“Leadership development in undergraduate programs: an example at the U.S. Coast Guard Academy”

AUTHORS	Alina M. Zapalska Nick Zieser Tyler Kelley
ARTICLE INFO	Alina M. Zapalska, Nick Zieser and Tyler Kelley (2016). Leadership development in undergraduate programs: an example at the U.S. Coast Guard Academy. <i>Problems and Perspectives in Management</i> , 14(1), 30-43. doi: 10.21511/ppm.14(1).2016.04
DOI	http://dx.doi.org/10.21511/ppm.14(1).2016.04
RELEASED ON	Wednesday, 02 March 2016
JOURNAL	"Problems and Perspectives in Management"
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES

0

NUMBER OF FIGURES

0

NUMBER OF TABLES

0

© The author(s) 2022. This publication is an open access article.

SECTION 2. Management in firms and organizations

Alina M. Zapalska (USA), Nick Zieser (USA), Tyler Kelley (USA)

Leadership development in undergraduate programs: an example at the U.S. Coast Guard Academy

Abstract

The paper presents specific examples of leadership training practices and educational activities that have been successfully implemented in an undergraduate program at the U.S. Coast Guard Academy. The purpose of this study is to illustrate a model of experiential learning that facilitates leadership development in an undergraduate program. The integration of cadets' learning in a classroom, during students' engagement in service learning, community engagements, internships, and extra-curricular activities allows cadets to develop necessary leadership skills required for graduation and employment in the future. A structured experiential learning environment allows students to discover their own styles of self-leadership and explore new leadership approaches. Concrete experience, reflective observation, abstract conceptualization, and active experimentation are exercised in the learning communities that include faculty, coaches, students (peer groups) and the community they serve.

Keywords: undergraduate education, leadership, model of self-leadership and experiential learning.

JEL Classification: A, Z00.

Introduction

Today, in a constantly changing business environment, domestic and international organizations, whether private or public, have to react flexibly to changing conditions. Higher education must prepare graduates to function effectively in this complex global society. Institutions of higher education hold a responsibility to students to provide them with opportunities to develop the skills necessary to succeed in the world they are entering. The Academic accreditation boards expect that academic undergraduate programs allow students to: develop, master, and practice critical thinking and problem-solving skills; form intercultural acumen and ethical responsibility; and develop effective leadership skills (Wurr & Hamilton, 2012). The country's ability to respond and foster economic growth in the presence of the current challenges will depend most importantly on the quality of leadership demonstrated at all levels of society.

Because of the increasing challenges, there is need for advancing and implementing new methods of leadership education as a process for effective and positive change (Zimmerman & Burkhardt, 2000). Several authors argue that leadership development and training must become an integral part of a student's college education in order for young individuals to be ready to take on the leadership roles when they enter the business world (Manz & Sims, 2001; Manz & Neck, 2004; Konradt,

Andreßen & Ellwart, 2009; Armeli, Meitar & Weisberg, 2006; Stewart, Carson & Cardy, 1996). Many public and private organizations have already considered leadership development to be critical and as a result have already started implementing leadership development changes. Fulmer (1997) says that almost every organization tries to create leaders who are capable of helping their organizations shape a more positive future.

This paper discusses how student learning and development of 21st century leaders can be achieved in and outside the classroom to ensure that the graduates are prepared to meet the challenges they will face throughout their professional careers and lives. The paper argues that leadership is an important outcome of the U.S. Coast Guard (CG) officers' undergraduate education. The goal is to present examples of effective educational leadership strategies that have been successfully developed and implemented in leadership education and development programs at the U.S. Coast Guard Academy (CGA). The paper outlines that the leadership education and training at the CGA must first be delivered through the implementation of self-leadership development and discovery followed by self-team, team, business unit, and organization leadership.

The self-leadership development program at the CGA identifies important processes, skills, and opportunities that promote effective self-leadership advancement in students and represents an outstanding model to be used by other undergraduate institutions that strive to develop effective leadership programs in undergraduate programs. The development of self-leadership is achieved through the existing curricular and non-curricular programs. The leadership

© Alina M. Zapalska, Nick Zieser, Tyler Kelley, 2015.

Alina M. Zapalska, Ph.D., Professor, Department of Management, U.S. Coast Guard Academy, USA.

Nick Zieser, LT., Instructor, Department of Management, U.S. Coast Guard Academy, USA.

Tyler Kelley, LT., Instructor, Department of Management, U.S. Coast Guard Academy, USA.

development program at the CGA does not follow a set method for developing each cadet's individual self-leadership skills, but rather provides them with frameworks to apply to their experiences. With this methodology, there is a great deal of flexibility in developing and providing instructional practices and activities suitable for promotion and development of self-leadership skills in an undergraduate program. However, many leadership development methods that are practiced are supported by experiential learning centered on the Kolb's Cycle of Experiential Learning theory (Kolb, 1984).

Based on the Kolb's Cycle of Experiential Learning theory, an effective learner is a person who progresses through a cycle of four stages of concrete experience followed by observation and reflection on that experience which leads to the formation of abstract concepts (analysis) and generalizations (conclusions) which are then used to test hypothesis in future situations, resulting in new experiences. By using this experiential learning model, the CGA cadets progress through a four-stage process of leadership development where they deepen the knowledge of themselves, define self-leadership, develop self-leadership skills and practices, and finally practice self-leadership skills in and outside the classroom through on- and off-campus activities and programs.

1. Literature review

The emergence of information technology and the challenges of globalization have drastically transformed the expectations and behavior of managers and workers in organizations. Over the years, leadership education has been altered as organizations are looking for new ideas and forms of leadership development and more effective teaching methods in order to face the challenges that

are present in today's economy (Fulmer, 1997). Academic programs have developed a cross-disciplinary approach to leadership education in order to provide educational opportunities that create and enhance the philosophy of leadership. The curricula across many academic institutions has focused on expanding students' knowledge, skills, and understanding of specific leadership theories, concepts, models, and modern leadership problems in applied settings (Bass & Avolio, 1994). The goal is to prepare students for leadership roles and responsibilities on campus and in career, community, and family leadership roles.

