

Suzanne & Richard Pieper Family Foundation  
Endowed Chair for Servant Leadership



College of Engineering  
UNIVERSITY OF WISCONSIN-MADISON

Annual Report  
October 2016

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## **Servant Leader Chair for the UW-Madison College of Engineering**

The Suzanne and Richard Pieper Family Foundation endowed a servant leader chair position at the UW-Madison College of Engineering in the fall of 2008. The mission of the chair is to “help prepare future leaders in their chosen fields to live lives of service to others by teaching and exemplifying character and moral values. Their examples and actions will lift up society, enrich organizations and communities, and have a positive effect on the least privileged.”

The original chair at UW-Madison was Jeffrey Russell, former department chair for the Department of Civil and Environmental Engineering and current Vice Provost for Lifelong Learning, who held the position from Fall 2008 until July 2012. The current chair is Greg Harrington, who also serves as associate department chair for the Department of Civil and Environmental Engineering and is responsible for oversight of the department’s undergraduate program. Greg also teaches and conducts research in the area of drinking water engineering, which has given him opportunities to serve local communities with their drinking water needs and to help students perform drinking water development projects in developing countries. For these efforts, Greg was awarded the Ragnar E. Onstad Award for Service to Society by the College of Engineering in May 2015.

Greg works closely with a Servant Leadership team to support the implementation of programs furthering the Foundation’s mission. Mark Kueppers, served the College of Engineering through June 2016 as a part-time faculty associate and also served as the full-time Assistant Director of Leadership Development at the Center for Leadership and Involvement. Mark has been promoted to Associate Director of the Center for Leadership and Involvement and, although no longer employed by the College of Engineering, continues to work closely with the Pieper Chair. In his role at the Center for Leadership and Involvement, Mark leads the implementation of a coordinated, campus-wide leadership initiative to give a more unified approach to leadership education across campus. Mark has been integral in helping to provide campus insight and connections. We are excited for Mark as he continues his professional growth and are thankful to remain closely connected to the Center.

Also assisting the team this year has been Morgaine Gilchrist-Scott, a graduate student in the UW Department of Library and Information Studies. Morgaine has a strong background in statistical analysis of large data sets and has been analyzing data from our participation in the Multi-Institutional Study of Leadership. She has been an integral part of evaluating undergraduate student data from a cohort of the general student body the University of Wisconsin and from cohorts at the College of Engineering and the School of Business.

We were joined on the Servant Leadership team by Angela Kellogg, an advisor in Engineering Student Development. Angela worked on a temporary appointment through April 2016. We are currently working with John Archambault, Assistant Dean for Student Development within the College of Engineering, to jointly fund a position that would provide assistance to the Engineering Student Development office and the Servant Leader Chair. The Engineering Student Development office advises the 55+ registered engineering student organizations, providing student leaders with the leadership training, support and resources necessary to implement quality programs and events. The office also assists student organizations with special event planning, budgeting and financial oversight, organizational development and more.

We are pleased to provide the Pieper Family Foundation with this annual report summarizing our activities through August 2016 and our goals for Academic Year 2016-17. The report is organized in accordance with the criteria set by the foundation to conduct its annual evaluation. We have also included specific information identifying how the funding provided for the Servant Leader Chair has made an impact. We look forward to receiving feedback from the foundation on our activities and to continuing our work into the coming year.

## **Criterion 1 – Outcomes Baseline Data**

### ***Typical Thinking that Goes into Evaluating the Criterion***

*“The servant leader chairs, with the exception of one, established this criteria before the chair was awarded, expressed in the form of a graph. In all cases this has been done through standard student surveys that the school was already conducting. From those surveys, questions were selected that represent the values, characteristics, actions, and involvement of someone representative of a servant leader. Institutions were asked to plot this going back five or six years as a baseline. The document established the database that will then be used in the future. The alumni portion of this is more elusive and each school has its own unique process. Whatever the benchmark that is established for the school, it’s compared historically going back as many years as possible both for the school and their peers in other schools, which is then continued each year in the future. This is a one-time award.”*

### ***Academic Year 2015-16 Progress***

As noted in previous reports, we continue to track data in the senior exit survey that is administered by Educational Benchmarking Inc (EBI). Our baseline data is from the 2007-08 academic year, the year prior to the one in which the college received the Pieper Family Foundation award. Our analysis of data since the baseline year is presented in our section on Criterion 3.

We acknowledge that the EBI survey measures important traits of leaders but does not directly address the attributes used to describe servant leaders. Thus, we worked with the University of Wisconsin Survey Center during 2013 to propose a new assessment survey that does this, and this survey was implemented for the first time in 2014. We also helped fund the campus-wide implementation of a survey used by the Multi-Institutional Study of Leadership. This survey also focuses on leadership knowledge, including servant leadership. This survey was administered in 2015 and we will continue to analyze the data from this survey into 2016. These new surveys are described in more detail in our section on Criterion 3.

### ***Academic Year 2016-17 Goals***

We expect to continue our work with these newer surveys in the coming year. Please see more in our discussion of Criteria 3 and 4.

## **Criterion 2 – Baseline Acceptance of Servant Leadership**

### ***Typical Thinking that Goes into Evaluating the Criterion***

*“Clear indication that the school is functioning with the qualities of a servant leader; building community, listening, awareness, stewardship, conceptualization and foresight, commitment to the*

*growth of people and empathy. Displayed in multiple examples of what the school is actually doing will validate this area. It is not unusual that the institutions that receive the Chair already have these types of programs underway. If they are of substantive magnitude, both locally, community, nationally, and internationally, one could expect to receive this one-time award.”*

### ***Academic Year 2015-16 Progress***

Since our initial report for Year 2008, we have continued to refine our approach, increase our participation, and expand our involvement across campus in servant-leadership activities. Most notably, we have advanced from learning about servant-leadership toward a deeper adoption and commitment to the servant-leader model by aligning it with the broader college and campus commitments to leadership development. Based on the input of our Servant Leadership team, the recently developed UW-Madison Leadership Framework highlights specific leadership competencies and values that are directly connected to Servant Leadership characteristics. These include, but are not limited to, the following:

<b>Servant Leadership Characteristics</b>	<b>UW-Madison Leadership Framework</b>
Awareness	Self-Awareness
Persuasion	Fostering Bridge-Building & Collaboration
Commitment to the Growth of People	Supporting Learning & Development of Others
Building Community	Connection and Community

Most importantly, the Leadership Framework is based on the concept of leadership as the phenomenon of positive change in an individual, group or community’s beliefs, values or behaviors. This dovetails with the Servant Leadership philosophy of being in service to others and not for the purposes of power and authority. Since 2008, we have continued to explicitly integrate Servant Leadership into programming and courses and we have now helped to support campus by ensuring that these principles are being addressed on a campus level. Specific examples will be further presented in our section on Criterion 6.

### ***Academic Year 2016-17 Goals***

Please see our discussion of Criterion 6.

## **Criterion 3 – Outcomes Measures Above Demographic Norms**

### ***Typical Thinking that Goes into Evaluating the Criterion***

*Measuring each year what was established in Criterion 1. The baseline data graphs represented in Criterion 1 are updated, both the peer group and the school. If this is considered qualitative data in the minds of the foundation, they will receive an award. If the alumni data is missing, the*

*award will not be made at maximum. If the norms in the institution are reasonably above average, one can expect a higher level award. If there are things missing, one can expect a lower level.*

### ***Academic Year 2015-16 Progress***

#### ***Senior Exit Survey***

When receiving the Servant Leader Chair Endowment back in 2008-09, we used results from our senior exit survey to establish baseline performance for Criterion 1. In all of our annual reports since that time, we have continued to use results from that survey to provide longitudinal analysis for Criteria 3 and 4. Rather than provide all of the data from that survey for this report, we summarize and discuss the results of those questions that have relevance to leadership education. We also provide a comparison of our student perceptions with the perceptions of students at peer universities.

The senior exit survey is administered by Educational Benchmarking Inc (EBI) and is taken by seniors at numerous engineering programs across the nation. This allows us to compare the perceptions of our students with the perceptions of students at other engineering programs. For each academic year, we receive the mean response for engineering students from UW-Madison, for engineering students within participating Carnegie peer group programs (research intensive universities), and for engineering students from all programs that participate in the exit survey.

We use statistical analysis to determine:

- whether our students' perceptions are significantly better or worse than perceptions of students at our peer programs, and
- if our students' perceptions are improving or declining with time.

Because a change in educational practice will generally take four to six years to be observed in a senior exit survey, we evaluate the above items over four to six year time intervals.

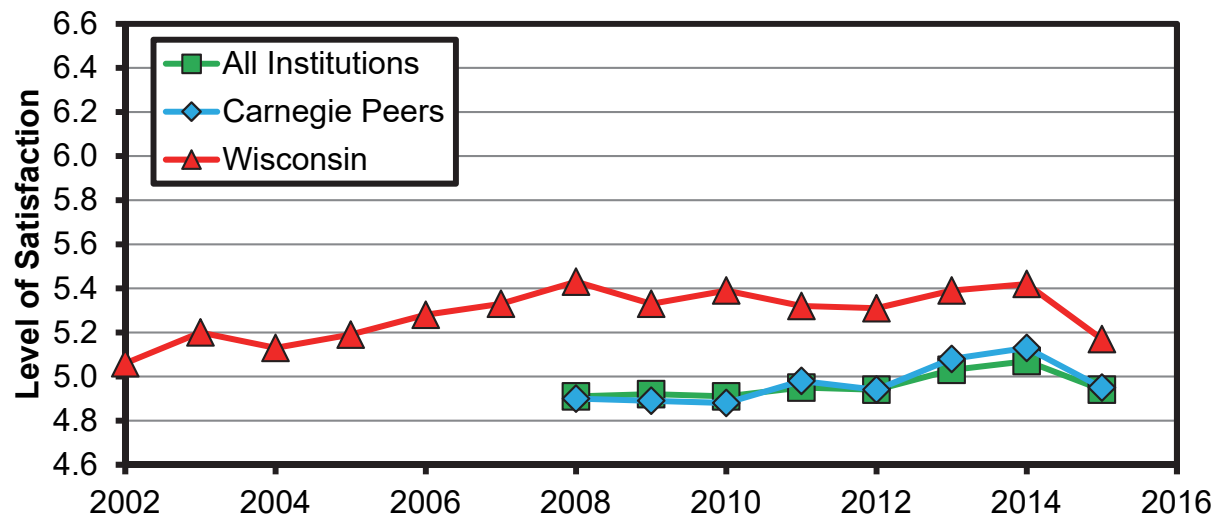
We selected the following nine questions to analyze for this report:

1. Satisfaction with value derived from team experiences.
2. Satisfaction with value of engineering program student organization activities.
3. Satisfaction with leadership opportunities in engineering program extracurricular activities (Question asked on 2010-2014 surveys) / Satisfaction with the engineering program having extracurricular leadership activities (Question asked on 2015 survey).
4. Satisfaction with your fellow students' ability to work in teams.
5. Satisfaction with your fellow students' level of camaraderie.
6. Degree that engineering education enhanced ability to function on multidisciplinary teams (Question asked on 2010-2013 surveys) / I am confident that I can function on multidisciplinary teams (Question asked on 2014-2015 surveys).

7. Degree that engineering education enhanced ability to understand ethical responsibilities (Question asked on 2010-2013 surveys) / I am confident that I can understand ethical responsibilities (Question asked on 2014-2015 surveys).
8. Degree that engineering education enhanced ability to understand professional responsibilities (Question asked on 2010-2013 surveys) / I am confident that I can understand professional responsibilities (Question asked on 2014-2015 surveys).
9. Degree that engineering education enhanced ability to recognize the need to engage in lifelong learning (Question asked on 2010-2013 surveys) / I am confident that I can recognize the need to engage in lifelong learning (Question asked on 2014-2015 surveys).

*We did not present new data in this report, because we receive our annual data from EBI in October of every year (we have just received the data for the 2015-16 academic year and are in the process of evaluating it). Thus, our next presentation of new data will come in the report after the 2016-17 academic year. We chose to present the same data from our January 2016 report, to keep our report consistent with previous and future reports, and to refresh the board's memory of our latest data.*

An example of the data is provided in Figure 1 for the third question in the above list: “satisfaction with leadership opportunities in engineering program extracurricular activities.” This figure shows our students’ satisfaction with leadership opportunities and compares their mean satisfaction level with the mean satisfaction level of students at other engineering institutions. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). The remaining data are provided in Appendix A.



**Figure 1.** Mean level of satisfaction with leadership opportunities in engineering program extracurricular activities. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. A change in survey question for the 2014-15 academic year likely contributed to the observed decline for all three cohorts.



For the time period from 2009-10 through 2014-15, there was no statistically significant improvement or decline in UW-Madison student perceptions of leadership opportunities, even though there was an apparent decrease in student perceptions over the previous year. However, for the same time period, statistical analysis showed that UW-Madison students had a significantly better perception of leadership opportunities at UW-Madison than did peer students of their own institutions. It is possible that the most recent year's decline is due to a rephrasing of the EBI question, but we will keep an eye on this in the coming years.

When considering the other questions in the same manner, we reached the following conclusions from the EBI survey:

- Our students had significantly better perceptions of the following items than students at EBI-participating Carnegie peer institutions and at all EBI-participating institutions:
  - Satisfaction with value derived from team experiences.
  - Satisfaction with value of engineering program student organization activities.
  - Satisfaction with leadership opportunities in engineering program extracurricular activities.
  - Satisfaction with fellow students' ability to work on teams.
  - Satisfaction with how engineering education enhanced ability to function on multidisciplinary teams.
  - Satisfaction with how engineering education enhanced ability to recognize need to engage in lifelong learning.
- Student perceptions significantly improved for the following items:
  - Satisfaction with how engineering education enhanced ability to function on multidisciplinary teams.
  - Satisfaction with how engineering education enhanced ability to understand ethical responsibilities
  - Satisfaction with how engineering education enhanced ability to understand professional responsibilities
  - Satisfaction with how engineering education enhanced ability to recognize need to engage in lifelong learning.

We note that the improvement in the latter four items is likely due to EBI's decision to rephrase these questions.

#### *National Survey of Student Engagement (NSSE)*

As noted in our goals from last year's report, the EBI senior-exit survey is primarily oriented to measuring educational outcomes and does not ask other pertinent questions such as whether a student participated in service-oriented activities. The university periodically participates in the National Survey of Student Engagement (<http://apir.wisc.edu/students-surveys.htm>), which asks freshmen and seniors to answer questions on topics such as whether students have participated or plan to participate in community service or volunteer work, and whether UW-Madison has contributed to students' ability to contribute to their community. UW-Madison participated in this



survey in 2014 and the Office of Academic Planning and Analysis has now posted engineering student data.

In evaluating the results from the 2014 survey, we learned the following about UW-Madison seniors:

- 51% of engineering students and 67% of the general student body said that they “tried to better understand someone else’s views by imagining how an issue looks to them.”
- 33% of engineering students and 52% of the general student body said that they had done or planned to do “community service or volunteer work.”
- 80% of engineering students and 74% of the general student body said that the university experience contributed “quite a bit or very much towards working effectively with others.”
- 45% of engineering students and 57% of the general student body said that the university experience contributed “quite a bit or very much towards developing a personal code of values and ethics.”

We plan to continue reporting progress on the above items as the university participates in this survey. The university is already preparing to conduct another edition of the survey in Spring 2017. However, we note that this survey is intended to assess student engagement, which is not necessarily an assessment of student leadership.

### *Multi-Institutional Study of Leadership*

Due to the limitations of NSSE as an engagement survey rather than a leadership survey, we helped fund the first-ever participation of UW-Madison in the Multi-Institutional Study of Leadership (MSL). UW-Madison students participated in the MSL survey in 2015. Because this was a new initiative for our team, we describe this activity in more detail in our section on Criterion 5.

### *Work with University of Wisconsin Survey Center*

As noted in last year’s annual report, we worked with the University of Wisconsin Survey Center (UWSC) to create a survey that directly addressed servant leader attributes. Because the MSL involved an extensive amount of additional effort, we postponed a follow-up of this survey until 2016-17.

### *Academic Year 2016-17 Goals*

As noted in our last annual report, we continue to be interested in collecting assessment data that goes beyond the data collected from the EBI and NSSE surveys. As noted in our section on Criterion 5, we have received a complete set of data from the MSL and we have evaluated a portion of that data. For the coming year, we will continue to participate with the UW Center for Leadership and Involvement in hiring a graduate student to further dissect the data to better understand how our engineering students compare to the general student body. For example, we

have the data to analyze gender differences amongst engineering students. We believe this effort will result in a research paper suitable for peer-reviewed publication. We will also implement our UWSC survey once again in the coming year and will likely continue to use it once every two years.

#### **Criterion 4 – Outcomes Measures Phenomenally Above Demographic Norms**

##### ***Typical Thinking that Goes into Evaluating the Criterion***

*If Criterion 3 is profoundly above the norms and a result of the program indicates that they are continuing to track in that way, you can expect awards at this level. For example, on a scale of 1-10, a typical peer institution might be a 4 or 5. A typical institution that would have been considered for a chair might be a 6. Phenomenal performance might be an 8 or a 9. We would expect eventually most of the institutions will be tracking at a 9, which would tend to maximize this award.*

##### ***Academic Year 2015-16 Progress***

The primary distinction between Criteria 3 and 4 is whether outcomes measures are above demographic norms or phenomenally above demographic norms. In our section on Criterion 3, we described how our students perceive our college relative to how other students perceive their colleges. While we have shown that our students perceive items such as leadership opportunities to be above demographic norms (Criterion 3), we defer to the foundation's judgment on whether these perceptions are phenomenally above demographic norms (Criterion 4). As an example, the database used for Criterion 3 is based on a scale of 1 to 7. Converting this to a scale of 1 to 10, our Year 2014-15 scores were in the range of 7.3 to 9.0, an improvement above our Year 2007-08 scores of 7.1 to 8.0. For comparison, our peer institutions' students had perceptions ranging from 6.8 to 8.1 in the baseline year and from 7.1 to 8.7 in Year 2014-15. While our scores are certainly at or near the level of 8 noted by the foundation for Criterion 4, the peer institution averages are also significantly higher than the 4 to 5 range noted for Criterion 4.

##### ***Academic Year 2016-17 Goals***

As noted above, the primary distinction between Criteria 3 and 4 is whether outcomes measures are above demographic norms or phenomenally above demographic norms. Thus, our goals for Criterion 4 are similar to those already stated for Criterion 3.

## **Criterion 5 – Breakthrough Venture Promising New Beginnings in Acts of Goodness**

### ***Typical Thinking that Goes into Evaluating the Criterion***

*We are attempting to encourage the institution, its faculty and student body to think beyond their envelope, searching for new ways of networking and collaboration, whole new approaches to enrichment and effectiveness. This is not about ideas, it is about validated actions. If those actions include the institution, the community it lives in, the world it lives in nationally and internationally, and they are phenomenally above it or have exhibited a breakthrough and others are following, this would be a max award. If they have something that is really promising and covers all those areas, it might be on the lower end of the scale. An activity that has some promise will likely receive a rating of “1” while an activity that is transformational or systemic will likely receive a rating of “3.” An activity that is both transformational and systemic – the ideal synergistic nurturing – may receive a rating of “5.”*

### ***Academic Year 2015-16 Progress***

In 2015, we continued to advance our work by supporting leadership efforts that focused on transformational and systemic change. The five primary accomplishments we report below are: 1) our continued efforts to launch a college-wide leadership course, 2) further implementation of the UW-Madison’s Leadership Framework through the efforts of the Coordinated Leadership Initiative, 3) campus participation in the Multi-Institutional Study of Leadership, 4) our outcomes from the annual student award that promotes servant leadership focused community projects, and 5) our participation in the inaugural summit of the Big Ten Leadership Educators Network.

### ***Leadership Course***

As noted in some of our servant leader chair meetings during the year, we continued to face significant challenges in Year 2015-16 towards offering college-wide leadership-oriented coursework. As noted in last year’s annual report, we began working with the Deans’ Educational Innovation Committee (EIC) to develop a sustainable way of delivering leadership content to a broader audience within the College of Engineering. By the end of the spring semester, we developed a position description to hire an instructor for a leadership course to be offered at the sophomore/junior level within the College of Engineering. However, we have not yet filled that position for two reasons. First, we participated in the inaugural summit of the Big Ten Leadership Educators Network (see below) and follow-up work with new contacts has us reconsidering the nature of the course to be offered. Second, we continue to work with the College of Engineering to determine how we can best assist in the current state budget climate. This is described more in our Academic Year 2016-17 Goals for Criterion 5.

Although we did not offer a college-wide leadership course, we did provide funding to support a leadership course offered in the Department of Civil and Environmental Engineering. This course is jointly taught by Norm Doll (former president and chairman of Pieper Power) and Mark Rounds (currently vice president of development at Vogel Bros.). General information about the course

and a listing of topics (including a section on servant leadership) are provided in Appendix B. This course was offered again in Spring 2016, with funding partially provided by the Pieper Endowment.

### *Coordinated Leadership Initiative*

The Servant Leadership team continues to play a critical role in supporting UW-Madison's Coordinated Leadership Initiative (CLI). The CLI is a cross-campus effort sponsored by the Provost and Dean of Students to align and connect existing campus leadership development opportunities, shape and inform the development of new opportunities, and allow for a more formal and intentional analysis of campus needs.

During the 2012-2013 academic year, we, along with team members from a wide variety of UW-Madison schools and colleges, developed a Leadership Framework that was inclusive of leadership research and theory and grounded in the concept of social change and service. During this process the concepts of Servant Leadership were kept in mind. We worked with hundreds of faculty, staff, and students individually, in small groups, and in large group settings to solicit input and feedback on the framework. The framework was unveiled in July 2013 and the final version, based on additional feedback, was released in February 2014.

CLI supports a growing community of leadership practitioners, including students, faculty and staff across campus, who are implementing the Leadership Framework in a wide variety of new and continuing programming. The following is a sample of high impact programming that has recently (2015-2016) been aligned with the Leadership Framework to effect positive change in beliefs, values and behaviors.

- **Adventure Learning Programs (ALPs):** ALPs is a student organization that provides workshops to improve group dynamics and build community on campus. ALPs uses the UW-Madison Leadership Framework for 40 student facilitators to reflect on their leadership skills and to track their leadership growth over their tenure with the program. The framework gives facilitators terminology for writing resumes and interviewing.
- **All-Campus Leadership Conference 2016:** Presented by the Student Leadership Program, this is the largest fully student-run event at UW-Madison, with an audience of approximately 900 individuals. Each of the conference's 25 breakout sessions was required to meet one or more values or competencies of the UW-Madison Leadership Framework. The framework helped students focus on learning more about their leadership needs and interests.
- **Bucky's Award Ceremony:** This event spotlights excellence in individual and organizational leadership. The UW-Madison Leadership Framework served as the rubric for the Outstanding Leadership Award.
- **DoIT Digital Publishing and Printing:** Employees of DoIT's Digital Publishing and Printing office lean on the UW-Madison Leadership Framework values and competencies to

develop stretch and growth goals for themselves with guidance from managers. The resulting dialog increased employees' connections and commitment to their work.

- **Leadership and Civic Engagement for Social Change Course:** This course engages first year students looking to explore who they are, how identity impacts leadership, and how to create change in their communities. Students have the opportunity to translate their leadership development into action through the lens of civic engagement and social justice.
- **Leadership Certificate:** The Leadership Certificate program, designed around the UW-Madison Leadership Framework, is for student leaders who excel in their leadership roles both inside and outside the classroom. The Certificate marks a formal acknowledgement of student contributions and achievements. The program continues to increase participation from other departments on campus. For example, the Department of Kinesiology recently implemented a course titled Group Development and Behavior Management, and this course may be used by students to meet certificate requirements. To meet a similar purpose, the School of Pharmacy implemented elements of the framework in a course titled Pharmacy in the Health Care System. The Pieper Chair intends to include a College of Engineering course in this program.
- **School of Human Ecology:** SoHE's implementation of the Framework has directly benefited students, faculty and staff. SoHE's stated commitment to improving the quality of people's lives and solving life's oldest problems directly aligns with the core tenant of the Leadership Framework – supporting leadership for the purpose of positive change. Throughout the past year, SoHE has explicitly and effectively infused leadership development into retreats for staff and faculty, incorporated leadership outcomes into course curriculum for undergraduate and graduate students and encouraged on-going employee development through a focus on coaching and feedback skills. "The UW-Madison Leadership Framework has been a valuable tool for the School of Human Ecology, from the Coaching and Feedback sessions in our all-school faculty and staff retreat to the full curriculum re-design in our Communities and Nonprofit Leadership undergraduate program," remarked SoHE's Dean Soyeon Shim. "In addition, we've discovered that the Framework and its accompanying materials are very accessible to our team as well as our campus staff and students."
- **Student-Athlete Advisory Committee (SAAC):** The Office of Student-Athlete Development is committed to inspiring, engaging, and advancing student-athletes outside of the athletic arena by providing programming and resources through four key pillars: Leadership & Involvement, Personal Development, Career Development, and Diversity & Inclusion. A few examples of OSAD's Framework-infused programming include the "Life Skills Academy" course required for all first year student-athletes, the "Student-Athlete Advisory Committee (SAAC)", a "Leadership Development for Young Professionals" course, and a partnership with the Center for Leadership & Involvement on the "Leadership Certificate".

