**Portland Affiliate’s 2013 Application to the Oregon Community Foundation for $52K**

**Introduction**

The ACE (Architecture, Construction & Engineering) Mentor Program seeks a three year grant from the Oregon Community Foundation to hire part time staff to expand our capacity to meet rising demand from high school students throughout the Portland region for mentor-ship opportunities with construction professionals. **These experiences will inspire students (including low & moderate income students) to succeed academically, develop new skills and better prepare them for success in the work place**. This Program will also help employers meet their future workforce needs and contribute to the economic vitality of the region.

**Background & Proposed Outcomes**

Over the past 6 years, **the ACE Mentor Program has served nearly 350 students from over 50 high schools in the Portland region.** **Mentors from the fields of architecture, construction management and** **engineering** **have contributed over 10,000 hours to work with students after school. Since 2006, ACE has awarded 41 students about $150,000 in college scholarships.** This year’s ACE Fundraising Luncheon was attended by over 350 people –the largest ever - and raised over $62,000. **As a result, ACE was able to award seven scholarships this year worth $ 28,000.**

By increasing our staff capacity, in the next three years, ACE will

* Prepare over 300 students in the Portland region – including low income students - for post-secondary success and for successful transitions to the workplace;
* Recruit over 210 mentors from the field of architecture, construction management and engineering to work with students after school to educate them about professional career opportunities in the construction industry & the skills required to access those opportunities;
* Help students to learn new skills including problem solving, how to work in teams & communicate more effectively and sharpen their public speaking skills. Additionally, students build confidence in themselves and their abilities.
* Increase the dollar amount of scholarships awarded to students by 10% annually.
* Increase the number of low income & female students willing to pursue careers in the construction sector – including engineering.

Support from OCF will leverage additional community resources and allow more of the funds that are raised by ACE to be devoted to awarding college scholarships to worthy students.

**Project Need**

Currently, there are NO architecture, drafting or engineering programs in any of the Portland Public High Schools which serve nearly 13,000 students. And while other districts do have some drafting and engineering programs, few have the professional involvement that ACE has. Students consistently inform us that the “real world” work with construction professionals is far superior to their experience in the classroom. Madison, one of our 2012 ACE graduates, said: “While participating in the ACE Program I have come to understand the importance of teamwork. The ACE experience has helped me affirm my desire to become an environmental engineer or architect. I now have a clear career path in my mind and it has put an end to a lot of stress. ”

In addition, many school districts are struggling with low completion and high dropout rates. For example, only 62% of all PPS students obtain their high school diploma on time and about one third drop out. Research on the issue has concluded that in order to achieve academic success, students need a **relationship** with a caring adult and see the **relevancy** **of their education.**

The construction sector is the second largest employment sector in the country. Because of the sheer volume of ‘baby boomers’ retiring over the next 19 years ( 72 million ) , many employers will be hard pressed to find the talent necessary to compete successfully. **Our country’s infrastructure is also aging.** **The Brookings Institute recently reported that “In 2030, about half the buildings in which Americans live, work, and shop will have been built after 2000.”** In October, 2011, the Wall Street Journal reported that engineering positions were one of the most difficult jobs to fill. **There is also great interest among employers in diversifying the profession – and recruiting more women into the construction sector.** Thus, for those young people that we have inspired and who have secured the skills and education needed, there will be tremendous opportunity in the next ten years for rich and rewarding careers in these professions.

**How It Works: Preparing Students for Academic & Workplace Success**

Highschool students work in small teams with construction professionals to create a design. Students meet with mentors in downtown offices from 4:00 to 6:00 PM in twelve sessions that occur from January through May. In the fall, a variety of different strategies are employed to recruit students including communication with Career Coordinators & educators, classroom presentations and Information Sessions. We stress to students that ACE represents a serious time commitment on their part and only 11th & 12th grade student are encouraged to apply. One of the primary criteria for acceptance is that students commit to participate in **all** twelve sessions.

In 2012, students worked with mentors to design four transit oriented retail projects including a coffee shop, bike shop, a yoga studio and a Visitor Center. All four buildings were located near the planned new MAX stop at OMSI just across the river from downtown Portland. **The ‘deliverables’ for each project included that students work with mentors to produce schematic-level graphics to convey the following : a site plan, landscape & floor plans, building sections, elevations, structural system diagrams, estimated cost summary and estimated construction schedules**. Each project team had to develop successful **sustainability strategies** that would reduce energy & waste, conserve water, utilize on site renewable energy sources, and incorporate used or recycled materials. These projects were selected so that the program could connect with and build on local community needs.

As a result of their work in project teams, students were educated about the following professions: architecture, landscape architecture, interior design, engineering (structural, civil, mechanical & electrical) and construction management. In May, student teams presented their designs to a large audience composed of parents, teachers and construction professionals and received feedback on their work from industry experts.