There are numerous models of leadership education and some have proven to be instructive and effective in past years (DiLiello & Houghton, 2006). For years many studies have been arguing that the first step for leadership development is recognized in the process of self-leadership practice. Self-leadership had been ignored in the organizational behavior management literature until the research results of Manz (1986) and Manz and Sims (1986, 1993, 2001). In their work, Manz and Neck (2004) proposed self-leadership as a replacement for leadership arguing that individuals do not require supervision because of development of their self-planning, self-direction, self-monitoring, and self-control skills. Most definitions define leadership as the process of social influence which occurs in certain situations and moves towards achieving a specific goal or goals (Bass, 1981; Bass & Stogdill, 1990); whereas self-leadership has been defined as a "...process of influencing oneself to achieve the self-direction and self-motivation necessary to behave and perform in desirable ways..." (Houghton & Neck, 2004, p. 1). Similarly, Manz (2001) views self-leadership as "...a philosophy and a systemic set of actions and mental strategies for leading ourselves to higher performance and effectiveness..." (p. 6).

Fig. 1. Knowledge work and management approach to leadership development in modern organizations

Self-leadership is crucial in knowledge work and has been articulated as the ideal management approach in modern organizations (Pearce & Manz, 2005; Manz & Sims, 2001). Figure 1 presents elements of knowledge work and management approach in modern organizations where leadership theory is designed and developed in order to improve personal effectiveness by influencing and enhancing individuals' affect, cognitions, and behaviors (Bandura, 1997). The model has been predominantly validated through five levels of organizational domains of leadership development that include: self, self-team, team, business unit and organization. All domains are critical in educational and training processes and organized in a sequence that allows leadership skills to be developed gradually but with increasing leadership responsibilities within organizational structures.

In support of knowledge work and the management approach in modern organizations, Bandura (1997) argues that individuals with well-developed self-leadership skills are able to influence their own cognition, motivation, and behavior to mobilize the motivation and actions required to meet organizational demands and expectations for organizational success. Pertaining to organizational behavior as well as knowledge work and the management approach in modern organizations, research has shown that self-leading people demonstrate high levels of job performance (Stewart et al., 1996), make more creative decisions (Carmeli et al., 2006), and express high levels of self-efficacy, positive affect, and job satisfaction (Neck, 1996; Neck & Manz, 1996).

Choi (2007) argues that self-leadership can be a reflection of one's personality, traits, or preference structure. In this context, the self-leadership literature argues that empowering leaders can encourage followers to take initiative to manage and control their own behavior which leads to efficient self-leadership that eventually leads to proficient leadership. Empowering leaders delegate significant responsibilities related to their followers' own jobs and emphasize follower self-influence rather than providing followers with specific tasks, orders, and commands. Empowering leaders lead their followers to influence themselves to achieve high performance as they believe that followers themselves are an influential source of knowledge and direction, and therefore they strive to develop followers who are effective at self-leadership (Bryant & Kazan, 2013; Pearce, 2007; Fiedler, 1996).

To develop and master self-leadership skills, explicit instruction must be coupled with opportunities for immersion in leadership, especially for the students in civilian academic institutions who in general lack such

opportunities (Bennis, 1989; Kouzes & Posner, 1990). A major obstacle to a comprehensive approach to teaching and developing self-leadership skills is that these intangible skills do not apply well to the same methods that are being traditionally used in teaching and assessing core academic subjects. Blase and Blase (2000) argue that the challenge to teaching leadership is the ambiguity of the concept and that leadership development and training require a comprehensive and multifaceted approach that integrates formal instruction to help students conceptualize effective leadership with opportunities to experience self-leadership through experiential learning and training. Fiedler (1996) supports this view stating that all the initiatives that prove successful include leadership theory to identify theories and the specific actions and qualities that make effective self-leadership followed by self-leadership training and other educational methods. The author also argues that practicing self-leadership to become a successful leader requires specifically determined and clearly defined goals and practices that inspire confidence, foster cooperation, and instill trust. Those tasks are impossible to teach exclusively with lectures and textbooks or to practice and test solely in a classroom setting.

Leadership educators are constantly searching for natural self-leadership laboratories where students can practice their own instinctive leadership tendencies and test the leadership processes learned in class. Several leadership educators recommend that self-leadership should be taught through active participation in meaningful and organized on-campus and off-campus activities (Townsend, 2000; Bennis, 1989; Bass and Avolio, 1994; Kouzes and Posner, 1990). The best practice in leadership education is to provide students with opportunities that allow them to exercise their self-leadership through "self" and "self-team" which is the most important element of knowledge work and management approach to leadership development in modern organizations as presented earlier in Figure 1. Giles et al. (1991) argue that students who provide a purposeful service to the community become engaged in experience and reflection of activities that pertain to their leadership learning curricula. One way to develop leadership skills among college students is through the use of experiential learning projects, internships, service learning and community services. John Dewey defines it "learning by doing" and Ryan and Cassidy (1996) define it as creating "lifelong learners" through which students develop: (1) understanding of self; (2) understanding of and ability to relate to others and community; and (3) acceptance of responsibilities inherent in community membership whether business unit, a whole organization or society.

2. Leadership education and models of experiential learning

Student leadership educational programs have been addressed in higher education literature, but college administrators still do not know enough about how different types of learning experiences promote desired leadership skills outcomes upon graduation (Cress et al., 1991; Komives et al., 2004). Researchers have explored the relationship between experiential learning and leadership (Astin & Astin, 2000; Astin et al., 2000). For example, Bialek and Lloyd (1997) examined the long-term effects of experiential learning in college after graduation while Pascarella and Terenzini (1991, 2005) found a direct relationship between involvement in student organizations and the development of leadership skills. Similarly, Cress et al. (1991) argue that leadership development programs enhance academic performance, self-efficacy, civic engagement, and personal development. Studies that focused on leadership theory and skill-sets have also considered experiential learning as an approach to promoting leadership identity (Pascarella & Terenzini, 2005).

The most common types of experiential learning in an academic setting today are service learning, volunteer service, internships, and study abroad, (Astin & Astin, 2000; Dugan, 2006b) as they all employ actions that are solely based on the

Experiential Learning model developed by Kolb (1984). Service Learning is a pedagogy that combines the concrete experience of community service with reflective observation, which is an example of academic instruction focusing on critical and reflective thinking. Volunteer service is student engagement in the community by providing service to a philanthropic organization or a business in the local area with no course credit or connection to academic course material. Internships, which are usually credit-bearing, occur when students participate in field-based education through cooperative education, practicum experiences, or classroom-based hands-on laboratory activities. Study Abroad Program is an arrangement by which students complete part of their degree program through educational activities outside the country. Such activities help students recognize the nature of leadership and prepare them to develop into leaders on campus, in the community, and in their professions (DiConti, 2004). Similarly, Dugan (2006) found that participation in student leadership training, student organization membership, service learning, and community service positively affected leadership development. The author suggested that further research was needed to distinguish between types of involvement and how this involvement differs across institutions for educators providing intentional and effective student leadership opportunities using more vigorous methodologies.