- **UW-Madison Arboretum Earth Partnership Restoration:** Restoration team leaders are an essential corps of land care volunteers at the Arboretum. They participate in ecological restoration by leading other volunteers from diverse backgrounds. Team leaders teach and supervise volunteers, practicing leadership and communications skills aligned with the UW-Madison Leadership Framework.
- **University of Wisconsin Libraries:** The library system incorporates the UW-Madison Leadership Framework into leadership development groups for staff.

In addition to these change initiatives, The Office of Talent Management, within UW-Madison's Human Resources Office created training materials for faculty and staff that incorporate the Framework into its popular Fully Prepared to Lead series. This revised program focuses on the seven Leadership Competencies from the Framework and launched in April 2016.

CLI continues to benefit from the talent and energy of campus and community volunteers to steer the initiative forward. Currently, a pilot Leadership Resource Directory is being developed that will allow participants to search for development opportunities by different elements of the Framework (Values or Competencies). Additionally, a monthly Community of Practice meeting is held for leadership educators to convene and share how they are implementing the Framework into their programming. That community provides a network of peers that suggest evolving leadership practices and support as we build a campus of positive change agents.

Direct Impact of Pieper Chair to the Coordinated Leadership Initiative: As a result of the financial support of the Pieper Foundation Chair, the CLI was able to provide partial funding for staff to support the development of a leadership resource directory (located within our updated website) and enhance Leadership Framework tools. The directory will connect users with learning resources to support their leadership development (programs, books, articles, etc.). The requirements gathering process was completed in May and the pilot directory will be available at the end of January. Additionally, as a result of the staff assistance, a new leadership assessment tool was developed, along with personalized reports, which supports individual and organizational development.

### *Multi-Institutional Study of Leadership*

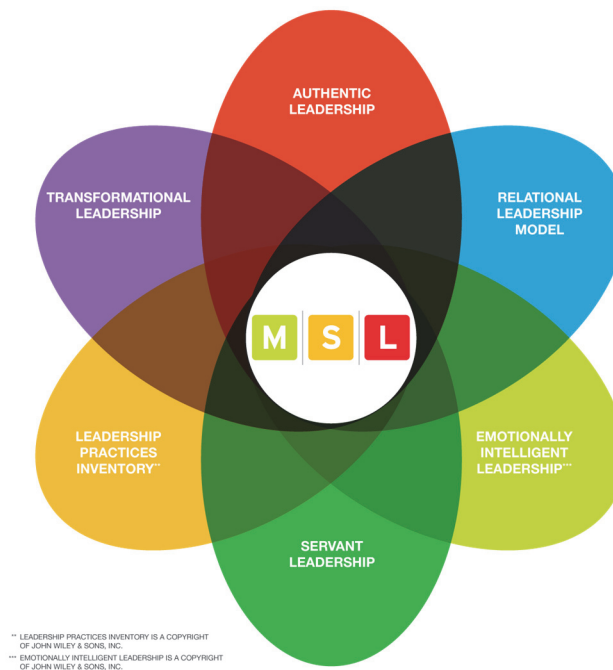
In 2015, UW-Madison participated in the Multi-Institutional Study of Leadership (MSL). The MSL is an international research program focused on understanding the influences of higher education in shaping socially responsible leadership capacity & other leadership related outcomes (e.g., efficacy, cognitive skills, and resiliency). Beyond a research program, the MSL is an international movement toward more effective, evidence-based college student leadership development (see Figure 2). A total of 80 institutions of higher education participated in this study.

We collaborated with the School of Business, Wisconsin Union, the Center for Leadership & Involvement and the McNair Scholars program to bring this important research to the UW-Madison campus. In February 2015, 5000 undergraduate students received this survey that is, in



part, based on theoretical concepts of Servant Leadership. Of the 5000 students who received the survey, more than 2100 responded. See Appendix C for the survey Codebook and list of questions.

The College of Engineering also collected data via a comparison sample. Of the 5,000 students receiving the survey, 500 were specifically from the College of Engineering. In May we received reports that illustrate the responses of UW-Madison students and College of Engineering students while also comparing this data with other institutions across the country. A detailed set of general results is provided in Appendix D, in which engineering students are labeled as “Comparative Sample 2.”



**Figure 2** – Visual model of the Multi-Institutional Study of Leadership

During this academic year, we began mining the data to develop conclusions about items that were not provided to us in the MSL reports. Our final product will be reports to the university, the College of Engineering, and the School of Business.

With the exception of two outcomes, engineering students could not be differentiated from the general student body at a 99% level of confidence. The two outcomes having statistically significant differences were:

1. **Citizenship:** Our engineering students perceived themselves more negatively than the general student body perceived itself with respect to citizenship attributes. Although



statistically significant, the magnitude of the difference was deemed trivial by MSL. The questions considered in the citizenship outcome were as follows:

*Think of the most effective, functional group of which you have **recently** been a part. This might be a formal organization or an informal study group. For consistency, use the same group in all your responses.*

- *I believe I have responsibilities to my community.*
- *I work with others to make my communities better places.*
- *I participate in activities that contribute to the common good.*
- *I value opportunities that allow me to contribute to my community.*
- *It is important to me that I play an active role in my communities.*
- *I believe my work has a greater purpose for the larger community.*

2. **Pathways to Hope:** MSL uses this definition of hope in the context of resiliency and leadership – “the process of thinking about one’s goals, along with the motivation to move toward those goals (agency), and the ways to achieve those goals (pathways).” There was no significant difference between engineering students and the general student body with respect to motivation/agency. However, our engineering students perceived themselves more positively than the general student body perceived itself with respect to pathway attributes. Although statistically significant, the effect was deemed trivial by MSL. The questions considered in the pathways to hope outcome were as follows:

- *I can think of many ways to get out of a jam.*
- *There are lots of ways around any problem.*
- *I can think of many ways to get the things in life that are important to me.*
- *Even when others get discouraged, I know I can find a way to solve a problem.*

In addition to comparisons between different student populations, the MSL also evaluated whether students perceived changes in thinking during the years from high school senior to college senior. The general student body at UW had statistically significant improvement in all leadership categories while they were in college. UW engineering students had statistically significant improvement in all but two leadership categories while they were in college. There was no statistically significant decline in any of the leadership categories, but the categories of *citizenship* and *complex cognitive skills* showed no statistically significant change in perception through college.

The results suggested that we need to prioritize the understanding of citizenship responsibilities amongst our engineering students. However, data for the general student body showed a similar difference based on gender, with male students scoring lower on citizenship responsibilities than female students. *Noting that 72% of the engineering participants were male, we conducted statistical analyses to determine if the lower citizenship scores were due to the skewed gender demographics of the engineering student body compared to the general student body.* To do this we compared males in engineering with males in the general student body, and females in

engineering with females in the general student body. Our results clearly showed no difference between males in engineering and males in the general student body. The same result was observed for females. *Thus, we have concluded that the lower scores on citizenship for engineering students are due to gender and not due to enrollment in engineering.*

A similar analysis was done for the Pathways to Hope category in the MSL. In this case, we discovered no difference between males in engineering and males in the general student body. However, we also discovered that females in engineering scored significantly higher on this leadership measure than females in the general student body. We have not definitively assigned a reason to this observation.

We continue to evaluate the individual questions that make up the citizenship category, as well as other categories of leadership in this leadership model. Our final report to the university is currently being drafted and we expect to include a final version of our MSL report to the university in our 2016-17 report to the Pieper Foundation. In addition, we expect to map the MSL outcomes to servant leader attributes in our 2016-17 report to the Pieper Foundation.

Direct Impact of Pieper Chair to the Multi-Institution Study of Leadership: UW-Madison and the College of Engineering were able to participate in this important research as a direct result of the financial support of the Pieper Foundation Chair. The data provided by engaging in the Multi-Institutional Study of Leadership will help us understand, on a broad scale, how effective our leadership programming is for students. This will become particularly true as we continue future participation in the MSL to assess longitudinal change in student perception.

#### *Student Award for Servant Leadership*

This past year we continued “The Pieper Servant Leadership Fund” student award program, which offers financial support (up to a total of \$10,000) for UW-Madison College of Engineering students to lead service-learning or community outreach projects that “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.” Projects need to demonstrate their alignment with The Pieper Family Foundation belief that human goodness is not simply innate; it requires action and service to others; and that character is inspired and facilitated in cultures, organizations, and families by and through the example of enlightened leadership. To receive an award, students must write a proposal in response to a request for proposals (see Appendix E). The program requires student leadership – student participation without leadership is insufficient to receive an award. In their proposals, students must state how they will use servant leadership principles in their oversight of the project.

We partially funded the following four projects in 2015-16:

- Tabuga (Ecuador) Water Improvement – Engineers Without Borders
- Lweza (Uganda) Water Supply – Engineers Without Borders
- Electric Car Controller for disabled children – Go Baby Go
- Latinos Exploring Engineering Professionals – Society of Hispanic Professional Engineers

### *Big Ten Leadership Educators Network*

Through a grant from the C. Charles Jackson Foundation, the University of Maryland organized an inaugural summit of the Big Ten Leadership Educators Network. We used Pieper Foundation funds to support the travel expenses of the Pieper Chair to this event, held August 4-6, 2016. The following material comes from the documented proceedings of this event (see Appendix F):

All 14 Big Ten member institutions sent representatives to The University of Maryland for a three-day, intensive summit aimed at building a network, solving common problems, and generating innovative ideas in a way that promotes the work of leadership educators at their respective institutions. As a result of the summit, a purpose statement for LENK as well as a set of priorities the group will pursue in the 2016-2017 academic year emerged.

Summit objectives were to:

- Identify intersections among the work of leadership educators
- Highlight distinctions between the institutional leadership programs and their purposes
- Emerge an understanding of core leadership values of the Big Ten member institutions and implications for our collective leadership education work
- Begin collaboration to evolve the potential for a college student leadership education initiative
- Initiate the investigation of a shared research agenda that results in evidence-based practice
- Illuminate mechanisms to funnel information among the Big Ten LENK
- Advance opportunities to share resources and educational approaches

The purpose of the network is to establish a network of leadership educators in the Big Ten to understand who we are, the context of our work, and how we can advance leadership education in the field, efficiently and effectively, through student-centered exchanges, dissemination of knowledge, and collaborative problem-solving.

The priorities established by the summit were as follows:

- Facilitate student-centered exchanges
  - The plethora of resources and experiences available as a collective Big Ten Leadership Educators Network far surpasses the resources and experiences available at a single institution. As a result, the Big Ten Leadership Educators Network sees an opportunity to connect students with peers, faculty, and staff at other institutions in student-centered exchanges to further expose them to diverse perspectives.
- Disseminate knowledge to the field
  - As the Big Ten Leadership Educators Network summit proceeded, it became evident the work being done in the Big Ten is of extreme value to the field and unique in having both academic and student affairs professionals at the table. As such, the Big Ten Leadership Educators Network hopes to publicize its valuable work and serve as a model for other national conferences.

- Engage in ongoing problem solving
  - At the Big Ten Leadership Educators Network summit, participants were open to sharing issues specific to their campus in an effort to garner advice and resources. In candidly sharing the challenges leadership educators are faced with, themes emerged that highlighted similarities across the Big Ten. Seeing great value in the sharing process, the Big Ten Leadership Educators Network aims to serve as a space to continue in productive dialogue.

The UW Center for Leadership and Involvement is engaged in committee work on the first of these priorities while the Pieper Chair is engaged in committee work on the second of these priorities.

In addition to the work identified above, we have initiated work to better understand what our peer institutions are doing for leadership education and how that might influence our course offerings. Most of this work has been done after the start of the fall semester, so we will report on the outcomes of this work in our 2016-17 annual report.

### ***Academic Year 2016-17 Goals***

#### ***Leadership Course***

The challenges encountered in 2015-16 have led to opportunities for 2016-17. As we entered 2015, we did not have sufficient funds to cover the full cost of a college-wide leadership course. However, the funding set aside for that purpose in 2015 has carried over to 2016. This can be combined with a portion of the income generated from the endowment in 2015 so that we may offer a course without the assistance of college funding. We believe the budget for this will be sustainable due to the increasing endowment and the extra income associated with that endowment, thanks to the generosity of the Pieper Family Foundation. Our original plan was to kick this off for the current fall semester, but we delayed it by one year to see if we could (1) better think about this position after attending the inaugural summit of the Big Ten Leadership Educators Network and (2) better delineate this position after completing work on a jointly funded position in the Student Development Center.

Our revised plan in developing this course is as follows:

- February 2017 – advertise for the instructor, using the network of campus and Big Ten partners that we have been establishing for the past two years.
- March 2017 – appoint the best candidate.
- May 2017 to August 2017 – appointee develops course content and continuous improvement process with oversight from the Pieper Servant Leadership team. Course content is expected to include the principles of servant leadership and students will be expected to complete the survey we created in collaboration with the UW Survey Center.
- September 2017 to December 2017 – appointee offers class for first time, while implementing the assessment process designed to provide continuous improvement.
- December 2017 to January 2018 – improve course based on assessment data

- January 2018 to May 2018 – offer course second time.

### *Coordinated Leadership Initiative*

In November 2016, the University's leadership website ([www.leadership.wisc.edu](http://www.leadership.wisc.edu)) will add a leadership resources directory, supporting the UW-Madison community in connecting to growth opportunities for the purposes of positive change. Additionally, we'll be partnering with the Provost's Office to determine a data collection plan for programs using the Leadership Framework. The Community of Practice and volunteer administrative teams will continue to support Framework implementation across campus and beyond.

### *Multi-Institutional Study of Leadership*

In addition to receiving the report provided in Appendix D, the university received the complete set of data from MSL in a file that can be analyzed by SPSS (a statistical analysis software package). The report only allows us to (1) compare UW engineering students with the general student body at UW and (2) see how students perceive their growth in understanding leadership principles during their college years. The data set allows us to run additional analyses, such as comparing UW engineering students with UW business students, comparing UW engineering students with general students at all participating institutions, and comparing subgroups of engineering students with each other (e.g., women vs men). We can also get additional information about the general student body at UW. Some of this work has already been completed, as described earlier. However, we are still finalizing our reports to campus, the College of Engineering, and the School of Business. We will continue collaborating with the Center for Leadership and Involvement and our graduate student assistant to do the statistical analysis and report writing during this academic year.

### *Student Award for Servant Leadership*

We will be advertising for more applications to our student award program in the coming semester. Our goal over time is to increase funding for this award to \$10,000/year.

### *Big Ten Leadership Educators Network*

We are formalizing connections initiated at the summit in August. Since September, the Pieper Chair has visited Northwestern University's Leadership Center, which is housed in their School of Engineering. The Pieper Chair is also participating in the writing of a Big Ten position paper on leadership education and how Big Ten universities can best leverage their resources to deliver leadership education in a large research university setting. This paper is expected to be complete in time for next summer's second summit of the network. We anticipate that this will be held at the University of Illinois.

The Big Ten Leadership Educators Network is committed to meeting annually in an effort to advance the field of leadership education. Based on the collaborative priorities established at the

2016 summer summit, the goal is to make significant progress in these three key areas in the upcoming academic year. The steering committee for the 2016 summit will remain together and has already begun moving forward to create the vision for the 2017 summit and determine how to best pursue the collaborative priorities established by the 2016 summit participants.

## **Criterion 6 – Carrying Out Mission of the Chair**

### ***Typical Thinking that Goes into Evaluating the Criterion***

*This is a follow-up of Criterion 2 and is an annual consideration. Is there a broad range of deliverable areas with some reasonable quantity of people involved carrying out the mission of the chair as agreed to and accepted by the institution?*

### ***Academic Year 2015-16 Progress***

This year, we solidified our work within the College of Engineering and deepened our networks of partners across campus. The most promising connection has been with Kathy Cramer, the director of the UW Morgridge Center for Public Service (<http://morgridge.wisc.edu/index>). This connection has led to potential community-based projects that allow for interaction between engineering students (especially those in civil and environmental engineering) and non-engineering students. Beyond these connections we've also been involved across campus in the following:

1. **UW-Madison's Coordinated Leadership Initiative.** Mr. Kueppers has served in his role as a co-leader of the campus-wide Coordinated Leadership Initiative (CLI). His specific role is to ensure that CLI is sustainable by developing key partnerships with campus and community leaders. Specifically, Mark is working with Executive Sponsors to integrate the UW-Madison's Leadership Framework into key campus-wide change initiatives. Currently the CLI receives administrative assistance from over 40 campus volunteers and is connected to an invested community of 450 known supporters. See Criteria #5 above for further details.
2. **Campus Servant-Leadership Working Group.** Dr. Harrington and Mr. Kueppers are members of this group that meet monthly to read articles, discuss relevant topics, and host/sponsor campus-wide activities related to Servant-Leadership.
3. **Multi-Institutional Study of Leadership.** Mr. Kueppers has helped direct UW-Madison's participation in the [Multi-Institutional Study of Leadership](#) (MSL), an international research program focused on understanding the influences of higher education in shaping socially responsible leadership capacity. Dr. Harrington is leading the effort to quantitatively evaluate the data for identification of priorities that can be worked on at the campus and college levels. In addition to learning how UW-Madison



students compare to their peers at other institutions, we will also be able to compare engineering students to all other data that is available.

4. **Chancellor's Scholars Program.** Dr. Harrington continues to serve as a Chancellor's Scholar mentor, designed to increase educational opportunities for academically talented underrepresented minority students. More information on this program may be found at <http://www.provost.wisc.edu/csp.htm>.
5. **College of Engineering Student Leadership Center.** We continue to work with Mr. John Archambault, Assistant Dean for Student Development, who has a supervisor role for the Student Leadership Center (<http://slc.engr.wisc.edu/>). This includes co-sponsorship of workshops and activities, and close partnerships with SLC activities and the Engineering Leadership course.
6. **Meyerhoff Undergraduate Excellence Award for Leadership, Service, and Scholarship.** Dr. Harrington serves as a reviewer of student applications for this university-level award, which recognizes students who have made outstanding leadership and service contributions to the University and/or the surrounding communities while maintaining a record of academic excellence. The award is named after the benefactor, Harvey "Bud" Meyerhoff from Baltimore, Maryland. Mr. Meyerhoff, a successful businessman and philanthropist, is a 1948 graduate of UW-Madison.
7. **Community-Based Involvement in Engineering Classes.** Dr. Harrington has developed connections with the Morgridge Center for Public Service and the UniverCity Alliance to bring community-based projects to the Senior Capstone Design course in the Department of Civil and Environmental Engineering. With facilitation from the Morgridge Center, students are working on building designs for the Bayview Foundation in Madison, which provides housing to low income citizens, many of whom are immigrants. The UniverCity Alliance has facilitated connections to help create engineering designs for park improvements in the City of Monona.

### ***Academic Year 2016-17 Goals***

As 2016-17 approaches, we are looking to continually add to our Servant Leadership programming opportunities while ensuring their interconnectedness. This will help ingrain a culture of leadership development within College of Engineering, and eventually across campus. In addition to the continuation of all work listed above, in 2016, we plan to:

1. Continue to support the implementation of the Leadership Framework into more academic courses throughout campus to ensure alignment with the new Leadership Certificate program.
2. Continue to review MSL survey data, specifically of engineering students, to understand the College of Engineering and UW-Madison's effectiveness in shaping socially responsible leadership capacity.



## **Criterion 7 – Servant Leader that Leads at an Element or Segment of our World**

### ***Typical Thinking that Goes into Evaluating the Criterion***

*Is there evidence that a professor in their nurturing locally, community, nation and world is consistently contributing or leading service model versus the power model? Are there multiple students participating in that level? Such a critical mass would be considered promising and obviously if such a leader or professor nurtures someone else who moves into that level, you could expect the maximum award. Examples are Nelson Mandela, Mother Teresa, and Mahatma Gandhi.*

### ***Academic Year 2015-16 Progress***

As noted in our previous reports, we cannot point to an individual leader who is the caliber of Gandhi, Mandela, or Mother Teresa. However, we remind the foundation that there is a pervasive desire among our student body to serve the world in positive ways that follow the vision set forth by such leaders. As an example, our university “consistently places on the Peace Corps’ annual list of schools that produce the most alumni volunteers” (<http://peacecorps.wisc.edu/>). Since the creation of the Peace Corps in 1961, 3000 UW-Madison alumni have served in the Peace Corps and this is second only to the University of California – Berkeley. In some ways, this desire for positive community service is ensured by UW-Madison’s holistic admissions process, in which admissions counselors look for “sustained involvement in activities in or out of school, leadership, community involvements” and other items in addition to standardized test scores and high school grade-point averages (<http://www.admissions.wisc.edu/appTipSheet.php>). In the 2010-11 academic year, 73 percent of UW-Madison seniors reported participating in community service or volunteer work ([http://apir.wisc.edu/studentsurveys/NSSE\\_2011\\_Final\\_report.pdf](http://apir.wisc.edu/studentsurveys/NSSE_2011_Final_report.pdf)).

Within the UW-Madison College of Engineering, active service-oriented student organizations include Engineers Without Borders (<http://ewbuw.org/>) and Engineering World Health (<http://ewh.slc.engr.wisc.edu/index.html>). Even the more traditional discipline-related organizations and honor societies are involved in community-level service activities (<http://slc.engr.wisc.edu/organizations.html>). Examples of service projects may be found by clicking on the links of some student organizations.

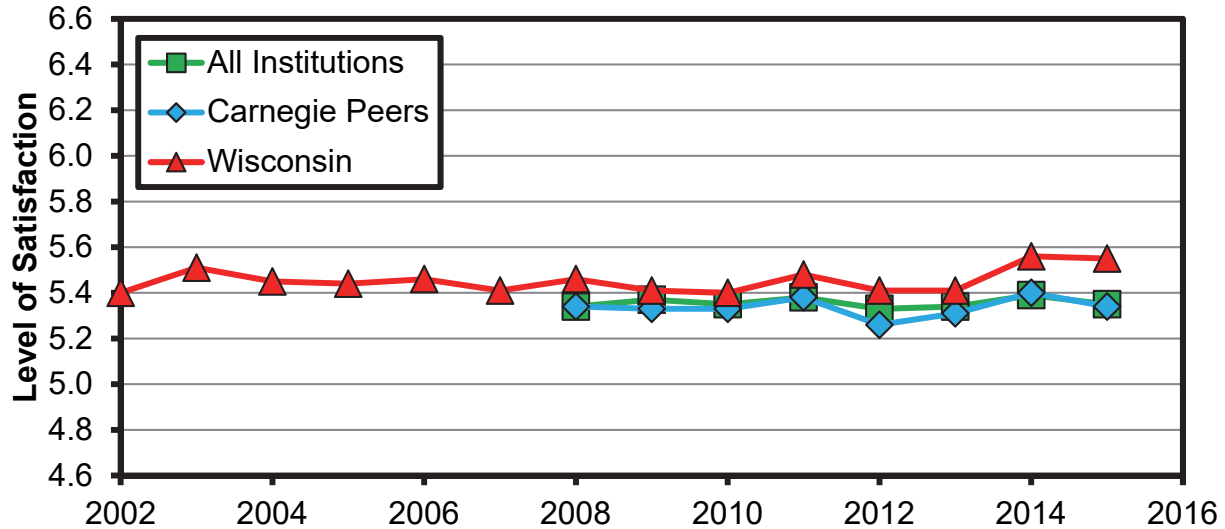
### ***Academic Year 2016-17 Goals***

While we wish to approach this criterion with some humility, we believe there are a significant number of our former engineering students who are bringing positive change to the world while exhibiting the attributes of servant leaders. This belief is reinforced by the large number of students who are planting the seeds for such service while they are on campus. It is clear that we do not track our alumni in ways that our fellow servant leader institutions do. One of our goals for the coming year is to honor the efforts of our alumni and, to do this, we intend to develop an approach to help us stay informed and engaged. This was a stated goal for Year 2015-16 and we

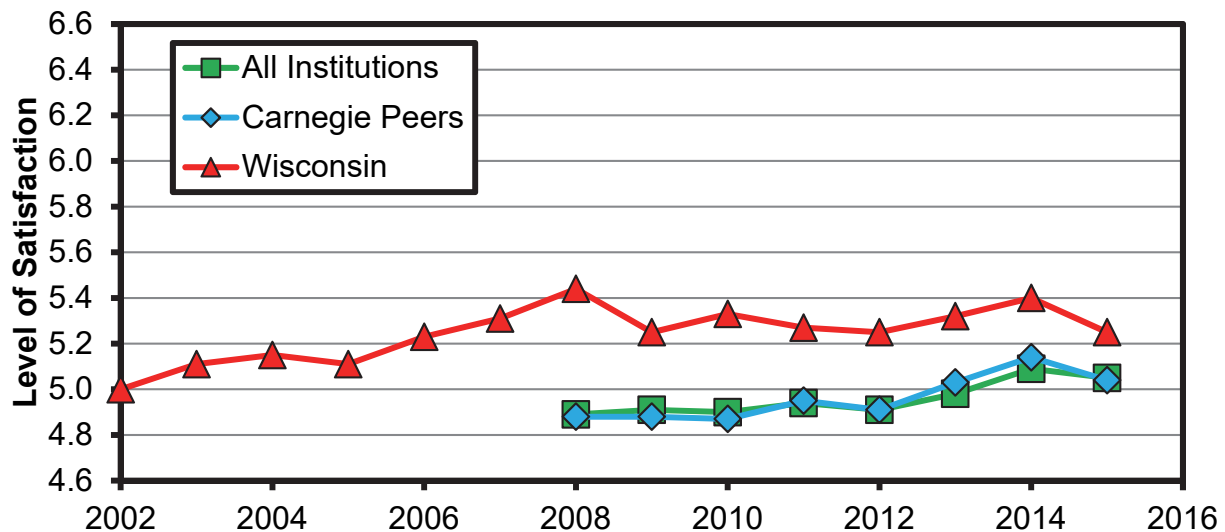
needed to continue resetting priorities as the impact of university budget cuts on priority setting continues to become more clear.