As a result of this experience students have a much deeper understanding of the various career opportunities, have more hope about their future and make better decisions about their lives after high school. They learn new life skills including how to work in teams and the importance of a work ethic. The relationships that they develop through ACE help them be more successful in college and also better prepare students for success in the work place. **One of the primary reasons that ACE is so successful is that it through collaboration, we leverage a tremendous amount of volunteer resources to better serve students. Key partners in this collaboration include over 35 architecture, construction management, engineering firms, Portland Public Schools and seven other School Districts.**

**Why OCF Funds are Needed**

Over the past six years, the ACE Mentor Program has been operated out of the offices of Nishkian Dean, a structural engineering firm. The principal of the firm, Ed Dean, has devoted countless hours to ‘staffing’ the program and his assistant has provided administrative, program and accounting support. **We estimate that over the past six years, the firm has made an in kind donation of $ 45,000.** For the past 18 months, ACE has had a small contract with the Portland Workforce Alliance to secure a part time Director for ACE and has also hired a fundraising event coordinator on contract.

Because of the tremendous growth of the Program, volunteer staff can no longer handle the workload. Thus far, all students who have applied have been accepted. However, as the program continues to grow**, dedicated staff is needed to manage the program and support mentors**. **Specifically, ACE is asking for $ 52,000 over three years to:**

* Hire a **part time** **Program Manager** that can support the work of volunteer mentors, manage the student application process and manage the finances for the organization;
* Cover a small portion of the expenses for a **part time** **Executive Director** ;
* **Conduct an evaluation of the ACE Program** and determine how we better serve all students including more low income and racially diverse students;
* Develop outreach materials that **help us to recruit additional students and mentors**.

**Project Leadership: Key Roles & Responsibilities**

There are nearly 100 Project leaders who will play critical roles, including:

* Three ‘Mentor Coordinators’( Adam Solomonson, Eric Buschert & Steven Tuttle) who will work with staff to recruit volunteer mentors to work with students.
* Over 65 volunteer mentors who work with students in twelve after school sessions
* ACE Executive Committee (see attached) who will work with the ACE Board to guide the overall work of the organization, including fundraising, program work and hiring staff.
* The ACE Board (attached) who will be responsible for the growth and development of the organization. The Board plays a key role in helping to raise funds for ACE and recruiting people to attend fundraising events.
* Project staff: Coordinates & supports the work of mentors, works with high school staff to recruit students, manages the application process, and works with the Board to implement the program work, policies and fundraising strategies of the organization.

**Evaluation Plan: Measuring Results**

While one of the goals of the project is to attract students to professional career opportunities in the construction sector, we also measure success by the degree to which we educate high school students about career opportunities, teach them new skills (e.g. teamwork, etc.), and help them to make more informed decisions about their life after high school. **Ultimately, one of our primary goals is to mobilize parent and community resources and partner with school s in the education process that links classroom learning to “real world” learning and prepares students for the world of work.** If OCF resources are available, we plan to hire a PSU graduate student to develop an evaluation tool and implement an evaluation process for the program.

Measurements of our success would include:

* Number of students who participate;
* Number of construction industry firms participating and volunteer mentors recruited;
* Dollar amount of scholarships awarded;
* Number of students who indicate they have learned new skills as a result of their participation ;
* Number of students who plan to continue their education after high school & continue their education to pursue careers in architecture, construction management & engineering.

**Project Budget Narrative: Our Request to OCF**

Thetotal cost of the ACE Budget is $ 311,750 – of which $ 185,900 is an in kind contribution by 65 mentors. Actual financial expenditures remain low due to the high level of in-kind donations. ACE is seeking $52,000 over 3 years to cover the cost of some staff expenses, the development of an evaluation tool and the cost of some marketing materials to recruit more students and mentors. **Our specific request to OCF in the first year is for $ 22,000.** If awarded, OCF’s grant would be spent in the following ways:

* $10,000 for a new part time Program Manager;
* $ 2,000 for a portion of the Staff Director’s contract;
* $ 7,000 to hire graduate students to conduct **an evaluation** **of the program and an analysis of the students we currently serve.** Our goal is to ascertain how we better serve a diverse group of students;
* $ 3,000 to develop new materials & strategies to **recruit** additional students & mentors.

**Sustainability Plan**

Based on our track record over the past six years, we have confidence that we will be able to secure the human, in kind and the financial resources needed to sustain and grow the program. **Our business model is based on high collaboration with existing organizations and low overhead** (i.e. hiring staff on contract). We have a strong base of support among our business partners in the construction sector and the 2012 fundraising event was the most successful ever. We also plan to continue to pursue foundation grants to supplement the corporate donations and permit a majority of the funds raised from events to be dedicated to student scholarships.