# ACE Academy 2008-09 Performance Evaluation Report Executive Summary

"I didn't know how to do any of this, now it's easy. I love the hands on opportunities at ACE!" comments a student on deck at the Willamette Carpenters Training Center. When this reviewer asked how he knew the frame was square, he said with pride: "The 3, 4, 5 rule." Similar comments were heard on my visit to the IBEW Training Center: "I wasn't looking forward to my senior year. Now, I can't believe the year is almost over." A second student states "I love hands on." And a third says "It's great we get to learn a little about all three industries and a lot about our area of interest."

These comments made by Academy for Architecture, Construction, and Engineering (ACE Academy) students are indicative of the responses found throughout the activities of the performance evaluation. Overall, <u>all</u> stakeholders (students, parents, teachers, administrative staff, and training center staff) report that the ACE Academy was effective in meeting its mission to *provide a contextual educational experience within the architecture, construction and engineering disciplines, leading to the achievement of rigorous student academic benchmarks and preparation for additional post-secondary education for a diverse high school student body. Many reported that its career and technical education in architecture, construction, and engineering was outstanding, although more work needs to be done to provide the right level of rigor and support for student achievement toward academic benchmarks in reading, writing, math and science. Additionally, students rated their overall educational experience and career preparation at ACE 4.0 and 4.1 on a 5 point scale, respectively, and reported that the rigor of the ACE program was <i>higher* compared to the rigor at their home high school.

ACE demonstrated an unusual level of implementation of school design for a first year new school. This is most likely attributed to strong, supportive leadership, a clear vision, and a qualified and committed staff.

Included in this report are findings, analysis, commendations and recommendations from an evaluation of the first year for the ACE Academy, a charter school located in northeast Portland. Data collection for this performance evaluation report included personal observations, interviews, focus groups, online and phone surveys, student transcripts, and enrollment, attendance and GPA reports. Data was collected between March and June 2009.

# **Findings and Recommendations**

#### Achievement:

Student achievement at ACE appears to be growing. Student's ACE GPA is higher than their incoming cumulative GPA and their home high school GPA for the year. In eight courses surveyed, the average proficiency level demonstrated on each standard assessed was *sufficient* or *proficient*.

Construction students appear to lag behind architecture and engineering students when measured by ACE GPA. Coincidently, B day construction students rated their ACE educational experience and career preparation significantly lower than other ACE students. This should be investigated further as student satisfaction and student learning often are linked, and one often follows the other.

# Staff:

ACE instructional staff consists of 5 teachers who work well together to plan instruction and activities in career and technical education as well as academics. Staff meet weekly to collaborative and plan lessons for the coming week. This is a dedicated and committed staff, interested and capable in implementing the school's vision for a hands-on, project-based career and technical charter school.

Instructional staff rated ACE's progress toward meeting its mission at **8.3.** Comments regarding specific components of the mission indicate that the contextual educational experience gets the highest mark; teaching to rigorous academic benchmarks needs improvement; preparation for post-secondary education is high within the trades, and will be increased even higher with the addition of the Senior Capstone project, but again, more work needs to be done in language arts to prepare students for college level reading and writing; and more diversity is needed in the student body, and warrants targeted recruitment of females and students of color.

Several staff expressed frustration that one staff member is not meeting his responsibilities regularly. This is causing undue burden on the other teachers to pick-up responsibilities dropped.

*Recommendation:* Address this issue with the support and facilitation of the director.

Staff is beginning to experience teacher burnout after an intensive year of developing from scratch the entire junior curriculum. One more year of such intensive work is needed to develop the senior curriculum, including the Senior Capstone, as well as make refinements to the junior curriculum.

*Recommendation*: Staff will need support and dedicated time to collaborate to continue one more year at this pace. They should be reminded that the second year is not easier than the first, as often thought, and will have new challenges. Knowing that the light at the end of the tunnel comes in the third year may help staff pace themselves.

Staff view the responsibility for handling student misbehavior as belonging to the teachers, versus sending the student to the principal. Several staff requested training in methods to deal with misbehavior of one student within the classroom, while continuing to instruct the rest of the class.

*Recommendation*: Provide training via peer modeling, team teaching, or visits with a master teacher from the school or nearby district.

### *Professional Development:*

Professional development during the summer before the school opened and during the school year was "just in time" and aligned with areas in which staff would be teaching

such as Project Lead the Way, brain based learning theory, and construction. Requests for professional development for the second year include:

- ✓ Integration, Differentiation, Grading for Proficiency, Project-Based Learning
- ✓ More Project Lead the Way
- ✓ Time to meet with an architecture teacher to help plan architecture curriculum
- ✓ Time to incorporate science into the curriculum
- ✓ High Schools That Work conference
- ✓ Follow-up with brain based learning theory with same professor.

