

# Teams Work Makes the Dream Work

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Microsoft Teams as Online Learning Communication  
Solution

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# Introduction

Online education and learning environments historically struggle with students feeling isolated or distant from their instructors, colleagues, and the material. Various mitigations have been considered and applied to varying degrees of success, such as:

1. Text-based discussions forums
2. Voice-based discussion forums
3. Synchronous video conferencing
4. SMS group chats, etc.



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# Introduction

- The discrepancy between student engagement with online materials and the achievement of learning outcomes has also been problematic, with some research demonstrating an improvement in assessments but no impact on achieving said learning outcomes.
- Research has shown that more organic, conversational interactions can lead to higher levels of reinforcement of previously acquired knowledge and improve social presence.



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# Introduction

- This leads to a stronger levels of reinforcement of previously acquired knowledge and improve social presence.
- Social networks strongly points to the high value of social interaction as an indicator of academic performance.



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# Problem Statement

How do we engage students and make them feel they are part of a larger learning community?



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## Our solution

Apply the use of a novel communication tool that is **Microsoft Teams** to create a fully online learning environment.

We plan to **shorten** the transactional distance by providing an online space that is social, building a **Community of Inquiry Framework** that allows for a space to improve:

1. Teacher-Student;
2. Student-Student;
3. and Student-Content Interactions

This Community will serve as a “home” outside a learning management system.



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# Survey implementation

We implement a Quasi-Experimental Pretest-Posttest Design to 25 students in the College of Applied Science and Technology.

*The basic premise behind the pretest–posttest design involves obtaining a pretest measure of the outcome of interest prior to administering some treatment, followed by a posttest on the same measure after treatment occurs. Pretest–posttest designs are employed in both experimental and quasi-experimental research and can be used with or without control groups.*

Both of the surveys include:

- Demographics
  - Age, identified gender, nationality, native language, English fluency, School-related
  - Comfort level with technology, generally
  - Comfort level with text-based chatting
  - Comfort level with video conferencing



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# Pre-test Questions

1. Experience/history in fully online college classes
2. Used tool in past?
3. Do you think online classes suffer from feeling of distance? Do you ever feel isolated?
4. What grade do you expect to get in this class?



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## Post-test Questions

1. What felt different when tool is included in class?
2. Do you prefer this to a standard discussion forum? Why?
3. Feel like instructor is more accessible?
4. Sense of community heightened?
5. Felt more connected to your classmates?
6. Was there group work? How did impact, if so?



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## Post-test Questions

7. If you knew in advance a future class was planning on using a tool like this, would this impact your decision to enroll?
8. When you needed assistance or wanted questions answered, was the tool a benefit or a hassle?
9. Was the grade you ended up with higher or lower than what you expected at the beginning of the semester?



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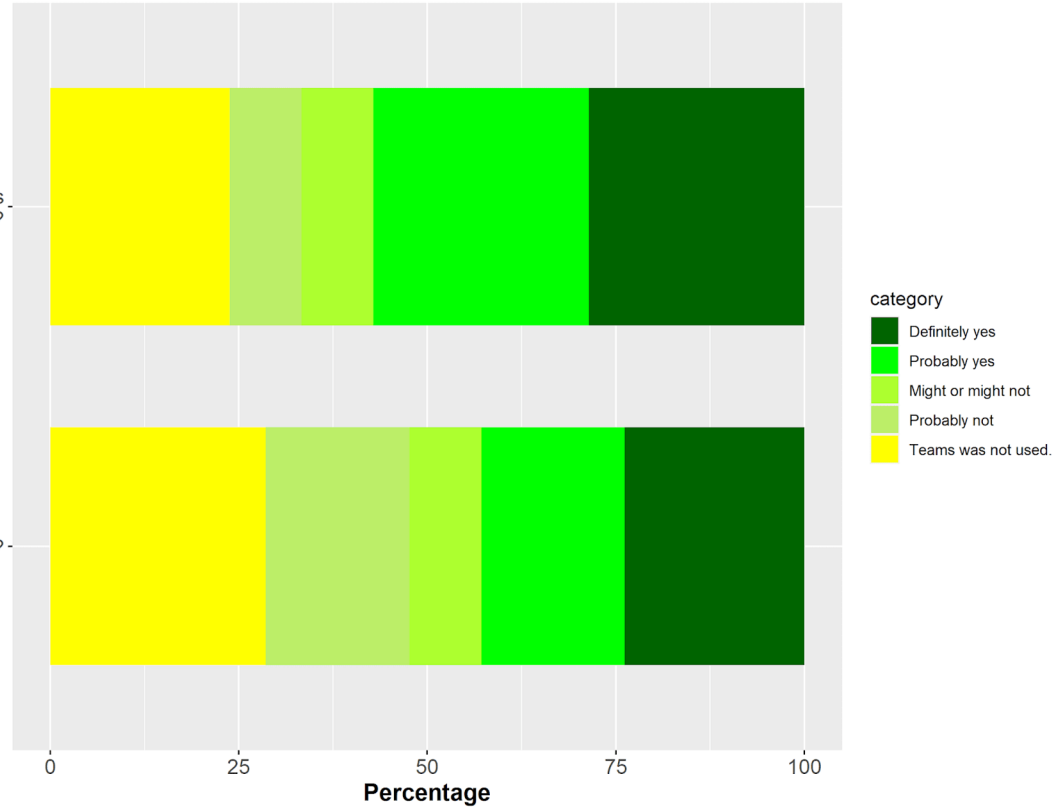
# Results

