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Student perceptions of teaching excellence: A comparison of a public and private university

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Abstract

The purpose of the study was to examine student perceptions of teaching excellence at different types of higher education institutions. The pressure to publish, larger class sizes, globalization, technological innovation greater accountability for learning, and justification of a college degree's worth make teaching excellence more difficult to attain. A byproduct of this pressure is an increased emphasis on student evaluations. Using two conjoint studies from a large public and a medium-size private university, assignments, exams, and grading were identified as the most important components for students in assessing teaching excellence. The least important was the faculty-student interaction, which may be caused by grade inflation. The dimensions were taken from a previously validated scale.

Keywords

conjoint analysis, grade inflation, student perceptions

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Student Perceptions of Teaching Excellence: A Comparison of a Public and Private University

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Abstract

The purpose of the study was to examine student perceptions of teaching excellence at different types of higher education institutions. The pressure to publish, larger class sizes, globalization, technological innovation greater accountability for learning, and justification of a college degree's worth make teaching excellence more difficult to attain. A byproduct of this pressure is an increased emphasis on student evaluations. Using two conjoint studies from a large public and a medium-size private university, assignments, exams, and grading were identified as the most important components for students in assessing teaching excellence. The least important was the faculty-student interaction, which may be caused by grade inflation. The dimensions were taken from a previously validated scale.

Keywords: conjoint analysis, grade inflation, student perceptions

Introduction

The importance of faculty in student learning is indisputable (Prosser et al., 2003). Faculty cannot succeed without a "conducive environment that sustains their performance" (Jalal, 2020, p. 8). Faculty are under pressure impinging on their ability to impart knowledge. Accountability to document learning and a college degree's value have increased (Kelchen, 2018). Simultaneously, teaching excellence has been more elusive because of increasing class sizes, technological innovation, and globalization (Smart et al., 2003). Publishing requirements are growing for many resulting in a siphoning of precious class preparation time (Schimanski & Alperin, 2018). These conditions have put a renewed emphasis on student evaluations. They comprise an important component in faculty promotion and tenure (Gibbs, 2001). There is also doubt about the accuracy of student evaluations to measure learning. Small or no correlations have been found between student evaluations and learning (Clayson, 2005, 2009; Uttl et al., 2017). Student evaluations also are influenced by personal preference (Gross et al., 2009). Grades and evaluations are positively related (Hoefer et al., 2012; Isely & Singh, 2005) and grade inflation is the result (Bok, 2003; Isely & Singh, 2005; McPherson et al., 2009). Students are treated as customers (Saje, 2005;

Zimmerman, 2002). Researchers have argued that faculty, especially untenured faculty, pander to students for high evaluations by offering high grades regardless of effort (Kanagaretnam et al., 2003; Zimmerman, 2002). The pressure may be greater for adjuncts. Many adjunct faculty employed semester-to-semester feel greater pressure to achieve high student evaluations (Sonner, 2000).

Grade inflation describes "student attainment of higher grades [that are] independent of increased levels of academic attainment" (Eiszler, 2002, p. 489). Grades become compressed at the scale top where the separation between the best students and others diminishes (Rosovsky & Hartley, 2002). This is one example of how student evaluations become one cause of grade inflation. Interdepartmental competition for students, peer pressure from colleagues, and graduation rates are also to blame (Smith & Fleisher, 2011).

The authors examined what constitutes teaching excellence from faculty and student perspectives by using a previously validated scale. After reviewing the literature, the authors settled upon a validated scale that correlated learning and final examination scores to answer the question and measure the components of teaching excellence and their importance for students. Since learning is the goal of teaching and the scale correlates well with learning, these components of teaching excellence were deemed appropriate. This paper sought to determine if grade inflation influences those components.

Literature Review

Teaching Excellence: Student Perspective

Stronge (2007) conducted a meta-analysis on teaching effectiveness. Four dimensions were recognized: *Instructional effectiveness* included complexity, content and direction clarity, technology to improve learning, high student expectations, and questioning. *Student effectiveness* was the assessment and feedback category. The *learning environment* included behavioral expectations, classroom management, respect, and trust. Finally, *teachers* should be caring, encourage responsibility, enthusiastic, impartial, positive, and respectful (Stronge, 2007).