In addition to this, we hope to use the Servant Leader Chair endowment to continue encouraging engineering students to participate in activities that serve underprivileged communities both locally and in developing countries. Our funding of student projects focused on providing clean water to impoverished communities and exposing the STEM fields to underrepresented communities is contributing to positive social change. Additionally, the CLI will look to partner with campus and community entities to address social issues, including the anti-bullying campaign that is being generated at UW-Madison. We look forward to participating with and supporting our communities in making the world more just and humane.

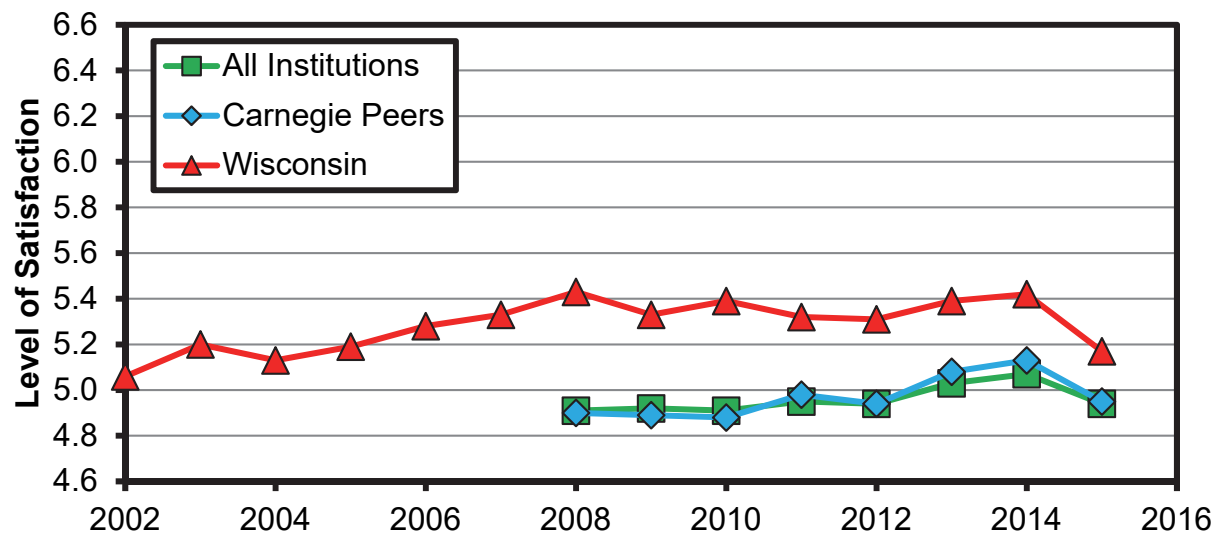
## Appendix A – Senior Exit Survey Data for Questions Relevant to Leadership Education



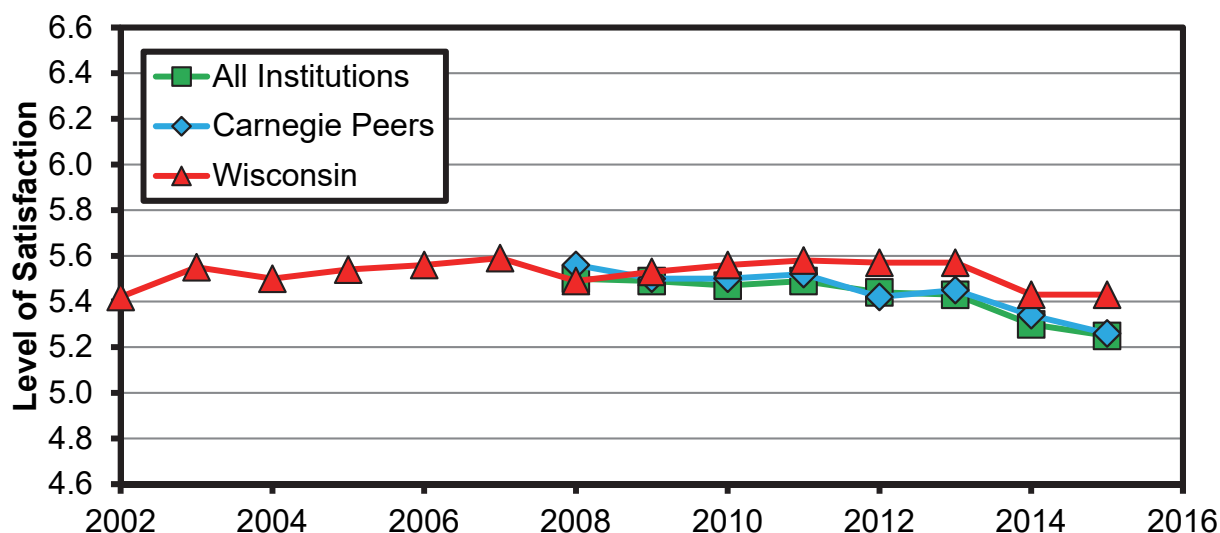
**Figure A1.** Mean level of satisfaction with value derived from team experiences. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). For the most recent six years, the difference between Wisconsin and peer engineering institutions is statistically significant at a 95% confidence level. For the same period, there was no statistically significant improvement or decline in student perception at Wisconsin.



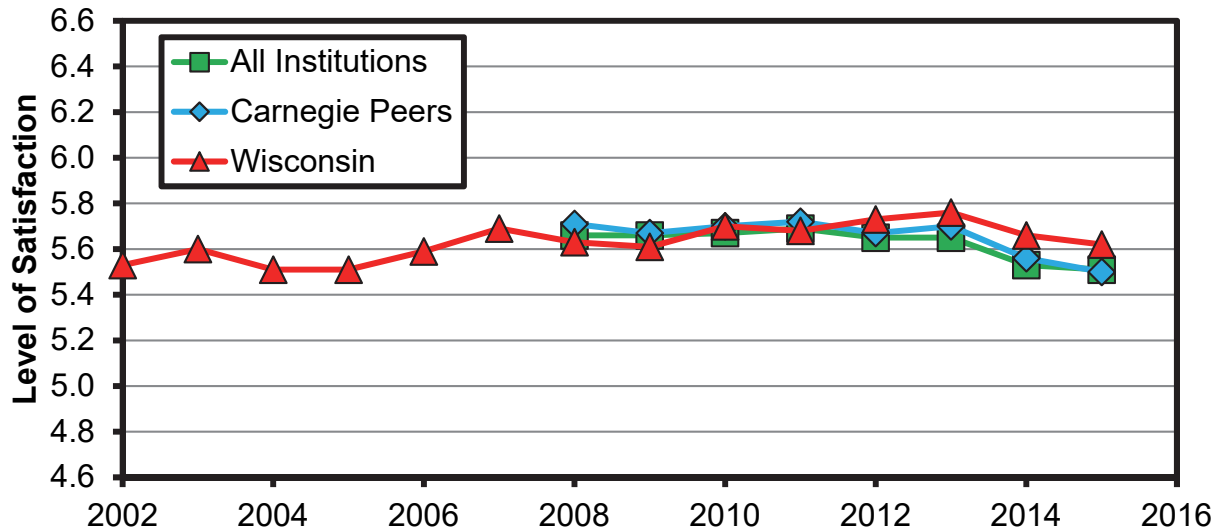
**Figure A2.** Mean level of satisfaction with value of engineering student organization activities. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). For the most recent six years, the difference between Wisconsin and peer engineering institutions is statistically significant at a 95% confidence level. For the same period, there was no statistically significant improvement or decline in student perception at Wisconsin.



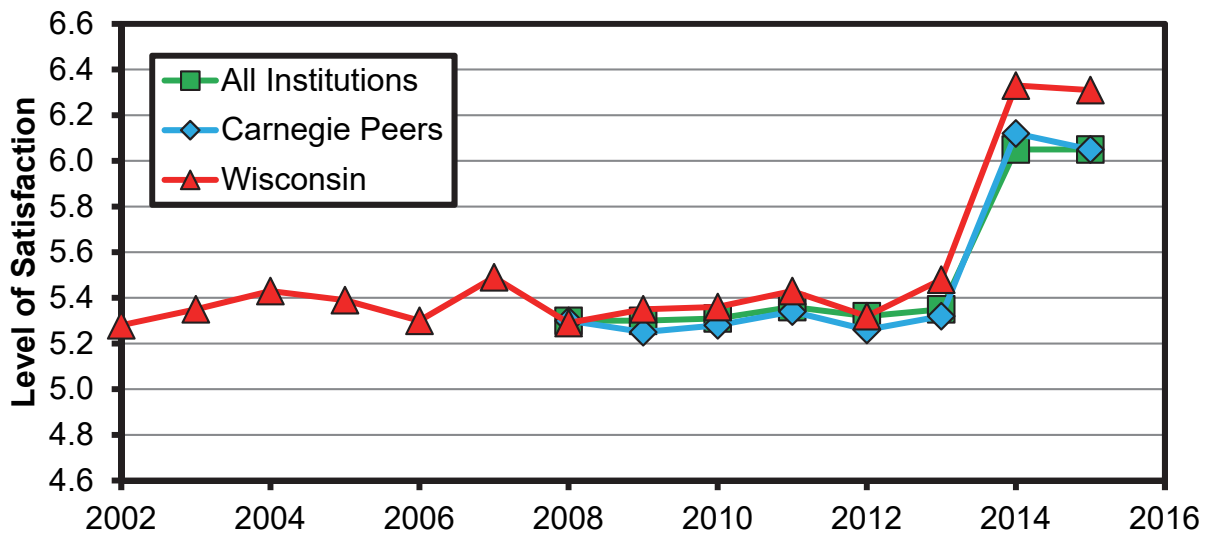
**Figure A3.** Mean level of satisfaction with leadership opportunities in engineering student organization activities. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). For the most recent six years, the difference between Wisconsin and peer engineering institutions is statistically significant at a 95% confidence level. For the same period, there was no statistically significant improvement or decline in student perception at Wisconsin.



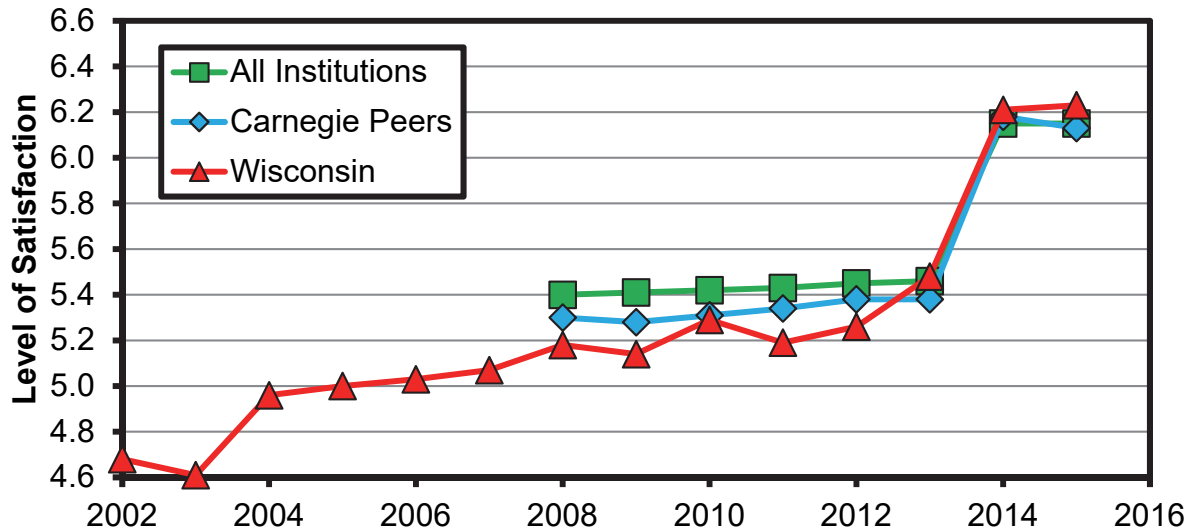
**Figure A4.** Mean level of satisfaction with fellow students' ability to work in teams. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). For the most recent six years, the difference between Wisconsin and peer institutions was statistically significant at a 95% confidence level. For the same period, there was no statistically significant improvement or decline in student perception at Wisconsin.



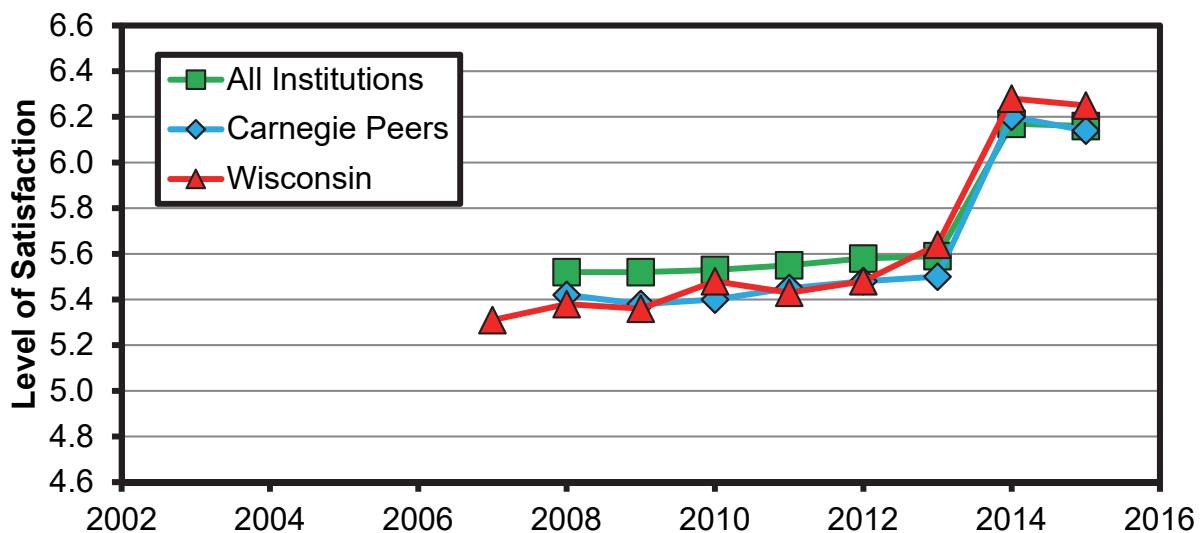
**Figure A5.** Mean level of satisfaction with fellow students' level of camaraderie. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). For the most recent six years, the difference between Wisconsin and peer institutions was not statistically significant at a 95% confidence level. For the same period, there was no statistically significant improvement or decline in student perception at Wisconsin.



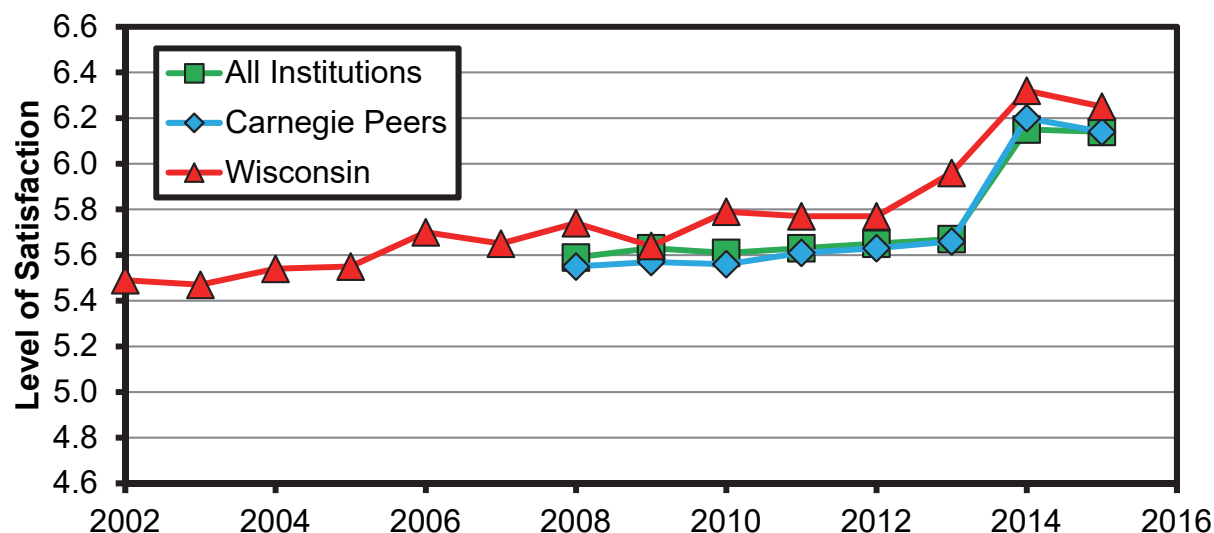
**Figure A6.** Mean level of satisfaction with how engineering education enhanced ability to function on multidisciplinary teams. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). For the most recent six years, the difference between Wisconsin and peer institutions was statistically significant at a 95% confidence level. For the same period, there was a statistically significant improvement in student perception at Wisconsin. However, the large improvement for all institutions in 2013-14 is likely due to a rephrasing of the question asked by EBI.



**Figure A7.** Mean level of satisfaction with how engineering education enhanced ability to understand ethical responsibilities. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). For the most recent six years, the difference between Wisconsin and peer institutions was not statistically significant at a 95% confidence level. For the same period, there was a statistically significant improvement in student perception at Wisconsin. However, the large improvement for all institutions in 2013-14 is likely due to a rephrasing of the question asked by EBI.



**Figure A8.** Mean level of satisfaction with how engineering education enhanced ability to understand professional responsibilities. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). For the most recent six years, the difference between Wisconsin and peer institutions was not statistically significant at a 95% confidence level. For the same period, there was a statistically significant improvement in student perception at Wisconsin. However, the large improvement for all institutions in 2013-14 is likely due to a rephrasing of the question asked by EBI.



**Figure A9.** Mean level of satisfaction with how engineering education enhanced ability to recognize need to engage in lifelong learning. The x-axis is organized on an academic year basis, so that 2012 refers to the 2011-12 academic year. The Pieper Servant-Leader Chair at the UW-Madison College of Engineering began in the 2008-09 academic year. The scale on the y-axis has a minimum value of 1 (very dissatisfied) and a maximum value of 7 (very satisfied). For the most recent six years, the difference between Wisconsin and peer engineering institutions is statistically significant at a 95% confidence level. For the same period, there was a statistically significant improvement in student perception at Wisconsin. However, the large improvement for all institutions in 2013-14 is likely due to a rephrasing of the question asked by EBI.



**Appendix B**  
**General Information and Topics for CEE 669 – Special Topics in Construction**  
**Management: Leadership for Construction**

CEE 698 Leadership Development – 3 Cr.  
Spring Semester 2015

**Course Description:**

This course starts with learning various concepts of leading others to accomplish a common goal. Concepts we will cover include leadership styles, self examination, human motivation, communication and problem solving. Students will put these learned concepts to work in their chosen project using feedback to improve their leadership effectiveness. Guest lecturers will present their personal views on the subject of leadership, in separate sessions possibly in the evenings as part of outside lecture series. Attendance is required and is included as part of the course grade. The discussions will provide the application framework with assigned reading providing the in depth review. There will be two exams and a report on the leadership project due at course completion. The course grade will be determined by class participation, two exam scores and the final report and presentation. Examples from experience in the construction industry will be used extensively for explanation and discussion, the discussion will be applicable for any industry or organizational setting.

See Moodle course homepage for weekly outline and syllabus.

**Course Objectives:**

Provide a basic understanding of leadership concepts and styles, individual assessment and relevant coaching. After classroom discussion to gain an understanding of these concepts students are given an opportunity to implement and report on what was learned further enhancing understanding.

**Class Schedule and resources:**

Discussions are held once per week for 75 minutes, on Thursdays from 9:30 until 10:45 AM in 1213 Engineering Hall. All reading material and video lectures are available on the eCOW2 site page which will be used for all course administration. We will meet on some Tuesdays with advance notice including the first day of class scheduled for Tuesday January 20, 2015.

**Assessment of student progress:**

Class participation (10%), Homework and Quizzes (20%), Midterm (20%), Final Exam (20%), Leadership Project (30%).

Prepared by Norm Doll

*"Knowing others is intelligence; knowing yourself is true wisdom. Mastering others is strength; mastering yourself is true power." -[Laozi](#), Ancient Chinese Philosopher believed to have written the Tao Te Ching, [Laozi books//](#)*

Leadership is lifting a person's vision to higher sights, the raising of a person's performance to a higher standard, the building of a personality beyond its normal limitations." Peter Drucker



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[News forum](#)

Course Information:

Meets Some Tuesdays (with advance notice) and every Thursday from 9:30 to 10:45 in Room 1213 Engr. Hall.

Meets Tuesday January 20, first day of class.



[Course Information](#)



[The role of Civil Engineering in Human Development](#)

## January 18 - January 24

Welcome, lets get started!

Lets start with WHY. Why are you here?

What do you want to learn from this course?

What Leadership experience do you have and what problems did you encounter?



[Leadership Project Definition](#)



[Leadership Definitions](#)



[Career Development Planner - optional](#)



[Leaders We Need Now](#)



[Start With Why](#)



[Milwaukee's zip code 53210](#)



[Corporate Social Responsibility](#)



[Cleaver Assessment forms](#)

This assignment requires each student to complete the forms that will be sent to you from the Cleaver Company. You will receive a report back on the forms you filled out online. An optional assignment is completing and uploading the Career Planner document, for your personal understanding. They are due on January 28.



**Simon Sinek: How great leaders inspire action**

Ted Talk video of Simon Sinek's presentation



**Attendance**

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## January 25 - January 31

DISC Personality Assessment Systems



**Marston's Explanation**



**DISC - Limitations**



**DISC - Keys to Motivation**



**DISC - 8 Classics**



**Personal Development**



**Week 2 Quiz**



**Leadership Project Proposal**

The proposal as defined in the Leadership Project document is due next week. It can be preliminary or just be a set of ideas to be defined in a second submittal.



**DISC Video Powerpoint Slides**



**Attendance**

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## February 1 - February 7

Leadership Theories and Skills & Personal Mission Statement



**Engineering - Ideal Profession**



**Qualities of a Servant Leader**



**The New Transparency of Leadership**



**Personal Mission Statement**



### Week 3 Quiz



### Developing Your Mission Statement

Video discussing the steps to draft a Personal Mission Statement



### Leadership Fundamentals - videos

This is a link to Leadership Fundamentals on lynda.com. It is a series of 21 short video clips plus 2 introductory clips, totaling 1 hour and 24 minutes. You will need these videos to complete the assignment that is due in 3 parts over the next 3 weeks. You can complete it all at once or in 3 parts. When you are finished with the entire set you will be able to download a completion certificate which is an assignment to be turned in.

