Action Research Presentation
NTW Year 2, 2018-2019

INTRODUCTION • Research Question(s) • What was the basis of our interest in this topic or focus? • What were we trying to learn about and understand? • What were the overall goals? • What were the factors in my own history and experiences that have led us to become interested in this area of inquiry?	**What are we proposing to study?** ➢ The neuroscience behind student engagement within a group. **What is the basis of our interest in this topic or focus?** ➢ Individual accountability within the group setting, how do we maximize (and keep) our student's interest when they are collaborating with each other. **What are we trying to learn about and understand?** ➢ The neuroscience behind what gets students talking about academic work (cognitively engaged) and why it matters. How can we get all students to take an initiative in their work? **What are our overall goals?** ➢ Identify techniques and strategies to integrate/implement in our classrooms that promote collaboration and meaningful discussion in groups. **What are the factors of our own histories and experiences that have led us to become interested in this topic?** ➢ During collaborative work, students have the tendency of letting one specific student complete the task at hand while all students benefit from the completion of the task. ➢ Ultimately, we want to figure out ways to encourage our students not to approach group work as a task that has a start and end, but as a meaningful time to collaborate, share ideas, and learn from one another through worthwhile discussion. **What are our specific research questions for this study?** ➢ How can we prevent the temptation of having only one student in the group completing the assignment? ➢ How can we design group work tasks so that the group as a whole cannot succeed without the contribution of each individual? ➢ What can we do to limit off-topic conversation? ➢ How can we get students to discuss the content/concept at a deeper level of interest and understanding? ➢ How do we overcome the "directness" of correctly performing a higher level math problem? While there may be more than one method to solve the problem, how do we get students to discuss the plan of action? ➢ How can we engage all students within a group, and design an environment where all group members put forth equal effort towards the end goal? ➢ How can we support special education students during the cooperative learning process?

BACKGROUND FOR THE STUDY/REVIEW OF RELATED LITERATURE: WHY

- What is the background of this topic or focus and why is that background important to understand?
- What is the context of previous work that has been done on this topic? To what else does the topic relate?

Cooperative learning "requires pupils to work together in small groups to support each other to improve their own learning and that of others" (Jollie, 56). While the definition may seem simple, in order for cooperative learning to be achieved, there are many essential key components that must be considered by educators. Students do not want to be receptacles of information. It is human nature to want to interact; to hear and to be heard. When this is executed successfully in the classroom, we see student achievement in the areas of reading, writing, understanding, problem-solving, socialization, self-esteem and conflict management rise. (Gillies, 211).

In order for successful cooperative learning to take place, educators first need to understand how it is achieved. Cooperative learning is not the same thing as 'group work.' That is to say, simply putting desks together does not cause collaboration amongst students. There are, however, many things teachers can do to foster meaningful collaboration and discussion amongst students and their peers. In each book, article and discussion about cooperative learning the key components that are outlined vary slightly, but there are two major themes that are included in all. In order for collaborative learning to take place, teachers need to tailor their instruction to promote positive interdependence and individual accountability.

Positive interdependence was described beautifully by Dr. Roger Johnson in his interview with School Talk. He explained that positive interdependence is being "linked together with other people in a way that you can't be successful unless they are, and they can't be successful without you" (Johnson). More simply put, "we sink or swim together" (Jollie, 61). Achieving this takes a lot of planning on the part of the educator because the cooperative learning task assigned must require that students' individual contributions must be just one integral part of a greater whole final product. The second key component, individual accountability, involves "students' understanding that they will be held accountable for their individual contributions to the group, that free-loading will not be tolerated" (Gillies, 286) or as Dr. Johnson stated, "no hitchhiking" (Johnson). This encourages the students to develop a sense of personal responsibility to contribute to the learning of the group. Other important key components at the forefront of cooperative learning include promotive interaction, or face to face communication, explicitly teaching interpersonal and small-group skills such as effective communication and conflict resolution by teachers, and finally allowing groups time to self-process and ask themselves reflective, metacognitive questions such as "how are we doing? Is there anything else that we should be doing? What could we be doing differently?" (Gillies, 298) Because of this emphasis on teamwork and individual accountability for the success of the team as a whole, it only makes sense that cooperative learning is inclusive. Cooperative learning is inclusive because it "asks questions of the whole group, allows students to work with people of all ability levels and ethnic backgrounds, trains students in interpersonal skills, requires and values the contribution of each student, promotes active and social learning, and finally creates a mutually supportive classroom." (Jollie, 204) As a result, this helps improve self-esteem as well as academic understanding in struggling students as well as students with disabilities.

Standard III of the New York State Teacher Standards addresses instructional practices of effective teachers. Standard III expects teachers to "use research-based practices to provide developmentally appropriate and standards-driven instruction, communicate clearly and accurately, set high expectations, use a variety of instructional approaches and resources, engage students in multidisciplinary skills and assess student progress and provide meaningful feedback" (The New York State Teaching Standards) in order to maximize student understanding and learning. Implementing cooperative learning tasks in the classroom does not only meet these standards but exceeds them. Specifically Element III.5, which states that teachers should "engage students in the development of multidisciplinary skills, such as communication, collaboration, critical thinking, and use of technology" (The New York State Teaching Standards)

	As stated before, students do not want to be receptacles of information. It is human nature to want to interact; to hear and to be heard. As a result, it doesn't take much effort on the part of the teacher to get students to "buy in" to the idea of cooperative learning in class. When cooperative learning tasks are properly planned and executed, all students, including students will learning difficulties and special needs, can grow socially, emotionally and academically, learning life skills that they will carry with them into the workplace and beyond.
DESCRIPTION OF THE RESEARCH CONTEXT: WHERE AND WHO • Where did we conduct this study? • Where did we gather the data? (and what software did we use) • What was the specific context in which the study will be conducted (e.g. school population, the classroom environment, curriculum, etc.)? • Who were the participants in this research? • What is our relationship to the people involved? • Did we need to gain permission ("informed consent") from parents, guardians, or other "gatekeepers"? If so, how did we gain this consent?	Bryanna Kelly - Science This study was conducted in a 10th-grade living environment classroom at Mineola High School. The class in question has 29 students; 20 male and 9 female. Four students are currently identified with special education needs and have IEPs. In general, these students require preferential seating, extended time to work on tasks, directions explained and read, and sometimes require the use of text to speech devices for reading comprehension tasks. The study was conducted over a four week period. Two weeks to collect initial data and two weeks to implement strategies and collect results data. The data was gathered in a number of ways. Quantitative data was taken in the form of quiz, test, lab, classwork and homework assignments. Qualitative data was collected using the iPad application Student Metrics which allowed the teacher to collect data based on student interactions and participation with one another during small group instruction as well as in the whole class setting. Sabrina Knopf - Mathematics This study was conducted in a 10th-grade Algebra II classroom at Mineola High School. The classroom consists of 19 students. 6 of those students have an Individualized Education Plan (IEP) and 5 students are Limited English Proficiency (LEP) Eligible. All together, there are 10 males and 9 females. In general, most of these students require preferential seating towards the front of the room or away from areas of the room that could cause them a distraction (for example, near the door or by the window). They also required extended time to work on tasks, directions explained, and some students have the accomodation to get their tests and quizzes read.. The study was conducted over a four week period. The first two weeks were used to collect initial data that was taken without any implementation, and the final two weeks were used to implement strategies and collect the results of those strategies. This data was gathered in a variety of ways, ensuring accurate results. Quantitative data was taken in the form of exams, classwork and homework assignments. Qualitative data was collected using the iPad application Student Metrics, which allowed the teacher to collect data based on student interactions and participation with one another during small group instruction (as well as in the whole class setting).

