External Factors That Impact Online Instructor Performance: A Study Measuring the Impact of Decision Fatigue & Quality Matters Recognition of Courses on Online Instructor Evaluation

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Abstract

Evaluating employee performance can be challenging in any occupation. This paper looks at external factors that exacerbate this difficulty to include decision fatigue of the evaluator and quality of course design when using a master course model. Questions raised include: what are external factors that need to be considered when addressing the instructor evaluation process in higher education? How are accuracy and timely completion of the evaluations affected by decision fatigue? What steps should be taken to prevent any issues? The research explores the effect of external factors such as decision fatigue and Quality Matters recognition of master course design on instructor evaluations and addresses possible solutions.

Introduction

Milton Friedman once stated "one of the great mistakes is to judge policies and programs by their intentions rather than their results" (Heffner, 1975). Although some universities are conducting observations of online instructor classroom performance and creating rubrics to measure best practices, a multitude of factors can influence the outcome of the observation beyond the instructor's individual efforts. Factors such as teaching Discipline, QM Recognition of course development, student engagement in the course, and even decision fatigue of the evaluator could impact perceptions of instructor performance and lead to a higher or lower score. The intended results of an online instructor performance evaluation system would be that better instructors score higher and poor instructors score lower. Is that really happening, though, or are external factors getting in the way of accurate results? By examining the overall outcomes of instructor evaluation and the external factors that can influence scores both positively and negatively, the authors of this paper hope that the findings help universities to create more accurate instructor evaluation programs and make better decisions about how to improve quality of instruction for students beyond the quality of the instructor.

Factor #1: Decision Fatigue of the Evaluator/Observer of Teaching

Decision Fatigue and Instructor Performance

Competitive environments can encourage organizations to operate more efficiently through increased productivity. To be efficient, there needs to be an evaluation system that recognizes and rewards those who contribute to meeting the objectives and goals of the organization. The process of conducting an accurate and complete evaluation can be extensive and repetitive for those conducting evaluations, which could cause fatigue for the evaluator if certain conditions are present.

The interest in fatigue and how it affects productivity increased when the industrial revolution introduced a change in work behavior, longer hours and repetitive tasks according to Rabinbach (1990). It was during this time that the comparable expansion in higher education had similar themes leading to concerns about mental fatigue and the effect on productivity (Johannison, 2006; Nye, 1982; Rabinbach, 1990). As organizations in higher education seek new target markets for their programs, the competitive environment can encourage a more efficient use of resources. This could result in additional responsibilities being assigned to administrators, staff and faculty.

Evaluation Challenges

In the field of higher education, online instructor evaluators are faced with challenges when conducting and completing annual evaluations for adjunct faculty members. One of the challenges for an evaluator can be decision fatigue. Decision fatigue if present and not addressed, may affect critical thinking and problem solving skills that are needed when conducting online adjunct faculty evaluations. Online instructor evaluators conduct evaluations along with along with teaching courses, participating in service activities and meeting scholarship expectations. The more responsibilities that is included in the workload for the evaluators, the greater opportunity for fatigue in decision making.

Decision Making

Decision making for online instructor evaluators is the process of selecting the appropriate responses to be submitted in the instructor's evaluation, with the range of possibilities for categories that include the ratings of needs improvement, meets expectations and exceeds expectations (Abemethy, 1996). The evaluation process is detailed and requires the execution of technical skills in which the decision made by the evaluator is organized, initiated, controlled and executed (Abemethy, 1996). Organizing the workload for the evaluator can depend on whether it is possible to complete the evaluations in an accelerated pace or during an extended period of time within the determined university timelines. The more evaluations that are scheduled and conducted in a shorter period of time require a strategy and a routine that allows for completion of all assigned tasks, without depleting the time set aside for personal activities. A controlled approach to instructor evaluations may keep the evaluator focused on the task at hand, which can reduce the temptation to multi-task. The attempt to multi-task could result in fatigue coming from increased stress levels and frustration.