A number of individual studies also address teaching excellent from the student perspective. For example, students value caring professors with real-world perspectives who are strong communicators (Kelley et al., 1991). Faculty should have intellectual skills, academic rigor, and personal warmth (Brown, 1977). Onwuegbuzie et al. (2007) found four meta-themes (advocate, communicator, empowering, and responsible) and nine themes (connector, director, enthusiast, ethical, expert, professional, responsive, student-centered, and transmitter) associated with teaching excellence. Additionally, faculty should be skillful in creating assignments, exams, and grading; course organization and planning; communication; and faculty/student interaction (Centra, 1977). Faranda & Clarke (2004) conducted in-depth interviews which identified five further themes: delivery, fairness, knowledge and credibility, organization and preparation, and rapport. Some research was directly related to teaching improvement. Over 3,500 student comments for an inspirational teaching award were analyzed with software to identify commonalities (Bradley et al., 2015). The study identified sixteen themes: supportive in their lives engaging, supportive beyond the job description, friendly, approachable, encouraging, passionate,

reliable, challenges students to succeed, enthusiastic, entertaining, role model, positive attitude, up-to-date research, motivational, and organized (order of several comments).

The Teacher Behavior Checklist (TBC) is designed to improve teaching through diagnosis and remediation (Keeley et al., 2006). It provides a checklist of 28 qualities; however, across 14 studies, only subject knowledge was included in all (Buskist & Keeley, 2018). In 11 of the 14 studies, "approachable and personable, being an effective communicator, having realistic expectations of students, and fair testing and grading were listed" (Buskist & Keeley, 2018, p. 100).

According to Buskist et al. (2002), faculty and students agreed on eight of the 28 qualities listed on the TBC (approachable/personable, creative and interesting, encouraging and caring, enthusiastic, flexible/open-minded, knowledgeable about the subject, realistic expectations of students/fair testing and grading, and respectful). Excluding knowledge, unidimensionality was found among eight factors (Landrum & Stowell, 2013). Nationally, American faculty met six criteria of the TBC 77% of the time (Boysen et al., 2015). Syllabus construction was the most frequently met criterion (91%) and instructional methods the least (69%). The qualities were extensive, from personal qualities such as caring, respect, and enthusiasm to real-world experience and academic rigor.

Teaching Effectiveness: Faculty Perspective

According to award-winning faculty, good teachers are (in order of importance) passionate, engaging, caring, and a teacher-learner (Benekos, 2016). Exemplary teachers value caring/empathy, communication skills, involvement, preparation, and real-world perspectives (Smart et al., 2003). Another group of exemplary faculty ascribed teaching excellence to receptivity and understanding of students' classroom needs and an abdication of some control to students in the classroom (Giorgi & Roberts, 2012, p. 66). Sixteen faculty viewed teaching excellence as commitment, critical thinking, dedication, learner independence, and expertise (Wood & Su, 2017). Matheson (2020) presented findings from in-depth interviews of five teaching-award-winning faculty on teaching excellence and determined that teachers should be enthusiastic and constantly try to make teaching relevant and meaningful. Furthermore, they are empathetic, respectful, vulnerable, self-critical, and receptive to feedback. Finally, they believed education should be authentic, linked to the wider community, and life-changing (Matheson, 2020).

Faculty in 12 studies using the TBC attributed teaching excellence to encouraging critical thinking and subject knowledge (Buskist & Keeley, 2018). In 10 of the 12 studies, excellent teaching included being approachable and personable, creative and interesting, and an effective communicator. There was much overlap between award-winning faculty and other faculty using the TBC (Keeley et al., 2016); however, award-winning faculty emphasized preparation and rapport with students more. Faculty and students differ on their perceptions of teaching excellence (Layne, 2012).

Students and faculty do have some commonalities on what constitutes teaching excellence. These commonalities include preparation, knowledge, caring, and real-world focus. Faculty are more nuanced about learning using terms like critical thinking, creativity, teacher-learner, learner

independence, and abdicating some control to students. Faculty depth here illustrates a greater background in learning theory.

Studies that did not survey faculty or students directly include Chickering and Gamson's (1987) good practices for teaching, which included develops reciprocity and cooperation among students; encourages student-faculty interaction; enforces time on task; provides prompt feedback; respects diverse talents and ways of learning; sets high expectations; and supports active learning. Their work is based on prior research. Similarly, Orlando (2013) synthesized teaching excellence to include accessible, caring, collaboration with colleagues, enthusiastic, flexible, high expectations, leadership, love of learning, and respect. Korthagen (2004) listed these skills for teaching excellence: compassion, empathy, flexibility, love, tolerance, and understanding. Table 1 summarizes the literature review.

