Math PLC - Recommendations May 15, 2015

Attendees

John Kaufmann	PSU	Math
Diane Fitzpatrick	Health & Science HS	Math
Dennis Williams	Beaverton School District	Math Specialist
Jennifer Satalino	PCC	Dual Credit
Beth Molenkamp	PCC	Dual Credit
Rachel Web	PSU	Math
Steve Simonds	PCC	Math
Diane Edwards	PCC	Math
Sally Hudson	PSU	Dual Credit
Pat Burk	PSU	Ed – Facilitator
Connie Plowman	PCC	OMC Project Manager
Matt Loun	Century HS	Math

Agenda

8:30 - 9:00 Check in, coffee, meet and greet
9:00- 10:30

- Meeting objectives
- Introductions
- Introduction to health and Science High School
- Open discussion on Willamette Promise dual credit guidance document (Do we support all, some, any of these recommendations? What changes would we recommend?)

10:30-10:45 Break

10:45-11:45 Developing a final statement: Issues:

- Recommendations for high school program
- Recommendations for college course options: Logical Reasoning and Problem Solving; Statistics and Probability; financial Math, Math 105, Statistics 243/244; Math 98
- Recommendations on course prerequisites
- Recommendations for credit and credit transfer from high school to college
- Recommendations on Teacher Credentialing
- Recommendations on credit transferability from Community Colleges to University

11:45-12:15 New developments and/or policy changes being implemented or planned at your site

- PCC
- PSU
- Century High School
- Beaverton High School
- Health and Science High School

12:15-1:00 Lunch

1:00 - 2:00

1. What are the recommendations we can agree on that would make a difference?

2:00-3:00

- What are the remaining barriers, either in policy or at our sites that need to be addressed?

Summary of Recommendations

Overall recommendation: As a general statement, we favor the establishment of an ongoing level of dialog, planning and policy discussion that cross-cuts secondary schools, community colleges and universities in Oregon in order to collectively and collaboratively address the many policy and procedural issues that have surfaced in these conversations; and to be a source of innovative strategies that can be piloted, evaluated and promulgated based upon evidence and mutual understanding of the operation and impact these changes. The initial work of the Professional Learning Communities in this project indicates that significant progress in the alignment of the systems, courses, credit and credentialing criteria can occur. We suggest making a commitment to ongoing dialog and to a climate of problem solving within a *Plan-Do-Study-Act* model in which specific changes are implemented, data are collected on the impact, analysis is conducted on results, and next steps identified based upon those results. For example, baseline research on the impact of dual credit courses on degree attainment rates represents a complex, baseline question that would benefit from implementation at various sites followed by evaluation of results and determination of next steps. Ongoing meetings and discussions with policy makers, administrators, decision makers and implementers together would add significant value to this initiative.

A second general recommendation is to consider the value and ongoing benefit of professional judgment moderation procedures based upon collaborative work among secondary and postsecondary faculty to mutually review curriculum, course syllabi, performance measures and student work products to calibrate the professional judgement of faculty in presenting courses and evaluating student work products.

Current conversations have focused on the mechanics of system alignment, i.e., course numbers, credit hours, faculty degrees, text material alignment, credit transferability issues among institutions, and so on. While these issues are important, we believe an equally important issue is the professional judgement, content knowledge, proficiency indicators and level of preparation of the faculty members teaching these courses. We would prefer to define these issues in terms of the pedagogical approaches to the course content, and agreement of the professional judgement of the instructors on the knowledge, skills and dispositions demonstrated by students. We add our support to other projects in this effort that have recommended a regular focus on calibration of instructor judgment and mutual scoring of student work as a key element of dual credit procedures.

We also recommend adoption of the National Alliance of Concurrent Enrollment Partnerships standards (http://www.nacep.org/accreditation/standards/) (2011) as guiding principles for Curriculum, Faculty Qualifications, Student Enrollment, Assessment and Course Evaluation. Within this framework we offer one modification of these standards. We recommend that a Masters of Arts in Teaching (MAT) in a specific content area be considered an eligible credential for teaching a course for college credit in that content area in either an " instructor of record" partnership model or appropriate review and/or documentation of the professional preparation and course compatibility of the high school instructor.

1. Recommendations for **Willamette Promise**

   1A. While we recognize that there are many good points in the Willamette Promise material, we are NOT supportive of merely adopting the Willamette Promise 4 Big Points. Specifically, proficiency-based dual credit courses would fall outside of NACEP standards. Further, we believe that retroactive enrollment is a complex procedure that could be misused, e.g., putting undue pressure on a student to withdraw from a course rather than adjusting course activities to better meet student needs. We favor an alternative procedure that would allow the student to withdraw from college credit participation after the first exam but remain in the course on a non-college credit basis to benefit from the participation in more rigorous content. Otherwise, we are concerned about the potential of underrepresented students being overly excluded from completing these courses. We suggest consideration be given to a common exit exam as a way of establishing common outcome expectations throughout the state. More discussion is needed on this topic. Further, we are concerned about the absence of local participation in the development of this particular model and it does not adequately address issues that we have identified. If we were to do something like Willamette Promise, we would need to be assured of local institutional participation to develop the necessary agreements and protocols for successful implementation.

