Educating Young Men

Language Arts/Mathematics

Grades 8 Resource- Unit 2
Young Men’s Leadership Academy
Academic Philosophy

Our philosophy is built upon research that indicates that boys and girls learn differently. We recognize that boys have varied academic, social, and emotional needs. We will address those needs through instruction that is tailored to the male learner and delivered in an environment that promotes academic success while instilling a strong culture of brotherhood and camaraderie.
Teaching Young Men

The goal of educators is to provide equitable learning opportunities for all students in the classroom. Research indicates that boys and girls develop literacy skills differently; resulting in disparate academic outcomes. As a result, providing equitable access to positive classroom experiences is an issue that has increased in urgency.

Past and current research report consistent findings:

- Gender is a significant factor in both reading materials and reading achievement for boys and girls
- On the US National Assessment of Educational Progress (NAEP) boys have scored significantly lower that girls in reading at all grade levels every year since 1992 (the first year NAEP scores were available)
- Boys are more likely than girls to be placed in special education programs
- Boys are less likely than girls to go to college
- Dropout rates are higher for boys than for girls

What causes this achievement gap?

Some researchers argue that the gender gap originates in biological, developmental, or environmental differences between boys and girls. Offering yet another perspective, sources such as ASCD and Psychology Today propose that the gap may be due to the way literacy is taught; suggesting that educational strategies that are more mindful of the way male brains develop would help close the gap.

What can educators do?

The encouraging news is that none of the findings above are irreversible. Recent studies focused on how boys learn suggest that if their academic needs are properly addressed, boys can obtain academic success equal to their female counterparts. A key component of their academic success lies in ensuring that boys are provided with classroom experiences that address their interests, needs, and learning styles.

Extracted from *Me Read? No Way!* Copyright Ontario Education
Boy Smarts
Boys are the masters of minimalism and the practitioners of “just –in-time” management. Asked to do almost any task, their immediate response is “later”. If they are asked to write a 50-word essay, they will count the words, and if they write 51 words most of them will think they have overdone it. If you have predominantly boys in your class, there are several things that you can do to improve behavior and learning. These methods are likely to work with most boys.

Respect
Boys are constantly checking to see if you respect them. They respond well to people who have expectations of them and respect them as capable of meeting those goals. As the TV character Ali G. would say, “respect!” If a boy has a sense that you respect him, he will walk over coals for you. Never ask a boy who is a poor reader to read out loud in front of his peers. He will be humiliated and will never do anything for you ever again.

Have clear signals about who is in charge
Boys need boundaries. They need to know who is in charge here. They respond to teachers who are fair, funny and respect their points of view, and they generally do better with teacher-led learning. Open spaced learning areas where no one clearly owns the space can be quite anxiety provoking for boys, and that anxiety converts into expressions of low motivation and clowning type behaviors.

Use a physical signal when you want silence
Boys need more signals than girls partly because they are less tuned into facial cues. Boys are more able to screen out white noise. (Teachers requesting quiet equals white noise!) Therefore, deliver instructions in silence. Use visual cues, raising hand, turning lights off and on, and moving to a part of the room. Never, ever yell.

Fewer rules and fewer words is better
Have a couple (no more than three) clear rules that you apply fairly and consistently. Base your classroom management on the idea of, “I won’t let this happen to you, and I won’t let you do it to anyone else”. During instruction, use a backup visual that you can point to for boys who have difficulty listening.

Value them and they will be heroes
Boys are tuned into hierarchies. This means the predominant values of a classroom, family or school will play a powerful role in determining their actions. Have a couple of core values (e.g. compassion, generosity, being part of a team). Live by them and insist upon them. Help boys to learn that they can be heroes and victorious but that winning doesn’t mean someone else has to lose.
Use knowledge from computer games as an inspiration for learning

Boys’ attraction to competition will override almost any disadvantage or loss of motivation. They generally love competitive games especially when there is not an ultimate winner. Quick fire quizzes with several rounds are a successful way of engaging boys. Computer game designers have cleverly used the principles of engagement to captivate boys:

- Make success challenging but attainable by breaking it down into stages.
- Make success more likely than failure, the most motivating games have players succeed about 80% of the time, initially, before building up to 100% before moving to the next level.
- Give people the opportunity to try again.
- Try to create a sense of moratorium where boys and girls can try to out new activities in a setting where there are no consequences.
- Use lots of movement.

Pay attention to less competitive, sensitive boys. Assisting them to attain personal bests can be useful. Give boys more time to answer and to assemble the words and give them a chance to phone a friend (the friend cannot answer the question but can make helpful suggestions).

Move regularly

Teaching boys is like being a cross between a matador and a traffic cop. Keep on the move and mingle with the crowd. Boys see things best in motion. Use visuals and animations as often as you can. As James (2009) notes, boys love targeting. If you have ever watched boys place rubbish into bins you will see that they don’t place it, they take a shot. For this reason, movement and aiming to achieve a set target are powerful strategies with boys.

