



General Education Committee Minutes

November 14, 2018

Present: Tien Chih Melinda Tilton

> Jason Comer Matt Queen Emily Arendt Tom Regele Leanne Gilbertson Cori Day Rebecca Muller

Megan Thomas

Brigham Jessen (student)

Absent: Bernie Quetchenbach* John Roberts* Lance Mouser*

Josh Hill* Sue Balter-Reitz (ex-officio)*

*excused

Melinda Tilton called the meeting to order at 2:03 p.m. in the SUB Missouri room.

The minutes of October 17 were accepted as presented.

T. ITEMS – FIRST READING

Item 26 Gen Ed Course: ARTZ 106 Visual Language-2-D Foundations. Submit for category V.A. Fine Arts.

Item 26.a Gen Ed Course: ARTZ 108 Visual Language-3-D Foundations. Submit for category V.A. Fine Arts.

The question was raised as to whether the GEC should hold off reviewing any additions to Gen Ed until our review of the purpose statement and outcomes is complete. It was noted in the paperwork that ARTZ 101 Art Fundamentals will eventually be removed from the Fine Arts category. ARTZ 101 does not count in the Art major, so students have been frustrated by taking it, and then needing one of the proposed courses in addition. While we do intend to update the category outcomes, they will not change so wildly that any of these courses (ARTZ 101, 106, or 108) would not fit.

- Motion by Matt Queen, seconded by Tom Regele that, upon verification by the Chair of the Art Department that ARTZ 101 will be removed from Gen Ed, the Committee approves Items 26 and 26.a.

- Motion carried.

II. ASSESSMENT UPDATE

Ms. Tilton noted that she will be attending the November 29 Academic Senate meeting. She will communicate to the Senate that we do not intend to accept any further changes to Gen Ed courses until we have finished our review of the purpose and outcomes. She will also share the timeline of the review, including departmental input.

Ms. Tilton will also give a report on ETS testing to the Senate (copy attached). At the beginning of this Fall semester, we were able to test 187 incoming freshmen students using the ETS test. We had a hunch that our students may be coming in with lower proficiency than the national average. According to ETS data, they are indeed coming in lower, and that we are raising them higher than the national average by the time they graduate. This data was preliminarily shared with the Senate last week, where the Chancellor was very interested and proposed we do a press release!

Questions were raised about ETS' national data. There is no way to know if students at the other universities are required to take the test or if it's voluntary. Volunteers and incentivized students skew the data. Also, if we do a press release about this information, we should disclose that all of the senior students tested were volunteers and some did receive incentives.

III. DISCUSSION/ACTION ITEMS

A. Letter to Department Chairs Re: Biennial Review

This letter will ask the Chairs for feedback on the course review process, as well as alert them to our Gen Ed outcomes review process.

RE: General Education Courses/Outcomes Revision

On behalf of the General Education Committee, we'd like to thank you for the time and effort you and your department invested in last spring's biennial review. As a result of your work, the data gathered was more useful and meaningful than in years past. The data submitted for every general education course was reviewed and evaluated by committee members, who reported their findings to the committee as a whole. For the vast majority of General Education courses, the data confirmed and demonstrated the appropriateness of current GE category designations. Occasionally, however, courses were missing data and/or explanations. Because it is likely that incomplete course reviews can be attributed to a lack of clarity in our request, we are critically evaluating and streamlining the process. Clear guidelines will be sent to each department chair for use in preparing the 2019 report, along with a template and examples to illustrate the report and expedite completion.

This year we will be working on revising the three outcomes listed under every General Education category (attached). Since you are the experts in your disciplines, your input would be invaluable to us. Please consult with professors teaching general education courses within your department and forward

recommendations to Rita by February 28, 2019. We intend to have the outcomes revised and ready for distribution by April 2019 for inclusion in all applicable general education course syllabi.

The committee's meeting with the Northwest Accreditation team went smoothly and new data documenting the excellence of our General Education program will soon be made available to faculty. We deeply appreciate the dedication of everyone teaching general education courses and their contributions to ensuring a high-quality education for all our students. Thank you!

