

**MINUTES: NPC CONSTRUCTION TECHNOLOGY PROGRAM
ADVISORY COMMITTEE MEETING 11/21/06
M-7 11:30 A.M.-1:00 P.M.**

I. Welcome and Introductions

The meeting was called to order by John Darst at 11:35 a.m. The following individuals were present:

- Anna Marie Rae, General Contractor – AMR Custom Builders - and graduate of the NPC BOC program;
- Thomas Montoya, Building Maintenance Supervisor – Navapache Regional Medical Center and graduate of NPC BOC program;
- Leslie Collins, NPC student advisor;
- Tom McRichie, General Contractor in HVAC and NPC BOC Associate Faculty;
- John Darst, Chair of NPC Construction Technology Program
- Betsyann Wilson, Independent Consultant who assisted John Darst in authoring the program review.

John Darst introduced those present to one another, and reminded the group that the purpose of the meeting was to finalize the Construction Technology Program Review, which they had received by e mail and reviewed prior to the meeting. The group would initiate closure of the project by providing input regarding trends in the program and industry, and by giving final approval to the document at a later date.

II. Old Business: Construction Technology Program Review

John turned the meeting over to Betsyann Wilson, who asked if anyone had any questions about the draft. Thomas Montoya wanted to know if NPC articulates with ASU Construction Tech programs. Leslie Collins explained that articulation agreements with state universities will allow students to seek baccalaureate level degrees for career and salary advancement. There are no current articulation agreements with either Arizona State University Polytechnical Institute (ASU East) or Northern Arizona University. Leslie further explained the difference between a Bachelor of Science and Bachelor of Applied Science degree. The BOC Advisory Committee felt the Bachelor of Applied Science would be the most appropriate degree with which to articulate, since it emphasizes application of trade-specific skills, rather than general studies. Strategies suggested to accomplish articulation agreements included sending BOC Program Chair John Darst to meetings of the Arizona State Articulation Task Force and contacting ASU East and NAU for information on how to proceed in developing and implementing articulation agreements.

Anna-Marie Rea remarked that in other communities where she had lived and worked, community colleges were the “go to” places for community employers to find skilled employees. She would like to see NPC assume that role and publicize it. All employers expressed frustration at the difficulty in finding skilled employees. They advertise in Tucson and Phoenix, because they don’t get enough response locally; still it is difficult to attract people to move here. Anna Marie suggested sending John Darst to construction trade shows to market the program and to stay abreast of trends in the industry.

This led to a discussion of the need to stay current with industrial trends. Anna Marie thought the college could bring salespeople from the various trades to teach workshops on new technology and methods. John suggested these could be 199 courses. The group wanted to know if 199 courses could count toward an AAS. Leslie felt that if the content were appropriate to the degree, they should. The group felt 199 courses would be a great source of enrollment for the college, and a great help, not only to professional tradespeople, but also to do-it-yourselfers.

Tim McRitchie recalled that past BOC chair Ben Carr had an incentive program to keep students enrolled through completion: If they did well in one class, they got the next for free.

All tradespeople/employers wanted internships to be part of the requirement for a degree, and all present agreed that they would offer internships.

At this point, there was no further discussion or questions, so Betsyann Wilson directed the group to some focus questions for the program review. These are summarized below.

A. Points for Discussion by BOC Advisory Committee

1. Are current NPC facilities adequate for teaching BOC courses? If not, what must be done to rectify the situation?

The Advisory Committee vehemently agreed that facilities for teaching BOC were not only inadequate for teaching current BOC courses, but also inadequate for any kind of program expansion. They feel the program needs not only a larger and better-equipped facility, but also equipment and teaching supplies to assist the program in reaching capacity needed for expansion.

2. What goals, objectives and outcome measures would most effectively drive the BOC program forward? What strategies must be implemented in order to accomplish those goals?

The Advisory Committee agreed that the college had to establish goals for numbers of students. Strategies recommended by the group for producing qualified entry-level workers included the following:

- Internships must be a requirement for program completion. Internships will give even entry-level employees an element of job experience that will expose them not only to the hands-on application of their respective trade, but also to the work ethic expected of them when they enter the job market. All advisory committee members expressed a desire to provide internship opportunities for NPC BOC students.
- Articulation agreements with state universities will provide options for higher degrees and career advancement and promote retention and completion. The college should develop articulation agreements with any Construction Technology programs at the university level, and John Darst should be attending meetings of the state articulation task force.

3. If the program is to grow, what is the capacity for adding faculty? Is it sufficient?

There was a brief discussion of faculty that revealed that currently, the number of faculty and associate faculty will not support program expansion. Increased enrollment would support additional faculty. Advisory Committee members expressed an interest in becoming NPC Associate Faculty in their respective trades.

4. NCCER – Is adoption of NCCER curriculum right for the college?

None of the employers on the advisory committee were familiar with NCCER curriculum, which may attest to the value of a student holding an NCCER certificate. Still, as Leslie Collins pointed out, from a curricular standpoint, NCCER curriculum provides a good guideline, even if it lacks “brand name recognition”. John Darst explained that he has been tasked with adapting NCCER curriculum for all areas of the BOC program, and while it does provide a uniform set of guidelines, it must be augmented or modified to meet the needs of BOC students. It should not be an impediment to articulation agreements, and so it was generally felt to be beneficial, or at least not detrimental.

