

 GRAD AND PROFESSIONAL SCHOOLS

Portfolio Review in Graduate Admissions: Outcomes of a Pilot Program

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The graduate enrollment management (GEM) landscape is rapidly changing as faculty and administrators recognize biases that may affect the graduate admissions process. At the same time, there is growing recognition and increased effort to advance inclusive excellence in higher education. Much of this work has been done at the undergraduate level and is only now beginning to reach graduate programs. The purpose of this article is to (i) discuss evidence for the need for change in the graduate admissions process, (ii) describe the development of a portfolio review protocol for graduate admissions in programs at a research university, and (iii) highlight a pilot program in which programs developed portfolio review processes and made admissions decisions using these protocols.

The admissions stage is a critical juncture in the graduate enrollment management process (NAGAP 2017) during which applicants vie for a limited number of positions. In practice, standardized test scores—for example, on the Graduate Record Exam (GRE)—weigh heavily in admissions decisions as many admissions committee members place great importance on them as an indicator of merit or deservingness to pursue graduate education (Croizet 2008, Posselt 2014). The College Board has noted that the GRE “does not and cannot measure all the qualities that are important in predicting success” (Educational Testing Service 2016a) and argues that multiple criteria should be used when evaluating applications and that the GRE is not intended

to be used as a screener. Nonetheless, some programs use these tests, including the GRE General Test, as a filter or to make a “first cut.” Initial cuts based solely on standardized test scores contribute directly to a lack of diversity in graduate admissions by eliminating a number of capable students—including women and people of color—because they obtain lower scores, on average, than do members of other groups (Miller and Stassun 2014). First-generation and socioeconomically disadvantaged students are also more likely to obtain lower scores on the GRE (ETS 2016b).

These lower scores have consequences for applicants and programs. As shown by Posselt (2014) and others (Cano, Wurm, Nava, McIntee, and Mathur 2018), the

mere presence of standardized test scores in an applicant's portfolio appears to lead admissions committee members to overlook other important qualities and experiences that applicants can bring to their programs. Not only does this mean that capable applicants are being denied the opportunity to advance their education because of one metric to the exclusion of other evidence, but the bias in favor of heavily weighting test scores also results in a homogenous student body (predominantly white, sometimes predominantly male, and of higher socioeconomic status), which has consequences for scholarly and creative endeavors. As researchers have found, when groups of learners are diverse, they demonstrate better problem-solving skills, experience more student engagement and better student outcomes, and make more robust intellectual contributions (Hong and Page 2004; Hurtado 2001; Hurtado and DeAngelo 2012; Valentine and Collins 2015).

Strategic enrollment management—and graduate enrollment management (GEM) efforts, specifically—have attempted to address and improve graduate student success by taking a comprehensive view of the entire student lifecycle (Dolence 1997, Sigler 2017). However, there have been no systematic efforts by centralized units to address challenges in the graduate application review process at a single institution. Most efforts seem to be at the individual program level as isolated disciplines begin to acknowledge the implications of reliance on an overly limited range of predictors in applicant selection processes. This article provides preliminary evidence from a new initiative by a centralized unit that demonstrates that it is possible to improve the selection of graduate students with a transparent and consistent review process, which in turn can positively impact GEM in diverse programs at the institution.

Wayne State University Portfolio Review Program

The Wayne State University (WSU) Graduate School is a centralized unit that provides recruitment, admissions, professional and career development, and Ph.D. employment outcome tracking services to WSU's eleven schools and colleges that offer graduate degree pro-

grams. The Graduate School certifies and confers the Ph.D. degree for all programs. In 2017, approximately 18 percent ($N=1,354$) of the 7,710 WSU graduate students self-identified as an underrepresented minority (black or African American; Hispanic/Latina/o/x; Native American, American Indian, or Alaskan Native; and/or Native Hawaiian or Other Pacific Islander). This percentage is slightly less than that of underrepresented undergraduate and professional students (approximately 20 percent; $N=4,031/19,379$).

In response to the literature, the Graduate School embarked on an exploration of holistic review as one framework by which to develop methods of improving the graduate applicant selection process so that transparent and consistent admissions decisions would be made for individuals and with attention to programmatic and strategic needs. Holistic review refers to “the consideration of a broad range of candidate qualities including ‘non-cognitive’ or personal attributes” and has been applied to medical school, graduate and professional school, and undergraduate admissions (American Association of Medical Colleges 2010, Kent and McCarthy 2016, Sedlacek 2017). As noted by researchers who study older “non-traditional” learners, non-cognitive variables such as self-efficacy, need for cognition, and a wider range of coping styles from which to choose may predict greater success in this population (Morris, Brooks, and May 2003; Warden and Myers 2017). The overemphasis of cognitive assessments and the concept of holistic review have also been discussed in employee selection. McKay and Davis (2008) note that “several scholars recently have criticized current models of personnel selection as overly cognitively loaded” (*e.g.*, Goldstein, Zedeck and Goldstein 2002). These theorists suggest that practitioners overemphasize the measurement of cognitive ability in selection models and fail to measure other meaningful correlates of job performance (*e.g.*, personality, tacit knowledge, interpersonal skills, decision making, motivation, etc.)” (155). This approach of assessing a broad range of abilities has also been found to improve equity during the personnel selection process (Pulakos and Schmitt 2009).

