Directing a Quality Enhancement Plan

Ronald A. Styron, Jr., Ed.D.
Quality Enhancement Plan Director
Academic Affairs, University of South Alabama
Mobile, AL 36688, United States of America

Jennifer L. Styron, Ph.D.
Director of Special Projects and Evaluation
College of Nursing, University of South Alabama
Mobile, AL 36688, United States of America

Shelia Whitworth, DNP
Assistant Professor, Maternal-Child Health Nursing
College of Nursing, University of South Alabama
Mobile, AL 36688, United States of America

ABSTRACT

This paper is drawn from a project aimed at enhancing the quality of instructional practice and improving student-learning outcomes in classes across an urban university located in the southern region of the United States. The strategies, employed by the project leader, are discussed in detail as framed by a new problem-solving leadership design called the Alloy Improvement Model (AIM). Data collected at the end of the second full year and reported in this paper indicated all project goals were met and that the utilization of the AIM was central to project success.

Keywords: Integrated Leadership, Active Learning, Instructional Practice and Pedagogy, Alloy Improvement Model.

1. INTRODUCTION

The purpose of the project, called a Quality Enhancement Plan (QEP), was to initiate a process that would lead to a pedagogical culture focused on student learning and academic success. The conceptual framework utilized for directing this process was Rogers' Diffusion of Innovation [1]. Accompanying Rogers' framework was the utilization of the Alloy Improvement Model, which integrated Kotter's Leading Change strategies [2] and Littman's democratic principles and practices [3], delivered via a Servant Leadership style [4]. The project concluded its third year (pilot, year 1, & year 2) in the spring of 2015.

2. CONCEPTUAL FRAMEWORK

Rogers' Diffusion of Innovation model was utilized to understand faculty behavior and help determine their propensity to change. Rogers found that organizational members possess dominant behaviors that align them with one of the following groups: innovators, early adopters, early majority, late majority, and laggards. The innovators usually consist of 2.5% of an organization's membership. These individuals are motivated and are usually involved in the delivery of innovative instructional strategies. While typically among the first to adopt innovations, innovators may not communicate well with other members of the organization and traditionally have limited influence on the adoption of new ideas. The second category, early adopters, usually consists of 13.5% of an organization's membership. Early adopters are open to new ideas, not too far ahead of other organizational members, opinion leaders, respected and seen as successful by other organizational members, have a positive outlook, and possess strong communication skills. Members of the third group, early majority represent another 34% of an organization and are influenced by the early adopters. Early majority group members follow the early adopters after they have approved a change and have incorporated it into their practice. The fourth group, the late majority, also represents 34% of an organization, and follows behind the early majority in adopting an innovation. The laggards, usually 16% of an organization, move slow, refuse to change, and are not willing to try new innovations [1]. The AIM problem-solving design embeds Rogers' adopter characteristics [1], as targeting the early adopters and early majority are key to ensuring the adoption (and success) of a change initiative.

3. ALLOY IMPROVEMENT MODEL (AIM)

Leadership Styles

The Alloy Improvement Model (AIM), a term coined by the author of this paper, represents the integration of leadership styles with change theory and a selected intervention to solve an organizational problem. The analogy was used to represent an integrated approach to leadership because an alloy is a mixture of 2 or more elements which create a metal that, once bonded, is more durable than the single elements of which it is composed. Likewise, the AIM consists of multiple components blended together to create a synergy, resulting in action more effective than the use of any one isolated component.

AIM consists of three components. The first component includes knowledge and expertise relative to leadership styles (theory); the second component includes knowledge and expertise relative to change (theory); and the third component includes knowledge and expertise relative to an intervention leading to the solution of a specific problem. AIM was created as a solution to organizational behavior, characterized by the inability of leaders to take appropriate

action, and leading to the solutions of a problem(s) (Figure 1).