Restricted: Available from January 21, 2014.



### Leadership Fundamentals Exercise through page 6.

Fill in the form and submit it, completed through page 6 minimum. The titles of the video clips align with the Exercise form.



### Leadership Fundamentals Exercise form

Use this form for assignments due the weeks of Feb. 2-8 and Feb. 16-22. If you have any trouble typing and saving your answers you can also get this form on the lynda.com Leadership Fundamentals site.



### Attendance

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## February 8 - February 14

### Motivational Aspects of Organizations



### Maslow's Theory



### What Motivates Employees



### Maslow's Hierarchy



### Herzberg HBR Article - Class use only - Do Not Copy



### Maslow's Hierarchy



### Employee Motivation Theories



### Employee Motivation Theories/Slides









### Week 4 Quiz



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## February 15 - February 21


Focus on Process

-  W. Edwards Deming biography
-  Deming's Leadership List
-  Deming's 14 Points and 7 Diseases
-  Personal Mission Statement
-  Week 5 Quiz
-  Leadership Fundamentals Exercise page 6 through 14.

Complete the remainder of the form and submit.

-  Leadership Fundamentals Completion Certificate












-  Introduction to Deming and Statistical Process Control - video
-  Introduction to Statistical Process Control - Slides

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## February 22 - February 28

Communication and Conflict Management -Lecture by Mark Rounds

-  Communication Strategies - Video
-  Communication Strategies - Lecture Slides
-  Ch 10 - Crucial Conversations
-  Seven Mistakes
-  Focus on Recognition
-  Dialogue
-  Communication Impact on Brains.
-  The Happiness Advantage
-  Week 6 Quiz



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## March 1 - March 7

Situational Leadership - Lecture by Mark Rounds **NOTE: We will meet both on Tuesday 3/3 and Thursday 3/5**

- Situational Leadership Assignment
- Delegating - McNamara
- Overly Agressive Leaders
- Week 7 Quiz
- Situational Leadership Assignment

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## March 8 - March 14

Time Management and Organizational Strategy

- Writing Introductions
- Making the most of Organizational Strategy
- Time Management
- Management Time: Who's got the monkey?
- Multitask Study
- Creating a Winning Environment
- Week 8 quiz









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## March 15 - March 21

Problem Solving, Learning from Failures and Developing Strategy - Guest lecturers Bryce Unger and Daniel Wargolet

- Technical Presentation Writing 1
- Technical Presentation Writing 2
- Reading Financial Statements



-  ICI (Infrastructure Consulting Inc.) Balance sheets
  -  ICI (Infrastructure Consulting Inc.) income statement
  -  AECOM Financials and notes
  -  ICI (Infrastructure Consulting Inc.) Cash flow
  -  ICI (Infrastructure Consulting Inc.) stock equity
  -  Financial Ratios quiz
  -  Financial Reporting class video
  -  Rich's slides from video
- 

## March 22 - March 28

Prepared for public presentations

-  Quick tips for presentations
  -  Toastmaster Public Speaking Tips
  -  MIT Public Speaking Tips
  -  The Five Dysfunctions of a Team
  -  Problem Solving Opportunities
  -  Improve Success by Improving Problem Solving
  -  Presentation quiz
  -  Presentation Evaluation Form 2015
- 

## March 29 - April 4

Spring Break-- no class or assignments

-  Mark's Reading List
- 

## April 5 - April 11

Discussion of Organizational Strategy, Teams, and Personal Development from the lynda.com Leadership Fundamentals video and workbook.



Midterm Exam

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## April 12 - April 18

Project Presentations



Subordinate survey

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## April 19 - April 25

Project Presentations



Leadership Project - Draft Report

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## April 26 - May 2

Project Presentations

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## May 3 - May 9

Project Presentations



Leadership Project - Final Report



Leadership Project - Final Presentation



Attendance and Participation

Restricted (completely hidden, no message): Available from May 10 2012, 2:00 AM to May 17 2013, 10:00 PM.



Final (12 week) Exam

---

### NAVIGATION



- My home
- Site home
- Site pages
- My profile

Current course

**CIVENGR 669 Spring 2015 (1)**

Participants

Badges

General

January 18 - January 24

January 25 - January 31

February 1 - February 7

February 8 - February 14

February 15 - February 21

February 22 - February 28

March 1 - March 7

March 8 - March 14

March 15 - March 21

March 22 - March 28

March 29 - April 4

April 5 - April 11

April 12 - April 18

April 19 - April 25

April 26 - May 2

May 3 - May 9

☐ Kaltura Media Gallery

My courses

CALENDAR



December 2015



Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

EVENTS KEY



Hide global events



Hide course events




Hide group events



Hide user events

ADMINISTRATION



Course administration

☐ Turn editing on

☐ Edit settings

Users

☐ Filters

Reports

☐ Grades

Badges

☐ Backup

☐ Restore

☐ Import

☐ Reset

Question bank

☐ Repositories

☐ Legacy course files

Switch role to...

My profile settings

Site administration

LATEST NEWS



Add a new topic...

Grade Corrections

10:49 PM,May 18 Norm Doll

Grade Errors

11:51 AM,May 18 Nicholas Zeman

Grades Posted

5:33 PM,May 16 Norm Doll

Final reports and presentations

11:22 AM,May 4 Norm Doll

Class tomorrow

6:02 PM,Apr 27 Nicholas Zeman

Older topics ...

UW COURSE



**CIVENGR 698**  
**Spring 2013**

**Norman Doll**  
**SEM 001**

## UW COURSE



**CIVENGR 698**  
**Spring 2014**

**Norman Doll**  
**SEM 001**

**Awad Hanna**  
**SEM 001**

UW SECTIONS ☐

SPRING 2015

# CIVENGR 669

- SEM 001



## Enroll additional users



Edit Spring 2015 roster

## LIBRARY RESOURCES



Refresh links ↻

## PEOPLE



## Participants

## MESSAGES



No messages waiting

## Messages

☐ [Moodle Docs for this page](#)

You are logged in as [Greg Harrington](#) ([Log out](#))  
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## **Appendix C**

### **Codebook for the Multi-Institutional Study on Leadership**

**Multi-Institutional Study of Leadership**  
**MSL 2015 Codebook**  
**Version v.1 (9.21.2014)**

Red Font = Negative Response Item  
Blue Font = Skip Pattern  
Green Shading = Sub-Study

QUESTION	VARIABLE NAME	VARIABLE LABEL	RESPONSE CODING	NOTES
<b>COLLEGE INFORMATION</b>				
1	DEM1	Did you begin college at your current institution or elsewhere? (Choose one)	1= Started here 2=Started elsewhere	
2	DEM2	How would you characterize your enrollment status? (Choose one)	1=Full-time 2=Less than full-time	
3	DEM3	What is your current class level? (Choose one)	1=Freshman/First-year 2=Sophomore 3=Junior 4=Senior (4 <sup>th</sup> year and beyond) 5=Graduate Student 6= Unclassified	
4	DEM4	Which of the following best describes your <u>primary</u> major? (Select the category that best represents your field of study)	1=Agriculture/Natural Resources 2= Architecture/Urban Planning 3=Biological/Life Sciences (ex. biology, biochemistry, botany, zoology) 4=Business (ex. accounting, marketing, management, entrepreneurship, finance, human resources, hospitality) 5=Communication (speech, journalism, television/radio) 6=Computer and Information Sciences 7= Criminal Justice 8= Ecology 9=Education	



10=Engineering (ex. chemical, aerospace, civil, industrial, mechanical, biomedical)  
11= Environmental Science  
12=Ethnic & Cultural Studies  
13=Foreign Languages and Literature (ex. French, Spanish)  
14=Health-Related Professions (ex. nursing, physical therapy, health technology, pharmacy, kinesiology, health care administration)  
15=Humanities (ex. English, literature, philosophy, religion, history)  
16=Liberal/General Studies  
17 = Library Science  
18=Mathematics/Statistics  
19 = Military  
Science/Technology/Operations  
20=Multi/Interdisciplinary Studies  
21=Parks, Recreation, Leisure Studies, Sports Management  
22=Physical Sciences (ex. physics, chemistry, astronomy, earth science)  
23=Pre-Professional (ex. pre-dental, pre-medical, pre-veterinary)  
24=Public Administration (ex. city management, law enforcement)  
25=Social Sciences (ex. anthropology, economics, political science, psychology, sociology, social work)  
26=Visual and Performing Arts (ex. art, music, theater)  
27= Women's/Gender Studies  
28=Undecided

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Multi-Institutional Study of Leadership – MSL 2015 Codebook – Version v.1 (9.21.2014)  
For Review and/or IRB Submission Purposes Only

5	ENV1	Are you currently working OFF CAMPUS in a job unaffiliated with your school?	1=Yes 2=No	If NO, skip to question #6
	ENV1a	Approximately how many hours do you work off campus at a site unaffiliated with your campus in a typical 7-day week?	Open response	
6	ENV2	Are you currently working ON CAMPUS?	1=Yes 2=No	If NO, skip to question #7
	ENV2a	Approximately how many hours do you work on campus in a typical 7-day week?	Open response	
	ENV2b	In what department or office do you currently work on campus? If you work in more than one, please indicate the department or office for which you complete the majority of hours.	Open response	
7	ENV3	In an average month, do you engage in any community service?	1=Yes 2=No	If NO, skip to question #8
<b>In an average month, approximately how many hours do you engage in community service... (Choose one for each category)</b>				
	ENV3a	as part of a class?	1=None	
	ENV3b	as part of a work study experience?	2=1-5	
	ENV3c	with a campus student organization?	3=6-10	
	ENV3d	as part of a community organization unaffiliated with your school?	4=11-15 5=16-20	
	ENV3e	on your own?	6=21-25 7=26-30 8=31 or more	
<b>8. Which of the following have you engaged in during your college experience:</b>				
	ENV4a	Study abroad	1=Yes	
	ENV4b	Practicum, internship, field experience, co-op experience, or clinical experience	2=No	
	ENV4c	Learning community or other formal program where groups of students take two or more classes together		
	ENV4d	Living-learning program (ex. language house, leadership floors, ecology halls)		
	ENV4e	Research with a faculty member outside of class		

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ENV4f	First-year or freshman seminar course
ENV4g	Culminating senior experience (ex. capstone course, thesis)

**8a. To what degree have you been involved in the following *on-campus* recreational facilities, programs, and/or services?**

REC1	Instructor-led group fitness or exercise classes (ex. Yoga, Zumba)	1=Never 2=Once
REC2	Intramural sports (ex. intramural flag football, Ultimate Frisbee)	3=Sometimes 4=Many Times
REC3	Open recreation (ex. pick-up basketball, weight lifting, treadmill)	5=Much of the Time
REC4	Outdoor adventure activities and/or trips	
REC5	Sport clubs (ex. club volleyball, club hockey)	

**YOUR PERCEPTIONS BEFORE ENROLLING IN COLLEGE**

**9. Looking back to *before you started college*, how confident were you that you would be successful in college at the following: (Select one response for each)**

PRE1a	Handling the challenge of college-level work	1=Not at All Confident	Cognitive Skills Pretest
PRE1b	Analyzing new ideas and concepts	2=Somewhat Confident	Cognitive Skills Pretest
PRE1c	Applying something learned in class to the “real world”	3=Confident 4=Very Confident	Cognitive Skills Pretest
PRE1d	Enjoying the challenge of learning new material		Cognitive Skills Pretest
PRE1e	Appreciating new and different ideas or beliefs		Cognitive Skills Pretest
PRE2a	Leading others		Leadership Efficacy Pretest
PRE2b	Organizing a group’s tasks to accomplish a goal		Leadership Efficacy Pretest
PRE2c	Taking initiative to improve something		Leadership Efficacy Pretest
PRE2d	Working with a team on a group project		Leadership Efficacy Pretest

**10. Looking back to *when you were in high school*, how often did you engage in the following activities: (Select one response for each)**

PRE3a	Student clubs and organizations (ex. student government, band, debate club)	1=Never 2=Sometimes
PRE3b	Organized sports (ex. varsity, club sports)	3=Often
PRE3c	Leadership positions in student clubs, groups, or sports (ex. officer in a club or organization, captain of athletic team, first chair in musical group, section editor of newspaper, chairperson)	4=Very Often

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of committee)

**11. Looking back to *before you started college*, how often did you engage in the following activities:** (Select one response for each)

PRE4a	Performed community service	1=Never	
PRE4b	Reflected on the meaning of life	2=Sometimes	Spirituality: Search for Meaning Pretest
		3=Often	
PRE4c	Participated in community or work-related organizations (ex. church group, scouts, professional associations)	4=Very Often	
PRE4d	Took leadership positions in community organizations or work-related groups (ex. union leader, PTA president)		
PRE4e	Considered my evolving sense of purpose in life		Spirituality: Search for Meaning Pretest
PRE4f	Worked with others for change to address societal problems (ex. rally, protest, community organizing)		
PRE4g	Participated in training or education that developed your leadership skills		
PRE4h	Found meaning in times of hardship		Spirituality: Search for Meaning Pretest

**12. Looking back to *before you started college*, please indicate your level of agreement with the following items:**

PRE5a	Hearing differences in opinions enriched my thinking.	1=Strongly Disagree	Controversy with Civility Pretest
PRE5b	I knew myself pretty well.	2=Disagree	Consciousness of Self Pretest
PREHOP1	I knew I could find ways to solve complex problems even when others gave up.	3=Neutral	Hope Pretest
		4=Agree	
PRERES1	I thought of myself as a strong person.	5=Strongly Agree	Resiliency Pretest
PRE5d	I enjoyed working with others toward common goals.		Collaboration Pretest
PREHOP2	I generally met the goals I set.		Hope Pretest
PRE5e	I held myself accountable for responsibilities I agreed to.		Commitment Pretest
PRERES2	I was not easily discouraged when I experienced failure.		Resiliency Pretest

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PRE5f	I worked well when I knew the collective values of a group.	Common Purpose Pretest
PRE5g	My behaviors reflected my beliefs.	Congruence Pretest
PRERES3	I was able to effectively manage negative emotions like sadness, fear, or anger.	Resiliency Pretest
PRE5h	I valued the opportunities that allowed me to contribute to my community.	Citizenship Pretest
PreHOP3	I pursued my goals with great energy.	Hope Pretest

**13. Please indicate how well the following statements describe *how you were prior to college*:**

PRE6a	I attempted to carefully consider the perspectives of those with whom I disagreed.	1=Does Not Describe Me Well 2	Social Perspective Taking Pretest
PRE6b	I regularly thought about how different people might view situations differently.	3 4	
PRE6c	Before criticizing someone, I tried to imagine what it would be like to be in their position.	5=Describes Me Very Well	

**14. We would like you to consider your BROAD racial group membership (ex. White, Middle Eastern, Native American, African American/Black, Asian American/Pacific Islander, Latino/Hispanic, Multiracial) in responding to the following statements. Please indicate what *your perceptions were prior to college*.**

PRE7a	My racial group membership was important to my sense of identity.	1=Strongly Disagree 2=Disagree	Collective Racial Efficacy Pretest
PRE7b	I was generally happy to be a member of my racial group.	3=Disagree Somewhat 4=Neutral	
PRE7c	I felt a strong affiliation to my racial group.	5=Agree Somewhat 6=Agree 7=Strongly Agree	

**YOUR EXPERIENCES IN COLLEGE**

**15. How often have you engaged in the following activities *during your college experience*:**

ENV5a	Performed community service	1=Never	Social Change Behaviors Scale
ENV5b	Acted to benefit the common good or protect the environment	2=Once 3=Sometimes	
ENV5c	Been actively involved with an organization that addresses a social or environmental problem	4=Often	
ENV5d	Been actively involved with an organization that addresses the concerns of a specific community		

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	(ex. academic council, neighborhood association)
ENV5e	Communicated with campus or community leaders about a pressing concern
ENV5f	Took action in the community to try to address a social or environmental problem
ENV5g	Worked with others to make the campus or community a better place
ENV5h	Acted to raise awareness about a campus, community, or global problem
ENV5i	Took part in a protest, rally, march, or demonstration
ENV5j	Worked with others to address social inequality

**16. *Since starting college, how often have you:***

ENV6a	<b>Been an involved member in <u>college organizations</u>?</b>	1=Never 2=Once 3=Sometimes 4=Many Times 5=Much of the Time
ENV6b	<b>Held a leadership position in a <u>college organization(s)</u>?</b> (ex. officer in a club or organization, captain of athletic team, first chair in musical group, section editor of newspaper, chairperson of committee)?	
ENV6c	<b>Been an involved member in an <u>off-campus community or work-based organization(s) unaffiliated with your campus</u></b> (ex. Parent-Teacher Association, church group, union)?	
ENV6d	<b>Held a leadership position in an <u>off-campus community or work-based organization(s) unaffiliated with your campus</u>?</b> (ex. officer in a club or organization, officer in a professional association, chairperson of committee)?	

**17. Have you been involved in the following kinds of student groups during college?** (Respond to each item)

ENV7a	Academic/Departmental/Professional (ex. Pre-Law Society, an academic fraternity, Engineering Club)	1=Yes 2=No
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ENV7f	Honor Societies (ex. Omicron Delta Kappa [ODK], Mortar Board, Phi Beta Kappa)
ENV7g	Media (ex. Campus Radio, Student Newspaper)
ENV7b	Arts/Theater/Music (ex. Theater group, Marching Band, Photography Club)
ENV7c	Campus-Wide Programming (ex. activities board, film series board, major event planning committee)
ENV7p	Multicultural Social Fraternities and Sororities (ex. National Pan-Hellenic Council [NPHC] groups such as Alpha Phi Alpha Fraternity Inc., or Latino Greek Council groups such as Lambda Theta Alpha)
ENV7q	Social Fraternities or Sororities (ex. Panhellenic or Interfraternity Council groups such as Sigma Phi Epsilon or Kappa Kappa Gamma)
ENV7e	International Interest (ex. German Club, Foreign Language Club)
ENV7n	Religious (ex. Fellowship of Christian Athletes, Hillel)
ENV7d	Identity-Based/Multicultural Organizations (ex. racial/ethnic groups, LGBTQ groups, women's groups)
ENV7d1	To what extent have you been actively involved in <i>racial/ethnic groups</i> (ex. Black Student Union, Korean Student Association) <i>on campus</i> during college?
ENV7d2	To what extent have you been actively involved in <i>LGBTQ groups</i> (ex. Pride Alliance, Queer Student Union) <i>on campus</i> during college?
ENV7d3	To what extent have you been actively involved in <i>women's groups</i> (ex. Woman's Circle, National

Insert skip pattern only for this question. If the response is 1 (yes), then ask the follow up questions: ENV7d1, ENV7d2, ENV7d3

Response options for these three sub-questions should be:

0=Never  
1=Sometimes  
2=Often  
3=Very Often

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	Organization for Women) <i>on campus</i> during college?
ENV7h	Military (ex. ROTC, cadet corps)
ENV7i	New Student Transitions (ex. admissions ambassador, orientation advisor)
ENV7j	Resident Assistants
ENV7k	Peer Helper (ex. academic tutors, peer health educators)
ENV7l	Advocacy (ex. Students Against Sweatshops, Amnesty International)
ENV7m	Political (ex. College Democrats, College Republicans, Libertarians)
ENV7o	Service (ex. Circle K, Habitat for Humanity)
ENV7r	Intercollegiate or Varsity Sports (ex. NCAA Hockey, Varsity Soccer)
ENV7u	Recreational (ex. Climbing Club, Hiking Group)
ENV7v	Social/Special Interest (ex. Gardening Club, Sign Language Club, Chess Club)
ENV7w	Student Governance (ex. Student Government Association, Residence Hall Association, Interfraternity Council)

---

**18. A mentor is defined as a person who intentionally assists your growth or connects you to opportunities for career or personal development. Since you started at your current college/university, have you been mentored by the following types of people?**

---

ENV8a1	Faculty/Instructor	1=No
ENV8a2	Academic or Student Affairs Professional Staff (ex. student organization advisor, career counselor, Dean of Students, academic advisor, residence hall coordinator)	2=Yes
ENV8a3	Employer	
ENV8a4	Community Member (not your employer)	
ENV8a5	Parent/Guardian	
ENV8a6	Other Student	

If NO for ALL items, skip to question #19.

For EACH question with a response other than NO, provide the corresponding variable name from the next question.

---

**18b. A mentor is defined as a person who intentionally assists your growth or connects you to opportunities for career or personal development.**

---



**Since you started at your current college/university, how often have the following types of mentors assisted you in your growth or development?**

ENV8b1	Faculty/Instructor	1=Never
ENV8b2	Academic or Student Affairs Professional Staff (ex. student organization advisor, career counselor, Dean of Students, academic advisor, residence hall coordinator)	2=Once 3=Sometimes 4=Often
ENV8b3	Employer	
ENV8b4	Community Member (not your employer)	
ENV8b5	Parent/Guardian	
ENV8b6	Other Student	

**18c. When thinking of your most significant mentor at this college/university, what was this person's role?**

ENV8c1	Faculty/Instructor	Select one response from the list of participant provided options, but do not include options not listed to the left.	For cases in which the participant indicates a "1" or higher on variables ENV8b1, ENV8b2, ENV8b3, and/ or ENV8b6, move to the next question.
ENV8c2	Academic or Student Affairs Professional Staff (ex. student organization advisor, career counselor, Dean of Students, academic advisor, residence hall coordinator)		
ENV8c3	Employer		
ENV8c6	Other Student		
			Otherwise, move the participant to question #19

18d	ENV8c_2	When thinking of your <u>most significant mentor</u> at this college/university, what was this person's gender?	1=Female 2=Male 3=Transgender/Gender Non-Conforming
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18e	ENV8d	When thinking of your <u>most significant mentor</u> at this college/university, what was this person's broad racial group membership?	1=White/Caucasian 2=Middle Eastern 3=African American/Black 4=Native American 5=Asian American/Pacific Islander 6=Latino/Hispanic 7=Multiracial 8=Unsure 9=Race/ethnicity not indicated above
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ENV8D.1	White/Caucasian
ENV8D.2	Middle Eastern
ENV8D.3	African American/Black
ENV8D.4	Native American
ENV8D.5	Asian American/Pacific Islander
ENV8D.6	Latino/Hispanic
ENV8D.7	Multiracial
ENV8D.8	Unsure
ENV8D.9	Race/ethnicity not indicated above

Note these variables are permutations of the above question that allow for the identification of each unique racial group identified above.