The position of online instructor evaluator requires the ability to make fast and accurate decisions, which is considered as important as executing skills proficiently. (Franks, Wiberg, & Fishburne, 1982) Decisions that are made as to teaching assignments can be affected from the information that is collected from the evaluators. Therefore, the evaluator needs to be timely and compile information so that a rational and accurate decision can be made in time for scheduling instructors for upcoming terms. Otherwise, incomplete or inaccurate information can affect scheduling of instructors when ratings are computed. In addition to collecting the information, the execution skills of the online instructor evaluator are critical to completing an accurate evaluation.

During an extensive period of analyzing data and making decisions as to what the data indicates, the

evaluator may experience decision fatigue which could affect the quality of the decisions being made. Large number of options can contribute to fatigue and the evaluator may not consider all the options available, which could result in a negative evaluation for an adjunct faculty member. Research has shown that performance can decline in the final stages if fatigue is present, which is critical to the accuracy of information during the execution of the instructor evaluation (Hancock & McNaughton, 1986). Since fatigue can have an impact on decision making and skill execution in different ways, the online instructor evaluator could review and revise daily objectives and goals on what needs to be accomplished (e.g. Royal et al., 2006).

Fatigue in the Evaluation Process

Fatigue has been found to be a common symptom complaint among healthy individuals in the general community including those working in higher education (e.g. Pawlikowska et al., 1994; Rosmalen, Neelman, Gans, & de Jonge, 2007). If the issue of fatigue is not addressed, it can impact how performance is evaluated and the availability of future career opportunities. If an instructor receives an unfavorable evaluation that may have been affected by decision fatigue, the opportunity to teach future courses could diminish or disappear completely if other instructors received positive evaluations that influenced their instructor ratings.

The lack of alertness can be a cause of inconsistency in evaluations (Klein & El, 2003). The factors to consider that contribute to decision fatigue need to be recognized before a strategy to approach the assigned evaluations can be developed. Each of the factors can influence fatigue and a combination of two or more factors can be challenging to overcome. Factors that need to be contemplated are stress level, repetitive decision making, sequential choices, extraneous variables and personal factors. The stress level factor that could impose decision fatigue can be the result of current workload, anticipated future assignments and personal challenges. The personal factors that evaluators may need to address include diet, rest and exercise, which can influence evaluator productivity, timing and the quality of the evaluation submitted. With these factors to consider, the evaluator also needs to understand the relationship between monotonous work, decision fatigue and the reduction in efficiency (Klein & El, 2003). Evaluators that take a personal interest in the evaluation process are less prone to time-related impairment of efficiency (Ax *et al*., 1967).

A large number of options in the evaluation process could contribute to decision fatigue, and, as a result, the evaluator may not consider all of the options that are available. When numerous options are available the evaluator may be reluctant to make trade-offs. Making trade-offs in some situations may contribute to additional detailed analysis which could complicate the evaluation execution process. In this case, an evaluator could experience decision avoidance and go with the information available to make a justified decision (Saxena, 2009).

In summary, extraneous factors can sway highly consequential decisions of expert decision makers. Prior research suggests that making repeated judgments or decisions deplete individuals' executive function and mental resources, which can influence subsequent decisions (e.g. Danzigera et. al., 2011).

Factor #2: QM Recognition of Course Development

Combining an extensively researched online course design rubric focusing on best practices with a rigorous peer review process, Quality Matters Recognition for an online course is a seal of excellence for online course design and development. ("Why QM?", 2018) What impact does QM Recognition have on instructor performance? Aman's 2009 study documented the positive impact of QM Recognition on student satisfaction (p. 2), and Swan, Matthews, and Bogle's 2010 research discovered an increase in student performance (Quality Matters' Impact on Online Learning, n.d.). Also, research in 2010 by Wright regarding the impact of QM training noted an increase in teacher self-efficacy after the training took place (Shattuck, 2012, p. 14).

Other Factors: Discipline & Online Instructor Training/Mentoring

Various other factors can impact the overall evaluation rating of an instructor's performance in the online facilitation of a course such as difficulty of the discipline and whether the instructor received training and mentoring to teach online. There can be issues with teaching in a discipline that may include course development, instructor's qualifications to teach the course material, and available student/instructor support services. If the instructor is qualified in the discipline, has been trained and mentored to teach online, and the course developer has incorporated best practices in online teaching during the development process, the instructor should have the tools available to provide students with a quality learning experience. The instructor teaching the course should be able to receive a meets expectations or an exceptional rating for facilitation on their evaluation.