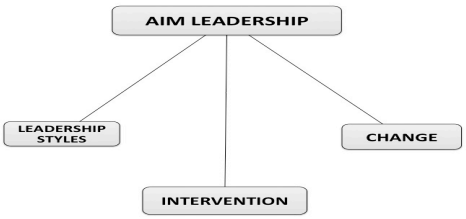

Figure 1. Alloy Improvement Model

An effective leader must be knowledgeable of multiple leadership styles and insightful in blending them together to form an overall leadership approach that mobilizes the collective efforts of membership to solve problems. Additionally, an effective leader must have an understanding of his/her personal traits and his/her tendency to exhibit certain behaviors along with the ability to seamlessly adapt to and adopt the behaviors of the styles selected as most appropriate. This process is essential in creating AIM's first component.

Leadership behavior has a critical role in the creation of successful organizations. Larsson and Vinberg [5] conducted a study in 2010 regarding the relationship of leadership behavior and effectiveness, productivity, quality, health, and job satisfaction in organizations and found the most successful organizational leaders had common leadership behaviors dictated by situational factors, influenced by both universal and contingency aspects. Consequently, appraisal of the situational factors found in an organization is a critical first step in determining the correct blend of styles. Situational leadership theory is based on the premise that one style of leadership may be effective in one situation with a different style of leadership effective in another, particularly in dynamic environments. To conduct their study, Sims, Farij, and Yun [6] matched a particular leadership style to a specific external circumstance. The leadership styles included were aversive, directive, transactional, transformational, and empowering. They found that leaders considered elements of the situation to guide their own leadership. As a result, the authors recommended a strategic approach to leadership that involved defining goals for a specific situation, defining potential leadership styles, identifying situational conditions, matching a leadership style to the situational conditions, and finally determining if the match between leadership style and situation was effective.

Gundersen, Hellesoy, and Raeder [7] examined the relationship between transformational leadership and team performance, work adjustment, and job satisfaction in a complex, international project setting. Their results indicated a positive relationship between transformational leadership and positive outcomes. Project leaders expressed a clear understanding of where the team was going, ensured common goals, and personally praised extraordinary work. Team members had higher levels of team trust and performance. Their findings also indicated that transformational leadership could act as a "stress buffer" in supporting team members as they adjust to the work environment. The term Transformational Leadership was first used by Burns [8] to describe the behavior of certain political leaders. It is defined as an approach that causes change in individuals or organizations by enhancing motivation, morale and performance. Transformational leaders inspire change in others and are enthusiastic, energetic, and passionate [8].

While the concept of servant leadership has been present since ancient times, Greenleaf coined the term in an essay he first published in 1970 [4]. In that essay he said, "The servant-leader is servant first beginning with the natural feeling that one wants to serve first. Then conscious choice brings one to aspire to lead." In 1972, Greenleaf [9] acknowledged servant leadership on an organizational level by stating "the more able and the less able serving each other, is the rock upon which a good society is built. Whereas, until recently, caring was largely person to person, now most of it is mediated through institutions." Later, Spears [10] organized Greenleaf's [11] Servant Leadership into ten characteristics including: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community.

Entrepreneurial Leadership is a relatively new leadership theory. It is defined by Roebuck [12] as "organizing a group of people to achieve a common goal using proactive entrepreneurial behavior by optimizing risk, innovating to take advantage of opportunities, taking personal responsibility and managing change within a dynamic environment for the benefit of the organization." This new leadership style is not limited to only one discipline.

For the purpose of QEP leadership, several leadership styles were blended together into a comprehensive leadership strategy. These styles included situational leadership, entrepreneurial leadership, transformational leadership, and servant leadership. Servant leadership was the predominant style utilized during the project.

Change Theory

The second component includes knowledge and expertise relative to change theory. Quite often, effective leadership and the implementation of an intervention aimed at solution of a problem fail not because of the lack of merit therein, but because of the lack of understanding of the dynamics of change by leadership. Human nature creates resistance to all change, even good change. Consequently, when organizations are involved in implementation of a solution without a strategy that integrates change theory, it will fail [13]. Kotter developed one of the most comprehensive and time-tested strategies to implementing change. It includes 8 steps that when followed, lead to successful long-lasting change. These steps included 1) creating a sense of urgency, 2) building a coalition, 3) creating a shared organizational vision, 4) getting buy-in, 5) supporting action and empowering faculty, 6) celebrating short-term success, 7) building on change, and 8) institutionalizing the change. Kotter's model represents the second component of AIM [2].

