



WAYNE STATE School of Medicine

Medical School Resource Use: Does What You Study, When You Study, and How You Study Make an Impact?

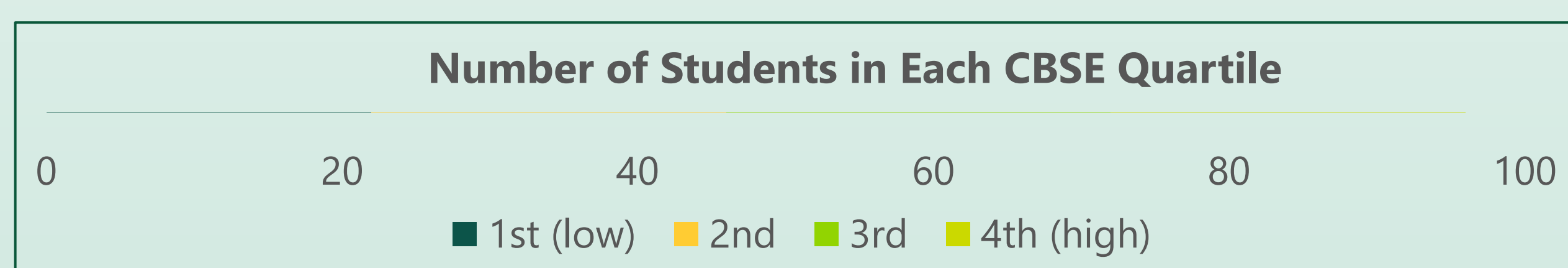
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Introduction

- Medical educators invest significant time in developing curricula but may not have a clear understanding of how students use provided material and other resources to prepare for pre-clerkship curriculum and the USMLE Step 1 exam.
- The recent Step 1 change to a pass/fail nonnumeric outcome and increase in pass minimum led to multiple consequences in students' preparation. Understanding student use of resources in this new context can facilitate institutional support.
- While there is some existing research on the predictive value of resources, there is a lack of information on how students utilize resources following the change of Step 1.
- The purpose of our study is to assess the patterns, extent, and impact of resource usage by students during their pre-clerkship and Step 1 dedicated study.