At WSU, “portfolio review” was selected to describe this method because of feedback from stakeholders that

“holistic review” had acquired negative connotations of lowered standards or simple “global” impressions about a candidate’s merit. “Portfolio review,” by contrast, also captures the fact that the entire portfolio is under consideration, including GPA; research, scholarly, creative, or applied experiences; writing and communication skills; and demonstrated evidence of non-cognitive skills such as persistence despite obstacles, motivation to pursue advanced studies, collaboration skills, community involvement, and entrepreneurship. The goal of WSU’s portfolio review was to invite a diverse and inclusive graduate student body to excel at WSU and to become leaders and innovators in Detroit and the world based on their achievements, work ethic, and values. This goal was clearly aligned with the WSU mission and strategic plan.

Data Collection at WSU

In addition to conducting a literature review on national trends and best practices in graduate admissions, the WSU Graduate School tested whether the GRE General Test scores were correlated with graduate academic performance as well as employment sector after graduation in a large sample of WSU doctoral alumni (Mathur *et al.* 2018). GRE verbal and quantitative subtest scores were not significantly correlated with cumulative grade point average or time to the Ph.D. degree. Furthermore, GRE scores do not predict employment in academic versus for-profit sectors.

The WSU Graduate School also conducted an experiment to determine how WSU faculty used application information to make admissions decisions (Cano, Wurm, Nava, McIntee, and Mathur 2018). Faculty participants from diverse disciplines read one of four variations of a vignette describing a candidate for doctoral admission who either had GRE scores in the 50th percentile or the 75th percentile and whose first-generation college student status was either mentioned or not. The results showed that GRE scores weighed heavily in decision making, especially when considering the first-generation college student status of the applicant. Faculty who themselves were continuing generation college students appeared to prefer GRE scores, especially if first-generation status was mentioned in the vignette. Because most

faculty are continuing generation students, these results suggest that when GRE information is present, it may inadvertently mitigate against first-generation college students, many of whom are from socioeconomically disadvantaged or marginalized backgrounds.

In sum, these findings suggest that graduate programs at Wayne State University, as at other institutions, intentionally or unintentionally place a disproportional amount of emphasis on GRE scores, despite evidence suggesting that standardized test scores may be a weak predictor of graduate student success (Miller and Stassun 2014, Smith and Garrison 2005). These data indicated that WSU was failing to admit outstanding students who are successful in every other way but their standardized test-taking skills. With these considerations in mind, portfolio review was designed to take multiple additional factors into account in the application review, with the standardized score being just one of several rather than the sole predictor of student success in graduate school.

Stakeholder Input

At the Wayne State University Graduate School, applicants, current students, and alumni, faculty, staff, and administrators voiced their concerns about the graduate admissions process, including the disproportional influence of standardized test scores and consequent prevention of qualified applicants’ obtaining admission to WSU despite abundant evidence about their drive, motivation, resourcefulness, and academic success and potential. Input was also solicited from programs about how these same students have been successful in other competitive programs. In addition, some program faculty reported that quantitative metrics, including GRE scores, enhanced admissions decision making. While some programs noted losing low-scoring applicants to other prestigious programs, others identified cases of students with low test scores who faced more academic difficulties. Other programs expressed reservations about standardized test scores but wished to require them to appear competitive with peer programs. The concerns and feedback received from faculty and staff demonstrated diversity across and within programs

about the importance of standardized test scores and other admissions metrics. For these reasons, the Graduate School did not eliminate GRE score collection but moved to portfolio review.

In addition, the Graduate School encouraged open discussion in meetings of the Graduate Council (the formal elected body of faculty and staff that advises the dean) and the semi-annual graduate directors meeting (which includes graduate program directors from every master's and doctoral program at WSU) about the variety of metrics used and valued by programs to make admissions decisions. Based on data collected at WSU as well as these discussions, the dean of the Graduate School presented the case for portfolio review at WSU leadership meetings including those of the provost's office, council of deans, and board of governors.

With support from university leadership, the graduate council, and graduate directors, Dean Mathur convened a Portfolio Review (PR) Committee in 2016 comprising faculty and administrators from a diverse set of doctoral programs: cancer biology, chemistry, communication, education, English, and psychology. This group provided valuable input into admissions processes that resulted in a new doctoral fellowship based on portfolio review and a portfolio review toolkit.

Graduate School Dean Fellowship Pilot

The PR Committee recommended that funds be expended for a fellowship to gain buy-in from programs in the initial adoption of the portfolio review concept. After some discussion, the committee recommended a competitive four-year graduate research assistantship that included a twelve-month stipend, full tuition scholarship, and subsidized health insurance. An announcement was sent to department chairs and graduate program directors of programs represented by the PR Committee. Participation was restricted to these departments to ensure commitment to the ideals and practical implications of the award. The award announcement stated, in part, "This fellowship program is a pilot aimed at recruiting talented doctoral students who are underrepresented in their field of study and

show promise for the rigors of doctoral studies through their personal and academic experiences and demonstration of grit, determination, and persistence regardless of scores." Note that the term "underrepresented" refers to many different forms of underrepresentation, including gender, age, ability, race, ethnicity, disability status, and national origin. Programs were free to identify various areas of underrepresentation given their programmatic needs, as well as the university mission, to provide a diverse and inclusive student community with educational experiences and opportunities to engage with co-learners with a variety of viewpoints. Also in these materials was the stipulation that funding from year to year was contingent upon remaining in good academic standing.

In addition to the requirements in their program of study, fellows were required to meet once per semester with their faculty mentoring committees (comprising their dissertation advisor and at least two other faculty mentors); participate in a doctoral student learning community supported by the Graduate School and consisting of monthly professional development meetings with other fellows and graduate students who receive other types of Graduate School funding and/or who experience underrepresentation in their units; file an Individual Development Plan annually and undergo an annual review in the department each year; and produce an annual progress report in consultation with the mentoring committee that includes professional development activities, goals, and outcomes over the past year.

