

TEAM WORK IN AN INTRODUCTORY ORGANIC AND BIOCHEMISTRY CLASSROOM



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Likert-type Survey administered to Gauge Students Comfort Working in Groups. This Lasted One Day.

Students Align Themselves on a Continuum to Alleviate Common Concerns and Issues with Group Work. This Lasted One Day.

Students Set Times to Meet Outside the Regular Classroom and Lab Times. Students Met for The Remainder of the Semester.

Students are Observed During Group Work Sessions and During Lab Exercises. Checklists are Completed by Instructor. This Phase Lasted the Remainder of the Semester.

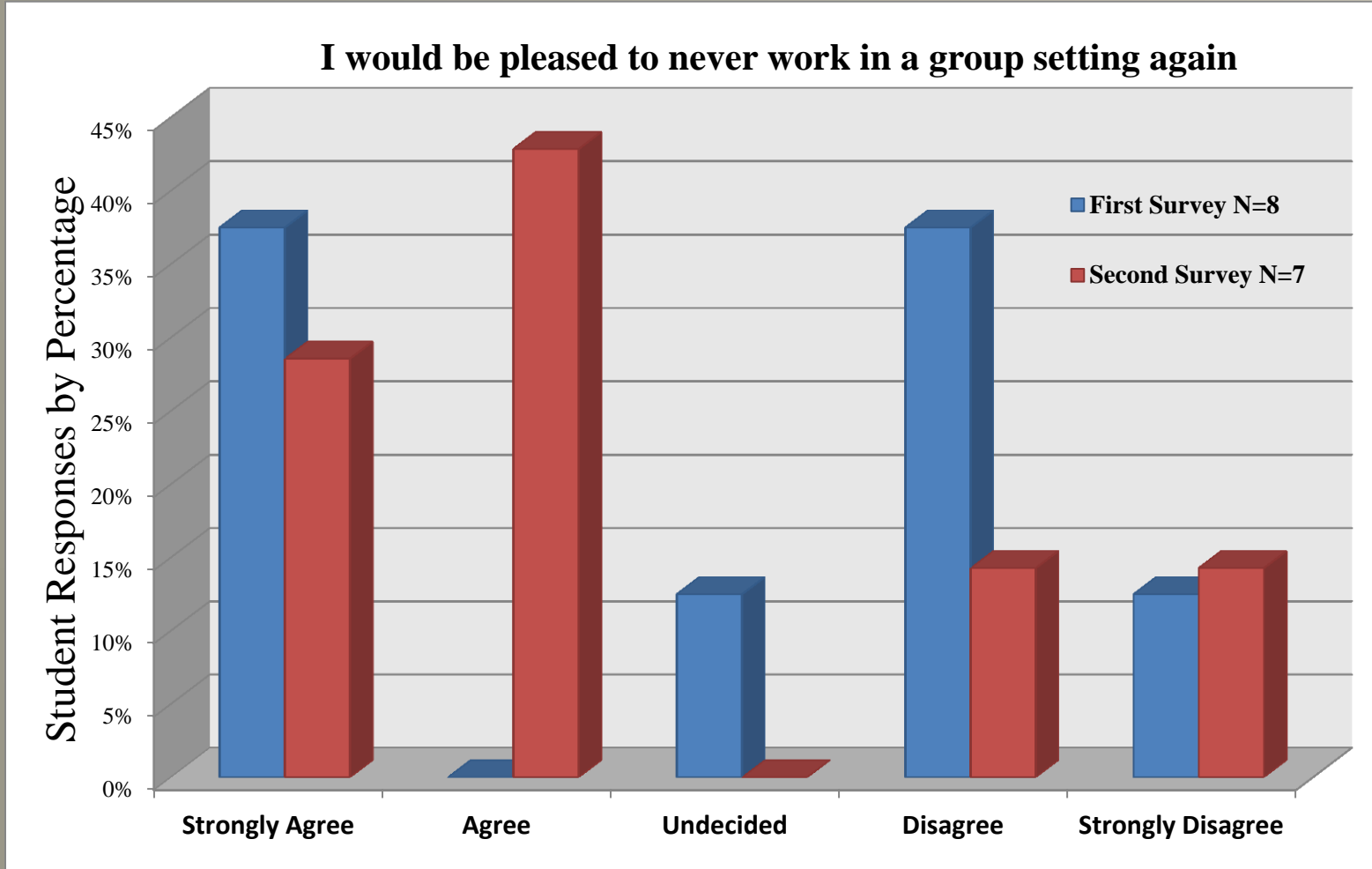
Assessment Scores For the Treatment Group and the Non-Treatment Group Were Compared.

