

QUALITY MATTERS

QM



Research Matters!

QUALITY MATTERS



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By 10:30



At least 5 takeaway triggers

Twitter questions

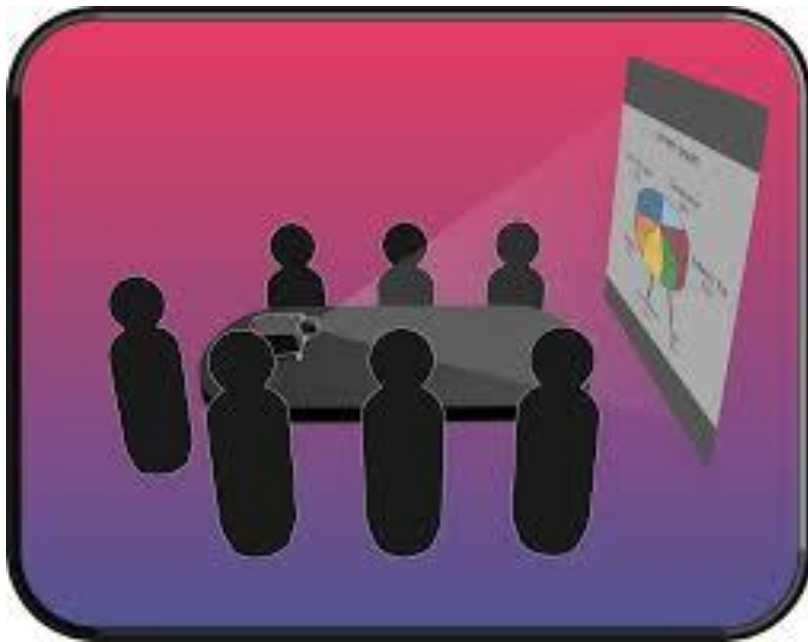
[#qmAskUs](#)

Resources

Ask us table!

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# 20 minutes, then practice fun



What we're learning from  
QM-focused research  
summary

Review with eye on fun

## Top things we've learned

Longitudinally: grades & successful completion ↑↑

↑↑ grades after improvement to course design

😊 Learner & 😊 faculty satisfaction

QM into organizational culture

QM review processes are strong 

Need to clearly identify inputs and outputs

Need inter-institutional study to move productively forward



**APPLAUSE**

# Saying quality assurance when we mean something else (Porosky-Hamlin, 2014)

Translation: Online learning QA often means “demand-for-proof-of-quality” “legitimacy” to many of our stakeholders (p. 260)



