

# The Quality of Student Learning in an Online International Graduate Nursing Program

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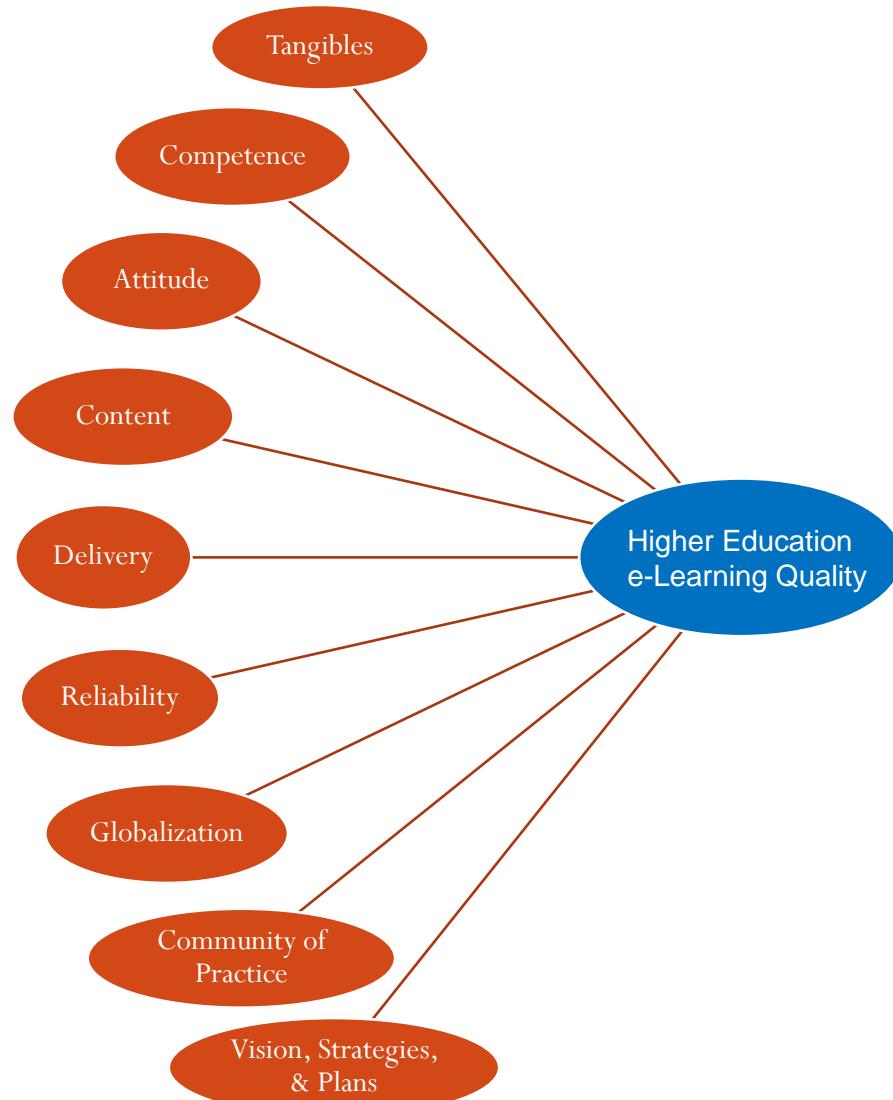
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# Higher Education e-Learning Quality



# Quality e-learning in HE

- **Tangibles**

Refers to aspects of e-learning such as access, password protection, encryption and Technical issues.

- **Competence**

Quality of technical support received by both learners and tutors.

# Quality e-learning

- Attitude

Support aspects of e-learning that affect satisfaction such as interaction & feedback

- Content

Must be well designed and developed

- Delivery

Animation and interactivity such as Flash and virtual environments

# Quality e-learning in HE

- Reliability

Reliable evaluation methods including plagiarism, authentication and online academic misconduct.

- Globalization

e-learning for the global audience.

# Quality of e-learning in HE

- Creating communities Practice

Essential tool for sharing knowledge

e-learning vision, strategies and Plans

- Developing e-learning vision, strategies and plans.