**19. During interactions with other students outside of class, how often have you done each of the following in an average school year? (Select one for each)**

ENV9a	Talked about different lifestyles/customs	1=Never	Socio-Cultural Discussions Scale
ENV9b	Held discussions with students whose personal values were very different from your own	2=Sometimes 3=Often 4=Very Often	
ENV9c	Discussed major social issues such as peace, human rights, and justice		
ENV9d	Held discussions with students whose religious beliefs were very different from your own		
ENV9e	Discussed your views about multiculturalism and diversity		
ENV9f	Held discussions with students whose political opinions were very different from your own		

20	ENV10	Since starting college, have you ever participated in a leadership training or leadership education experience of any kind (ex. leadership conference, alternative spring break, leadership course, club president's retreat)?	1=Yes 2=No	If NO, skip to question #21
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**20a. Since starting college, to what degree have you been involved in the following types of leadership training or education?**

ENV10a	Leadership Conference	1=Never
ENV10b	Leadership Retreat	2=Once
ENV10c	Leadership Lecture/Workshop Series	3=Sometimes
ENV10d	Positional Leader Training (ex. Treasurer's training, Resident Assistant training, Student	4=Often

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	Government training)
ENV10e	Leadership Course
ENV10f	Short-Term Service Immersion (ex. alternative spring break, January term service project)
ENV10g	Emerging or New Leaders Program
ENV10h	Living-Learning Leadership Program
ENV10i	Peer Leadership Educator Team
ENV10j	Outdoor Leadership Program
ENV10k	Women's Leadership Program
ENV10l	Multicultural Leadership Program

---

**20b. Since starting college,** have you been involved in the following types of leadership training or education?

---

ENV10m	Leadership Certificate Program	1=Yes
ENV10n	Leadership Capstone Experience	2=No
ENV10o	Leadership Minor	
ENV10p	Leadership Major	

---

**ASSESSING YOUR GROWTH**

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**21.** Please indicate your level of agreement with the following items:

*For the statements that refer to a group, think of the most effective, functional group of which you have **recently** been a part. This might be a formal organization or an informal study group. For consistency, use the same group in all your responses.*

SRLS1	I am open to others' ideas.	1=Strongly Disagree	Controversy with Civility Scale
SRLS3	I value differences in others.	2=Disagree	Controversy with Civility Scale
SRLS4	I am able to articulate my priorities.	3=Neutral	Consciousness of Self Scale
SRLS5	Hearing differences in opinions enriches my thinking.	4=Agree	Controversy with Civility Scale
		5=Strongly Agree	
SRLS9	I am usually self-confident.		Consciousness of Self Scale
SRLS10	I am seen as someone who works well with others.		Collaboration Scale
SRLS13	My behaviors are congruent with my beliefs.		Congruence Scale
SRLS16	I respect opinions other than my own.		Controversy with Civility Scale
SRLS22	I know myself pretty well.		Consciousness of Self Scale

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SRLS23	I am willing to devote the time and energy to things that are important to me.	Commitment Scale
SRLS24	I stick with others through difficult times.	Commitment Scale
SRLS27	It is important to me to act on my beliefs.	Congruence Scale
SRLS28	I am focused on my responsibilities.	Commitment Scale
SRLS29	I can make a difference when I work with others on a task.	Collaboration Scale
SRLS30	I actively listen to what others have to say.	Collaboration Scale
SRLS32	My actions are consistent with my values.	Congruence Scale
SRLS33	I believe I have responsibilities to my community.	Citizenship Scale
SRLS34	I could describe my personality.	Consciousness of Self Scale
SRLS40	I work with others to make my communities better places.	Citizenship Scale
SRLS41	I can describe how I am similar to other people.	Consciousness of Self Scale
SRLS42	I enjoy working with others toward common goals.	Collaboration Scale
SRLS47	I participate in activities that contribute to the common good.	Citizenship Scale
SRLS48	Others would describe me as a cooperative group member.	Collaboration Scale
SRLS51	I can be counted on to do my part.	Commitment Scale
SRLS52	Being seen as a person of integrity is important to me.	Congruence Scale
SRLS53	I follow through on my promises.	Commitment Scale
SRLS54	I hold myself accountable for responsibilities I agree to.	Commitment Scale
SRLS59	I am comfortable expressing myself.	Consciousness of Self Scale
SRLS60	My contributions are recognized by others in the groups I belong to.	Collaboration Scale
SRLS62	I share my ideas with others.	Controversy with Civility Scale
SRLS63	My behaviors reflect my beliefs.	Congruence Scale
SRLS66	I value opportunities that allow me to contribute to my community.	Citizenship Scale

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SRLS69	It is important to me that I play an active role in my communities.	Citizenship Scale
SRLS71	I believe my work has a greater purpose for the larger community.	Citizenship Scale

**THINKING MORE ABOUT YOURSELF**

22.	DEM5	How would you characterize your political views? (Choose one)	1=Very Liberal 2=Liberal 3=Moderate 4=Conservative 5=Very Conservative
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**23. Read each item carefully and select the response option that best reflects you.**

HOP1	I can think of many ways to get out of a jam.	1=Definitely False	Hope: Pathways
HOP2	I energetically pursue my goals.	2=Mostly False	Hope: Agency
HOP3	There are lots of ways around any problem.	3=Somewhat False	Hope: Pathways
HOP4	I can think of many ways to get the things in life that are important to me.	4=Slightly False 5=Slightly True	Hope: Pathways
HOP5	Even when others get discouraged, I know I can find a way to solve a problem.	6=Somewhat True 7=Mostly True	Hope: Pathways
HOP6	My past experiences have prepared me well for my future.	8=Definitely True	Hope: Agency
HOP7	I've been pretty successful in life.		Hope: Agency
HOP8	I meet the goals that I set for myself.		Hope: Agency

**24. In thinking about how you have changed during college, to what extent do you feel you have grown in the following areas? (Select one response for each)**

OUT1a	Ability to put ideas together and to see relationships between ideas	1=Not Grown At All 2=Grown Somewhat	Cognitive Skills Scale
OUT1b	Ability to learn on your own, pursue ideas, and find information you need	3=Grown 4=Grown Very Much	
OUT1c	Ability to critically analyze ideas and information		
OUT1d	Learning more about things that are new to you		

**25. How confident are you that you can be successful at the following? (Select one response for each)**

OUT2a	Leading others	1=Not at All Confident	Leadership Efficacy Scale
OUT2b	Organizing a group's tasks to accomplish a goal	2=Somewhat Confident	

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	OUT2c	Taking initiative to improve something	3=Confident	
	OUT2d	Working with a team on a group project	4=Very Confident	
26. How often do you...				
	SUB2a	search for meaning/purpose in your life?	1=Never	Spirituality: Search for Meaning
	SUB2b	have discussions about the meaning of life with your friends?	2=Sometimes	
	SUB2c	surround yourself with friends who are searching for meaning/purpose in life?	3=Often	
	SUB2d	reflect on finding answers to the mysteries of life?	4=Very Often	
	SUB2e	think about developing a meaningful philosophy of life?		
27. The following statements inquire about your thoughts and feelings in a variety of situations. For each item, be as honest as possible in indicating how well it describes you.				
	SPT1	I try to look at everybody's side of a disagreement before I make a decision.	1=Does Not Describe Me Well	Social Perspective Taking Scale
	SPT2	I sometimes try to understand my friends better by imagining how things look from their perspective.	2	
	SPT3	I believe that there are two sides to every question and try to look at them both.	3	
	SPT4	When I'm upset at someone, I usually try to "put myself in their shoes" for awhile.	4	
	SPT5	Before criticizing somebody, I try to imagine how I would feel if I were in their place.	5=Describes Me Very Well	
28. 27. Please indicate your level of agreement with the following items. For the statements that refer to a group, think of the most effective, functional group of which you have recently been a part. This might be a formal organization or an informal study group. For consistency, use the same group in all your responses.				
	MOT1	I only join groups with good reputations.	1=Strongly Disagree	External Self-Concept
	MOT2	I need to be part of a group that reflects my values.	2=Disagree	Internal Self-Concept
	MOT3	I am willing to persist in the face of adversity to meet my group's goals.	3=Neutral	Goal Internalization
	MOT4	Others recognize me as a good person because of	4=Agree	External Self-Concept
			5=Strongly Agree	

MOT5	my contributions to the group. Providing quality leadership, whether recognized or not, is important to me.	Internal Self-Concept
MOT6	When I agree with my group's goals, I work harder to make a difference.	Goal Internalization
MOT7	It is important that others think I do high quality work.	External Self-Concept
MOT8	I need to see that my actions make a difference in the group.	Internal Self-Concept
MOT9	I put my group's progress toward a goal above my own success.	Goal Internalization

**29. Indicate how much you agree with the following statements as they apply to you over the last *month*. If a particular situation has not occurred recently, answer according to how you think you would have felt.**

RES1	I am able to adapt when changes occur.	1=Not at All True	Resiliency Scale
RES2	I can deal with whatever comes my way.	2=Rarely True	
RES3	I try to see the humorous side of things when I am faced with problems.	3=Sometimes True	
RES4	Having to cope with stress can make me stronger.	4=Often True	
RES5	I tend to bounce back after illness, injury, or other hardships.	5=True Nearly All the Time	
RES6	I believe I can achieve my goals, even if there are obstacles.		
RES7	Under pressure, I stay focused and think clearly.		
RES8	I am not easily discouraged by failure.		
RES9	I think of myself as a strong person when dealing with life's challenges and difficulties.		
RES10	I am able to handle unpleasant or painful feelings like sadness, fear, and anger.		

**YOUR COLLEGE CLIMATE**

**30. Indicate your level of agreement with the following statements about your experience on your current campus:**

ENV11a1	I feel valued as a person at this school.	1=Strongly Disagree	Belonging Climate
ENV11b1	I have encountered discrimination while attending this institution.	2=Disagree	Non-Discriminatory Climate:
		3=Neutral	Indirect
ENV11a2	I feel accepted as a part of the campus community.	4=Agree	Belonging Climate
ENV11b2	I feel there is a general atmosphere of prejudice	5=Strongly Agree	Non-Discriminatory Climate:

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ENV11a3	among students. I feel I belong on this campus.	Indirect Belonging Climate
ENV11b3	I would describe the environment on campus as negative/hostile.	Non-Discriminatory Climate: Indirect
ENV11c1	<u>Faculty</u> have discriminated against people like me.	Non-Discriminatory Climate: Direct
ENV11c2	<u>Staff</u> members have discriminated against people like me.	Non-Discriminatory Climate: Direct
ENV11c3	Other <u>students</u> have discriminated against people like me.	Non-Discriminatory Climate: Direct

**BACKGROUND INFORMATION**

31.	DEM6	What is your age?	Open Response	
32.	DEM16	Have you ever been a member of the military?	1=Yes 2=No	If response is no (2), then skip to Dem7
	DEM16.1	Select the response that best describes your <i>current</i> military involvement status.	1=ROTC, cadet, or midshipman at a service academy 2=In Active Duty, Reserves, or National Guard 3=Discharged Veteran NO LONGER serving in active duty, reserves, or national guard	
33.	DEM7	What is your gender?	1=Male 2=Female 3=Transgender/Gender Non-Conforming	If 1 or 2, skip to question #32
	DEM7a	Please indicate which of the following best describe you: (Mark all that apply)	1=Female to male 2=Male to female 3=Intersexed 4=Gender Non-Conforming 5=Genderqueer 6=Two-spirit 7=Third gender 8=Preferred Response Not Listed (SPECIFY):	
34.	DEM8	What is your sexual orientation?	1=Heterosexual	



			2=Bisexual 3=Gay/Lesbian 4=Queer 5=Questioning 6=Rather not say	
35.	DEM9	Indicate your citizenship and/or generation status: (Choose one)	1=Your grandparents, parents, <u>and</u> you were born in the U.S. 2=Both of your parents AND you were born in the U.S. 3=You were born in the U.S., but at least one of your parents was not. 4=You are a foreign born, naturalized citizen. 5=You are a foreign born, resident alien/permanent resident. 6=You are an international student.	
36a	DEM10a	Please indicate your broad racial group membership: (Mark all that apply)	1=White/Caucasian 2=Middle Eastern 3=African American/Black 4=American Indian/Alaska Native 5=Asian American/Pacific Islander/Asian 6=Latino/Hispanic 7=Multiracial 8=Race/Ethnicity Not Listed	DEM10
36b	DEM10b	Please indicate your ethnic group membership: (Mark all that apply)	African American/Black 1=Black American 2=African 3=West Indian 4=Brazilian 5=Haitian 6=Jamaican	Note that:  1) This question only pertains to those who mark responses of AA/ Black, Asian, Latino, or Multiracial;

7= Caribbean: Not Listed  
8= Black: Not Listed  
Asian American/Pacific Islander/Asian  
1=Chinese  
2=Indian/Pakistani  
3=Japanese  
4=Korean  
5= Filipino  
6=Pacific Islander  
7=Vietnamese  
8= Asian: Not Listed  
9=Pacific Islander: Not Listed  
Latino/Hispanic  
1=Mexican/Chicano  
2=Puerto Rican  
3=Cuban  
4=Dominican  
5=South American  
6=Central American  
7= Latino: Not Listed

2) The response options that appear should reflect just those that correspond with their broader racial group membership.

**37. We are all members of different social groups or social categories. We would like you to consider your BROAD racial group membership (ex. White, Middle Eastern, American Indian, African American/Black, Asian American/Pacific Islander, Latino/Hispanic, Multiracial) in responding to the following statements. There are no right or wrong answers to any of the statements; we are interested in your honest reactions and opinions.**

SUB4b	I often regret that I belong to my racial group.	1=Strongly Disagree	PRIVATE COLLECTIVE RACIAL ESTEEM
SUB4c	Overall, my racial group is considered good by others.	2=Disagree	PUBLIC COLLECTIVE RACIAL ESTEEM
SUB4d	Overall, my race has very little to do with how I feel about myself.	3=Disagree Somewhat	IMPORTANCE TO IDENTITY
SUB4f	In general, I'm glad to be a member of my racial group.	4=Neutral	IMPORTANCE TO IDENTITY
SUB4g	Most people consider my racial group, on the average, to be more ineffective than other groups.	5=Agree Somewhat	PRIVATE COLLECTIVE RACIAL ESTEEM
SUB4h	The racial group I belong to is an important	6=Agree	PUBLIC COLLECTIVE RACIAL ESTEEM
		7=Strongly Agree	IMPORTANCE TO IDENTITY

		reflection of who I am.		
	SUB4j	Overall, I often feel that my racial group is not worthwhile.		PRIVATE COLLECTIVE RACIAL ESTEEM
	SUB4k	In general, others respect my race.		PUBLIC COLLECTIVE RACIAL ESTEEM
	SUB4l	My race is unimportant to my sense of what kind of a person I am.		IMPORTANCE TO IDENTITY
	SUB4n	I feel good about the racial group I belong to.		PRIVATE COLLECTIVE RACIAL ESTEEM
	SUB4o	In general, others think that my racial group is unworthy.		PUBLIC COLLECTIVE RACIAL ESTEEM
	SUB4p	In general, belonging to my racial group is an important part of my self-image.		IMPORTANCE TO IDENTITY
38.	DEM11a	Do you have a long-lasting condition (physical, visual, auditory, mental, emotional, or other) that substantially limits one or more of your major life activities (your ability to see, hear, or speak; to learn, remember, or concentrate)?	1=Yes 2=No	If NO, skip to question #36
	DEM11b	Please indicate the condition(s) you have:	1=Deaf/Hard of Hearing 2=Blind/Visual Impairment 3=Speech/Language Condition 4=Learning Disability 5=Physical or Musculoskeletal (ex. multiple sclerosis) 6=Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder 7=Psychiatric/Psychological Condition (ex. anxiety disorder, major depression) 8=Neurological Condition (ex. brain injury, stroke) 9=Medical (ex. diabetes, severe asthma) 10=Not Listed	
39.	DEM12	What is your current religious preference?	1=Agnostic	

		(Choose one)	2=Atheist 3=Bahá'í 4=Baptist 5=Buddhist 6=Catholic 7=Church of Christ 8=Confucianism 9=Eastern Orthodox 10=Episcopalian 11=Hindu 12=Muslim 13=Jehovah's Witness 14=Jewish 15=LDS (Mormon) 16=Lutheran 17=Methodist 18=Pentecostal 19=Presbyterian 20=Quaker 21=Seventh Day Adventist 22=Taoist 23=Unitarian/Universalist 24=UCC/Congregational 25=Protestant: Non-Denominational 26= Christian: Not Listed 27= Religion Not Listed 28=None
40.	DEM13	What is your best estimate of your grades so far in college? [Assume 4.00 = A] (Choose one)	1=3.50 – 4.00 2=3.00 – 3.49 3=2.50 – 2.99 4=2.00 – 2.49 5=1.99 or less 6=No college GPA

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41.	DEM14	What is the <u>HIGHEST</u> level of formal education obtained by any of your parent(s) or guardian(s)? (Choose one)	1=Less than high school diploma or less than a GED 2=High school diploma or a GED 3=Some college 4=Associate's degree 5=Bachelor's degree 6=Master's degree 7=Doctorate or professional degree (ex. JD, MD, PhD) 8=Don't know
42.	DEM15	What is your <u>best estimate</u> of your parent(s) or guardian(s) combined total income from last year? If you are independent from your parent(s) or guardian(s), indicate your income. (Choose one)	1=Less than \$12,500 2=\$12,500 - \$24,999 3=\$25,000 - \$39,999 4=\$40,000 - \$54,999 5=\$55,000 - \$74,999 6=\$75,000 - \$99,999 7=\$100,000 - \$149,999 8=\$150,000 - \$199,999 9=\$200,000 and over 10=Don't know 11=Rather not say
43.	ENV12	Which of the following best describes where you are currently living while attending college? (Choose one)	1= Off campus with partner, spouse, and/or children 2= Off campus with parent/guardian or other relative 3=Other off-campus home, apartment, or room 4=College/university residence hall 5= Other on-campus student housing 6= Fraternity or sorority house 7=Other
44.	DEF	Please provide a brief definition of what the term	Open response

*leadership* means to you.

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**Appendix D**  
**Multi-Institutional Study of Leadership**  
**General and Sub-Study Outcomes**



**MULTI-INSTITUTIONAL STUDY OF  
LEADERSHIP**

2015

**School Report**



**General and Sub-Study  
Outcomes**



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# General and Sub-Study Outcomes

This report provides key information on your students' reported achievement across the general and sub-study outcomes in the MSL. It also provides statistical tests to determine the extent to which your students score significantly differently than their peers in the comparison groups that you've selected. In addition to the general and sub-study outcomes, this report also includes the MSL Delta Measure tables, which provide a change over time analysis focused on outcome achievement for seniors at your school (for community colleges, this measure has been adapted to include all students in your sample).

## Reading the Tables

Please consider the following when reviewing tables:

- The blue column in each table represents the results for your random sample respondents only.
- Different measures use different size scales. Please consult the header for each major variable to determine the scaling. For example, some measures may be built on a 4, 5, or 7-point scale, and thus a mean of 4 will be interpreted very differently from one scale to another.
- In tests of significance, a boxed 'S' indicates the result is statistically significant at the .01 level.
- For statistically significant results, effect sizes are calculated and reported as 'trivial,' 'small,' 'moderate,' or 'large.' We recommend that you examine closely any results with effect sizes of small or greater.
- Cells populated with a period indicate that an insufficient number of respondents, less than 15, answered that particular question for analyses to be conducted. The MSL requires 15 cases for a statistic to be reported to ensure respondent confidentiality as well as appropriate interpretations of the data are made. Basing a finding off of fewer than 15 cases may lead to erroneous conclusions.
- The data presented in these tables include all responses received from respondents in the survey for each item or measure. In some places, where individual items were missing (item missing data), composite measures were not calculated. To help identify cases in the data with high rates of missing data, we have calculated a variable called CORE\_PCT (CORE variable percentage). This variable will consist of a proportion of CORE variables with responses over the total number of CORE variables. This measure will be included in the analytic data file and may be used to filter specific cases with various levels of completeness.

## The General and Sub-Study Outcomes Tables

This table describes students' capacities across core outcomes and substudy outcomes in the MSL. Data represent your random sample, the MSL National Sample, and other benchmark/comparison sample groups pre-selected by your institution for inclusion in this report. Statistical tests of differences are provided comparing your general population data with data from each of your comparison groups using independent samples *t*-tests. Results in this section are useful for:

- benchmarking student capacity from your random sample with that of students in selected benchmark/ comparison sample groups, and
- determining potential outcome areas that should be targeted for further development.

Mean (M): Represents the average score for all cases on an outcome measure with higher number indicating greater capacity.

Standard Deviation (SD): Indicator of the variation of the distribution from the mean.

Sig: Provides the results of an independent samples t-test to determine whether the mean for this comparison group is significantly different than the mean in the blue column (general population sample); significance is determined at the .01 level

Effect: Indicates the effect size, or magnitude, of any significantly different results

### General Outcome Measure Scores and Comparisons

University of MSL2015				MSL National Sample				Coalition: Catholic				Custom Pk: 999999				MSL2012 School Data: 999999				Comparative Sample 1			
	M	SD		M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect
<b>Social Change Model Leadership Outcomes</b>																							
Scored on a 5-point scale ranging from Strongly Disagree (1) to Strongly Agree (5)																							
Consciousness of Self	4.05	0.61		4.05	0.61			4.07	0.61			4.08	0.63			4.12	0.57	S	-	4.10	0.61		
Congruence	4.27	0.56		4.24	0.57			4.26	0.56			4.27	0.56			4.28	0.54			4.33	0.51		
Commitment	4.42	0.49		4.40	0.51			4.42	0.51			4.41	0.52			4.42	0.49			4.48	0.45		
Collaboration	4.21	0.53		4.18	0.54			4.21	0.54			4.21	0.55			4.23	0.52			4.26	0.52		
Controversy with Civility	4.29	0.51		4.23	0.53	S	-	4.24	0.53	S	-	4.26	0.55			4.27	0.52			4.34	0.49		
Citizenship	4.00	0.67		3.94	0.68	S	-	4.00	0.66			4.01	0.69			4.04	0.65			4.06	0.64		
Resiliency	3.88	0.67		3.88	0.65			3.90	0.65			3.90	0.66			3.98	0.64	S	-	3.96	0.63	S	-
Omnibus SRLS	4.20	0.47		4.17	0.48	S	-	4.20	0.48			4.20	0.49			4.22	0.46			4.26	0.45		
Scored on a 4-point scale ranging from Not At All Confident (1) to Very Confident (4)																							
Leadership Efficacy	3.12	0.67		3.12	0.66			3.15	0.65			3.16	0.66			3.15	0.64			3.16	0.65		
Scored on a 4-point scale ranging from Not Grown At All (1) to Grown Very Much (4)																							
Complex Cognitive Skills	3.17	0.62		3.18	0.62			3.20	0.61			3.21	0.62			3.16	0.62			3.29	0.60	S	-
Scored on a 5-point scale from Does Not Describe Me Well (1) to Describes Me Very Well (5)																							
Social Perspective-Taking	3.96	0.72		3.88	0.74	S	-	3.89	0.73	S	-	3.92	0.74			3.94	0.72			4.05	0.68	S	-
Significance: S = p < .01      Effect Sizes: Trivial -      Small ○      Moderate ◐      Large ●																							

Indicator of effect size: A dash indicates the effect is trivial, a white circle indicates a small effect, a half filled circle is a moderate effect, and a fully shaded circle is a large effect

Be sure to check the scaling for each measure before interpreting the mean scores

The presence of an 'S' indicates that the difference between this comparison group mean and the general population mean is statistically significant.

## MSL2015 General Outcomes

University of Wisconsin-Madison			MSL National Sample				Comparative Sample 1				Comparative Sample 2				Carnegie Peers: Very High Research				Custom Peer: 240444			
	M	SD	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect
<b>Social Change Model of Leadership Outcomes</b>																						
<i>Scored on a 5-point scale ranging from Strongly Disagree (1) to Strongly Agree (5)</i>																						
Consciousness of Self	4.05	0.59	4.05	0.61			4.16	0.54	S	-	4.03	0.63			4.01	0.61			3.97	0.61	S	-
Congruence	4.26	0.52	4.24	0.57			4.25	0.48			4.23	0.53			4.22	0.56			4.19	0.57	S	-
Commitment	4.44	0.46	4.40	0.51	S	-	4.50	0.42			4.44	0.47			4.38	0.51	S	-	4.34	0.52	S	-
Collaboration	4.22	0.49	4.18	0.54			4.29	0.45			4.23	0.47			4.16	0.54	S	-	4.13	0.54	S	-
Controversy with Civility	4.24	0.49	4.23	0.53			4.22	0.46			4.19	0.48			4.21	0.53			4.18	0.53	S	-
Citizenship	3.95	0.68	3.94	0.68			3.98	0.63			3.84	0.66	S	-	3.92	0.69			3.86	0.69	S	-
Omnibus SRLS	4.19	0.44	4.17	0.48			4.23	0.40			4.16	0.43			4.15	0.48	S	-	4.11	0.47	S	-
Resiliency	3.86	0.62	3.88	0.65			3.95	0.58			3.92	0.61			3.84	0.65			3.81	0.64		
<i>Scored on a 4-point scale ranging from Not At All Confident (1) to Very Confident (4)</i>																						
Leadership Efficacy	3.14	0.63	3.12	0.66			3.34	0.58	S	○	3.15	0.61			3.10	0.65			3.08	0.65	S	-
<i>Scored on a 4-point scale ranging from Not Grown At All (1) to Grown Very Much (4)</i>																						
Complex Cognitive Skills	3.19	0.61	3.18	0.62			3.23	0.57			3.13	0.61			3.15	0.62			3.09	0.63	S	-
<i>Scored on a 5-point scale from Does Not Describe Me Well (1) to Describes Me Very Well (5)</i>																						
Social Perspective-Taking	3.83	0.71	3.88	0.74			3.74	0.72			3.75	0.75			3.85	0.74			3.82	0.73		
<i>Scored on an 8-point scale ranging from Definitely False (1) to Definitely True (8)</i>																						
Hope (Agency)	6.67	1.04	6.62	1.06			6.89	0.88	S	○	6.72	1.06			6.56	1.09	S	-	6.47	1.13	S	-
Hope (Pathways)	6.52	0.94	6.50	1.00			6.56	0.92			6.69	0.91	S	-	6.46	1.00			6.39	1.01	S	-
Significance: S = p < .01      Effect Sizes: Trivial -      Small ○      Moderate ◐      Large ●																						

## MSL2015 Sub-Study Outcomes

University of Wisconsin-Madison			MSL National Sample				Comparative Sample 1				Comparative Sample 2				Carnegie Peers: Very High Research				Custom Peer: 240444			
	M	SD	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect
<b>Sub-Study Outcome Measure Scores and Comparisons</b>																						
<i>Scored on a 4-point scale ranging from Never (1) to Very Often (4)</i>																						
Spirituality: Search for Meaning	1.55	0.83	1.66	0.83	S	-	1.49	0.80			1.40	0.83			1.59	0.83			1.54	0.82		
<i>Scored on a 7-point scale ranging from Strongly Disagree (1) to Strongly Agree (7)</i>																						
Private Collective Racial Esteem	5.57	1.03	5.52	1.10			5.86	0.93	S	○	5.50	1.08			5.47	1.10			5.50	1.09		
Public Collective Racial Esteem	5.19	1.15	4.94	1.22	S	○	5.50	1.19			5.08	1.14			4.97	1.22	S	-	4.96	1.24	S	-
Importance to Identity	3.29	1.36	3.59	1.41	S	○	3.51	1.42			3.07	1.30			3.50	1.45	S	-	3.65	1.45	S	○
<b>Significance:</b> S = p < .01 <b>Effect Sizes:</b> Trivial -      Small ○      Moderate ◐      Large ●																						

# The MSL Delta Measure: Change Over Time

This table describes changes in students' perceived capacities across core outcomes in the MSL and is limited to those students who have experienced the campus environment for the longest duration – respondents who identified as seniors and beyond (omitting graduate students). All MSL respondents are asked to retrospectively report on their capacities prior to college as well as present capacities. This table specifically analyzes only data provided by students who indicated they are in their senior year. Data represent seniors in your random sample, the MSL National Sample, and other benchmark/comparison sample groups pre-selected by your institution for inclusion in this report. Data in the blue columns represent seniors from your institution's random sample. Statistical tests in this table examine differences in the reported capacities of seniors prior to the start of college and currently. This is done using paired samples *t*-tests. Similar tests are provided for seniors in each of your comparison groups. The presence of an 'S' symbol indicates the differences are significant at the .01 level: the rate of change in students' capacities is above and beyond simple chance. Results in this section are useful for:

- determining the degree to which students change in their capacity across key outcomes while in college,
- identifying the extent to which outcomes of focus for your institution reflect developmental gains, and
- benchmarking against comparison groups to see where your students are either mirroring patterns of significant difference or demonstrating unique patterns.