*Recommendation*: Provide ongoing, job embedded professional development to refine and build teacher skills and knowledge in project-based learning, credit for proficiency, and integration. Recent research indicates teachers need at least 33 hours of professional development in each topic annually, in order for new strategies to be implemented into the classroom. Project-based and integration expert Michelle Swanson, based in Eugene, could lead staff to the next level of implementation. Visits with Gary Myer, the developer of the only Oregon based Bigger Picture school in Beaverton: Terra Nova, and Steve Day, the developer of a new credit for proficiency small school serving grades 6-12 in Beaverton: Health and Science School, could provide staff with greater insights to teaching with a credit for proficiency model.

### *Instruction:*

What's working well

- ✓ Primary focus on architecture, construction and engineering
- ✓ Hands on activities
- ✓ Project-based learning
- ✓ Use of field trips, training centers as additional sites for learning
- ✓ Applying math to professional technical projects
- ✓ Applying writing to professional technical projects
- ✓ Language arts and math content are more clearly seen by students than science
- ✓ Level of student responsibility for learning
- ✓ Opportunities to continue learning through credit for proficiency process

### What isn't working so well

- ✓ Language arts content may not be aligned with college admission requirements
- ✓ Science content is not easily recognizable by students
- ✓ Opportunities for involvement by each group member in construction projects
- ✓ Student understanding of how credit for proficiency grading by standards correlates to individual projects, and to final subject area grades
- ✓ More organized, planful daily, weekly calendar

#### *Recommendations*

- ✓ Increase language arts (reading, writing and speaking) activities, levels and supports
- Map language arts school standards to college prep standards, using such tools as David Conley's *College Knowledge* and the Center for Educational Policy Research's (CEPR) *Standards for Success*
- ✓ Find ways for students to learn and practice "Cognitive Strategies and Overarching Academic Skills" (from CEPR) to prepare them to be college and work ready

- ✓ Increase opportunities to learn science
- ✓ Intentionally show students where academic content is being learned and applied
- ✓ Start the year with a project, to show new students quickly what this school is about
- ✓ Intentionally and regularly teach students to recognize, value and use the components of the school design including: integration of academic and professional technical learning, project based learning, contextual hands on learning, credit for proficiency and standards-based grading

### Students:

Students love this school, and many have become re-engaged in their own learning primarily through the hands-on contextual learning in an area of interest to the student: architecture, construction, or engineering. 87 of the 94 juniors enrolled at the end of the 08-09 school year are returning.

Concerns by students in focus groups included:

- ✓ a need for more clarity in how to translate numbers that indicate the level of proficiency in standards demonstrated in projects to letter grades on report cards.
- ✓ a concern that females in construction are underestimated by adults and their peers.
- ✓ a need to learn and practice more reading and writing that prepares them for college. During staff interviews, staff agreed these were real concerns and brainstormed methods for addressing and resolving each.

# Recommendation:

- Explicitly teach students the value of standards- based, criterion-referenced grading, and how to interpret proficiencies that measure their learning.
- ✓ Teach staff peer observation data collection techniques such as Gender Equity for Student Achievement to increase awareness of unintentional biases and behaviors and their affect on student learning.
- ✓ Map language arts standards and assignments to college admission standards such as *Standards for Success*.

#### Parents:

Parents gave ACE high ratings for its first year: **8.4,** and were extremely complimentary during the phone survey. The most common statement was: "He loves it!" Parents are satisfied with quality of staff, administration, and student engagement and achievement. They recognize that ACE offers a unique educational opportunity.

Parents greatest dissatisfaction lies in communication regarding daily and weekly school schedules, student progress, and student support services for students with special needs. *Recommendation*: Parent nights for learning how to interpret progress online using Moodle and TeacherEase, posting online of daily schedules a week in advance, and increased clarity and accountability with districts as to how and when support services will be provided.

# **Training Centers:**

The four Training Centers continue to be supportive of the ACE mission and are ready to continue participation in ACE student instruction in the trades. They believe ACE can

provide qualified candidates to their apprenticeship programs and that their staff and facilities can provide authenticity and rigor to the career and technical program.

*Recommendation*: Training Center staff request more timely and better communication when scheduling training and activities using the Training Center staff or facilities.

In summary, based on observation, data, and stakeholder reports, the ACE Academy has had a successful first year, and is posed to increase that success in year two. This success is likely due to the fact that ACE meets most of the Career Academy *National Standards of Practice*. These standards were developed by an informal consortium of career academy organizations, including the Southern Regional Education Board/High Schools That Work and the National Academy Foundation, and are framed around ten key elements of successful implementation, drawn from many years of research and experience from all parts of the country. The standards may be downloaded from the Career Academy Support Network at http://casn.berkeley.edu/resources/national\_standards.html.