The instructor evaluation should address areas such as timely response to student questions, discussion facilitation, assessment and feedback. The familiarity with the course material should allow the instructor to complete tasks such as assessment in a timely manner, while creating more presence in the classroom. Research has shown that teaching presence is a significant determinate of perceived learning, student satisfaction, and sense of community (Gorsky, Caspi, Antonovsky, Blau, & Mansur, 2010). LaPointe and Gunawardena (2004) suggested that a perceived teaching presence had a strong direct effect on learning outcomes.

Possible Impact of External Factors on Instructor Evaluation

The impact of a negative instructor observation can have a lasting effect on instructor morale, future teaching opportunities, and student learning. If the selection process for instructors to teach courses is based on a rating system that is influenced by the results from an annual observation, the accuracy of the observation becomes even more important. Once an observation is completed and submitted, there can be challenges for the instructor to overturn an unacceptable rating if the overall results have been affected by decision fatigue. The instructor may not be aware of the effect of the observation on teaching opportunities until the evaluation has been submitted and the course schedule has been determined.

Study of External Factors: Purpose & Hypotheses

Purpose of Research

Over the course of several years of performing classroom performance reviews on online instructors for a mid-western university, two of the authors noticed difficulty in making decisions when they were tired, sick, or had a higher workload than normal. They also anecdotally perceived that instructors teaching poorly designed courses tended to do worse than those teaching classes that were up-to-date and well-developed. From these observations, the authors wondered if these perceptions were true. While discussing best practices and how to achieve fairness and equality in observing instructors' classroom performance online, the idea for studying the impact of external factors on the overall scores online instructor evaluation arose. The two hypotheses below discuss these theories in more detail. Results and possible remedies will be revealed after a discussion of methodology.

Hypothesis #1: Avoidance of Decision Fatigue by Observers can Affect an Instructor's Performance on an Evaluation

Why would decision fatigue of an observer have an effect on the performance of an instructor during an evaluation? Observations can involve the analysis of available information through the use of critical thinking skills in addition to repetitive decision making concerning instructor performance. If decision fatigue is present, the cognitive ability to conduct an accurate assessment of performance could be affected by a lack of concentration and the needed energy level. A study by Joosen, Frings-Dresen and Sluiter (2011) supports this hypothesis by demonstrating that personal and environmental

factors may obstruct work participation in individuals. The study also suggests that focusing on diminishing limitations and restrictions affecting work participation is encouraged and could have an impact on work results. This is an important consideration, since impaired work ability has a negative impact on the quality of life and economic consequences for people (Joosen, Frings-Dresen & Sluiter, 2011).

To address elements that cause or contribute to decision fatigue the observer can develop and implement a strategy. To maintain professional performance when conducting effective and accurate evaluations the strategy should consider limitations in the work environment. Limitations can include personal limitations, assigned activities, office work conditions and imbalances involving personal and work responsibilities. The observer should know their limitations and how to cope with those limitations so that the observation results for instructors are not influenced. The Joosen, Frings-Dresen and Sluiter (2011) study suggests a method to cope with conditions in the work environment by using tools such as relaxation techniques, taking breaks and setting boundaries as to additional workload or personal requests.

Hypothesis #2: Instructors Teaching QM Recognized Courses Will Perform Better in Teaching Evaluations

Why would QM Recognition positively impact instructor performance? Well-developed courses present the material more clearly and emphasize learning objectives. Instructors would have more time to spend giving feedback and interacting with students about the material instead of struggling with a poor class designed that provides no guidance to help students navigate the course shell or even contains misinformation that confuses students and generates chaos for the instructor to fix. A 2010 study by Hall supports this hypothesis by demonstrating that a course based on QM standards "led to higher quality instruction…[and] less time devoted to non-instructional tasks" (Shattuck, 2012, p 11-12). In particular, Hall examined emails and discussion postings of 14 course sections of a sociology course and found an increase in "teaching presence" due to the reduction of course management responsibilities on the part of the instructor due to the benefits of QM in course structure. Hall noted "a positive effect on students' higher-order cognition via higher teaching presence" and that student discussion grades and satisfaction were higher (Shattuck, 2012, p 11-12).