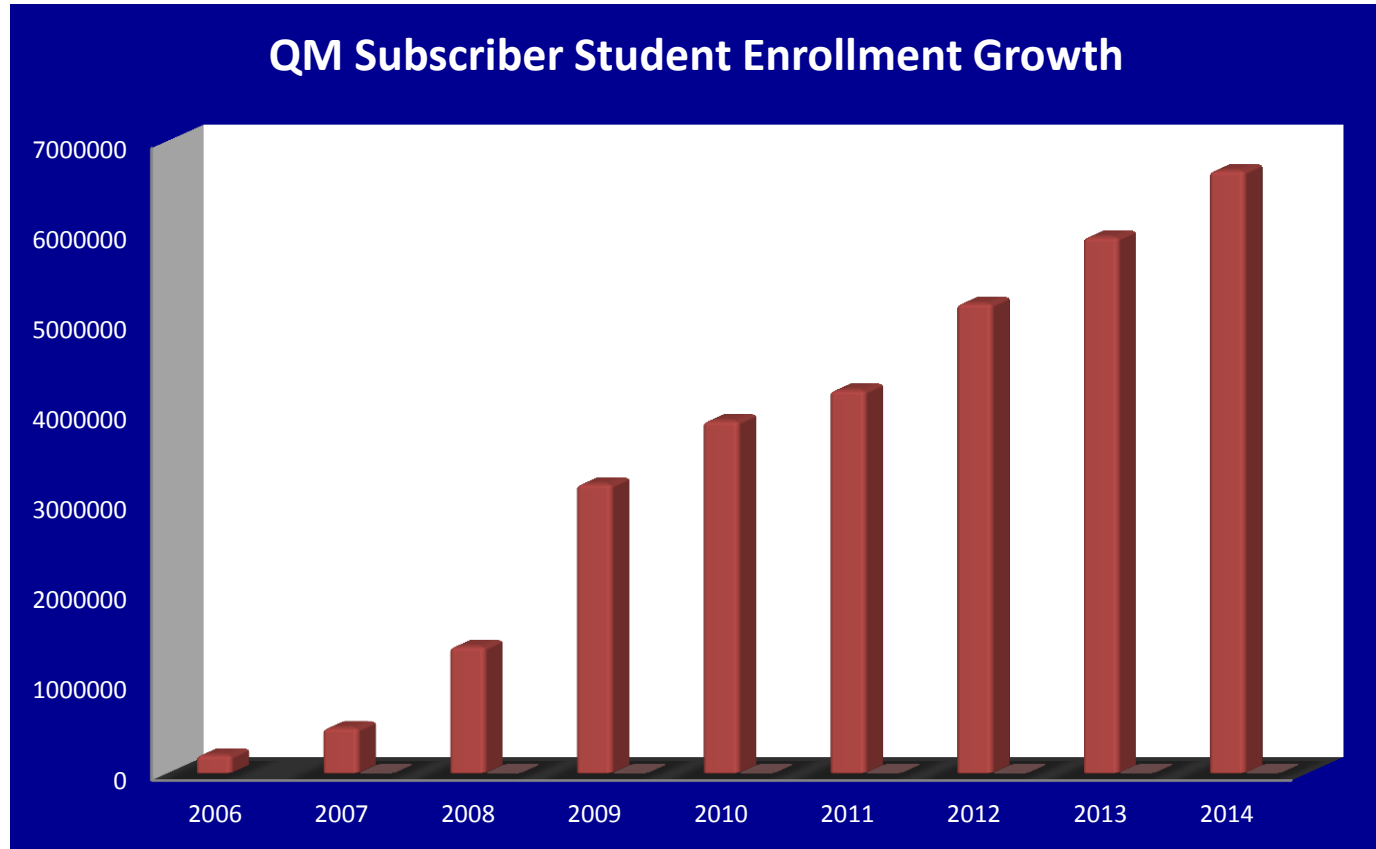
# Resources to keep handy

- QM Research Library <https://www.qmprogram.org/qmresources/research/>
- QM Research pages  
<https://www.qualitymatters.org/research>
- Toolkit for Designing QM-focused research
  - Introduced today, 1:40 P.M. (Maryland Salon D)*
  - Ask us anything about QM research table during conference*
- Resource list/notes
- Watch for white paper

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Why important?

# Subscriber Growth – Student Impact



**Potential Student Impact Growth: 200,000 to almost 7 million**

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Less confused, increased satisfaction (Finley, 2005)

Satisfaction ↑ in QM peer-reviewed courses/institutions  
(Aman, 2009)

Students 😊 (Knowles & Kalata, 2010)

Students still like lectures 🗣️; even when more teacher  
interaction online (Knapp & Paull, 2013)

Student perceptions not significantly impacted if course design  
guided by QM standards (Parscal, Frey, & Lucas, 2011)

# Learner voice

- Students valued design elements identified in Rubric (Iyengar, 2006) and missed them when absent (Mott, 2006)
- Courses should be designed to meet needs of all learners, including those who might need assistive technologies (Bowen & Bartoletti, 2009)
- Learners correlate quality design with QM standards
  - Quantitative, survey research
  - $N=3,160$ ; 22 states; 31 institutions (Ralston-Berg, 2011, 2014)

## The Student Voice: Inter-Institutional Research on the Impact of QM for Students

- DropThought
- Noel Levitz

*Tomorrow (Wed), 9 AM, in Baltimore Salon B*

++ engagement when activities met QM (Runyon, 2006)