Mean (M): Represents the average score for all cases on an outcome measure with higher number indicating greater capacity.

Standard Deviation (SD): Indicator of the variation of the distribution from the mean.

Sig: Provides the results of an independent samples t-test to determine whether the mean for this comparison group is significantly different than the mean in the blue column (general population sample); significance is determined at the .01 level

Effect: Indicates the effect size, or magnitude, of any significantly different results

### MSL2015 Delta Measure: Change Over Time

University of MSL2015				MSL National Sample				Coalition: Catholic				Custom Peer: 999999				MSL2012 School Data: 999999				Comparative Sample 1			
	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect	M	SD	Sig Effect		
<b>Social Change Model of Leadership Outcomes</b>																							
Scored on a 5-point scale ranging from Strongly Disagree (1) to Strongly Agree (5); please note separate scale for Resiliency																							
<b>Consciousness of Self</b>																							
Prior to College	3.41	1.05	S	3.45	1.00	S	3.48	0.99	S	3.44	1.02	S	3.48	0.97	S	3.46	0.99	S					
Senior Year	4.15	0.61		4.13	0.58		4.17	0.57		4.18	0.58		4.20	0.55		4.10	0.61						
<b>Congruence</b>																							
Prior to College	3.84	0.98		3.92	0.86		3.94	0.86		3.92	0.87		3.97	0.80		3.95	0.87						
Senior Year	4.33	0.56	S	4.29	0.55	S	4.32	0.54	S	4.30	0.55	S	4.32	0.52	S	4.33	0.51	S					

Seniors' perceived capacity on outcome measure prior to college

Seniors' perceived capacity on outcome measure during spring semester senior year

Indicator of effect size: A dash indicates the effect is trivial, a white circle indicates a small effect, a half filled circle is a moderate effect, and a fully shaded circle is a large effect

Be sure to check the scaling for each measure before interpreting the mean scores

The presence of an 'S' indicates that the difference between this comparison group mean and the general population mean is statistically significant.

# MSL2015 Delta Measure: Change Over Time

University of Wisconsin-Madison				MSL National Sample				Comparative Sample 1				Comparative Sample 2				Carnegie Peers: Very High Research				Custom Peer: 240444				
	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect
Social Change Model of Leadership Outcomes																								
Scored on a 5-point scale ranging from Strongly Disagree (1) to Strongly Agree (5)																								
Consciousness of Self																								
Prior to College	3.37	0.96	S	●	3.45	1.00	S	●	3.52	0.96	S	●	3.59	0.96	S	●	3.42	0.99	S	●	3.40	0.99	S	●
Senior Year	4.13	0.59			4.13	0.58			4.16	0.54			4.03	0.63			4.09	0.60			4.06	0.59		
Congruence																								
Prior to College	3.91	0.88	S	○	3.92	0.86	S	○	3.94	0.78	S	○	4.01	0.81	S	○	3.91	0.86	S	○	3.91	0.84	S	○
Senior Year	4.29	0.57			4.29	0.55			4.25	0.48			4.23	0.53			4.27	0.56			4.23	0.56		
Commitment																								
Prior to College	4.20	0.82	S	○	4.13	0.83	S	○	4.32	0.70	S	○	4.31	0.70	S	○	4.16	0.81	S	○	4.15	0.80	S	○
Senior Year	4.45	0.51			4.43	0.50			4.50	0.42			4.44	0.47			4.41	0.51			4.37	0.52		
Collaboration																								
Prior to College	3.90	0.84	S	○	3.84	0.87	S	○	4.03	0.72	S	○	3.94	0.77	S	○	3.83	0.86	S	○	3.78	0.86	S	○
Senior Year	4.29	0.53			4.24	0.53			4.29	0.45			4.23	0.47			4.21	0.54			4.20	0.53		
Controversy with Civility																								
Prior to College	3.85	0.81	S	○	3.86	0.83	S	○	3.77	0.84	S	○	3.90	0.74	S	○	3.88	0.82	S	○	3.88	0.80	S	○
Senior Year	4.31	0.52			4.27	0.53			4.22	0.46			4.19	0.48			4.25	0.54			4.23	0.52		
Citizenship																								
Prior to College	3.76	0.85	S	○	3.73	0.89	S	○	3.79	0.94			3.71	0.87			3.75	0.89	S	○	3.71	0.92	S	○
Senior Year	4.00	0.69			3.98	0.68			3.98	0.63			3.84	0.66			3.96	0.69			3.92	0.68		
Omnibus SRLS																								
Prior to College	3.83	0.55	S	○	3.82	0.56	S	○	3.89	0.52	S	○	3.91	0.48	S	○	3.82	0.54	S	○	3.81	0.54	S	○
Senior Year	4.24	0.47			4.22	0.47			4.23	0.40			4.16	0.43			4.19	0.48			4.17	0.46		
Resiliency																								
Prior to College	3.53	0.74	S	○	3.53	0.81	S	○	3.67	0.73	S	○	3.67	0.74	S	○	3.51	0.80	S	○	3.53	0.82	S	○
Senior Year	3.95	0.60			3.95	0.64			3.95	0.58			3.92	0.61			3.90	0.64			3.90	0.63		
Significance: S = p < .01      Effect Sizes: Trivial -      Small ○      Moderate ●      Large ●																								

## MSL2015 Delta Measure: Change Over Time

University of Wisconsin-Madison					MSL National Sample				Comparative Sample 1				Comparative Sample 2				Carnegie Peers: Very High Research				Custom Peer: 240444			
	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect	M	SD	Sig	Effect
Leadership Efficacy					Scored on a 4-point scale ranging from Not At All Confident (1) to Very Confident (4)																			
Prior to College	2.80	0.69	S	●	2.83	0.76	S	●	2.98	0.65	S	●	2.89	0.64	S	○	2.82	0.74	S	●	2.80	0.73	S	●
Senior Year	3.28	0.61			3.24	0.63			3.34	0.58			3.15	0.61			3.22	0.63			3.21	0.63		
Complex Cognitive Skills					Scored on a 4-point scale ranging from Not Grown At All (1) to Grown Very Much (4)																			
Prior to College	3.01	0.59	S	●	3.01	0.64	S	●	3.02	0.55	S	○	3.04	0.53			3.02	0.62	S	○	2.99	0.63	S	○
Senior Year	3.36	0.61			3.34	0.58			3.23	0.57			3.13	0.61			3.30	0.58			3.28	0.56		
Social Perspective-Taking					Scored on on a 5-point scale from Does Not Describe Me Well (1) to Describes Me Very Well (5)																			
Prior to College	3.45	0.90	S	●	3.52	0.91	S	●	3.33	0.88	S	●	3.51	0.87	S	○	3.50	0.90	S	○	3.45	0.89	S	●
Senior Year	3.92	0.69			3.94	0.72			3.74	0.72			3.75	0.75			3.89	0.73			3.87	0.73		
Hope Scale - Agency					Scored on an 8-point scale ranging from Definitely False (1) to Definitely True (8)																			
Prior to College	3.98	0.62	S	●	3.89	0.67	S	●	4.05	0.56	S	●	4.03	0.62	S	●	3.92	0.65	S	●	3.91	0.67	S	●
Senior Year	6.76	1.10			6.70	1.05			6.89	0.88			6.72	1.06			6.65	1.09			6.60	1.10		
Hope Scale - Pathways					Scored on an 8-point scale ranging from Definitely False (1) to Definitely True (8)																			
Prior to College	3.98	0.62	S	●	3.89	0.67	S	●	4.05	0.56	S	●	4.03	0.62	S	●	3.92	0.65	S	●	3.91	0.67	S	●
Senior Year	6.62	0.93			6.57	0.99			6.56	0.92			6.69	0.91			6.54	0.99			6.48	0.95		
Significance: S = p < .01					Effect Sizes: Trivial -					Small ○					Moderate ●					Large ●				



## **Appendix E**

### **Student Awards for Pieper Servant Leadership Projects**

# Pieper Servant Leadership Project Funding Application - FY17

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## Pieper Servant Leadership Project Funding Application

### Overview

The Pieper Servant Leadership Fund is offering financial support for UW-Madison College of Engineering students to lead service-learning or community outreach projects that “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.” Projects should be aligned with The Pieper Family Foundation belief that human goodness is not simply innate-it requires action and service to others; and that character is inspired and facilitated in cultures, organizations, and families by and through the example of enlightened leadership. A total of \$10,000 is available and will be distributed among multiple projects to maximize the overall impact of the funds.

In partnership with Engineering Student Development (ESD), the Pieper Family Foundation encourages full time students and registered student organizations to apply for funds via the application form below by March 18, 2016. Grants will be awarded and winners will be notified by the end of March.

### Criteria for Selection

A successful proposal will clearly articulate responses to the questions below.

In what ways does your proposal expect project leaders to “lift up society, enrich organizations and communities, and have a positive effect on the least privileged?” Furthermore, how will project leaders put into action and support the 12 Principles of Servant Leadership as outlined in this article:

<https://aspireonline.org/aspire2015/wp-content/uploads/sites/9/2015/10/BECOMING-A-SERVANT-LEADER-OVERVIEW.pdf>  
(<https://aspireonline.org/aspire2015/wp-content/uploads/sites/9/2015/10/BECOMING-A-SERVANT-LEADER-OVERVIEW.pdf>)

Minimally, the proposal must specifically address how project leaders will use the principles of Awareness, Stewardship, Growth, and Building Community.

In what ways does your proposal engage yourself and others in leadership activities that extend beyond simply participation in an event or organization that is led by someone else?

To what extent does your proposal build on existing partnerships with other individuals and organizations to maximize the impact of your work (e.g. shared funding, combined resources, build on existing program or infrastructure)?

### Budget Summary and Allocation of Funds

You must include a detailed budget for how you propose to spend the requested amount. The budget must include both projected income and expenses for the project, including any additional grants or gifts you plan to obtain for the project.

In order to support as many proposals as possible, the review committee may elect to fund portions of a proposal and encourage applicants to seek supplemental funding for the remainder.

### Award Requirements

Recipients of Pieper Funds must agree to:

Submit 2-3 page project progress report (if project is still active), or project summary (if project is completed) to Greg Harrington, at [gwharrin@wisc.edu](mailto:gwharrin@wisc.edu), by August 1, 2016. This report or summary should include what your team did for the project (including photos) and how your team used the principles of Servant Leadership to successfully lead the project. Complete a Servant Leadership Survey upon initial award of funds and at the conclusion of the project.

Respond to other requests for information, updates, presentations, etc. as requested by the award committee.

Include the ESD logo along with written acknowledgement that “This program is partially funded through the Pieper Servant Leadership Fund at UW-Madison” on any and all marketing materials generated for the project.

Comply with University rules and regulations, and ESD policies and procedures. If a proposal is accepted, the contact person listed will need to schedule an appointment with the ESD Financial Specialist to discuss the program expenses, necessary paperwork that may need to be filled out, and how monies will be disbursed. This meeting must occur within two weeks of being awarded the funds.

All funds must be spent by December 31, 2016.

### Primary Contact Name

Anna Sailor

**Organization Name**

Engineers Without Borders - Ecuador

**Title/Position**

Team Member

**Email Address**

asailor@wisc.edu

**Phone Number**

5084792195

**Advisor Name**

Paul Block

**College of Engineering Department/Affiliation**

College of Engineering

**Advisor Email Address**

pblock@engr.wisc.edu

**Advisor Phone Number**

6082638792

**Name of the Proposed Program**

Wash Station Project, Tabuga, Ecuador

**Amount Requested to Support the Program**

2,000

**Please provide a detailed description of the proposed project, including the purpose, objectives and intended outcomes. Remember to include a description of how the project will “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.”**

Engineers Without Borders-UW Madison (EWB-UW) has worked with the small coastal community of Tabuga, Ecuador for almost three years to execute the Tabuga Water Source Improvement Project. Over two assessment trips and two implementation trips, we have been able to fix the crumbling distribution system and repair the cistern that serves approximately 530 people living there. Our last implementation trip was completed in January 2016 to make improvements such as install an electronic float control at the cistern, add a chlorine pump at the well, and add isolation and flush valves at various points in the network to improve flow. We continue to work with the Water Committee of Tabuga to improve quality of the water, and we are working on a heavy metal filtration system that will begin implementation later this year. As the major segments of the Tabuga Water Source Improvement Project come to an end, we are looking for new areas of improvement so we can continue to work with the community.

Consequently, it has come to our attention that the women of Tabuga have voiced a need for wash stations in the community. As of now, the local women wash their clothes in the river running just south of the town. They dredge the riverbed to create shallow pools to wash their clothes in while they keep an eye on their children playing in the stream. The water from the river is extremely contaminated. On our January 2015 assessment trip we found that E.coli and coliform counts were 2 and 15 times higher, respectively, than the most contaminated water in the pipes in Tabuga. In addition to the river water being incredibly unclean, washing clothes leaves behind soapy water that drifts downstream into the mouth of the river leading to the ocean. Contaminated water is the major cause of disease in the community, and exposure to the river is one of the primary means of disease transfer.

The ultimate goal of this project is to construct personal wash stations for each household, or clusters of households, so women in Tabuga can wash their clothing in the comfort and privacy of their own home. In the river, washing is very tedious and backbreaking work; even climbing up and down the steep slope with heavy laundry can be dangerous. A personal upright wash station would allow women to complete their work comfortably and put less strain on their bodies. In addition to designing and constructing wash stations, we will incorporate a filtration system to filter water before it is released into the environment to reduce additional pollution in the community. This filtered water could also be reused to further reduce daily water usage, especially in the dry season. Having

personal wash stations in the community will not only reduce the risk of disease in the community, but it will give women more time to focus on other daily tasks or become more active members of the community.

The NGO we are working with, The Ceiba Foundation, collaborated with a first-year engineering introductory class at the University of Wisconsin-Madison in 2012 to brainstorm a suitable wash station design for the community. The design involved a number of washing units grouped together in a communal design that was to be located in a central location in the community. Unfortunately, the project was never pursued, and our organization was given the task to pick up where the students had left off. On our January 2016 implementation trip, various designs were presented to women in the community at the community meeting. Many women complained about the pod-like design stating that washing is not an opportunity to congregate and spend time with other women in the community, but rather a private time to complete their daily chores. They did not like the idea of having all of the wash stations located at one place in Tabuga that would be close to some, and far away from others. Our team is working now to improve these preliminary designs and continue to communicate with the women in Tabuga to understand exactly what they want and how we can provide appropriate options.

**Please explain in detail how your project will address the 12 basic principles of servant leadership, minimally including Awareness, Stewardship, Growth and Building Community.**

EWB projects inherently contribute to the principles of servant leadership due to the project mission and objectives. Students involved with EWB not only get invaluable design experience, but they are forced to think critically about designing for a community with different cultural values, customs, and availability of resources. Awareness of cultural differences is one of the most important factors that contributes to design and implementation, and one of the most difficult aspects of the project. Over the course of the semester, students discuss international ethical dilemmas as a way to increase awareness of important cultural factors that affect the success of the project. Stewardship is vital in the long-term success of each project, and an important quality for leaders in EWB. In addition to verifying that the project is sustainable, project managers in EWB must make sure that the next student leaders have the same attention to local customs, and make ethical decisions to maintain the quality of the projects we are working on.

Fostering a sense of community is an important aspect of Engineers Without Borders. As a university student organization, it is important to work together as student group. Social events and competitions are held outside of regularly scheduled meetings to build a sense of community within the student body. We also work with the Madison-Area Professional Chapter of EWB (MAPC), a group of professional engineers with expertise in a variety of areas. Various training sessions are held throughout the year to benefit students and improve knowledge necessary for each project. By working with the greater Madison community, we are able to improve the flow of knowledge, gain new sources of expertise, and grow in our expertise as engineers. We also foster a strong bond with our partners in Ecuador, and as we work with our local NGO and community in Ecuador, we extend the EWB community even further. Working together is a learning process for all, and we all grow by learning from each other as we work towards a common goal.

**Please list all stakeholders involved with, and that will be impacted by, the project.**

The primary stakeholders of this project are the women of Tabuga, who will be performing daily chores. Building wash stations will allow women to complete their chores faster, more safely and efficiently, and with less negative impact to the environment. By staying away from the heavily polluted river, women and children especially will contract fewer diseases that are attributed to the high level of bacteria in the river. Not only will wash stations physically remove people from contaminants in the river, but cause less soap pollution to be deposited and concentrated downstream as more and more women wash clothes in their household. By staying close to home, women will have more time that can be devoted to other daily chores, spending time with their family, or increasing their involvement in community organizations.

It is expected that the community members of Tabuga will own this project. Initially, the Water Committee, an organization in Tabuga that currently runs operations on collecting water taxes and making continual improvements to the water distribution lines, will take control of operations and help families build their wash station. We propose that the Water Committee use this as an economic opportunity to increase water funds by charging a fee to build a wash station for each family that wants one. This money can then be used to cover chlorine costs, or to finance a new well pump.

In addition to the members of Tabuga, the EWB students at UW-Madison and the professional engineers from MAPC will benefit from working with an international community on a multi-disciplinary project. The continued collaboration with the community of Tabuga will allow students to gain valuable design experience in an international setting. Students who travel to Tabuga for assessment and implementation will personally interact with the recipients of the project, challenging their leadership skills, and giving them new insight on engineering in a developing country.

**Please provide a detailed action plan, including a schedule with timelines and key deliverables, for how the project will be accomplished. Remember to include both progress and final reports to the Pieper Foundation in your plan.**

Engineers Without Borders-USA has a strict documentation and progress timeline that allows us to plan for future assessment and implementation trips. Attached as a supporting document is a rough timeline schedule of the next steps of this project. Dates are

based on submittal deadlines provided by EWB-USA. By following this timeline, we will be able to implement the final project during spring break of 2017. (See supporting documentation)

Over the course of this semester we will continue to send our in-country contact design ideas to get feedback over email. This will allow us to finalize the design and speed up the assessment process. On the first trip, we will be constructing a prototype wash station, rain catchment system, and water filtration system so we can get a better idea of what the women want. By working with the women and having them evaluate the prototype design, we can begin to optimize the design before we return from the trip. This will also allow us to get more useful feedback, as women will be more comfortable to share their suggestions in a relaxed, informal, and comfortable environment.

We plan to work throughout the fall semester to improve upon the designs and implement the final design over winter break of 2017. During the implementation trip, we will be training members of the community to build the wash stations themselves. Training local community members will be crucial in this project, as they will be the main developers of the wash station project. Training sessions will be held to teach local people how to build a mold for the concrete base, how to mix and pour concrete, and how to construct specific elements of the wash station. In conjunction with this, a water filtration system will be incorporated in the design, and a workshop on the importance of filtering water before dumping it onto the ground will be conducted. A number of students in EWB-Ecuador speak Spanish, and these students will help translate. We may consider hiring a translator for these workshop sessions, but that does not seem necessary at the moment. All information conveyed during the workshop will be provided in Spanish for reference.

**Please explain how this program helps to support student leadership development.**

EWB allows students to develop leadership skills both in the field and at the University of Wisconsin-Madison. There are many positions within EWB that require strong leadership skills. Due to the long-lasting nature of each project, there are many opportunities for students to get involved and rise up through various leadership positions within the project to gain experience. Each student is part of a sub-group that works on a specific task, and meets weekly with their group to report their progress to the subgroup leader. The subgroup leader is in charge of managing each task that must be completed and working with other subgroup leaders to share relevant information and keep the project moving at a constant pace. The subgroup leaders report to the two project managers who coordinate all aspects of the project from the subgroup leaders to the community members in Tabuga. Students learn to communicate with each other and with professional mentors, who help with complicated technical aspects of the project.

In the field, students are required to be very knowledgeable about their specific task and be prepared to make fast decision should any complications arise. While traveling, students must be aware of their actions and how the Ecuadorians receive them. It is especially important to listen and work together with the local community members, as their lasting impression will affect the project in the months and years to come. When the traveling students return to Madison, they must effectively inform the rest of the EWB members about the trip: the data that was collected, the tasks that were completed, and relevant observations must all be clearly conveyed to allow for the project to continue in the hands of the students. Both phases of the project allow students to build leadership skills by making communication and collaboration essential parts of the project's success.

Both types of student leadership embody the Wisconsin Idea. By taking information that we learn and applying it beyond the classroom, we can positively impact people's lives both here and in Tabuga. It takes more than a good technical understanding to fulfill the Wisconsin Idea in a project of this scale, but a committed group of leaders has the ability to bring about success. More than anything else, EWB projects require strong leaders who will assemble the necessary talent, foster a dedicated team, and manage the project process through each phase to have a lasting positive effect.

**Please provide a detailed budget, with justification for the funding request and an outline on how the grant money will be used specifically to support the proposal.**

The grant money will go towards funding the first assessment trip, planned for August of 2016. In addition to holding forums with the women of Tabuga, we will construct a prototype in a central part of town so we can get constructive feedback on the design of the system. We believe that this is more useful than just interviewing women as it allows us to communicate in a more familiar setting where they might feel more confident to speak freely. A proposed budget of \$2,000 is presented below based on estimated material costs and any additional unforeseen fees. This grant will allow us to purchase the material necessary to create a prototype in the community that will ultimately serve as the basis of a town-wide transformation. A detailed budget is provided in the supporting document.

**Attach any additional supporting documentation for your project proposal here.**

Uploaded File: Pieper2016WashStationSupp.pdf

# Pieper Servant Leadership Project Funding Application - FY17

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## Pieper Servant Leadership Project Funding Application

### Overview

The Pieper Servant Leadership Fund is offering financial support for UW-Madison College of Engineering students to lead service-learning or community outreach projects that “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.” Projects should be aligned with The Pieper Family Foundation belief that human goodness is not simply innate-it requires action and service to others; and that character is inspired and facilitated in cultures, organizations, and families by and through the example of enlightened leadership. A total of \$10,000 is available and will be distributed among multiple projects to maximize the overall impact of the funds.

In partnership with Engineering Student Development (ESD), the Pieper Family Foundation encourages full time students and registered student organizations to apply for funds via the application form below by March 18, 2016. Grants will be awarded and winners will be notified by the end of March.

### Criteria for Selection

A successful proposal will clearly articulate responses to the questions below.

