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Leading with Heart in the Construction Industry: Preparing Level 5 Leaders at UW-Madison

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Abstract

It is widely known that the construction industry needs leaders to *lead* construction projects not just *over/micro-manage* construction projects. At the UW-Madison we are crafting and implementing learning opportunities for all of our undergraduates such that they can acquire and develop the critical, yet intangible skills and values of "leadership," so we can have more comprehensive *leading* and less *micro-managing*. This study is under the umbrella of a larger objective: to design and offer an innovative, allied set of leadership development programs for undergraduates to acquire critical leadership skills, knowledges, and attitudes/values. Using the leadership strategies presented in Jim Collins' book *Good to Great* as a baseline, several executives and key subordinates of successful construction industry companies were interviewed to see if these leadership strategies were being implemented. To check for validation of the leadership principals, the executives were interviewed to understand their definition of success, leadership strategies, important accomplishments, view of financial resources, outside activities, and ideas for developing future leaders. Once validated, these leadership strategies can be translated to student learning and development. To understand the current leadership training of students, a number of students from UW-Madison were interviewed to understand how accessible leadership opportunities are to them and if their current training is making a positive difference. The interview results are preliminary and we are working to implement more opportunities experiential and otherwise that reinforce students' acquisition of "Level 5 Leader" skills, knowledges, and values/attitudes.

Overview

What if the crisis of 2008 represents something much more fundamental than a deep recession? What if it's telling us that the whole growth model we created over the last 50 years is simply unsustainable economically and ecologically and that 2008 was when we hit the wall – when Mother Nature and the market both said: "No more." – Thomas L. Friedman, New York Times New York Times March 8, 2009



Now more than ever engineers must harness technical knowledge and creativity together, and craft solutions to complex grand challenges such as the innovation of clean, affordable, and

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reliable energy. Engineering education must offer students the best knowledge and tools available to do this. The National Academy of Engineering (NAE) states that twenty-first century engineering education must integrate critical core competencies into the undergraduate curriculum in order to *tackle the grand challenges of tomorrow* – one of the critical competencies is leadership skills, knowledges, and attitudes/values. *The Engineer of 2020: Visions of Engineering in the New Century* (National Academies Press, 2004) states that engineers rise to serve as business leaders as well as nonprofit and government leaders who must guide policy decisions that are technologically intricate and demand leaders who understand the strengths and limitations of science and technology.

Engineers must understand the principles of **leadership** and be able to practice them in growing proportions as their careers advance. They must also be willing to acknowledge the significance and importance of public service and its place in society, stretching their traditional comfort zone and accepting the challenge of bridging public policy and technology well beyond the roles accepted in the past.

This study breaks apart the large, unwieldy concept of students must “understand the principles of leadership,” which is clearly a critical competency for engineering education today, and explores and describes successful engineer-leaders with a widely accepted model for leadership excellence found in Jim Collins’ book *Good to Great*. This inquiry offers several results: (1) students had the opportunity to interview and learn from exceptional leaders via qualitative research methods; (2) students had the opportunity to apply a leadership model as a framework to describe leadership in action and its non-formulaic nature; and (3) the synthesis and analysis of the data offers material to design innovative curriculum changes that enhance the current leadership learning opportunities at the UW-Madison College of Engineering.

These results embody a series of leadership curriculum initiatives now underway at UW-Madison. The *Leading With Heart* project is just one of several theory-based explorations that are enabling us to create engaging, student-centered, experiential leadership learning opportunities. This study is under the umbrella of a larger objective: **to design and offer an innovative, allied set of leadership development programs for undergraduates to acquire critical leadership skills, knowledge and attitudes/values**. Please note that throughout this document the concept of a *theory* (a tool that allows us to explain the past or predict future outcomes) is being used interchangeably with the word *model*.

A Context for Leadership Curriculum Development

Several theories operate in concert to guide our curriculum innovation with the Social Change Model (SCM) (Komives and Wagner, 2009) as the primary, overarching framework. The nationally-recognized body of knowledge found in the SCM provides sound theoretical grounding for our curriculum initiatives based on the premise that leadership can be learned, and that it is a process rather than a position, recognizing that everyone has the potential to be

a leader. The goal of the SCM is to enhance student leadership development and learning in key content areas of individual, group and community values. The central principles of the SCM say leadership is “purposeful, collaborative, values-based” and “results in positive social change.” The ultimate goal of the SCM is that students will have increased capacity to mobilize self and others to facilitate positive social change at UW-Madison and beyond, thus creating better citizens and future leaders. The SCM focuses on seven core values needed to become a successful leader and effect positive social change. Our leadership curriculum initiatives integrate and address each of the seven values: Consciousness of Self; Congruence; Commitment; Collaboration; Common Purpose; Controversy with Civility; and Citizenship.