Programs wishing to nominate a candidate submitted the following materials to the Graduate School: the applicant's entire Ph.D. program application package, the nominator's explanation of how the applicant met the criteria for the fellowship, a rationale for the mentoring committee membership, signatures indicating mentors' willingness to mentor the student, and a brief essay (300–500 words) by the applicant that described the academic and/or personal experiences that demonstrate grit, determination, persistence, and resilience and how these experiences prepared the applicant for the rigors of graduate study. Six nominations were re-

ceived: one each in history and education, two in psychology, and two in cancer biology. Four candidates were selected from the following Ph.D. programs: cancer biology (two), history, and psychology. All four applicants accepted the fellowship offer and matriculated in fall 2016. This first cohort is now in its second year and continues to meet respective programmatic milestones.

Portfolio Review Toolkit

The Portfolio Review Committee also created a portfolio review toolkit to support programs with their portfolio review efforts. The toolkit provides an updated literature review of the evidence in support of portfolio review and systematic review of application packages, including literature cited in this article. Also included in the toolkit were guidelines for developing a portfolio review process in an intentional manner, including thoughtful reflection on the diverse experiences that programs value. It emphasized that this reflection can take time, and much of this work must be completed before the next application cycle. Part of this work includes reviewing the institutional and program mission statements and strategic plans, many of which include statements about the value of diversity and inclusion from an educational and training perspective. Programs are also encouraged to consider how certain student qualities and experiences may enhance the mission and strategic goals. For example, programs can review past admissions decisions to examine the impact of their current processes on meeting strategic goals. Once this preliminary work is completed, programs can focus on how the existing admissions process helps or hinders the submission and evaluation of these qualities and experiences and identify assessments that may provide desired information. (See Table 1 [on page 12] for a sampling of questions that can be used during this reflection phase.) Note that themes addressed with these questions must be revisited throughout portfolio review development to ensure continual program improvement even after the initial practice of portfolio review.

Reflecting on these questions is also likely to spark a desire to more clearly communicate application expectations to prospective students. To assist programs

with this task, the committee developed clear guidance regarding applicants' personal statements that directs them specifically to include evidence of persistence and overcoming obstacles as well as activities and experiences (*e.g.*, participation in pipeline programs like McNair or NIH BUILD programs; military or public service; working with underserved populations) that could contribute to their ability to provide a unique perspective. This guidance is posted on the WSU Graduate School website.

In addition, as noted by Posselt (2014, 2016) and Sedlacek (2017), it was important that applications were evaluated in a consistent and methodical manner. Therefore, rubrics were also created to provide programs with customizable templates for evaluating both personal statements and entire application packages based on the results of the programs' decisions about the qualities and experiences they deemed most valuable. (See Table 2 [on page 13] for a personal statement rubric template and Table 3 [on page 14] for an application rubric template.)

Finally, programs were advised to treat the admissions process as an opportunity for continuous program improvement. Once rubrics have been created and implemented, programs must annually evaluate the effectiveness of the tools to achieve desired outcomes and refine the process as needed.

Dissemination

In an iterative manner, the toolkit was shared with the Graduate Council, graduate directors, and WSU leadership for additional refinement and approved by WSU's Office of General Counsel to ensure consistency with state and federal laws. The toolkit has now been posted online and made available to programs. Four programs have already applied these tools; their efforts to improve admissions processes are summarized below.

Ph.D. in Cancer Biology

The cancer biology graduate program (CBGP) in the Department of Oncology, housed in the WSU School of Medicine, has been in existence since the 1980s and currently has 25 graduate students pursuing the Ph.D. De-

TABLE 1 ► Questions to Consider When Developing Portfolio Review Processes

Explore Program Values	► What are the missions and strategic plans of our institution and its units? How does our program align with elements of these plans? ► What are the diverse qualities and experiences of students that ideally advance these missions, and what qualities and experiences do students need to succeed in the program, in a lab, or a work group—e.g., particular research, creative, or professional skills or experiences? Non-cognitive factors such as the ability to work independently and/or on a team, ability to work with team members holding diverse perspectives, ability to persist despite setbacks; volunteer or service activity, communication skills, willingness to work with diverse populations? ► What stakeholders must be involved in the process from its initiation for it to be successful? To what extent must administrators or leaders espouse portfolio review? ► What rationale or justification is appealing to stakeholders? ► Are there meaningful incentives that can be applied to encourage buy in?
Develop Assessment Methods	► What evidence would provide reliable information about desired experiences and skills? ► Is it clear to applicants that this information is being reviewed and where they should include such information? How should this information be communicated to prospective students? ► How should the evidence in admissions decisions be weighted? ► Are the various pieces of evidence compensatory—i.e., can high ratings in some areas make up for low ratings in other areas? Do low scores on any variables eliminate applicants from further consideration? ► How will these data be collected—i.e., what materials should be required of applicants? ► What type of rubric can be developed to assess portfolios or aspects of portfolios?
Implement Portfolio Review	► What type of training should be offered to implement portfolio review and use of rubrics? ► What value is attached to these qualities and experiences, and how will the admissions committee reliably weigh these pieces of data in a consistent fashion so as not to recreate prior processes? ► To what extent do rubrics align with the values stated above? ► What amount of interrater agreement is desirable? How will disagreements be handled?
Evaluate	► Does the application of rubrics to applications submitted in prior years result in different admissions decisions? Why? ► Does the application of rubrics to the current year's pool result in an admitted cohort that meets program learning outcomes or mission statements? ► How do students admitted under portfolio review perform in the program? What metrics can be used to measure the success of portfolio review?

cisions about graduate admissions and stipend support in the School of Medicine are overseen by a centralized Interdisciplinary Biomedical Sciences (IBS) Admissions Committee comprising nine representatives from each of the graduate programs in the School of Medicine; the committee functions as an initial review panel structured similarly to a grant review panel. According to this process and based on a standard rubric for evaluating candidates for IBS fellowships, the CBGP IBS committee members (in consultation with the graduate program director) nominate applicants for consideration by the IBS review panel. Applications are scored on several dimensions using a rubric (see Table 4, on page 15). This

rubric is based on years of experience indicating that the GRE score is only one of many factors considered and certainly is not the major criterion for admission (*i.e.*, accounts for 13.3 percent of the total points).