Question

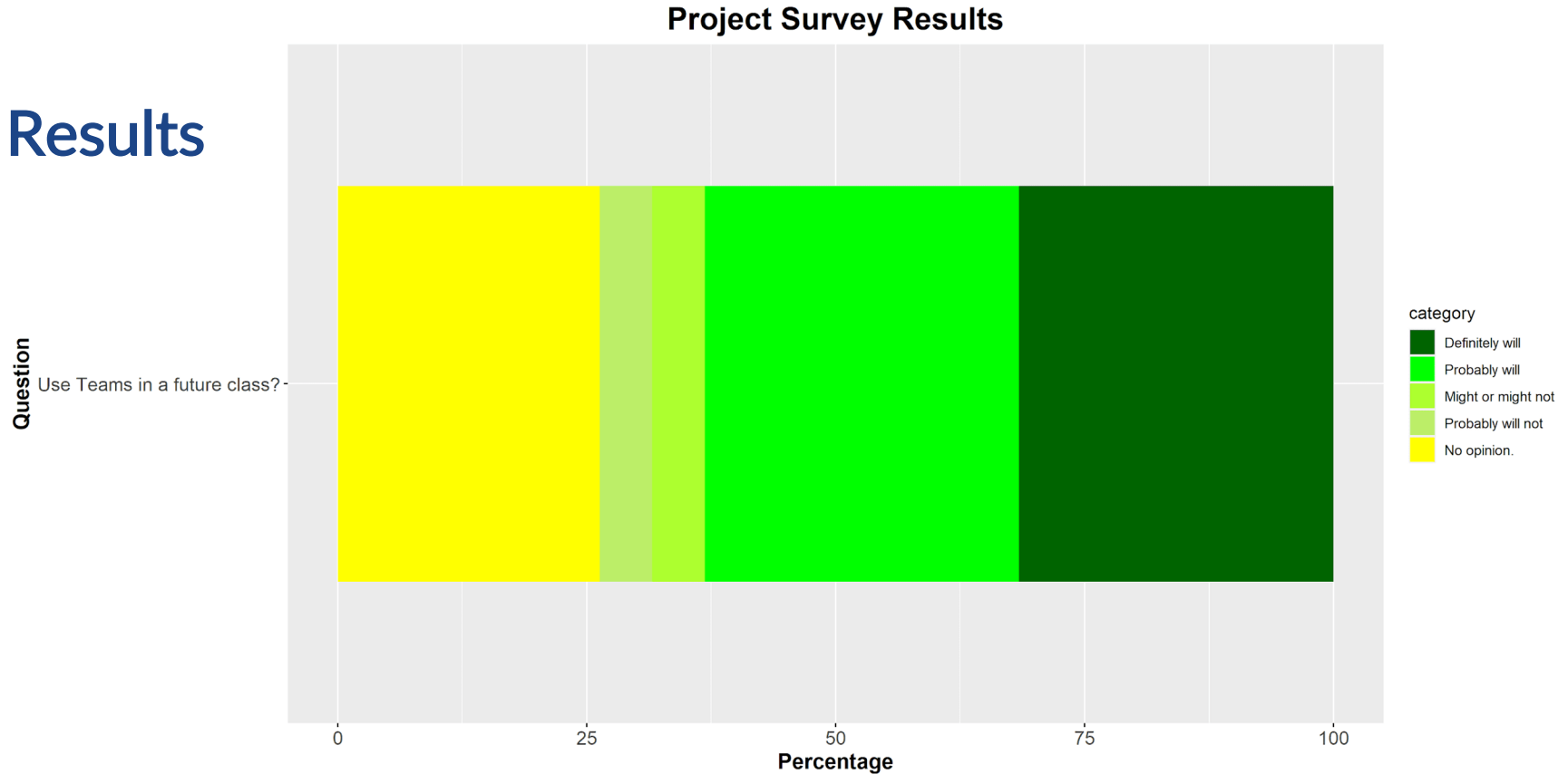
Do you feel the integration of a tool like Microsoft Teams into a fully online class improves your experience?