In addition to SCM (a leadership model), we have found that the pedagogical concepts within the Culture-based Education (a pedagogical model) offer a solid “map” to design effective, relevant, and engaging leadership programming for our students. Culture-based Education is a holistic approach with the learners’ needs at the forefront. Characteristics of Culture-Based Education (CBE) (Northwest Teacher Induction, 2009) include: integrating traditional cultural knowledge with current “western-based” educational content and performance standards in the core areas of science, mathematics, social studies and language arts; and utilizing placed-based educational strategies that are experiential and student driven. In CBE the focus is on the student; the context of learning demands that it is useful, applicable, and relevant; the content that is both cultural and academic; and spirituality or the source of empowerment is also considered. We have found at the outset that using these two models together are effective, and allow us to run additional studies like *Leading With Heart* to explore and describe leadership from different angles that inform future curriculum design that pioneers new leadership learning at the UW-Madison College of Engineering. We will revisit these models throughout the following *Leading With Heart* report, and within the *Recommendations* section specifically.

“Good to Great” Applied to Construction Industry

Jim Collins’ book *Good to Great* strived to understand why good companies became great companies and how they accomplished that transformation. Their study looked at eleven companies that showed remarkable long-term success in comparison to other similar companies in their field. As they studied these eleven companies, many common themes emerged. One theme that emerged from the study that will be explored here is the presence of what Collins termed “Level 5 Leaders”, people who have both “personal humility” and “professional will.” Success for a Level 5 leader is defined not as a personal achievement but a company achievement that will outlast his or her tenure. Level 5 leaders often do not look inward in praise for the company’s success, but deflect the praise to others. They are modest yet willful, shy yet fearless. Level 5 leaders possess high standards and will not accept mediocrity.

To validate the claim that behind a successful company is a level 5 leader, a number of executives from leading construction organizations in Wisconsin were interviewed. While many are private companies and do not share their financial information, their financial success can be substantiated by personal conversation, sales and geographic growth. The people interviewed were a very select group that will be expanded upon as the study continues. As the executives were interviewed, their answers were compared to the definition of a Level 5 leader presented in *Good to Great*. Key subordinates of the executives were also interviewed to provide a different perspective on his or her leadership. Both the executives and key subordinates responded on the definition of success, leadership strategies, important accomplishments, view of financial resources, outside activities, and ideas for developing future leaders.

With the framework of the *Good to Great* Level 5 leader being validated by the responses in the executive and subordinate interviews, these principals can be translated to student learning and development. The executives provided responses to what motivations and strategies they used as a leader, but also provided ideas on how to put them into practice for students to develop their leadership potential and skills. In order to understand the current level of understanding of leadership, several students were interviewed on many of the same topics as the executives, including the definition of success, leadership strategies, important accomplishments, view of financial resources, outside activities, and ideas for improving their leadership development. With the baseline knowledge of students' current understanding of leadership and with the validation of Level 5 leadership from the executive interviews, recommendations on how to develop these principles in students through activities and experiences are provided.

I. *Leading With Heart* Project – one campus initiative for leadership learning discovery

Executive's Perspective

Background

Six executives and four key subordinates (see Table 1) were interviewed as part of the research on the construction industry. The executives were initially chosen upon recommendation from personal contacts of the faculty at the University of Wisconsin-Madison College of Engineering. The executives come from a mix of disciplines within the construction industry including highway, mechanical, electrical, general, builders, and construction equipment. With each of the interviews, the interviewee was asked to recommend other leaders who might be willing to participate.

The interviews for the executives and key subordinates were conducted using three mediums-- six were done in-person, three were done by phone, and one was done by e-mail. The questions were sent to each person before the interview so that they would have some time to look over the questions and prepare their answers in advance if they so wished.

Table 1 - Profile of Executive Interviews

Interviewee Classification	Construction Industry
Executive	6
Key Subordinate	4

Definition of Success

All six executives defined success in similar ways—the executives all had high regard for the financial well-being of their business. This was expressed by individuals noting that success of their company meant leaving the job in a better condition than when they started, returning shareholder value, achieving market diversification, expanding geographically, exceeding industry benchmarks on profitability, lowering personnel turnover ratio, or having a high reputation for their company.

The executives all defined success in other less financial ways. One executive said that success would also be seeing your staff energized for the right reasons and working together for a common goal. Another would ask whether their employees were achieving career fulfillment, stability, financial success, and daily enjoyment from their jobs.

Success for two also meant a balance of their job with their home life. Relationships with their spouse, their children or in some cases grandchildren were all deemed very important. Success even reached to the church, the community or, as one executive said, “leaving good in every person you touch.”

Executive Leadership Strategies

The executives’ view of success impacted the way he or she directed the company. The responses below are not simply leadership attributes, but actions and behaviors. The leadership strategies that executives currently use are important because future leaders can learn these leadership strategies to facilitate their own leadership development. The responses are ordered from most frequent to least frequent. Some responded with one general strategy, while others listed many, thus some executives may use these leadership strategies but may not have mentioned it in their answer. The numbers below are the number of times the leadership style was mentioned out of the six executive construction industry interviews.