Lack of vision and strategy can result in  
e-learning failure

# Learner Objectives

- Observe the relationship between class size and level of faculty and student engagement in online graduate nursing courses
- Improve engagement and satisfaction of students and faculty

# Number of Online MSN Classes

Year	Number	Percent
2007	12	4%
2008	94	31%
2009	118	39%
2010	80	26%
Total	304	100%

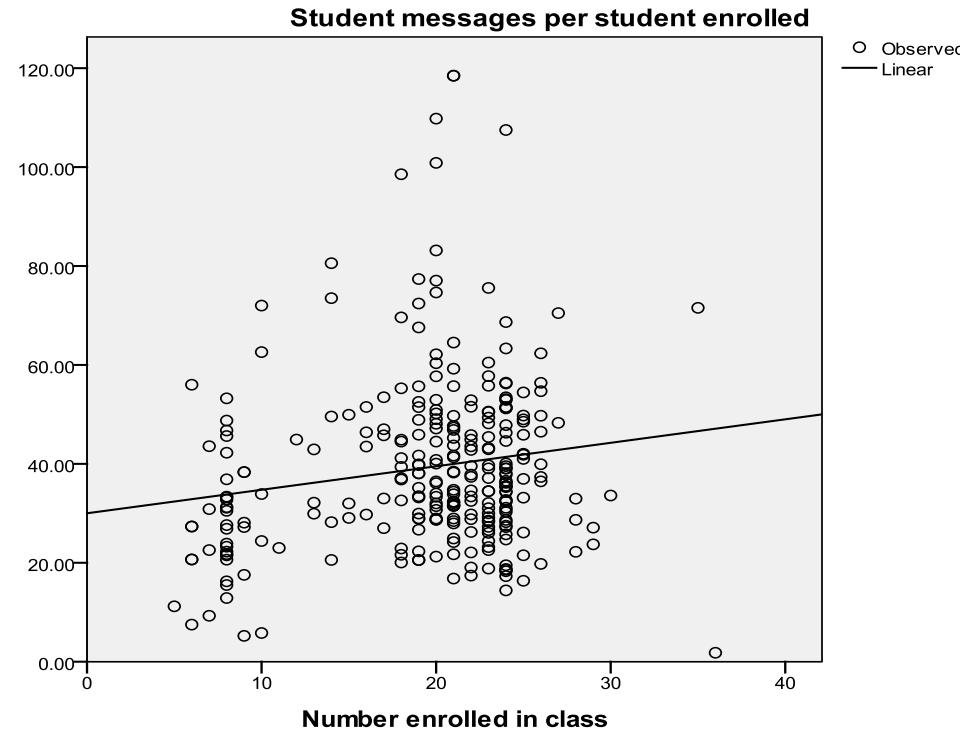
# Average Class Size and Response Rate Per Course

Year	Mean Class Size	Range	Mean Response Rate
2007	17.31	7 - 20	46%
2008	17.13	5 - 27	48%
2009	21.49	6 - 36	46%
2010	19.61	8 - 29	42%
Overall	19.48	5 - 36	46%