In this project, creating urgency for change involved the articulation of a sound rationale for change. If there was no good reason to change, why go through the trouble? Kotter's [2] second step, building a coalition, was facilitated by the utilization of strategies constructed around Rogers' Diffusion of Innovation [1]. In building a coalition, it was important to recognize those who were early adopters and then support and nurture them. By doing so, the success of the early adopter category would have a positive influence on the early majority, thus moving to organization toward successful change. If leaders do not identify the early adopters, they run the risk of being influenced by the laggards and expending all their time and energy on those who are not willing to change or try new innovations.

The project's shared vision was built on the foundation provided by Littman's democratic principles and practices [3]. Use of these principles and practices help establish a vision in which all constituents have ownership by providing a structure for input and feedback. Also, the vision was continually articulated and supported by the project director. Kotter's fourth step required buy-in so participants were continually provided with reasons why the proposed change was good for the students, how the change would yield positive results, and how their participation in the change would lead to organizational and personal improvement. Supporting action and empowering faculty included providing them with the resources they needed to be successful, helping them break through potential barriers, and trusting them to do the right thing. Celebrating success included taking every opportunity to praise those embracing the change by publicizing and rewarding their achievements, and through credentialing their project-related competencies. Building on that change included an honest discussion of what was going well and what needed to be improved. The process of institutionalizing change had begun, but not yet realized as changing a culture is difficult and takes many years to be realized [2, 13, 14].

Intervention

The third and final AIM component includes knowledge and expertise relative to an intervention, leading to the solution of a specific problem. After an organization conducts a study of relevant data, it will determine the problem that needs to be addressed and select an appropriate intervention that will solve the problem. The intervention varies according to the particular problem the organization is planning to address. Once a specific intervention is identified, the leader must become an expert in all aspects of the intervention, if not already. The credibility of the leader will be lost if he/she does not attend to this important aspect of the AIM problem-solving leadership design. It should also be noted that although a solution has been identified, it will not be realized if there is not a comprehensive leadership plan blending the intervention with leadership and change strategies previously discussed. For this specific project, after a thorough review and analysis of appropriate data, the problem identified was an overall low level of critical thinking and collaboration among postsecondary students. The agreed upon intervention was the implementation of an instructional strategy called Team-Based Learning. This strategy was recognized as an effective way to improve the identified problem [15].

4. DEMOCRATIC PRINCIPLES AND PRACTICES

Woven throughout AIM are Littman's [3] democratic principles and practices. They permeate every aspect of AIM and are used in concert with leadership theory, change theory, and the intervention related to the solution of the selected organizational problem. The principles and practices to be followed are:

- Comprehensive – all significant options and impacts are considered.
- Efficient – the process will not waste time or money.
- Inclusive – stakeholders affected by the plan have opportunities to be involved.
- Informative – results are communicated to and understood by stakeholders.
- Integrated – individual, short-term decisions support strategic, long-term goals.
- Logical – each step leads to the next.
- Transparent – all participants understand the process.

Utilization includes consideration of all significant options, ensuring all participants understand the process. It does not waste time, each step leads to the next one in a logical manner, stakeholders are involved in making important decisions, decisions support short- and long-term goals, results are communicated and understood, and all stakeholders are represented.

These principles and practices not only complement leadership styles, change, and implementation of the intervention, but also empower members of an organization to achieve success at levels that would seem impossible to those who try to control people through autocratic means. Use of the principles and practices facilitate teacher leadership and help sustain change initiatives. They served as the structural foundation for AIM and were utilized throughout the project [16].

5. PROBLEM SOLVING

One of the great challenges facing leaders is that, in most cases, they know the problems facing their organization and the corresponding solutions, but they are not sure how to create a bridge from problems to solutions because of an inability to blend leadership styles to match organization needs, misunderstandings regarding the dynamics of change and how to support the process of change, and a lack of expertise relative to the solutions required. To bridge the gap between this problem and corresponding solution, the project director utilized a dominant servant leadership style with integrated components of situational, transformational, and entrepreneurial leadership. The foundation supporting this bridge was change theory, democratic principles and practices, and the intervention, Team-Based Learning [14] (see Figure 2).