Ms. Tilton noted that Joe Thiel, Director of Academic Policy & Research for the Commissioner's Office, confirmed that we will probably not receive new outcomes for the MUS Core, so we can go ahead with revising our outcomes.

Also, for our next round of Gen Ed course reviews, please let Ms. Tilton know of really good reviews from last year, which we can use as examples. It was noted that the Art reviews were particularly well put together.

B. Recommendation to Senate Regarding Purpose/Outcomes on Syllabi

We should not wait until the outcomes are revised! We need to require this now, as NWCCU was so impressed with it.

C. Feedback from Faculty on Gen Ed Outcomes, Subcommittee Formation

How should we rewrite the outcomes? Last time we hoped to get faculty groups together, but it didn't work and the outcomes did not turn out well written, to say the least. It was suggested that the Committee revise the outcomes and then send them out for faculty to respond.

It was agreed that the December meeting will be a work session for outcomes.

The meeting adjourned at 3:18 p.m.

Respectfully submitted, Rita J. Rabe Meduna.

ETS Proficiency Profile Test for Incoming Freshmen Fall 2018: Results and Comparison with Seniors

In Fall 2018, the Gen Ed committee asked the instructors teaching A&SC 111 (First Year Experience) to give the abbreviated version of the ETS Proficiency Profile exam to all freshmen in that course. Additionally, because many science students do not take A&SC 111, the Department of Biological and Physical Sciences gave the exam to all freshmen in BIOB 161 (a required lab of all majors, Biology and Chemistry, in their first semester). All students took the pencil-paper exam in a proctored setting. As a result of these efforts, 187 Freshmen took the exam in Fall semester 2018 (by early October, prior to completing any Gen Ed courses).

ETS has an appropriate comparative data set for Freshmen in a proctored setting, and that served as the basis of comparison for these data. The comparative data guide contains data from 56 institutions and 38,811 students as of October 2018.

This report not only compares the performance of our freshmen (N=187) to the national average of entering freshmen (N=38,811 at 56 institutions), but also compares the performance of our freshmen to the performance of our exiting seniors (N=67) who took the full proficiency profile exam, voluntarily, over the past two years. The seniors took the test online, in an unproctored format, and are compared to the performance of exiting seniors nationally that took the test online and unproctored (N=22,875 at 41 institutions).

ETS provides eight scores along with national comparative data:

Total Score – overall score on the exam as a whole

Four "Skills Sub-scores": general abilities to be expected after completing a General Education Program:

Critical Thinking

Reading

Writing

Mathematics

Three "Context-Based Sub-scores": general knowledge areas to be expected after completing a General Education Program:

Humanities

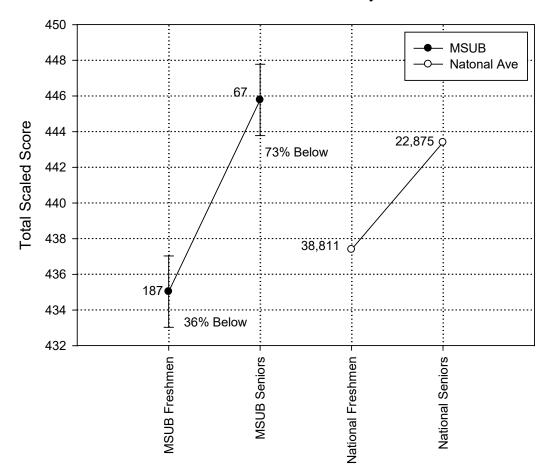
Social Sciences

Natural Sciences

MSU-Billings has, for the past few years, been using the ETS Proficiency Profile to assess exiting seniors' performance in the areas above. In general, our seniors perform approximately average (when compared to exiting seniors) on all measures. However, we wanted to see how our incoming freshmen performed (when compared to entering freshmen nationally) so that we can assess the "growth" (or lack of growth) exhibited by our students during their time here, specifically with respect to skills and knowledge attained through the General Education Program. The results and comparisons are below.

