

Is an Online Gathering Place Important for Distance Education Student Success? A Comparison of the Perceptions of Online Professors and Student



Gary Moore

NC STATE
UNIVERSITY



Wendy Warner

NC STATE
UNIVERSITY



Jane Bachelor

UF | IFAS
UNIVERSITY of FLORIDA



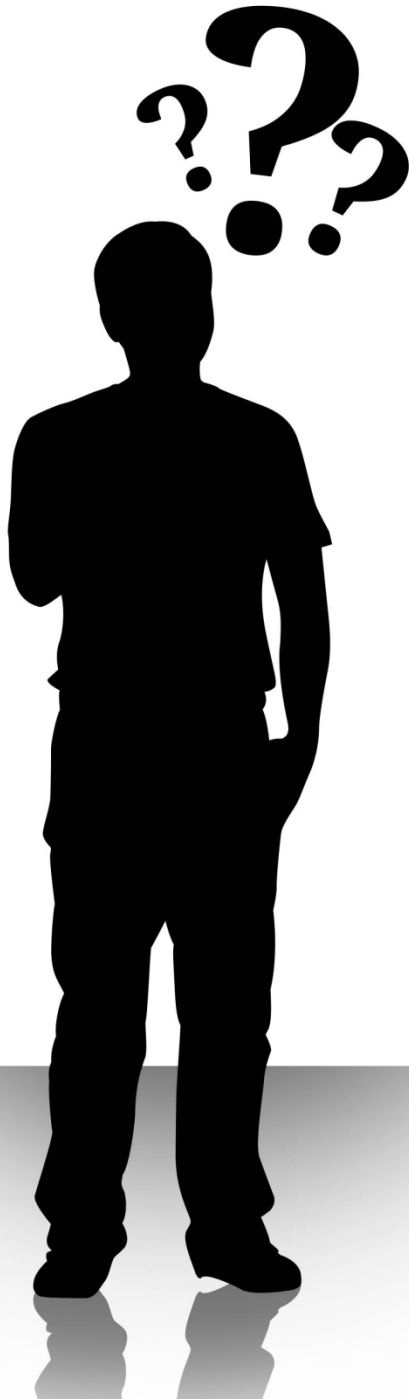
David Jones

NC STATE
UNIVERSITY



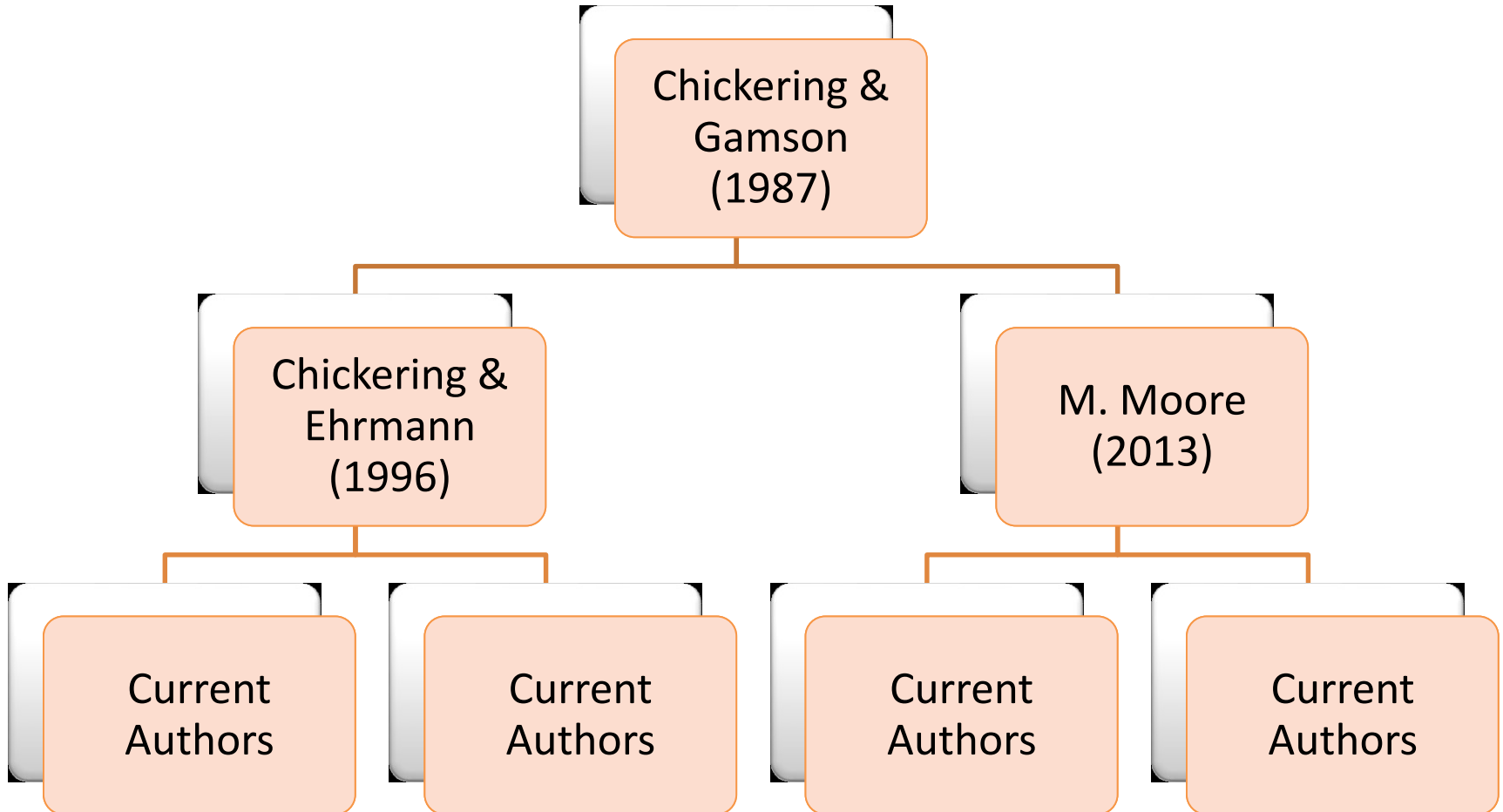
What The EXPERTS Say About Student-to-Student Interaction in Distance Education Classes!

- “...student-to-student exchange is a critical part of a quality online class...” (Stanley, 2013, p. 1)
- “...interaction [is] an essential element to student learning and to the overall success and effectiveness of distance education” (Sher, 2009, p. 103)
- “One of the recurrent themes in the literature is the effectiveness of using collaborative activities, group discussions, and other forms of student-student interaction” (Dixson, 2010, p. 2)



- What is the basis for the recommendation that student-to-student interaction is important in distance education classes?

The Source!!





Chickering and Gamson (1987)

- Identified 7 Principles of Effective Teaching for **undergraduate** education
 - frequent and open communication between faculty members and students
 - **promotion of collaborative student efforts**
 - incorporation of active learning
 - prompt feedback
 - efficient use of time
 - establishing high expectations
 - celebrating differences in student learning
- According to Google Scholar this one article has been cited 5,494 times



Chickering & Gamson (1987)

- The seven principles were developed from research on face-to-face undergraduate classes taught during the 1960s, 70s and 80s