Teacher Research Team: Collaborative Learning

Jonathan Piccirillo - Italian

This study was conducted in a 10th grade Italian classroom at Mineola High School. There are a total of 18 students in the classroom; 10 females and 8 males. There one student in the classroom that has an IEP. This student attends resource room, requires reteaching of material, check for understanding, classroom directions, extended time, preferential seating and separate location. The student is seated in front of the classroom and is also provided cues and visual aids to help learn the material. This study was conducted over a four week period and the first two weeks were used to collect data. The data results were collected by formative assessments, quizzes, tests, classwork, homework, and classwork. The next two weeks were focused on collecting data with the implementation the new strategies in order to compare the effectiveness of the new strategy and implementation. Qualitative data was collected using the Ipad application Student Metrics. The use of the APP allowed the teacher to gauge participation and engagement in the classroom. The implementation motivated the students to speak in the target language in order to receive a "point/swipe" for their classwork.This strategy was used in both small group instruction as well as a whole class. The purpose of these implemented strategies was to develop cohesive and coherent instruction and served only the purpose of increasing participation, engagement, and communicative skills within the target language of the world language classroom.

Cynthia Mejia - Science

This study was conducted in a 10th grade Living environment classroom at Mineola High School. There are a total of 25 students in the classroom; 16 females, and 9 males. 11 of my students in the classroom are currently identified as ENL students. These students are now transitioning into integrated classrooms, where they are learning the content in English. These students require extra time during formal assessment, and some specific student need translated directions and information for clarification and assistance. The study was conducted over a four week period. I took the first two weeks to collect initial data of the students and their engagement prior to implementing different strategies. The last two weeks were used to collect data of the students and their engagement with the implementation of the strategies. Data was collected through a series of different mediums, to ensure more accuracy in the data analyzed. Quantitative data was collected in form of quiz, test, classwork, labs, and homework assignments. Qualitative data was collected using the iPad application Student Metrics, which allowed the teacher to collect data based on students engagement, interaction and participation with each other during small group activities and in the whole class setting. The purpose of these strategies were to develop cohesive and coherent instruction that would foster greater student engagement that would further support understanding of the content in the curriculum.

Data and Findings

- What was the timeline of the study, from start to end?
- What are the overall findings?
- What is the significance of these findings?
- What data supported these findings?
- What were some of the setbacks, obstacles, and pivots you encountered in this research?

Initial data for this action research project was collected over a two week period of time. This initial data was collected to serve as a baseline for comparison for data collected during and after cooperative learning strategies were implemented. The final data to analyze the impact of implementation was collected over a two week period as well.

The overall findings of this study indicate that there are clear, yet simple, strategies that teachers can implement in their cooperative learning assignments to promote engagement and student discourse as well as accountability for academic tasks. It is also notable to recognize that in addition to academic benefits, there was a clear improvement in the social and emotional development of students, creating a much more inclusive and comfortable environment for students to work in. Finally, in particular, students with disabilities and/or language barriers, or simply students who have struggled academically over the course of the year have shown significant academic improvement leading to increased confidence and thus, stronger motivation to work toward success.

We believe that the feasibility of implementation is what makes these findings so significant. With simple, minor classroom changes there can be a large improvement of academic outcomes for all students, especially struggling learnings and English language learners.

Specific data to support these findings can be found below in the artifacts section. Some important statistical data to note is that there was a significant increase in student test scores from exams given prior to and after the implementation of these cooperative learning strategies. There was also a notable improvement in the number of students who completed homework assignments. When surveyed, students responded that this was because the homework seemed "easy" because they knew what it was about so it was less daunting to do. As a team, we infer that this is a result in although a more detailed analysis would need to be conducted to confirm this. Finally, while there was no significant difference in the mode of laboratory experiments, there was a lower frequency of students who were turning in their lab assignments late. Perhaps this is also due to the perception of "ease" as a result of understanding the material more thoroughly. It is important to note that this data was collected over the course of two different topics and how this concept can be applied across all curriculum areas.

Some setbacks and obstacles encountered during this action research was the initial implementation, and getting the students to "buy in" to the idea of being open and sharing their ideas with one another. At the high school level there is a lot of pressure to fit in and as a result some students are more reluctant to share their thoughts. As students worked in the same groups over the two weeks, however, they because more comfortable with one another and participation improved.

