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Is “working together” working?

An investigation into tertiary students’ attitudes
toward collaborative assessments

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Mariam Mousa (for data collection) and Nick Garrett (statistical support)

Value of collaborative assessments

- Promotes learning (Hargreaves, 2007)
- Increases knowledge (Desrochers et al., 2007)
- Better retention of knowledge (Cortright et al., 2003)
- Vehicle for transferable skills (Dyball et al., 2007)
- Develops critical life skills (McKechan & Ellis, 2012)
- Enhances inter-professional practice (McCallin, 2005)

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Team-based testing as a special type of collaborative assessment

- Enhances the development of communication and team-work skills (McAlpine, 2000)
- Offers learning in itself (e.g. problem-solving, decision-making, negotiation) in addition to assessing knowledge (Robinson et al., 2008)
- Offers reduction in test-anxiety and improved grades (Zimbardo et al., 2003)

One question remains unanswered:

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What do the students think of collaborative assessments?

QUALITATIVE STUDY

Participants

- 7 female; 1 male
- Mean age = 30 years (range = 19-51)
- 3 NZ, 2 Asian, 1 No' American, 1 Maori, 1 Middle Eastern

Data and Analysis

- Thematic analysis of semi-structured open interviews

KEY THEME

Collaborative learning and assessment are favourable when self-perceived levels of academic competence were low and unfavourable if self-perceived levels of competence were high.

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Will perceived grades or world-view influence student attitudes toward collaborative assessments?

To answer, I designed a quantitative survey-based study:

Participants

- 80 Social Psychology students
- 79% female; 21% male
- Mean age = 24 years
- Range = 17-53 years
- Ethnicity ⇒

European/Kiwi	29
Asian	12
Indian	7
Maori	9
Pacifika	9
South African	4
North American	3
Middle Eastern	3
African	2
Filipino	1
Eastern European	1

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Survey Questions

	Not at all	A little	A moderate amount	A lot	An extreme amount
1	2	3	4	5	

1	I see myself as an <i>individualistic</i> person
2	I see myself as a <i>collectivist</i> person

3	I can see the benefit of working collaboratively with others
4	I achieve more by working with others
5	I dislike group assessments
6	I prefer assessments that are based on group work, where everyone shares the grade
7	I like group activities as long as my grade is not dependent on the group
8	Working with others is too difficult
9	I feel "taken advantage of" when I work with others in a group
10	If I have to complete a group assessment, I prefer working with people I know

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What role will *perceived grades* have on attitude toward collaborative assessments?

grade	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1.00000	0.14	-0.05	-0.12	-0.22	0.08	-0.28	0.12	0.00	0.06	-0.02
	0.23	0.69	0.31	0.07	0.52	0.01	0.32	0.99	0.64	0.85
73	72	72	72	71	72	72	71	70	72	72

Spearman r Correlations

Perceived grades:

<input type="checkbox"/>	A range	(n=6)
<input type="checkbox"/>	B range	(n=46)
<input type="checkbox"/>	C range	(n=20)
<input type="checkbox"/>	D range	(n=1)

Negatively correlated with:

6	I prefer assessments that are based on group work, where everyone shares the grade
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Approaching (negative) significance:

4	I achieve more by working with others
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Attitude toward collaborative assessments as correlated with *Individualism*

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1.00000	-0.35	-0.21	-0.37	0.32	-0.24	0.04	-0.03	0.07	0.20
	0.002	0.06	0.0009	0.004	0.03	0.76	0.77	0.51	0.08
80	80	80	79	79	80	79	78	80	80

Spearman r Correlations

Negatively correlated with:

2	I see myself as a <i>collectivist</i> person
3	I can see the benefit of working collaboratively with others
4	I achieve more by working with others
6	I prefer assessments that are based on group work, where everyone shares the grade

Positively correlated with:

5	I dislike group assessments
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Attitude toward collaborative assessments as correlated with *Collectivism*

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
-0.35	1.00000	0.50	0.64	-0.40	0.55	0.11	-0.16	-0.15	-0.00
0.002		<.0001	<.0001	0.0003	<.0001	0.35	0.16	0.20	0.98
80	80	80	79	79	80	79	78	80	80

Spearman r Correlations

Negatively correlated with:

1	I see myself as an <i>individualistic</i> person
5	I dislike group assessments

Positively correlated with:

3	I can see the benefit of working collaboratively with others
4	I achieve more by working with others
6	I prefer assessments that are based on group work, where everyone shares the grade

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Summary

- Despite research showing the value of collaborative assessments, not all students like them
- Students' world-view seems to have some influence on their attitudes, with collectivist students liking group assessments significantly more than individualistic ones
- Qualitative research found high-achieving students to dislike group assessments but the quantitative study failed to fully support this initial finding

Implications

- What is not clear is if these positive or negative attitudes influence the value/benefit of collaborative assessing
 - even though some students don't like shared assessments, they may still benefit from them
- There may be value in collaborative engagement for students without their grades being dependent on the shared work

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Limitations

- The study surveyed mostly psychology students; students from other disciplines may have different attitudes
- No questions were asked that distinguished marked assessments from unmarked group work (the later might be enjoyable and beneficial even without the former)

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Future Research

- More work is needed on the different aspects of group assessments:
 - The influence of students being able to choose their partners
 - What to do when others “loaf”
 - If there are different attitudes toward different types of assessments (e.g. shared tests, practical work, written assignments, etc.)
- Research is also needed on how attitudes may influence the value of group work

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References

- Cortright, R. N., Collins, H. L., Rodenbaugh, D. W., & DiCarlo, S. E. (2003). Student retention of course content is improved by collaborative-group testing. *Advances in Physiology Education*, 27(3), 102-108.
- Desrochers, M. N., Fink, H. C., Thomas, A., Kimmerling, J., & Tung, W. (2007). Student assessment: A comparison of solitary, cooperative, and competitive testing. *International Journal of Teaching and Learning in Higher Education*, 19(3), 289-296.
- Dyball, M. C., Reid, A., Ross, P. & Schoch, H. (2007). Evaluating Assessed Group-work in a Second-year Management Accounting Subject. *Accounting Education: An International Journal*, 16(2), 145-162.
- Hargreaves, E. (2007). The validity of collaborative assessment for learning. *Assessment in Education: Principles, Policy & Practice*, 14(2), 185-199
- McAlpine (2000). Collaborative learning online. *Distance Education*, 21(1), 66-80.
- McCallin, A. (2005). Interprofessional practice: Learning how to collaborate. *Contemporary Nurse*, 20(1), 28-37.
- McKechn, S. & Ellis, J. (2012). Collaborative learning in the Scottish curriculum for excellence: The challenges of assessment and potential of multi-touch technology. *Education 3-13: International Journal of Primary, Elementary and Early Years Education*, DOI:10.1080/03004279.2012.717959
- Robinson, D. H., Sweet, M., & Mayrath, M. (2008). A computer-based, team-based testing system. In D. Robinson & G. Schraw (Eds.), *Recent innovations in educational technology that facilitate student learning* (pp. 277-290). Charlotte, NC: Information Age Publishing Inc.
- Zimbardo, P. G., Butler, L. D., & Wolfe, V. A. (2003). Cooperative college examinations: More gain, less pain when students share information and grades. *The Journal of Experimental Education*, 71(2), 101-125.