Author	Dimension	Sample
Benekos (2016)	Passionate, engaging, curious, caring, and teacher-learner	Faculty
Boysen et al., (2015)	Training, instructional methods, the assessment process, syllabi, content, and student	Faculty
Bradley et al. (2015)	Supportive engaging supportive beyond the job description friendly approachable	Students
Bradicy et al., (2013)	encouraging passionate reliable enthusiastic entertaining role model positive attitude	Students
	un-to-date research motivational and organized	
Brown (1977	Personal warmth intellectual skill and academic rigor	Students
Buskist and Keeley (2018)	Subject knowledge tonic enthusiasm and promoting critical thinking	Faculty
Buskist and Keeley (2018)	Subject knowledge, topic enthusiasm, and pronoting ended annumg	Students
Buskist und Rectey (2010)	communicator, and realistic expectations of students, and fair testing and grading	Students
Buskist et al. (2002)	Approachable/personable: creative and interesting: encouraging and caring: enthusiastic'	
Buskist et ul., (2002)	flexible/open-minded: knowledgeable about the subject: realistic expectations of	
	students/fair testing and grading: and respectful	
Centra (1977)	Course organization and planning: communication: faculty/student interaction: and	Students
	assignments, exams, and grading	
Centra and Gaubatz (2005)	Course organization and planning: communication: faculty/student interaction: assignments.	Students
()	exams, and grading; student effort and involvement; and overall evaluation	
Chickering and Gamson	Student-faculty interaction; reciprocity and cooperation among students; active learning;	No sample
(1987)	prompt feedback; time on task; high expectations; and diverse talents and ways of learning	1
Faranda and Clarke (2004)	Rapport, delivery, fairness, knowledge and credibility, and organization and preparation	Students
Giorgi and Roberts (2012)	Receptivity, sensitivity, and giving students some control	Faculty
Gruber et al., (2010)	Fostering teamwork, subject expertise variety of teaching methods, friendliness, and humor	Students
Keeley et al., (2016)	Enthusiastic, strive to be better, creative and interesting, knowledgeable, and approachable	
Kelley et al., (1991)	Communication skills, genuinely caring, and a real-world perspective	Students
Korthagen (2004)	Empathy, compassion, understanding and tolerance, love, and flexibility	No sample
Landrum and Stowell	Approachable, creative, encouraging, enthusiastic, flexible, knowledgeable, realistic	Faculty and
(2013)	expectations, and respectful	students
Matheson (2020)	Enthusiastic, make teaching relevant and meaningful, empathetic, respectful, vulnerable,	Faculty
	self-critical, and receptive to feedback	
Onwuegbuzie et al., (2007)	Advocate, communicator, empowering, and responsible	Students
Orlando (2013)	Accessible, caring, enthusiastic and warm; create community; flexible; high student	No sample
	expectations; love of learning; professional; respect students; and skilled leader	
Smart et al., (2003)	Communication skills; real-world perspective; carrying/empathy; involvement orientation;	Faculty
	and organization preparation	
Stronge (2007)	Instructional effectiveness, student effectiveness, learning environment, and teacher's	Students
	personal qualities	
Stronge et al., (2011)	Classroom management and student relationships	Faculty
Wood and Su (2017)	Dedicated, committed, discipline expertise, encourage learner independence and critical	Faculty
	thinking and safe learning environment	

Table	1.	Literature	Review
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Source: Baglione and Tucci, 2019.

Student Instructional Report

The Student Instructional Report (SIR) by the Educational Testing Service correlated learning and final examination scores (Centra, 1977). Specifically, final examination scores and student ratings

from SIR were correlated in 72 sections of seven courses across 44 teachers (Centra, 1977). The exams were constructed by faculty not teaching the classes, and students were randomly assigned to some but not all classes. Final examination scores correlated with course objectives and organization, lecture quality, and an overall teaching effectiveness measure. Teacher-student relationships and student effort were moderately correlated with final exam scores.

SIR II comprised eight scales with the first four similar to those in SIR (course organization and planning; communication; faculty-student interaction; and assignments, exams, and grading), although items had been added, changed, and deleted (Centra, 1998). According to Centra and Gaubatz (2005), updated scales included course outcomes, student effort and involvement, supplemental instructional methods, and course difficulty. The scales were validated through factor analysis. Instead of final examination scores, the scales were related to student perceived learning since it did not require standardized tests and correlated with student instruction ratings. The independent variables were:

- course organization and planning
- communication
- faculty-student interaction
- assignments, exams, and grading
- student effort and involvement, and
- overall evaluation.