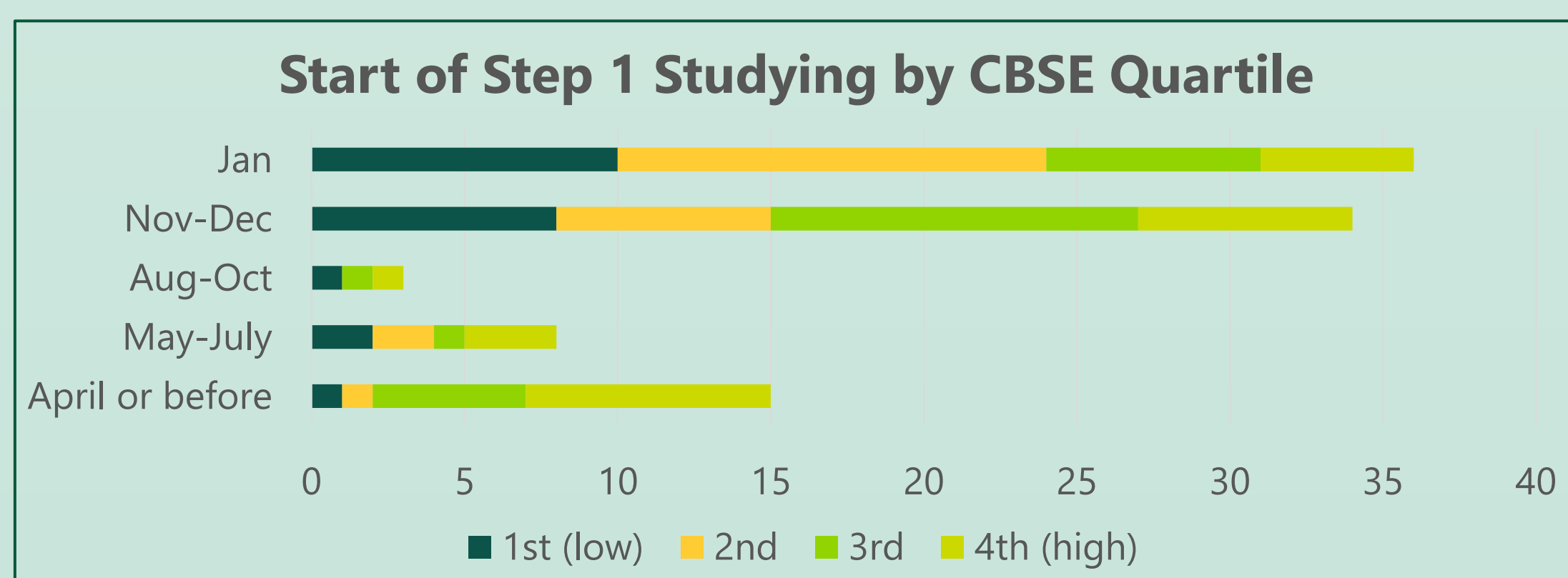
Methods

- Students and faculty collaborated on a survey for the Class of 2025 at WSUSOM to determine study resource use as part of a larger survey regarding preparation for the USMLE Step 1 exam.
- The survey was optional, provided via Qualtrics, responses are anonymized and linked with performance on Segments 1 and 2 and CBSE.
- The Institutional Review Board (IRB) was consulted prior to project initiation and determined that the project did not fall within the scope of human subject research regulation and did not require further IRB review.
- The survey was sent to the entire class via listservs after the Step 1 dedicated period ended and scores had been posted.
- 32.5% of students (n=96) responded. 92 of the respondents passed the Step 1 exam.
- Additionally, all students take the CBSE at the end of Segment 2, an examination which is statistically predictive of performance on the USMLE Step 1 exam.
- Responses on the CBSE were divided into first (n=22), second (n=24), third (n=26), and fourth (n=24) quartile and linked to responses on this survey.