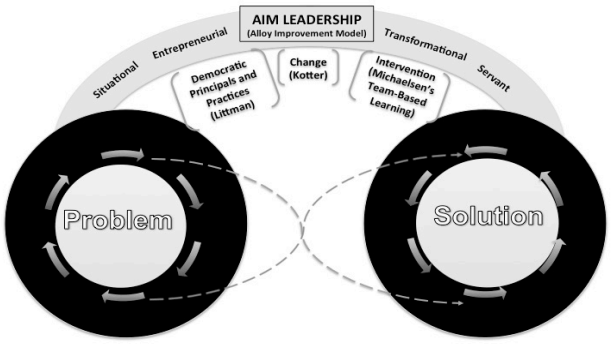

Figure 2. AIM as a Problem-Solving Leadership Design

6. IMPLEMENTATION STRATEGY

An essential aspect of the project implementation process was to facilitate, encourage, recognize, coach, mentor, and inspire faculty. A positive and supportive relationship with each faculty member involved in the project was created by making time for them if they needed assistance, having frequent face-to-face conversations with them, and providing them with the expertise required to successfully deliver the selected intervention, Team-Based Learning, through comprehensive professional development sessions. The director modeled the behaviors expected of faculty by submitting proposals for conference presentations, journal manuscripts, and grants related to the project. To improve empathy for the instructors, the director also taught classes utilizing Team-Based Learning. Moreover, change initiatives are destined to fail without support, follow-up, and professional development. As a result, the director provided instructors opportunities for credentialing, scholarship and professional development, financial support to employ Team-Based Learning, and recognition of success throughout the term of the project [14].

Credentialing
A Certificate of Pedagogy was created and endorsed by the institution's Provost to serve as significant professional credential. To obtain the Certificate, faulty were required to participate in no less than five professional development sessions, submit no less than three application activities, and then submit a research proposal, manuscript, or grant proposal based on the project experience. The Certificate was framed, matted, and signed by the project director and Provost. Nineteen instructors were awarded Certificates during the first 2 years of the project. A second certification, called the "Quality Enhancement Plan Professional Development Fellow," was also available for participants. Faculty members who attended no less than 5 professional development sessions earned the Fellow Certificate. Thirty-one instructors earned Fellow status. Additionally, a "Quality Enhancement Plan Educator of Distinction" was selected at the end of each academic year. Recipients were nominated by peers and had to submit an application packet including supporting materials, which were reviewed by a panel of peers. Instructors received these credentials at the end of the year Celebration of Success.

Scholarship
Developing the scholarship of pedagogy was an important aspect of the Quality Enhancement Plan, particularly because of the research and publication expectations for instructors. Accordingly, the director provided instructors with technical support when writing grant proposals and recognition when a proposal was accepted. A total of 43 professional presentations related to the project were conducted, including 32 during year 2 and 11 during the pilot. Three grant proposals were submitted during year 2 with 2 proposals funded for a total of $26,500.

Professional Development
Professional development sessions were conducted every month during a time and location convenient for instructors. Depending upon the depth, breadth and difficulty of the topic addressed, sessions lasted from 90 minutes to 2 days. Topics for sessions were solicited from instructors and every session was directly connected with the utilization of Team-Based Learning. The majority of the sessions were conducted by the project director. Some sessions were conducted solely by instructors, with other sessions conducted jointly by the project director and instructors. Session topics included:

- Aligning tRATs with IF-ATs Using TestMaker
- Collaborative Learning
- Collegial Coaching
- Connecting SMART Board Technology and Team-Based Learning
- Course Design Using Team-Based Learning
- Creating Performance-Based Team-Based Learning Assessments
- Crafting Multiple-Choice Questions that Promote Critical Thinking
- Designing Application Activities Using Case Studies
- Developing Student Learning Outcomes that Promote Critical Thinking
- Flipping Your Classroom
- Introduction to Team-Based Learning
- Learning Walks
- Point Spreading with iClickers
- Reciprocal Questioning to Increase Understanding
- Team-Based Learning summer workshop
- Using the Comprehensive Assessment of Team-Member Effectiveness (CATME) to facilitate Peer Evaluation
- Using Team-Based Learning to Improve Critical Thinking and Content Acquisition

A total of 402 instructors attended these sessions (duplicated head count).

