

November 4, 2016 – **CLEP & DSST** Faculty Conference

CLEP Mathematics Breakout sessions

*****Final Recommendations are starred below

Chair – Teresa Adams – Community College of Denver

Scribe - Brittni Lorton – Community College of Denver

- Colleges are required to offer Challenge exams and some institutions (CU Denver) uses **CLEP** exams as challenge exams.
- In this meeting we are discussions
 - **CLEP** College Algebra
 - **CLEP** College Mathematics
 - **DSST** Fundamentals of College Algebra
 - **DSST** Fundamentals of Statistics
- The **DSST** does not math what they say they are testing on – Faculty all agree it was too many repeat questions because of the randomization and not enough time to complete the exam.
 - Can we recommend not to use **DSST** college algebra exam until it is fixed because there are some flaws.
 - Patricia from ACC - If you do well on this exam then you know your stuff so we are fine with giving credit
 - Shelly MSUDenver – **DSST** covers about 40% of their college algebra material, so much was missed, and the raw score is 37% and maybe that is not enough material.
 - Chair – Teresa Adams from CCD. We are talking about if **DSST** has the competencies so that a student has shown proficiency to succeed in the next course.
 - On the **DSST** maybe the randomization is poorly created in the algorithm because folks who got Question for **DSST** folks: Is it algorithmically generated? a student got a question correct got the same question again but that shouldn't have been generated. Maybe the exam needs to change how it is generated itself.
 - Teresa – one of the reviewers for the SAT's – we pull problems for a number of reasons: answers are ambiguous etc, not because students are not doing well.
 - **DSST** Stats:
 - Rick CMU – does not feel the stats test was not enough (including their recommended raw score) for a student to do well in the next stats course. Maybe if there was a higher cut score?
 - The whole test maybe needs to be reviewed because it doesn't match what they say they are doing. It is too long and not consistent
 - It doesn't even cover all the material needed for College Algebra so maybe we reject it based on that reason?
 - Stats is mainly about conceptual development and not computation and so the **DSST** exam was far too focused on computation and not the applications and understanding, not enough interpretation questions.

- *****Overall – it sounds like the faculty agree that the **DSST**, College Algebra and Statistics, does not meet the competencies we wish and we recommend to not accept this **DSST** at all until it is revised as needed. (so if we have to accept it that we accept it with a higher cut score.
- **DSST** rep came in the room – faculty mentioned the above mentioned concerns.
 - College algebra had not enough time and too many questions, the percentage break down of types of questions listed did not match what was given in the exam
 - Statistics has more definitions and computations and not conceptual understanding. Some topics did not match our competency outline that we don't address in our respective courses. Needed a formula memorized to answer the question and the exam did not provide the formula for them and most students do not have the formula memorized.
 - If a student gets a question wrong it is not adapting to their correct or not – answer: it is not adapting.
 - It turns out it is not algorithmically generated, the proportion of questions that is represented on that sheet does not match the proportion of the questions on the exam.
 - How large is the test bank? Probably about 500 questions but they are building from a 2008 start from scratch. (not as extensive as we would like it to be)
- **CLEP** discussions:
 - Because of the state-wide courses for major content revision for college algebra so this test may change the way we view this test because of the content that will change. (this conversation happened yesterday and will continue in the spring to adjust the college algebra core content/themes).
 - What should the cut score be to accept?
 - Robert PPCC – any student who did well on the **CLEP** exam would do well in the next course
 - Brittini from CCD – overall agree with Robert, that it would be a fair enough exam to give credit for college algebra
 - The idea with the pathways changes is that there should be a STEM college algebra and a non-STEM college algebra.
 - How is the test generated? For the SAT and AP exams Teresa mentioned that the form is built so that the questions are set, he had form A and she had form B. Form A should test the same as Form B
 - Websites may not match what we actually offer.
 - **CLEP** exam is not adaptive
 - **CLEP** representative: a raw score of about 50% is the general ACE recommendation of a scaled score of 50.
 - The different forms are not necessarily listed in order of increasing size of difficulty. And the different forms and mixed in content and difficulty. The same content coverage but not the exact same questions. It is not algorithmically designed. The pool of questions is about 120 per package of forms. If a question reaches a certain exposure level (certain

students have already seen these questions) then those questions are retired and they are constantly creating new questions.

- We are all in agreement that we are okay with the **CLEP** College Algebra exam as accepting for credit, we now need to discuss the recommended scaled cut score.
- We are wondering what the data shows – for students who receive credit for this **CLEP** college algebra of a scaled score of 54 how well do they do in the subsequent course?
- At large four year institutions, they were able to match **CLEP** students vs college algebra students – the pool of non clep takers was much larger than the pool of clep takers, looked to see their current performance. The **CLEP** students performed as well or better than the non **CLEP** takers. Some of the cases were statistically equivalent and some were not.
- Can College Board conduct a study to break up the data more to show how the students do in the next course for the **CLEP** students?
- *****Recommended for **CLEP** College Algebra – We will accept College Algebra exam **CLEP** score of a scaled score of 54 and we may decide to change that alter on.
- **CLEP** for College Mathematics
 - *****Recommended - It is a terminal course so folks in the room agreed on a scaled score of 50 for the College Mathematics