Did the integration of Microsoft teams help you to feel less isolated?

Project Survey Results

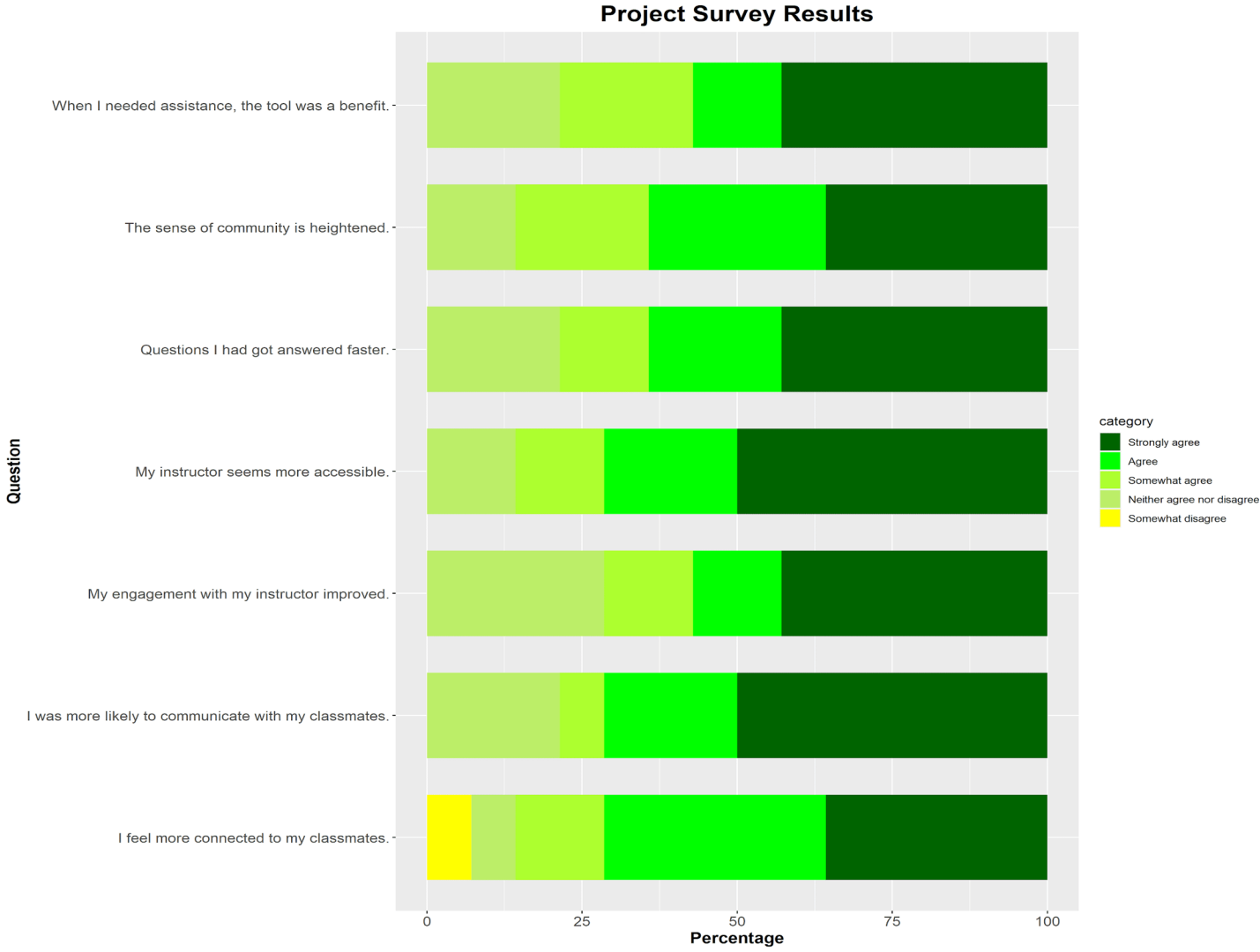


