

Missouri Department of Higher Education
Curriculum Alignment Initiative
Steering Committee Meeting
Friday, July 18, 2008

Members Present

- Administrative Members
 - Cindy Heider on behalf of Jeanie Crain, Missouri Western State University
 - Mike Grelle, University of Central Missouri
 - Fred Janzow, Southeast Missouri State University
 - Jeff Lashley, Moberly Area Community College
 - Jim Spain, University of Missouri-Columbia
- Arts and Humanities Workgroup
 - Paul Long, Metropolitan Community College - Maple Woods
- DESE Members
 - Lin Everett, Department of Elementary and Secondary Education
 - Connie Hurst-Bayless, Mehlville School District
 - Sharon Hoge, Department of Elementary and Secondary Education
- Engineering and Technology Workgroup
 - Ragu Athinarayanan, Southeast Missouri State University
 - David Pope, Ozarks Technical Community College
- English Workgroup
 - Katricia Pierson, William Woods University
 - Jamie Spencer, St. Louis Community College
- Foreign Languages Workgroup
 - Madeleine Kernen, Missouri State University
- Mathematics Workgroup
 - Yungchen Cheng, Missouri State University
 - Mary Shepherd, Northwest Missouri State University
- Science Workgroup
 - Chris McGowan, Southeast Missouri State University
 - Angela Speck, University of Missouri – Columbia
 - Sarah Bush, University of Missouri – Columbia
- Social Sciences Workgroup
 - Richard Miller, Missouri Southern University

Members Absent

- Administrative Members
 - John Ganio, St. Louis Community College
- DESE Members
 - Kevin Lowery, Bolivar School District
 - Bryan McDonald, Grain Valley R-V School District
 - Vickie Miller, Maryville R-II School District
- Foreign Languages Workgroup
 - David Smallwood, Southeast Missouri State University
- Science Workgroup

- Deborah Allen, Jefferson College
- Social Sciences Workgroup
 - Debra Greene/Roger Jungmeyer, Lincoln University

Other Participants

- MDHE
 - Hillary Fuhrman, Research Associate
 - Shannon Koenig, Program Specialist
 - Angelette Prichett, Research Associate

Welcome and Introductions

Ms. Hillary Fuhrman welcomed the group and thanked everyone for attending. She introduced Ms. Angelette Prichett as the person who will assume the coordination role for the Curriculum Alignment Initiative (CAI). The group welcomed Ms. Prichett and made introductions.

Approval of May Minutes

There were three objections to the May minutes: Paul Long was in attendance at the May meeting and he is a representative of Metropolitan Community College - Maple Woods. Sharon Hoge is currently employed with the Missouri Department of Elementary and Secondary Education (DESE). The minutes were approved with the noted corrections.

CAI Status Update

Ms. Fuhrman informed the committee that the Coordinating Board of Higher Education (CBHE) was very receptive to the work of the Curriculum Alignment Steering Committee (CAS) at the June 12 meeting. The competencies were approved with an allowance for updates with regard to assessment. The group can continue move forward in its work.

CAS Charge

The original charge of CAS was to complete entry and exit-level competencies as well as communication and policy recommendations. Currently, almost all entry-level competencies, as well as thirteen exit-level competencies have been completed. Optimal entry-level competencies have been well received, as well as the cross-disciplinary.

Ms. Fuhrman presented CAS with a letter from Commissioner Robert Stein. After reading the letter aloud, Ms. Fuhrman echoed the sentiments in the letter and thanked the group for their efforts.

The meeting was then turned over to Ms. Prichett, who thanked Ms. Fuhrman and the group and proceeded to define the efforts of CAI as interconnected. She stressed the importance of CAI and its role with college-aged students. Ms. Prichett also expressed gratitude for the work done by the committee and proceeded to discuss the agenda for the day.

Entry-Level Competencies

At the time of the last meeting, the map gap analysis team had not yet met. Since the last meeting, Commissioners King and Stein responded to the letter sent from University of Missouri representatives. (The letter from University of Missouri representatives was distributed and

reviewed by CAS at the last meeting.) Ms. Fuhrman noted that the letter was taken very seriously and that as a result of the letter, specific groups were also brought together to address the math competencies.