Financial Support
Instructors were provided a $300 support allocation for each semester of participation in the project, to aid the implementation of Team-Based Learning in their classrooms. The allocation could be used to purchase items such as textbooks, IF-AT forms, easel pads, markers,

team folders, or technology such as iPads. Instructors could also bank unused funds to defray conference travel, lodging, and registration costs. The average total cost of support allocations exceeded $30,000.00 each semester. Funds were also provided to purchase licenses for the California Critical Thinking Skills Test, technology-related equipment, and software needed to support Team-Based Learning classroom, the annual Celebration of Success, individual subscriptions to the Team-Based Learning Collaborative, and for educational subscriptions to organizations with web resources including case studies, videos, and application activities. Stipends were also provided to participants for attendance at summer professional development sessions.

Celebration of Success

Celebrations of Success events were conducted each semester to recognize the accomplishments of faculty. They also provided a formalized opportunity for the development of fellowship, teaming, and networking. Celebrations were held in the dedicated project Classroom with refreshments provided. An Ice Cream Social Luncheon Celebration of Success was held in the fall of each year and a Celebration of Success Award's Reception was held during the evening in the spring each year at the University's Faculty Club.

7. FINDINGS

During year 1 of the project, 49 instructors participated in the fall of 2013 and 60 participated during the spring of 2014. Approximately 1,513 students enrolled in project classes during the fall of 2013, and 1,844 enrolled in classes during the spring of 2014. During year 2 of the project, 98 instructors participated during the fall of 2014 and 81 instructors participated during the spring of 2015. There were 4,772 students enrolled in classes during the fall of 2014, and 3,495 students enrolled in classes during the spring of 2015.

Findings indicated the goals of the project were being met, as 82% of student learning outcomes set met target mastery during year 1 and 93% of student learning outcomes set met target mastery during year 2. The California Critical Thinking Skills test was administered to students enrolled in project classes and was compared to students enrolled in identical classes not participating during year 1. Results indicated there were significant differences in all constructs tested between comparison groups. Students enrolled in Team-Based Learning classes scored in the 29th percentile and students who were not scored in the 27th percentile. When administered as a pre- and post- test in project classes during year 2, significant differences in all constructs were found. There was also a significant different between pre- and post- test scores with pre-test scores in the 36th percentile, and post- test scores in the 51st percentile. During project years 1 and 2, there were increases in critical thinking and collaboration as measured by pre- and post- test scores determined through the use of surveys completed by students in project classes. Perhaps the most notable project impact dealt with student persistence in quality enhancement plan (QEP) courses. In both years of the project, QEP courses had half as many student withdrawals as compared to identical non-QEP classes. Furthermore, there were significantly higher numbers of students receiving A's and B's, and significantly lower numbers of students receiving D's and F's in QEP courses, when compared to non-QEP courses.

8. DISCUSSION

Prior to the initiation of a project, yet after thorough reflection and self-assessment, the leader should arrive at an understanding of his/her predominant and secondary leadership styles and corresponding behaviors. The leader should then assess the cultural complexion and problems to be addressed by their organization. Based on these situational factors, their personal leadership styles, organizational culture, and organizational problems, the leader should create a personalized leadership strategy matched with his/her organization. Once the leader has formed this strategy, he/she should integrate the tenets of change, as defined by Kotter [1], into their plan of action. Democratic principles and practices [3] should likewise by embedded throughout the strategy and assimilated into a comprehensive organizational improvement plan focused on the successful implementation of a research-proven intervention.

9. CONCLUSIONS

Project outcomes indicated that students were more likely to utilize critical thinking skills that went beyond teacher-introduced knowledge. Students also exhibited higher cognitive processing, increased problem-solving skills, and collaboration, and better understood class material. Persistence and grades improved, students stayed focused longer, and mastery of student learning outcomes improved. Furthermore, the use of Team-Based Learning proved to be an effective instructional strategy for university faculty and administrators who are looking for ways to improve educational outcomes.

Evidence provided supports the use of the Alloy Improvement Model as an effective problem-solving leadership design to guide a campus-wide improvement initiative. By targeting early adopters, and subsequently those consisting of the early majority, the project director was able to engage stakeholders who were able to cultivate change by serving as role models. Educational leaders may follow the AIM model discussed in this paper to realize solutions to their organizational problems.