- (6) Surround yourself with good people. *All the executives agreed that the company is only as good as its employees. As an executive, you have a powerful input into who works alongside of you. Get good people who share your philosophy. Delegate work to them and trust that they will get the work done. Spend time with them and hand off your knowledge. Know what motivates them to get things done.*
- (5) Lead by example. *Just about all of the executives said that they lead by example, which translated into a couple different meanings. One meaning is that they would be willing to do anything they would ask of their employees. Secondly, they would set the*

tone for the work culture by acting in the manner in which he or she would like his employees to act. Treat others the way you want to be treated.

- (4) Use consultative decision-making. *As you surround yourself with knowledgeable people who you trust, reach out to them for important decisions. An executive noted that, “Humility is incredibly important. I have seen so many people fail because of arrogance. It creates blind spots. That doesn’t mean that you are not confident or driven or proud of accomplishments. It means there is always more to learn and that others are smart and knowledgeable.” Another executive said, “Digest input from all kinds of people and turn that into an action plan that turns out results from everybody.”*
- (3) Make decisions. *While it is important to gather others’ input, realize that consensus is not essential. One executive said that, “Young people think consensus is the highest ideal, but it’s the lowest common denominator. You need a decider, a team leader, the ‘n+1’. When the time is right, you need to act and move forward.”*
- (3) Set Goals. *Once you have a strategic plan, set goals to get there. Set goals that are realistic but not easy.*
- (3) Be Accountable. *Once the expectations are clearly set, a person will know what decisions he or she is allowed to make. Trust that each person will achieve what he or she set out to do. People need to own their business and their objectives. It is okay to ask for help along the way and mistakes will happen. At the end of the day, you are accountable for your work, so do not blame others for your own mistakes. In the words of one executive, “Do what you say you’re going to do—you owe it to yourself and those around you.”*
- (3) Know yourself. *Before you go out leading others, you have to know who you are and stay true to yourself. Know your values.*
- (2) Use Planning. *Knowing and internalizing the mission of your company is essential. A broad strategic mindset that correlates to the company’s mission is important to set the future direction of the company. Gather input from a wide variety of people and respect their ideas. Be an active listener. One executive emphasized knowing your costs—how much time, money, and other resources are you investing in a project? Are you sure that’s going to be worth the return you get on that investment? Look over the horizon and be proactive, not reactive, to the upcoming challenges.*
- (2) Identify with role models. *Be true to yourself, but also remember other leaders in your life. What made them a good leader? What could they have done better? Pick and choose qualities of people you enjoyed working for. Seek out similar people who are a step ahead of you and figure out how they got there.*

- (2) Have fun along the way. *If you spend some many hours of your life doing one thing, make sure you enjoy it.*
- (1) Be Transparent. *The following points were made by one executive, all relating to transparency. It should be noted that transparency does not happen if there is no trust in the executive. A culture of trust must be built first. 1. No surprises—the earlier you know about something, the more prepared you'll be to address any potential issues 2. Bad news first—communicate the problem up front, then work with team to find solutions 3. Full disclosure—share all relevant information with your team, so they fully understand the situation's challenges and opportunities and understand the direction they need to take*

Important Accomplishments

All six executives listed some of their important accomplishments, both as a company and as an individual. Like their definitions of success, the important accomplishments of an executive extend beyond finances to people and relationships. Many companies celebrate their “people first” attitude to the public, but authentic relationships reach beyond a popular expression. Either you consistently strive to help others or it is just a façade. It is the action of caring about people and maintaining relationships that was emphasized by many of the executives. One executive said that, “People matter most: Not money, not a great title, nothing matters more than being part of a network of people who care about each other.”

Many company accomplishments were strategic in nature—refocusing on the mission, heading into the correct field of business, or designing an incentive system. Part strategic and part culture, other executives mentioned high financial or safety ratings of their company. The human side of business starts with the culture of the company. Hiring the right people, creating a high-care attitude, and acting with honesty and integrity were a few of the specific responses by executives. Also emphasized were keeping up with their family responsibilities.

View of Financial Resources

Each executive responded with their view of their company's financial resources. Acting as an executive of a company often gives one great influence over the use of the financial resources of the company. In defining success for a company, over half listed giving back as part of their company's success. A common response was being a steward of the money, not owning the money but using it to the best of their ability towards their view of success. For a company to survive and give back, the business needs to do well financially. An executive said, “Although money is not the primary driver, however, given the personal financial investment in the firm and the risks associated with that investment, a return on investment is important.”