5. Mandatory Placement: Should vocational students be required to earn minimum placement scores in reading, writing and math before enrolling in courses, or does this requirement deter potential enrollees?

This question was posed only because it was a prominent topic in the previous BOC program review draft. The author of that document strongly felt that mandatory placement testing deterred students from taking BOC courses or programs. Therefore, the question of placement testing was put to the BOC Advisory Committee at this meeting. Mandatory placement testing is not applicable to BOC courses per se, only to students seeking degrees, because they must complete general education classes for which placement testing is required. In the case of general education courses, the question of placement testing is non-negotiable. As Leslie Collins explained, what *can* be massaged is what general education course selections are used toward degrees. For example, an Associate of Applied Science in Construction Technology might require English 100, which emphasizes technical writing, instead of English 101, which emphasizes academic essays. One BOC Advisory Committee member reported that he actually found the placement testing process to be helpful, because it revealed areas he needed to refine and improve if he was to be successful in his chosen career. At a future advisory board meeting, the group would like to review BOC degree requirements and explore and discuss such options.

6. Degrees and Certificates – What are the pros and cons of a *degree* in Construction Technology? Should degree programs be emphasized and are they indicators of program success?

The advisory committee strongly endorsed degrees, because they are important for career advancement. Still, they emphasized the need for on-the-job internships as requirements for degrees. As one member put it, “Hire for attitude – Advance for Skill”. In other words, completion of a degree is indicative of the ability to follow through and complete a program, and such evidence should indicate commitment and work ethic to a prospective employer.

7. What is the nature of employability of Degree and Certificate Completers locally and statewide?

As was aforementioned, there is tremendous unmet need both locally and statewide for both entry-level and skilled employees in the building trades. This is due to the massive population boom in the Western United States and the ongoing and escalating need for housing and related infrastructure.

8. Should Plumbing and HVAC be added to specialization/proficiency areas?

By all means, Plumbing and HVAC should be included in areas of emphasis, and Certificates of Proficiency should be developed for each and placed in the catalog.

9. Should BOC invite more opportunities for NAVIT students? How can the relationship between NAVIT and NPC BOC be mutually beneficial?

Expansion of opportunities for NAVIT students will depend upon whether the program can expand, but the advisory committee sees high schools as an excellent pool of potential employees, and sees the value of getting students into the BOC pipeline as early as possible.

One committee member pointed out the value of allowing Welding (WLD) courses to count for elective credit toward some BOC degrees. As he pointed out, he holds an Associate Degree in BOC with an emphasis on Building Maintenance, and he uses welding often in his day-to-day work. Still, none of the welding classes he took through NAVIT applied toward his BOC degree, even though he uses the skills he learned regularly.

B. Committee Recommendations

1. BOC Program Structure

Expand the NPC BOC program to accommodate larger numbers of students across the Construction Technology field. As one committee member pointed out, in other communities where she has lived, community colleges are the “go-to” places to find employees. There is certainly demand from the industry. NPC should meet the demand. Continue to pursue means of expanding the program, including the partnership with Show Low Bluff.

2. BOC Curriculum and Offerings

- a. Make on-the-job internships a requirement for program completion. Seek internship opportunities from advisory committee members, who will not only provide them, but who will help identify additional opportunities through contacts within the Construction Technology community.
 - b. Provide short-term, open entry/open exit workshops to keep those in the field abreast of current technology. The BOC Advisory Committee reports that technology across the building trades is advancing at a pace never before seen, and local tradespeople are unable to keep up with the latest trends. The committee suggested construction trade shows as a resource for learning about new trends, and even for identifying associate faculty personnel to teach workshops on the new trends. They recommend sending BOC Program Chair John Darst to several trade shows each year to gather information. Mr. Darst can also work with Dean Peggy Belknap to create workshops to disseminate information.
3. Explore articulation agreements with state universities. Send John Darst to meetings of the State Articulation Task Force, and contact ASU East and NAU for information on how to initiate articulation agreements in Construction Technology.
 4. Convene a meeting of the advisory committee to examine current degree requirements and make recommendations for possible modifications of required courses to produce better-qualified program completors.
 5. Related to Item # 4 above, examine the feasibility of accepting Welding courses as electives for BOC, and perhaps for Automotive and Industrial Technology degrees as well.

III. New Business

The group was asked if they would make a last analysis of the final program review document, complete with their comments and suggestions from today's meeting. All agreed, and felt they would be able to offer feedback effectively via e mail, rather than meeting again. Betsyann will prepare the final document in the next two weeks, e mail it to John, and he will forward it to all committee members, including those who were not present today. Once all have weighed in, he will forward the document to Dean Peggy Belknap. All members were thanked profusely for their help.

IV. Adjourn

The meeting was adjourned at 12: 50.