UNM College Enrichment Program & STEM GATEWAY

Mock Finals Reflection

Spring 2014, Fall 2014, Spring 2015

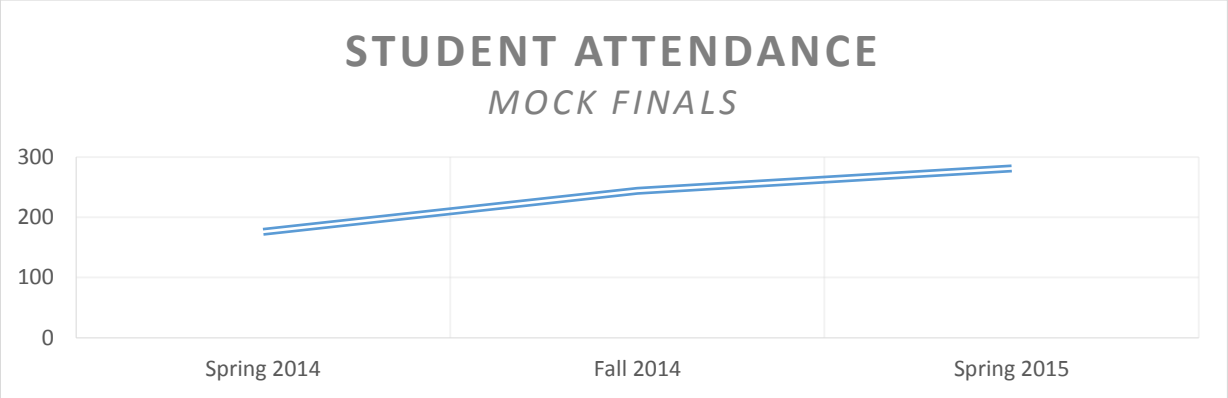
Mock Finals History

The College Enrichment Program (CEP) has been offering Blast off to Finals and Mock Math Finals for the last 15 years. Mock Math Finals were developed to provide students a 'real life' experience to help them adjust to a final exam environment prior to their course exam, thus reducing test anxiety and increasing performance. Participating students are given a previous final exam, allowing them to take the exam, providing the answer key and tutors to help them with any questions that emerge. Math courses that have traditionally been included were: Math 100, 101, 102, 103, 121, 150, and 180. In 2014, STEM Gateway partnered with the College Enrichment Program (CEP) to offer more courses critical for STEM degree completion (e.g., Bio 201, Chem 121, etc.). This provided a positive trend in attendance and the name was changed to 'Mock Finals' to reflect the new exams provided.

Mock Finals Impact

For the Fall 2014 semester, of the students who attended the Mock Finals event, 91.3% passed their class with a C or better, and overall did much better than their peers.

Figure 1. Mock Finals Attendance



Mock Finals & Student Engagement

The original goal of the program was to reduce test anxiety by providing not only the final exam practice, but support from peers and staff on specific content. The demand for the expansion of courses that are required for STEM students demonstrates the need for hosting a continued program for students with an emphasis on STEM. Figure 2 below shows all the Spring 2015 exams taken, with Chemistry, Math 180, Statistics 145 and Biology being the exams with the largest demand. These courses are required for many STEM students at the University of New Mexico and thus this event has a positive impact for STEM students.