Outside Activities

Like with their money, most executives mentioned using their time to benefit their company, family, and community. Over half of the executives listed serving on boards and being with family as their primary outside activities. The executives' expertise allows them to

make a difference advising, coaching, mentoring, and providing opportunities in many organizations. Said one executive, “Be generous: Whether it’s your time, your money, your connections—you have gifts and talents to share that other people need. Get involved with charitable organizations, donate to a cause you believe in, be a mentor on someone else’s personal advisory board.”

Developing Future Leaders

The executives had a wide variety of ideas for developing future leaders. Below is a summary of some of the ideas mentioned. There is some similarity between the leadership strategies that executives exhibit and how to develop those leadership strategies in future leaders. The responses are ordered from most frequent to least frequent. Some responded with one general strategy, while others listed many, thus some executives may use these leadership strategies but may not have mentioned it in their answer. All six executives replied to this question.

What students can do

- ② (4) Understand the bigger picture. *The world does not revolve around engineers. Learn how an engineer fits into the bigger world--take classes outside your major, travel, and intern, whatever you need to do. One executive was specific, saying, “Engineers need greater depth of exposure outside of engineering. Learn about the environment, business, and psychology. One way to do this is through extracurricular activities.”*
- ② (3) Get involved. *Student organizations provide learning opportunities a classroom cannot provide, including hands on experience, social interaction, and leadership opportunities. Serve, learn, make mistakes, and find out how to get elected.*
- ② (3) Know yourself. *Be passionate about something. Be intellectually curious. Look within yourself and grow. Promote your strengths, improve your weaknesses. A helpful framework entitled “Build Yourself” can be found in the Appendix. You have to be comfortable with yourself before you can lead others.*
- ② (2) Communicate effectively. *Many executives knew that communication was important for business success, even if it meant taking additional classes. One executive said that, “Engineers often communicate poorly, whether it is their innate personality, their shyness, or a lack of public speaking experience. Communication is very important in the business setting, whether oral, written, or visual. If you cannot communicate, you cannot succeed. Communication is the key in leadership. It needs to be a part of every class.”*
- ② (2) Intern or co-op with a company. *Internships are a great dose of reality. You see what the profession is like and they get to see if you fit into their culture.*

- ② (1) Learn a foreign language or study abroad. *A great way to understand the bigger picture. One executive mentioned specifically learning Chinese and Arabic. Understand a new culture.*

What mentors can do

- ② (2) Offer and effectively publicize a variety of leadership opportunities. *Leadership opportunities can be found in classroom projects. However, more opportunities can often be found in student organizations. Encourage student organization involvement.*
- ② (2) Provide clear expectations. *Know what decisions people can make and allow them to make mistakes. Put them in situations to succeed while allowing small failures.*
- ② (2) Guide, don't command. *One executive noted, "Leave them in charge of themselves. Guide rather than command their exploration with their full permission. Become a supportive partner in their learning process. Help them learn things about themselves that perhaps can be learned in no other way. Follow their energy. Enhance their self-esteem. Encourage their creativity."*
- ② (1) Know the student. *Get to know the students on a non-superficial level. Encourage a student to look within themselves and grow. Provide honest feedback. Recognize a person's strengths and promote them. Identify a person's weaknesses and improve them. Take time for one-on-one time for feedback and advice. Watch them on a day-to-day basis. Be available for follow-up sessions. Have training available. Students need role models that aren't athletes or rock stars.*

Analysis of Key Subordinate Interviews

The key subordinates responded to questions relating to their executive's leadership strategies, view of financial resources, and outside activities in order to provide a different perspective on the executive's leadership and to validate the statements of the executive.

The statements made by the key subordinates in response to the executive's leadership strategies directly aligned to the executive's own statements, often word for word. In the key subordinate's reflection on his or her own leadership strategies, they all responded with the same strategies. Like the leadership strategies, all the key subordinate responses on the executive's view of financial resources and outside activities were matched. It appears that the key subordinates have a clear understanding of the executives and that the actions of the executives match their statements.

Students' Perspective

Background

The second part of the study was interviewing students. As shown in Table 2, there were fourteen students interviewed. Each student has had extensive work with the student

organizations that they have been involved with. The two student organizations that the students have been actively involved with are the Concrete Canoe Team and Engineers Without Borders (EWB). It must be noted that the students chosen do not represent the entire student body of the College of Engineering at the UW-Madison.