MSUB Overall Performance on the Proficiency Profile Exam

Total Score ETS Proficiency Profile

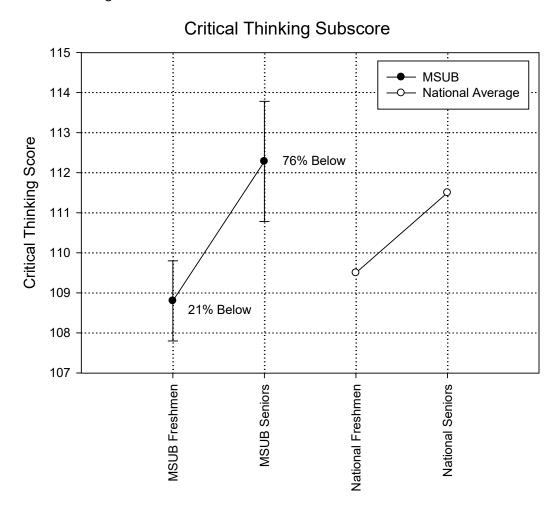


The figure above shows the performance of MSUB freshmen and seniors as solid dots (error bars are 95% confidence intervals) and the national averages (for freshmen and seniors) as open circles. Sample sizes for each data set are to the left of the symbol, and for the MSUB data the % of institutions that have an average below MSUB is shown to the right and below the symbol. The national averages are scaled so as to be in the middle of the national distribution (50% of institutions below).

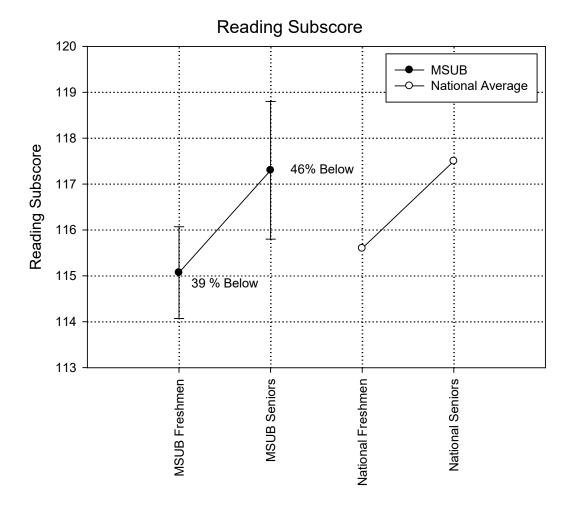
The results for the total score suggest that incoming freshmen at MSU-Billings perform statistically significantly **below** the national average (the national average is outside the 95% confidence intervals for MSUB) and yet exiting seniors score statistically significantly **above** the national average. Thus, students at MSU-Billings display significantly greater improvement on this metric (Total Score) than the average university student in the nation.

MSUB Performance on Skills Sub-scores:

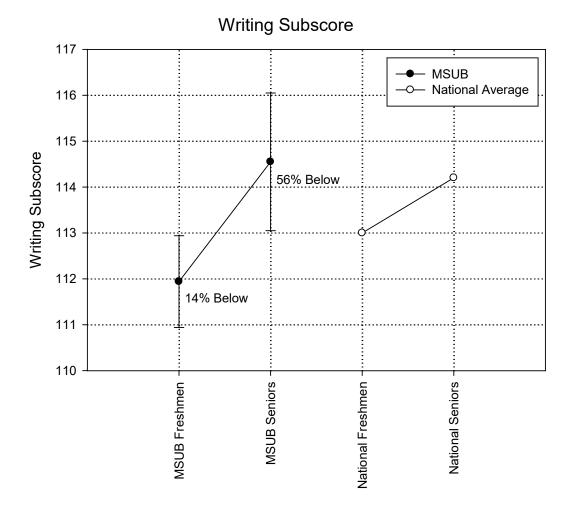
Critical Thinking



The figure above shows the performance of MSUB incoming freshmen and exiting seniors on the Critical Thinking Sub-score compared to similar populations nationally. Freshmen at MSUB score well below the national average (for freshmen, though not significantly lower) when they enter college, and when they leave they are slightly (though not significantly) higher than the national average. Only 21% of institutions have averages below MSUB's entering freshmen, but 76% have exiting seniors that score lower than MSUB's seniors. Again, students at MSU-Billings show greater performance gains with respect to critical thinking skills than students nationally.