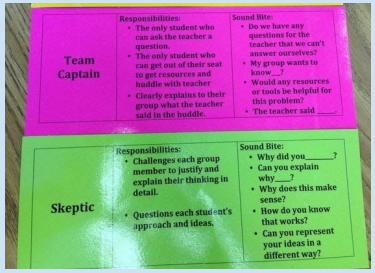
IMPORTANCE AND SIGNIFICANCE OF THE STUDY: WHO CARES? • Whose interests were served by this research? Who benefitted? How do you know they benefitted? • What is the study's significance for your classroom/school/ local context?	The importance of this study is mainly for our students. As educators, we are constantly striving to learn and grow as teachers, and we are always looking for more effective ways to teach our students. Students and teachers have benefitted from this study. Student achievement and engagement has improved and the classroom has become a much more interactive and student led learning environment. The techniques used in this study are simple and easy to implement in all classrooms and the benefits are immense.
REFERENCES • What articles did we use to inform our research and actions (link them here) • What Inter Visitations did we use to inform this action research project?	1. "Cooperative vs Competitive Learning." *School Talk*, performance by Roger Johnson, season 1, episode 470, Team TVS, www.youtube.com/watch?v=bL3oJDLpc6M. 2. Gillies, Robyn M. and Adrian F. Ashman. "The Effects of Training in Cooperative Learning on Differential Student Behavior and Achievement." Journal of Classroom Interaction 32.1 (1997): 1-10. 3. Polloway, Edward A., James R. Patton, and Loretta Serna. Strategies for teaching learners with special needs. 9th ed. Upper Saddle River, N.J.: Pearson Merrill Prentice Hall, 2008. Print. 4. "The New York State Teaching Standards." *Http://Www.highered.nysed.gov*, New York State Education Department, 12 Sept. 2011, www.highered.nysed.gov/tcert/pdf/teachingstandards9122011.pdf.
Technique 1 from Research *Positive Interdependence and Individual Accountability*	**What is Positive Interdependence and What Does It Look Like?** "Positive interdependence exists when group members are linked together in such a way that one cannot succeed unless other do, and they must coordinate their efforts to ensure that everyone complete his or her specific goal" (Gillies, 805) In short, students who experience positive interdependence within their cooperative group settings feel closer to their peers, are more attentive to what their group members had to say, and were more willing to communicate effectively. The understanding that, "we sink together or we swim together" motivates students to achieve. Jolliffe suggests this feeling can be achieved by establishing mutual goals, joint rewards in which the group is rewarded for each individual being successful on a test or quiz, supplying shared materials and information and finally assigning roles (444). The aim of individual accountability is to encourage students to take on personal responsibility for their role in the group setting. "Individual accountability means that each member of the group must learn to be responsible for his or own contribution, otherwise the success of the group will be in danger" (Jolliffe, 467)

What is Individual Accountability and What Does It Look Like?

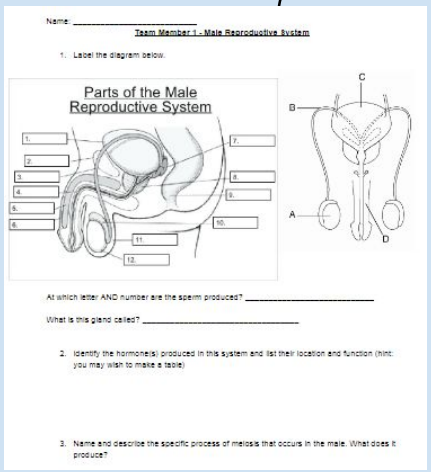
Positive interdependence and individual accountability are directly connected to planning and instruction for teachers. In order to promote these two essential cooperative learning tasks teachers need to design lessons that are open ended and not explicit, right or wrong answer questions. The students should synthesize information and create something new. Below are a few ways this was used in the classroom.

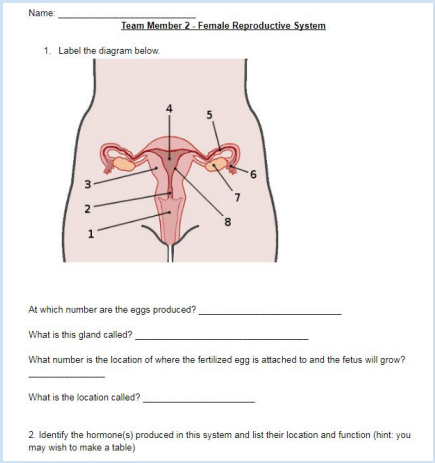
Materials used in Bryanna's classes:

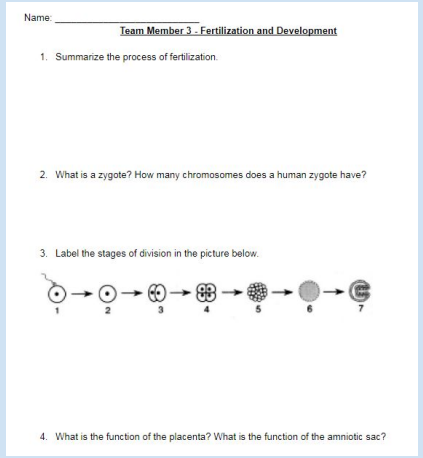
Group Roles with Sound Bites" to promote discussion



Individual accountability where each student had a different paper to complete and present to the group.







Positive Interdependence where individuals share their work and together selected important information from each to create a google document that would serve as their notes for the unit

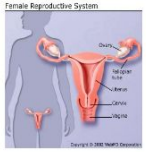
Module 8 Reproduction

1.Male Reproductive System

-Sperm is produced in the testis which also produces the male hormone named,"testosterone"
-The sperm is produced and stored in the testis
-Spermatogenesis is the process where special cells in the testes undergo meiosis to become sperm cells
-The way that the structure allows it to perform its function is that the head contains the DNA of the cell and the nucleus which organizes the cell's movement and the midpiece is the part that gives the cell its energy to complete its function, the tail allows the cell to move wear it needs to go by moving back and forth.

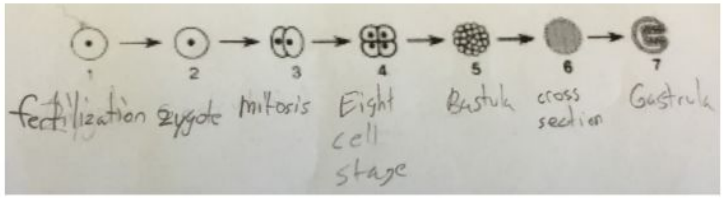
2.Female Reproductive System

-The ovary is the organ that produce the egg found in the female body
-Once the egg is fertilized the Fallopian tube carries the egg from the ovary to the uterus
-Once the egg is fertilized it implants itself into the uterine wall followed by growth



3.Fertilization & Development

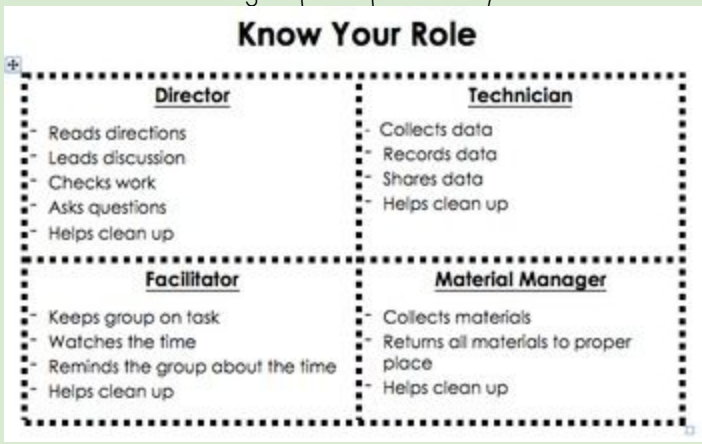
-Sperm travels to the egg in the Fallopian tube for this to occur
-The definition of the Zygote is the fertilized egg
-The placenta is moves things in and out of the sack
-The placenta allows Nutrients, Oxygen, Carbon Dioxide, Wastes to be exchange between the mother and the baby
-amniotic sac-acts as a cushion for the baby, maintains a constant temperature and allows the baby to develop evenly