# Percent of Courses Taught by Full-Time and Adjunct Faculty

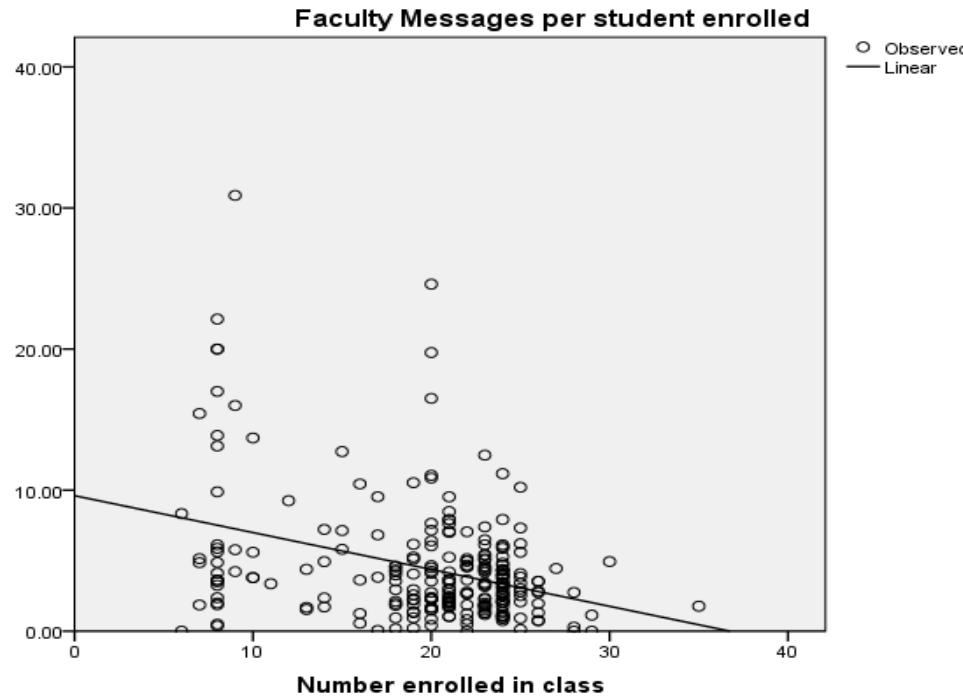
Year	Full-Time	Adjunct
2007	69%	31%
2008	51%	49%
2009	49%	51%
2010	64%	36%
Overall	54%	46%

# Research Question: As class size increases, does student engagement in online discussion forums increase?



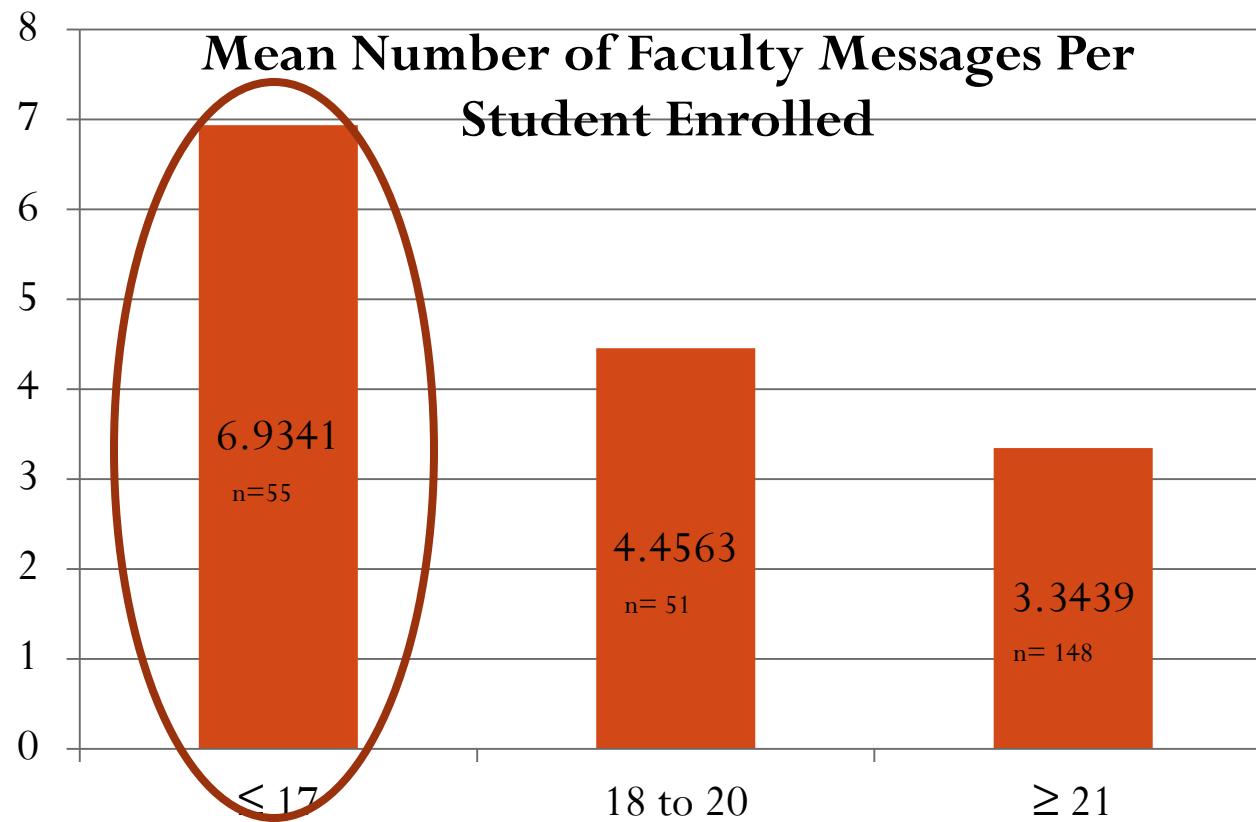
A simple linear regression was calculated predicting the number of student messages per student based on the number of students enrolled in the class. A significant regression equation was found ( $F(1, 286) = 7.423$ ,  $p < .01$ ), with an  $R^2$  of .025. Predicted student messages per student is equal to  $30.009 + 0.475(\text{NUMBER ENROLLED})$ . The number of student messages per student increased 0.475 for every additional student enrolled in the class.