- Their seminal efforts were supported by the Johnson Foundation and the American Association for Higher Education
- The seven principles have been promoted and adopted at many universities

But Are these Principles Applicable in 2016?

- The students of that era were different from the students of today
- Distance education classes are different than face-to-face classes
- Technology has changed





Research Question

- Are there differences in the views of undergraduate students, graduate students and professors regarding the importance of student-to-student interaction in distance education classes?



Why is this Research Important?

- Enrollment in distance education continues to grow at a 9-10% annual growth rate.
- Over 90% of public universities offer online courses and programs.
- With the continuing growth in distance education offerings, it is important to critically examine the pedagogical strategies most appropriate in distance education courses.

NCSU-UF Student-to-Student Interaction Research



**Phase 3 - Faculty Perceptions –
Fall 2015 (Nationwide)**

**Phase 2 - Undergraduate Student
Perceptions – 2014-15 (UF)**

**Phase 1 - Graduate Student Perceptions –
Fall 2013 (NCSU)**

The Instrument

- The instrument was created by the researchers, field tested and validated by experts
- 18 Likert-type items: 12 positive, 6 negative
 - Strongly Agree = 5
 - Agree = 4

 - Neither Agree or Disagree = 3 3.5

 - Disagree = 2 2.5
 - Strongly Disagree = 1

The Instrument

- For professors the wording of the statements on the instrument were altered slightly.
 - “I” was replaced with the word “Students” to reflect the difference in perspectives between students and professors.