With regard to the response letter from Commissioners Stein and King, Dr. Mike Grelle pointed to the third paragraph regarding student versus teacher centered learning and questioned if there was a public dispute over this issue. It was clarified that this paragraph was discussed within CAS, but was not a dispute, and was simply a response to the topic addressed in the original letter from University of Missouri representatives.

Math Gap Analysis

The mathematics workgroup addressed the revised mathematics entry-level competencies. Dr. Cheng noted that DESE, METS, MDHE and CAI workgroup liaisons met and reviewed the math gap analyses. Several issues were decided upon: Statistics will be addressed in cross-disciplinary competencies because it is not a prerequisite for a college algebra level course; the importance of communication skills will be outlined in the preamble of the mathematics competency; the optimal entry-level competencies are under development and the math and engineering groups will work together to complete. Dr. Cheng suggested more emphasis be placed on approach and expectations to close the math gap between K-12 and higher education, but that he is optimistic.

Dr. Connie Hurst-Bayless noted that in public schools, only three units of math (and science) are required and perhaps it would be beneficial if four units were required. This, however, may increase dropout rates and could in turn affect other legislation (e.g. No Child Left Behind). Dr. Hurst-Bayless also commented that more tutoring would be beneficial and that it can be complicated for teachers to teach students at multiple levels of ability at one time.

The question was asked if many students entering college meet the desired competencies and if there would be some type of assessment. The overwhelming response was, "Yes." It was acknowledged that an assessment will help determine a student's level of knowledge and who will be most successful in certain courses.

The discussion of assessment continued as Dr. Hurst-Bayless stressed the importance of aligning MAP testing with the entry-level competencies. Dr. Fred Janzow noted that the key issue in this work is assessment and that there must be accountability through assessment. It is the role of educators to ensure the message is out about what it takes to navigate the assessment. Dr. Hurst-Bayless commented that post-secondary institutions should look at other standardized tests outside of the ACT, like MAPS. Presently, MAPS are not regarded with the seriousness of the ACT because they do not impact college entrance. Ms. Sharon Hoge added that end of course exams are becoming popular assessments at high schools. It would be valuable if higher education representatives could be part of the review of end of course exams and test development. Dr. Grelle shared his positive experience when Central Missouri State worked with Lees' Summit high school to offer automatic college entrance to students who successfully passed the high school's assessments, which gave the high school assessment more relevance. Dr. Jeff Lashley noted that at community colleges, because of the number of non-traditional students, entrance based on high school assessments may not be a viable option. Mr. David Pope

agreed that there will need to be provisions for non-traditional students. Several committee members echoed the need for several student tracks.

Ms. Prichett framed several questions about the assessment: What are we assessing, where are we using the assessment, and will we use what already exists? If yes, will we simply modify what exists? How will the assessment be implemented and who will work together to implement? Ms. Prichett noted that the competencies will be changed to include more assessable language. Dr. Hurst-Bayless emphasized the importance of the assessment group finding the guiding documents and ensuring that the assessment group is comprised of both secondary and post-secondary education representatives. A CAS member went on to suggest that if the assessment is already out there, the group should use it; however, it is a matter of being aware of what assessments already exist. Ms. Madeleine Kernan suggested that too many assessments won't be beneficial and that perhaps a goal would be to have just one assessment. Dr. Hurst-Bayless commented that a good assessment doesn't feel like an assessment.

The question was raised as to how the group will deal with the change in political leadership. Ms. Lin Everett wanted to ensure that an invitation was made to gubernatorial candidates to learn more about what the committee is doing. Both Ms. Everett and Dr. Jamie Spencer want to ensure the work of the committee is recognized. Ms. Fuhrman and Ms. Prichett assured the group that CAI is a central issue for the DHE staff and that senior staff and the commissioner are working on providing information to gubernatorial candidates and the educational advisory staff. It was noted that regardless of election outcomes, the group has the mandate of the SB 389.