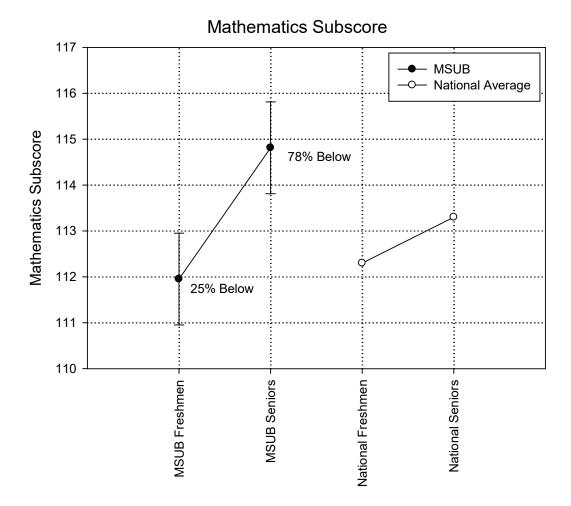


The figure above shows the performance of MSUB freshmen and seniors on the Reading subscore relative to national averages. Entering freshmen at MSUB score below the national average (above only 39% of other institutions). Exiting seniors also score slightly below the national average, but the number of institutions scoring below MSUB has risen to 46%, suggesting that, while there may be room for improvement here, students at MSUB show slightly better growth in performance with regard to reading than students nationally.



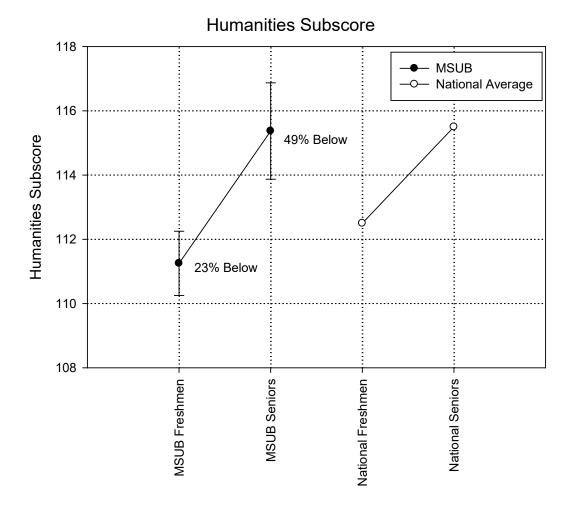
The figure above shows the performance of MSUB's freshmen and seniors on the Writing subscore compared to national averages. Incoming freshmen at MSUB enter college scoring significantly below the national average on the writing subscore. By the time they exit as seniors, performance has increased to slightly above the national average. It is clear that growth on this measure is greater among students at MSU-Billings than nationally.

Mathematics

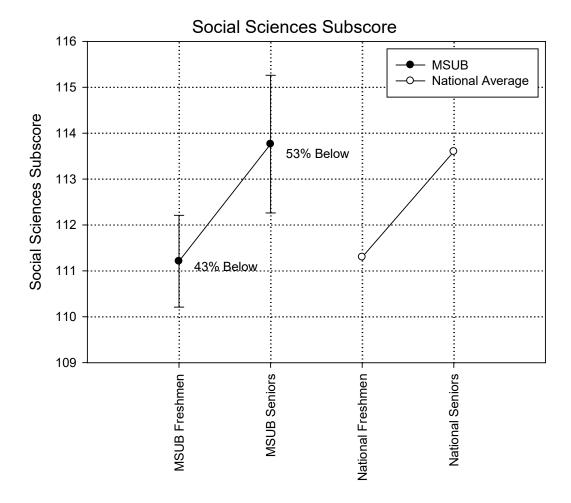


The figure above shows performance on the Mathematics subscore by MSUB's freshmen and seniors compared to national averages. Incoming freshmen at MSUB score slightly below the national average and our institution average is above only 25 % of the other institutions using this exam. By the time they leave, our seniors score significantly above the average for seniors nationally, and our average is above that of 78% of the other institutions.