Table 2 - Profile of Student interviews

Concrete Canoe Team	Engineers Without Borders
7	7
Total number of students	14

The Concrete Canoe Team and EWB were chosen because of their significant growth and success over the past six years. Seven of the students were involved with EWB. Three of the students involved with EWB were male, while the other four were female. Three of the students involved with the Concrete Canoe team were male, while the other four were female as well. Those students involved with the Concrete Canoe team bring a total of 25 years of experience to a team that won five straight national championships beginning in 2003; a feat done by no other team. To put this in perspective, only seven other schools have won a national championship in the twenty-two years of the National Concrete Canoe Competition being held. Those students involved with EWB bring 20 years of combined experience to their organization that has grown tremendously since its beginning in 2003. EWB is currently involved with five community development projects around the world. The projects include building a waste water collection system in two communities in El Salvador; improving water quality, agricultural techniques, and agro-forestry production in Orongo, Kenya; improving the locally used cook stoves and farming practices in Muramba, Rwanda; building a hydro electric generator at the water source to bring electricity to the community, designing a material efficient concrete beam/roof for widespread use in the community, and building a Health Clinic with a sustainable and efficient design in mind; and providing groundwater drainage and storm water management infrastructure in Red Cliff, Wisconsin. The ability to create, fund, and see projects from cradle to grave in third world countries speaks volumes to the work of the students involved.

Each of the students had their own reasons for choosing to attend the University of Wisconsin-Madison. All of them mentioned that Madison was a great school socially and educationally. Eleven out of the fourteen students mentioned in-state tuition as being a major part in their decision to attend the UW-Madison. Nine of the fourteen interviewed said that the quality of education within the engineering school based upon rankings was a major factor in their choice for attending the UW-Madison. The other five students were undecided on a major when choosing schools. They mentioned the broad array of degree opportunities available to them as a major reason for choosing the UW-Madison.

Summary of interview's main points

The interviews were conducted over the phone, through e-mail, and in-person. The interview questions were sent to each student before the interview so that they could have some time to look the questions over and get some ideas on how to answer the questions.

The following paragraphs illustrate the main points of the interviews. These main points show the qualities of a "Level 5 Leader". These qualities resemble those described by Collin's and the executives' recommendations for developing future leaders.

Each student had their own way of answering the questions. However, the answers shared common aspects to their responses. For example, one student mentioned that an important characteristic of a team is having mutual respect for one another. Another student said that having a sense of team belonging as being an important characteristic of a team. While these answers may appear different, they are related in that having mutual respect for fellow team members brings about a sense of team belonging. Seven out of the fourteen students mentioned mutual respect or team belonging as an important characteristic to have in a team. Each team member has to feel that what they do for the team is important. This feeling can only come from mutual respect of team members. Having the right people on board the project will foster this mutual respect for one another. The leaders on the team must have respect for the other members because they do important work just like the leaders. The other members must have that same respect for the leaders of the team because without the leaders, the team would have no direction. Another example comes from a student that said that a common goal is an important characteristic in a team. However, another student said that every member has to have the same focus or vision. Five of the fourteen students said a common goal was an important characteristic of a team. Each team member has to know what the goal of the project is. That way, every member will be able to work in their own way towards that one single goal.

Four of the students noted communication as an important characteristic of a team. This answer parallels a leadership style recommended by the executives for developing future leaders. All of the students did not know if they had a "leadership style". However, six students said their leadership style was trying to lead by example. This answer coincides with the one of the leadership strategies mentioned by executives. Delegating responsibilities and work to other team members was another leadership style that four students mentioned. This style shows that the leaders know they have the right people around them and they trust those team members to get the work done.

These examples of interview answers show that these students are on their way to becoming successful leaders. They have taken leadership positions within their classes and within their respective student organizations. They are getting some practical experience as leaders. The majority of the students have had no class to learn leadership theory. However, they are learning what it takes to take a team and create a successful project.

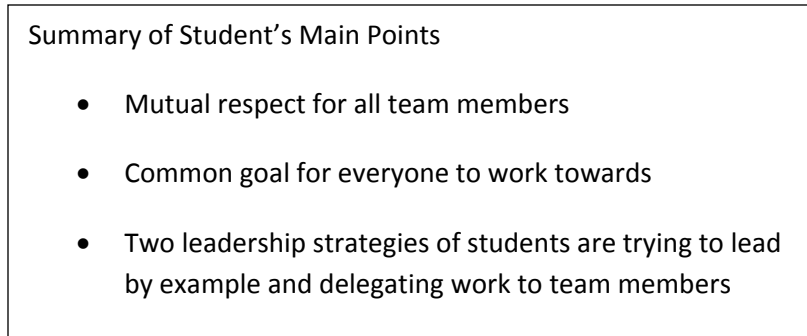


Figure 1 – Summary of Student's Main Points

Qualitative Data – What students say they already have

All of the students feel prepared or feel that they will be prepared to enter into the profession once they have graduated from the UW-Madison. They realize they are learning the technical skills required to succeed in the career of their choice.

Eleven of the fourteen students said that the leadership opportunities are abundant within the College of Engineering at the UW-Madison. Of those eleven, six students said that the student has to be willing to be in the effort to get involved and be committed to the opportunity. The leadership opportunities are not available to those that just sit around, but available to those seeking the opportunities and wanting to become leaders. Being involved with these student organizations gives the student the opportunity to be put into a leadership position that they would not normally be in. The students in leadership positions within concrete canoe and EWB have embraced the role and flourished as can be seen by the student organizations' recent success. The success of these student-run organizations over the past few years is remarkable. The students have grown into leaders by themselves. These students have had no formal education or training in leadership.