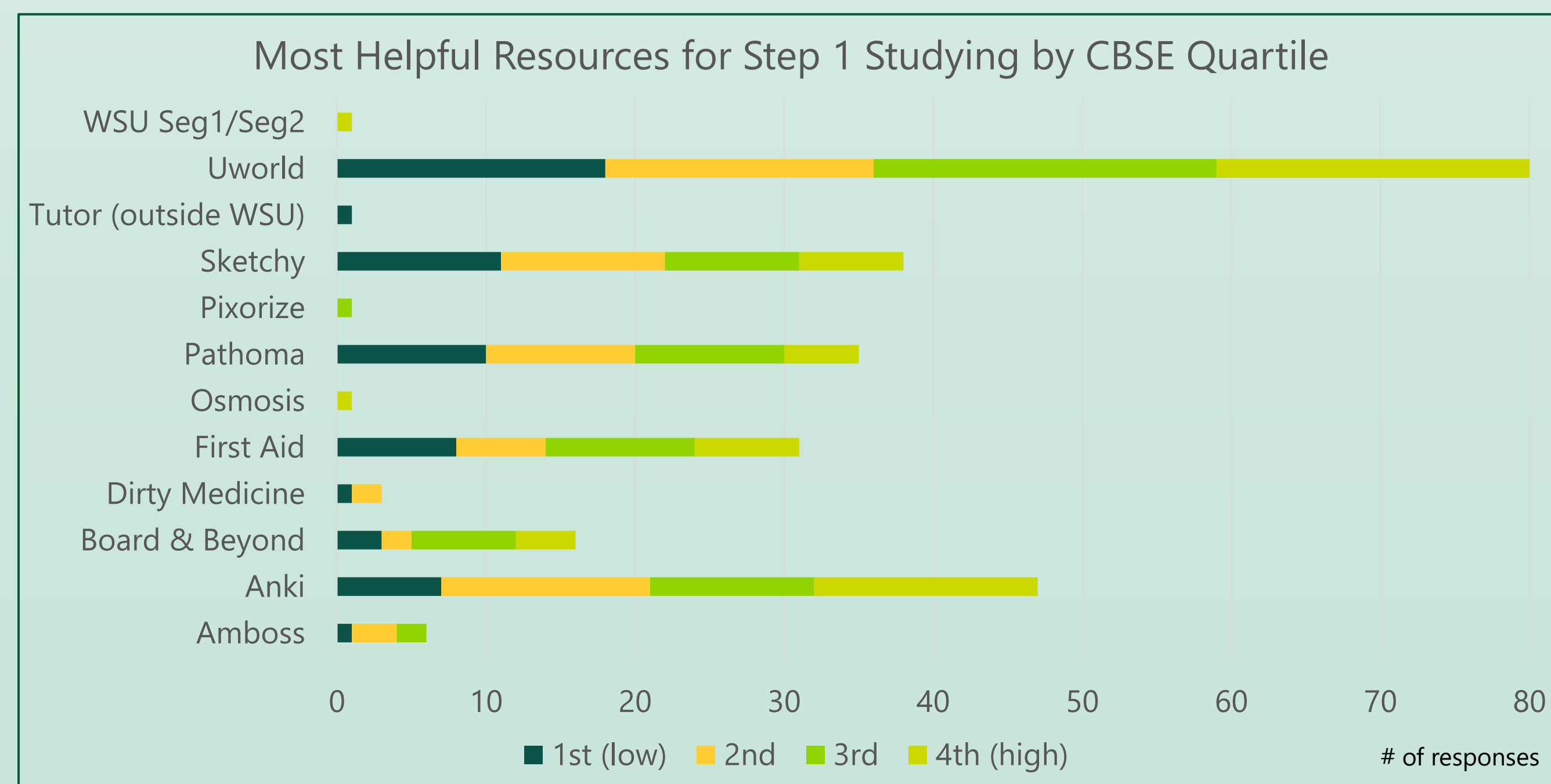
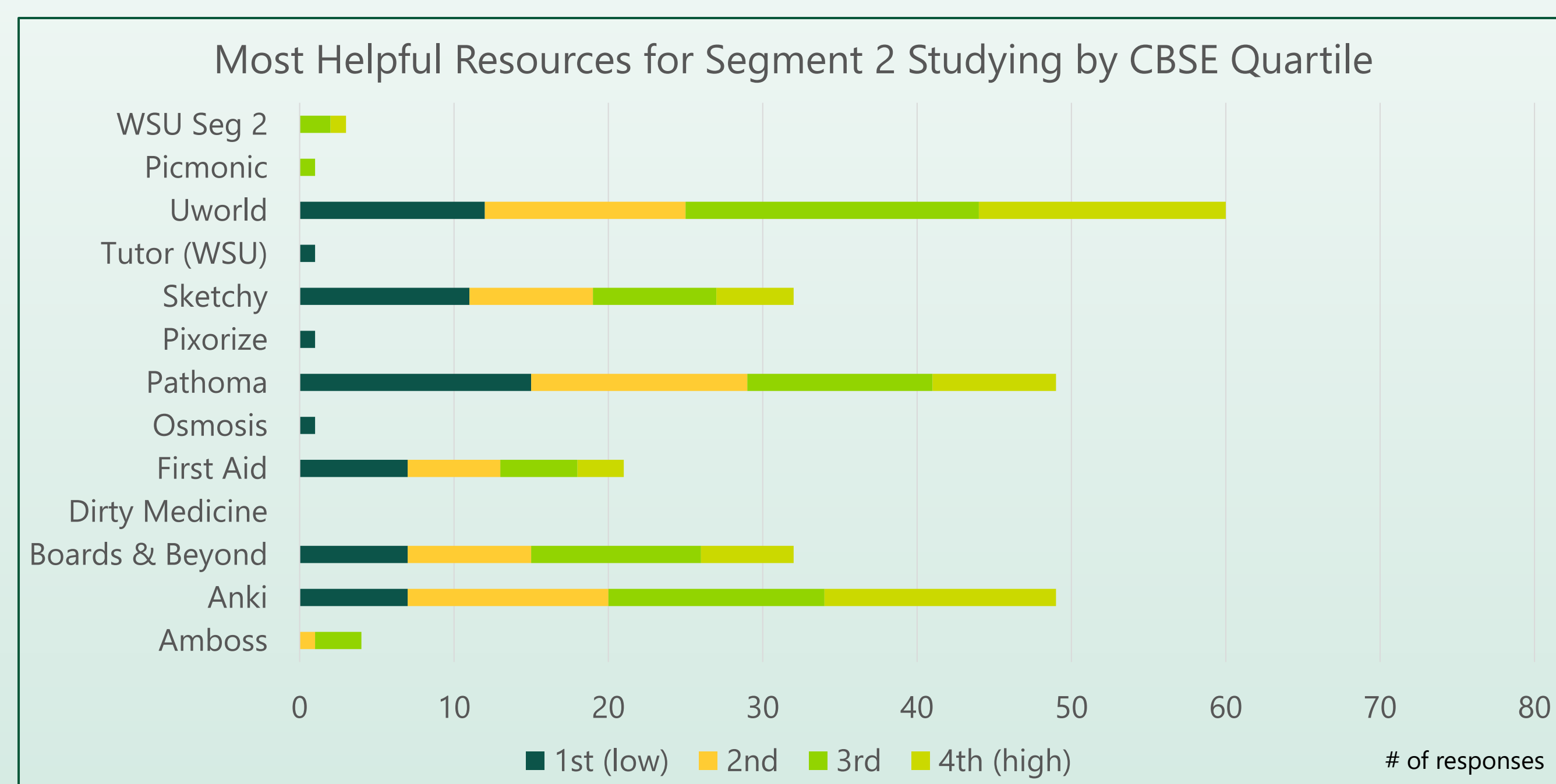