Dr. Hurst-Bayless reminded the group to be cognizant of the implementation of the competencies at both the secondary and post-secondary levels. It is important to preserve the work of the group as well as allow the opportunity for input from practitioners. Another CAS member cautioned about potential difficulties in implementation because of possible limits on individuality. If a program does not align with the competencies, it could create conflict. However, it was noted that the developing the competencies is exciting and the right thing. It is unrealistic to hope that all would agree with what is being developed. Dr. Janzow reminded the group that SB 389 is focused on transfer between institutions and fair treatment of transfer students. The committee discussed the CAS charge again, including the development of assessment, and noted that the next action steps will not be completed as quickly as the original competencies.

Ms. Prichett noted that at the December CBHE meeting, the board will be made aware that the next steps in CAI will take a bit longer. However, the group can move forward by finalizing the competencies and taking them to the board. The CAS has identified and developed over 800 competencies.

Break for Lunch

The meeting was called to order at 1 pm.

Math Gap Analysis

The CAS was informed that the math competencies now include a set of optimal entry-level competencies, which are identical to the math competencies developed by the engineering group,

and will remain identical. When questioned about the need for optimal competencies, Dr. Mary Shepherd shared that a gap analysis meeting identified that there was a need to identify what level of math was need to enter certain fields. Dr. Ragu Athinarayanan clarified that although the competencies are listed as optimal, a student who wants to study engineering can still begin at a lower level of difficulty (e.g. college algebra), but it will take much longer to complete a degree than if the student started at a higher level (e.g. calculus). Dr. Angela Speck and Dr. Shepherd commented that this rationale also applies in science and other fields. It was noted that overall, the feedback on optimal competencies is very positive.

It was requested that on page seven, third bullet of the CAI report for the June 12 board meeting, the sentence be changed to read (in any further publications), “In many fields, a basic level of preparation may *not be sufficient* for preferred institutional admission, persistence, timely completion, and successful entry into a profession.”

Optimal Entry-Level Competencies

The optimal competencies were taken down from public comment on Tuesday. Dr. Athinarayanan noted that he felt encouraged by the comments that were made. He will work with the math group to ensure the documents are in sync with the engineering group’s competencies. Ms. Prichett questioned if the group wanted to re-post the optimal level competencies again later in the year so as to garner more feedback when school is in session. The CAS decided to make the current revisions and then re-post later in the year.

A discussion of optimal competencies in technology continued. Dr. Angela Speck commented that it is not beyond middle and high school students to do basic computer programming. Mr. Pope agreed and noted that programming is often not presented in context, which can make it unnecessarily difficult to learn. When it was questioned whether programming should be presented to all students, it was noted that perhaps the classes should be offered as AP classes. Dr. Hurst-Bayless was curious as to what a course would look like and notified the group that technical assistance would be needed to develop programming related curriculum for high schools. Mr. Pope suggested not restricting the type of students who can take programming and/or web design classes. Dr. Janzow proposed not to offer just a stand-alone course, but to embed the information in other curriculum. It was noted that programming can be taught as part of a math or excel class.

It was agreed that the engineering and information technology workgroup would revise their competency to include basic programming and web design concepts and that the revised competency would be re-posted for public comment by mid-September. It was noted that programming is not necessarily all about computer skills; much of it is also about logic. Ms. Fuhrman stated that when the competencies are released they can be distributed through provost and superintendents’ offices. The competencies can also be sent to engineering deans if feedback isn’t strong enough.

The question was posed how much optimal science competencies would differ from the entry-level competencies that have already been developed. Dr. Speck remarked that science is a different way of thinking in general, and is very cumulative in nature. It was questioned whether it would be best to have students on a certain track, perhaps guided by a school counselor. A

comment was made that while students may have to take chemistry and physics in high school, it may not help them once they get to college. It was stated that advanced math classes are more critical than advanced science courses. CAS discussed whether or not students are hearing the message about what classes and skills are needed in certain areas. At times, Dr. Speck noted, only successful students are being made aware of requirements. Late boomers do not often hear about expectations for a particular field of study. Dr. Grelle suggested that the expectations be unambiguous. Teachers must also be appropriately informed on what to teach, which will be addressed by developing entry-level and optimal entry-level competencies.

Cross-Disciplinary Competencies

CAS was informed of the progress to-date and reviewed internal feedback from the CAI workgroups. It will be necessary for a representative from each workgroup to make appropriate changes to the competencies.