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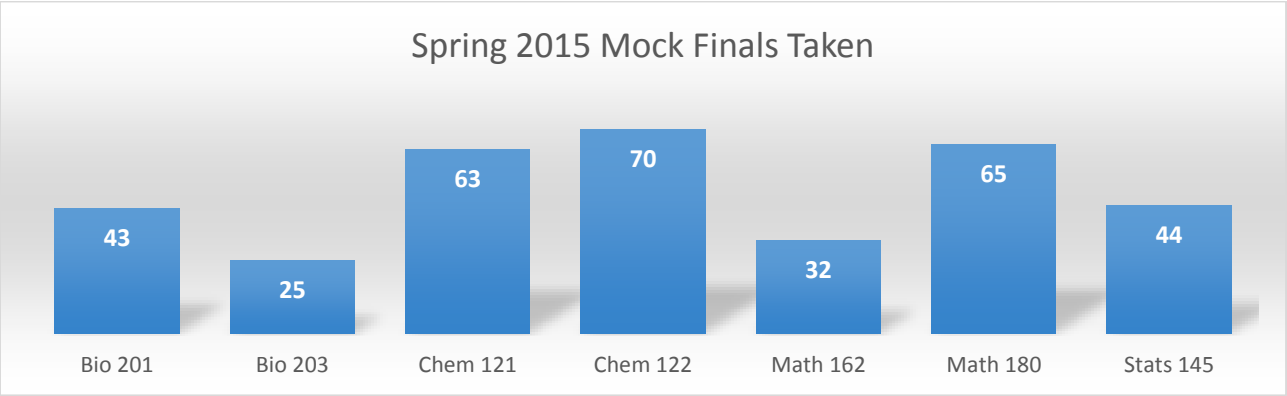
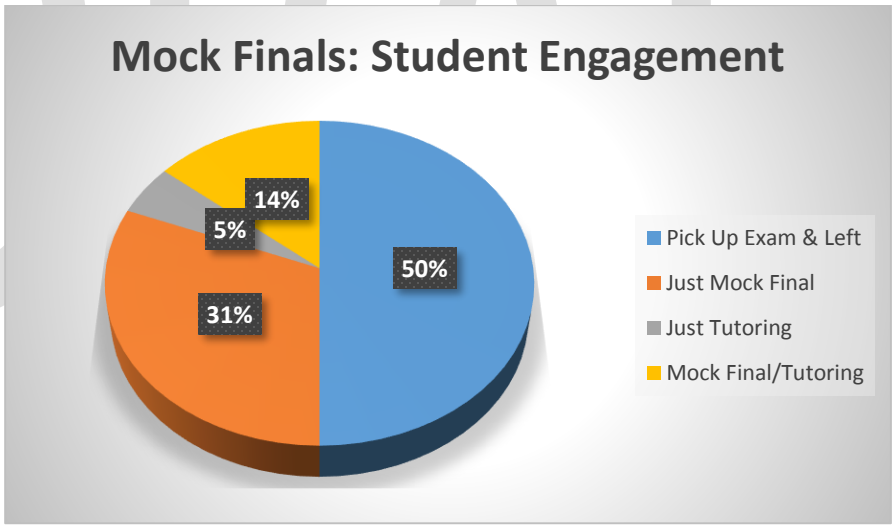
Figure 2. Mock Finals Subject Demand



The goal of Mock Finals is not to simply distribute a key to the exams, but provide a space to practice the exam and get tutoring support from peers and staff. Of the student participants from Spring 2015, 50% engaged with tutoring and the mock finals exam conditions, while the other 50% simply picked up the exam and left. The goal and ultimate engagement practice is to get more students taking the mock final, and then getting the additional tutorial support and thus be more prepared for their final exam.

Figure 3. Mock Finals Engagement



Demographics of Students

Of the students participating, many took more than one mock final to account for 428 tests being distributed. The following represents the students participating.

Table 1
Demographics of Mock Finals Student Participants

Factor	Overall
Gender N (%)	
Female	149 (63.9)
Male	84 (36.1)
Ethnicity/Race N (%)	
American Indian	8 (3.4)
Asian	24 (10.3)
Black	5 (2.1)

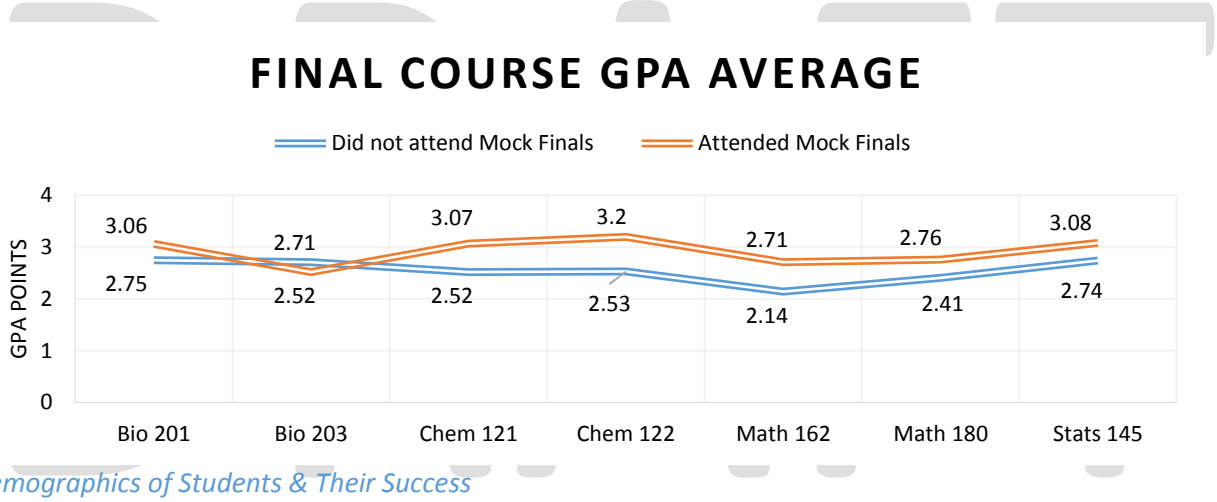
Hispanic	111 (47.6)
White	78 (33.5)
Mixed (Two or More)	5 (2.1)
Foreign	1 (.4)
Race Unknown	1 (.4)

A majority of students served by Mock Finals are STEM majors and 1st or 2nd year students. Of the students participating in the Spring 2015 event, 70% were Freshmen or Sophomores and 70% were classified as STEM majors.