Student Statement	Professor Statement
I gain a lot from interacting with my classmates	Students gain a lot from interacting with their classmates



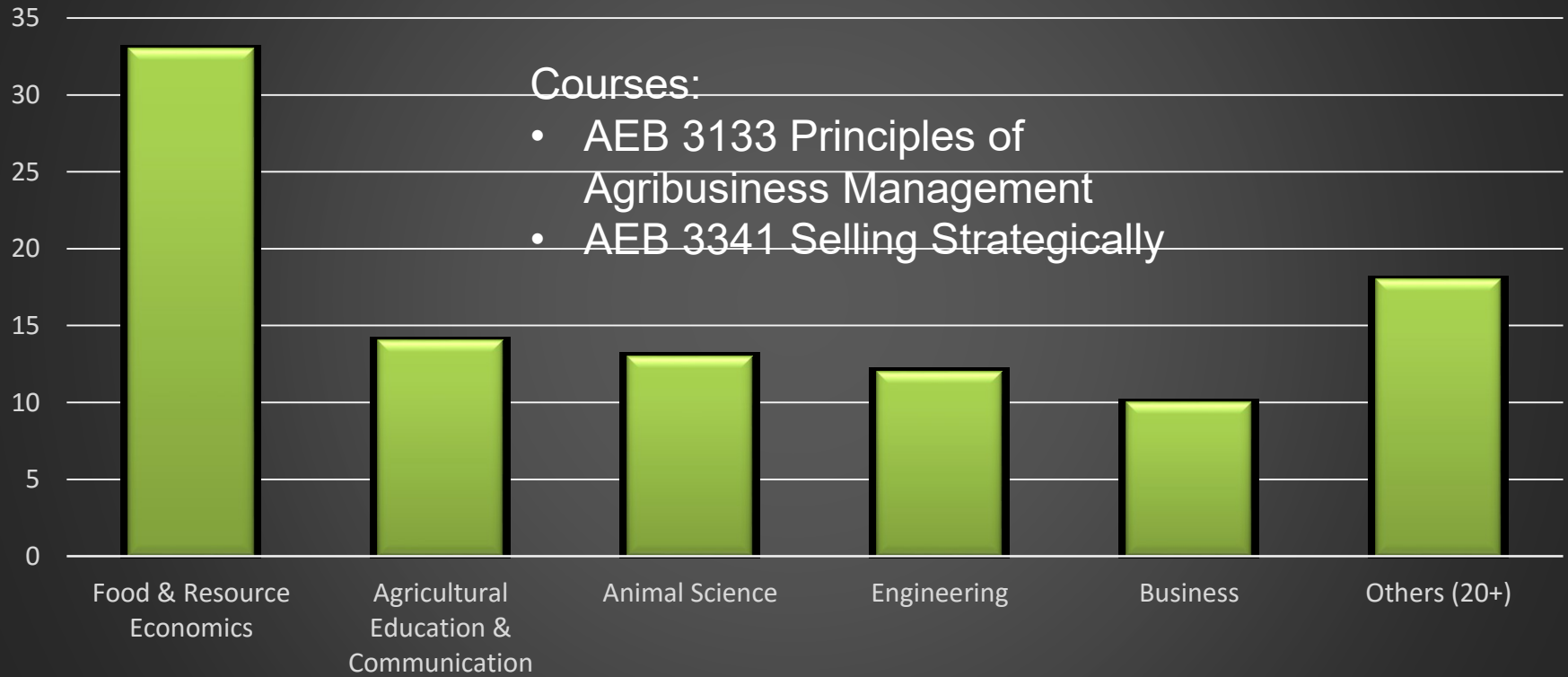
The Population

Population	Grad Students who took AEE courses at NCSU - 220	Undergrad Students at UF - 479	Agricultural Education Professors - 105
Response Rate	62%	84%	81%
Cronbach's Alpha	.95	.92	.90



The UF Students

Majors (Percents)





Distance Education Students and Professors Views Regarding Student-to-Student Interaction in Distance Education Classes

Statements	NCSU Grads F 2013 n=135 \bar{x} (s)	UF Undergrads 2014-15 n=407 \bar{x} (s)	Ag Ed Profs F 2015 N=85 \bar{x} (s)	Difference Between Profs & Students
1. It is important for me to feel connected to others in my DE courses.	2.58 (0.89)	2.64 (1.00)	3.93 (0.86)	1.30
2. It is important for me to feel as if I belong to my classroom community.	2.74 (1.01)	2.77 (1.05)	4.04 (0.70)	1.28

Views Continues....