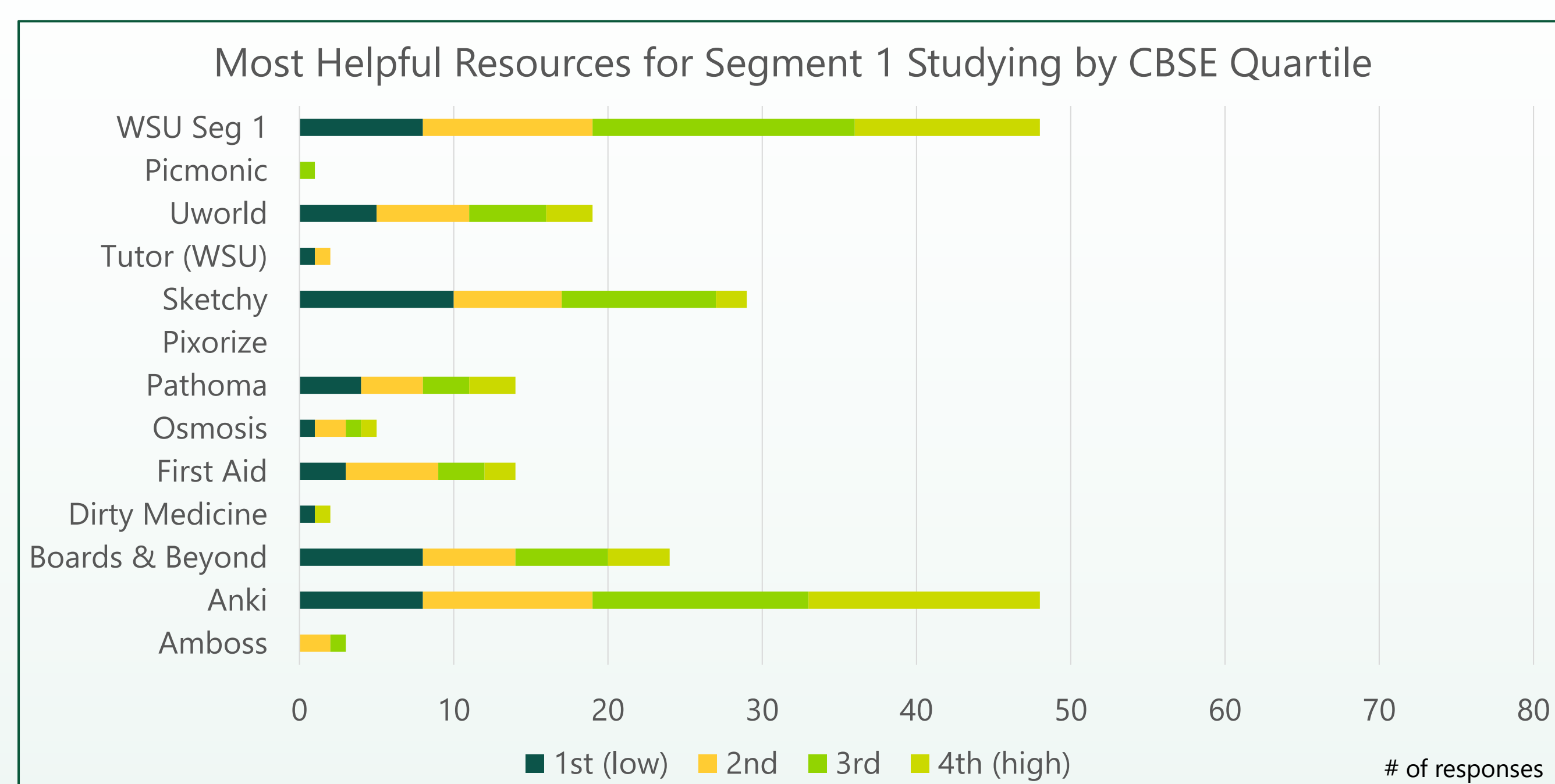
Results