Why would QM Recognition not impact instructor performance? Perhaps the instructors would put forth the extra effort to teach the learning objectives even in a poorly developed course not only for the students but also for their performance review. Instructors who are lackadaisical may not score as well in any case. Also, course development at the university uses an internal rubric to review courses based on the QM rubric. Perhaps QM Recognition is not as beneficial when the QM principles are already used for developing all courses at an institution. In fact, research supports this. In Aman's 2009 study, he hypothesized impact to the university beyond courses that are QM reviewed as student satisfaction was higher at institutions participating in QM even when the courses had not gone through the formal QM peer review process (Shattuck, 2012, p. 15). A study by Strickland and Alarcon in 2010 found that knowledge about the QM process was spread colleague to colleague informally and also at meetings for departments and schools (Shattuck, 2012, p. 16). Most notably, Parscal, Frey, and Lucas in their 2011 study found little differentiation in student satisfaction levels before and after QM review possibly due to systemic use of the QM rubric in course development throughout their university (Shattuck, 2012, p. 16).

Methodology: Procedures and Background

Materials used include summative scores from 59 online instructor evaluations and a list of Quality Matters Recognized courses at the university, which was a medium size private institution with multiple modalities offered (face to face classes, blended, and online) and a primarily teaching focus. Data was only collected on adjunct faculty teaching undergraduate courses online. Both upper and lower level classes were included. The disciplines represented varied widely to include

areas such as humanities, social sciences, modern languages, business classes, and computer science. Reviewers were experienced online faculty on a six person team of online instructor evaluators, which were full time faculty positions with half time release from teaching responsibilities to conduct faculty reviews. Inter-rater reliability between team members was heavily emphasized with training conducted periodically to make sure reviewers were interpreting institutional policies and best practices concerning online teaching in the same way. A rubric to measure online instructor performance was developed with a teaching and facilitation orientation instead of focusing on course design and development. This approach was somewhat different from current practices that use an instructor performance rubric focusing on course design (Thomas, Graham, and Pina, 2018). Thomas, et al, (2018) also noted that many institutions use a master course approach where master courses are created by a team of designers and subject matter experts and then copied for others to use. This study was conducted at a university using this model, so a focus on course design would not measure an instructor's work product unless the instructor being reviewed was the creator of the master course.

The first step in research was determining what factors to consider. Data on QM Recognition of course development, date, time, and day of the week that instructor performance reviews were submitted, teaching discipline of the course, and overall instructor scores on the reviews were compiled. Additionally, reviews were assigned each term by the supervisor on a master assignment list. The numerical placement of the review on the assignment list was also a factor considered. Results were examined for possible correlations and causal relationships between the factors and the overall review scores to prove or disprove hypotheses. QM course data pertaining to instructor performance reviews was coded for anonymity. Limitations to this study include possible personal bias of observers and the small size of the study.

Study of External Factors: Results

Hypothesis #1: Impact of Decision Fatigue

The data collected from the research of the two evaluator's results indicates the effective use of time management and communication skills to avoid decision fatigue. These skills are necessary to effectively perform accurate faculty online observations before established deadlines, in addition to performing faculty workload responsibilities without having a negative effect on family and personal obligations. The faculty workload responsibilities for the evaluators include teaching, scholarship and service. To accomplish meeting the high standards required for both the faculty and evaluator positions at the university while avoiding decision fatigue, the evaluations require completion in a specified period of time while not interfering in meeting other responsibilities. According to Schaufeli (2003), the work setting and factors related to it, such as job demands, social support and role ambiguity are important factors in decision fatigue resulting from stress. Therefore, the evaluators have many issues to consider to avoid decision fatigue when completing instructor evaluations.