Note: Negative Statements are in italics and were reverse coded

Statements	NCSU Grads F 2013 n=135 \bar{x} (s)	UF Undergrads 2014-15 n=407 \bar{x} (s)	Ag Ed Profs F 2015 N=85 \bar{x} (s)	Difference Between Profs & Students
3. I feel I learn more in a course when I have the opportunity to engage with my peers.	3.22 (1.02)	2.96 (1.03)	4.25 (0.72)	1.23
4. Interaction with other students enhances my learning of the content.	3.13 (1.04)	3.01 (1.10)	4.20 (0.63)	1.16
5. It is important for me to know about the other students in the class.	2.67 (0.96)	2.53 (1.01)	3.71 (0.87)	1.15

Views Continues....



Note: Negative Statements are in italics and were reverse coded

Statements	NCSU Grads F 2013 n=135 \bar{x} (s)	UF Undergrads 2014-15 n=407 \bar{x} (s)	Ag Ed Profs F 2015 N=85 \bar{x} (s)	Difference Between Profs & Students
6. I gain a lot from interacting with my classmates.	2.96 (1.01)	2.90 (1.03)	4.00 (0.76)	1.09
7. The relationships I have established with other DE students have continued after the class is over.	2.07 (0.99)	2.19 (1.14)	3.18 (1.01)	1.02
8. I have better things to do with my time than spending it interacting with other students in the class.	3.01 (1.00)	2.95 (0.98)	3.82 (0.90)	0.86

Views Continues....



Note: Negative Statements are in italics and were reverse coded

Statements	NCSU Grads F 2013 n=135 \bar{x} (s)	UF Undergrads 2014-15 n=407 \bar{x} (s)	Ag Ed Profs F 2015 N=85 \bar{x} (s)	Difference Between Profs & Students
9. I think student-to-student interaction should be a high priority for a distance education class.	2.96 (1.00)	3.08 (1.11)	3.89 (0.95)	0.84
10. I think the value of cooperative learning (students in small groups learning from each other) is overblown in distance education classes.	2.76 (0.95)	2.82 (0.93)	3.59 (1.07)	0.78

Views Continues....



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11. I am more concerned about course content than participating in a classroom community.	2.20 (1.01)	2.20 (0.87)	2.57 (1.04)	0.37
12. I enjoy participating in on-line forums, bulletin boards, Google hangouts, Skype and other such approaches that promote student-to-student interaction.	2.64 (1.10)	2.58 (1.15)	2.89 (0.91)	0.30

Views Continues....



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Statements	NCSU Grads F 2013 n=135 \bar{x} (s)	UF Undergrads 2014-15 n=407 \bar{x} (s)	Ag Ed Profs F 2015 N=85 \bar{x} (s)	Difference Between Profs & Students
13. I desire a substantial amount of student-to-student interaction in my DE courses.	2.22 (0.87)	2.43 (0.97)	2.58 (0.89)	0.20
14. I care about other students in my DE courses.	3.19 (0.83)	3.03 (0.98)	3.21 (0.84)	0.14
15. I prefer to work alone on assignments.	2.10 (0.91)	2.18 (0.99)	2.29 (0.81)	0.13
16. I would prefer <u>not having</u> "group work" in distance education classes.	2.05 (1.07)	2.08 (0.90)	2.12 (0.89)	0.05

Views Continues....



