

Shaping Online Discussion: Assessment Matters

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Research Question

Is student behavior in online discussions shaped by how discussion participation is assessed?

- Do students participate more and/or are discussions more interactive when specific assessment criteria are used?
- Do different assessment criteria encourage differing student behaviors in online discussions?



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Research Design

quasi-experimental design

- comparing discussion activity in 8 sections of a required undergraduate course in Educational Technology
- discussion participation was mandatory for all students & counted for 10% of their course grade
- 78% of students allowed researchers to review their discussion postings
- 119 students (after drops) – 97 female, 22 male



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Treatment Conditions

no criteria (n=53)	Condition 1 participation counts for 10% of the final grade	Condition 2 participation counts for 10% of the final grade + 1 initial post & 2 responses / discussion required
	Condition 3 participation counts for 10% of the final grade + 1 initial post & 2 responses / discussion required + grading criteria: postings must clearly state a position defended with at least 1 example from readings or experience	Condition 4 participation counts for 10% of the final grade + 1 initial post & 2 responses / discussion required + grading rubrics which assess postings on 3 criteria: relevance, originality & quality of writing
Criteria (n=66)		

Data Sources & Analysis

individual student data:

- number & length of initial posts
- number & length of responses
- number of messages read

aggregated across modules; compared between groups & instructors using non-parametric statistics

data on discussions:

- posts/discussion
- threads/discussion
- average posts/thread
- average thread depth
- greatest thread depth

compared descriptively between conditions



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Results:

Number & Length of Initial Posts

Chi Sq comparison of number of initial posts

- no significant differences between conditions or instructors either w/in or across modules

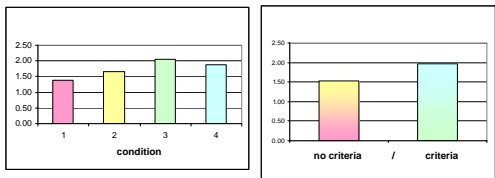
MANOVA comparison of length of initial posts

- no significant differences between conditions or modules
- significant difference between instructors
- no significant interaction between condition & instructor



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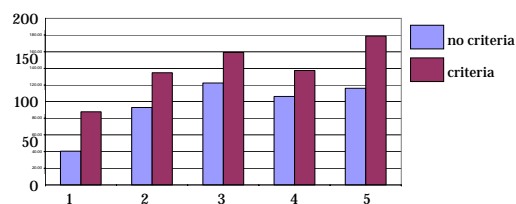
Results: Number of Responses



- students in Condition 3 posted most responses
- across modules, point biserial correlation between group membership & instructor and number of responses
- Chi Sq comparison w/in modules shows significant difs between groups on first 3 modules (but not final 2)



Results: Length of Responses



- MANOVA shows significant effects for treatment group and instructor, but no significant interaction effects;
- students in the Criteria Group wrote significantly longer responses than students in the No Criteria Group

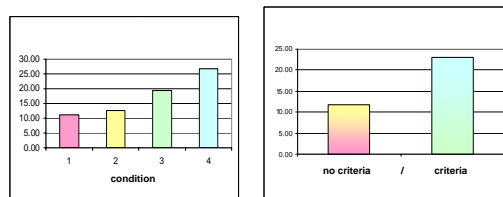


indep var	module	F (1, 114)	p	h ²
group	1	7.876	0.006	0.065
	2	9.637	0.002	0.078
	3	4.008	0.048	0.034
	4	5.380	0.022	0.045
	5	3.075	0.082	0.026
instructor	1	2.742	0.101	0.023
	2	6.633	0.011	0.055
	3	17.935	0.000	0.136
	4	24.442	0.000	0.177
	5	5.784	0.018	0.048

- univariate tests show students in Criteria Group wrote sig. longer responses in modules 1-4
- students taught by male, native speaker wrote sig. longer responses in modules 2-5



Results: Number of Posts Read



- students in Condition 4 read most messages
- MANOVA reveals a main effect for treatment group & instructor, but no interaction effects



module	criteria		no criteria	
	Mean	SD	Mean	SD
1	17.53	17.02	8.17	10.52
2	21.53	24.75	15.11	13.59
3	18.89	22.39	14.94	14.63
4	26.65	75.06	18.08	8.38
5	22.79	38.48	15.04	18.71

- univariate tests show significant differences between groups only in modules 1 & 4;
- significant differences between instructors only in module 3



Results: Comparisons by Discussion

	no criteria	criteria	instructor 1	instructor 2
posts/discussion	40.55	58.30	52.40	46.45
threads/discussion	15.50	18.80	16.90	17.40
avg posts/thread	1.65	2.04	1.99	1.71
avg thread depth	0.71	0.98	0.99	0.71
greatest depth	1.90	2.70	2.65	1.95

- comparisons by discussion show those of criteria group exceeded no criteria group on all measures of interactivity
- those in male instructor's classes exceeded those in female, ESL instructor's on all measures except threads/discussion
- differences between instructors < differences between groups



Conclusions

Student behavior in online discussions can be shaped by how discussion participation is assessed.

- Students in this study participated more and discussions were more interactive when specific assessment criteria were used.
- Different assessment criteria encouraged differing student behaviors in online course discussions. This finding deserves further investigation.



Unanticipated findings revealed significant differences in student participation in online discussions in course sections taught by different instructors.

- No significant differences between course sections indicate these are indeed related to instructors and not classes.
- Differences may be related to instructors' native language/culture and clearly deserve further investigation.