The final adjunct online instructor rating submitted by the evaluators consist of one of the following three ratings: Needs Improvement, Meets Expectations and Exceptional. The evaluations that result in a Needs Improvement rating for the adjunct online instructors require detailed and supportive documentation that cover the areas that fall below expectations in addition to the areas that meet or exceed expectations. The evaluation also consists of constructive feedback that is reinforced by the documentation. A Meets Expectations rating that an instructor receives requires documentation that defines areas that the adjunct online instructor met or exceeded expectations in the evaluation. The Exceptional ratings require documentation that describes how the adjunct online instructor exceeded expectations to receive this rating.

In the two weeks surveyed, the evaluators completed ninety-eight percent of the evaluations during the period of Monday through Friday. The most productive days of the week for the evaluators are the days of Monday, Tuesday and Wednesday. This period accounts for eighty-three percent of the

total evaluations as shown in Table 1. During these three days between the time of 8:00 AM and 5:00 PM, 43 of 58 evaluations were submitted, accounting for seventy-four percent of the total evaluations.

Table 1. Dates/Times of Completion of Evaluations

	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Total
8:00 AM – 12:00 PM	0 (0%)	4 (25%)	5 (26%)	2 (14%)	0 (0%)	2 (100%)	0 (0%)	13 (22%)
12:01 PM – 1:00 PM	0 (0%)	6 (37%)	2 (12%)	2 (14%)	1 (14%)	0 (0%)	0 (0%)	11 (19%)
1:01 PM – 5:00 PM	0 (0%)	3 (18%)	9 (50%)	10 (72%)	6 (86%)	0 (0%)	1 (100%)	29 (50%)
5:01 PM – 9:00 PM	0 (0%)	3 (18%)	2 (12%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	5 (9%)
Total Evaluations	0 (0%)	16 (28%)	18 (31%)	14 (24%)	7 (12%)	2 (3%)	1 (2%)	58 (100%)

As shown in Table 2, eighty-percent of the Needs Improvement (NI) ratings were submitted during the first three days of the week, thus providing adequate response time to field questions concerning instructor performance. The Meets Expectations (ME) ratings submitted during the first four days of the week accounted for ninety-five percent of the total ME ratings. The Exceptional (E) ratings were all completed during the first four days of the week.

Table 2. Comparing Evaluation Completion Dates With Overall Scores

	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
8:00 AM – 12:00 PM	NI 1 (25%) ME 2 (26%) E 1 (25%)	NI 0 (0%) ME 2 (50%) E 3 (27%)	NI 0 (0%) ME 2 (29%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 1 (100%) ME 1 (100%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)
12:01 PM – 1:00 PM	NI 0 (0%) ME 4 (50%) E 2 (50%)	NI 0 (0%) ME 0 (0%) E 2 (18%)	NI 0 (0%) ME 0 (0%) E 2 (33%)	NI 0 (0%) ME 1 (17%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)
1:01 PM – 5:00 PM	NI 2 (50%) ME 1 (12%) E 0 (0%)	NI 3 (100%) ME 0 (0%) E 6 (55%)	NI 1 (100%) ME 5 (71%) E 4 (67%)	NI 0 (0%) ME 5 (83%) E 1 (100%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 1 (100%) ME 0 (0%) E 0 (0%)
5:01 PM – 9:00 PM	NI 1 (25%) ME 1 (12%) E 1 (25%)	NI 0 (0%) ME 2 (50%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)
	NI 4 (40%) ME 8 (30%) E 4 (18%)	NI 3 (30%) ME 4 (15%) E 11 (50%)	NI 1 (10%) ME 7 (27%) E 6 (27%)	NI 0 (0%) ME 6 (23%) E 1 (5%)	NI 1 (10%) ME 1 (5%) E 0 (0%)	NI 1 (10%) ME 0 (0%) E 0 (0%)

The data in Table 3 shows that the twenty-four percent of the evaluations entered during the period of 1:01 PM and 5:00 PM had a rating of Needs Improvement, thirty-eight were Meets Expectations and thirty-eight percent were Exceptional. This period of time accounted for fifty percent of the total evaluations entered.