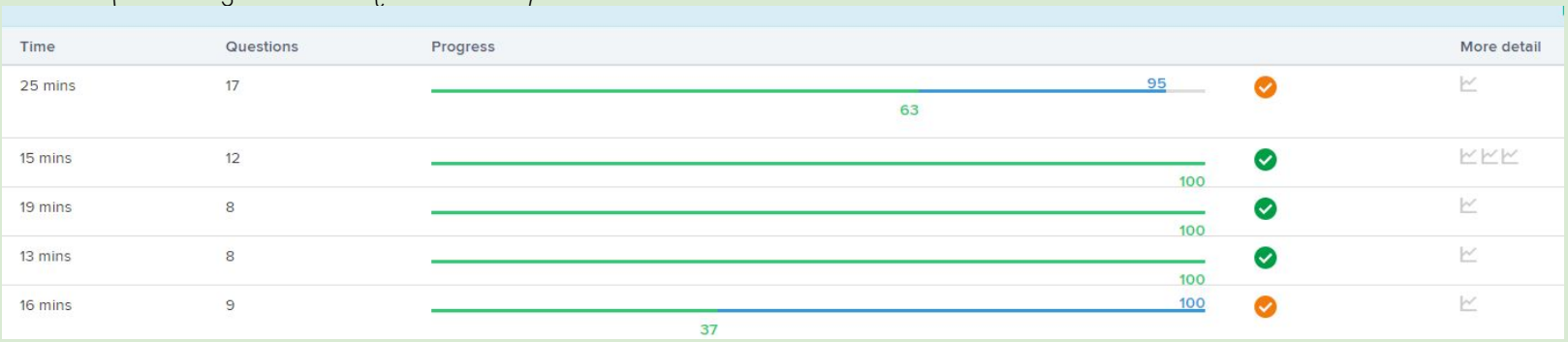
Group Assessment where students used their shared google drive document to complete a common quiz assessment. Students answered the questions before, individually, then discussed answers and submitted a common quiz with answers they agreed upon.

Sabrina's Algebra II classes:

Student Group Roles: Students had specific roles within their groups or pairs. They were held accountable to do an equal amount of work.



Individual Student Accountability: Each student had a different problem or example (or multiple problems or examples) to work through and discuss. If the questions were challenging and required steps, students were sometimes given tasks that would allow both students to be working on the same problem, but coordinating with one another to successfully get it correct. This was able to be completed with partners on Mathspace using the tiered questions they offer.



Positive Interdependence: Students created a video where they explained how to factor using the various methods of factoring. Although this was a review, it is crucial for the Regents in June, and is atopic that is relevant and necessary in many other mathematical strategies across the curriculum.

Group Assessment: Students critiqued other student work and had class discussions on how to correctly explain factoring and how to choose what methods are used. This was also used during Peardeck group assignments that were followed by a discussion.

Factoring Video Rubric

Use an iPad application such as Doceri, ShowMe, iMovie, Flipgrid, etc.

Names: _____

Grading: Your video will be graded according to the rubric below and will be worth a maximum of 20 points. Ten points will be peer review and the other ten points will be from your teacher.

Category	Score: 2	Score: 1	Score: 0
Solution	The students provided appropriate solutions.	The students provided a partial solution.	There are no attempts at solutions.
Math Steps	The steps are clear and easy to follow.	The steps are difficult to follow.	There are no steps.
Visual Appearance	The video is neat, organized, and is easy to watch.	The video is difficult to follow.	The video is not neat, organized, and is difficult to follow.
Errors	There are no mathematical errors.	There is more than one mathematical error.	The math is completely incorrect.
Timeliness	Video completed and turned in on time.	Video turned in one day late.	Video turned in two or more days late.

BONUS: *If there is more than one way to complete the problem, show multiple ways in the video!*

Teacher evaluation: _____

Student evaluation: _____

Total: _____

Materials used in Cynthia's classes :

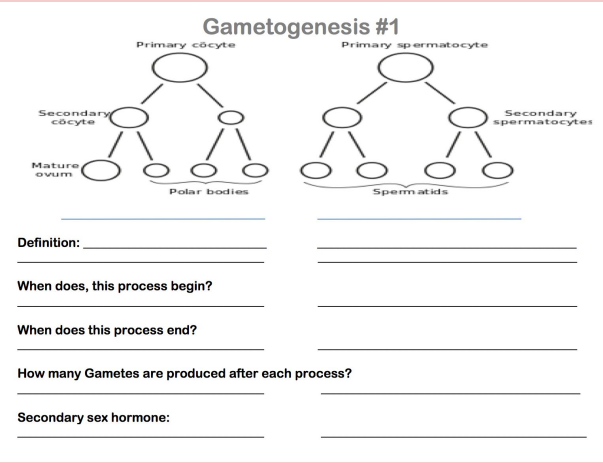
Group Roles: Students are given specific roles that they take on during group work. This will keep students accountable and ensure equal amount of work.

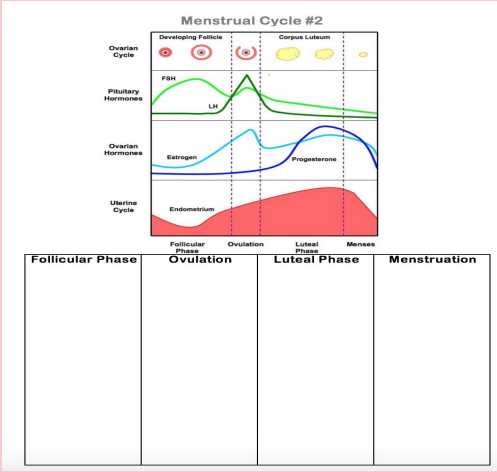
- ***Lead scientist:*** Keeps the group on the assigned task, makes sure that all members of the group have the opportunity to participate, makes sure that all members understand their task and is respected.
- ***Scientific reporter***: Presents finding or finished work from the group to the teacher, coordinates with the group with any presentation that is asked from the group, serves as the wildcard and will take on the role of anyone that is absent.
- ***Data recorder***: compiling group members ideas, challenges group members ideas, makes sure that everyone knows what data is to be collected during the activity.
- ***Resource Manager:*** Gets and returns the supplies needed during the activity, keeps track of the time, can briefly leave their station to talk to the teacher or other groups if it is appropriate.