Final Survey Administered to Determine Changes in Attitudes and Perceptions.

BACKGROUND

The unemployment rate in Lame Deer, Montana is a staggering 78% with 87% of the population living below the poverty line. The average life expectancy is only 57 years old with 63% of the population under the age of 18 years old (Wolf, 2016). With this in mind, I wanted to address the reasons more of the young people choose not to go to a four year university to raise the living conditions of their families. Students at CDKC often express concern in transferring into a university setting. They also have a difficult time asking their peers for help and learning how to advocate for themselves. The goal of this study to teach students how to lean on each other both inside and outside of the classroom.

Comparison of Student Responses form Initial and Final Likert-type Survey



RESEARCH QUESTIONS

My study was directed by one main question:

“How does team and group work elicit a sense of community among students?”

In addition, I had four sub questions:

“How does self-confidence improve as a result of working in a group?”

“Do students perform better on assessments as a result of team?”

How will working in a group solidify concepts for complete understanding and retention of material?”

“How do students feel about moving forward in their education as a result of working in groups?”

TREATMENT

Four distinct phases were applied during this study.

They are outlined in the flow chart above along with the assessment methods that were used during the study.

The chart also includes the measurement tools that were used. The most important part of the treatment was students working together in groups outside of the classroom.

DATA COLLECTION

Data was collected using Likert-type surveys, observation checklists, a reflexive journal and with summative assessments.

The Likert-type survey was given at the beginning of the semester and at the end of the semester. The observation checklist was completed during the lab sessions as well as during the independent group work sessions. Summative assessments were given over the same material as previous sections. I wrote student comments, suggestions for lessons, pros and cons of specific labs and notes for future sections in the reflexive journal.

RESULTS AND CONCLUSION

Though student assessment scores did not increase dramatically, the students were able to work through more material than the previous sections of the class. Students also spent more time working with each other and less time relying on me as an instructor.

STUDENT COMMENTS AT CONCLUSION OF TREATMENT:

- “I called her this weekend and she always has an excuse why she can’t come do the work”.
- “I don’t mind helping but I cannot teach them from the beginning”.
- “I want to find people that are determined to take advantage to help each other succeed”.

STUDENT COMMENTS BEFORE THE TREATMENT:

- “I feel like all the people in this class will work really well together so I am okay with the group work”.
- “I don’t mind working in a group. It just sucks when the teacher chooses the group”.
- “I don’t now if people refuse to contribute or not but I am going to get the work done. I am in the class to learn and I will do whatever it takes to get there”.
- “I am really excited to do this!! All of the students in here are smart and it will be fun to get to know them better”.
- “I would not have answered the [group work continuum] questions the way I did if I was in a different class. It is because of these specific students I feel confident working n a group”.

Students looking through a microscope at DNA extracted from strawberries. This was not a part of the lab but these students wanted to explore further.