In what ways does your proposal expect project leaders to “lift up society, enrich organizations and communities, and have a positive effect on the least privileged?” Furthermore, how will project leaders put into action and support the 12 Principles of Servant Leadership as outlined in this article:

<https://aspireonline.org/aspire2015/wp-content/uploads/sites/9/2015/10/BECOMING-A-SERVANT-LEADER-OVERVIEW.pdf>  
(<https://aspireonline.org/aspire2015/wp-content/uploads/sites/9/2015/10/BECOMING-A-SERVANT-LEADER-OVERVIEW.pdf>)

Minimally, the proposal must specifically address how project leaders will use the principles of Awareness, Stewardship, Growth, and Building Community.

In what ways does your proposal engage yourself and others in leadership activities that extend beyond simply participation in an event or organization that is led by someone else?

To what extent does your proposal build on existing partnerships with other individuals and organizations to maximize the impact of your work (e.g. shared funding, combined resources, build on existing program or infrastructure)?

### Budget Summary and Allocation of Funds

You must include a detailed budget for how you propose to spend the requested amount. The budget must include both projected income and expenses for the project, including any additional grants or gifts you plan to obtain for the project.

In order to support as many proposals as possible, the review committee may elect to fund portions of a proposal and encourage applicants to seek supplemental funding for the remainder.

### Award Requirements

Recipients of Pieper Funds must agree to:

Submit 2-3 page project progress report (if project is still active), or project summary (if project is completed) to Greg Harrington, at [gwharrin@wisc.edu](mailto:gwharrin@wisc.edu), by August 1, 2016. This report or summary should include what your team did for the project (including photos) and how your team used the principles of Servant Leadership to successfully lead the project. Complete a Servant Leadership Survey upon initial award of funds and at the conclusion of the project.

Respond to other requests for information, updates, presentations, etc. as requested by the award committee.

Include the ESD logo along with written acknowledgement that “This program is partially funded through the Pieper Servant Leadership Fund at UW-Madison” on any and all marketing materials generated for the project.

Comply with University rules and regulations, and ESD policies and procedures. If a proposal is accepted, the contact person listed will need to schedule an appointment with the ESD Financial Specialist to discuss the program expenses, necessary paperwork that may need to be filled out, and how monies will be disbursed. This meeting must occur within two weeks of being awarded the funds.

All funds must be spent by December 31, 2016.

### Primary Contact Name

Anna Sailor

**Organization Name**

Engineers Without Borders - Ecuador

**Title/Position**

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**Advisor Name**

Paul Block

**College of Engineering Department/Affiliation**

Civil and Environmental Engineering

**Advisor Email Address**

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**Advisor Phone Number**

6082638792

**Name of the Proposed Program**

Mineral Filtration Project, Tabuga, Ecuador

**Amount Requested to Support the Program**

\$2,000

**Please provide a detailed description of the proposed project, including the purpose, objectives and intended outcomes. Remember to include a description of how the project will “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.”**

The University of Wisconsin-Madison chapter of Engineers Without Borders (EWB-UW) returned from its second implementation trip in January 2016 for the Tabuga Water Source Improvement Project. This project takes place in the community of Tabuga, Ecuador, and its goal is to improve the existing water system for the 150 families that live there. Tabuga is a coastal town located due west of Quito and is home to about 530 people, a population comprised mostly of subsistence farmers. Ultimately, the finished project will provide the people of this community with a clean, potable, dependable, and safe system that will collect, store, treat and distribute drinking water.

The first stage of the Tabuga Water Source Improvement Project has been completed. Over the course of the project we have succeeded in 1) making improvements to the pump including the installation of a chlorination system at the wellhead, 2) adding an electronic float control to regulate the pump, and 3) adding isolation and flush valves at various points throughout the pipe network. These are all directed towards the goal of improving water quality and availability in the community of Tabuga. The water can be considered biologically clean because of the chlorination system. In addition, the storage cistern is protected from contamination and the well is controlled by a float system, so overflows should no longer occur. Finally, sufficient valves and pressure gauges have been installed to allow better maintenance of the system.

The second stage of the Tabuga Water Source Improvement Project will address the ongoing issues in access to and quality of water. During the second implementation trip, we observed that there was much greater access to water in the distribution system, but as a result of this, water usage has gone up and demand has increased. We are unsure whether the new demand is based on the amount of water people actually use, or whether it's based on a higher value from people leaving their taps on, as they were accustomed to doing before. The high demand requires more water to be pumped from the well, and we are concerned that this may damage the well pump. In addition to this, there is still unequal access to water for those living in the farthest neighborhood. By the time the water reaches families living in 'Norte', it is little more than a trickle because the pressure and volumetric losses are so high. Problems with the high mineral concentration in the water still remain. Clogging of the pipes due to precipitation is less of an

issue now that a few strategic pipes were buried, but there are still instances of mineral obstruction. Also, people still complain that the water has a funny taste and worry about the white precipitate that appears when they boil their water.

This phase of the project involves reducing the mineral concentrations to recommended levels, large-scale analyses of water pressure losses, volume losses, and water consumption throughout the community, and an assessment of the need for additional water storage and water supply. These objectives are based on ongoing and new problems that we have encountered after the success of the first stage of the project.

**Please explain in detail how your project will address the 12 basic principles of servant leadership, minimally including Awareness, Stewardship, Growth and Building Community.**

EWB projects inherently contribute to the principles of servant leadership due to the project mission and objectives. Students involved with EWB not only get invaluable design experience, but they are forced to think critically about designing for a community with different cultural values, customs, and availability of resources. Awareness of cultural differences is one of the most important factors that contributes to design and implementation, and one of the most difficult aspects of the project. Over the course of the semester, students discuss international ethical dilemmas as a way to increase awareness of important cultural factors that affect the success of the project. Stewardship is vital in the long-term success of each project, and an important quality for leaders in EWB. In addition to verifying that the project is sustainable, project managers in EWB must make sure that the next student leaders have the same attention to local customs, and make ethical decisions to maintain the quality of the projects we are working on.

Fostering a sense of community is an important aspect of Engineers Without Borders. As a university student organization, it is important to work together as student group. Social events and competitions are held outside of regularly scheduled meetings to build a sense of community within the student body. We also work with the Madison-Area Professional Chapter of EWB (MAPC), a group of professional engineers with expertise in a variety of areas. Various training sessions are held throughout the year to benefit students and improve knowledge necessary for each project. By working with the greater Madison community, we are able to improve the flow of knowledge, gain new sources of expertise, and grow in our expertise as engineers. We also foster a strong bond with our partners in Ecuador, and as we work with our local NGO and community in Ecuador, we extend the EWB community even further. Working together is a learning process for all, and we all grow by learning from each other as we work towards a common goal.

**Please list all stakeholders involved with, and that will be impacted by, the project.**

The stakeholders that will be impacted the most by this project are the community members of Tabuga. Secondly, The Ceiba Foundation, EWB-UW students, and members of MAPC will be influenced by this project.

The most important objective of this project is that the members of Tabuga receive reliable, clean, and consistent water from the town well. We have succeeded in removing biological contaminants from the water, reducing water losses at the cistern, and installing needed valves and pressure gauges to improve the reliability of water throughout the day. This has already had a positive impact on the community. Now, members of Tabuga can trust the quality of water that comes out of their taps and can use it for consumption in their home. They have access to more water, which allows them to do more chores and improve their quality of life. The next phase of implementation will further improve the quality of water in Tabuga and strengthen the relationship that we have with the community. This is mutually beneficial to both parties, because the members of Tabuga will feel more comfortable with our presence and be more explicit in their needs, and our students will better understand how we can help.

Students and professional engineers involved in the project benefit from working with the community when they are mutually respectful and dedicated to the project. It allows us to receive constructive feedback on the most vital needs of the community, and implement solutions in a way that is culturally appropriate and feasible. Fostering a good relationship with the community of Tabuga also benefits the Ceiba Foundation that works to preserve the rainforest surrounding the community. The stronger presence that they have in the community will improve communication overall and offer an additional source of assistance.

**Please provide a detailed action plan, including a schedule with timelines and key deliverables, for how the project will be accomplished. Remember to include both progress and final reports to the Pieper Foundation in your plan.**

We will follow the EWB-USA documentation requirements to assess alternatives, establish preliminary and finalized designs, and implement the preferred design. A timeline is provided as an attachment assuming that all documentation is approved and we can begin the implementation phase this summer. We expect that the project, due to the large scope, will take at least two implementation trips before it is complete. The project timeline should be revisited in the future to plan for monitoring trips after the proposed 2nd implementation trip (see supporting documentation).

The first implementation trip scheduled to take place this summer will most likely involve building the foundation that the new holding tank will rest on. In subsequent implementation trips we will construct the holding tank and connect it to the current water system. This will not only allow for a longer settling time to reduce the concentration of heavy metals, but will provide an additional amount of water that will be necessary as demand and population increase. This timeline should be revised after the first



implementation trip based on completed tasks and projections for future work.

**Please explain how this program helps to support student leadership development.**

EWB allows students to develop leadership skills both in the field and at the University of Wisconsin-Madison. There are many positions within EWB that require strong leadership skills. Due to the long-lasting nature of each project, there are many opportunities for students to get involved and rise up through various leadership positions within the project to gain experience. Each student is part of a sub-group that works on a specific task, and meets weekly with their group to report their progress to the subgroup leader. The subgroup leader is in charge of managing each task that must be completed and working with other subgroup leaders to share relevant information and keep the project moving at a constant pace. The subgroup leaders report to the two project managers who coordinate all aspects of the project from the subgroup leaders to the community members in Tabuga. Students learn to communicate with each other and with professional mentors, who help with complicated technical aspects of the project.

In the field, students are required to be very knowledgeable about their specific task and be prepared to make fast decision should any complications arise. While traveling, students must be aware of their actions and how the Ecuadorians receive them. It is especially important to listen and work together with the local community members, as their lasting impression will affect the project in the months and years to come. When the traveling students return to Madison, they must effectively inform the rest of the EWB members about the trip: the data that was collected, the tasks that were completed, and relevant observations must all be clearly conveyed to allow for the project to continue in the hands of the students. Both phases of the project allow students to build leadership skills by making communication and collaboration essential parts of the project's success.

Both types of student leadership embody the Wisconsin Idea. By taking information that we learn and applying it beyond the classroom, we can positively impact people's lives both here and in Tabuga. It takes more than a good technical understanding to fulfill the Wisconsin Idea in a project of this scale, but a committed group of leaders has the ability to bring about success. More than anything else, EWB projects require strong leaders who will assemble the necessary talent, foster a dedicated team, and manage the project process through each phase to have a lasting positive effect.

**Please provide a detailed budget, with justification for the funding request and an outline on how the grant money will be used specifically to support the proposal.**

As the second phase of this project is still in the planning stage, we do not have a concrete budget. We are planning to build an additional holding tank to increase the retention time for chlorine to work properly. The dimensions of the holding tank will depend on the chemical reactions that are necessary to remove heavy metals from the water. We predict that the project will cost less than \$10,000 in total, taking into consideration the cost of concrete, rebar, labor, and foundation work. The first stage of this two-phase implementation will focus on building the foundation of the holding tank this summer. We hope that this grant will help cover the cost of concrete, rebar, and labor to clear a sizable area and lay the foundation for the settling tank. A detailed budget is being compiled and will be included in the 524 – Preliminary Design report due in April.

We are requesting funds in the amount of \$2,000 to partially fund this project over the course of the next year and a half. This is a compromise between the needs of our student organization and the resources of the Pieper Servant Leadership Fund. We feel that this is a reasonable sum of money to request for the project, as it allows our project to be funded while leaving a large portion of the grant to go towards other projects. A grant of \$2000 will help us reach our implementation goal this summer and bring us closer to completing the project.

**Attach any additional supporting documentation for your project proposal here.**

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# Pieper Servant Leadership Project Funding Application - FY17

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## Pieper Servant Leadership Project Funding Application

### Overview

The Pieper Servant Leadership Fund is offering financial support for UW-Madison College of Engineering students to lead service-learning or community outreach projects that “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.” Projects should be aligned with The Pieper Family Foundation belief that human goodness is not simply innate-it requires action and service to others; and that character is inspired and facilitated in cultures, organizations, and families by and through the example of enlightened leadership. A total of \$10,000 is available and will be distributed among multiple projects to maximize the overall impact of the funds.

In partnership with Engineering Student Development (ESD), the Pieper Family Foundation encourages full time students and registered student organizations to apply for funds via the application form below by March 18, 2016. Grants will be awarded and winners will be notified by the end of March.

### Criteria for Selection

A successful proposal will clearly articulate responses to the questions below.

In what ways does your proposal expect project leaders to “lift up society, enrich organizations and communities, and have a positive effect on the least privileged?” Furthermore, how will project leaders put into action and support the 12 Principles of Servant Leadership as outlined in this article:

<https://aspireonline.org/aspire2015/wp-content/uploads/sites/9/2015/10/BECOMING-A-SERVANT-LEADER-OVERVIEW.pdf>  
(<https://aspireonline.org/aspire2015/wp-content/uploads/sites/9/2015/10/BECOMING-A-SERVANT-LEADER-OVERVIEW.pdf>)

Minimally, the proposal must specifically address how project leaders will use the principles of Awareness, Stewardship, Growth, and Building Community.

In what ways does your proposal engage yourself and others in leadership activities that extend beyond simply participation in an event or organization that is led by someone else?

To what extent does your proposal build on existing partnerships with other individuals and organizations to maximize the impact of your work (e.g. shared funding, combined resources, build on existing program or infrastructure)?

### Budget Summary and Allocation of Funds

You must include a detailed budget for how you propose to spend the requested amount. The budget must include both projected income and expenses for the project, including any additional grants or gifts you plan to obtain for the project.

In order to support as many proposals as possible, the review committee may elect to fund portions of a proposal and encourage applicants to seek supplemental funding for the remainder.

### Award Requirements

Recipients of Pieper Funds must agree to:

Submit 2-3 page project progress report (if project is still active), or project summary (if project is completed) to Greg Harrington, at [gwharrin@wisc.edu](mailto:gwharrin@wisc.edu), by August 1, 2016. This report or summary should include what your team did for the project (including photos) and how your team used the principles of Servant Leadership to successfully lead the project. Complete a Servant Leadership Survey upon initial award of funds and at the conclusion of the project.

Respond to other requests for information, updates, presentations, etc. as requested by the award committee.

Include the ESD logo along with written acknowledgement that “This program is partially funded through the Pieper Servant Leadership Fund at UW-Madison” on any and all marketing materials generated for the project.

Comply with University rules and regulations, and ESD policies and procedures. If a proposal is accepted, the contact person listed will need to schedule an appointment with the ESD Financial Specialist to discuss the program expenses, necessary paperwork that may need to be filled out, and how monies will be disbursed. This meeting must occur within two weeks of being awarded the funds.

All funds must be spent by December 31, 2016.

### Primary Contact Name

Giulia Mondin

**Organization Name**

Engineers Without Borders-Uganda Program

**Title/Position**

Co-Project Manager

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**Advisor Name**

Paul Block

**College of Engineering Department/Affiliation**

Civil and Environmental Engineering

**Advisor Email Address**

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**Advisor Phone Number**

(608) 263-8792

**Name of the Proposed Program**

Uganda Program: Lweza Water Project

**Amount Requested to Support the Program**

\$2,000

**Please provide a detailed description of the proposed project, including the purpose, objectives and intended outcomes. Remember to include a description of how the project will “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.”**

Our EWB-UW Uganda Program is currently working in Lweza, Uganda, a community of approximately 6,250 villagers. Of the estimated 6,250 community members, the majority of families in the village earn their income through low wage subsistence agriculture and manual labor and do not have access to clean and safe drinking water. Currently, there are nine free water sources used by the villagers of Lweza which are all heavily contaminated with bacteria and fecal matter far exceeding the World Health Organization's standards of safe drinking water. The main water treatment encouraged in Lweza is boiling, however, many community members are unable to afford the electricity and charcoal costs associated with boiling. Our program is working with the community members of Lweza to create and implement an engineering solution to supply the community with a sustainable, affordable, and accessible source of clean drinking water.

During our recent assessment trip to Lweza, Uganda, the community members identified water as their main priority. Specifically, the community identified three issues: unsafe water quality due to contamination from runoff during the rainy seasons, economic challenges leading to families having insufficient funds to treat their drinking water, and poor accessibility as fetching water from current sources is a very timely and laborious process. These problems cause many families to commonly suffer from waterborne illness, requiring children and adults to stay home from school and work.

Since 2014, we have been working with the community to combat these issues. To address the poor water quality, we will be developing a new water source by drilling a borehole to be connected to a water tank where clean water pumped from the ground will be stored and then distributed to the village. This solution will also address the community's concerns with accessibility. The implemented tank will be centrally located in the town, so water will be available a short distance from households, and later implementation trips will increase piping to even more areas of the village. For affordability, the water should not need to be treated at the household level, so families will have access to cheap water. On a second implementation trip, we plan on implementing a solar-panel pump, so there will be no operation costs associated with electricity. Overall, the Lweza community will benefit from clean and safe drinking water, increasing the health and wellness of the 6,250 villagers. Upon the completion of our project, the community of Lweza will be given the basic human right of clean water which they are currently lacking, improving their quality of life.

**Please explain in detail how your project will address the 12 basic principles of servant leadership, minimally including Awareness, Stewardship, Growth and Building Community.**

Our Lweza Water Project is driven by a group of UW-Madison students driven by the 12 basic principles of servant leadership. Our project embodies a strong calling to serve the citizens of Lweza to help improve their quality of life without a personal gain. Specifically, our members feel passionate about bringing this deserving community the human right of clean drinking water. This has been shown through the hours of time and hard work are members have put in creating design plans, calculations, drawings, and educational materials for the villagers. Through our project, no students or professional members receive any monetary or material compensation, and instead are invested in our project for the sole purpose of improving the lives others. This connects to our projects empathy, as our members understand the hardship the citizens of Lweza experience with their current contaminated water sources, and are driven by this passion to uplift this community.

In addition, our project is centered around listening to the needs and desires of the Lweza community members. Throughout every step of our project, our members have involved Lweza leadership and community members in every single aspect of the planning and design of our project in order to fit the program to the exact needs of the community itself. On our recent assessment trip in Summer of 2015, our travel team members surveyed 75 households in Lweza and held community meetings to listen to the concerns the community had about their current water conditions and the solutions they would like to see implemented. For example, the community specifically asked for a community wide clean water source centrally located in the village as opposed to household level treatment. Our members listened and have designed a community wide borehole system to be implemented behind the Lweza Primary School in the center of the community. This connects to our projects awareness of the situation and the culture of the Lweza community. The community members come to our organization to help them with specific concerns regarding their water sources, and our members are using our understanding of the communities available resources and our engineering background to develop a sustainable solution to their water crisis.

Our water project also works under the principle of stewardship. Our members are invested in planning for the future of our project to bring a positive change to this community. In addition, the growth of the community members is a driving factor in our project. Not only does our project want to provide the community with water, we want to see the community members empowered by a new quality of life. Having access to clean water can improve a community's health and wellness, help enhance primary education, and uplift the economy of the village. Throughout our project process, we also emphasize building community, both within our organization itself and with the Lweza community. All of our members and the citizens of Lweza are all driven to work together to implement a sustainable water program.

**Please list all stakeholders involved with, and that will be impacted by, the project.**

**1) Village Health Project (VHP):**

VHP is a non-governmental organization based in Madison, Wisconsin which has been working on global health initiatives in the Lweza community since 2006. In 2014, VHP came to EWB-UW looking for a solution to Lweza's poor water quality, and has been instrumental in enabling our organization's communication with the Lweza community as well as aiding us in the health and sanitation aspects of our project. With groups located in both Madison, WI and Lweza, Uganda, our partnership with VHP allows for efficient communication between EWB-UW members and the Lweza community. This is crucial to the success of our project, for the community must be highly involved in the planning, implementation, and monitoring stages of our project to ensure an appropriate solution for the community is designed and sustained.

**2) Madison Area Professional Chapter of EWB (MAPC):**

MAPC is a professional chapter of EWB located in Madison, Wisconsin. Their organization consists of several professional engineers who serve as mentors of our projects. These professional mentors assist our team with the technical details throughout our project to ensure feasibility and ethical implementation of our water system. In particular, our project's Responsible Engineer in Charge, Larry Ryan, is a member of the MAPC and works exclusively with EWB-UW Uganda to assist in the planning, implementation, and monitoring of our project.

**3) James Ntambi:**

James Ntambi is a faculty advisor for our EWB-UW Lweza water project. Professor Ntambi grew up in Lweza, Uganda, and serves as an invaluable resource in assisting communication with Lweza community members. In addition, Professor Ntambi provides our project members with crucial knowledge regarding Lweza culture and the unique challenges facing the villagers of Lweza such as water, education, and financial resources which help our project design an appropriate system tailored specifically for the community members of Lweza, Uganda.

**4) Citizens of Lweza, Uganda:**

Since the beginning of our project, the community members have played a pivotal role in all aspects of our project. Ronald Nsimbe serves as one of our project's community contacts and is an instrumental means of communication between our members and Lweza. Also, the community has elected a water committee of 7 members, including a chairperson, mobilizer, treasurer and secretary. This committee is responsible for collecting money from the community members for the implementation of the project (5% cash contribution) as well as for the maintenance and operation of the system for the duration of its lifespan.

The water committee will be responsible for maintaining the project, including frequent inspection and cleaning. All problems with the system will be reported to the committee, and a member of the committee will identify the problem and be responsible for fixing it or contacting the drilling company (Draco) for assistance. There are also engineers and electricians on the water committee who will assist with the implementation and upkeep of the project.

During our implementation trip in the summer of 2016, our team will be building a 60,000 L water tank and digging a trench to lay pipes from the top of the hill to the distribution tap. The community members will help with the labor of building the tank. Including the community members in the construction of the project will help the village develop a sense of ownership and pride in the project which will only help the sustainability of the system.

5) EWB-UW Members: Undergraduate engineering students will work to design and implement an international engineering project addressing poor water quality in Lweza, Uganda.

**Please provide a detailed action plan, including a schedule with timelines and key deliverables, for how the project will be accomplished. Remember to include both progress and final reports to the Pieper Foundation in your plan.**

In the summer of 2015, our project sent six students and one mentor to Lweza for our three week assessment trip. As our first in country experience, our members used this trip to collect water samples of the community's current water sources, take GPS data of the village, survey local community members on their water usage and opinions of the current state of Lweza's water, source local materials for future construction, and build a trusting relationship with the community and its leaders.

After the success of our assessment trip, our members have been finalizing our design to develop a clean water source and distribution system for the citizens of Lweza. Our design includes drilling a 100 m borehole on the hill behind the Lweza Primary School, centrally located in the village. The clean water from the borehole will be pumped to a travel-team constructed water storage tank and be gravity-fed to a tap at the bottom of the hill. Currently, we have subgroups working on different aspects of the project: the design group has been drafting diagrams and calculations for the implementation, the operations group has been contacting companies near Lweza to source materials for our project, and the education group has been working with the community members and their water board to prepare educational material for the community regarding the operation and maintenance of the borehole system once built. We are planning on sending a travel team to Lweza this winter to implement our system.

After the first phase of our implementation, we would make sure to write a progress report about our successes and future plans for our program. Upon completion of our project, we will complete a final report of our project.

**Please explain how this program helps to support student leadership development.**

Our project helps the students of the University of Wisconsin-Madison develop leadership skills in developing, implementing, and monitoring an international global health initiative using their engineering skills. Currently, our program has approximately 50 students who work with professional mentors from the Greater Madison area, including the EWB Madison Area Professional Chapter and the Village Health Project, to design all aspects of our project including structural design, logistics, water research, and education. Through this project, our members will gain experience drafting the design for our borehole, the water holding tank, the pump, and the piping distribution system. In addition, our student members will learn how to design a global engineering system in an ethical manner. The Lweza Water Project also allows students to think about the longevity and sustainability of an engineering project by creating educational material to help teach the community how to maintain and operate the experience dealing with project design, implementation, international relations, and global service. In addition to the technical skills learned through our project, our Uganda Water Project will also teach studentssystem after EWB-UW is no longer in Lweza, Uganda. In the summer of 2016, we plan to send five of these UW-Madison undergraduate student members and one professional mentor to Lweza to implement our design, and through the support of the Pieper Servant Grant, these five students would be able to transfer their knowledge of engineering and public health to the Lweza community. With the support of your foundation, students at the University of Wisconsin-Madison will gain indispensable skills and experiences for future careers by broadcasting the Wisconsin Idea on a global scale. For students on campus interested in engineering and global health initiatives, EWB-UW is the best possible experience to gain hands on intercultural skills and ethical judgement regarding implementation of a system the community itself has sought out and is involved in. Through your support, UW Madison students are able to use their skills and knowledge learned in the classroom to make global change.