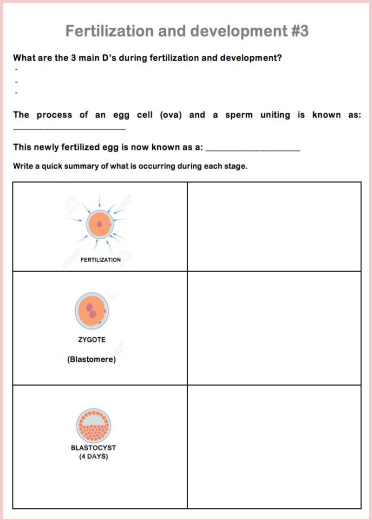
Lead scientist	- Keeps the group on the assigned task - makes sure that all members of the group have the opportunity to participate - makes sure that all members understand their task and is respected.
Scientific reporter	- Presents finding or finished work from the group to the teacher - coordinates with the group with any presentation that is asked from the group - serves as the wildcard and will take on the role of anyone that is absent.

Data recorder	- compiling group member's ideas - challenges group member's ideas - makes sure that everyone knows what data is to be collected during the activity.
Resource Manager	- Gets and returns the supplies needed during the activity - keeps track of the time - can briefly leave their station to talk to the teacher or other groups if it is appropriate.

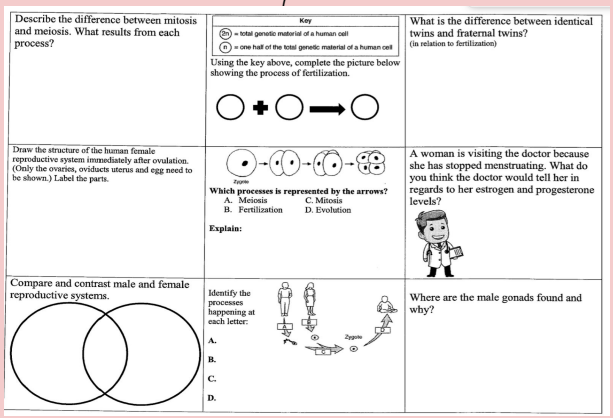
Individual Accountability: Each student is given a different sheet with a specific task that he/she will need to complete and present to the group.







Positive Interdependence: Where each member shares their work and works together to complete a new task that he/she needs all of the information collected by each member.



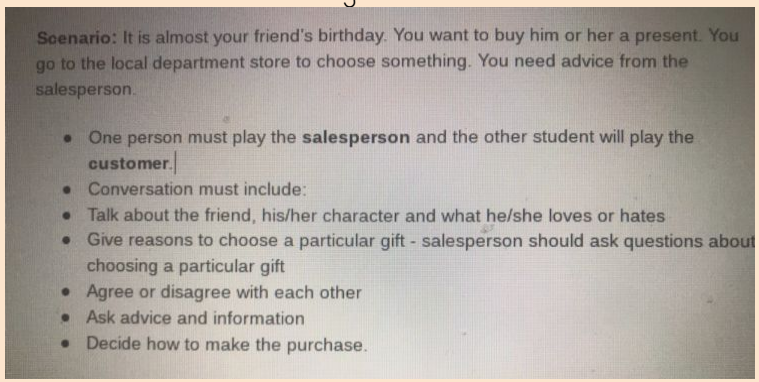
Describe the difference between mitosis and meiosis. What results from each process?	**Key** 2n = total genetic material of a human cell n = one half of the total genetic material of a human cell Using the key above, complete the picture below showing the process of fertilization.	What is the difference between identical twins and fraternal twins? (in relation to fertilization)
Draw the structure of the human female reproductive system immediately after ovulation. (Only the ovaries, oviducts uterus and egg need to be shown.) Label the parts.	Zygote **Which processes is represented by the arrows?** A. Meiosis C. Mitosis B. Fertilization D. Evolution **Explain:**	A woman is visiting the doctor because she has stopped menstruating. What do you think the doctor would tell her in regards to her estrogen and progesterone levels?
Compare and contrast male and female reproductive systems.	Identify the processes happening at each letter: Zygote **A.** **B.** **C.** **D.**	Where are the male gonads found and why?

Jonathan's Italian III classes:

Student Group Roles: Students had specific roles within their pairs. They were held accountable to do an equal amount of work. The students worked on a presentational task in order to gain communicative proficiency within the clothing and shopping unit.

-One student was assigned the role of the **customer**

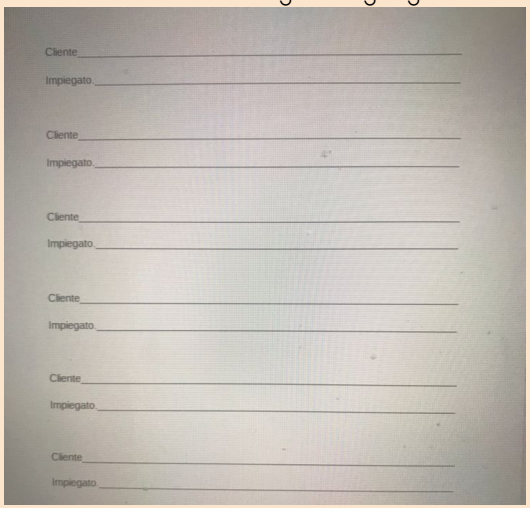
-the other student was assigned the role of the **store clerk**



Scenario: It is almost your friend's birthday. You want to buy him or her a present. You go to the local department store to choose something. You need advice from the salesperson.

- One person must play the **salesperson** and the other student will play the **customer**.
- Conversation must include:
- Talk about the friend, his/her character and what he/she loves or hates
- Give reasons to choose a particular gift - salesperson should ask questions about choosing a particular gift
- Agree or disagree with each other
- Ask advice and information
- Decide how to make the purchase.

Individual Student Accountability: As the students worked in their assigned roles, one was accountable for the vocabulary related to a customer wanting to buy clothes at a department store and the store clerk was accountable for the vocabulary related to working in clothing store. Each student was required to formulate correct grammar structure and pronunciation through their dialogues and conversation in the target language.