Fig. 2. Kolb's cycle of experiential learning model

Source: Smith, M.K. (2001). David A. Kolb on Experiential Learning, the Encyclopedia of Informal Education. <http://www.infed.org/biblio/b-explrn.htm>.

Experiential learning merits our attention to Experiential Learning theory (ELT) that has proven to transform experience into knowledge for students who can then use the knowledge for individual and collective development and therefore, link education, work, and personal development (Kolb, 1984). Kolb's ELT is represented by the four modes of the learning cycle, called: Cycle of Experiential Learning, consisting of four-stages of leadership development: *concrete experience*, *reflective observation*, *abstract conceptualization*, and *active experimentation*. The Kolb's Cycle of Experiential Learning model, presented in Figure 2, illustrates how experience is transformed through reflection into concepts, which are used as guides for active experimentation. In the first stage, the learner actively experiences an activity. In the second stage, the learner consciously reflects back on that experience. In the third stage, the learner attempts to conceptualize a theory or model of what was observed. In the fourth stage, the learner is trying to plan how to test a model or theory or plan for a new experience.

Bringle and Hatcher (1996) also argue that service learning plays a major role in the development of self-leadership skills as a method of teaching through which students apply their academic skills and knowledge to address real-life needs in their own communities. The authors claim that by focusing on first "self" or "individual" and then "self-team" or "community," service learning has a positive influence on personal, attitudinal, moral, social, and cognitive outcomes and the potential to enrich learning and renew communities where self-leadership development through experiential learning benefits the students. Community projects and service-learning programs empower students to identify community problems and teach them how to design solutions to address those problems while leading to self-leadership development. Through awareness of their community's needs, students become more personally invested in the project and more eager to find ways to make it successful by taking charge which leads to effective self-leadership. According to Wurr and Hamilton (2012), leadership and service-learning programs and policies are designed to provide students with multiple pathways to become engaged learners as leaders and co-curricular programs with concrete experiences and active experimentation are designed for students interested in learning and developing self-leadership skills.

This paper presents how the Kolb's Cycle Experiential model supports teaching modes and techniques for self-leadership development at the CGA. The techniques presented highlight four conditions under which an efficient learner studies better when allowed to: (1) observe and collect a wide range of information;

(2) presents sound logical theories to consider; (3) converges to learn better when provided with practical applications of concepts and theories; and (4) accommodates learning better when provided with "hands-on" experiences. While students have individual preferences for learning and developing self-leadership skills, the integration of their experience, observation, concepts, and actions, create a holistic lifelong learning process that is easily transferable. Experiential learning that combines active, engaged work with thoughtful experience, reflection and discussion, which is also supported by Dewey (1933), has been considered to be the essential pedagogical practice that connects the service experience with academic study and promotes the cognitive development of self-leadership skills (Eyler, 2002).

3. USCGA leadership development programs

The CGA, located in New London, Connecticut, is the smallest of the United States federal military academies. It offers bachelor degrees in eight majors – Civil Engineering, Electrical Engineering, Mechanical Engineering, Naval Architecture and Marine Engineering, Government, Management, Operations Research and Computer Analysis, and Marine and Environmental Science. The CGA educates, trains and develops leaders of character who are ethically, intellectually, and professionally prepared to serve their country and humanity. Since 1876, leadership, moral, ethical, and honor education has been fused into the training of the Corps of Cadets and addressed by the enforcement of the Honor Code and Leadership training programs. During four years of academic, military and athletic programs, the Commandant of Cadets, the academic faculty, Department of Athletics, and the Leadership Development Center work together with the Corps of Cadets to guide and monitor cadets' development and implementation of moral-ethical and leadership skills. An Academy-wide culture of leadership is required to facilitate learning across academic disciplines. Cadets are exposed to leadership theory as well as moral-ethical behavior, honor and integrity through many facets including the long-standing tradition of guest speakers to the Corps of Cadets. Spot-light lectures provided to the entire Core of Cadets are just one example of these activities. These guest speakers provide cadets with role-model examples of successful individuals and reinforce the importance of self-leadership and honorable living and consideration of others. Additionally, through mentorship by dedicated civilian and military faculty, leadership education also focuses on developing in cadets self-leadership skills with propensity to live honorably with the highest conduct standards.

Fig. 3. Model of self-leadership development

The self-leadership development process illustrated in Figure 3 helps depict the self-leadership development process at the CGA. It is a five-step model of self-leadership development which focuses on the process of self-influencing through which individuals control their own behavior, influence and lead themselves to achieve the self-direction and self-motivation necessary to perform (Neck & Houghton, 2006). It also combines behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies, designed to positively influence personal effectiveness (Neck & Houghton, 2006). Self-leadership requires *Know Yourself* which may include: strengths, weaknesses, values, needs, learning styles, teaching, personality attributes, and leadership style. A second stage of self-leadership development model, *Lead Yourself*, can be described as a self-imposed influence process that primarily aims to support individuals to deal effectively within this complex world and to lead to fulfillment in life (Neck & Manz, 2013). Practicing self-leadership strategies, such as self-observation,

self-goal setting, self-reward, self-punishment, self-cueing, task enhancement, shaping perceptions, beliefs, mental imagery and self-talk, can contribute to a number of predictable outcomes and lead to enhanced performance (Neck & Houghton, 2006). Self-leadership implies personal growth and maturation and is about effectively leading oneself as an individual or a member of a team. *Lead Yourself* requires numerous skills that include: time management, organization, self-care, self discipline, and perseverance. *Broaden Your Perspectives and Understand Others* includes but is not limited to: understand others, hierarchy of needs (racial, cultural, gender, religious, and diversity and commonalities), power, privilege, oppression, liberation; and individual and institutional discrimination. In *Develop and Refine Skills* Stage individuals are expected to: understand leadership theory, develop and acquire good communication skills, group development and inclusion capabilities, and critical thinking skills. All four stages are expected to provide all necessary skills to be able to enter Stage 5: *Lead Others*.

