

All Together Now: Using Group Tests to INcrease Student Learning



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Introduction/Literature Review

- Enhancing students' ability to **work on teams** is an important part of the college experience.
 - Teamwork is one of the 7 Soft Skill Clusters identified by Crawford, Lang, Fink, Dalton & Fielitz (2011).
 - The “teamwork” cluster includes such behaviors as positive and encouraging attitude, maintains accountability to the team, and productivity.
- **Assessment** is defined as the activities undertaken by teachers and students that provide information to be used as **feedback** to **modify learning activities** (Black, Harrison, & Lee, 2004).
- **Individual assessments delay feedback** and this sometimes results in a long waiting period for students to receive their results (Giuliodori & DiCarlo, 2008).

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- Group testing enables students to take tests with peers and allows students to discuss questions and their reasoning for an answer, resulting in immediate feedback and filling in knowledge gaps (Cortright, Collins, Rodenbaugh, & DiCarlo, 2008).
 - There are more positive than negative outcomes to be gained from cooperative testing (Hanshaw, 2012).
 - Evidence includes: an increase in memory and learning, decrease in test anxiety, enhanced listening skills, and enrichment of social interactions.
 - Students express their levels of test anxiety and sense of competition for a grade reduce significantly (Hancock, 2007).

How I Used Group Tests

Fall 2015

Mississippi State
Introduction to AIS
75 min class period

40 students

- 3 majors
- Freshmen -Seniors

11 groups

- 3-4 students per group

Homogenous Groups

- Achievement and attendance

Found out their group
the day of the test

Day of the test

Grouping

Students looked at list on the projector screen

Found their team number

Sat at the table with their group number

Test

One copy of test per group

Allowed to discuss

Write one response for each question

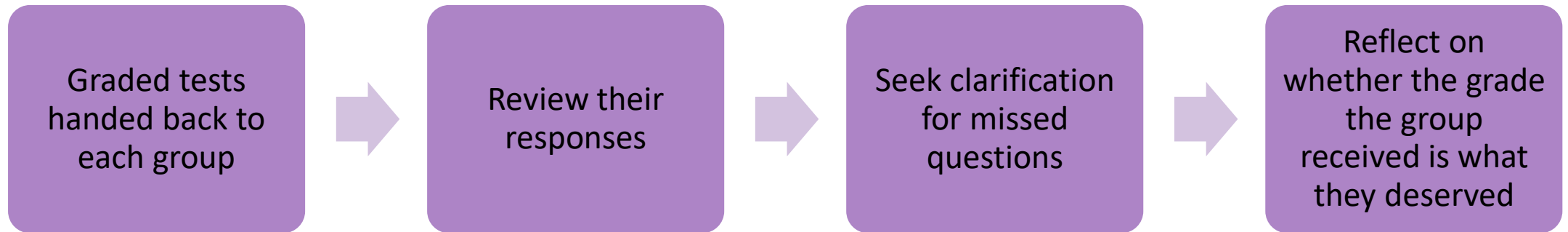
Allowed to dissent and write rationale on the exam