Data on 6,136 classes and 116,144 students were collected from 26 two- and four-year colleges and universities over three semesters in 1995 and 1996. Multiple regressions were used to determine the best predictor of student perceived learning. Six variables were statistically significant: (a) overall evaluation; (b) student effort; (c) assignment, exams, and grading; (d) communication; (e) class size less than 15; and (f) junior or senior level. Stepwise regression produced the following significant predictors of perceived student learning: overall evaluation; student effort and involvement; and assignments, exams, and grading. Communication was important for different disciplines. Educational Testing Service recommends its use for instructional improvement and tenure decisions (Educational Testing Service, 2013).

SIR II may serve as a proxy for teaching excellence. It encapsulated the main qualities of teaching excellence perceived by students and faculty. The scales have been validated and shown to relate to learning: objective and perceived. Descriptions of the four scales are listed below. *Course organization and planning* include class preparation; class time use; explaining course requirements; subject knowledge; and summarizing material. *Prior research* documented the need for intellectual skill, academic rigor, training, time on task, organization preparation, classroom management, dedication, commitment, expertise, discipline expertise, real-world perspective, flexibility, curious, skilled leader, and more. *Communication* includes clear and understandable presentations; command of English; use of examples or illustrations to clarify course material; use of challenging questions or problems; and enthusiasm for course material. *Synonyms used in prior research* include engaging, critical thinking, active learning, rapport, and creativity. *Faculty-student interaction* includes helpfulness and responsiveness to students; respect for students; concern for student progress; availability of extra help for the class; and willingness to listen to students. This also included approachable, accessible, advocate, caring, tolerant, personal warmth, personable, friendliness, empathy, compassion, love, empowering, creating community,

encouraging learner independence, safe learning environment, humor, and others. *Assignments, exams, and grading* include information on grading; clarity of exam questions; exams covering important aspects of the course; instructor's comments on assignments and exams; overall quality of textbooks; and helpfulness of assignments in understanding course material. Descriptors were realistic expectations, fairness, assessment process, student evaluations, fair testing and grading, and others.

Public vs. Private Education

Higher education in the United States has two distinct paths: public and private. State support for public institutions has declined. From 2008 to 2019, funding per student (adjusted for inflation) in higher education declined in 45% of the states (Mitchell et al., 2018). Only four spent more during that timeframe; California, Hawaii, North Dakota, and Wyoming. Declines of more than 30% occurred in nine states: Alabama, Arizona, Louisiana, Mississippi, Missouri, New Mexico, Oklahoma, Pennsylvania, and South Carolina. The top 10 American universities are all private (U.S. News and World Report, n.d.). Number 22 is the highest rated public university: University of California at Berkley. Class sizes are usually larger at public than private universities (Peterson, 2017). One study found a negative relationship between class size and learning as measured through student-rated outcomes (Monks & Schmidt, 2011). There is also a difference between faculty in these institutions. A study of business faculty at over 100 U.S. universities found only a small percentage of faculty excel at teaching and research, and that faculty at private universities are more likely to achieve excellence in both than those in public universities (Jalbert, 2019). Differences exist between public and private universities on funding, class size, and faculty excellence in teaching and research. Hence, this study examined teaching excellence at both types of institutions.

The research here examined a large public institution in the Midwest with a student-faculty ratio of 18:1 with fewer than 20 students in 39% of its classes against a small private southeastern university with a student-faculty ratio of 12:1 and almost half (48%) of its classes with fewer than 20 students (U.S. News and World Report, n.d.). The public school had approximately five times as many undergraduates on its main campus as the private school. The faculty research requirements at the public institution were much higher than the private university. Teaching requirements were higher at the private school. The authors intended to compare how students perceive teaching excellence at the two institutions. The importance of faculty classroom instruction in promotion and tenure decisions varied between the two institutions. Faculty will respond emphasizing what is in their best interest, whether it be academic research or classroom instruction. Ultimately, faculty wants tenure and promotion and will employ strategies to achieve them. The authors believed those strategies might differ across the two institutions and would influence the importance of student assessment of the SIR II scales; however, the authors believed grades would be paramount regardless of pedagogical differences.

