

Alignment & Coordination: Curricular & Co-curricular (ACCC)
#3 Subcommittee Meeting
April 21, 2006

Attending: Dick Knight (chair); Jo Oshiro (OUS); Ray VanDiver (OMSI), Don Domes (HSD)

ACCC Mission: Using best practices from the co-curricular world in classroom instruction and vice versa. Identifying ways that the two learning environments can complement each other and address gaps in each system.

OPAS Recommendations: Improve coordination and funding of co-curricular activities in order to assure that all students in Oregon have the opportunity to participate in co-curricular activities.

1. Reviewed Minutes from Previous Meeting

- 1) 2.E.b.2 – what does the relegation of hands-on learning such as used to take place in 4H, FHA, FFA /State Fair to the co-curricular world mean in the current system?

2. Discussion points for today:

- Focus Area 1: Communication & Marketing of co-curriculars
- Focus Area 2: Shift toward inquiry & project-based curriculum
 - Confirm, Clarify
 - Map out paths to implementation
 - Prioritization if needed

Vo-Tech (Vocational-Technical) Education:

Don Domes gave a potted history of the loss of Vocational/Technical Education in [public] schools and the current state of such programs:

- Most current technology education arises out of the previous era's Industrial Arts education.
- Hillsboro SD: 1980 9 FTE Tech Ed teachers; 1998 2.2 FTE Tech Ed teachers. Hillsboro Hi has no computer science classes: when the teacher retired, he was not replaced. Over the last 15 years part of the way the budgets have been balanced is by hiring fewer teachers and increasing the class size of each teacher. This has also created a reduction in the variety and number of classes offered. Additional requirements have also been instituted which then shrinks the opportunity for tech classes.
- Old School perception that blue collar labor is still near minimum wage, "dirty shops"; Vo-Tech is out of fashion; has a bad reputation as a place to warehouse non-achievers, slotting kids into blue-collar labor jobs, second-class citizens compared to college-degreed kids.
- New School drive is toward "clean shops" and especially toward pure look-and-listen academics.
- Administrators and teachers come from and have internalized an academic background and values.
- There used to be programs tightly tied to schools that culminated in State Fair activities, competitions, prizes – FFA, FHA, 4H, DECA. Most of this hands-on activity has been relegated to the co-curricular world, and is now much less tightly tied to schools and classrooms.

- Where robotics and CS fits in to the Vo-Tech – to – Academic scale today is totally dependent on the school, especially for the type of hands-on building, welding, machining needed for the more serious engineering contests.
- “Dirty” shops are expensive and risky – equipment replacement, maintenance, safety.
- New graduation requirements are moving more and more towards pushing paper rather than projects, because of the demands of processing the number of kids.
- Where will the kids get the hands-on experience? Psychomotor skill development and the Piaget/constructivist model of learning have been marginalized in current classrooms.
 - [Jo’s notes: Jean Piaget was a Swiss child psychologist whose theory of cognitive development and learning made the following implications for classrooms:
 - Instruction adapted in content and methods to the learner’s developmental level
 - Teachers facilitate learning by providing experiences;
 - Peer and near-peer interaction promotes learning and greater understanding;
 - New learning needs to be placed in context with the learner’s current knowledge;
 - Concrete props, visual aids (models, time lines, ...) are needed;
 - Use of familiar examples to introduce complex ideas;
 - Opportunities to classify and group information with increasing complexity helps learners assimilate new information with previous knowledge;
 - Use of problems requiring logical analytical thinking such as puzzles and brain-teasers.

“Piaget and Cognitive Development”, K. Bhattacharya and Seungyeon Han, retrieved May 31, 2006 from <http://www.coe.uga.edu/epltt/Piaget.htm>.]

Impacts for OPAS:

A number of K12 educators in OPAS are delivering the applied part of K12 education as PTE – Professional Technical Education. OPAS needs to be explicit about how we feel about PTE and whether they are a part of the whole initiative – are these programs relevant as gateways into 4,6,8 degrees and as alternative for kids who are arriving at 2,4 year degrees from nontraditional paths?