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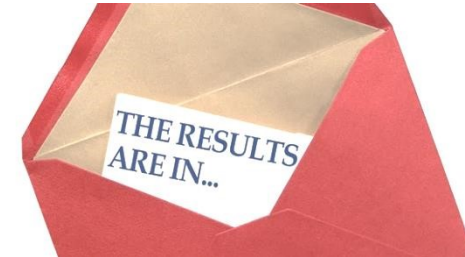
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17. I only participate in discussion board exchanges if they are a graded component of the course.	2.27 (0.96)	2.08 (0.90)	2.17 (0.90)	0.04
18. I like the chance to read and comment on my classmates' discussion board posts.	3.05 (1.05)	3.03 (1.01)	3.00 (1.01)	-0.04

Expectations Grand Mean

Agree = 4

Neither Agree or Disagree = 3

Disagree = 2



Statements	NCSU Grads F 2013 n=135 \bar{x} (s)	UF Undergrads 2014-15 n=407 \bar{x} (s)	Ag Ed Profs F 2015 N=85 \bar{x} (s)	Mean Differences
The Grand Mean	2.66 (0.69)	2.64 (0.66)	3.30 (0.69)	0.66



Statistics

- ANOVA: $F(2,624)=38.12$, $p=.0001$
- Post hoc analysis confirms professors perceptions were different from both undergraduate and graduate students.
- The effect size was $\eta^2=.109$ which is equivalent to a Cohen's d of $.7$ which is between a medium and large effect size (Fritz, Morris & Richler, 2012).

Summary of Findings

- Graduate students tended to be ambivalent or slightly negative in regards to student-to-student interaction in distance education classes!!
- University of Florida Undergraduate distance education students had nearly identical views.
- Ag Ed professors tended to be the opposite and thought student-to-student interaction was important.



Comments from Profs

- “It is the instructor's responsibility to build a culture where interaction is valued”
- “I strongly believe that students learn more when they interact and help each other.”



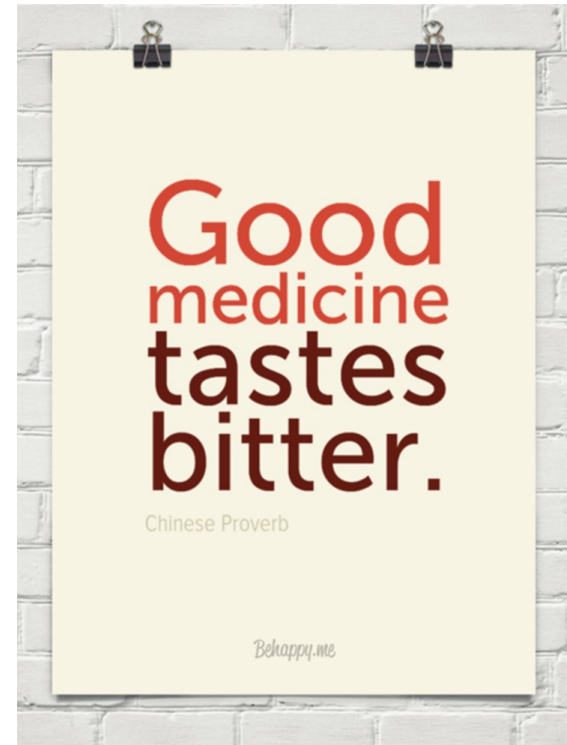


Comments from Profs

- “Our center for technology suggested (strongly insisted) that I add more group assignments to increase student to student interactions. So I made the changes suggested and have never had so many people complain... Long story short my course evaluations were the worst of my professional teaching career.”

We wonder....