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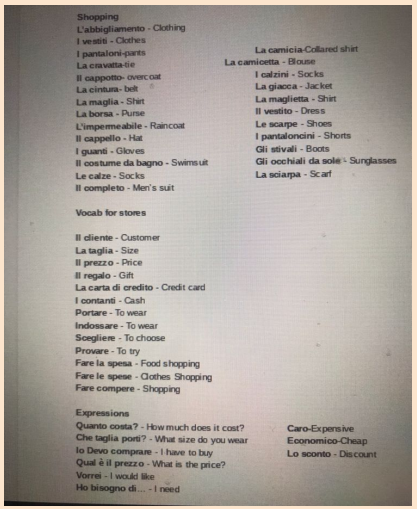


Shopping

L'abbigliamento - Clothing

I vestiti - Clothes

I pantaloni-pants

La cravatta-tie

Il cappotto- overcoat

La cintura- belt

La maglia - Shirt

La borsa - Purse

L'impermeabile - Raincoat

Il cappello - Hat

I guanti - Gloves

Il costume da bagno - Swimsuit

Le calze - Socks

Il completo - Men's suit

La camicia-Collared shirt

La camicetta - Blouse

I calzini - Socks

La giacca - Jacket

La maglietta - Shirt

Il vestito - Dress

Le scarpe - Shoes

I pantaloncini - Shorts

Gli stivali - Boots

Gli occhiali da sole - Sunglasses

La sciarpa - Scarf

Vocab for stores

Il cliente - Customer

La taglia - Size

Il prezzo - Price

Il regalo - Gift

La carta di credito - Credit card

I contanti - Cash

Portare - To wear

Indossare - To wear

Scegliere - To choose

Provare - To try

Fare la spesa - Food shopping

Fare le spese - Clothes Shopping

Fare compere - Shopping

Expressions

Quanto costa? - How much does it cost?

Che taglia porti? - What size do you wear

Io Devo comprare - I have to buy

Qual è il prezzo - What is the price?

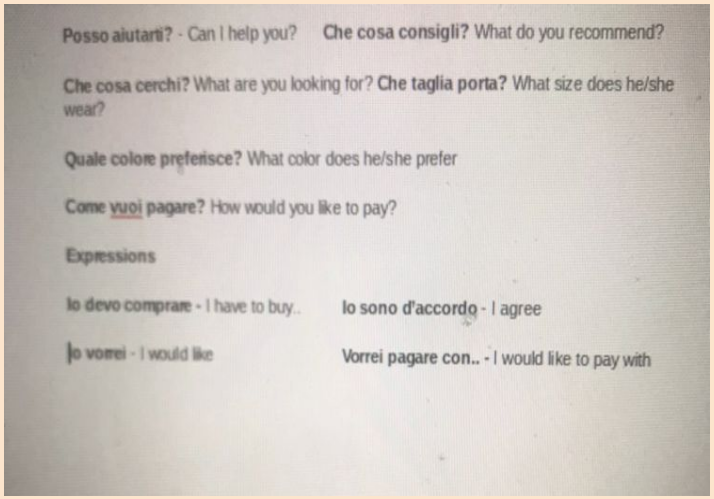
Vorrei - I would like

Ho bisogno di... - I need

Caro-Expensive

Economico-Cheap

Lo sconto - Discount



Posso aiutarti? - Can I help you? **Che cosa consigli?** What do you recommend?

Che cosa cerchi? What are you looking for? **Che taglia porta?** What size does he/she wear?

Quale colore preferisce? What color does he/she prefer

Come vuoi pagare? How would you like to pay?

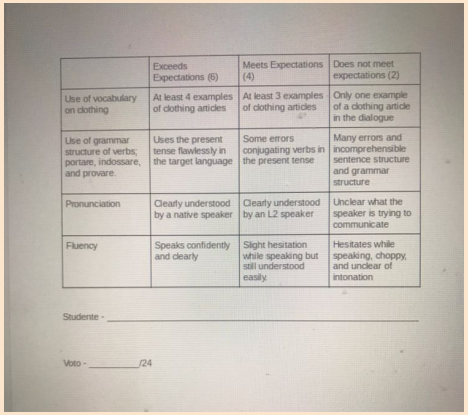
Expressions

Io devo comprare - I have to buy.. **Io sono d'accordo** - I agree

Io vorrei - I would like **Vorrei pagare con..** - I would like to pay with

Positive Interdependence: The students created a flipgrid recording their dialogue. The students were able to practice and demonstrate their understanding of the vocabulary, grammar structure, and pronunciation. This task is very important because it is often a speaking scenario on the Checkpoint B FLACS Examination. It is also important for the students to practice fluency within the target language and enables the students to utilize circumlocution as they demonstrate communicative proficiency.

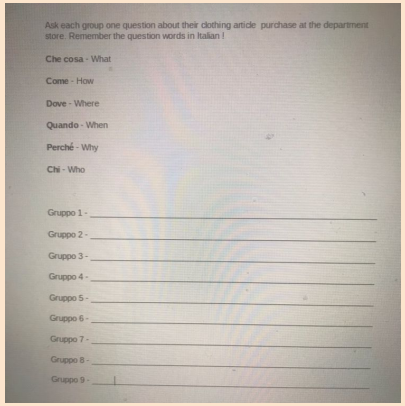
Group Assessment: The students listened to each others' conversations in class and were required to ask each other questions about their purchases in the department store. This created conversation within the target language. This helped reinforce the vocabulary and grammar structure but also created a higher level of thinking since the students had to know take what they had learned and formulate questions.



	Exceeds Expectations (6)	Meets Expectations (4)	Does not meet expectations (2)
Use of vocabulary on clothing	At least 4 examples of clothing articles	At least 3 examples of clothing articles	Only one example of a clothing article in the dialogue
Use of grammar structure of verbs; portare, indossare, and provare.	Uses the present tense flawlessly in the target language	Some errors conjugating verbs in the present tense	Many errors and incomprehensible sentence structure and grammar structure
Pronunciation	Clearly understood by a native speaker	Clearly understood by an L2 speaker	Unclear what the speaker is trying to communicate
Fluency	Speaks confidently and clearly	Slight hesitation while speaking but still understood easily.	Hesitates while speaking, choppy, and unclear of intonation

Studente - _____

Voto - _____/24



Ask each group one question about their clothing article purchase at the department store. Remember the question words in Italian !

