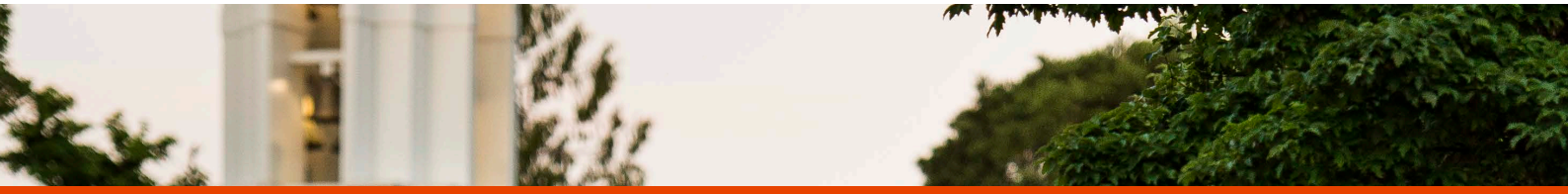
Oregon State University



HOLISTIC ADMISSIONS

February 13, 2019

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INTRODUCTION

Oregon State University promises to be "welcoming and foster belonging and success for all." (OSU Strategic Plan 4.0, 2018). As a starting point, the graduate admissions process plays a critical role in shaping the student culture within an academic program. The attributes of enrolling students influence the array of interpersonal interactions and life experiences present in the academic community, the dynamism of the learning environment, and the range of ideas and perspectives to which students and faculty will be exposed. Because the admissions process is so pivotal in setting the tone for academic culture and influencing the achievement of desired educational/academic outcomes, it is crucial that graduate programs have access to and utilize the most effective tools available to identify those who will best contribute to and be successful in their particular program.

The Oregon State University Holistic Admissions Working Group is committed to supporting graduate programs in their efforts to attract and enroll qualified and diverse applicants. We believe a holistic admissions process, emphasizing the whole person, not just select attributes, will best serve our graduate communities in achieving their goals. Through a holistic review of applications, program leaders will be able to use a rigorous and comprehensive approach to consider the wide range of factors that illuminate applicant strengths and influence student success. The adoption of a holistic approach to graduate admissions will support our university's efforts to strengthen our graduate programs, increase the quality and diversity of students, and honor the many ways that applicants' knowledge, skills and unique strengths are manifested.

The following report summarizes the comprehensive research of the working group, drawing on both local and national expertise. The goal of this work is to support faculty and staff in implementing more holistic graduate admissions practices. The report includes a summary that serves as a best practices document – a succinct how-to guide – on how to admit students more holistically, as well as an in-depth analysis carried out by the working group.

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HOW-TO-GUIDE

Successful implementation of holistic admissions review requires early input from all involved and an ongoing commitment to the process. The following suggested practices are intended as a baseline upon which to build.

1 Review your current admissions review process with an open mind.

Is your current process delivering the students you want? Are there requirements that hinder applicants from non-traditional backgrounds? Are there less inhibiting, possibly more creative ways for applicants to demonstrate their abilities to you? Most institutions provide a variety of tools for faculty to use in assessing the quantitative aspects of the admissions process, including a new admissions funnel (with ratios of admitted to accepted, and matriculated within various demographic groups) dashboard for Oregon State University faculty. Qualitative assessment tools are most often designed and implemented by faculty in their own graduate programs.

2 Admissions decisions should be collaborative, consistent and documented.

Forming a committee with representation from a faculty with diverse backgrounds and using a file review rubric is a good way to accomplish these goals. Table 1 (page 6) is from Educational Testing Services, but faculty can write rubrics specific to their programs. Train reviewers to ensure shared understanding of the rubric and consistency in scoring. Add additional point scores in areas of importance to your program, such as contributions to diversity, and demonstrated ability to deal with adversity, or it could be a score for having completed a field camp, or similar.

3 Get the most information possible from your graduate application.

Application forms at Oregon State University are customizable for each major. Your admissions committee can write application questions to help discover applicants' skills, relevant work experience, and performance in prerequisite course work or other items relevant to your program.