Fig. 4. Leadership development program at the USCGA.

Alignment of leadership education with academic, athletic, and military training programs is essential at the CGA. The Cadet Division and the CGA's Institute for Leadership reviews methodologies in practice at the CGA for achieving self-leadership development and training processes and programs, and through campus-wide participation integrates, refines, modifies, and improves these processes. Plans define specific learning objectives with regard to self-leadership, propose assessment vehicles and methods, and recommend program enhancements to facilitate the achievement of the leadership learning objectives defined by both the U.S. CG's mission and the CGA's mission. The development and support of leadership development in the Corps of Cadets has been strongly supported by all members of the CGA faculty, staff, military officers, enlisted, and cadets. The CGA strategy is that success in achieving self-leadership development within the Corps of Cadets significantly enhances the climate in which intellectual, physical-athletic, and leadership development are maintained. Every employee of the CGA is part of the leadership experience, and each bears a responsibility to exemplify the virtues and values expressed in the CGA mission. Intellectual leadership development is accomplished through the academic curricula of the CGA and some extra-curricular activities. A visual diagram for the Leadership Development Program at the CGA is presented in Figure 4.

According to Figure 4, not all of the learning goals for the CGA's cadets, and especially for leadership development purposes as defined by the CGA mission statement, are accomplished through credit-bearing courses. Some of the shared educational goals for cadets are achieved primarily through specially coordinated programs of military, residential life, and co-curricular activities. Such learning is not classroom-based and is not fostered by an instructive pedagogy. The extra-curricular learning goals typically focus on self-leadership skills, attitudes, and values. These learning goals also focus on helping students apply knowledge and concepts in practical situations and providing opportunities for the integration and application of knowledge. Cadet learning outside the classroom occurs through contact that the cadets have with one another, through their interaction with particular programs, and through various environments in which they operate. Cadets have considerable discretion to select, organize, and reflect upon as part of self-leadership development as those extra-curricular learning opportunities available to them are being developed through three types of leadership styles: autocratic, democratic, and liberal.

An important area of measurable extra-curricular learning is achieved through the cadets' involvement in the social and residential life at the CGA. Cadets are exposed to self-leadership development and learning opportunities by virtue of living together, designing their own social interactions, interacting regularly with faculty, staff, and administrators outside the classroom, and being governed by a standard code for cadet conduct and academic integrity. The military, residential, and social environments are designed to bring together talented, engaged, and energetic cohorts of cadets with various leadership abilities, interests, racial, socioeconomic, and ethnic backgrounds to promote self-leadership, a code of conduct, and an academic honor code. Additionally, cadets support self-governing organizations and clubs to promote and develop self-leadership training outside the academic or military classroom.

The CGA faculty and staff assist by mentoring cadet clubs and activities in which cadets elect officers and develop bylaws and missions. Cadets become leaders of their organizations or clubs. They practice self-leadership skills by becoming responsible for the clubs' budgets and developing quality of educational and ethical programs that meet the mission statement of the CGA. The Commandant of Cadets, the Academic Dean, the Associate Dean, and the President of Alumni Association oversee the cadet activity budget and together with the CGA faculty and staff coordinate those club activities to make sure they provide specific leadership training and experiences outlined by the CGA's mission statement. The CGA Alumni Association and the CGA Cadets Parents Association provide the majority of funding for the extra-curricular programs and activities.

4. Self-leadership development through the USCGA curricular program

In teaching the core curricula, individual faculty members have significant influence on the Corps of Cadets as they develop rapport with cadets in their classes. To satisfy the requirements for the graduation, the CGA faculty must implement some elements of honor and respect, teamwork, and most importantly leadership into their curricula. The Administration is responsible for supporting the teaching military staff and academic faculty to encourage the reinforcement of leadership education. Established programs and formal curricula exist at the CGA. For example, the Moral and Ethical Philosophy course emphasizes the imperative to provide leadership education by focusing on moral and ethical elements of leadership. The CGA has a traditional distributional

approach to general leadership education and its clear articulation of student learning at the beginning of a course and throughout the course that helps cadets know what is expected of them. This course's grading criteria frequently includes the evaluation of leadership and teamwork skills.

The CGA's Management Department, with its Association to Advance Collegiate Schools of Business (AACSB) accredited program, supports the academic program of leadership development by providing efficient and effective services for the holistic development of cadets' self-leadership. The mission of the Department is to provide academic coursework on leadership theories and practices which serve the leadership, managerial, and communication needs of CG officers desiring to advance professionally in the organization. While elective and major specific courses such as Diversity and Leadership are offered, an Organizational Behavior and Leadership (OB&L) course is required for all cadets in order to develop leadership skills necessary for cadets when they graduate. This course is taught so the cadets are able to answer the question: "How will I lead?" and delivered at a pivotal time in the cadet's leadership development. Just after taking the course, cadets embark on their "cadre summer", where they are responsible for leading and training the incoming class of new cadet recruits at the CGA. This transformational leadership experience helps to instill the Coast Guard leadership concepts, and serves as a foundation for leading others in the fleet as junior officers.

In order to better prepare cadets for this first leadership experience, the three-part OB&L course explores: "why you act the way they do, who cadets are as leaders, and how to understand and lead teams." Upon completion of the three credit courses, students are expected to achieve the following learning outcomes: (1) be able to understand their own self-leadership styles and the strengths and weaknesses of that style; (2) be capable of entering into a team environment in a leadership role, assess the dynamics of that team, and adapt self-leadership style to effectively lead the individual members and team as a whole; (3) possess a thorough understanding of quality "followership" and be capable of developing high quality, more engaged, more critically thinking followers; and (4) be able to articulate, evaluate, and implement common academic and CG organizational behavior and leadership frameworks.

The foundation of this course rests in the Coast Guard's Leadership Development Framework. This

framework groups twenty-eight leadership competencies into four main categories: *Leading Self*, *Leading Others*, *Leading Performance and Change*, and *Leading the Coast Guard*. The OB&L course specifically focuses on the first two categories of *Leading Self* and *Leading Others* as depicted in Table 1. These are first thirteen leadership competencies that cadets are expected to learn and understand. The first half of the course has a strong focus on self-leadership or *Leading Self*. The framework for this course is the same as the framework used to develop leadership across the other facets of the Academy, ensuring the thirteen leadership competencies are inherent in all aspects of the cadet's holistic development. Distinguishing the thirteen competencies by leading self and leading others establishes a developmental progression. In order to lead others you must first be able to lead yourself. Understanding the distinction is essential to developing the situational awareness needed to be a strong leader of character. Integration of this framework into academic models in the OB&L is essential to the holistic development of cadets into Coast Guard Officers.