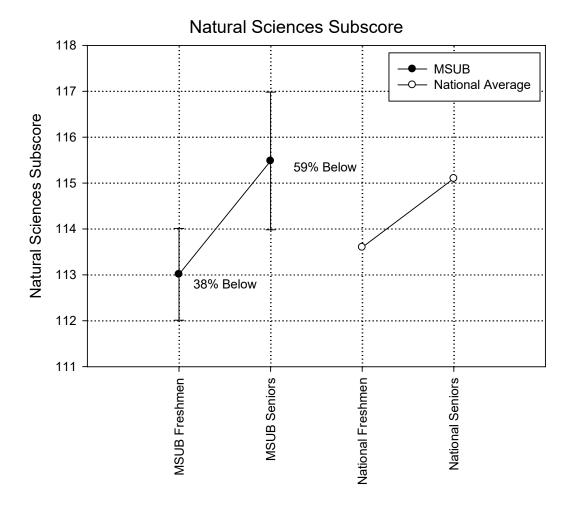
Humanities



The figure above shows performance by MSUB's freshmen and seniors on the Humanities subscore compared to national averages. Incoming freshmen at MSU-Billings score significantly below incoming freshmen nationally, but by the time they leave MSUB, seniors score only marginally below the national average. Thus, while there may be room for improvement here, students at MSU-Billings again show more growth in this knowledge area than seen nationally.



The figure above shows performance on the Social Sciences subscore by MSUB's incoming freshmen and exiting seniors, as well as national averages for these groups. Although neither incoming freshmen nor exiting seniors differ significantly from the national averages for these groups, students at MSU-Billings improve slightly more than nationally on this measure while at college. MSUB's institutional average for freshmen is above only 43% of the other institutions, while the score for exiting seniors is above 53% of the other institutions.



The figure above shows performance on the Natural Sciences subscore by MSUB's incoming freshmen and exiting seniors as well as the national averages for these groups. As seen above in the Social Sciences subscore, neither freshmen nor seniors differ respectively from national averages. However, like Social Sciences performance, students at MSUB show greater improvement than national averages. The institutional average for freshmen is above only 38% of other institutions while the average for seniors is above 59% of the other institutions.

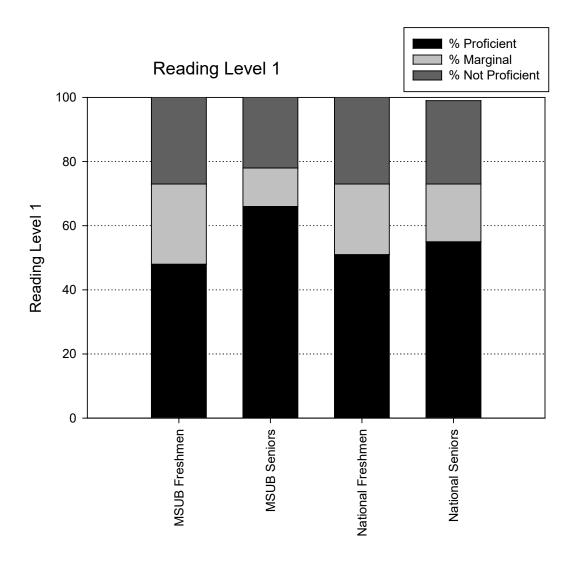
Overall Conclusions from Total Score and Subscores:

In every score, students at MSU-Billings show greater improvement from freshmen to senior than national averages. In some cases, this improvement is striking (e.g. critical thinking, writing, mathematics and humanities) while in the others it is more modest, yet still greater than national averages. We conclude that the general education program at MSU-Billings is effective at moving students farther than average for the nation.

The ETS Proficiency Profile exam also provides "Proficiency Classifications and Proficiency Level Statistics." These data are shown in the figures below.

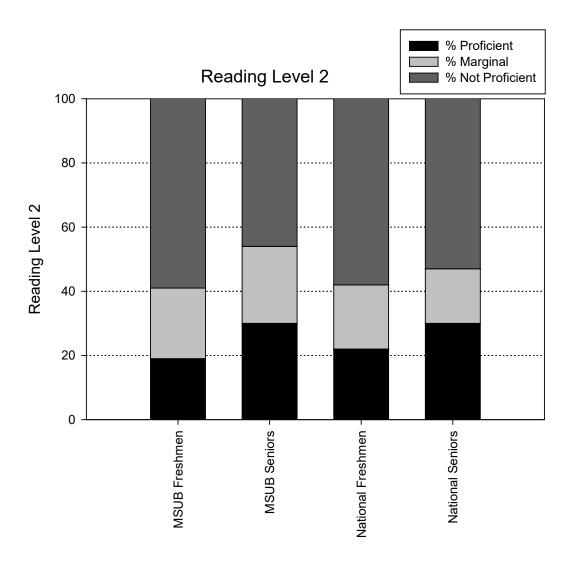
ETS considers a student proficient at Reading, Level 1 if they are able to