4 Ask for the information you need from reference letters.

Reference letter forms can also be customized. Your committee can write question prompts and design a rating grid for letters for your program's applicants.

5 Think outside the box: Determine and identify what leads to success in your program.

Have applicants complete a short set of questions to demonstrate personal qualities that will help them succeed in graduate school. Qualities known as "grit," or perseverance can be measured. Oregon State University's Office of Undergraduate Admissions worked extensively with William Sedlacek, a pioneer in assessing non-cognitive variables, qualities beyond test scores and grades. A variety of OSU graduate programs use rubrics to help assess non-cognitive variables when making admissions or scholarship decisions. As an example, the College of Engineering currently uses the Educational Testing Services rubric included in this document when selecting students for Provost's Fellowships.

6 If you use a standardized test score cut-off, consider eliminating it.

Standardized test scores should be at most one measurement factored in to the larger picture of an applicant's competencies. As noted in the body of this document, standardized test scores are at best questionable indicators of academic success and are sometimes a barrier for students of color, international students, and domestic students from lower socioeconomic backgrounds.

7 If you use a GPA cut-off, consider eliminating it.

GPA requirements for graduate admission to Oregon State University are somewhat flexible. The Oregon State University Graduate Council has set 3.00 as the minimum acceptable GPA for full graduate admission at OSU. However, applicants presenting GPAs between 2.75 and 2.99 can be admitted conditionally without additional review. Program directors may petition for admission of strong applicants with cumulative GPAs below 2.75. These applicants are often identified by holistic review with one or more attributes other than the GPA which are strongly valued or desired by the host department/program. These applications undergo secondary screening by the Graduate Admissions Committee (GAC), as one of the Faculty Senate committees. A recent comparison of graduate students admitted by the GAC and regularly admitted students between 2007 and 2016 showed no substantial difference in success. (Table 2).