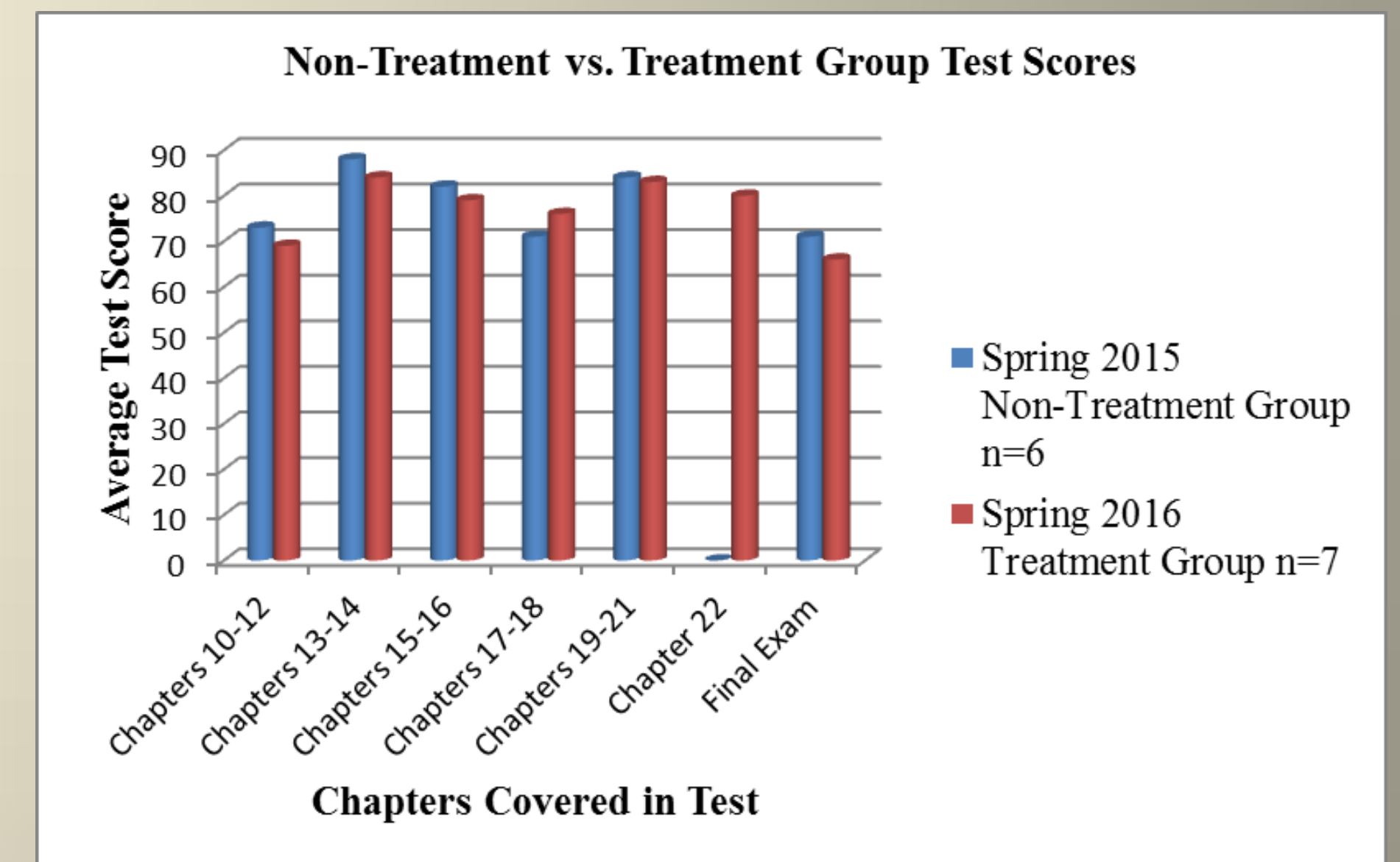


VALUE AND FUTURE WORK

One of the most valuable parts of this work was remembering what it was like to be a student! I also learned that the students can handle WAY more than what I have been expecting of them. I will continue this process in future sections of this class and other classes with some modifications:

- I will keep track of how often students come to me individually with questions.
- I will keep track of students overall perceptions of each other as group members formally and more frequently.
- I will give specific expectations for the group work sessions until students understand how to be “productive”.
- I will add a weekly check in for students about their satisfaction with the work the group is doing.
- I will have students complete the survey more frequently.
- I will keep the reflexive journal with me in the classroom and write in it IMMEDIATELY when I have information to record.

Scores for Treatment and Non-Treatment Groups Comparison of Assessment



WORKS CITED

Wolf, R.R. (2016). About Reservation Poverty. Retrieved February 16, 2016 from Cheyenne Children Services: <http://www.cheyennechildrenservices.com/Poverty/Figures.html>



Baby Cleveland. His mother came back to class after having him because her group would not let withdraw from the class. Permission to use photo Given by Brooke Whitewolf