↑ Higher grades on discussion board activities (Hall 2010)

↑↑ Major assignment/final exam scores, as well as overall course grades statistically significant (Swan & colleagues, 2010, 2011, 2014)

A-D course grades ↑ F course grades ↓ over 5 yrs.  
(Harkness, 2014)



# Community of Inquiry Framework

Dominant research paradigm measures students' connectedness

- ✓ Social presence
- ✓ Teaching presence (design, facilitation, & direction)
- ✓ Cognitive presence

Swan et al. (2009, 2014) suggested orthogonal relationship to QM

Hall (2010) suggested impact on cognitive presence

Miner (2014) QM similar to the impact of an architect; Col similar to role & impact of an interior designer

Simunich (yesterday): Designing for Presence

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- No apparent difference in completion rate; however, positive comments (Loser & Trabandt, 2006)
- Increased satisfaction, but could find no relationship with course completion in one semester study (Aman, 2009)
- Taking a step at controls:
  - 2 QMed courses completion/same instructors
  - Consistently higher completion rates(95.5; 95%) than average rate for other online courses over multiple (6; 11) semesters (Dietz-Uhler, Fisher, & Han, 2007)

## Persistence & Completion

- Control, at least, for the delivery variable...because
- Instructor presence impacts students' online learning experience
- Even in QM-reviewed courses
- Therefore, to further understand the effects of QM recognition on attrition, a more accurate control for variables is necessary  
(Rutland & Diomedede, 2011, p. 11)
- We'll return to this...

# Students' Motivation & Self-efficacy

Findability matters! (Simunich, Robins, & Kelly, 2012)

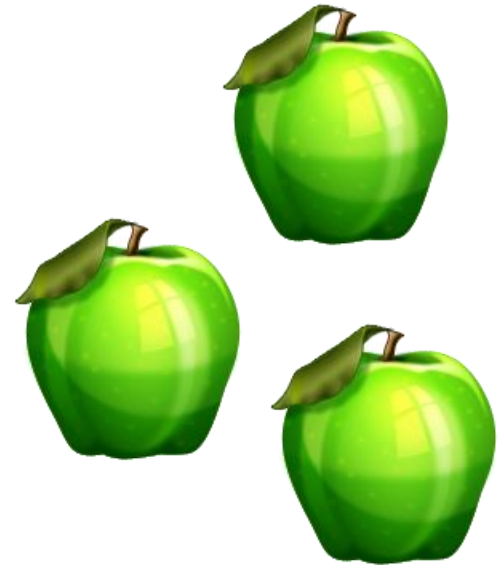
- ☑ Motivation & self-efficacy positively correlated
- ☑ Controlled study
  - Eye-tracking & talk aloud (cognitive overload)
  - Motivation & self-efficacy instrument

Readiness factors matter, however (Geiger, Morris, & Suboez, 2013)

- ☑ Which SmarterMeasures™ readiness factors correlate with learning
- ☑ Controlled study
  - QMed courses
  - QMed, expert instructor
  - Strong LMS support
- ☑ Only typing speed/accuracy and reading rate/recall statistically significant correlated to student course retention & course grade.
- ☑ Question raised: What was the instructor's role in mediating issues?

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# Cannot talk about impact without documenting before!



## QM Research context

- Knowing the QM principles & processes is key to designing a study and analyzing data
- Sometimes (often) research is an application of “common sense” 😊

Why would we expect to see results, without documenting if impact happened previously or in associated ways?

## Results of Longitudinal Study

- University of D.C. mapped
  - professional development participation, QM courses
  - Applications into LMS technologies
  - QMed courses
  
- Findings: Student outcomes pre/post QM **2007-2012**
  - **N=1,570**
  - **Withdrawals ↓23.53**
  - **Pass class grades A-D ↑19.74**
  - **Failing class grades F ↓66.66**

*Learn more: HBCU Case Study: An Online Learning Initiative, today (Tues), 2:15 session in Maryland Salon F*

# QM rigors or instructor variable?

Knowles & Kalata (2010) noted some differences in PR & student assessment

- Surprised?
- Because of students simply clicking “yes”?