What students say they need

The students realize that they need to be well educated in communication. Six students emphasized the need for more public speaking classes. The students know there are public speaking and writing classes available for them to take. However, the students want these classes to be mandatory. They also want more than just one class required for graduation requirements. One student brought up the topic of soft skills or skills that are not technical skills. Communication skills such as being able to speak and write effectively are examples of soft skills. This student wanted the engineering degree to integrate the soft skills with the technical skills more than what it does now. While the technical skills are important in the engineering world, the soft skills are becoming just as important. The students today are beginning to realize this and they are demanding it.

Eight of the fourteen students would also like to see more group projects given to them by professors. The students realize the importance of teamwork and would like to have the experience working with others. Some of the students even suggested having the professors pick one student to be the leader of the group. This student would then be in charge of

delegating tasks so that the project will be completed on time. By forcing one student to be leader, it forces the student to take responsibility of the project. Without being forced into the leadership role, that student may never be able to get that leadership experience. Another student suggested having the leadership role rotated between group members. That way, each student would gain the leadership experience instead of just one student.

All of the students would like to learn more about leadership and how it can be applied to their careers. They would like to have classes that explain leadership theory. Along with the theory, all students said they want a leadership class that allows them to practice the leadership theory that they have learned. Two of the students had the idea of having these leadership classes offered to freshman and sophomore undergraduates instead of just the junior or senior undergraduates. Perhaps, the theory class should be taught to the younger students while the practical application class should be taught to the older students. The older students will have more technical knowledge to apply the knowledge to real life situations. Teaching theory to younger students will allow them to soak in as much as they can without having to worry about in depth group projects. The older students can take the theory learned and then apply them to in depth group projects in the leadership class and in other classes.

II. Larger Campus Leadership Curriculum Development (Recommendations)

***Leading With Heart* Project Recommendations: From Executives & From Students**

For this one, specific project the students' comparison of the preliminary descriptions of industry leaders leadership styles and skills, with Collins' "Level 5 Leader" findings illustrates that successful leaders do set high expectations for themselves and their organizations, and that the, "paradoxical blend of personal humility and professional will" (Collins, 2001) indeed is present, and does seem to correlate with success. These interviews with successful leaders and others provides critical input for our campus' creation of quality educational experiences that advances leadership development for our students.

Figure 2 shows the three most common recommendations from executives and students. These recommendations are ways to foster student development into a "Level 5 Leader" from the executive standpoint and the student standpoint.

Executive Recommendations	Student Recommendations
<ul style="list-style-type: none"> • Encourage students to understand themselves and the bigger picture they fit into • Provide leadership and communication opportunities, both in principles and application • Create non-superficial relationships for mentoring and coaching 	<ul style="list-style-type: none"> • Would like to see a greater emphasis on communication skills • Would like classes to have more group projects where each team member has the opportunity to be team leader • Would like a leadership class that teaches theory and has practical applications

Figure 2 – Executive and Student Recommendations

With these recommendations in hand, we turn to the larger, campus’ leadership curriculum development initiatives with the objective: to design and offer an innovative, allied set of leadership development programs for undergraduates to acquire critical leadership skills, knowledges, and attitudes/values we can place these observations and the industry leaders’ thoughts on students’ leadership development within the framework of our guiding model, the Social Change Model (SCM) of leadership; and set forth preliminary recommendations for curriculum development. The industry leaders’ thoughts on “what students can do” to build their leadership skills is reflected in the seven values within the SCM (Consciousness of Self; Congruence; Commitment; Collaboration; Common Purpose; Controversy with Civility; and Citizenship). Given the similarities the first recommendations based on the *Leading with Heart* Project include:

- (1) to design and offer (and possibly require) more opportunities for undergraduates to explore their Citizenship in the bigger-than-engineering world; co-ops, internships, non-engineering experiences, humanities learning, etc.
- (2) to offer incentives for undergraduates to get involved in student organizations and consciously practice Collaboration as well as Common Purpose
- (3) to integrate self-awareness inside and outside the classroom learning experience in a nod to one of the foundational knowledges: Consciousness of Self
- (4) to emphasize effective communication skills (written, oral, interpersonal influence, diplomacy, etc.) via the Student Leadership Center’s programming, the Dean’s Student Leadership Class, the on-line Leadership module, and the two additional

leadership courses offered in the College of Engineering which address the values of Collaboration; Common Purpose; Controversy with Civility; and Citizenship.