8 Continually assess your admissions practices and the outcomes they promote.

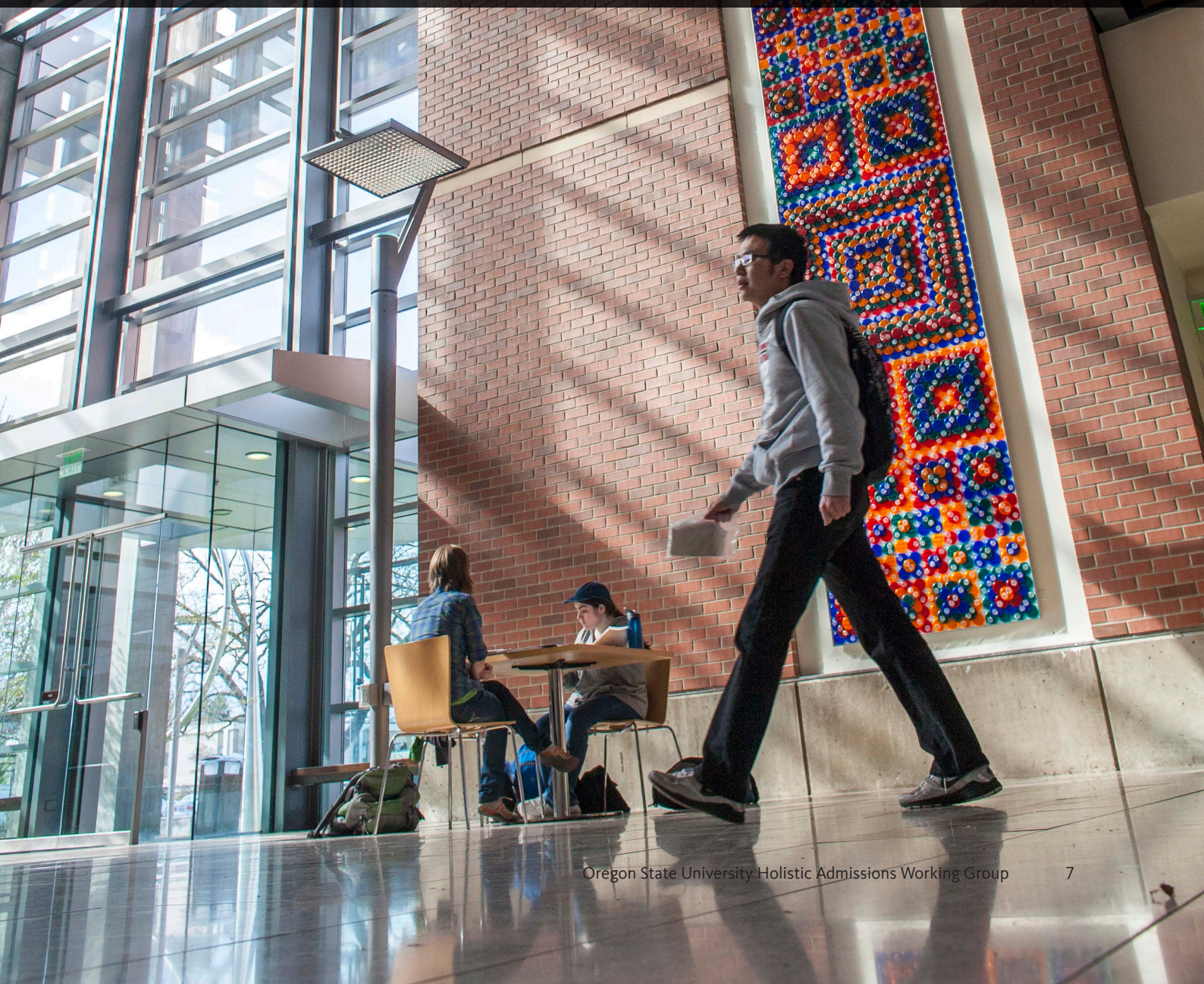
Holistic admissions review should lead to more diversity of background among your incoming students. Admissions data are available at Oregon State University using a variety of university-wide reporting systems. Use of these tools plus others you design will help ensure that your admissions processes help you meet the recruitment and enrollment goals of your graduate program.

TABLE 1. EDUCATIONAL TESTING SERVICE (ETS) SAMPLE RUBRIC FOR HOLISTIC REVIEW OF GRADUATE APPLICANTS

Component & Max Points	Points values
Research Max = 5	3 – 1 yr UG + work/internship research 2 – 1 year of UG research 0–1 – less than a year *1–2 extra for publications, posters, awards, etc.*
LORs Max = 3	3 – high on all 6 attributes 2 – high on 5 attributes 1 – high on 4 attributes
Work exp./CV Max = 3	2 – 2+ years related work exp. 1 – 1–2 years related work exp. *1 extra for volunteer work*
UG curriculum Max = 2	1 – extensive science coursework *1 extra for high UGI challenge*
GPA Max = 4	4 – 3.8 to 4.0 3 – 3.5 to 3.79 2 – 3.2 to 3.49 1 – 3.0 to 3.19
Sample rubric for illustrative purposes	

Component & Max Points	Points values
Personal statement Max = 3	1–2 – quality of writing, maturity *1 extra for overcoming challenges, contribution to diversity*
***GRE*® Quant** Max = 2	2 – 164–170 1 – 160–163 -1 – less than 142
GRE AW Max = 2	2 – 5.0–6 1 – 4.0–4.5 -1 – less than 3
GRE Verbal Max = 1	1 – 150–170 0 – <149
Total Score:	20–25 – Strong admit 17–19 – Admit 14–16 – Probable admit 10–13 – Probable deny 0–9 – Deny