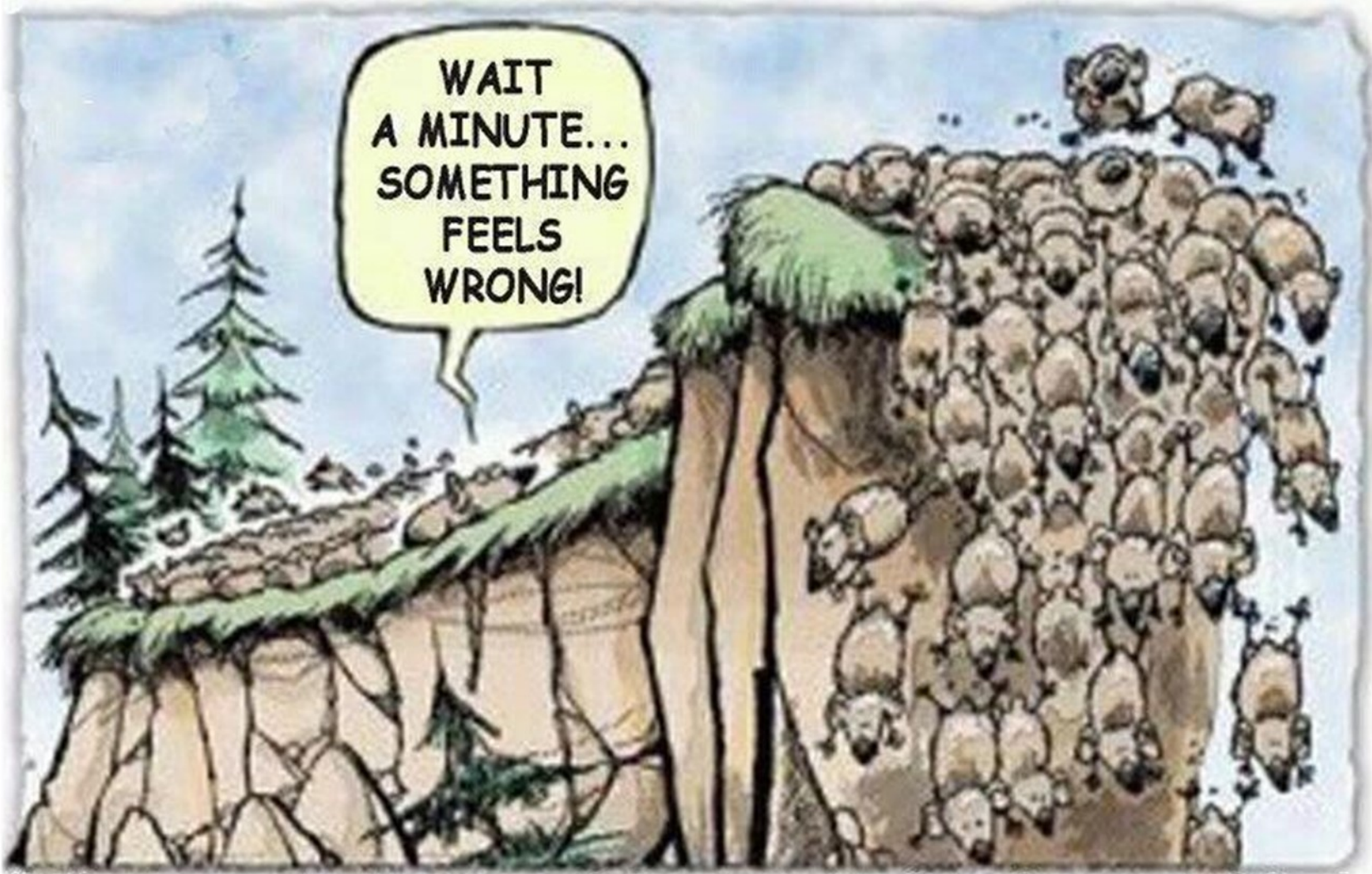
- Don't students know what is best for them?
 - Even though they might not embrace student to student interaction perhaps that is good for them.





We wonder....

- Are professors delusional and out-of-touch with the real world of our students?
 - Does having student forums and other forms of student-to-student interaction really make a difference in distance education classes?
 - Are we like academic lemmings blindly accepting the conventional wisdom (which is probably out-of-date and built on a faulty foundation)?



