "Somewhat Uncomfortable". "Laggards" may just indicate fear of the products and lack of technological ability. Technology Committee members and the IT department have developed a plan to work with faculty in groups and one-on-one with technology to ease the transition into the products.

Full implementation of the innovation begins in the fall with the first-year students of the Program. Information sessions by Program Advisors, meetings with Department Heads, and a strategies course will introduce incoming students to the initiative. The administrator will complete of a review and analysis of faculty surveys at semester and year-end for changes and trends in perceptions. Evaluation of retention and NCLEX pass rate outcomes will identify how

the innovation affected the organization and whether additional measures for continuous improvement need exploration.

Upon review of the project, there were some limitations noted. Faculty consisted of a small sample size. There were also faculty attrition and additions during the study timeframe. Also, lack of student participation in the study. In hindsight, providing the survey before strategic planning may have produced a baseline assessment to provide a more measureable perspective.

Organizational change can be difficult. Change driven by desired outcomes and careful strategic planning help opportunities emerge for improvement in practice. This project created an environment empowering employees to innovate. The Technology Initiative provides a foundation for future innovations.

The following questions relate to your perceptions of your role and the Technology Initiative.

		Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Overall Agree
1.	You feel empowered to be innovative in your role.	0%	0%	7.14% (1/14)	14.29% (2/14)	78.57% (11/14)	92.86% (13/14)
2.	Technology will improve classroom instruction.	0%	0%	0%	21.43% (3/14)	78.57% (11/14)	100% (14/14)
3.	Computerized testing will improve student outcomes in the course.	0%	7.14% (1/14)	0%	35.71% (5/14)	57.14% (8/14)	92.86% (13/14)
4.	Computerized testing will improve NCLEX success.	0%	0%	7.14% (1/14)	35.71% (5/14)	57.14% (8/14)	92.86% (13/14)
5.	Computerized testing will improve transition to practice.	0%	0%	7.14% (1/14)	28.57% (4/14)	64.29% (9/14)	92.86% (13/14)
6.	The item analyses in ExamSoft will improve program outcomes.	0%	7.14% (1/14)	7.14% (1/14)	21.43% (3/14)	64.29% (9/14)	85.72% (12/14)

The following questions relate to your comfort with the specific Technology Initiative Components.

		Uncomfortable	Somewhat Uncomfortable	Neutral	Somewhat Comfortable	Comfortable	Overall Comfort
7.	How comfortable are you with the iPad?	0%	21.43% (3/14)	0%	21.43% (3/14)	57.14% (8/14)	78.57% (11/14)
8.	How comfortable are you with Sherpath?	7.14% (1/14)	28.57% (4/14)	14.29% (2/14)	42.86% (6/14)	7.14% (1/14)	50.00% (7/14)
9.	How comfortable are you with EHR Tutor?	14.29% (2/14)	7.14% (1/14)	21.43% (3/14)	50.00% (7/14)	7.14% (1/14)	57.14% (8/14)
10.	How comfortable are you with ExamSoft?	7.14% (1/14)	14.29% (2/14)	7.14% (1/14)	57.14% (8/14)	14.29% (2/14)	71.43% (10/14)

Table 1: Faculty Innovation Survey