- (5) to encourage that required classes include more group projects where each team member has the opportunity to be team leader and connects with Congruence; Commitment; Collaboration; Common Purpose.
- (6) to offer a leadership class that teaches theory and has practical applications; this course is currently being designed and will be offered as an online module in the fall of 2009 and will be built around all seven core values.

All recommendations and the subsequent initiatives stemming out from *Leading With Heart* Project will also be anchored in the pedagogical Culture-based Education model with the learners' needs at the forefront.

Next Steps

The study will continue throughout the next year. The samples of executive and student interviews will increase. The recommendations will be implemented within different student organizations and different classes within the College of Engineering at the UW-Madison. The results will be monitored and best practices will be developed.

Conclusion

"Level 5 Leaders" are people who have both "personal humility" and "professional will." They measure success not as a personal achievement but as a company achievement that will outlast his or her tenure. Level 5 leaders often do not look inward in praise for the company's success, but deflect the praise to others. Top executives and their subordinates from leading companies around the state were interviewed. The definition of success, leadership strategies, important accomplishments, view of financial resources, outside activities, and ideas for developing future leaders were all topics covered by the interview. The answers given by the executives and subordinates were compared to the definition of a Level 5 Leader given by *Good to Great*. A group of students from the UW-Madison were interviewed as part of the study as well. They were chosen based on their involvement with successful student organizations. These students were given a set of questions very similar to the executives and subordinates.

The strategies, accomplishments, and views of leadership have created an example for others to follow. The executives stressed leadership strategies such as leading by example, surrounding yourself with good people, and using consultative decision making as ways to garner success. Accomplishments that were people based and not financial based were more important to the executives. One important idea that came up in many different areas was that money was not the most important thing. Making money was not the definition of success for the executives. Making money was not the greatest accomplishment for the leading companies.

The personal humility and professional will can be clearly seen by the way the executives run their companies.

The students' view of leadership is not well understood. Lead by example was the majority response to their leadership style. All the students were quite unsure of how to answer this question. There was no confidence in their answers. This lack of understanding leadership shows a need for leadership education or training. Not only do the students need it, they want the leadership education or training. They want to be taught about leadership. They want actual classes that teach theory and have a practical application. The students in leadership positions within their respective student organizations are going beyond the classroom to learn about leadership. They are getting leadership experience firsthand; almost learning on the job.

The development of future leaders is essential to the success of every company, no matter what field they are in. There are ways that students can development themselves and ways that mentors can help. Students can get involved, understand the bigger picture, know themselves, communicate effectively, intern or co-op with a company, and learn a foreign language or learn a new culture. Mentors can get to know the student on a non-superficial level. They can publicize leadership opportunities effectively and provide leadership exposure. Mentors can also help the development of future leaders by guiding them, and not commanding them. The development of future Level 5 Leaders is a long term process. Leading with heart will help those who want it to become successful Level 5 Leaders.

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Appendix A: Executive Interview Questionnaire

I. PERSONAL REFLECTION ON YOUR LEADERSHIP STYLE AND VIEWS

How would you describe your leadership style i.e., specific examples?

Who personally influenced you as a leader? Who are your leadership role models and why?

How do you define success for yourself?

II. IMPACT OF YOUR LEADERSHIP STYLE

Could you give us some idea of where your organization has come from and where it is now? (e.g., 3 of employees then and now, sales maybe, something that indicates its progress and development, # offices, #employees)

What would you say is the most important accomplishment of your organization during your tenure?

What would you say is your most important personal accomplishment?

III. PROJECTING BEYOND YOURSELF AND ORGANIZATION

How do you view financial resources? If you do not mind me asking, what do you acquire and do with your disposable income?

What activities are you involved in outside of your professional work? Why?

IV. ORGANIZATIONAL TRANSITION AND LEADERSHIP SUCCESSION PLANNING

What would you say is the *one or two most important* traits to develop in your key leadership team?

Have you selected your successor or potential successor(s)?

If yes, how long have they been with the organization?

V. RELATIONSHIP TO SERVING OTHERS AND YOUR LEADERSHIP STYLE AND VIEWS

We've identified some important traits that others have shown us you have, things like humility, helping and serving subordinates, giving all the credit to others, putting the needs of the organization and society in front of your needs.

What influenced you to adopt these traits?

Do you consider them important for leading your organization?

How would you go about developing those traits in future leaders?

How familiar are you with servant leadership?

Do you feel your organization fosters a servant leadership environment? If so, how?

VI. TRANSLATING EFFECTIVE LEADERSHIP TO COE STUDENTS AND RELEVANT LEARNING AND EXPERIENCES

At our University in the College of Engineering, we are attempting to develop leadership traits in our students in several ways, including specific leadership education combined with leadership of student organizations, leadership projects of a wide variety, and community service projects including international relief efforts. Do you think we will provide lasting impact with this effort?

Do you have ideas on how to operationalize these concepts for us in this effort?

Do you think each student should have leadership training?