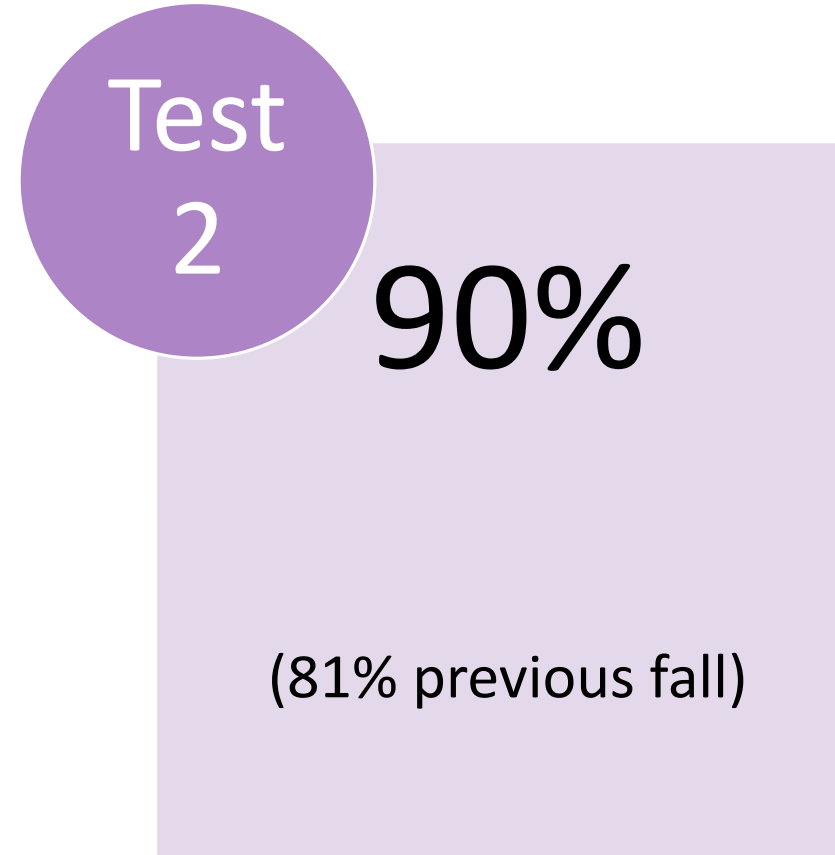
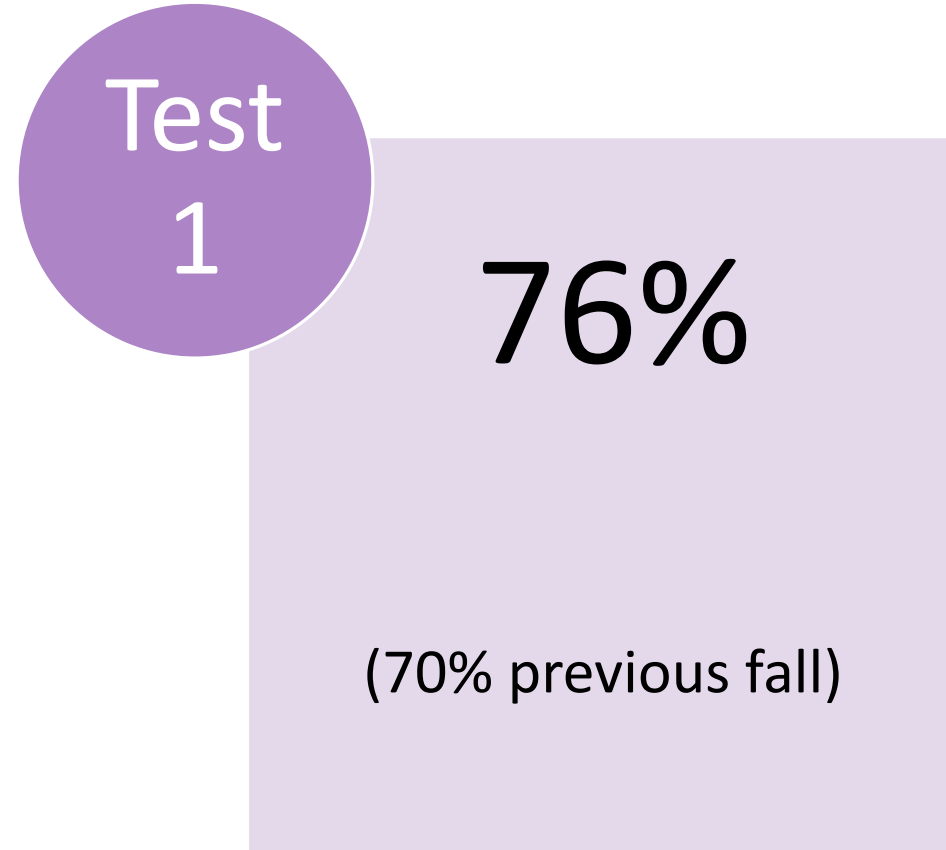
After finishing the test

- Satisfaction Instrument**
- Students could share their feelings toward the group test
- Group Assessment**
- Each group member was allowed to assess the others
 - Not used to change individual's grade
 - Used as a tool for reflection

Next class period



Results to Date



Satisfaction with the group test process

Item	Test 1 (<i>N</i> = 40)		Test 2 (<i>n</i> = 37*)	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Enhanced Learning	4.20	.75	4.20	.65
Understand difficult concepts	4.15	.88	4.16	.79
Enjoyable	4.30	.72	4.38	.63
Nice change of pace	4.60	.73	4.65	.58
Distracting	1.75	.70	1.59	.63
Confusing	1.95	.74	1.70	.73

Note: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*

*three students did not take the second test

Lessons Learned/Advice

- Consider the **objectives** of the course
- The **structure** of the group test can be done in a variety of ways.
 - Same groups for each test
 - Test completed outside of class time
 - Grading could reflect input (group assessment)
- Determine **groups** prior to the test date
- Need adequate classroom **space**
- Decide how to handle **students** who don't want to work in a group for the test
- Write test to encourage **discussion**

Thank you!

Any Questions?

References

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