The portfolio review process in CBGP has provided a more objective and reasonably holistic evaluation of student motivation and attributes for success in graduate study. However, some challenges must be addressed on a regular basis. For example, there is a lack of consistency in scoring among reviewers from different academic departments, so including three raters and a committee discussion has been essential to minimize problems related to interrater agreement. Similarly, reviewer bias toward

TABLE 2 ► Sample Wayne State University Personal Statement Rubric¹

Quality	Evidence and Scoring Guideline				Score
	1	2	3	4	
Writing Style/Mechanics	Incomplete or run-on sentences, little and/or poor punctuation	Sentence structure and punctuation needs editing	Sentences varied, some awkward. Punctuation appropriate for the most part, no major errors	Excellent sentence structure, varied in composition and length. Punctuation appropriate, error-free reflecting thorough proofreading	—
Quality of Research or Scholarly Experience	No research experience, including no relevant research coursework	Research experience limited to coursework; no additional research experience	Research experience outside the field of interest with transferable skills to proposed area of study OR some basic research experience beyond coursework (e.g., data entry, scheduling appointments)	Excellent research experience in the field of interest (e.g., meaningful and extensive contributions and/or research skills, perhaps evidenced by honors thesis, publications, presentations, or other scholarly products;)	—
Persistence and Motivation	No evidence of persistence in achieving long-term goals or motivation for the field of study	Some evidence of persistence and motivation but not explicitly stated	Evidence of persistence and motivation provided with no accompanying information about relevance to the field of study	Evidence of persistence and motivation including initiative in seeking out opportunities and/or explanation of how the evidence is relevant to the field of study	—
Other Qualities Specified by Program Admissions Committee²	Using "Unique Perspective" as an example: No evidence of ability to share unique perspectives to enhance learning or contribute to the program needs/goals	Some evidence of ability to share unique perspectives but not explicitly stated	Evidence of ability to share unique perspectives with no accompanying information about relevance for the field of study	Evidence of ability to share unique perspectives and an explanation of how the evidence is relevant to the field of study	—
Average Score (Total ÷ <i>n</i> Items) ³					⇒

¹ The purpose of the rubric is to provide a standardized assessment of the personal statement across applications. Admissions committees reach final admissions decisions through discussion and consensus and in accordance with Wayne State University's policies.

² For example, the ability to contribute a unique perspective; leadership skills; applied skills relevant to the degree program.

³ Insert average into full application rubric.

one's "home department" is likely. Use of the rubric by a centralized committee with local representatives largely

ameliorates this challenge. Finally, while the workload for committee members is significant, the reviewers are

TABLE 3 ► Sample Wayne State University Graduate Application Rubric¹

Application Criteria ²	Evidence and Scoring Guideline				Score
	1	2	3	4	
Written Communication Skills Evidence obtained from: personal statement, writing sample, feedback from letters of recommendation	Incomplete or run-on sentences, little and/or poor punctuation	Sentence structure and punctuation needs editing	Sentences varied, some awkward. Punctuation appropriate for the most part, no major errors	Excellent sentence structure, varied in composition and length. Punctuation appropriate, Error free, reflecting thorough proofreading	—
Academic Preparation³ Evidence obtained from: transcripts, standardized test scores, personal statement, feedback from letters of recommendation	GPA < 3.0 (exception request must be made to the Graduate School) and/or total Q + V < n; AW < n	GPA 3.0–3.5 and/or total Q + V between n–n; AW between n–n	GPA 3.51–3.74 and/or total Q + V between n–n; AW between n–n	GPA 3.75–4.00 and/or total Q + V between n–n; AW between n–n	—
Research/Scholarly/Technical Skills Evidence obtained from: transcripts, personal statement, feedback from letters of recommendation	No research experience, including no relevant research coursework	Research experience limited to coursework; no additional research experience	Research experience outside the field of interest with transferrable skills to proposed area of study or some basic research experience beyond coursework (e.g., data entry, scheduling appointments)	Excellent research experience in the field of interest (e.g., meaningful and/or research skills, evidenced by honors thesis, publications, presentations, or other scholarly products)	—
Persistence and Motivation Evidence obtained from: personal statement, feedback from letters of recommendation	No evidence of persistence in achieving long-term goals or motivation for the field of study	Some evidence of persistence and motivation but not explicitly stated	Evidence of persistence and motivation provided with no accompanying information about relevance for the field of study	Evidence of persistence and motivation including initiative in seeking out opportunities and/or explanation of how the evidence is relevant to the field of study	—
Ability to Contribute a Unique Perspective Evidence obtained from: personal statement, feedback from letters of recommendation	No evidence of ability to share unique perspectives to enhance learning or contribute to the program needs/goals.	Some evidence of ability to share unique perspectives but not explicitly stated	Evidence of ability to share unique perspectives with no accompanying information about relevance for the field of study	Evidence of ability to share unique perspectives and an explanation of how the evidence is relevant to the field of study	—
Average Score (Total ÷ n Items)					⇒

¹ The purpose of this rubric is to provide a standardized assessment of admissions materials across applications. Admissions committees reach final admissions decisions through discussion and consensus and in accordance with Wayne State University's policies.