- We need to be more intentional about how PTE, non-academic, and re-entrants are treated – if these opportunities are not in schools, then encourage co-curriculars to provide these opportunities.
- Ray: Looking at co-curricular as a substitute for school was not original intent of creating the programs. Philosophy at OMSI moving toward support for formal education because of the perceived gap – that’s dangerous.
- Dick: Can find money to do anything once, but ability to sustain is almost nil. We don’t have economic models or scales to cover universal access to Co-curriculars.
- Ray: A benefits OPAS could provide to Co-Curriculars a business model of sustainability: what works, how do you figure out what to charge, internal rate of return, etc? OMSI runs first as a business.
- Do we have any way of figuring out or tracking the number of kids involved in Co-curricular activities in Washington County, much less Oregon?

- Jo will attempt to deduce some index of this activity from IRS Form 990's found on Guidestar for organizations listed as Co-curricular providers on the BEC supersite.

Discussion of Focus Areas:

- Focus Area 1: Communication & Marketing of Co-curriculars
 - Co-curricular world very fragmented. Lots of people working hard doing similar things without benefiting from each other's knowledge, much less other resources.
 - Possible use of OPAS discretionary funds – Partner with BEC, perhaps others, cut the ETIC grant proposal to an affordable level, provide a workshop and/or clearinghouse for co-curricular providers to share knowledge with each other and potential customer/clients and perhaps classroom teachers. OMSI team is looking at that, hoping to create a response. Ray will take the lead on this and come back with some recommended next steps.
- Focus Area 2: Shift toward inquiry & project-based curriculum
 - Jo, bring this up with Eileen Boerger SAMR and Sean Gallagher, SCC, and Winnie Miller IPD.
 - Dick is convinced this is a high-leverage area. Part of this is based on the belief that there is a certain best effective way of teaching and the standards should if not reflect that certain way then at least not get in the way.
 - Ask Bill Becker & Steve Day to explicate what is the state standards process in which they are participating:
 - what is the process that is going to unroll
 - How can OPAS have maximum influence
 - Don: In school, how are people going to accomplish those standards ... drives standards to the lowest possible denominator.
 - Current standards are not based on the known best way to teach. Write standards that allow the best way to teach.
 - Standards requiring resources get bogged down in textbook adoption
 - The model of having a training source available once a year is not the best model, especially for applied curricula. Minimum requirement is for something web-based. Teachers' perception of learning is standing & lecturing – very different problem to lecture to 37 than 20.
 - In High School, really need to fill the seats either via marketing classes or core requirements.
 - Marketing Hands-On and Applied Classes/Curricula:
 - Kids' perception is that anything “engineering” is too hard ... “invention” is cool but “shop” and “tech ed” are dirty/outmoded. How can we create a shift in perception?
 - Currently, kids control the checkbook because of what they choose as electives – marketing problem.
 - Problem of IB kids – schedules are so locked in, there is no way to get applied side to complement the academic side.
 - Don's approach to getting applied stuff back – create a high-desire, hands-on class that reaches across a wide range of students that can be taken in grades 9 and 10 before schedules are totally locked in.

- At CSTA (Computer Science Teacher's Association), there is a consensus that having a CS class in HS is not critical to succeeding in CS in college, but without CS in HS, far fewer students will choose CS in college.
- Don – this is a moving target; kids change. Demos he used 10 years ago no longer jazz kids. Don't call it CS – call it game programming.
- If the Co-curricular workshop/ conference/ clearinghouse materializes, talk about what's hot – a kind of futurists process, as part of figuring out how to attach engineering & applied science to the parts of kids' lives that they think is cool.
- Dick: Kids really want to just go do something. The trick is to structure it so they are learning something. Kids want to feel and do and touch.

Recap:

- 1) How is OPAS going to relate to technical education? Can work with Bruce and the Steering Committee.
- 2) Focus Area 1 – assigned to Ray/BEC
- 3) Invite Bruce to next meeting
- 4) Focus Area 2 – ask Bill & Steve how we get engaged in the standard-setting part
- 5) Jo & Dick will corral other subcommittees in on these issues
- 6) Don extends invite to visit class – contact Don, 8:30 MthF, 9:00 TuW Robotics – groups larger than 3 are not good. Must have 5 school days notice because of security.
- 7) Next meeting Friday May 12 at Hilhi 2:45 lab walkthrough, 3:30 meeting – Phone access may be a problem.
- 8) Give Nathia Rivera (Don Domes' bilingual instructional aide) 15 minutes on agenda to present aspects of her program.