

Construction Advisory Committee

Meeting Minutes

Northland Pioneer College, Community & Technical Education Location: <u>Silver Creek Campus, Snowflake, AZ</u> Date: <u>May 10, 2012</u>

Attendees:

Ken Wilk, NPC, Construction Chair Gary Townsley, Apprentice Director, Arizona Builder's Alliance Tim Kinney, President, Kinney Construction Services Tim Turner, Faculty, NPC Jason Carter, Whiteriver Construction Mike Marr, Whiteriver Construction Tom Poscharsky, Snowflake City Council, Economic Dvlt Committee, RADC Leslie Collins, NPC, Academic Advisor Newell Peterson, NPC, Faculty Joe Costion, Former Coconino CC faculty, Solar & Energy Steve Sims, General Contractor, Owner of Creative Green Homes Peggy Belknap, NPC, Dean of Career and Technical Education Matt Weber, NAVIT, Superintendant

- 1. Ken Wilk, Construction Chair, convened the meeting at 10:05 AM
- 2. Self-introductions
 - a. First time attendees: Gary Townsley, Tim turner, and Tim Kinney introduced themselves
 - b. Everyone stated the name and title
- 3. Kids College
 - a. Classes in snowflake and show low June 10th through 14th building birdhouses and concrete
 - b. Joe: What ages? ages 6-9 for construction class 6-14 for other classes
 - c. Peggy: Introducing kids to college at early age
- 4. Holbrook Skills Center
 - a. Around 15,000 square feet located in Holbrook housing construction, welding, and Mecha-tronics
 - b. Tom: What's the time frame? Should be ready for fall 2013
 - c. Joe: Is it going to seek LEED Certification? We will ask if at least a certification level is possible.

5. Con Program/Course Descriptions Discussion:

Ken: We addressed the three prevailing suggestions noted from the March meeting: 1. More electrical classes. 2. More green or sustainable classes 3. Industrial construction examples will be introduced through the assignments and projects within the classes.

The course description documents have been provided to give those of you a better idea of topics within the courses in our program. Possible text books and reference material was also brought in for council member review and place on the front table. Then we opened it up to comments from each council member regarding our program, classes, and course descriptions.

Gary: Likes to see the NCCER direction, he has been using that curriculum in his program since the 90's. Currently they offer carpentry and electrical level 1 certifications with their construction technology program. They have over two hundred students enrolled in his program.

Mike: Site work, equipment capabilities, soils boring logs, soils reports, and associated testing methods could strengthen our curriculum.

Joe: affirmed mikes assertion

Leslie: we could highly recommend geology as the Gen. Ed. for lab science **Gary:** there is a good soils module in the Heavy equipment level 3 program **Steve:** compaction, cuts/fills, optimal moisture content, basic hydrology **Ken:** Storm Water Pollution Prevention and Dust control

Jason: Likes the business electives, shared that most contractors fail because of lack of business skills.

Tom: CON 230 Sustainable construction looks good, can see where CON 245 fits in if its covers wind and solar power correctly. I heard some interesting statics from the radio that half of students from high school are going to college. Half of the students that go to college and graduate are actually getting jobs. The construction internship class is good idea. Explore the power companies and mines in the area to make internships successful.

Steve: Water resources are an issues that have not be addressed in today's economic conditions but will likely play a mitigating factor in future growth and expansion. We need to communicate this to our students. Water reusing and efficient structures are the future should be explored.

Leslie: Highly recommending Geology as a science for the Gen Eds. Also, clearly noting to students that some of the Gen. Eds. course may not transfers to a four year intuitions in the degree plan.

Peggy: Jokingly said, "Well shouldn't advisors keep students informed on that." However, she was in agreement with Leslie's concerns since not all students will enroll with advisors present. Also, Peggy mentioned articulation agreements with NAU for transferable classes

Joe: Has had success offering classes that transfer to NAU in differing semester then when they are offer at NAU. Also, has had great success offering CM 120 "Building the Human Environment" created by David Grider: it counts as a liberal arts classes, introduces solar orientation/other architectural concepts, and explores culturally significant design elements of historical populations **Ken:** Dave used the Navajo Design Symposium guidelines when I took that course

Joe: At Coconino we offered 1 and 3 credit hour service learning course to help get student's hands on experience. It takes a lot of faculty coordination but can be a great way to get students hands on experience.