² Other criteria that program may include are oral presentation skills, clinical or applied experiences, community engagement or involvement, ability to take the perspectives of other people, or other experiences deemed necessary for student and programmatic success.

³ Programs are encouraged to define rubric scores (scores of 1–4) for academic preparation based on research and program needs and requirements as well as university requirements.

Weighting Criteria (weighting of items may be modified by programs to reflect their needs; the following is only a template):

- 20% Written Communication Skills
- 20% Academic Preparation
- 20% Research/Scholarly/Technical Skills
- 20% Persistence and Motivation
- 20% Ability to Contribute a Unique Perspective to Research and/or Training

TABLE 4 ► Application Rubric Used by Cancer Biology/IBS Program

Application Criteria and Scoring Guideline								Max Score	Score
Academic Record									
Graduate Transcripts: <i>Require</i> ≥ 2 semesters and ≥ 16 credit hours in graduate-level courses									
International Transcripts: <i>Require</i> conversion to GPA by WSU Grad Admissions									
GPA ≥	Conv. to... (Score)	GPA ≥	Conv. to... (Score)	GPA ≥	Conv. to... (Score)	GPA ≥	Conv. to... (Score)	15	—
4.0	15	3.7	10	3.4	7	3.1	4		
3.9	12	3.6	9	3.3	6	3.0	3		
3.8	11	3.5	8	3.2	5	<3.0	0		
Graduate Record Examination									
%	Verbal, Quantitative ≥ Conv. to... (Score)	%	Conv. to... (Score)	n	Analytical ≥ Conv. to... (Score)	n	Conv. to... (Score)	13	—
90	4	60	1	6.0	5	4.5	2		
80	3	≤50	0	5.5	4	4.0	1		
70	2			5.0	3	<4.0	0		
Enter sum of Verbal + Quantitative + Analytical converted scores into right Score column									
Personal Statement									
Relevant experiences in (evidenced by prior accomplishments), motivation towards, and long-term goals in biomedical field(s) & research.								15	—
References (Three Required)									
Evaluation of biomedical academic and research interests & accomplishments, duration of interaction, consistency among letters								15	—
Research Experience									
<i>Undergraduate Accomplishment</i>		<i>Graduate Accomplishment</i>		<i>Publications Accomplishment</i>					
	Score		Score		Score				
Significant Research (summer, senior thesis, etc)	8–9	Thesis or ≥ directed research project	10–11	Abstract(s)/non-peer-reviewed pub(s)	12–13			15	—
Labs 'A'	7			Authored peer-reviewed research publication (PubMed verified)	14–15				
Labs 'B'	6								
Enter sum of <i>one</i> category into right Score column									
Bonus (must explain)								5	—
Interview									
<i>Attribute</i>	<i>Score</i>	<i>Justify if Score ≥</i>							
Scientific Knowledge	0–10	6						25	—
Research Interest & Enthusiasm	0–5	3							
Communication	0–10	6							
Enter sum of scores into right Score column									
Total Score								⇒	

reminded regularly about the value of this work and the success of admitted students over the past 20 years. Service on this committee is highly valued by administrators during annual reviews, which increases buy-in.

Ph.D. in English

Traditionally, the WSU English Department has considered the entire application for Ph.D. applicants. As a result of considering issues outlined by the WSU Graduate School's portfolio review initiative, the department undertook the additional step in September 2016 of creating rubrics for evaluating the applications in order to improve and standardize evaluation practices for the fall 2017 cycle. Through a series of meetings throughout the fall semester, the department adapted rubric templates developed the previous summer by the Portfolio Review Committee. The adaptations consisted of developing rubrics for the evaluation of all materials in the file and a separate rubric that followed published hiring criteria for evaluating funding decisions. The admissions rubric now emphasizes a variety of skills and experiences thought to predict student engagement and retention as well as timely completion, with all categories weighted equally. The Graduate Committee conducted a norming exercise, and the evaluation of a selection of past applicants through this method demonstrated that with the consistent application of the criteria that were developed, they likely would have had different outcomes in some circumstances, which would have resulted in more offers of admission and a more diverse cohort. When committee members deliberately prioritized resilience and diverse intellectual perspectives, they valued individual applications differently.

During the 2017–18 cycle, they reviewed the Graduate School's admissions and funding rubric templates and adjusted the admissions rubric to include weighted areas rather than having all areas remain of equal weight (*see* Table 5, on page 17). The six members of the Graduate Committee independently evaluated and scored the applicants. Then the committee as a whole reviewed the ranked list formed from averaging individual rankings as a starting point for a conversation about the applicants. With few exceptions, they felt that the

ranking arrived at in this way was an accurate opinion of the group. During the 2016–17 admissions cycle, the Department of English received 48 applications to its Ph.D. program, of which 28 were evaluated as complete and reviewed holistically for admission. Admission was offered to nineteen students; seven matriculated in fall 2017; 28.5 percent were from underrepresented minority groups, an increase compared to most recent prior years. While the process of creating and using the portfolio review rubrics was intensive and required a great deal of dialogue in Graduate Committee, members have found that doing so seems to be increasing consistency in reviewing applications—which results, in turn, in increased diversity in Ph.D. admissions even though applications could not be assigned points based on the underrepresented minority status of the applicant (consistent with state law).

Ph.D. in Psychology

WSU's Psychology Department offers five doctoral programs. One program—Industrial/Organizational (I/O) Psychology—conducted a pilot implementation of portfolio review as recommended by the WSU Graduate School. The field of I/O psychology includes the development, validation, and application of procedures for selecting employees, so the task of considering a revised model for selecting graduate students seemed appropriate.