The major challenge facing leaders relative to problem solving is the inability to bridge the gap between the identified problem(s) facing their organization and the corresponding solution(s). These problems and solutions represent the 'What' needs to be done to improve. Although leaders typically know what needs to be done, all too often, they do not know 'How' to get it done [17]. Utilizing the AIM supports leaders in identifying and addressing the 'How' part of the problem-solving process needed to bridge the gap from problems to corresponding solutions (see Figure 2). The integration and

delivery of AIM concepts is not easy. It takes many years of preparation, scholarly activity, and application. However, the effort is worth the reward as with dedication and practice, the effective leader is able to solve organizational problems with confidence in a seamless, effective manner [18].

10. REFERENCES

[1] E. M. Rogers, **Diffusion of Innovation**, New York, NY: Free Press, 2003.

[2] J. Kotter, **Leading Change**, Boston, MA: Harvard Business School, 1996.

[3] T. Littman, **Planning Principles and Practices**. Retrieved from Victoria Transport Policy Institute website: http://www.vtpi.org/planning.pdf *(version current as of 2013)*.

[4] R. K. Greenleaf, **The Servant as a Leader**, Indianapolis, IN: Greenleaf Center, 1970.

[5] J. Larsson & S. Vinberg, "Leadership Behavior in Successful Organizations: Universal or Situation-Dependent?", **Quality Control and Applied Statistics**, Vol. 55, No. 3, 2010, pp. 217-218.

[6] H. P. Sims, S. Faraj, & S. Yun, "When should a leader be directive or empowering? How to develop your own situational theory of leadership", **Business Horizons,** Vol. 52, No. 2, 2009, pp. 149-158.

[7] G. Gundersen, B. T. Hellesoy, & S. Raeder, "Leading International Project Teams: The Effectiveness of Transformational Leadership in Dynamic Work Environments", **Journal of Leadership and Organizational Studies,** Vol. 19, No. 1, 2010, pp. 46-57.

[8] J. M. Burns, **Leadership**, New York: Harper & Row, 1978.

[9] R. K. Greenleaf, **The Institution as Servant**, Indianapolis, IN: Greenleaf Center, 1972.

[10] L. C. Spears, "Character and Servant Leadership: Ten Characteristics of Effective, Caring Leaders", **The Journal of Virtues and Leadership**, Vol. 1, No. 1, 2010, pp. 25-30.

[11] R. K. Greenleaf, **Servant-Leadership: A Journey into the Nature of Legitimate Power and Greatness**, Mahwah, NJ: Paulist Press, 2002.

[12] C. Roebuck, **Critical Need for Entrepreneurial Leaders During Turbulent Times.** Retrieved from http://www.chrisroebuck. co/critical-need-for-entrepreneurial-leaders-during-turbulent-times (ver*sion current as of 2004*).

[13] R. Hoojberg & F. Petrock, "On Cultural Change: Using the Competing Values Framework to Help Leaders Execute a Transformational Strategy", **Human Resource Management**, Vol. 32, No. 1, 1993, pp. 29-50.

[14] L. K. Michaelsen, A. B. Knight, & L. D. Fink, **Team-Based Learning: A transformative use of small groups in college teaching**, Sterling, VA: Stylus, 2004.

[15] R. DuFour & R. Eaker, **Professional learning communities at work: Best practices for enhancing student achievement**, Bloomington, IN: National Educational Service, 1998.

[16] Mind Tools, **Why Do Projects Fail?** Retrieved from https://www.mindtools.com/pages/article/newPPM_58.htm (*version current as of 2014*).

[17] F. Crowther, M. Ferguson, & L. Hann, **Developing Teacher Leaders**, Thousand Oaks, CA: Corwin Press, 2009.

[18] R. A. Styron, L. K. Michaelsen, & J. L. Styron, "A university-wide improvement plan to change classroom culture and improve student learning", **To Improve the Academy**, Vol. 34, No. 1-2, 2015, pp. 194-233.

[19] P. Taffinder, **The Leadership Crash Course: How to Create Personal Leadership Value**, Philadelphia, PA: Kogan Page Publishers, 2006.