Che cosa - What

Come - How

Dove - Where

Quando - When

Perché - Why

Chi - Who

Gruppo 1 - _____

Gruppo 2 - _____

Gruppo 3 - _____

Gruppo 4 - _____

Gruppo 5 - _____

Gruppo 6 - _____

Gruppo 7 - _____

Gruppo 8 - _____

Gruppo 9 - _____

Technique 2 from Research
Promotive Interaction

What is Promotive Interaction?

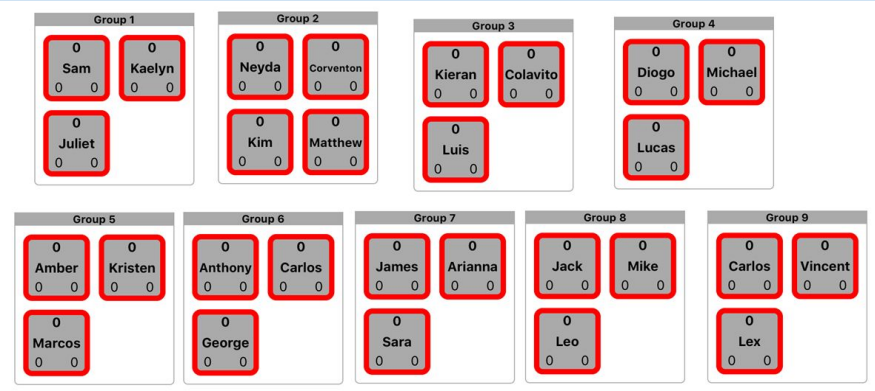
Promotive interaction, or as Jolliffe calls it, face-to-face interaction, involves "students encouraging and facilitating each others' efforts as they work together" (Gillies, 882). Students can achieve this by helping each other to critique their work and provide constructive feedback. Promotive interaction is important because when students "dialogue together, they learn to use language to explain their ideas and experiences, negotiate meaning around a task, and develop new ways of thinking and behaving that they may not have previously considered" (Gillies, 882).

What Does It Look Like?

This can be facilitated in a number of ways. Specifically in our study we implemented open ended tasks, and face to face grouping situations. Students worked on common assignments at tables facing one another and were grouped heterogeneously. Students with disabilities were provided sentence stems to promote discourse if they were feeling stuck

Materials used in Bryanna's classes:

Heterogeneous grouping - students of different ability levels in the same group
Friend grouping - to allow students to feel comfortable while working and promote discussion.

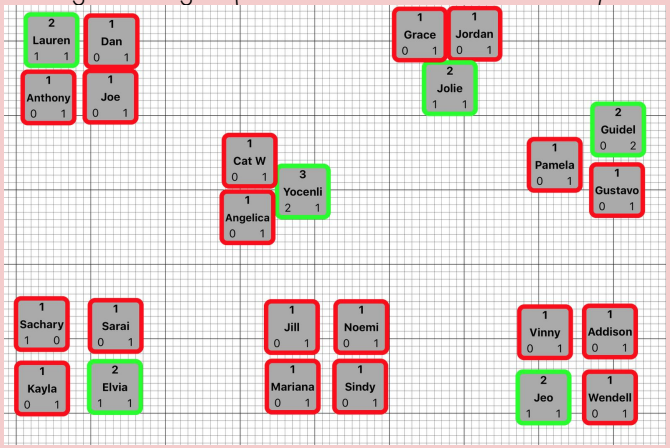


Materials used in Sabrina's Algebra II class:

Heterogeneous grouping: Students of varying levels of ability and language proficiency in the same group. This counted as a "peer tutor" setting.

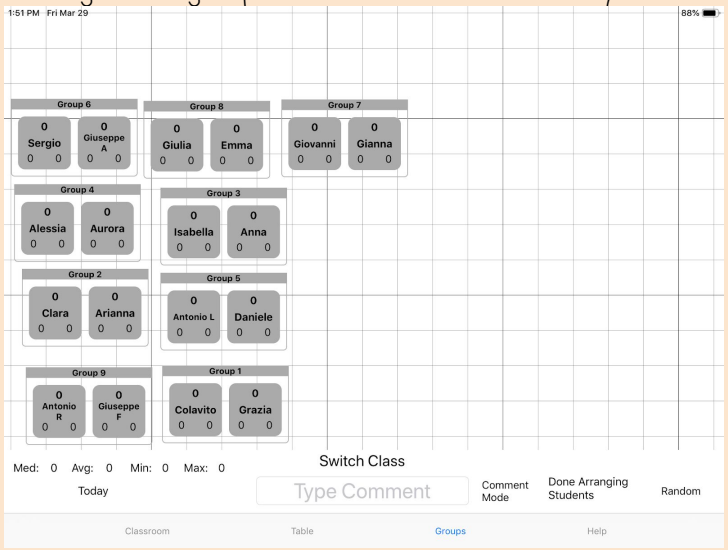
Materials used in Cynthia's class:

Heterogeneous group- Students of different ability levels and language proficiency in the same group.



Materials used in Jonathan's class:

Heterogeneous group- Students of different ability levels and language proficiency in the same group.

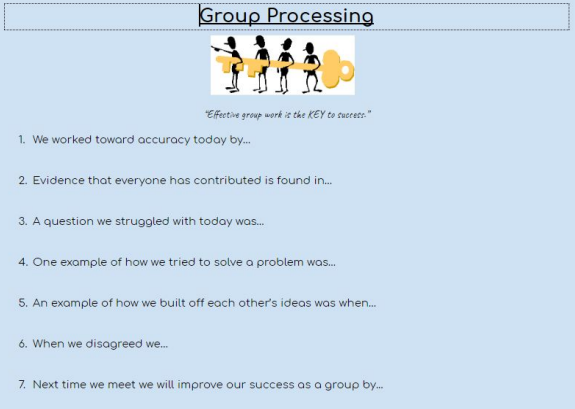


Technique 3 from research
Group Processing

What Is Group Processing and What Does It Look Like?

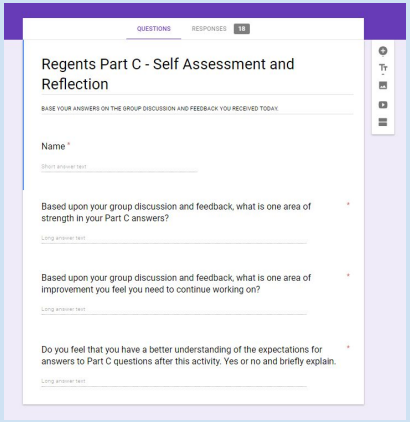
"Group processing is critically important for student learning as it allows members to discuss how well they are achieving their goals and maintaining effective working relationships" (Gillies, 1024). This focus on metacognitive thinking, or "thinking about thinking", students are reflective of what is working and what is not and identifying what they must do to improve.