Mock Finals & Student Success

The original goal of the program was to foster better performance on final exam grades. Thus, Mock Finals' student participants and their peers were compared on final course grade for the respective Mock Final courses offered.

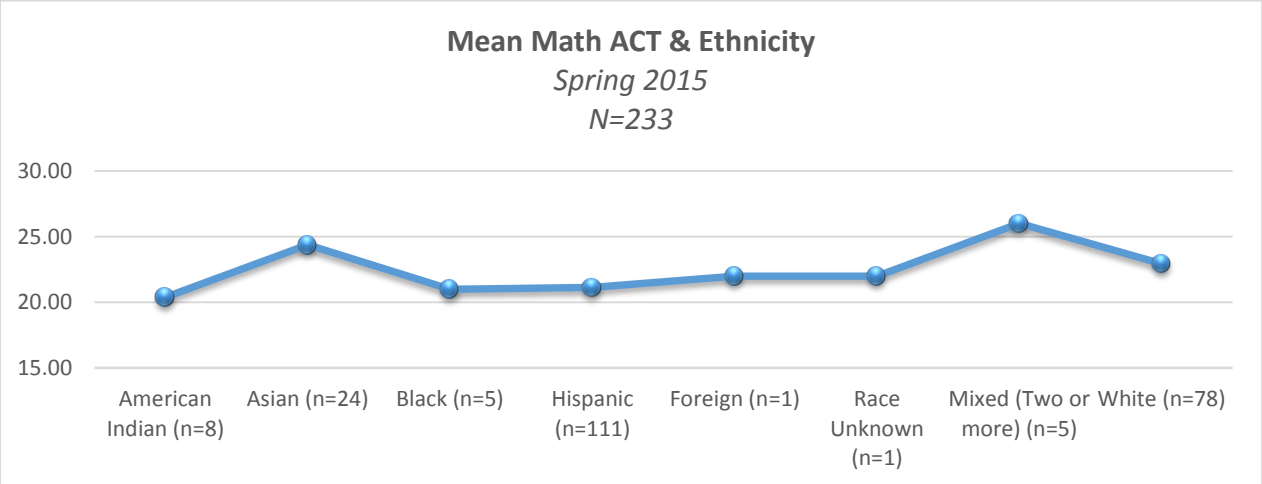
Figure 4. *Final Course Grades*



Demographics of Students & Their Success

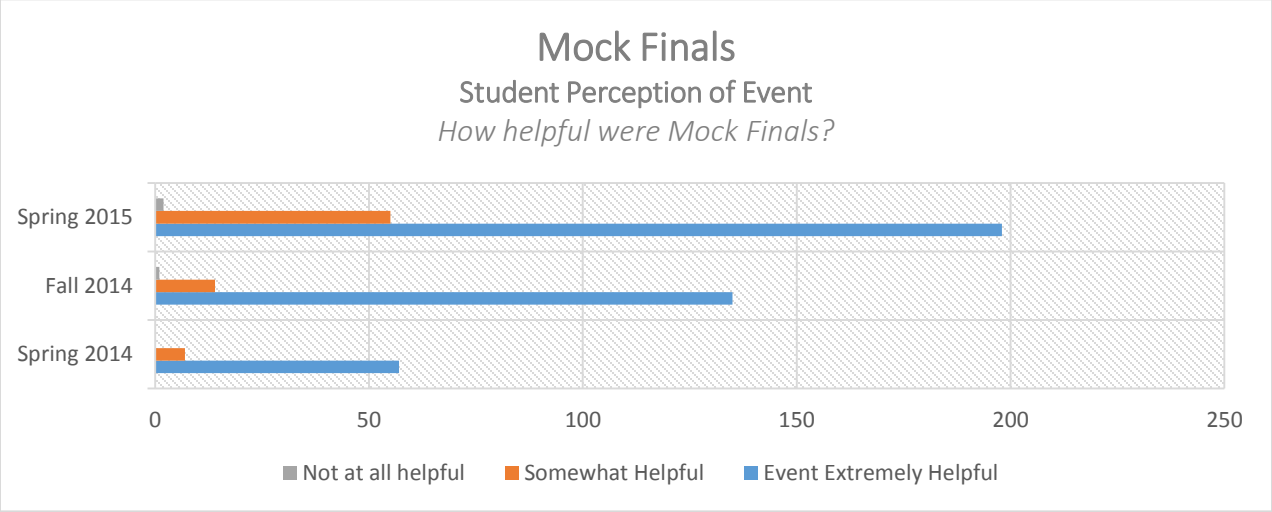
Often math preparation is an indicator of success in math courses (Gamoran & Hannigan, 2000) and in an effort to understand how UNM students fare in terms of their mathematics ACT score, below is its distribution by ethnicity of the students who participated in Mock Finals.