- Recognize factual material explicitly presented in a reading passage
- Understand the meaning of particular words or phrases in the context of a reading passage



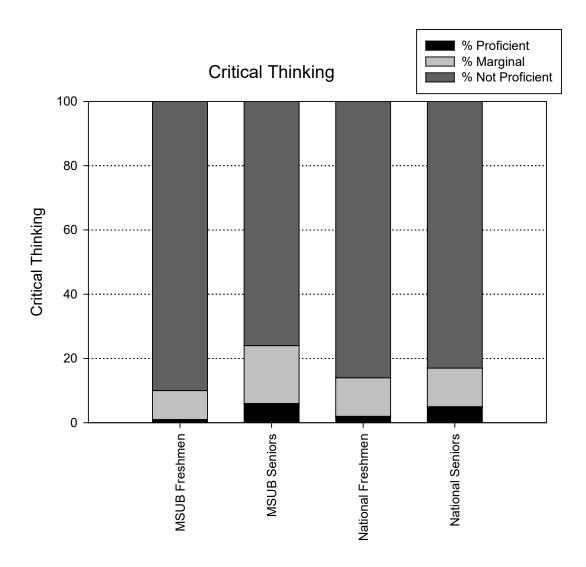
ETS considers a student proficient at Reading, Level 2 if they are able to

- Synthesize material from different sections of a passage
- Recognize valid inferences derived from material in the passage
- Identify accurate summaries of a passage or of significant sections of the passage
- Understand and interpret figurative language
- Discern the main idea, purpose, or focus of a passage or significant portion of a passage



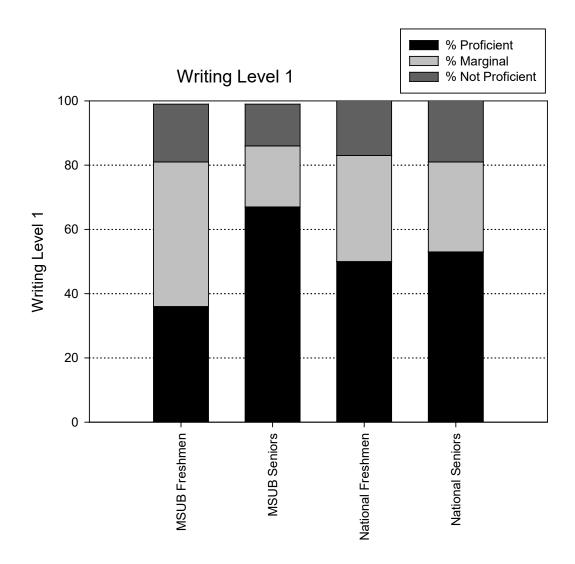
ETS considers a student proficient at this level if they are able to:

- Evaluate competing causal explanations
- Evaluate hypotheses for consistency with known facts
- Determine the relevance of information for evaluating an argument or conclusion
- Determine whether an artistic interpretation is supported by evidence contained in a work
- Recognize the salient features or themes in a work of art
- Evaluate the appropriateness of procedures for investigating a question of causation
- Evaluate data for consistency with known facts, hypotheses or methods