While OB&L is the only leadership course required for the entire corps of cadets, the course Leadership, Organizational Development, and Change (LODC) is part of the curriculum for cadets in the Management major. LODC builds off the foundation of self-leadership set in the OB&L course and applies learned concepts, such as Kolb's experiential learning model to leading organizational change. Through their own experiential learning, cadets in LODC are expected to achieve the following: (1) Understand how to lead performance and change; (2) Develop a change plan for an organization; (3) Apply organizational change theory to their own experiences as cadets through a change project. These objectives solidify the concepts of organizational change, while building off leadership theory from OB&L to deepen cadets understanding of leadership and experiential learning.

With the foundation for leadership self and leading others laid in academics and training, cadets are then encouraged to apply these concepts to all leadership experiences at the CGA. The most common forum is extra-curricular activities, where cadets choose to dedicate their time and effort. Many of the extracurricular activities at the CGA are volunteer-based, so cadets gain extraordinary leadership experience leading themselves and their peers through the various sports and activities they participate in outside required commitments at the CGA.

Table 1. Leading self and leading others leadership competencies

Leadership competency	Characteristics	Type of leadership
Accountability & responsibility	Recognizes the impact of personal behavior and accepts responsibility for the person performance and the performance of others	Leading self
Aligning values	Aligns personal values with class core values to model for others	Leading self
Followership	Looks to leadership for guidance and feedback through active listening and asking questions when appropriate	Leading self
Health & well-being	Maintains personal health and well-being and assists others in maintaining a healthy lifestyle	Leading self leading others
Self-awareness & learning	Recognizes own strengths and weaknesses and pursues self-development	Leading self
Personal conduct	Recognizes the impact of personal behavior and conduct on others	Leading self
Technical proficiency	Knows classroom and personal roles in fulfilling mission tasks for self and others	Leading self
Effective communications	Applies basic conventions of cadet communication with self and other both orally and in writing	Leading self Leading others
Team building	Is open to views of others; works in collaborative, inclusive outcome oriented manners with supervisors and others	Leading others
Influencing others	Models a respectful understanding of others' positions, while gaining the ability to achieve cooperation by giving cooperation	Leading others
Mentoring	Recognizes own strengths and weaknesses and uses mentors for development	Leading others
Respect for others & diversity management	Treats all individuals fairly and in compliance with class policies	Leading others
Taking care of people	Takes appropriate action to safeguard the welfare of others	Leading others

With the foundation for leadership self and leading others laid in academics and training, cadets are then encouraged to apply these concepts to all leadership experiences at the CGA. The most common forum is extra-curricular activities, where cadets choose to dedicate their time and effort. Many of the extracurricular activities at the CGA are volunteer-based, so cadets gain extraordinary leadership experience leading themselves and their peers through the various sports and activities they participate in outside required commitments at the CGA.

5. Self-leadership development through the USCGA extra-curricular programs

Equally important to providing direct leadership instruction in a traditional classroom is offering students the chance not to observe but engage with effective leaders in hands-on and real-world experiences like interscholastic, intercollegiate, and intramural sports, physical education classes, and physical fitness training. The CGA provides numerous opportunities for structured and focused learning beyond the classroom. Some of those programs include: no-academic credit lectures, presentations, and discussions; advisory and training sessions on problem areas presented by individual cadets or cadet organizations; peer educator programs in which cadets are trained to participate in the extra-curricular learning processes of other cadets; recognized clubs, organizations, athletic teams, and groups that work directly and routinely with advisors, coaches, and supervisors; internships; Honors Program activities; study abroad trips, community service activities, and service learning trips.

Using a Kolb's model of experiential learning, cadets develop and transform into effective learners when they participate in extracurricular programs. They progress through a cycle of four stages: having a concrete experience followed by observation and reflection on the experience which leads to the formation of abstract concepts (analysis) and generalizations (conclusions) which are then used to test hypothesis in future situations, resulting in new experiences. The model assumes that the process of experiential learning is circular and cadets can begin with any of the four modes. Cadets are expected to develop as effective leaders who can rely on the four learning modes in whatever combination the situation they require.

The responsibility for the physical-athletic development of the Corps of Cadets rests primarily with the Athletic Division. Physical fitness is an important component of cadet life, and the benefits of instilling into each cadet an appreciation for maintaining an active personal fitness regime are life-long, and most importantly an element of leadership development. The CGA Athletics Division considers physical fitness as self-leadership development process as part of the mental discipline, personal relationships, and moral strength that can be acquired through participation in competitive sports when teamwork, self-leadership, and leadership are expected to be strongly practiced and developed. Physical-athletic and leadership development is accomplished through interscholastic, intercollegiate, and intramural sports, physical education classes, and physical fitness training. Some of the cadet sport clubs, such as Boxing Club, Water Polo Club, or

Rugby Club, also provide athletic and self-leadership training for the cadets. Professional leadership development is accomplished by the various official CGA programs and through the mentorship of cadet leaders by the Cadet Division and staff leadership advisors.

The CGA also provides programs that address moral and ethical development. Extra-curricular activities provide the opportunities for cadets to develop these various skills that are required for self-leadership to occur and be mastered. The intended learning outcome of these programs is to teach three core concepts: to live one's life with honor, to have respect for others, and express devotion to duty. Concepts such as fair play, teamwork, and sportsmanship are moral constructs that are derived directly from the understanding of leadership, honor, and respect. The mental discipline, healthy life-style choices, and personal bonds of commitment to teammates properly developed through competitive sports are manifestations of moral reasoning and support the primary learning objectives of self-leadership education. The linkage between physical-athletic development and leadership development has been observed. The emphasis on health fitness is also evident at the CGA in the leadership learning outcomes and the curriculum of the Physical Education through the Athletics Department. In all these areas, health fitness is the logical choice because it enhances the individual's capacity to handle the physical demands of the job, reduces the risk of injury and chronic disease, assists in weight management, and helps individuals pursue physically active recreational activities which constitute the elements of self-leadership. Through self-leadership and discipline all individuals can improve their health because fitness levels are dependent on a sound exercise program, not inherent athletic ability.