# Research Question: As class size increases, does faculty engagement in online discussion forums decrease?



A simple linear regression was calculated predicting the number of faculty messages per student based on the number of students enrolled in the class. A significant regression equation was found ( $F(1, 252) = 34.37$ ,  $p < .001$ ), with an  $R^2$  of .120. Predicted faculty messages per student is equal to 9.604 minus 0.261 (NUMBER ENROLLED). The number of faculty messages per student decreased 0.261 for every additional student enrolled in the class.

Research Question: Is there a difference in faculty participation based on enrollment categories?



One-Way ANOVA comparing three enrollment categories. Significantly more messages ( $F (2, 222) = 5.683, p < .001$ ) for  $\leq 17$  category than for other two groups. No significant difference in messages between 18 to 20 and  $\geq 21$  groups.

# End of Course Evaluation Tool

- Administered at the end of each course
- Same tool as used for on-campus courses
- Participation is voluntary
- Score:
  - 5 = Strongly Agree
  - 4 = Agree
  - 3 = Neutral
  - 2 = Disagree
  - 1 = Strongly Disagree

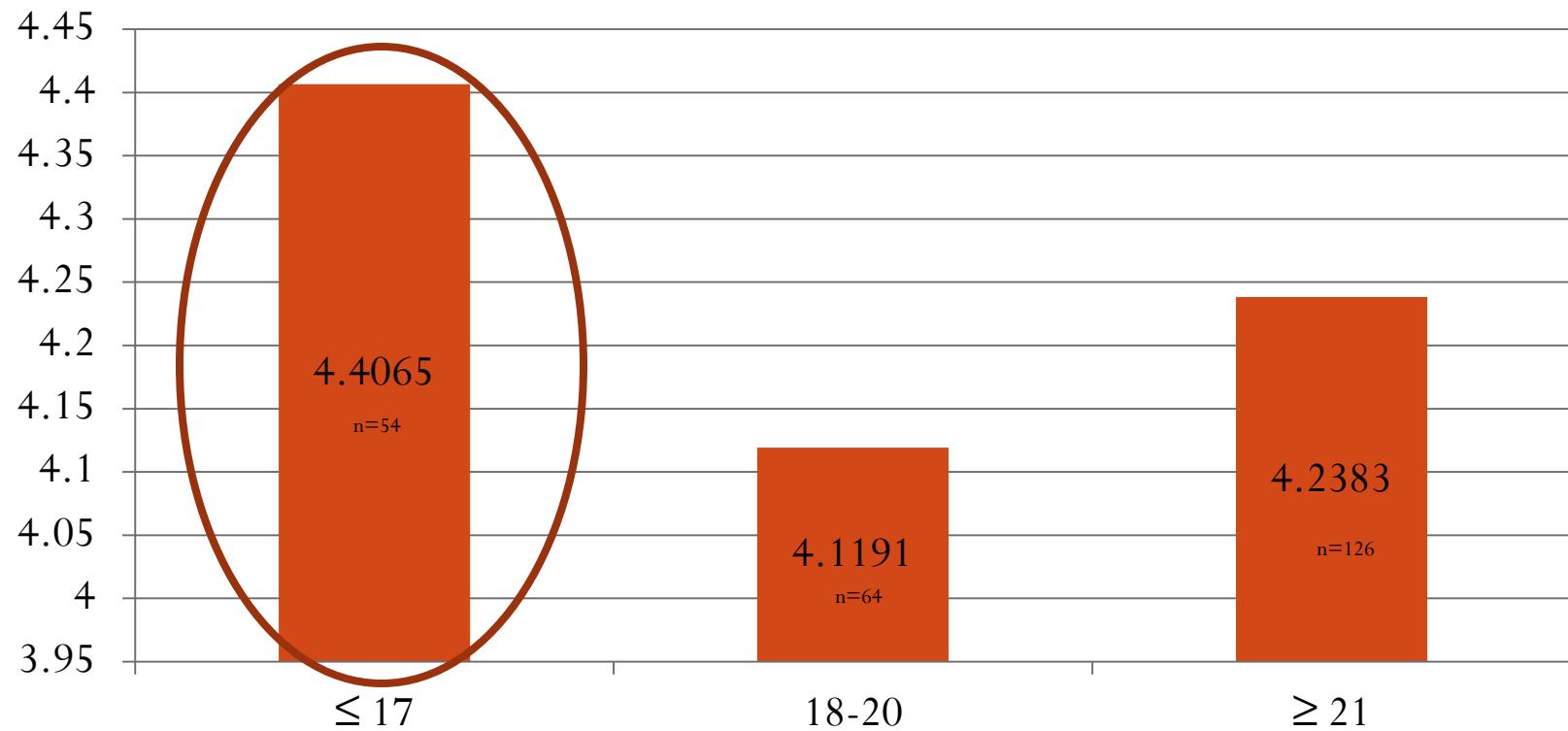
# End of Course Evaluation Tool

Question	SA (5)	A (4)	N (3)	D (2)	SD (1)
Course syllabus made objectives and requirements clear?					
Course content was relevant and useful?					
Textbooks and teaching materials were beneficial?					
Methods of evaluation seemed fair?					
Policy for late work and make-up assignments clear?					
Writing component was a valuable learning experience?					
Oral presentation component was a valuable learning experience?					
Research activities were good learning experiences?					
Overall, the course was a valuable educational experience?					