2. Recommendations for **High School Program**

   2A. High school advisors need the up-to-date and accurate knowledge and training on what options for dual credit and course transferability are available, how the courses available in high school do or do not meet degree requirements and transferability. It is our finding that a lack of consistent information on current and projected options for dual credit exists across all high schools in this region.

   2B. We strongly suggest the establishment and ongoing funding for Professional Learning Communities composed of secondary and postsecondary faculty to periodically (twice a year) meet to share information on course design and content and to collectively score samples of student work to calibrate professional judgement and evaluation of student performance indicators, i.e., tests, portfolios, work samples, etc.

   2C. We recommend an investment in preparation of college advisors at each high school to assist students and parents in understanding applications for entry and financial aid requirements, course requirements, degree pathways and transfer options. We further recommend that these positions serve as institutional liaison positions between secondary and postsecondary institutions so that each high school has available at least one staff member who is fully informed on procedural and policy alignment issues and serves to provide accurate information on system connectivity. It is anticipated that these personnel would meet periodically with postsecondary institutions to remain current on policy and procedures.

   2D. We recommend consideration of diversifying instructional methods and curriculum content to integrate rigorous content with field-based experiences in order to make rigor more accessible, e.g., Health and Sciences High School, Beaverton Public Schools. Likewise, many schools in Oregon have found success with *Project Lead the Way* curriculum and experiences. Such strategies can be articulated to college level experiences.

3. Recommendations for **College Course Options**:

3A. We recommend a 4th year of math instruction be required for High Schools offering dual credit programs in order to more seamlessly sequence and articulate the transition from secondary school to postsecondary institutions.

3B. We recommend that high schools and colleges work together to define what a 4th year High School Math class looks like in terms of content knowledge, skills and dispositions. Existing courses can be identified as pre-college or college level depending on course design, curriculum content and student performance criteria.

3C. Specific courses at the community college level will be identified as appropriate senior year transitional courses for students not currently enrolled in math or for students wanting to attain transferable college credit prior to graduation. For example: we recommend a senior year transitional course that combines Logical Reasoning and Problem Solving; Statistics and Probability; and Financial Math as a generally transferable college credit math course in the senior year. Likewise, we suggest a Math 105 option combining Statistics 243 and 244. This course would have an Algebra 2 prerequisite.

3D. We recommend the elimination of low level mathematics courses on equity grounds and suggest increased levels of student support, assistance and intervention to create more pathways to college level or college preparation courses in mathematics.

4. Recommendations on **Course Prerequisites**

4A. We recommend creation of course alignment panels to resolve existing definitional issues of "college credit" and "high school credit." The content of some courses, e.g., Math 70 or Math 95, may be below many high school level courses, such as, algebra 2, Pre-calculus or Calculus. It is imperative that these content and pedagogical differences be resolved at an institutional level. It is beyond the scope and authority of this PLC to accomplish this task, but we clearly see the need to do so.

4B. This must be followed by establishing good advising and good program descriptions that clarify course prerequisites both within the high school program and for transferability purposes.

5. Recommendations for **Credit and Credit Transfer from High School to College**

5A. We recommend that credit transferability be aligned with the standards adopted by the National Alliance of Concurrent Enrollment Partnerships (NACEP). Doing so would provide a standards-based framework statewide that would provide more consistency from institution to institution and easier communication regarding institutional procedures.

5B. Likewise, we recommend that all institutions follow Oregon Dual Credit Standards which are modeled on the NACEP framework.
http://www.ode.state.or.us/teachlearn/subjects/postsecondary/dualcredit/oregon_dual_credit_standards_2014.pdf

5C. As mentioned earlier, we favor consideration being given to a series of common exit exams developed in collaboration among secondary and postsecondary faculty to establish a set of measureable outcomes for common dual credit courses throughout the state.

6. Recommendations on **Teacher Credentialing**

6A. We recommend the adoption of the Oregon Dual Credit Standards adopted by the Higher Education Coordinating Commission on June 12, 2014, for teacher credentialing.

6B. To accommodate the ability of secondary school certified instructors in math to provide instruction, we recommend the adoption of the "Instructor of Record" model in which the high school instructor is partnered with a college level instructor to review course content, syllabi, performance indicators and evaluation.

6C. We recommend the establishment of a joint committee of secondary and postsecondary institutions to formalize the credentialing review process so that secondary school teachers with an MAT can submit their credentials, experience, course design and assessment criteria for review for the purpose of being recognized for teaching courses for college credit.

6D. We recommend the regular and ongoing provision of "collaboration" professional development days that are funded and mandatory (for full time college faculty and high school teachers) to mutually score student work samples and to review course design and material selection.

7. Recommendations on **Credit Transferability from Community Colleges to University**

7A. We recommend that students interested in taking mathematics courses for college credit be expected to enroll at the beginning of the course and be provided an elongated drop deadline (after first exam). In addition, students would be allowed to retain a late withdrawal deadline, e.g., 4 weeks prior to the end of the course. Students will be provided support and assistance with meeting course expectations. In the event that it is deemed unlikely that the student can complete the course for college credit, the student will be entitled to drop the course as a college credit course, but retain a seat in the course to gain exposure to more rigorous mathematics content to better prepare for college success the following year.

END OF RECOMMENDATIONS