There are many collaborative efforts among the academic, military, and athletic divisions of the CGA which articulate common learning goals and measure student learning outcomes. While the extra-curricular programs share many learning goals with the academic program, they have additional goals for cadets that may not be expressly articulated as part of the academic programs of the Academy. One of the strengths of the current extra-curricular programs is the extent to which all departments are working to develop and enhance student learning and self-leadership development beyond the classroom. The rationale for the CGA extra-curricular programs has been to develop intellectual, physical-athletic, professional leadership, and moral and ethical excellence as a prerequisite for

leadership development. Student-run extra-curricular programs at the CGA are excellent incubators for delivering the full spectrum of challenging situations which call for different styles of leadership. An excellent example of an extra-curricular activity that incorporates and develops professional leadership competencies is the Cadet Investment Club. A student-run cohort of financially inclined students from all disciplines on campus; the Investment Club offers many interesting and unique experiences which allow students the opportunity to go beyond self-leadership practice to the development and training of various leadership styles.

Another example is the capstone course for cadets majoring in Management which is a hybrid of classroom learning and experiential consulting. The cadets, who are in their fourth year of study, are divided into teams of four to five students and given problem statements submitted by non-profit organizations in the community and from other independent units in the Coast Guard. Cadets are tasked with using their academic training to tackle real-life challenges. Although each team is assigned a faculty advisor for assessment purposes, it is the responsibility of the cadets to organize the work flow, coordinate meeting times with the client(s), and manage the logistics of traveling to make observations and collect data. These consulting projects are ideal for allowing cadets the opportunity to step beyond simply managing self and managing self-team, and instead focus on leading the team. The projects are of such a breadth and depth that teamwork is crucial; the tasks are purposefully designed so that no one cadet can carry the weight for the others. Along the way the faculty advisor acts as an observer to all team meetings and is given a close-up view of the various team dynamics at play. The advisor creates opportunities for the team to provide feedback to each other and often moderates feedback sessions to accelerate the movement from forming to storming, norming, and finally, performing.

A final example is the summer academic internships offered for cadets during the summer between their third and fourth years of study. These voluntary assignments take students from all eight academic majors and send them to various locations throughout the country, based on the education background of the cadet and the needs of the service. For example, cadets are regularly sent to the office of the Chief Financial Officer at USCG Headquarters. The cadets are integrated into the financial management workforce of active duty of Coast Guard Officer and civilian professionals and are expected to make meaningful contributions to

on-going projects. During the summer of 2015, two cadets joined the team responsible for conducting internal property audits at various Coast Guard bases along the East Coast of the United States. After making their observations and documenting discrepancies, they made adjustments to the value of assets on the Coast Guard's balance sheet. Their success in this project, like all other internships, is largely determined by their ability to exhibit positive self-leadership competencies. Additionally, internships have proven beneficial by allowing them the opportunity to make direct applications between coursework and the responsibilities of commissioned officers.

The CGA recognizes the importance of community or service learning in the form of experiential education where learning occurs through a cycle of action and reflection. During community or service learning cadets work with others through a process of applying what they are learning to community problems, and, reflecting upon their experience as they seek to achieve real objectives for the community and deeper understanding of their self-leadership and other leadership skills. Community and service learning are generally understood as an experiential learning pedagogy that links academic work and community engagement through critical reflection. They continue gaining popularity in higher education due to their potential to provide transformational learning opportunities for students and to contribute to community-building and development.

The engagement of cadets in service learning helps them acquire, practice and advance all types of leadership skills required of them upon graduation and employment in their CG careers and beyond. Service learning as an educational method by which participants learn and develop through active participation in service that is conducted in, and to meet the needs of, a community or organization, allows cadets to develop knowledge of self and others; develop self-leadership skills and practices; and exercise self-leadership skills through service. Through community work and service learning cadets apply their academic skills and knowledge to address real-life needs in their communities or organizations and are enriched by experiences acquired in ethnically and culturally diverse environments. Service learning combines the concrete experience of community service with reflection observation, which is the academic instruction focusing on critical and reflective thinking while impacting leadership acquisition and growth and contributing to leadership identity. Community service and service learning develops

new skills and an understanding of the community or organization's needs and then uses those skills while leading projects which have an immediate positive impact.

The Community Service Division under the auspices of the Cadet Division supports cadets and the local community in a common effort to integrate academic study with responsible community service, given the fact that an active learning strategy connects students to the academic experience in a real world setting. Cadets are required to engage in multiple community or service learning experiences prior to graduation. Service and community learning benefits students by providing opportunities to develop self-leadership skills, discover talents, and provide meaningful personal insight into self-leadership styles. Additionally, cadets learn what they are capable of as leaders, and what type of leader they want to become. Through community service, ideas are generated and cadets are able to make decisions with appropriate facilitation from learning communities. Their experience is in line with research-based models for self-leadership. High quality feedback helps set realistic, individualized goals for self-leadership development in line with research-based principles of leadership and emotional intelligence. They also allow cadets to shape their values and aspirations, while providing opportunities to practice self-leadership styles. A service or community learning program develops self-leadership skills in students as they learn to work collaboratively as leaders and team players with the community. They learn that the most effective leadership is that which encourages the active participation and indeed, leadership of others.

The Cadet Division and the Institute for Leadership is applying the pedagogy of service learning in a wide variety of situations. Service learning allows students to gain real-life experiences by interacting with community partners, develop a sense of community with classmates and local organizations, retain more of what they learn, and explore career options while applying what they have learned in the classroom through reflection. Reflection provides insight into a cadet's own self-interests when he or she reflects on how service has made a difference in his or her own life. Reflection allows a student to develop growth and understanding in several areas including: career exploration, civic responsibility, social change and justice, professional development, leadership development, intellectual pursuit, spiritual fulfillment, and political consciousness.

These real life experiences are an opportunity to enhance organizational leadership skills necessary to manage both personnel and materials within the CG organization. Cadets' self-leadership development is assessed in various ways and it consists of the list of specific goals or outcomes from of service learning as they relate to a cadets' area of concentration or program of study and the list of planned activities that helps reach these specific self-leadership goals throughout four years of military, academic, athletic and leadership training.