# End of Course Evaluations

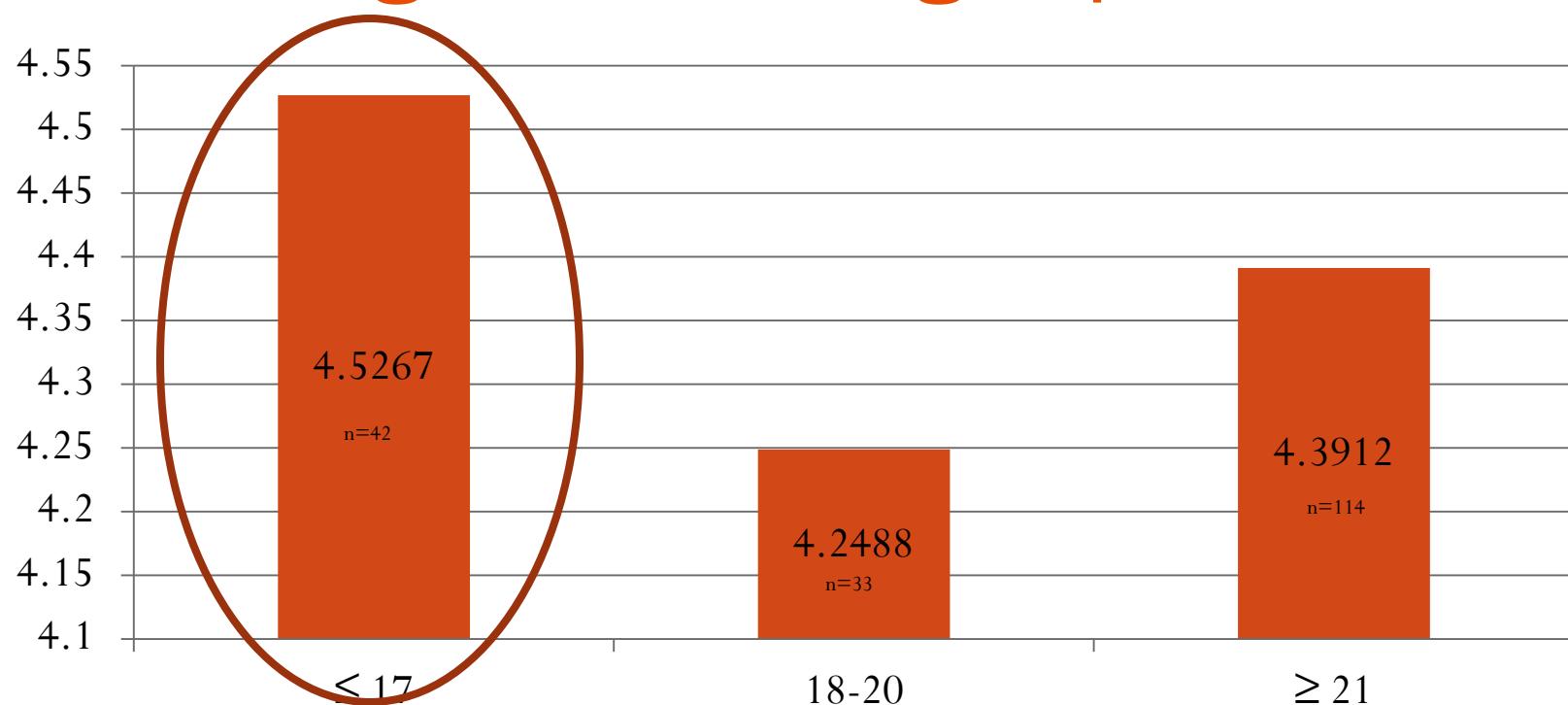
- One-Way ANOVA comparing three enrollment categories ( $\leq 17$ , 18 through 20,  $\geq 21$  students) on all mean end of course evaluation scores.
- No significant difference among groups was found on the following:
  - Syllabus and objectives clear
  - Course content relevant
  - Examinations, papers, etc. are representative of course content
  - Policy for late work clear
  - Writing component was valuable
  - Oral presentation component valuable
  - Overall, course was a valuable experience