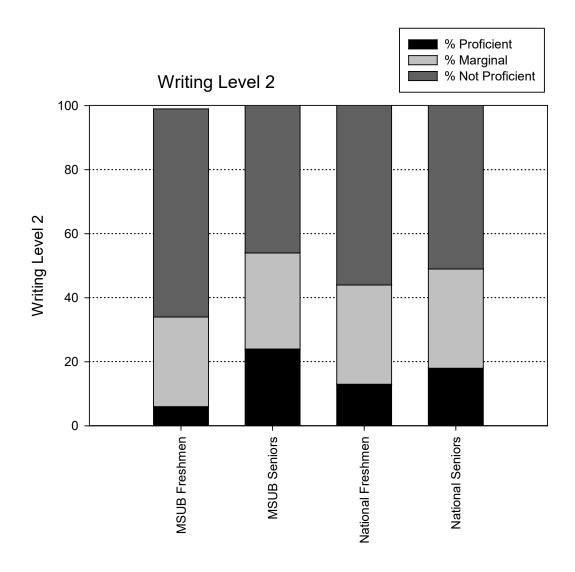
ETS considers a student proficient at Writing, Level 1 if they are able to

- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions)
- recognize appropriate transition words
- recognize incorrect word choice
- order sentences in a paragraph
- order elements in an outline



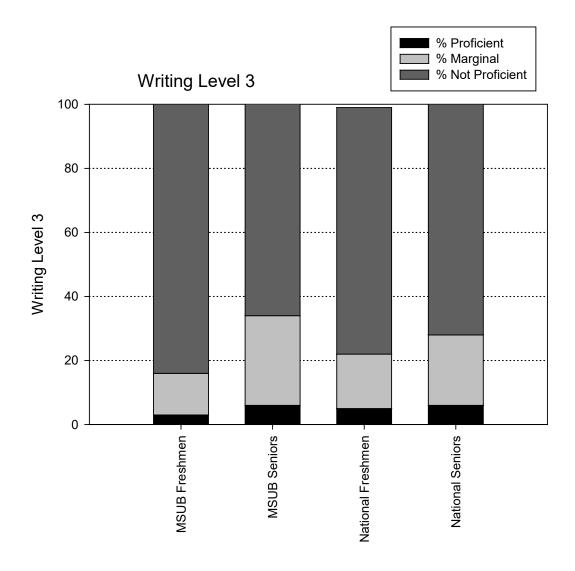
ETS considers a student proficient in Writing, Level 2 if they are able to:

- incorporate new material into a passage
- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions) when these elements are complicated by intervening words or phrases
- combines simple clauses into single, more complex combinations
- re-cast existing sentences into new syntactic combinations.



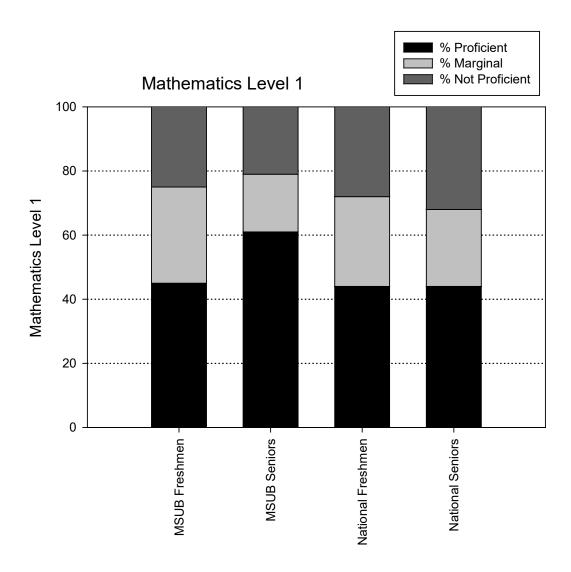
ETS considers a student proficient at Writing, Level 3 if they are able to:

- discriminate between appropriate and inappropriate use of parallelism
- discriminate between appropriate and inappropriate use of idiomatic language
- recognize redundancy
- discriminate between correct and incorrect constructions
- recognize the most effective revision of a sentence