REVIEW OF ADMISSIONS PRACTICES AND METRICS



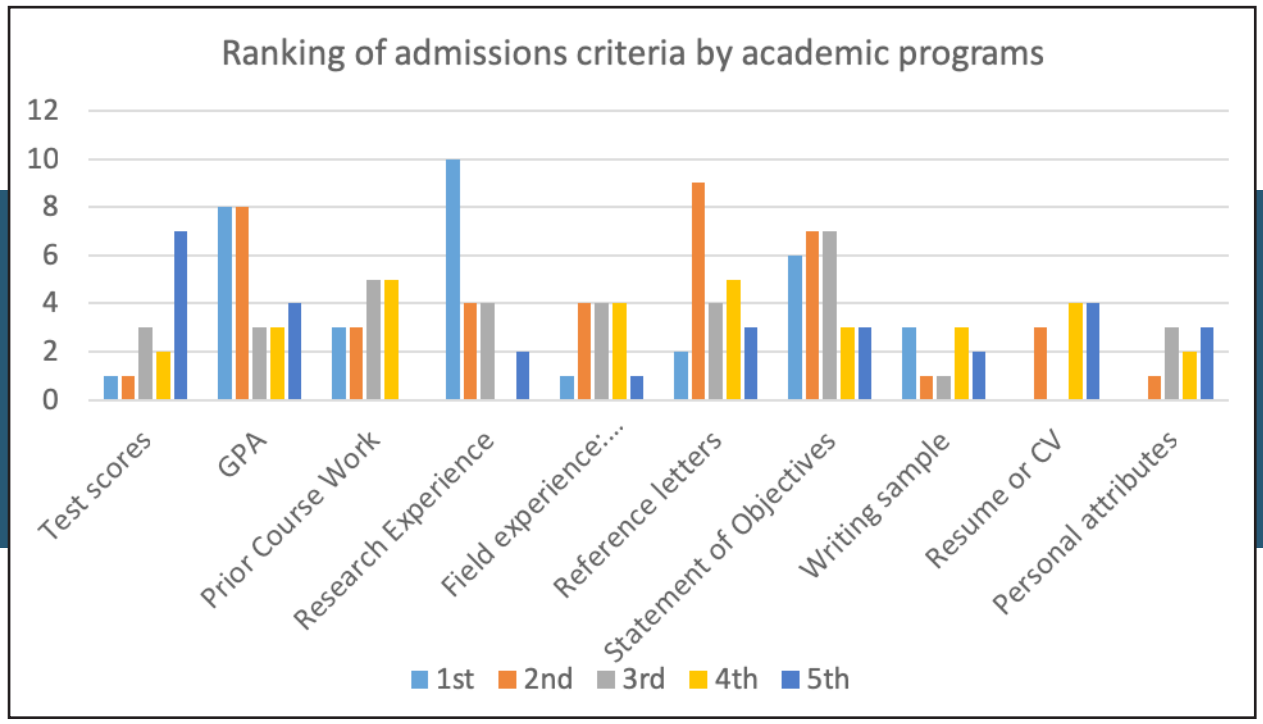
CORE STUDY OF ADMISSIONS PRACTICES

The working group researched a comprehensive number of characteristics of graduate applicants that are commonly used at the point of admission to predict future success in a graduate program. There has been substantial debate in recent years about the relative merit of standardized test scores and how much emphasis should be placed on test scores in comparison to other factors in the admissions process.

The working group surveyed the academic programs at OSU in 2017 to get a snapshot of how admissions is handled across the university. Program administrators from 31 of OSU's approximately 80 graduate programs ranked the various characteristics (see Figure 1) from 1-10, with 1 being the most important.

The results showed that most programs consider the GPA the most important metric, with research experience in second place, and the statement of objectives in third place. Test scores were considered the second least important characteristic, with only personal attributes being less important, see Figure 1.

FIGURE 1. RANKING (1 THROUGH 5) OF ADMISSIONS CRITERIA BY OSU'S GRADUATE PROGRAMS RESULTING FROM A 2017 SURVEY.



MERIT OF VARIOUS ADMISSIONS METRICS

The working group conducted a deeper dive into some of the key metrics often used in the admissions process, including GPA, GRE scores and letters of recommendation.