It was questioned whether statistics and data analysis is something that every student can do and it was noted that the relevant competency was taken from high school curriculum. Ms. Fuhrman informed the group that statistics was added in response to the math gap analyses. It was suggested by several committee members that precautions be taken when finalizing the competencies as constituents may interpret the document very literally versus realizing the intent or underlying concepts.

A discussion of terminology developed. Some readers may be intimidated by certain terminology but using other vocabulary could misconstrue the meaning of the concepts being learned. It was suggested that an example be given with certain competencies so as to provide a context.

Exit-Level Competencies: Matrix Crosswalk

The group was referred to the sample (42-Hour block General Education) matrix provided in the CAI report to CBHE on June 12. The committee's response to the sample was positive. Ms. Fuhrman said that MDHE has a template for the matrix that CAS members can use to build their own matrices based on the outcomes of their work. It was noted that the matrix may be a good way to display entry-level competencies as well as K-12 competency areas. The deadline for workgroups to transition products into the matrix is Friday, October 17.

Remaining Exit-Level Competencies

Ms. Prichett began the discussion of exit-level competencies by noting that thirteen of the competencies have been completed. Dr. McGowan suggested that workgroups meet and assess for which other courses it will be appropriate to develop competencies. There was an original list that the group agreed upon that Ms. Prichett will email to the group. Ms. Prichett suggested that the group view the list and brainstorm which courses should be evaluated next. It was noted that SB 389 requires that the courses are limited to General Education.

It was proposed that the workgroups complete competencies for other classes even if they aren't entry-level. Dr. Spain agreed and stated that the competencies could be helpful for students who want to access higher level courses (i.e. foreign language) upon entry. It was noted that classes one or two levels higher may not be in the general education core and there is potential for there

to be a great number of courses. A suggestion was made to use enrollment numbers to help document the logic for choosing which courses are analyzed. Enrollment numbers may also help assess transferability issues.

Dissemination of Competencies

The original seven competencies are final and CBHE has charged CAS to begin dissemination. Several suggestions for avenues of dissemination were made, including: CAOs, deans, superintendents, and the MDHE website. It was requested not to make the information available in several different places so that updating does not become a tedious process. Dr. Hurst-Bayless asked if she could distribute the information at the conference of Show Me Curriculum Administrators Association (SMCAA) on Oct. 21-22, 2008. Dr. Hurst-Bayless and Dr. Cheng echoed the importance of having one website where people can find the information. It is also possible to present to SMCAA what is ready this fall, and then present new information again next spring.

Ms. Prichett volunteered to organize the competencies into a user-friendly format on the website. It was noted that the date last updated will be important to include. Dr. Spencer suggested that the preambles could be resurrected and used on the website. Ms. Prichett will contact workgroups while developing the template and will coordinate information for groups. Everything that was approved at the board meeting will be included. A PowerPoint presentation with voiceover is viable format to present the information. The PowerPoint could provide a consistent message when people are presenting. Ms. Sarah Bush noted that implementation information should be included. It was also suggested that a user viewing the document electronically be able to jump out of the drafts to make public comments. Another suggestion was made to develop a handout or business card with the web address where CAI information can be found.

Next Meeting and Assessment Committee

Ms. Everett proposed the next meeting in mid to late September with an agenda of the following: packaging of marketing materials, how to deliver the information, entry and exit-level competencies, minimal components of optimal competencies. It was agreed by members of the CAS that the next meeting will be a small group meeting on Friday, Sept. 26 at the University of Missouri unless it is deemed unnecessary to meet at that time.

A large group meeting date was set for Friday, November 14. Items on the agenda will include: review progress of CAS, optimal and cross-disciplinary competencies, and existing exit-level competencies matrices; indentifying second round exit-level competencies and deciding what will be presented at the CBHE meeting on Dec. 3 – 4th.

The following committee members expressed interest in serving on the assessment committee:

Ms. Sarah Bush, Dr. Yungchen Cheng, Dr. Mike Grelle, Ms. Sharon Hoge, Dr. Connie Hurst-Bayless, Dr. Fred Janzow, Dr. Jeff Lashley, Mr. Paul Long, Dr. Jamie Spencer, Mr. David Pope, Dr. Mary Shepherd, Dr. Angela Speck.

The meeting was adjourned at 3:04 pm.