# Mean score: The textbooks and teaching materials were beneficial.



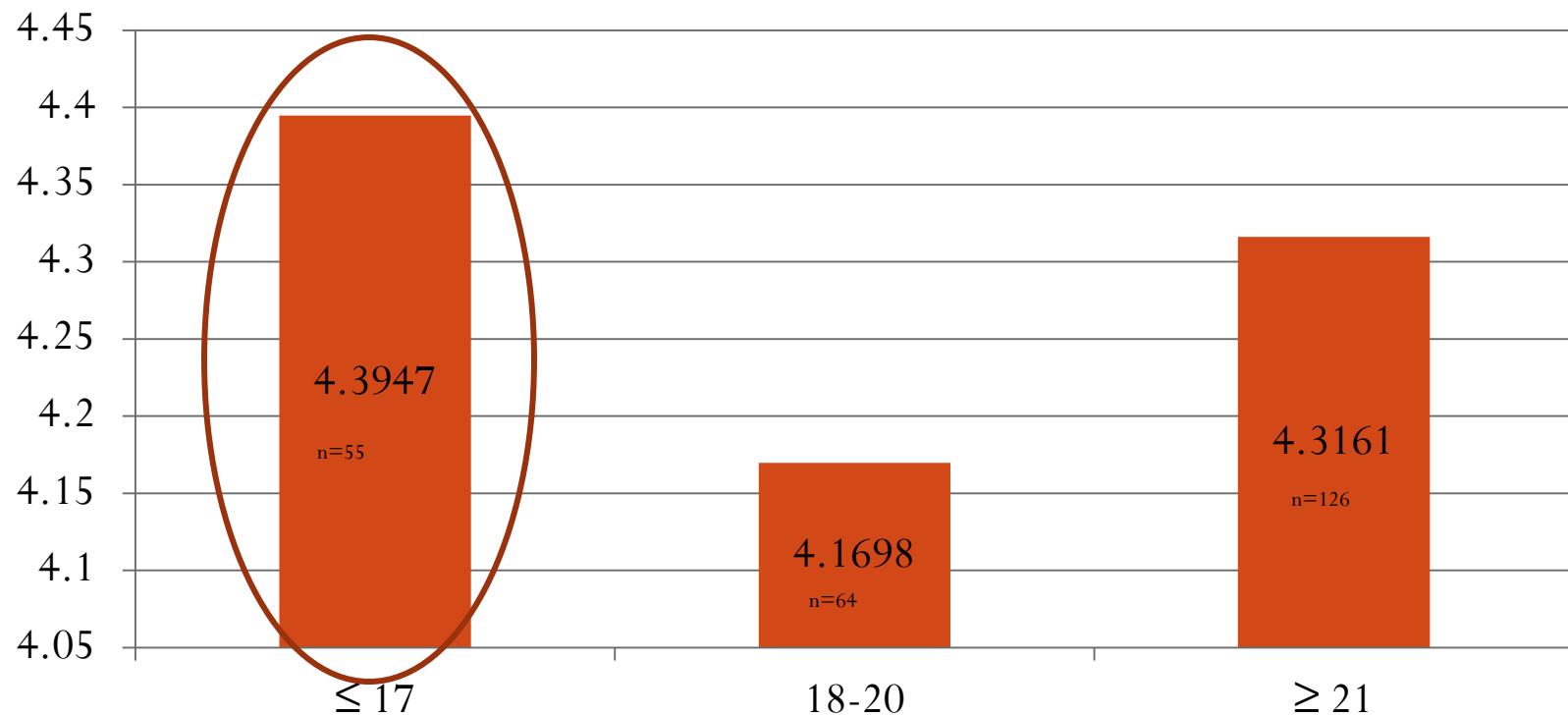
One-Way ANOVA comparing three enrollment categories. Significantly higher score for  $\leq 17$  category than 18 to 20 group ( $F (2, 241) = 4.228, p < .05$ ) but not significantly higher than  $\geq 21$  group. No significant difference in scores between 18 to 20 and  $\geq 21$  groups. (NOTE: 5= strongly agree; 1= strongly disagree).

# Mean score: Research activities were a good learning experience



One-Way ANOVA comparing three enrollment categories. Significantly higher score for ≤17 category than 18 to 20 group ( $F (2, 186) = 4.546$ ,  $p < .05$ ) but not significantly higher than ≥21 group. No significant difference in scores between 18 to 20 and ≥21 groups. (NOTE: 5= strongly agree; 1= strongly disagree).

# Mean score: Overall, the workload for this course seemed appropriate



*One-Way ANOVA comparing three enrollment categories. Significantly higher score for ≤17 category than 18 to 20 ( $F (2, 242) = 4.423, p < .05$ ) group but not significantly higher than ≥21 group. No significant difference in scores between 18 to 20 and ≥21 groups. (NOTE: 5= strongly agree; 1= strongly disagree).*

# Summary

- As class size increases,
  - There is a statistically significant increase in number of student messages per student enrolled
  - There is a statistically significant decrease in number of faculty messages per student enrolled
- There is significantly more faculty participation (as measured by number of faculty messages per student) when class size is  $\leq 17$  students than for class sizes of 18-20 and  $\geq 21$
- Mean end of course student satisfaction scores for *teaching materials, research activities, and workload* were significantly higher for class size of 17 or fewer than for class enrollment of 18-20