Hypotheses

Below is a summary of support for the hypotheses taken from the literature review. The first hypothesis was that students from both universities would select grades as most important in teaching excellence. Because of the emphasis on student evaluations and their correlation with grades, the authors anticipated that grades would be the most important dimension for public and

private university students. Grade inflation also arises from inter-departmental competition, peer pressure from colleagues, and emphasizing graduation rates. Regardless of the cause, students are predisposed to expect high grades independent of academic achievement. The second and third hypotheses examined results separately for the two schools. The authors examined the difference in importance across the four dimensions. There would be a 25% difference between the perceived importance of the top-ranked dimension and the least important dimension. This indicates the dimensions differ in their importance. If the dimensions were equally important, they would have an importance weight of 25%. Even with different criteria for evaluating faculty, the public university could not receive tenure or promotion without teaching excellence. Respondents at the two universities would differ on their evaluations of the four dimensions/constructs. With grading paramount, the remaining dimensions would be of less import and therefore, the hypotheses were:

- H₁: Students at the public (H_{1a}) and private university (H_{1b}) will rank assignments, exams, and grading most important in teaching excellence.
- H₂: Students separately at the public (H_{2a}) and private university (H_{2b}) will differ among the four teaching excellence dimensions/concepts.
- H₃: Students at the public and private university will differ on the evaluations of teaching excellence.

Methods

The objective of this study was to decompose the components of teaching excellence and determine whether differences existed for students in public and private universities. The survey was constructed through applying the SIR II dimensions in a conjoint analysis to estimate main effects. Four SIR II dimensions were included in the study: (a) communication, (b) course organization and planning, (c) faculty-student interaction, and (d) assignments, exams, and grading (Centa, 1977; Centra & Gaubatz, 2005). This scale encapsulated many of the dimensions documented in other studies for both students and faculty and correlates with learning. The remaining four dimensions for SIR II were held constant across respondents. Dimensions were measured as poor or excellent. With four dimensions at two levels each, there were 32 possible permutations or profiles. Each profile contained a dimension at either excellent or poor level. A fractional factorial of these profiles was chosen statistically to ensure orthogonally among the four dimensions. Conjoint analysis was used to estimate student preferences.

Conjoint analysis has been used extensively in the marketing literature. To understand the tradeoffs among the four dimensions of teaching excellence, conjoint analysis was used to decompose respondents' overall evaluations into dimension partworths (Green & Rao, 1971; Louviere, 1988). Instead of evaluating dimensions in isolation, they were evaluated together making tradeoffs explicit. The importance among dimensions was estimated through partworth scores (i.e., percentages that sum to 100). Partworths have a common measurement unit and can be combined and compared across dimensions. The highest partworth is the most important dimension. Nineteen traditional-aged, full-time undergraduate students pretested the survey using protocol analysis. Corrections were then made to the survey.

Respondents evaluated 10 orthogonal (uncorrelated) and fractional (subset of all combinations) profiles to estimate main effects on a one-(inferior)-to-10 (outstanding) scale. In Table 2, the first profile is listed. The professor was strong in student interaction and assignments, exams, and

grading but poor in course organization and planning and communication. Profiles were combinations of the four dimensions at two levels: poor or excellent. Eight profiles were used to calibrate the model and two holdouts to estimate model fit (i.e., correlated with calibration estimates). To measure model validity, Pearson's R was estimated: observed and estimated preferences were correlated. To measure model fit, the correlation between the holdout samples and model preference was estimated (Kendall's tau; Hollander et al., 2013). Respondents received a utility score by profile or 10 different scores. Utility or partworth utilities measured a construct's importance or how they influenced a respondent's decision. These determined dimension scores and importance.

Characteristic	Performanc	e Level (Hypothetical Professor)
Course Organization and Planning	Poor:	an explanation of course requirements;
		class preparation; subject knowledge; use of class time; and summarizing material.
Communication	Poor:	understandable presentations; command of English; examples;
		asks challenging questions; and enthusiasm for material.
Faculty/Student Interaction	Excellent:	helpfulness; responsiveness, respect;
		concern; availability; and
		listening to students
		textbook; and helpfulness on assignments.

Table 2.	Conjo	int Pro	file	Examp	ole
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Dimension names and descriptors were provided in the survey. SIR II consists of eight dimensions. Four were used to construct profiles, and the remainders were held constant. Since the same scenario was evaluated, course outcomes; student effort and involvement; course difficulty, workload and pace; and instructional methods did not vary for respondents. Respondents were instructed to assume that the teacher's grading, the effort required, and course difficulty matched the school's average.