- Students were asked when they began studying for the Step 1 exam, with April or before being the earliest (start of Segment 2) and January being the latest (start of dedicated). Students in the 4th CBSE quartile were more likely to start studying for Step 1 earlier.



Results

- Students ranked their top 3 resources during Segment 1, 2 & Step 1 studying.
- The frequency of resource rank within the top 3 by student CBSE quartile are summarized below.



Discussion

- Resource usage and its correlation with quartile exam performance provides one perspective of what resources students may find effective to augment their learning.
- Exploration of other influential factors is vital.
- Uworld was consistently the most often cited helpful resource by students in Segment 1, Segment 2, and during Step 1 study.
- Students in the two highest CBSE quartiles were more concentrated as a group in what resources they cited as most helpful, while students in the lower quartiles were more likely to note a greater spread across different resources. This may be that students are exploring a greater number of resources that would effectively help them in their learning.
- Medical school lectures, although a top resource during Segment 1, were used less than many external resources during Segment 2 and during Step 1 dedicated study. Reasons may include wider focus and longer structure as well as the change of examination structure, with faculty written exams during Segment 1 and NBME exams during Segment 2, which may have led to shifting of students' study strategies. This area deserves further study.
- WSUSOM funds some external resources, such as Uworld and First Aid, for all students, which may impact the frequency of their use by this student group.
- Resources may not be available to students who have limited social determinants of education and introduce inequities, which are mitigated with WSUSOM external resource use funding for all students.
- **Limitations:** Low sample size for some choices may limit validity of efficacy of certain tools.
- Students who scored below passing thresholds were assigned tutors through WSUSOM policy, impacting the validity of this resource as all others were optional.
- **Next steps** include:
 1. Exploring resource usage at other schools
 2. Resource predictive value of passing Step 1
 3. Resource predictive value of Segment 1 and 2 course scores
 4. Understanding different ways students utilized resources
 5. Qualitative feedback regarding the ways in which resources helped
 6. Further considerations of financial support to facilitate equitable resources
 7. Feedback to enhance current curriculum

References

1. Belovich, Andrea N., et al. "USMLE Step-1 Is Going to Pass/Fail, Now What Do We Do?" *Medical Science Educator*, vol. 31, no. 4, 2021, pp. 1551–1556., <https://doi.org/10.1007/s40670-021-01337-4>.
2. Chen, David R., et al. "Student Perspectives on the 'Step 1 Climate' in Preclinical Medical Education." *Academic Medicine*, vol. 94, no. 3, 2019, pp. 302–304., <https://doi.org/10.1097/acm.0000000000002565>.
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