GPA

The Graduate Admissions Committee at Oregon State University reviews applications upon request when a graduate program wishes to admit an applicant who has not met the minimum GPA for admission. At the Committee's request, a 2018 data summary was conducted to compare graduation rates of three categories of graduate applicants admitted to Oregon State University between 2007 and 2016:

- Regularly admitted applicants with cumulative GPAs of 3.00 or higher
- Conditionally admitted applicants with GPAs between 2.75 and 2.99
- Applicants with GPAs below 2.75 admitted after review by the Graduate Admissions Committee

The study found no significant difference in masters or doctoral degree completion rates among these groups, see Table 2, which shows the percentage of students graduated from each admissions group. Based on the quantitative calculations, an interesting point is that the GAC admits actually lead to a higher overall graduation rate (more so for the doctoral students) than the conditional or regular admits.

These applicants are a small subset of those who apply with low GPAs, yet the results are thought-provoking. Consideration by the Graduate Admissions Committee requires strong faculty support, including a detailed description of how the applicant shows promise in spite of a poor academic history or association with an unaccredited institution. Preparing a file for GAC review requires a full file review, a holistic reading by the faculty supporting the applicant. Thus far, these review mechanisms seem effective at identifying non-traditional applicants who would not otherwise be offered graduate admission.

Thus far, these review mechanisms seem effective at identifying non-traditional applicants who would not otherwise be offered graduate admission.

TABLE 2. SUMMARIZED PERCENTAGE OF STUDENTS GRADUATED FROM EACH OF THE THREE ADMISSIONS GROUPS (REGULAR ADMISSION, CONDITIONAL ADMISSION, AND ADMISSION FOLLOWING GAC REVIEW) AT OSU.

	GAC admits		Cond admits		Regular admits	
	Masters	Doctorate	Masters	Doctorate	Masters	Doctorate
TOTAL:	55.88%	48.15%	57.24%	25.00%	56.48%	39.02%
Combined Total:	55.09%		53.97%		51.62%	

LETTERS OF RECOMMENDATION (LOR)

Letters of recommendation range in usefulness to application file reviewers. Depending upon the applicant's knowledge about whom to ask for a letter and what the focus of the letter should be, the reference may be key to an admissions decision, or may be irrelevant.

The recommendations of Bruland (2014) to applicants may be helpful at OSU: (a) cultivate a relationship with professors that extend beyond one course so they can comment on multiple facets of your scholarship (b) provide excellent examples of your work from their courses to letter writers (c) don't neglect asking authors to comment on your teaching ability (if of interest to the applicant) and provide an opportunity for them to observe you teaching.

Reviewers need letters of Recommendation (LORs) that provide specific, named evidence of performance; A means of assessing the experience of an author of a LOR should accompany any ranking statistics the author provides for the applicant. Unless the pool in which the student is in the top 1% is clear, the relative ranking from author to another author or from one applicant to another is unclear.

In the following, we summarize select recent studies of letters of recommendation as an aspect of applications for graduate admissions:

Kuncel et al. (2014) conducted a meta-analysis of the association between letters of recommendation (LOR) and metrics of student performance (GPA, faculty performance rating, attainment of Ph.D). They found that LOR provided a modest improvement in the multiple R2 statistics (increases of 0.003 or 0.01) relating the LOR to traditional metrics of GPA plus verbal GRE score plus quantitative GRE score. However, there is no description of how a quantitative response for a LOR is obtained, or if such an increase in the multiple R2 is meaningful.

DeZee et al. (2014) scored approximately 3 LOR from each of 75 students in each of 2 groupsThe top group was the approximately top 27 students in each of 3 graduating classes and lower group comprised the 27 lowest ranked student in the same 3 graduating classes. Only 3 variables were statistically significantly associated with the group membership after controlling for undergraduate GPA and MCAT scores; (a) the author being a supervisor/employer and (b) a quantitative rating of "best compared to peers" increased the likelihood of becoming a top student while (c) the presence of a non-positive comment decreased the likelihood of becoming a top student. Summary statements such as "I enthusiastically or strongly recommend..." were predictive of the top student group.