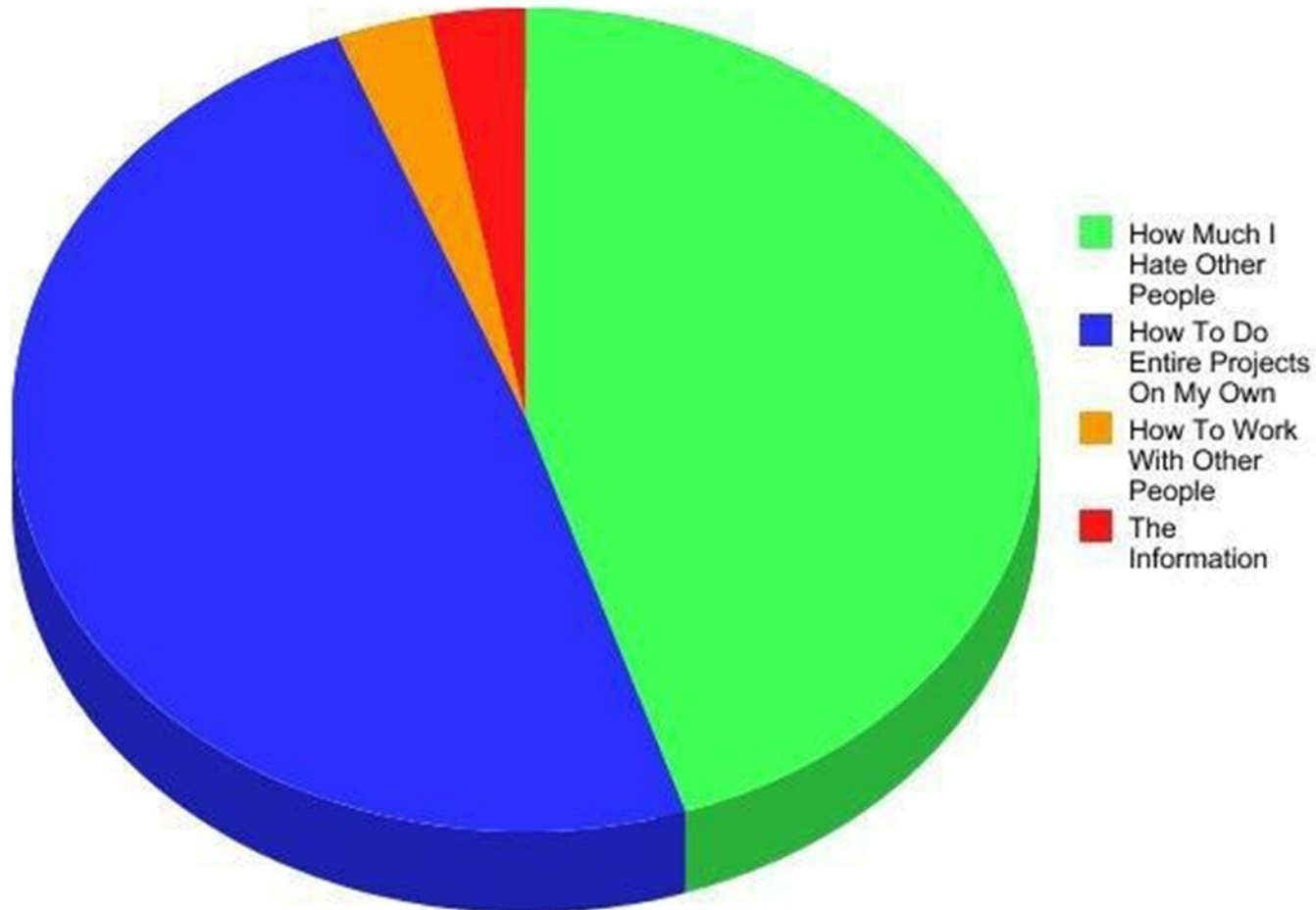
**"Shut up, you moron! Do as you've been told
It's for your own good!"**



We wonder....

- Are professors capable of creating and implementing meaningful student-to-student learning activities?
- Are we skilled at facilitating group work?

What Group Projects Taught Me



We wonder....

- Are our students capable of participating effectively in student-to-student interaction activities?



We wonder....

- Is student-to-student interaction occurring in live classes and is it meaningful?



Conclusions

- In general, undergraduate and graduate students in College of Agriculture distance learning classes do not desire student-to-student interaction in their classes.
- Professors think student-to-student interaction is essential.



Recommendations for Practice

- Having extensive student-to-student interaction in undergraduate and graduate distance education classes **DOES NOT** need to be a high priority for the instructor



Recommendations for Practice

- If an instructor chooses to incorporate student-to-student activities into a class, they should be voluntary
 - Students who do desire and benefit from student-to-student interaction should have the opportunity to engage in those activities
 - Students who do not want student-to-student interaction should not be forced to engage in those activities



Recommendations for Additional Research

- This study did not look at student achievement.
 - Additional research should examine the student performance and comprehension in courses with a great deal of student-to-student interaction as compared to courses with minimal or no student-to-student interaction.
 - This could be with both distance education and live classes.