Figure 5. *Math ACT Scores & Ethnicity*

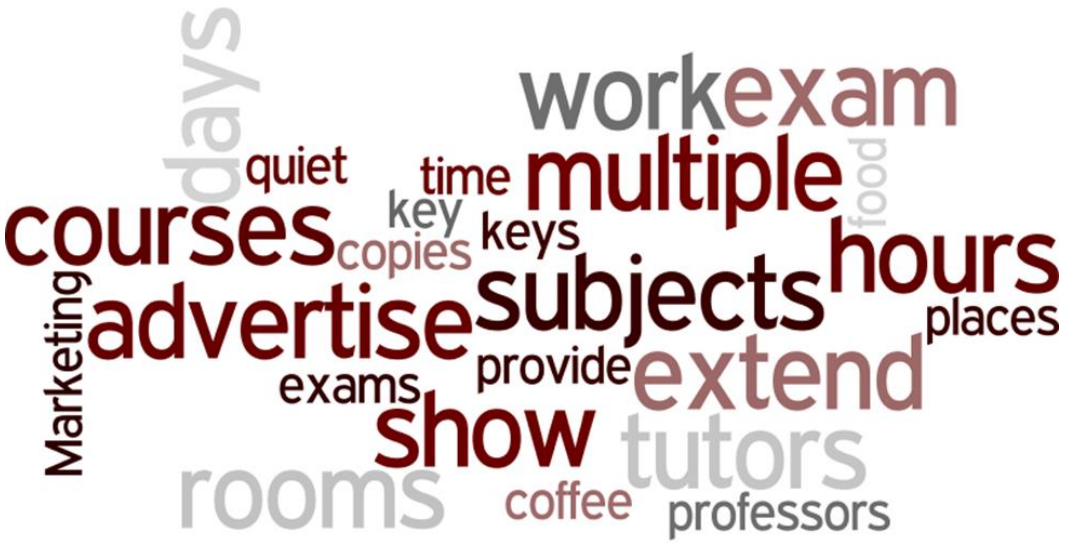


Summary of Key Findings:

Overall, students were satisfied with the Mock Finals event. A majority of students who filled out an evaluation indicated the event was 'Extremely Helpful' and 89% indicated they were likely to attend another event.



A word cloud was created to show the summary of suggestions for improving future events. The bigger the word is, the more often times it was mentioned. Student consistently mentioned they wanted more 'courses,' more 'subjects', more 'tutors' and so on.



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Actions Planned/Taken:

Overall, the event was successful and in an effort to make it even better in the future, below are some common issues that came up from Spring 2014, Fall 2014 and Spring 2015 and recommendations to resolve these:

Issue	Recommendation
Many individuals were not aware of the event until closer to date	• Choose date earlier in an effort to reach out to other professors and students • Begin advertising earlier
Drop in student participants made it difficult to plan for copies of exams	• Emphasize pre-registration
Evaluation responses were not inclusive	• Make evaluation more accessible *(i.e., QR code, URL)* • Make it a requirement to fill out evaluation before receiving exam key
Many volunteers felt chaos on how to engage the day of the event	• Pre-assign tutors and test rooms, and have an "official schedule" • Schedule rooms on one floor for testing, tutoring, etc.
Coffee ran out and students were upset	• By emphasizing pre-registration, will make it easier to gauge catering numbers

Which Student Affairs goals does this program / project align with?

STEM Gateway partnered with CEP in an effort to support the grant's following objective:

Improvement of student persistence and degree attainment in the STEM fields will improve campus-wide retention-rate and graduation-rates as STEM aspirants represent a significant proportion of incoming students.

This partnership for student success supports the following Student Affairs goal:

Facilitate the wellness, retention, persistence, intellectual growth, career readiness and graduation of all students.

References

Gamoran, A., & Hannigan, E.C. (2000). Algebra for everyone? Benefits of college-preparatory mathematics for students with diverse abilities in early secondary school. *Educational Evaluation and Policy Analysis, 22*(3), 241-254.

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