What challenges will future leaders have to face?

VII. NEXT STEPS AND FOLLOW-UP

Would you be willing to provide a 1 hour lecture to our students around this topic?

Are there other leaders you would suggest we visit with? If yes, who are they and why should we visit with them?

Anything else you would like to add or that we missed in trying to understand your leadership style?

Would you be willing to review the draft paper and offer suggestions and comments?

Do you have any subordinates we could interview to get a broader picture of your leadership style?

Appendix B: Key Subordinate Interview Questionnaire

I. RELATIONSHIP TO LEADER

How long have you known this executive leader?

How did you get to know this executive leader?

How long have you worked with them?

II. PERSPECTIVE ON THEIR LEADER'S STYLE

How would you describe their leadership style?

How important is personal gain (wealth and recognition) to them?

How much are they ego or 'top-dog' driven?

If you do not mind me asking, what things, or kinds of things do they do or acquire with their wealth?

What activities are they i.e., the executive involved in outside of their professional work?

III. PERSONALIZING WHAT YOU OBSERVE TO YOUR OWN LEADERSHIP STYLE AND VALUES

How would you describe your own leadership style?

What outside activities are you involved in?

If you do not mind me asking, what do you acquire and do with your disposable income?

Who are other leaders that you admire and why?

Do you read or attend any formal education programs to improve your leadership skills?

Are you proactively developing other leaders in the organization? If yes, how are you doing this?

Do you have specific leadership skills you are trying to develop?

Do you have other comments, suggestions, or views on leadership you would like to share with us?

IV. NEXT STEPS AND FOLLOW-UP

Are there other leaders you would suggest we visit with? If yes, who are they why should we visit with them?

Would you be interested in reviewing our paper?

Appendix C: Student Interview Questionnaire

I. BACKGROUND

Why did you choose to attend the UW – Madison?

What were some of the deciding factors in your decision to attend UW – Madison?

Student Organizations:

How did you get involved?

How did your role grow over time?

What is your current role?

What do you feel are the one or two most important characteristics to develop in a team?

If you are in a leadership position, have you selected a successor or how does your organization choose new leaders?

What are the reasons for your organization's success?

II. PERSONAL REFLECTION ON YOUR LEADERSHIP STYLE AND VIEWS

How would you describe your leadership style i.e., specific examples?

What other activities had a significant impact on your leadership style?

Who personally influenced you as a leader? Who are your leadership role models and why?

How do you define success for yourself?

III. IMPACT OF YOUR LEADERSHIP STYLE

What are your priorities when you decide on your vocation after your schooling is done?

What would be your ideal vocation after you graduate?

Do you feel that you are well prepared for your future endeavors?

How do you view financial resources? If you do not mind me asking, what do you acquire and do with your disposable income?

IV. TRANSLATING EFFECTIVE LEADERSHIP TO COE STUDENTS AND RELEVANT LEARNING AND EXPERIENCES

At our University in the College of Engineering, we are attempting to develop leadership traits in our students in several ways, including specific leadership education combined

with leadership of student organizations, leadership projects of a wide variety, and community service projects including international relief efforts.

How accessible do you feel these leadership opportunities are to you as a student?

What could be done to improve the development of leaders in the College of Engineering?

Classroom

Are you aware of any leadership classes being offered? What would you like to learn?

How have you been encouraged to take leadership roles in your classes?

Are there classes that encourage leadership roles more than others? If so, which ones?

How could professors better enable leadership growth?

What professors do you look up to? Why?

V. NEXT STEPS AND FOLLOW-UP

Are there other student leaders you would suggest we visit with? If yes, who are they and why should we visit with them?

Anything else you want to add or any other general comments?

Would you be willing to review the draft paper and offer suggestions and comments?

Appendix D: Build Yourself

Build Yourself

- Features: *Know who you are and who you want to be. What will your core values be? What about your strengths? Your attitude? What do you want others to think of you?*
- Design: *Once you know what kind of person you want to be, you can design a life path that will help you get there. The education and experiences you need, the type of career and family you want.*
- Plan: *Put your dreams and actions in place—what school you will attend, what companies you'll pursue, what extra-curricular activities you want to develop. But be willing to be flexible.*

- *Skills/Resources: Figure out what skills and resources you're going to need to meet your goals. Make sure you're always in the process of building your toolbox of skills. Just when you master one skill, you'll find there's something else to learn.*
- *Team: You're not going to get where you want to be on your own. You'll need family, teachers, friends, teammates—a whole network of people to provide you with information, guidance, connections, and support.*
- *Time: Invest in yourself. Take the time to focus regularly on your personal development plan—build on what is working, strengthen what isn't working.*
- *Evaluation: You're always going to be a work in progress. Stop along the way to get feedback from yourself and others to make sure you're still heading in the right direction and that you're staying true to the goals you set for yourself.*