Table 3. Identifying Peak Work Times of Observers

	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Total
8:00 AM – 12:00 PM	NI 1 (50%) ME 2 (29%) E 1 (25%)	NI 0 (0%) ME 2 (29%) E 3 (75%)	NI 0 (0%) ME 2 (29%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 1 (50%) ME 1 (13%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 2 (15%) ME 7 (54%) E 4 (31%)
Weekly Total							13 (22%)
12:01 PM – 1:00 PM	NI 0 (0%) ME 4 (80%) E 2 (33.3%)	NI 0 (0%) ME 0 (0%) E 2 (33.3%)	NI 0 (0%) ME 0 (0%) E 2 (33.4%)	NI 0 (0%) ME 1 (20%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 0 (0%) ME 5 (45%) E 6 (55%)
Weekly Total							11 (19%)
1:01 PM – 5:00 PM	NI 2 (29%) ME 1 (10%) E 0 (0%)	NI 3 (43%) ME 0 (0%) E 6 (54%)	NI 1 (14%) ME 5 (45%) E 4 (36%)	NI 0 (0%) ME 5 (45%) E 1 (10%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 1 (14%) ME 0 (0%) E 0 (0%)	NI 7 (24%) ME 11 (38%) E 11 (38%)
Weekly Total							29 (50%)
5:01 PM – 9:00 PM	NI 1 (100%) ME 1 (33%) E 1 (100%)	NI 0 (0%) ME 2 (67%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 0 (0%) ME 0 (0%) E 0 (0%)	NI 1 (20%) ME 3 (60%) E 1 (20%)
Weekly Total							5 (9%)

The following observations were made from the data results above:

- Evaluators require an established a structured timetable to complete evaluations to meet job and personal responsibilities while avoiding decision fatigue. The evaluators completed only one evaluation on a Saturday (2% total evaluations).
- Evaluators submitted ninety-two percent of the evaluations requiring additional documentation supporting the rating decision during the first four days of the week, thus leaving time to field questions concerning an instructor's evaluation.
- The instructor ratings of Needs Improvement, Meets Expectations and Exceptional did not have a drastic increase in numbers near the conclusion of the rating period, thus indicating that stressful situations in meeting deadlines and managing other responsibilities were avoided.

Are these findings consistent with the hypothesis? The findings indicate that by avoiding decision fatigue, the instructor's performance can be affected on an evaluation. The accuracy and overall assessment of the performance of an instructor may affect the future performance of an instructor and their rating. If decision fatigue is avoided by the evaluator in the evaluation process, then the instructor will receive a rating that is a true indicator of performance. In this study, seventeen percent of the total observations received a Needs Improvement and forty-five percent received Meets Expectations ratings. The instructors receiving these ratings could improve future ratings by addressing the assessment of their present performance and making the necessary adjustments recommended in the evaluation, thus affecting their future performance. The thirty-eight percent of instructors that received an Exceptional rating have an understanding of what it will take to maintain their current rating.

Hypothesis #2: QM Recognition

Hypothesis #2 posed that instructors teaching QM Recognized courses would perform better in teaching evaluations. Did the results of this study indicate a connection between QM Recognition and instructor observation results? Fifty nine instructor observations were reviewed for results over two consecutive terms in 2012. Thirteen of the instructors taught QM Recognized classes. Forty six

did not. First, the number of instructors in the study scoring a needs improvement (the lowest overall score), a meets expectations (the middle score), and an exceptional (the highest score) were compared over two terms.

Table 4. Instructor Overall Scores in QM, Non-QM, and All Classes

	Needs Improvement	Meets Expectations	Exceptional
QM Classes	2/13 (15.38%)	7/13 (53.84%)	4/13 (30.77%)
Non-QM Classes	8/46 (17.39%)	19/46 (41.3%)	19/46 (41.3%)
All classes	10/59 (16.95%)	26/59 (44.06%)	23/59 (38.98%)

The following observations were made from the data results above:

- Instructors teaching QM Recognized classes received fewer overall needs improvement scores than instructors teaching non-QM classes by 2.01% (17.39-15.38%).
- Instructors teaching QM Recognized classes received more overall scores of meets expectations than instructors teaching non-QM classes by 12.54% (53.84-41.3%).
- Instructors teaching QM Recognized classes received fewer overall exceptional scores than instructors teaching non-QM classes by 10.53% (41.3-30.77%).