Conclusions

The CGA has created an environment with institutional goals for leadership development that must be achieved inside and outside the classroom. The program was developed to ensure that CGA graduates will be prepared to meet challenges they will face throughout their professional careers. The CGA's mission has clearly defined goals for both curricula and extra-curricular learning in a systematic way to across the divisional boundaries for self-leadership development. Its mission statement and strategic plan identify goals and designate the Academy's faculty, officers and administrative staff who are responsible for creating, developing, and maintaining successful leadership programs where cadets can connect knowledge with self-leadership skills development that can be acquired in and outside the classroom. This is accomplished by placing cadets in curricular and extra-curricular opportunities in order to enrich their leadership educational experience. Equally important to providing direct instruction is offering students the chance to observe and engage with effective self-leaders in hands-on and real-world experiences, such as through community involvement, internships, job-shadowing and mentoring. Mentorship is a strong component of the self-leadership program. Students follow a chain of command, enabling lower classmen to observe the upper classmen as they lead, teach and make decisions, before assuming the roles themselves. The mentors, on the other hand, experience authentic responsibility for others, which can instill in them genuine concern for the success of the larger group, a key component of effective leadership.

The CGA service-learning and community engagement represent experiential learning as presented by Kolb (1984) and combine an active and engaged work with thoughtful reflection and discussion supported by Dewey (1933). Reflection is considered to be the essential pedagogical practice that connects the service experience with academic study and promotes the cognitive development that equips students to learn and understand social problems. Effective self-

leadership learning is seen when a cadet progresses through a cycle of four stages: of (1) having a concrete experience followed by (2) observation of and reflection on that experience which leads to (3) the formation of abstract concepts (analysis) and generalizations (conclusions) which are then (4) used to test hypothesis in future situations, resulting in new experiences. Experiential learning practices well demonstrated via service-learning or community service, create space for student self-leadership development because they provide a living-laboratory for students to engage in critical thinking, to experience complex social issues, and to gain real-world experience. By taking students out of the classroom and bringing them into the community, students translate theory to practice, generating real-world experiences they can draw from to better integrate academic learning.

The CGA extra-curricular activities as well as community service or service-learning are high-impact educational practices that support successful undergraduate development of self-leadership skills. Service learning and community service contribute to emotional intelligence and ethical leadership. Cadets who participated in service-learning report a heightened awareness of ethical issues and of self-awareness than those cadets who did not participate in service-learning programs. Service-learning also provides cadets with opportunities to experience seeking solutions to complex problems. Service-learning is also an effective pedagogy for self-leadership development because it offers opportunities for personally relevant, identity-defining experiences with transformational experiences as real moments in which individual undergo deeply-rooted shifts in self-awareness and self-identity.

The CGA undergraduate program is committed to forming and implementing both curricular and co-curricular activities and services where cadets can learn and develop self-leadership skills. Student learning is a high priority within and beyond the extra-curricular programs, and cadets are encouraged to achieve their full leadership potential during their intellectual, personal, ethical, social, emotional, athletic, and spiritual development. With the efforts of the CGA faculty, officers, and staff, the CGA increasingly has moved towards embracing a culture of developing curricular and extra-curricular activities as program-specific ways to achieve educational goals and learning outcomes for the development of self-leadership skills. Extra-curricular programs support the Academy's mission to prepare cadets to be effective leaders and active participants in a changing world. The integration of service learning and learning communities facilitates the development and acquisition of

valuable self-leadership skills. Through participation in athletic and club activities, community work, and service learning, cadets are enabled to develop interpersonal, communication, team building, and leadership skills through effective feedback.

The CGA focuses on self-leadership learning goals for the entire curricular and extra-curricular programs. This clear delineation and definition of self-leadership learning, development, and practice goals have been the most important step in the development of a comprehensive leadership strategic plan. According to the CGA leadership program, every cadet has the potential to be a leader through experiences and education as all cadets possess self-leadership potential that can be developed through self-leadership programs and activities. Leadership needs to be learned and practiced as would any other acquired skill. Teaching leadership to future CG officers is difficult due to the lack of cadets' experience. Bridging the classroom theories with practical experience

provides cadets with a successful combination of two components that are expected to transform the CGA cadets into successful leaders.

The CGA believes that this articulation of leadership education goals is iterative and continually evolving as the program changes over time and as the Academy becomes more sophisticated in its understanding of shared learning leadership educational outcomes. The CGA also recognizes that each administrative department has specific leadership/self-leadership learning outcomes goals that are unique to their area which they hope to achieve through their individual activities and interactions with cadets. The CGA faculty, staff, and cadets tend to focus on the particular component of the CGA activities and life they are directly engaged with, e.g. a course, a program, a group, office, or organization. Often the activities and work in specific areas can be used as indicators of broader cadet progress toward realizing the CGA's leadership education mission goals.

References

1. Astin, A.W. & Astin, H.S. (2000). *Leadership reconsidered: engaging higher education in social change*. Battle Creek, MI: W.K. Kellogg Foundation.
2. Astin, A.W., Vogelgesand, L.J., Ikeda, E.K. & Yee, J.A. (2000). *Executive Summary: How Service Learning Affects Students*. Los Angeles, CA: UCLA Higher Education Research Institute.
3. Bandura, A. (1997). Self-efficacy: toward a unifying theory of behavioral change, *Psychological Review*, 84, pp. 191-215.
4. Bass, B. & Avolio, B.J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications.
5. Bass, B. (1981). *Stogdill's handbook of leadership revised*. New York: Free Press.
6. Bass, B., and Stogdill, R. (1990). *Bass and Stogdill's handbook of leadership: theory research and managerial applications*. New York: Free Press.
7. Bennis, W. (1989). *Becoming a Leader*. San Francisco, CA: Jossey-Bass.
8. Blase, J. & Blase, J. (2000). Effective instructional leadership: Teachers' perspectives on how principals promote teaching & learning in schools, *Journal of Educational Administration*, 38 (2), pp. 130-141.
9. Bringle, R.G. & Hatcher, J.A. (1996). Implementing service learning in higher education, *The Journal of Higher Education*, 67 (2), pp. 221-239.
10. Bryant, A. & Kazan, A.L. (2013). *Self-Leadership: how to become a more successful, efficient, and effective leader from the inside out*. New York, NY: McGraw-Hill.
11. Calizo, L.H., Cilente, K. & Komives, S.R. (2007). A look at gender and the multi-institutional study of leadership, *Concepts and Connections*, 15 (2), pp. 7-9.
12. Carmeli, A., Meitar, R. & Weisberg, J. (2006). Self-leadership skills and innovative behavior at work, *International Journal of Manpower*, 27, pp. 75-90.
13. Choi, J. (2007). Motivational theory of charismatic leadership: envisioning, empathy, and empowerment, *Journal of Leadership and Organizational Studies*, 13, pp. 24-43.
14. Cress, C.M., Astin, H.S., Zimmerman-Oster, K. & Burkhardt, J.C. (1991). Developmental outcomes of college students' involvement in leadership activities, *Journal of College Student Development*, 42, pp. 15-27.
15. Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston, MA: D.C. Heath and Company.
16. DiConti, V.D. (2004). Experiential education in a knowledge-based economy: Is it time to reexamine the liberal arts? *The Journal of General Education*, 53 (3-4), pp. 167-183.
17. DiLiello, T. & Houghton, J. (2006). Maximizing organizational leadership capacity for the future: toward a model of self-leadership, innovation and creativity, *Journal of Managerial Psychology*, 21, pp. 319-337.
18. Dugan, J.P. (2006a). Involvement and leadership: A descriptive analysis of socially responsible leadership, *Journal of College Student Development*, 47, pp. 335-343.