Faculty members began by discussing whether there were graduate student experiences they wanted to assess in addition to those already assessed through the existing graduate admissions process. That process included submission of transcript(s), GRE scores, a personal/professional statement, and three letters of reference from academic sources (*i.e.* faculty members). They decided to require an additional letter of reference from a non-faculty source to comment specifically on non-cognitive factors such as teamwork, resilience, and conscientiousness (*e.g.*, willingness to contribute in all phases of a project, tendency to complete assigned work outside the classroom on time). The area also shifted the submission of a writing sample from “recommended” to “required” because writing skills were highly valued; guidance was provided to applicants on the desired length, preference

TABLE 5 ► Department of English Rubric for Evaluating Ph.D. Applications for Admission¹

Category	Category Strength ² (weak = 1; strong = 2)	Category Weight ³	Calculated Score	Notes
Academic Background: Coursework, research projects, presentations, and publication	—	0.20	—	
Statement of Purpose: Reveals applicant's sense of professional purpose for the Ph.D. in English	—	0.25	—	
Writing Sample: Reveals applicant's ability to develop an argument/analysis in English studies	—	0.15	—	
Letters of Recommendation: Support applicant's readiness to begin a Ph.D. in English studies	—	0.10	—	
Persistence and Motivation: Applicant provides evidence of potential persistence and motivation in pursuing a Ph.D. in English studies	—	0.10	—	
Perspective: Applicant provides evidence of his/her ability to share unique perspectives relevant to pursuing a Ph.D. in English studies	—	0.10	—	
Department Resources: Current faculty has appropriate expertise for applicant's professional goals in English studies	—	0.10	—	
Total Score		⇒		

¹ The purpose of this rubric is to provide a standardized holistic assessment based upon evidence gleaned from the applicant's background, statement of purpose, transcripts, GRE scores, writing sample, letters, persistence and motivation, unique perspectives, and department resources.

² Indicates readiness to begin a Ph.D. in English Studies at WSU; enter whole number only.

³ Sum of weights should equal 1.00.

⁴ Calculated Score = Category Strength * Category Weight.

for a research-oriented writing sample, etc. Finally, the program provided specific guidelines about what applicants should address within their personal/professional statement (*e.g.*, interest in the field)—guidelines that had not been provided previously.

The review process included having all six faculty members review all applications (approximately 70). All candidates who were recommended for consideration by at least one faculty member were discussed in detail. Points of disagreement were explored by asking, “What

did you see that others might have missed that led you (not) to support the applicant?” These conversations allowed the group to consider information that might be evaluated differently in the future. The program faculty did not develop scoring rubrics for use *a priori* when evaluating applications, in part because they did not anticipate the amount of time that would be required to reach consensus on the components to assess and then to do this work. However, they presented their process to the department at large in order to provide realistic

expectations of workload and time to develop portfolio review processes.

Master's of Public Health

In March 2016, the WSU master's in public health (MPH) leadership urged the admissions committee to consider a portfolio review process in order to increase the number and diversity of the student body. Readings and resources (AAMC 2010; ETS 2015a, 2015b; Kent and McCarthy 2016) were provided to explain approaches and to build committee members' confidence that a change to a portfolio review strategy would be consistent with the program mission to "recruit and retain high caliber students with diverse educational and experiential backgrounds." The committee discussed and endorsed the concept of portfolio review and decided immediately that it would review all completed applications, changing the previous policy that only applicants meeting a specific GPA and GRE threshold would be considered for admission.

Since that time, MPH admissions committee deliberations have focused on indicators of successful degree completion. (The WSU MPH is an accredited professional degree program for which a graduation rate of 70 percent within six years is required to avoid probationary status.) In order to ensure that the materials submitted by each applicant would be reviewed consistently, the admissions committee developed a rubric called the "admissions scorecard." The scorecard prompts review and scoring of twelve items in four domains (see Table 6, on page 19). Each of these review criteria is rated on a scale of 0 (poor) to 3 (excellent) by two committee members.

Because the twelve review criteria are weighted equally, there are numerous means to a high or low score, and a high score is attainable with lower academic performance if the other items are highly rated. For this reason, a scorecard cut point based on total score is not used; rather, the scorecard has proved useful for guiding review, providing structure to review/evaluation of the admissions materials, and standardizing the discussion of applicants at the monthly admissions meeting. In fall 2017, The MPH program explored

indicators of scorecard performance and noted acceptable interrater reliability ($ICC = 0.840$; $n = 75$). The program also retrospectively reviewed ten MPH students admitted in fall 2015 and found a correlation of 0.766 between the rubric score and MPH GPA. It was notable that the scorecard total score was strongly associated with MPH GPA despite the fact that only three of the twelve scorecard items are explicitly academic (*i.e.* college GPA, GRE score, and academic aptitude gleaned from letters of recommendation). This suggests that the portfolio review consideration of a variety of attributes contributes to admitting students with a variety of strengths that forecast graduate success. To further improve processes, the program is considering adding GRE scoring guidelines to the scorecard (as suggested by the WSU Graduate School) or waiving the GRE requirement.

Challenges and Opportunities in Portfolio Review

As the WSU Graduate School undertook this process, a robust and lively discussion took place among administrators and faculty from the programs described above. With sample rubrics to examine, programs have begun to think more concretely about the portfolio review process. The researchers have found that programs are becoming more interested in developing portfolio review mechanisms now that they have seen other programs begin to implement the process. Nevertheless, a number of valid concerns continue to be raised.