Are these findings consistent with the hypothesis? The first finding that instructors teaching QM classes were less likely to receive needs improvement overall is consistent with the hypothesis. The second finding is consistent as it indicates that instructors teaching QM recognized classes were more likely to receive meets expectations. Surprisingly, the third finding was not consistent as instructors teaching QM classes received the highest score of exceptional less than others who taught non-QM reviewed classes.

Next, a review of dates when courses received QM Recognition and scores of individual instructors teaching those classes was conducted to search for any course-related factors to explain why instructors of QM classes received fewer exceptional ratings. Out of thirteen instructors, only two scored needs improvement overall. These instructors taught courses that were QM Recognized in 2007 and 2008, Courses H and J. As QM requires that higher education courses be reviewed for re-certification every five years due to updates to the QM rubric and to the courses themselves ("Re-Certification for QM-Certified Courses," 2018), these two courses could need revision and updating. Four instructors out of the thirteen scored exceptional overall; courses taught were Courses A, B, and C. Survey data was gathered in 2012, and Courses A and B had just been QM Recognized a year earlier in 2011 (2011 QM Recognized Courses (Institution) – Higher Education, 2018). Course C had been reviewed by QM in 2009, three years prior to the study (2009 QM Recognized Courses (Institution) – Higher Education, 2018). Thus, the data indicates a possible connection between exceptional instructor performance and classes that have been QM Recognized within three years. Also noteworthy, two of the instructors who scored exceptional taught Course C, indicating a possible connection between that particular course and high observation scores.

Table 5. Comparing Year of QM Recognition and Instructor Overall Rating

Class	Year of QM Recognition	Instructor Scores, circa 2012
Course A	2011 (2011 QM Recognized Courses (Institution) – Higher Education, 2018)	1- Exceptional 1- Meets Expectations
Course B	2011 (2011 QM Recognized Courses (Institution) – Higher Education, 2018)	1- Exceptional
Course C	2009 (2009 QM Recognized Courses (Institution) – Higher Education, 2018)	2- Exceptional
Course D	2009 (2009 QM Recognized Courses (Institution) – Higher Education, 2018)	1- Meets Expectations
Course E	2008 (2008 QM Recognized Courses (Institution) – Higher Education, 2018)	1 – Meets Expectations
Course F	2008 (2008 QM Recognized Courses (Institution) – Higher Education, 2018)	2- Meets Expectations
Course G	2008 (2008 QM Recognized Courses (Institution) – Higher Education, 2018)	1- Meets Expectations
Course H	2008 (2008 QM Recognized Courses (Institution) – Higher Education, 2018)	1- Needs Improvement
Course I	2007 (2007 QM Recognized Courses (Institution) – Higher Education, 2018)	1- Meets Expectations
Course J	2007 (2007 QM Recognized Courses (Institution) – Higher Education, 2018)	1- Needs Improvement

Conclusion

Many external factors could impact online instructor performance during an observation of their teaching skills to include decision fatigue of the observer, QM Recognition of the course/strength of course design, teaching discipline, availability of training/mentoring of faculty to teach online, and quality of students. Administrators of distance learning programs and evaluators of online instructor classroom performance should reflect on their review processes periodically. High level administrative oversight of online faculty performance review systems is encouraged so that reviewers do not become fatigued. Red flags for fatigue would be high review volume, short time frames to conduct reviews, numerous criteria, overly detailed rubrics, and complaints about the workload from reviewers. One fatigued reviewer can negatively impact many faculty and students.

Similarly, poor course design, especially when using master courses, can also hinder faculty performance and student learning experiences. If master course templates are duplicated for use by multiple faculty, administrators should look for patterns of low review scores by course to identify possible areas for course design improvement. QM Recognition of courses should help enhance faculty performance and student learning, especially when using master courses.

Reviewers themselves should also consider external factors such as course design and teaching discipline so that outcomes can fairly reflect instructor performance. Finally, reviewers need to take frequent breaks when reviewing faculty and avoid making decisions about instructor performance when they are tired.

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