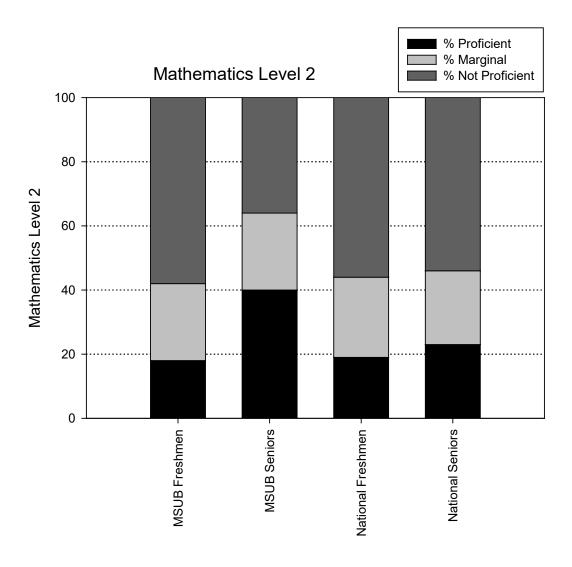
ETS considers a student proficient at Mathematics, Level 1 if they are able to

- solve word problems that would most likely be solved by arithmetic and do not involve conversion of units or proportionality (These problems can be multi-step if the steps are repeated rather than embedded.)
- solve problems involving the informal properties of numbers and operations, often involving the Number Line, including positive and negative numbers, whole numbers and fractions (including conversions of common fractions to percent, such as converting 1/4 to 25%)
- solve problems requiring a general understanding of square roots and the squares of numbers
- solve a simple equation or substitute numbers into a algebraic expression
- find information from a graph (This task may involve finding a specified piece of information in a graph that also contains other information.)



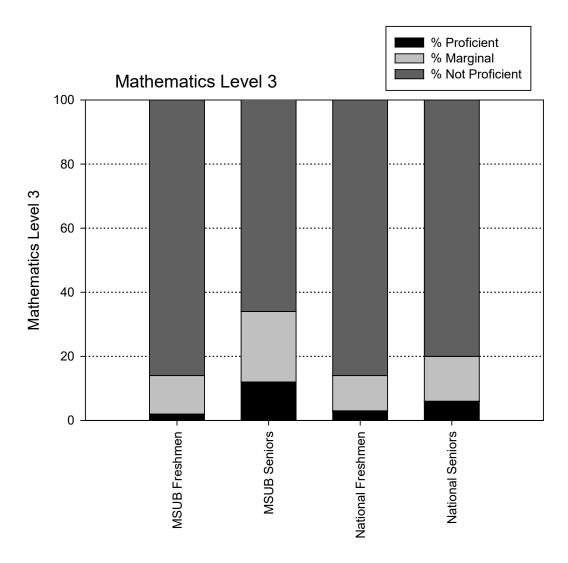
ETS considers a student proficient at Mathematics, Level 2 if they are able to

- solve arithmetic problems with some complications, such as complex wording, maximizing or minimizing and embedded ratios (These problems include algebra problems that can be solved by arithmetic [the answer choices are numeric].)
- simplify algebraic expressions, perform basic translations and draw conclusions from algebraic equations and inequalities (These tasks are more complicated than solving a simple equation, though they may be approached arithmetically by substituting numbers.)
- interpret a trend represented in a graph, or choose a graph that reflects a trend
- Solve problems involving sets (The problems would have numeric answer choices.)



ETS considers a student proficient at Mathematics, Level 3 if they are able to

- solve word problems that would be unlikely to be solved by arithmetic; the answer choices are either algebraic expressions or are numbers that do not lend themselves to back-solving
- solve problems involving difficult arithmetic concepts such as exponents and roots other than squares and square roots and percent of increase or decrease
- generalize about numbers, e.g., identify the values of (x) for which an expression increases as (x) increases
- solve problems requiring an understanding of the properties of integers, rational numbers, etc.
- interpret a graph in which the trends are to be expressed algebraically or in which one of the following is involved: exponents and roots other than squares and square roots, percent of increase or decrease
- solve problems requiring insight or logical reasoning



Overall Conclusions: In every case above, entering freshmen at MSU-Billings show lower Proficient and higher Non-Proficient levels than entering freshmen nationally. However, in every case except for

Reading Level 2 and Writing Level 3, exiting seniors show higher levels for Proficiency and lower levels for Non-Proficiency. Indeed, even for Reading Level 2 and Writing Level 3, exiting seniors at MSUB show lower levels of Non-Proficiency than national averages, and are AT NATIONAL AVERAGES for Proficiency. Again, though there is always room for improvement, the General Education Committee feels that these data suggest that our General Education Program is accomplishing its goals admirably.