# Results





# Results

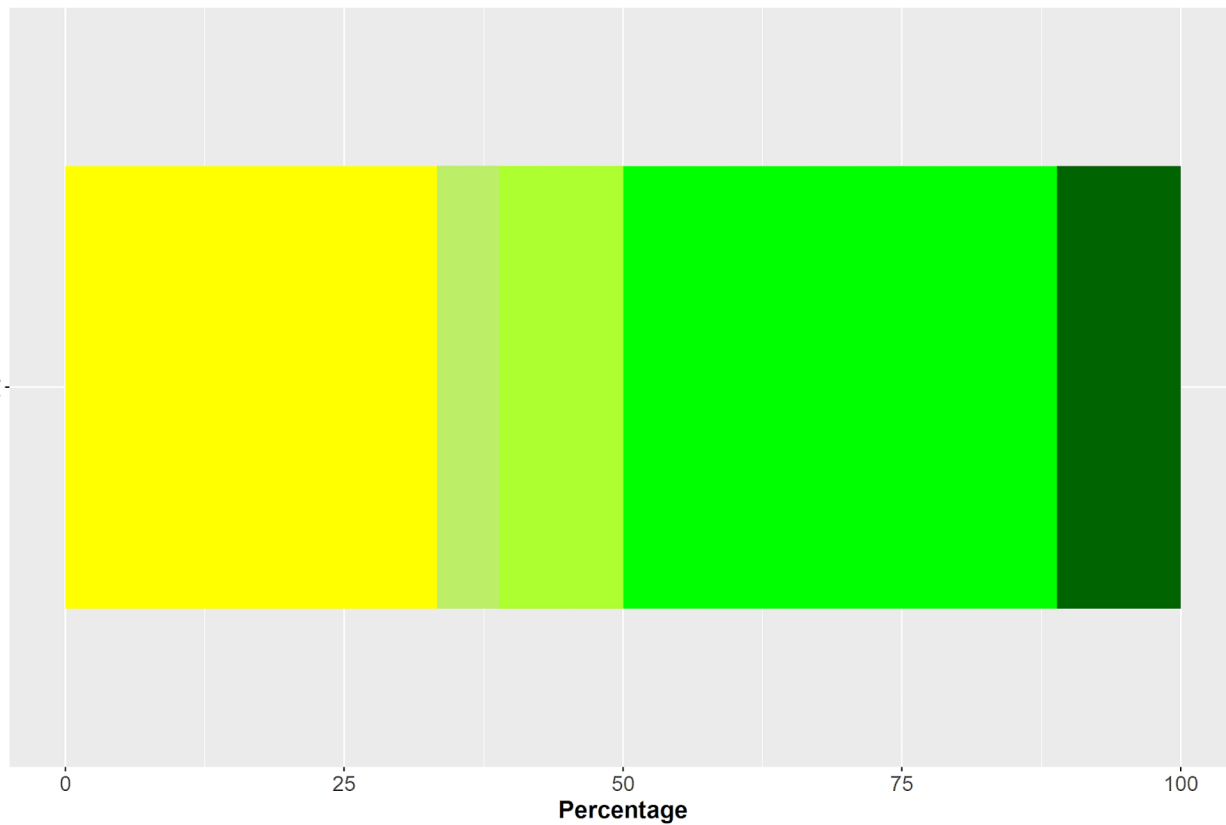


# Results

## Project Survey Results

Question

How did using Teams impact groupwork?