Steve: I have some great deigns for smaller easier to transport structures that are d about 8ft wide that our energy efficient and may meet local demands for housing well generating revenue and providing hand on experience to students. I have shared this idea with some of the area high schools that have building programs.

Newell: Likes the topics he has heard discussed and would like to review our textbooks.

Tim Turner: Had a few points: 1. a dam will be constructed on the north fork of the Whiteriver requiring certified workers in next several years. 2. There is around 80 % unemployment on the Apache Reservation. 3. A construction licensing class should be offered 4. IBC building codes classes could be offered 5. Let's build a skills center in White river

Steve: contract and contractor law could be a great class and nicely tie into some of the point Jason had made as to why contractors are unsuccessful in business

Ken: jokingly mentioned that maybe we could prefab Tim a skills center in the Holbrook shop and send it to white river as a project for students.

Tim Kinney: What is the likely student demographic and employment opportunities for you students? Shared his experience and frustration with attaining an associate and having 2 out of the 50 credits he took transfer a four year institution. Constructors need a strong background in some engineering fundamentals as Mike has mentioned. As an example moving rebar placement in a footing (even only slightly) could have disastrous consequences.

Ken: Entry level construction jobs in the trades are what we target for are students who will likely be 16-20. However, we will likely have some non-traditional students as well. Most of the classes in the AAS degree should be transferable to a four year institution; students will likely lose a semester or so of credit (most classes will likely transfer as elective credits). We are looking to

implements a degree tract specifically designed for students wishing to transfer to a four year institution. However, implementation has been tabled until 2014 to gauge student demand.

Mike: Engineering economics and principles are important as Jason had previously mentioned as well. These classes can be done using algebra but the concepts are important

Ken: We should probably highly recommend students take Micro Economics for their social science Gen ed.

Mike: I recently attended a Harvard business school class and think we could offer some basics for dealing with people issues and people. That is often overlooked in degree programs.

Ken/Leslie: We will explore some classes that we offer that may address this. **Tim Kinney:** Technical writing that is a class/skillset I use every day.

Peggy: It does not transfer cleanly to a four year institution.

Tim Kinney: We are working to change that at NAU

Joe: I have been thinking of re-ordering the curriculum to teach it in the same manner a building is built. It doesn't really make sense to teach framing before concrete. The Electrical level 1 and 2 classes would be good perquisite for the alternative energy course. This way you could really teach the students how to effectively set up a photo voltaic system. We did not do this at Coconino and it made me have to teach students the basics of electrical theory and hindered others in the class. So much more could be done if there is a better progression of skills to that course. Be careful of using AutoCAD in your drafting electives it could be expensive if that is not what the local community is using.

Ken: You are right we need to avoid using proprietary names and switch to the more generic CAD

Group: Revit, Sketch-up, BIM.... There are many programs that are used for drafting.

Joe: Make sure sustainable solar home design calculations: heat losses, convection, VPI... are included in the applicable courses; Student's really enjoy learning those skills.

Matt: Appreciate the council's decision seeking NCCER certifications and wanted to share that if a students is 22 or younger and has not graduated from high school they may be eligible for NAVIT assistance please direct students that may fit in that category to us and we will see what we can do.

Peggy: The architect's here for the next meeting are looking at us through window Please feel welcome to stay and review the plans for the new Skills Center with us. We appreciate you so much for the great input and taking time from your busy schedules to share your insight with us.

Ken: Thank you!

- 6. Adjourned at: 11:35 AM
- 7. Next Meeting date: TBD via email in fall of 2012
- 8. Not Covered::
 - a. Advisory Committee Leadership
 - b. Classes Next Semester
 - i. Estimating (1 credit)
 - ii. OSHA Safety 10 Hour (1 credit)