■ **Concern #1:** "Portfolio review will result in admitting less-qualified students." There are two responses to this concern: First, faculty can be offered local and national research evidence on the predictive value of standardized test scores for student success. Second, it may be helpful to operationalize "less qualified" or even the term "merit" as some faculty use scores as a way to judge deservingness to pursue further education (see Croizet 2008). On the basis of evidence reviewed above, the authors reject the notion that standardized test scores are the sole predictor of graduate student success or that they assess deservingness to pursue graduate study. The statement that less-qualified students will gain admittance as a re-

TABLE 6 ► Master's of Public Health (PH) Rubric

Metric	Metric Specifics	Score ¹ (0–3)	Comments
Academic Aptitude			
GPA (≥3.0)		—	
Math Ability ²	Performance notes:	n/a	
GRE or USMLE ³			
GRE	USMLE		
Category Percentile	Scoring Note	Baseline	Scoring Note
Verbal ≥ 60th		Step 1: min 192; mean 229	—
Quantitative ≥ 55th		Step 2: min 209; mean 240	
Writing ≥ 50th		Step 3: min 196; 225 mean	
TOEFL ⁴	Performance notes:	n/a	
Personal Statement			
Personal Experiences with PH	How PH affected applicant's life, a loved one, or a community they are connected to	—	
Why Interested in PH Career	Hypothesized career path	—	
Why Interested in WSU		—	
Communication/Writing Skills	Paragraph organization, grammar, ability to write effectively	—	
Resume			
Additional Academic Experiences	Research volunteering, student organizations, etc.	—	
Professional Experiences	May or may not include PH	—	
Presentation	Content formatting, organization, and clarity of writing	—	
Letters of Recommendation			
Academic Aptitude	Applicant's academic potential	—	
Professionalism	Applicant's professional experiences and potential	—	
Public Health Experience and Interest	Degree to which letters of reference speak to applicant's interest in a public health career	—	
Total Score	⇒		

¹ Enter whole number for score: 3 = Excellent; 2 = Good; 1 = Marginal; 0 = Poor.² Evidence of math ability sufficient to be successful in biostatistics and epidemiology is considered but not scored.³ Applicants are scored on either their GRE or their USMLE scores.⁴ TOEFL score is considered but not included in the total score. TOEFL score to scorecard conversion: 105–120 = 3; 90–104 = 2; 79–89 = 1.

sult of portfolio review also presumes that efforts to achieve diversity are at odds with efforts to achieve excellence. As noted by Williams, Berger, and McClendon (2005), the perceived relationship between diversity and excellence varies from institution to institution. According to the Inclusive Excellence Change Model, diversity is a critical component for achieving excellence. Students and faculty attain excellence by working in diverse groups, which can stimulate creative and novel approaches to problem solving and offer skills development to work in an increasingly culturally diverse society.

WSU's strategic plan is aligned with this conceptualization of inclusive excellence. The plan includes the following objectives (among others): "Celebrate and increase the understanding and appreciation of diversity and inclusion"; "design and implement recruitment strategies that result in increased numbers of qualified and diverse underrepresented students, faculty, and staff"; and "develop and enhance programs focused on understanding multiculturalism and building diversity and inclusion competencies and expertise." Other institutions' efforts to embrace portfolio review do not appear to have lessened excellence in student outcomes, but this is an empirical question. WSU intends to conduct research to explore this question locally and will disseminate findings to the campus community.

- **Concern #2:** "*Rubrics are unnecessary as long as faculty review all application elements.*" Faculty members may balk at quantifying their evaluations of applicants because it takes time to create a rubric about which there is consensus. However, there is evidence that without some structure and common method of evaluation, implicit biases about performance and skills can still guide the decisions of well-meaning people (Posselt 2014, Sedlacek 2017). Research on personnel selection also demonstrates that unstandardized evaluations can lead to bias during selection and evaluation processes in the workplace (Huffcutt *et al.* 2001, McDaniel *et al.* 1994). Rubrics are absolutely necessary to ensure a reviewer's consistent interpretation across candidates and to prevent rater

drift. Rubrics still allow room for individual differences in admissions committee member ratings but reduce the likelihood that certain elements of the application are not under- or over-weighted in a manner that reifies or reinforces existing biases and unfounded beliefs about merit.

- **Concern #3:** "*Portfolio review is illegal.*" This concern arises out of confusion about the purpose of portfolio review. The aim of portfolio review is to create a consistent and transparent method of reviewing applicants' materials that advances strategic goals, needs, and missions of the institution and program. As noted in the decisions of prominent legal cases in Texas (*Fisher v. University of Texas* 2013, 2016) and Michigan (*Grutter v. Bollinger* 2003), review processes that appraise multiple elements are legal and appropriate in certain circumstances. Violations of federal law and some state laws occur when decisions are based solely on race. It is essential that programs consult on a regular basis with institutional legal counsel about state and federal laws. It is important to emphasize that moving away from reliance on evaluation systems for which there is documented evidence of bias toward a system that has less bias is not illegal under federal law or any state law.

- **Concern #4:** "*Portfolio review is too time consuming.*" It is true that the development and implementation of portfolio review takes time and effort. Faculty time is already divided among many responsibilities, including research, teaching, and service. Yet this concern alone does not justify the status quo, especially when it impacts a program's ability to recruit and retain the best talent to meet program goals. Programs are most likely to be successful when the long term is considered. For example, at least one year prior to implementation, programs can engage in the self-reflective process described earlier to identify the experiences and skills required for success and that meet program and institutional strategic needs. Programs with large numbers of applicants may devise systems by which candidates are assessed by a subset of faculty raters. Additionally, as raters become more familiar with the evaluation

process and agreed-upon rubrics, the time demands of the assessment process per candidate decrease.