You et al. (2013) U of Toledo follow-up study

- General agreement, however,
- Significant differences with 2.1; 2.4; 2.2; 3.2
- Different expectations?
- PRs more demanding?
- Instructors’ step in?

Miner (2014) suggested online students may not be skilled in recognizing course design.

## Positive impact of Rubric

- ✓ Providing easy-to-use guide or self-assessment tool by designers & instructors
- ✓ Establishing shared language/concepts by teams (Greenberg, 2011)
- ✓ Linking discussion, development, and implementation more effective online learning for new online instructors (Ward, 2011)
- ✓ QM standards high correlation with [TPACK](#) (Technological Pedagogical Content Knowledge) (Ward, 2011)
- ✓ High correlation with technological affordances (Bose, 2012)  
Actions, abilities, and possibilities offered within online learning environments when using technology (p. 193). Refers to e-learning tools properties and interaction of learner

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# Strong QM Processes

- ✓ **Inter-rater agreement** (Shattuck, Zimmerman, & Adair, 2014)
    - Analyze of agreement by standard among PRs in a particular review to assure consistent application of standards
  
  - ✓ **Rubric review process** (Shattuck, Zimmerman, & Adair, 2014)
  
  - ✓ **28,000 QM trained online educators**
  
  - ✓ **QM review participation**
    - Collegial interaction with others on the team
    - Valuable leadership experience for chairs
    - Idea shopping and a parallel review on their own courses (Sener, 2011)
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# Establishing baselines

*Few current examples:*

- 100% participants ( $N=71$ ) agree/strongly plan on using QM rubric to design (Dowden, 2014)
- Surveying faculty ( $N=154$ ) about which training & how used (Engelmann, McMahon, Coyle, 2014)  
*Learn More: Quality Matters Research Initiative in MN, today (Tues), 2:15 PM; Maryland Salon D*
- “You don’t know what you know” (Harkness, 2014)

Faculty beliefs regarding QM participation: Study it, don't just rely on hearsay (Altman, Schwegler, & Bunkowski, 2014)

- ☑ Heard faculty concerns about voluntary, unofficial QM PR process
- ☑ Theoretical framework: Theory of planned behavior
- ☑ Quantitative analysis → Qualitative lens (mixed)
- ☑ Surveyed participants and non-participants
  - Both: positive attitudes; likely promotion help; not likely to infringe on academic freedom
  - Nonparticipants more likely to think process would be effortful & time consuming

*Learn More: Examined PR comments from 34 courses informally reviewed*

*Tomorrow (Wed), 1:50 PM; Baltimore Salon A*

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# Organizational Impact

- Carryover effect (diffusion of treatment) to non-reviewed courses (Aman, 2009, p. 107)
- Informal sharing among faculty (Strickland & Alarcon, 2010)
- Impacting institutional course development (Parscal, Frey, & Lucas, 2011; Harkness, 2014)
- Valuable recognition: “Expecting QM certification to solve all student success alone is unrealistic” (Miner, 2014, p. 106)
- Developed & dissemination of accessibility policy template (Frey, Kerns, & King, 2011)

# Current issues and realities

- Too late to ignore possible QM influence in the “before” courses
  - ☑ Must detail the before for evidence of after
  - ☑ Not just recognizing the variables, but including in data analyses
- Definition, definitions, definitions
  - ☑ QM implementation levels; persistence/retention
  - ☑ Exactly which input and which output variable

*Learn more: QM Impact Infrastructure: A Toolkit for Changing the Institutional Culture Through Action Research, Wed, 8 AM, Baltimore Salon B*
- Sample size, Sample size, Sample size & needed **Time!**
  - ☑ Challenge to get participants, initially & completion
- QM has no direct access to institutional implementation data
  - ☑ Assist in designing
  - ☑ Inter-institutional study

# Do you have



At least 5 Takeaway triggers

Twitter questions sent

**#qmAskUs**

Resources handy

Plans to stop by table

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# Thank You!

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