**Please provide a detailed budget, with justification for the funding request and an outline on how the grant money will be used specifically to support the proposal.**

The overall cost of the project will be approximately \$45,000. This estimate, as seen in the attached budget, includes airfare, lodging, and all construction costs for our project. The Lweza community is very invested in the project and will be contributing 5% of the construction costs. In addition, our EWB-UW organization has received grants from other organizations to help cover the costs of airfare and lodging. However, the construction costs of our project still need to be raised. We are asking for a \$2,000 grant from your organization, as this would make a substantial impact on our project's success while still leaving the Pieper Servant Grant with enough money to fund other deserving projects. The cost of the pump which will be used to pump water from the borehole to the holding tank is \$2,827, which would be almost covered by your support. Our EWB-UW organization currently has three international projects, and we rely on support from gracious donors to help us achieve our goals and improve the quality of life in other areas of the world. Currently, we have already raised enough funds to cover the remaining portion of the pump and other construction materials. We appreciate your time and look forward to hearing from you.

**Attach any additional supporting documentation for your project proposal here.**

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# Pieper Servant Leadership Project Funding Application - FY17

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## Pieper Servant Leadership Project Funding Application

### Overview

The Pieper Servant Leadership Fund is offering financial support for UW-Madison College of Engineering students to lead service-learning or community outreach projects that “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.” Projects should be aligned with The Pieper Family Foundation belief that human goodness is not simply innate-it requires action and service to others; and that character is inspired and facilitated in cultures, organizations, and families by and through the example of enlightened leadership. A total of \$10,000 is available and will be distributed among multiple projects to maximize the overall impact of the funds.

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A successful proposal will clearly articulate responses to the questions below.

In what ways does your proposal expect project leaders to “lift up society, enrich organizations and communities, and have a positive effect on the least privileged?” Furthermore, how will project leaders put into action and support the 12 Principles of Servant Leadership as outlined in this article:

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In what ways does your proposal engage yourself and others in leadership activities that extend beyond simply participation in an event or organization that is led by someone else?

To what extent does your proposal build on existing partnerships with other individuals and organizations to maximize the impact of your work (e.g. shared funding, combined resources, build on existing program or infrastructure)?

### Budget Summary and Allocation of Funds

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In order to support as many proposals as possible, the review committee may elect to fund portions of a proposal and encourage applicants to seek supplemental funding for the remainder.

### Award Requirements

Recipients of Pieper Funds must agree to:

Submit 2-3 page project progress report (if project is still active), or project summary (if project is completed) to Greg Harrington, at [gwharrin@wisc.edu](mailto:gwharrin@wisc.edu), by August 1, 2016. This report or summary should include what your team did for the project (including photos) and how your team used the principles of Servant Leadership to successfully lead the project. Complete a Servant Leadership Survey upon initial award of funds and at the conclusion of the project.

Respond to other requests for information, updates, presentations, etc. as requested by the award committee.

Include the ESD logo along with written acknowledgement that “This program is partially funded through the Pieper Servant Leadership Fund at UW-Madison” on any and all marketing materials generated for the project.

Comply with University rules and regulations, and ESD policies and procedures. If a proposal is accepted, the contact person listed will need to schedule an appointment with the ESD Financial Specialist to discuss the program expenses, necessary paperwork that may need to be filled out, and how monies will be disbursed. This meeting must occur within two weeks of being awarded the funds.

All funds must be spent by December 31, 2016.

### Primary Contact Name

Michael Gilsdorf

**Organization Name**

Independent Study - Go Baby Go

**Title/Position**

Engineer

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9209018017

**Advisor Name**

Joseph Krachey

**College of Engineering Department/Affiliation**

Electrical and Computer Engineering

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**Advisor Phone Number**

6082659007

**Name of the Proposed Program**

Electric Car Controller

**Amount Requested to Support the Program**

\$900.00

**Please provide a detailed description of the proposed project, including the purpose, objectives and intended outcomes. Remember to include a description of how the project will “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.”**

The Electric Car Controller will improve the ability of Go Baby Go to provide disabled children with electric cars to increase their mobility by making it easier to modify the cars wiring. It will also add a remote stop function to the car that the cars did not have previously.

Go Baby Go is a national organization with a group in Madison that modifies electric cars for students with disabilities. For many of the kids this will be their first chance to have mobility of their own. The cars need to have different physical supports added to them in order to assist the children with varying levels of strength and mobility. Then the wiring of the cars has to be modified to allow a large button to control the electric motor. This involves disconnecting the current foot pedal controlling the power and wiring in a large button in its place. Then the power circuit needs to be cut to allow a kill switch to be added so that parents can shut the car off.

The Electric Car Controller will be a circuit board to make the modifications of the car much simpler. The board will have locations to mount the kill switch and the button. This will remove much of the re-wiring work for each car. With the Electric Car Controller , a case will be mounted to the car with wires available to connect the input power from the battery, the output power to the motor, the kill switch, and the large button. To install the Electric Car Controller , the power wires to the motor and battery will be cut and connected to the board which will allow the board to act as the control for the car and bypass all the other circuitry in the car. This will drastically reduce the technical knowledge needed to rewire the cars. In addition, this board will have a radio module to allow a remote key fob to stop the car remotely.

The Electric Car Controller will make it easier to modify the electric cars and provide an additional feature with the remote stop. The board will be run with a micro-controller that will allow future modifications and additions to the remote/board with only minor changes. The goal of the Electric Car Controller is to develop the board and remote, and provided 10 completed sets to the Go Baby Go organization for use in future builds next year. Various parts are cheaper if we order more at one time, so I am hoping to

build at least 10 boards, but would like to build more if the funds are available.

For more information on Go Baby Go, here is the link to their Facebook page:  
<https://www.facebook.com/search/top/?q=gobabygo%20madison>

**Please explain in detail how your project will address the 12 basic principles of servant leadership, minimally including Awareness, Stewardship, Growth and Building Community.**

The Electric Car Controller is a great community project that brings together many of the principles of servant leadership.

**Calling:**

Originally I had an independent study project in mind for a remote to control the throttle on my families fishing boat, but when Joe told me about this group, I immediately changed my project to help this cause. My mom is a physical therapist and has been working with disabled kids her whole career, and it is great to have the opportunity to help these same kids in my own way. I am also excited to share the knowledge I learn from this years build with her to see if it is possible to expand Go Baby Go to some of the kids she is working with.

**Listening:**

When I started this project, Joe and I didn't know a lot about how the cars were modified or what changes Go Baby Go was looking for. Since then, I have met with the Go Baby Go leaders 3 times to discuss how we can make the car remodel process better.

**Healing, Empathy and Awareness:**

I put these three principles together because in this case, empathy and healing are the ideas that are important to understand. For many families seeing you child grow up with disabilities is hard, and it is hard for many of the kids to not be able to do the same things other kids their age are doing. By modifying the cars for the kids, they will have the mobility they have never had before. For many people they never realize the challenges these kids face, and although I am very grateful to be lucky enough to not face these challenges myself I have been seeing them in the kids my mom works with my whole life. Developing the Electric Car Controller is a small contribution to making the lives of these kids a little better. I am very excited to help with the build this year on April 2nd.

**Conceptualize and Foresight:**

I am developing the board for the 6V version of the car because that is the most common type used at Go Baby Go. Some families will purchase their own cars that may be 12V cars. I am designing the board to make it very easy to switch between the 6V car and the 12V. I am also using a micro-controller so that in the future it will be easy to add more features to the cars when families ask for them. For example, one idea is to modify the switch to force a kid to stand on an electric four wheeler as a physical training activity. With the Electric Car Controller , it will only require a minor code change to change the operation of the switch.

**Stewardship:**

Go Baby Go already makes the lives of these kids better, and with the Electric Car Controller will make Go Baby Go better. First, it will allow almost anyone the ability to make the car modifications without any knowledge of how electronics, and with minimal tools. Second, it will help the parents to control the car by giving them the ability to stop the car from a distance, and third, it will provide a simple platform that future improvements can be made on as this organization grows.

**Growth:**

I am planning on helping with the Go Baby Go build this year, and want to help install the Electric Car Controller next year. I am also hoping to expand the Go Baby Go idea with some of the kids my mom works with.

**Building Community:**

Go Baby Go brings engineers and physical therapy students together to help kids with disabilities and their families. The physical therapist students develop the physical supports needed, and the engineers make the car modifications. Together, with the kid and their family final modifications for the button location and other changes are made so the kid can drive the car. I am excited for the build this year. To see the kids moving on their own for the first time will be amazing.

**Please list all stakeholders involved with, and that will be impacted by, the project.**

Michael Gilsdorf  
Joseph Krachey  
Members of Go Baby Go  
All future disabled children and their parents who receive a car from Go Baby Go

**Please provide a detailed action plan, including a schedule with timelines and key deliverables, for how the project will be accomplished. Remember to include both progress and final reports to the Pieper Foundation in your plan.**



The project began January 4th, 2016 and the final prototype will be completed by May 14th.

Deliverable (Start Date - End Date): Description

Project description for approval (Jan. 4 - Jan. 19): Developing an idea for the independent project and researching components to be used for low power controllers and radios.

Basic code development for proof of concept (Jan. 19 - Mar. 1): In the basic code development, a project using the selected components was made to ensure that the project will work with more refinements and efficiency calculations.

Code efficiency improvements - (Mar. 1 - Mar. 27): The remote will be run off a coin cell battery and will need to be optimized for power efficiency and signal range.

Circuit board development - (Mar. 19 - Apr. 9): Two custom designed boards will be designed to run the code developed.

Go Baby Go spring car build - (Apr. 2): I will be participating in the spring car build to better familiarize myself with the process. The Electric Car Controller will not be installed with these cards but will be part of next years car builds.

Build circuit board - (Apr. 9 - Apr. 24): Build the two board prototypes.

Finally assembly - (Apr. 24 - May 14): Complete final assembly and modifications for the final prototype.

Progress/Final report - (May 1 - May 7): Complete the final report and progress check for Greg Harrington.

Build remaining boards - (May 7 - May 1): Build the remaining Electric Car Control sets and deliver to Go Baby Go.

**Please explain how this program helps to support student leadership development.**

This project is being ran through the independent study course ECE491. As the student in this course, I am and was responsible for designing and implementing the project. By doing this project alone I have to schedule, order, and build all the different parts of the remote and the receiver. This required planning and organization to ensure the final project will be functional. Without anyone else to rely on, I am forced to be the leader when developing the Electric Car Controller. Once the Electric Car Controller is developed, I will have to work with other engineers and the people at Go Baby Go to show them how to install and set up the Electric Car Controller.

**Please provide a detailed budget, with justification for the funding request and an outline on how the grant money will be used specifically to support the proposal.**

Development Package:

MSP430 Launchpad - 10.00

AIR Booster Pack CC110L - 20.00

Key fob:

MSP430G2553 microcontroller – 2.50

A110LR09A radio – 14.00

Circuit board – 5.00

Polycase – 5.00

Miscellaneous board components (Resistors, Capacitors, etc.) - \$10

Total: 36.50

Car controller:

MSP430G2553 microcontroller – 2.50

A110LR09A radio – 14.00

Circuit board – 6.50

Relay – 2.00

Polycase – 5.00

Miscellaneous board components (Resistors, Capacitors, etc.) - \$10

Total: 40.00

One complete set total = 76.50

To make 10 sets would be 765.00

Spare parts:

MSP430G2553 microcontroller –  $2.50 \times 5 = 12.50$   
A110LR09A radio –  $14.00 \times 5 = 70.00$   
Relay –  $2.00 \times 5 = 10.00$   
Total: 92.50

Total cost for making 10 sets would be 857.50

Total project cost 887.50

**Attach any additional supporting documentation for your project proposal here.**

Uploaded File: *No Response*

# Pieper Servant Leadership Project Funding Application - FY17

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## Pieper Servant Leadership Project Funding Application

### Overview

The Pieper Servant Leadership Fund is offering financial support for UW-Madison College of Engineering students to lead service-learning or community outreach projects that “lift up society, enrich organizations and communities, and have a positive effect on the least privileged.” Projects should be aligned with The Pieper Family Foundation belief that human goodness is not simply innate-it requires action and service to others; and that character is inspired and facilitated in cultures, organizations, and families by and through the example of enlightened leadership. A total of \$10,000 is available and will be distributed among multiple projects to maximize the overall impact of the funds.

In partnership with Engineering Student Development (ESD), the Pieper Family Foundation encourages full time students and registered student organizations to apply for funds via the application form below by March 18, 2016. Grants will be awarded and winners will be notified by the end of March.

### Criteria for Selection

A successful proposal will clearly articulate responses to the questions below.

In what ways does your proposal expect project leaders to “lift up society, enrich organizations and communities, and have a positive effect on the least privileged?” Furthermore, how will project leaders put into action and support the 12 Principles of Servant Leadership as outlined in this article:

<https://aspireonline.org/aspire2015/wp-content/uploads/sites/9/2015/10/BECOMING-A-SERVANT-LEADER-OVERVIEW.pdf>  
(<https://aspireonline.org/aspire2015/wp-content/uploads/sites/9/2015/10/BECOMING-A-SERVANT-LEADER-OVERVIEW.pdf>)

Minimally, the proposal must specifically address how project leaders will use the principles of Awareness, Stewardship, Growth, and Building Community.

In what ways does your proposal engage yourself and others in leadership activities that extend beyond simply participation in an event or organization that is led by someone else?

To what extent does your proposal build on existing partnerships with other individuals and organizations to maximize the impact of your work (e.g. shared funding, combined resources, build on existing program or infrastructure)?

### Budget Summary and Allocation of Funds

You must include a detailed budget for how you propose to spend the requested amount. The budget must include both projected income and expenses for the project, including any additional grants or gifts you plan to obtain for the project.

In order to support as many proposals as possible, the review committee may elect to fund portions of a proposal and encourage applicants to seek supplemental funding for the remainder.

### Award Requirements

Recipients of Pieper Funds must agree to:

Submit 2-3 page project progress report (if project is still active), or project summary (if project is completed) to Greg Harrington, at [gwharrin@wisc.edu](mailto:gwharrin@wisc.edu), by August 1, 2016. This report or summary should include what your team did for the project (including photos) and how your team used the principles of Servant Leadership to successfully lead the project. Complete a Servant Leadership Survey upon initial award of funds and at the conclusion of the project.

Respond to other requests for information, updates, presentations, etc. as requested by the award committee.

Include the ESD logo along with written acknowledgement that “This program is partially funded through the Pieper Servant Leadership Fund at UW-Madison” on any and all marketing materials generated for the project.

Comply with University rules and regulations, and ESD policies and procedures. If a proposal is accepted, the contact person listed will need to schedule an appointment with the ESD Financial Specialist to discuss the program expenses, necessary paperwork that may need to be filled out, and how monies will be disbursed. This meeting must occur within two weeks of being awarded the funds.

All funds must be spent by December 31, 2016.

### Primary Contact Name

Alexander Sanchez

**Organization Name**

Society of Hispanic Professional Engineers (SHPE)

**Title/Position**

President

**Email Address**

alsanchez@wisc.edu

**Phone Number**

414-469-8658

**Advisor Name**

Tim Osswald

**College of Engineering Department/Affiliation**

Mechanical Engineering

**Advisor Email Address**

tosswald@wisc.edu

**Advisor Phone Number**

(608) 263-9538

**Name of the Proposed Program**

Latinos Exploring Engineering Professions

**Amount Requested to Support the Program**

\$1,600

**Please provide a detailed description of the proposed project, including the purpose, objectives and intended outcomes. Remember to include a description of how the project will "lift up society, enrich organizations and communities, and have a positive effect on the least privileged."**

Latinos Exploring Engineering Professions (LEEP) is our primary outreach event for the Spring semester. Each year we bring 80+ high school students from Milwaukee and Madison on campus to teach them about engineering and STEM. This includes everything from careers in engineering to hands-on activities that explore engineering concepts. Our event focuses on catering to minorities in STEM, especially Latino/a students, who do not normally have the access and exposure to engineering and STEM related education. Our objectives are to educate the students on what engineering is, present the opportunities and careers it has to offer, and demonstrate that engineering and STEM can be fun and interesting. We hope that the students leave with a desire to attend college and pursue STEM, a notion that many underrepresented and less privileged students don't even consider as an option. In the past, we have received positive feedback from the students and teachers expressing how the event has inspired them to pursue postsecondary education. We ultimately want to help develop a generation of engineers that is more diverse than the previous one. A more diverse STEM field will certainly "lift up" society. Furthermore, we hope the opportunities of college and STEM education are communicated throughout the Hispanic community, a group that is certainly less privileged than groups traditionally represented in STEM and higher education. We hope this message not only gets spread by the attendees of the event, but the SHPE members who volunteer and witness the positive impact they are having on these underprivileged students.

**Please explain in detail how your project will address the 12 basic principles of servant leadership, minimally including Awareness, Stewardship, Growth and Building Community.**

The project leaders of LEEP are increasing the awareness of the lack of diversity in STEM. This awareness leads to the stewardship we feel to increase the number of Latino/as and other underrepresented minorities in STEM, which will lead to not only a more inclusive and progressive society, but also an enriched and empowered Hispanic community that realizes it is capable of accomplishing great things, like graduating college and solving societies' issues with STEM. We hope to help these students grow and become aware that they are capable of careers in engineering. Of course, we understand and empathize with the difficult situations many of these students come from. It is our job help these students realize their situation can be improved or they can

accomplish the goals they want to accomplish with a little hard work and dedication. We hope to build a community in these schools and on campus that encourages each other to become successful and achieve everything they desire. In the past, we have encouraged the students to give us feedback and tell us what they would like more of in our event so they can get the most out of it. We listen to the students and try to accommodate all of their suggestions. We have all worked together to conceptualize how we can achieve all our goals for this event.

**Please list all stakeholders involved with, and that will be impacted by, the project.**

Madison East High School  
Madison West High School  
Milwaukee Hamilton High School  
Milwaukee Riverside High School  
Society of Hispanic Professional Engineers, UW-Madison Chapter  
Diversity Affairs Office, UW-Madison

**Please provide a detailed action plan, including a schedule with timelines and key deliverables, for how the project will be accomplished. Remember to include both progress and final reports to the Pieper Foundation in your plan.**

January 18th- March 18th: Event Planning- event schedule developed, lab tours coordinated, schools invited  
March 25th- Buses Ordered  
March 29th- Rooms booked  
April 8th- Confirm with schools  
April 15th- Food and supplies for activities purchased  
April 22nd- Volunteers confirmed and responsibilities established  
April 29th- Event Day: LEEP  
May 20th- Final report submitted

**Please explain how this program helps to support student leadership development.**

The project leaders for this event have the opportunity to collaborate with each other to develop a program that will benefit and help Latino students grow and encourage them to pursue STEM. We will be responsible for managing 80+ students and around 15 volunteers. In order for the event to run smoothly, we will have to demonstrate strong leadership skills, such as communicating effectively. We have a number of younger students working to make this event successful. This is a great way for them to get involved early in college and expose them to what it means to lead an event. In the past, LEEP has encouraged SHPE members to become more active in the chapter, including those who have gone on to become President. Any time people must be coordinated together to achieve a goal or carry out a successful event, leadership is required. LEEP is no exception. Events like LEEP stimulate an individual's growth as a leader. For those that volunteer and do not participate as much in the planning of the event, the high school students look up to these people as mentors and volunteers. It is vital that each volunteer is the best leader they can be as they take the students around campus and help lead the activities. Furthermore, we hope this event inspires some of the attendees to become leaders themselves some day. Our former President attended LEEP when he was in high school and it inspired him to become active in SHPE when he decided to attend UW-Madison. We hope to have the same effect in this year's event.

**Please provide a detailed budget, with justification for the funding request and an outline on how the grant money will be used specifically to support the proposal.**

Supplies for Activities \$450- This amount is used to purchase supplies for the hands-on activities we will be running during the event. These activities are used to show how engineering can be fun yet still have real-world impacts and importance.

Food and Drinks \$700- This amount will be used to purchase food and drinks for our attendees and volunteers. In the past we have gotten pizza, but we would like to look into getting nicer (healthier) food.

School buses \$400- In the past, we have paid for buses for a few of the high schools. The Milwaukee schools have shared previously. Since public school budgets can be low, this is vital to reaching a wider audience and ensuring the students are able to attend such a rewarding experience.

Flyers and Advertising \$50- This includes printing for advertising around campus, encouraging students to volunteer and participate in the event.

Total \$1600

**Attach any additional supporting documentation for your project proposal here.**

Uploaded File: *No Response*

**Appendix F**  
**Proceedings for the Inaugural Summit for the Big Ten Leadership Educators Network**

# Big Ten Leadership Educator Network

Summer Summit 2016

August 4-6, 2016

Proceedings

Funded by The C. Charles Jackson Foundation



## Contents

*Introduction*

*Participants*

*Summit Objectives*

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Upon joining the Big Ten in 2014, leadership educators at The University of Maryland sought to understand how, as a conference, the Big Ten was working collectively to advance the field of leadership education. Quickly recognizing that collaboration was scarce between Big Ten member institutions, efforts were made to bring Big Ten leadership educators together at a national conference. Following that brief initial meeting, it became apparent that for meaningful collaboration to occur all Big Ten institutions must be gathered in the same space with the common purpose of advancing leadership education in the Big Ten.

In August 2016, all 14 Big Ten member institutions sent representatives to The University of Maryland for a three-day, intensive summit aimed at building a network, solving common problems, and generating innovative ideas in a way that promotes the work of leadership educators at their respective institutions. As a result of the summit, a purpose statement for LENK as well as a set of priorities the group will pursue in the 2016-2017 academic year emerged.



## Participants

All 14 Big Ten member institutions had representatives at the first Big Ten LENK summit, and many had representation from both the academic and student affairs realms of leadership education. Interestingly, several representatives work in hybrid roles that span both areas. Participants also had varying levels of experience in higher education and, specifically, leadership education.



## Summit Objectives

- Identify intersections among the work of leadership educators
- Highlight distinctions between the institutional leadership programs and their purposes
- Emerge an understanding of core leadership values of the Big Ten member institutions and implications for our collective leadership education work
- Begin collaboration to evolve the potential for a college student leadership education initiative
- Initiate the investigation of a shared research agenda that results in evidence-based practice
- Illuminate mechanisms to funnel information among the Big Ten LENK
- Advance opportunities to share resources and educational approaches



## Purpose Statement

Establish a network of leadership educators in the Big Ten to understand who we are, the context of our work, and how we can advance leadership education in the field, efficiently and effectively, through student-centered exchanges, dissemination of knowledge, and collaborative problem-solving

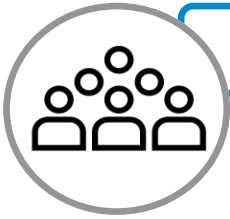


*"As I reflect [on LENK] since being back [at my home institution], I feel the summit was the beginning of something special. I'm excited to see what we are able to accomplish together!"*

- Big Ten LENK Summit Participant



## Collaborative Priorities



### Facilitate student-centered exchanges

The plethora of resources and experiences available as a collective Big Ten LENK far surpasses the resources and experiences available at a single institution. As a result, LENK sees an opportunity to connect students with peers, faculty, and staff at other institutions in student-centered exchanges to further expose them to diverse perspectives.



### Disseminate knowledge to the field

As the LENK summit proceeded, it became evident the work being done in the Big Ten is of extreme value to the field and unique in having both academic and student affairs professionals at the table. As such, the Big Ten LENK hopes to publicize its valuable work and serve as a model for other national conferences.



### Engage in ongoing problem solving

At the LENK summit, participants were open to sharing issues specific to their campus in an effort to garner advice and resources. In candidly sharing the challenges leadership educators are faced with, themes emerged that highlighted similarities across the Big Ten. Seeing great value in the sharing process, Big Ten LENK aims to serve as a space to continue in productive dialogue.

## Looking to the Future

*"My vision is for LENK to be a space where colleagues can share resources and support to advance and improve the programs and ventures at their respective campuses."*

- Big Ten LENK Summit Participant

Big Ten LENK is committed to meeting annually in an effort to advance the field of leadership education. Based on the collaborative priorities established at the 2016 summer summit, the goal is to make significant progress in these three key areas in the upcoming academic year. The steering committee for the 2016 summit will remain together and has already begun moving forward to create the vision for the 2017 summit and determine how to best pursue the collaborative priorities established by the LENK summit participants.

## Acknowledgements



Big Ten LENK would like to acknowledge those who have been influential in the execution of the first Big Ten LENK summit. The C. Charles Jackson Foundation funded a significant portion of the summit and The University of Maryland Leadership and Community Service-Learning office hosted the 13 other Big Ten member institutions.