Materials used in Bryanna's classes:


Group Processing

"Effective group work is the KEY to success."

1. We worked toward accuracy today by...
2. Evidence that everyone has contributed is found in...
3. A question we struggled with today was...
4. One example of how we tried to solve a problem was...
5. An example of how we built off each other's ideas was when...
6. When we disagreed we...
7. Next time we meet we will improve our success as a group by...


QUESTIONS RESPONSES 18

Regents Part C - Self Assessment and Reflection

BASE YOUR ANSWERS ON THE GROUP DISCUSSION AND FEEDBACK YOU RECEIVED TODAY.

Name *

Short answer text

Based upon your group discussion and feedback, what is one area of strength in your Part C answers? *

Long answer text

Based upon your group discussion and feedback, what is one area of improvement you feel you need to continue working on? *

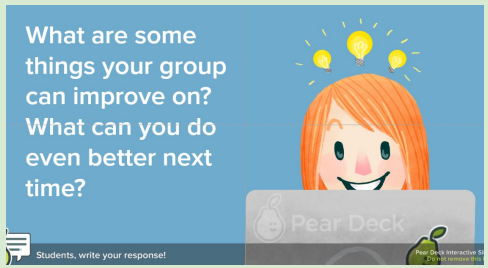
Long answer text

Do you feel that you have a better understanding of the expectations for answers to Part C questions after this activity. Yes or no and briefly explain. *

Long answer text

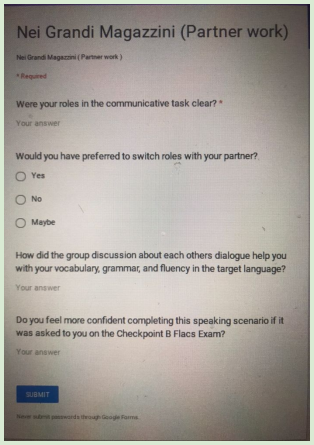
Materials used in Sabrina's Class:

Peardeck Feedback



Google Forms Feedback

Materials used in Jonathan's Class:



Google Forms Feedback

PART IV Regents Question Group Work

Your email address (**sknopf@mineolak12workspace.com**) will be recorded when you submit this form. Not you? Switch account

* Required

Explain the roles of your group members. *

Your answer

Do you feel that everyone in your group participated? If not, what are you going to do about it next time? *

Your answer

What was one thing your group did GREAT? *

Your answer

What is one thing your group can improve on? *

Your answer

What did you learn about this part IV question? What strategies and/or techniques did your group use to tackle it? *

Materials used in Cynthia's class:

Self-Evaluation Form

ACTIVITY _____

1. The activity was (HARD EASY) to complete because _____

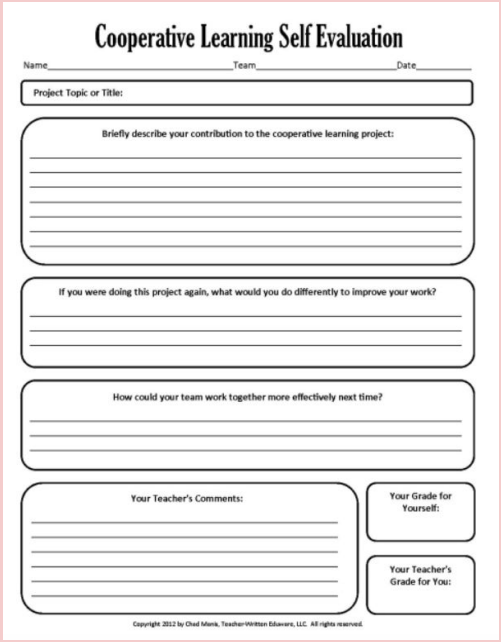
2. The part of the activity I did best was _____

3. I could have done a better job if _____

4. The mathematics I used was _____

5. After completing the activity I felt _____
because _____

6. I would rate my work on the activity as (EXCELLENT GOOD FAIR POOR)
because _____



Cooperative Learning Self Evaluation

Name_____ Team_____ Date_____

Project Topic or Title:

Briefly describe your contribution to the cooperative learning project:

If you were doing this project again, what would you do differently to improve your work?

How could your team work together more effectively next time?

Your Teacher's Comments:

Your Grade for Yourself:

Your Teacher's Grade for You:

Teacher Research Team: Collaborative Learning

Possible Next Steps for each member

Bryanna's Next Steps:

Now that I have developed a strong understanding of the important components of designing and implementing effective cooperative learning tasks, I feel that one area I wish to next explore is how to support small group and interpersonal skills. One of the most persistent difficulties I found with my students when working in groups was, how to resolve conflict and come to an agreeable compromise that all members could agree on. I would love to explore more how to facilitate and teach students these essential life skills by embedding them into the lessons I teach for science.

Sabrina's Next Steps:

After this action research project, I feel much more confident in my ability to establish a structure in the classroom where I can successfully implement cooperative learning tasks that will promote independence and interdependence within each group - whether that be small groups of 2 or larger groups of 4 students. In an extremely demanding and difficult course such as Algebra II, group work and collaboration can allow students to deepen their understanding of their knowledge of the content through accountability and teamwork. For my next step, I would like to explore more personalized small group work and find strategies that will make students work through difficult questions and learn how to have a better growth mindset when it comes to challenging problems. As the year goes on, we are going to be learning very challenging content, and I want to teach students how to focus on ways they can improve and help their peers improve.

Cynthia's Next Steps:

After this action research project I have developed a better understanding of the importance in designing lessons that implement cooperative learning task that will promote independence and interdependence within each group. This will allow students to develop the understanding of accountability in their groups and work together to build on their knowledge of the content. For my next possible step I would like to explore more personalized small group work and find strategies that will make students explore the connections between the content and personal experiences. I would like to find ways to embed these personal connections to the lessons taught in my classroom.

Jonathan's Next Steps:

After this action research project, I feel very confident about implementing cooperative learning tasks in groups of two in order to promote conversation and fluency in the target language. I would also like to explore cooperative learning more with larger groups and analyze how bigger groups can expand their ideas and use their knowledge of Italian to create conversation and discussion. My ultimate goal is to have the students debate together or complete a socratic seminar in the target language on topic that the students can connect to their everyday lives.