Finally, Bruland (2009) analyzed 38 LOR for 12 applicants to a PhD program in English studies at a western land grant institution (6 accepted and 6 declined applicants with equal gender representation). The author provides a rhetorical analysis of the letters. Most letters ranked the student in some manner. Bruland notes that a rank without information about the number of students observed or number of year evaluating students is unlikely to be a persuasive statement. The following points were identified with respect to treatments of scholarship, teaching and service.

- Accepted letters included detailed summaries of the applicant's written work and specific references to the work's title. Letters from non-accepted students were so generic that the student could not be identified from the body of the letter.
- Accepted letters were more likely to include discussions of teaching ability.
- Accepted letters were longer than one page.

Gender differences were identified across letters in both accepted and unaccepted groups. Letters for women had more digressions and more references to teaching than letters for men.

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THE GRE TEST

Who performs well on the GRE and who does not?
According to many researchers, white, English-speaking males and Asians tend to perform well on the GRE (Sedlacek, 2011; Wolfe, 2015; Ripin, 1996; Miller and Staussun, 2014; Clayton, 2016). Women and people of color tend to underperform on the GRE, even though their overall graduate academic performances (GPAs) tend to be higher than GRE scores predict (House, Gupta, and Xiao, 1997). Sedlacek (2011) states, "noncognitive variables... provide viable alternatives in fairly assessing the abilities of people of color, women, international students, older students, students with disabilities, or others with experiences that are different than those of young, white, heterosexual, able-bodied, Eurocentric males in the United States (traditional students)." Applicants with lower parental income and education were associated with lower GRE scores, and proficiency in English is also correlated with GRE-Verbal scores. Applicants who come from families of lower socio-economic status and those who are non-native English speakers are at a disadvantage for high performance on the GRE test (Pennock-Roman, 1994).

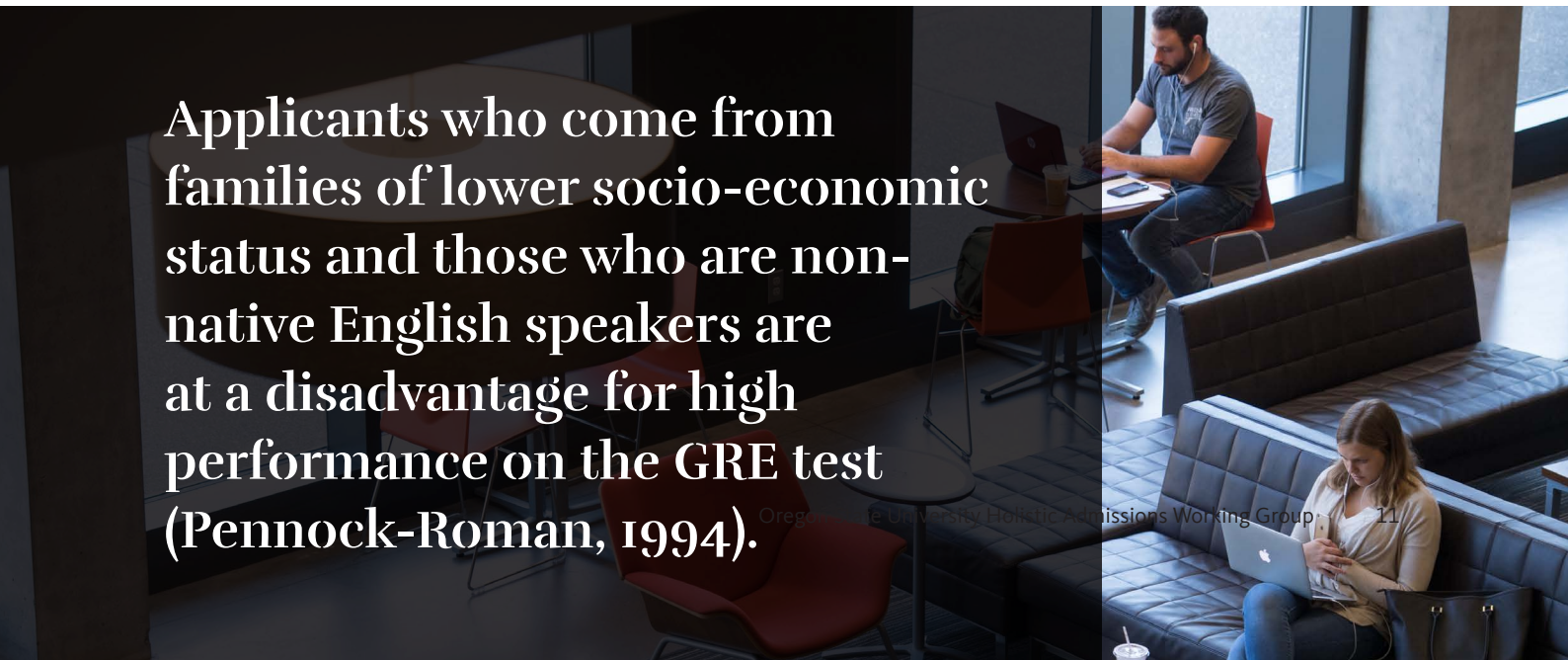
Financial and geographic burden
The GRE is expensive and this expense is likely a larger burden on people with fewer financial resources, increasing the hurdle to apply for graduate school. Preparing for the exam is also costly. Preparatory materials (books, classes, etc.) can cost over $1,000 and may be out of reach for people with little or no discretionary income, thus widening the burden for those with an economic disadvantage.