19. Dugan, J.P. (2006b). Explorations using the social change model: Leadership development among college men and women, *Journal of College Student Development*, 47 (2), pp. 217-225.
20. Eyler, J. (2002). Reflection: Linking service and learning – linking students and communities, *Journal of Social Issues*, 58 (3), pp. 517-534.
21. Fiedler, F.E. (1996). Research on leadership selection and training: one view of the future, *Administrative Science Quarterly*, 41 (2), pp. 241-250.
22. Fulmer, R.M. (1997). The Evolving Paradigm of Leadership Development, *Organizational Dynamics*, 25 (4), pp. 59-72.
23. Giles, D., Honnet, E.P. & Migliore, S. (Eds.). (1991). *Research agenda for combining service and learning in the 1990's*. Raleigh, NC: National Society for Internships and Experiential Education.
24. Houghton, J.D. & Neck, C.P. (2002). The revised self-leadership questionnaire: testing a hierarchical factor structure for self-leadership, *Journal of Managerial Psychology*, 17 (8), pp. 672-691.
25. Kezar, A. & Moriarty, D. (2000). Expanding our understanding of student leadership development: A study exploring gender and ethnic identity, *Journal of College Student Development*, 41 (1), pp. 55-69.
26. Kolb, D.A. (1984). *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
27. Komives, S.R., Longerbeam, S.D., Owen, J.E., Mainella, F.C. & Osteen, L. (2006). A leadership identity development model: Applications from a grounded theory, *Journal of College Student Development*, 47, pp. 401-418.
28. Kouzes, J.M. & Posner, B.Z. (1990). *The leadership challenge: how to get extraordinary things done in organizations*. San Francisco, CA: Jossey-Bass.
29. Manz, C.E. (1986). Self-leadership: toward an expanded theory of self-influence processes in organizations, *Academy of Management Review*, 11, pp. 585-600.
30. Manz, C. & Sims, H. (1986). Leading self-managed groups: a conceptual analysis of a paradox, *Economic and Industrial Democracy*, 7, pp. 141-165.
31. Manz, C. & Sims, H. (1993). Leading workers to lead themselves: the external leadership of self-managed work teams, *Administrative Science Quarterly*, 32, pp. 106-128.
32. Manz, C. & Sims, H.P. (2001). *The new super-leadership*, Koehler Publishers Inc.
33. Manz, C.C. & Neck, C.P. (2004). *Mastering self-leadership: empowering yourself for personal excellence*, 3rd ed., Pearson Prentice-Hall, Upper Saddle River, NJ.
34. Neck, C.P. & Manz, C.C. (1996). Thought self-leadership: the impact of mental strategies training on employee cognition, behavior, and affect, *Journal of Organizational Behavior*, 17, pp. 445-467.
35. Neck, C.P. (1996). Thought self-leadership: A self-regulatory approach towards overcoming resistance to change, *International Journal of Organizational Analysis*, 4, pp. 202-216.
36. Neck, C.P. & Houghton, J.D. (2006). Two decades of self-leadership theory and research. Past developments, present trends and future possibilities, *Journal of Managerial Psychology*, 21 (4), pp. 270-295.
37. Neck, C.P. & Manz, C. (2013). *Mastering self-leadership. empowering yourself for personal excellence*. 6th ed. Upper Saddle River: Pearson Education.
38. Pascarella, E.T. & Terenzini, P.T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass Publishers.
39. Pearce, C.L. (2007). The future of leadership development: The importance of identity, multi-level approaches, self-leadership, physical fitness, shared leadership, networking, creativity, emotions, spirituality and on-boarding processes, *Human Resource Management Review*, 17 (4), pp. 355-359.
40. Pearce, C. & Manz, C. (2005). The new silver bullets of leadership: The importance of self- and shared leadership in knowledge work, *Organizational Dynamics*, 34, pp. 130-140.
41. Ryan, M. and Cassidy, J.R. (1996). *Internships and excellence*. *Academic Search Premier*, 82 (3). COMDT INST 5351.3. (2006). USCG Commandant Instruction M5351.3, Leadership Development Framework: P 2-2.
42. Stewart, G., Carson, K. & Cardy, R. (1996). The joint effects of conscientiousness and self-leadership training on employee self-directed behavior in a service setting, *Personnel Psychology*, 49, pp. 143-164.
43. Townsend, C.D. (2000). From theory to practice: educating leaders for tomorrow, *Concepts and Connections (National Clearinghouse for Leadership Programs)*, 8 (2), pp.1, 3, 4.
44. Wurr, A.J. & Hamilton, C.H. (2012). Leadership development in service-learning: an exploratory investigation, *Journal of Higher Education Outreach and Engagement*, 16 (2), pp. 213-239.
45. Zimmerman-Oster, K. & Burkhardt, J.C. (2000). *Leadership in the making: impact and insights from Leadership Development Programs in U.S. Colleges and Universities*. W.K. Kellogg Foundation.