category

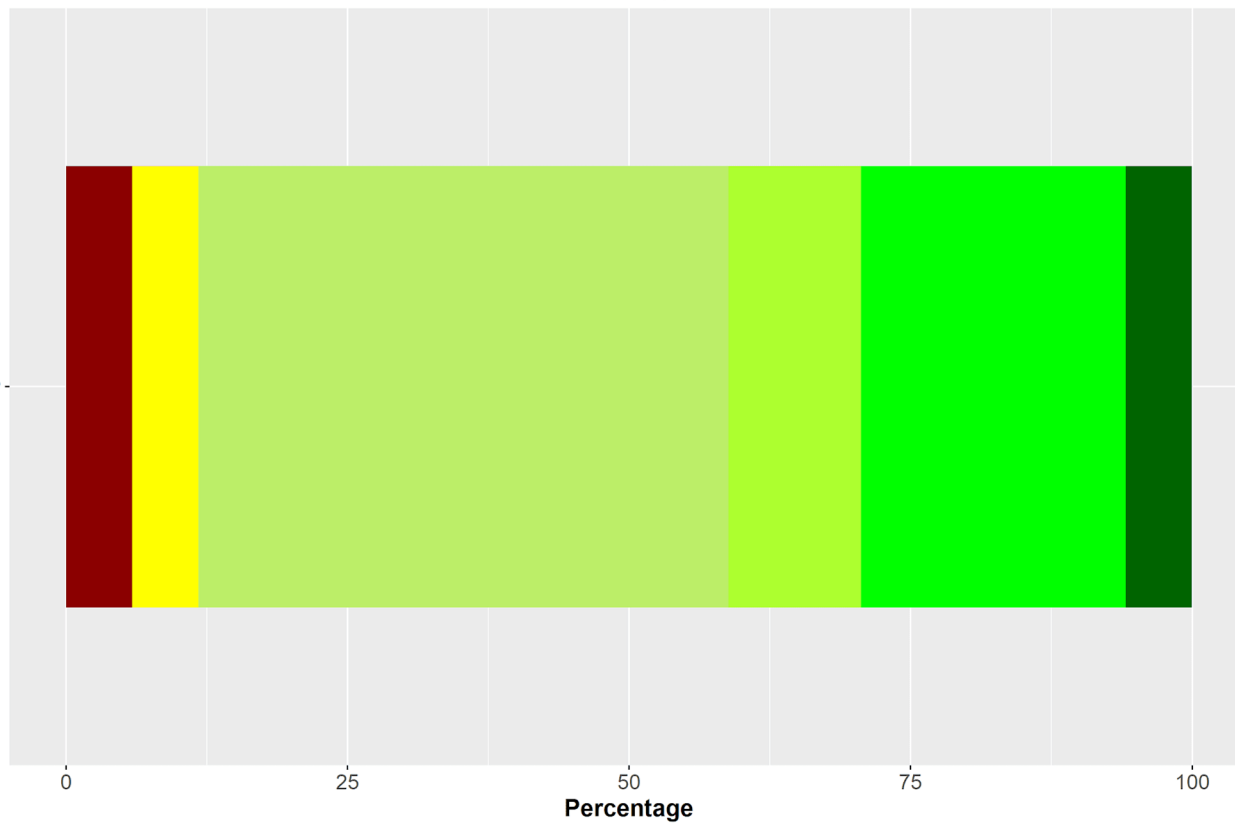
- Extremely positive
- Moderately positive
- Slightly positive
- Neither positive nor negative
- We did not use Teams.

# Results

## Project Survey Results

Question

Expected grade difference?



category

- Much higher
- Moderately higher
- Slightly higher
- About the same
- Slightly lower
- Much lower



# Conclusions

With the previous results we concluded that:

- More than the 50% of the students think that the sense of community is heightened
- More than the 50% of the students think that the interaction with their instructors improved
- The interaction with their peers increased almost 75% and also the feeling of connection with them too
- The majority of them think that they can use Microsoft Teams in their future classes



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## Future Work

1. Continuing to use Microsoft Teams in our classes to keep creating online communities every semester.
2. Adapting the future classes with more activities using Microsoft Teams.
3. Implementing the survey every semester.
4. Continuing to analyze the future data in order to engage more students into a strong online community.



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