Data was gathered from full-time traditional-age undergraduate students at a large Midwestern and a medium-sized Southeastern university. Data was gathered from undergraduate business classes at both universities. At each, the same professor administered and taught the classes in which the students completed the survey. Students were sent an email with a Qualtrics link to complete the survey. The data was anonymous. The data were analyzed in SPSS version 26. SPSS was also used to construct the 10 orthogonal and fractional profiles evaluated in the conjoint analysis.

To compare the results across the two samples, a discriminant analysis function was used (Tabachnick & Fidell, 2019). Eight profiles or combinations of the four dimensions were used to calibrate the model. The high and low values (excellent and poor) were the same absolute number; they only differed in sign. Only half or four of the partworths were needed for the discriminant function. Four partworths from the conjoint analysis were used as predictors for group membership in the two universities. Partworths represented high for the four dimensions in the SIR II dimensions. Correlations among predictors were estimated for collinearity (pooled within-group matrices). One discriminant function was estimated. Wilks' Lambda was used to test for equality of group means. Box's M was estimated for equality of covariance matrices (rejected for p < .001). Wilk's Lambda and the canonical correlation were examined for the canonical function. The

standardized canonical discriminant function coefficient and structure matrix identified the order of importance of the predictors.

Results

Public University

Two respondents did not complete all the conjoint profiles, and three had little variance in their profiles. They were removed from the analysis leaving 127 respondents. Among respondents, no question had more than three missing values. Table 3 details the demographics. Only a quarter of respondents (26%) were female (see Table 3). They were split between business and non-business majors (47% and 42%, respectively). Seventy-two percent were freshmen or sophomores. Three-quarters were active in on-campus student organizations (e.g., clubs, Greek life, and intramural sports). Seventeen percent were college athletes. Fifty-four percent lived on-campus.

The conjoint results are listed in Tables 4 through 6. The conjoint model fit was excellent. Pearson's *R*, the correlation between the observed and estimated preference, was .988 and statistically significant (p < .000; Table 4). Kendall's Tau, the correlation between the ranks for the observed and estimated preference, was .857 and statistically significant (p < .001). Assignments, exams, and grading was the most important dimension, although each dimension represented at least 22% of the total (weights sum to 100%) (see Table 5 and Table 6). Hypothesis $_{1a}$ was supported for the public university since assignments, exams, and grading ranked first. The difference between the highest value (assignments, exams, and grading at 28.7) was almost 25% higher (28.7-23/23) than the lowest value (faculty-student interaction at 23). Hypothesis H_{2a} was supported.

Private University

Surveys were completed by 137 respondents. Four surveys were removed for low variability among responses and three surveys removed for straight-lining responses, leaving 123 usable surveys. Among respondents, no question had more than four omitted responses. Eighty-four percent of respondents were sophomores or junior (see Table 3). Ninety-one percent were business majors. They lived on-campus (72%), and there was a split by gender (males equal 54%). Their home addresses were mostly in suburban areas (52%). Forty percent were working while in school. Most were active in organizations on-campus (74%). Almost a third played on school sports teams (30%).

The correlation for the observed and estimated preference indicated a strong model fit (Pearson's R = .98, p < .000; see Table 4). The Kendall's Tau for estimating the holdout profiles was statistically significant (.88; p < .001). Among the four dimensions, assignments, examinations, and grades was most important in assessing teaching excellence, followed by communication and course organization and planning. Faculty-student interaction was the least important (see Table 4). Table 6 confirms these results with the largest spread between excellent and poor for assignments, exam, and grading. Hypothesis 1b was supported: assignments, examination, and grading ranked highest. Hypothesis 2b was supported: the difference between the highest value (assignments, exams, and grading at 27.9) was 22% higher (27.9-22.8/22.8) than the lowest value (faculty-student interaction at 22.8).

Sample Comparison

Table 3, Table 4, and Table 5 compare the two samples. The sample for the public university had more males (74%) than the private university (54%), and the public had more freshmen (40% versus 2%) completing the survey. Respondents at the private university were predominantly upperclassmen (62%), while approximately a quarter were at the public university (28%). The private university had more students living on-campus (72% versus 54%). Almost all business students completed the survey at the private university (91%), with only about half majoring in business at the public university (47%). The sample had an average self-reported GPA of 3.34 and 3.19 for the public and private universities, respectively. This difference was statistically significant (t(229) = 2.18; p < .03).