■ **Concern #5:** *“We’ve always done reviews this way, and our students are successful.”* Programs are to be commended for working on admissions processes that enroll students who succeed in meeting program outcomes. Programs can also be encouraged to re-evaluate their processes through the lens of portfolio review and to identify gaps related to diversity and inclusion or metrics that are even more aligned with the program’s mission, values, and goals as well as principles of inclusive excellence. Programs can also be encouraged to evaluate their evidence, including student and alumni tracking surveys. If programs rely on anecdotal evidence to evaluate their success in recruiting and retaining students, it may be useful to also provide institutional data.

■ **Concern #6:** *“There is no standardized way to rate qualities and experiences. A rubric dehumanizes applicants.”* Individual raters may impose their own biases or preferences on each portfolio, and the thought of reducing these qualities and experiences to a number may seem difficult at first; however, research demonstrates that failing to utilize a consistent and transparent rating system can result in individual biases overriding programmatic goals and needs in the admissions process. Indeed, Posselt (2014) and others show how intelligent, well-meaning faculty members select students who are similar to themselves or who fit the historical ideal of a successful student even when other candidates show equivalent likelihoods of success. Unfortunately, these unstandardized processes have resulted in inequities in higher education and a loss of talent in the graduate student body. Sedlacek (2017) offers questions that can be used in the admissions process to identify the unique contributions each applicant can make, thereby mitigating concerns regarding the possible dehumanization of applicants during the admissions review process. As described above, it is possible to resolve rating disagreements and even to achieve high interrater agreement with training, clear decision rules, and discussion along the way. Transparent

and consistent processes ensure that each individual applicant is considered with respect.

Addressing the Challenges

The most important lesson learned is that developing and instituting portfolio review is a long-term process that requires constant communication, including the sharing of data from professional societies, the institution, and specific programs. Education also must address the benefits and logistics of portfolio review as well as misconceptions. In addition, it is essential that administrators help educate and inspire their departmental colleagues. As new members join the faculty from other institutions, as administrators leading the process move into other appointments, retire, or return to the faculty, and as faculty champions of the process move on or retire, the educational activities—both for why and how to conduct portfolio review—must be ongoing. There is a never a time when communication with stakeholders ends.

Another lesson learned is that there is a need for centralized guidelines but local control. Programs must have agency and autonomy to tailor their review processes to meet their needs. Portfolio review must be considered part of a broader graduate enrollment strategy that includes adequate outreach and recruitment efforts to ensure diverse applicant pools. Likewise, relationship building is necessary to help students from all backgrounds feel included. Finally, portfolio review does not end with enrollment. Consideration and resources should be directed to supporting students from all backgrounds after they enroll and until they graduate, demonstrating “integrated interdependence” in graduate enrollment circles (Connor, LaFave, and Balayan 2015). Alumni often are excellent mentors and resources for students just entering the programs.

Even with the best of intentions, some programs may find it difficult to prioritize portfolio review. Financial incentives are one means of enhancing engagement in portfolio review efforts. For example, the fellowships described earlier encouraged programs to explore non-cognitive assessment and admissions. In addition, the WSU Graduate School now bases funding and awards, in

part, on programs' development and implementation of portfolio review processes, especially those that recognize the limitations of standardized tests and collect information on applicants' other qualities and experiences that predict graduate student success. The next step will be to incentivize the use of the toolkit, which will be done by linking funding (*e.g.*, fellowships, scholarships, graduate research assistantships) and faculty and student awards (*e.g.*, teaching, service, and mentoring awards) to departments' development and creation of tailored portfolio review practices for their own programs. Special consideration will be given to programs that create or use a variety of metrics—in addition to or instead of standardized scores alone—to assess valued qualities and experiences that predict graduate student success.

Conclusion

Centralized graduate schools have an important role to play in supporting graduate programs in their enrollment management efforts. By engaging programs and reviewing local and national evidence as well as convening a committee to investigate portfolio review as an option for graduate admissions, the WSU Graduate School has taken the lead in providing guidance and structure based on best practices to improve transparency and consistency in the process. With portfolio review, the WSU Graduate School hopes to implement a broader definition of merit in order to recruit and train the highest caliber student body, respecting disciplinary needs, in a manner that aligns with the mission of Wayne State University and with graduates who will contribute to intellectual and economic capital locally, nationally, and globally.

GEM professionals at other institutions can embark on a similar process by engaging in three initial

steps to understand the needs and unique challenges of their programs: fact finding, self-reflection, and implementation. First, engage in a data collection phase. Invite champions of holistic or portfolio review at the institution to share their efforts with colleagues. Use this opportunity to learn about the challenges and the outcomes of these processes and why they work in the particular programs. With this group and other representatives who are interested in portfolio review, conduct analyses to identify the outcomes of current admissions practices: What are the demographic characteristics of admitted students? What are the degree completion rates and time to degree for enrolled students? What about other outcomes that programs and the institution value, such as research productivity, community engagement, or entrepreneurship? See Table 1 [on page 12] for questions to promote related conversations.) Do programs have the data they need to examine these valued outcomes? If not, explore how the institution might collect them. Data collected in this stage will help identify directions for programs to initiate portfolio review processes. Second, create a timeline for programs to reflect on their values and develop an initial assessment plan. (Table 1 includes a number of thought-provoking questions to help programs develop methods by which to implement portfolio review.) A realistic timeframe to engage in discussion is needed to increase the likelihood that change can be implemented. Third, disseminate results to broaden the conversation regarding GEM, inclusive excellence, and doctoral outcomes. Continued research is necessary to determine the benefits and challenges of portfolio review and to enable all programs and institutions to benefit from best practices in GEM.

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