The GRE is only offered in certain test centers. Thus, people who live in small towns or countries that do not have test centers have the difficult (sometimes impossible) task of getting to a test center on specific dates, which requires finding and paying for transportation, and possibly taking off work or school, and finding childcare. These factors are more of an obstacle for people already at an economic disadvantage.

Does the GRE predict student success in Graduate School?
Research has shown that the GRE may predict student's grades in their first year of graduate school, although it is likely that the variance of GPA is small (Morrison and Morrison, 1995; Sternberg and Williams, 1997; Clayton, 2016; Sampson and Boyer, 2001). In contrast, based on a meta-study, others found that the GRE is strongly predictive of student's first year grades and graduate GPA (e.g. Kuncel et al, 2010). It is noteworthy that this author received funding from ETS to conduct this study.

What would be a better way to utilize the GRE?
Educational Testing Services (ETS, 2016) recommends the following best practices for using GRE test scores:

- Do not use cut off scores.
- Do not add scores together to get a compilation score.
- Small differences in GRE scores should not be used to make distinctions between applicants.



THE GRE TEST *CONT.*

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HOLISTIC REVIEW

Some institutions use the GRE but give it less importance and consider many other factors that can help determine if an applicant will be a successful graduate student in their program (University of Michigan, 2017).

Holistic review is defined by the University of Michigan (UM) as "a full file review, [in which] readers give careful consideration to all the credentials presented by the student as they assess the application materials for indicators that the applicant possesses qualities known to contribute to successful completion of the degree program" (2017). It includes variables, sometimes referred to as noncognitive variables, other than academic performance, like persistence, overcoming adversity, leadership, motivation and research potential. A holistic approach is gaining momentum: National Science Foundation Graduate Fellowships, Gates Foundation, University of California at Los Angeles, University of Minnesota, University of Texas at Austin, and UM use a holistic approach (University of Michigan, 2017).

Oregon State University utilizes the holistic review process at the undergraduate level. OSU developed a student evaluation system for undergraduate students based on the holistic approach called the Insight Resume. Retention, GPA, and diversity reportedly increased after the Insight Resume was implemented (Tomsho, 2009).

Many other noncognitive assessments exist; a list of instruments can be found here: https://ccrc.tc.columbia.edu/images/a-list-of-non-cognitive-assessment-instruments.pdf. Researchers did a meta-analysis of non-cognitive assessments and concluded that no test is perfect or more valid than others, and suggest that institutions find the "most valid measure for their intended purpose" and to use multiple measures. (Duckworth and Yeager, Educational Researcher 2015)