Characteristic	Public % $(n = 127)$	Private % (<i>n</i> = 123)
Gender		
Male	.74	.54
Female	.26	.46
Residence		
On-campus	.54	.72
Off-campus	.42	.7
Off-campus (with family)	.3	.20
Undergraduate Level		
Freshman	.40	.2
Sophomore	.32	.36
Junior	.18	.48
Senior	.10	.14
Undergraduate Major		
Business	.47	.91
Non-business	.42	.7
Undecided	.13	.2

Table 3.	Demograp	ohic Chara	cteristics
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Note. Rounding error may not sum to 100

Table 4. Conjoint Results (Overall)

Statistic	Value (Public)	Significance	Value (Private)	Significance
Pearson's R	.98	.000	.98	.000
Kendall's Tau	.86	.001	.88	.000
Kendall's Tau for Holdouts	1.00		1.00	

Note. Correlation between observed and estimated preferences.

Category	Public	Private
Assignments, Exams, and Grading	28.7	27.9
Communication	23.4	25.9
Course Organization Planning	24.9	23.5
Faculty-student Interaction	23.0	22.8

Discriminant Analysis

The conjoint results across universities were compared through discriminant analysis (see Table 7). Wilks' Lambda was not statistically significant for any of the groups across the two universities (p > .153); see Table 7). The partworth for each dimension or construct did not differ between the respondents of the two universities. The highest correlations among predictors (pooled withingroups matrices) were .374. Box's M was not statistically significant; thus, equality of the covariance matrix held (p > .077). The canonical correlation was .123, which means little of the variance was explained. Wilk's Lambda was not statistically significant (3.699(4), p < .449). The test of equality of group means showed no difference between the two universities on the

partworths. Classification results showed that 51% and 59% were classified correctly for the private and public universities, respectively. Conjoint results did not differ across the samples. Hypothesis three was not supported. Differences did not exist between the public and private universities on the partworths across the four dimensions. Examining the results across universities revealed the same results. The highest and lowest ranked dimensions were the same for respondents from the public and private universities (see Table 6). Communication ranked third with respondents at the public university and second for the private university. The partworths were similar for the four dimensions between the universities (see Table 6). For assignments, exams, and grading, the average partworths for excellent were 1.013 (public) and .951 (private).

Table 0. Conjoint I artworth Results (Levels by Oniversity)			
Category	Public	Private	
Assignments, Exams, and Grading			
Excellent	1.013	.951	
Poor	-1.013	951	
Communication			
Excellent	.830	.870	
Poor	830	870	
Course Organization Planning			
Excellent	.844	.760	
Poor	844	760	
Faculty-Student Interaction			
Excellent	.854	.736	
Poor	854	736	

Table 6. Conjoint Partworth Results (Levels by University)

Table 7. Discriminant Results (overall)

Statistic	Value	Significance
Wilk's Lambda	3.69	.449
Box's M	1 7.13	.078
Course (high)	.995	.292
Communication (high)	.999	.640
Faculty-Student (high)	2.045	.154
Assignments (high)	.998	.492

Conclusion

Students took a short-term focus and valued assignments, exams, and grading above all else. This contradicts much of the prevailing literature, especially when coupled with faculty-student interaction as the least important. Equally surprising were the similar results at a private teaching-focused school and a large public university with higher research requirements for faculty. This finding may support an explanation of grade inflation (Hoefer et al., 2012; Isely & Singh, 2005), where learning and grades are decoupled (Eiszler, 2002). The best students had difficulty distinguishing themselves since grades are compressed at the scale top. Higher education's emphasis on student evaluations may be partly to blame for grade inflation (Bok, 2003; Isely & Singh, 2005; McPherson et al., 2009). The sample had an average self-reported GPA of almost 3.2, although higher at the public university. Students appeared to be conditioned to expect high grades regardless of effort. Faculty may be acquiescing to student demands on grades to placate them for strong student evaluations.

Full-time faculty teach almost all traditional in-person classes in business at the private institution, but many adjuncts are employed teaching the first two years of liberal arts classes. Adjuncts attaining poor evaluations have difficulty being rehired. With student evaluations and grades linked, re-employment is partially based on giving students good grades. Full-time faculty with low teacher evaluations are almost precluded from promotion and tenure. No amount of publication success can mitigate poor student evaluations. Publications are expected; there is more latitude than at the private institution on what constitutes an acceptable publication. The selection process is non-compensatory. (Note: One of the authors is a former department chair and current promotion and tenure committee member where the data was collected. This represents his perspective.) At the public institution, research comprises a higher proportion of promotion and tenure requirements. The pressure to publish is greater at the public institution.

Even with disparate goals for faculty between the universities, student emphasis at both was on grades over faculty-student interaction. Discouraging for faculty, these interactions ranked lowest at both universities. This contradicts much of the literature review on teaching excellence where faculty and students agreed that instructors should be approachable/personable, encouraging, and caring, and enthusiastic (Buskist et al., 2002). In the 24 studies cited in the literature review, 23 listed a measure of faculty-student interaction as critical to teaching excellence. Students valued faculty interaction as least important. Universities may be relying on student evaluations leading to grades being paramount over learning.

All dimensions represented at least 22% of the total, so teaching excellence is multi-faceted. Course structure and planning were important, just not as important as grades. The same was true for faculty being subject experts, using class time effectively, being enthusiastic, challenging students, and being helpful, respectful, and responsive in dealings with students. All this supported research showing faculty should make courses "structured, available, outlined, and easy to understand" (Swanson et al., 2015, p. 227). This indicated human interactions are memorable and positive (Swanson et al., 2015). Ranking across the universities for the dimensions was almost identical; however, the two middle dimensions: communication and course organization planning, reversed order.

There was a wide range among the dimensions. The difference between the highest and lowestrated dimension was at least 22%. A hierarchy exists among the dimensions. The contribution of this study was forcing students to be explicit among the numeric difference among dimensions and showing that grades were paramount. Grade inflation appeared to contribute to this conclusion. Faculty can only address the emphasis on grades by addressing grade inflation. Unilateral mitigation of grade inflation is to the detriment of the organization undertaking it. Inflating grades can attract and retain students (Brandt, 2001; Hu, 2005; Stone, 1995; Wikstrom & Wikstrom, 2005). Graduates with lower grade point averages are at a disadvantage competing in the marketplace with students from universities with grade inflation (Chan et al., 2002).

Theoretical Implications

Theoretically, teaching excellence has taken many forms throughout the literature. The approach of this study is one of many. All have commonalities. Unlike many, the scale chosen here is empirically based. The authors operationalized the construct in an easily understood format for evaluation, forcing tradeoffs among important dimensions. Ratio-level comparisons among dimensions were also created to measure their importance.

Practical Implications

Teaching excellence is multi-faceted; yet grades are paramount for students. Grade inflation has exacerbated the focus on grades by students. This applies to private and public universities. Universities are under renewed pressure to justify their costs and, conversely, a student's degree. Higher grades can be perceived to equate with learning, but when learning is disconnected from grades (as occurs with grade inflation), the relationship may become tenuous. Grade inflation can only be confronted collectively. If one school separates itself from others by ameliorating grade inflation, it risks making students less competitive in the marketplace when competing with students from institutions which continue to inflate grades.

Limitations and Future Research

Prior research showed faculty and students differ in teaching excellence. A meta-analysis on the TBC found differences between faculty and students. Separate conjoint models could be estimated for both groups and partworths compared through discriminant analysis. The delivery method may also differ in evaluating teaching excellence. The equal importance of faculty in online and face-to-face teaching modes could be compared (Bangert, 2005; Garrison et al., 2000; Gorsky & Blau, 2009). The influence of culture could also be studied, including the application of those results to other countries (Casero Martínez, 2016; Chen et al., 2012; Grieve, 2010; Liu et al., 2016; Liu & Meng, 2009). Non-business students could be surveyed to determine if similar results yielded (Centra, 1977) And the pragmatism of business students in their assessments could be compared. Even within a business school, there may be differences by major. Assessing and enhancing teaching excellence in a recent meta-analysis identified four strategies: peer reviews, portfolios, self-assessments, and student evaluations (Harrison, 2020). These could be linked to this study's assessment of teaching excellence.

Limitations included the sample sizes as both studies were small. Partworths could not be examined to determine if segments existed at either school. Some demographic variables differed between the two samples. Learning was not measured, only perceptions. Results were not compared to student evaluations which may reduce external validity. The average GPA differed between universities, and the authors cannot eliminate that the findings between the two universities may be caused by GPA. Grade inflation is caused by many factors. Further research can disentangle the causes including faculty, departmental competition, peer pressure from colleagues, and graduation rates (Smith & Fleisher, 2011). Regardless of what precipitated it, grade inflation's impact appears prevalent.

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