Control where they sit

Move boys who do not appear to be paying attention to the front. Proactively shift the seating of boys who seem unsettled or distracted. They will often be playing up to impress their local audience. Boys need quiet times to reflect and re-energize, boys need quiet times to think, read and at times, quietly chat with others.

Know about anger

Anger and shame can stop boys’ learning, and once boys are angry, it is harder for them to get over it. If they feel you are going to shame them in front of their peers, they will fight you tooth and nail. Most boys will do silly, self-defeating things rather than lose the respect of their peers. Take your sail out of their winds. Deal with issues at a time of your choosing not when the boy wants to deal with it. There are also decision-making differences between girls and boys when involved in dispute resolution. Girls are often more able to see the effect of their actions on other students so asking, “how you think she felt?” type questions may pay off. In contrast boys may be less cued into other students’ emotions and a more successful strategy may be reinforcing a rule such as, “I wouldn’t let him do that to you, and I’m not going to let you do it to him”.


**Boys are loyal and funny**
Boys love the inside word; the cheat sheet and they love to score. Giving them hints suggestions and a way to succeed builds their loyalty to you. Boys buy popularity through achievement, jokes and skills. Humor is an essential quality.

**Boys generally learn through doing- thinking- talking**
Boys like movement and are generally more active than girls. They are also more concerned with performance. While some boys will be inherently interested in the material, almost all boys engage when there is a competitive spirit. The more that you mimic a game show format the more boys will be engaged.

**Give them a whiff of success**
Most men and boys waste an incredible amount of time completing tasks that don’t need to be done and avoiding tasks that don’t need to be avoided. Help them to structure tasks and to improve on early attempts so that they gain mastery and success. Once a boy believes he can be successful, he’ll almost always live up to it.

Extracted from the *Brain Based Learning Manual* Copyright Andrew Fuller
Teaching Young Men

Model of a Boy-Friendly Curriculum

**BOYS NEED CURRICULUM THAT PROVIDES**
- “Safe” classes that foster discussion
- Tasks that are open-ended and require interchange with others
- Subjects that mandate exploration of “the self”
- Teachers who “facilitate”
- Subjects that accept alternative truths

**BOYS NEED CURRICULUM THAT PROVIDES**
- A wide variation of courses and activities.
- Teachers with “passion”
- “Disciplined freedom”
- Avenues to be impulsive
- Tasks that are “relevant” - can be explored through boys’ culture
- Problem-based learning, (“doing it”)
- Hands-on activities with practical solutions

**BOYS NEED CURRICULUM THAT PROVIDES**
- Teachers skilled at facilitating boys’ exchange of ideas.
- A range of tools to express ideas
- A range of outcomes to set tasks
- Criticism skills
- A mandate for the expression and an exchange of ideas
- Subjects with “non-binary” epistemologies
- Subjects that are non-competitive and allow access

**BOYS NEED CURRICULUM THAT PROVIDES**
- Freedom for individual interpretation of curriculum tasks
- Freedom to undertake curricular tasks according to personal skills
- Freedom to access range of academic and non-academic activities
- Freedom from pursuing an “ideal” masculinity

Adapted from Imms, 2003
Teaching Young Men

COURAGEOUS CONVERSATIONS

According to the Ontario Ministry of Education, boys respond well to real-world themes that offer them authentic learning experiences – that is, experiences they have had or could have in their own lives. Exploring real-world themes typically involves a combination of resources and activities. Real-world themes have a clear focus on one or more meaningful, key concepts and authentic learning experiences that involve both direct instruction and students’ discovery of things on their own.

In addition to authentic real-world experiences, students need opportunities to engage in courageous conversations about race and issues of discrimination. This work is critical for students and teachers to engage in because outside school experiences are quite inconsistent with the expectations that are inside of school. It is the school’s responsibility to take on the onus of understanding what students experience outside of school.

For example, if students read particular kinds of books outside of school, and if they engage in social media outside of school, then teachers must figure out how to utilize that as an anchor for what happens inside of school. It is the teacher’s responsibility to develop learner lenses to understand what’s happening with the student outside of school so that he or she can be responsive to that reality. As teachers and students engage in courageous conversations within the classroom, it is imperative that all members are aware of the four agreements.

The Four Agreements of Courageous Conversations:

1. **Stay engaged:** Staying engaged means “remaining morally, emotionally, intellectually, and socially involved in the dialogue”
2. **Experience discomfort:** This norm acknowledges that discomfort is inevitable, especially, in dialogue about race, and that participants make a commitment to bring issues into the open.
3. **Speak your truth:** This means being open about thoughts and feelings and not just saying what you think others want to hear.
4. **Expect and accept non-closure:** This agreement asks participants to “hang out in uncertainty” and not rush to quick solutions, especially in relation to racial understanding, which requires ongoing dialogue (pp.58-65).
Unit 2
## Language Arts
### Grade 8

**Theory:** Boys are twice as likely as girls to say they don’t enjoy writing at all (19.4% versus 9.1%) and that they never write (10.6% versus 5.1%). This development could have a negative impact on school attainment, as children and young people who enjoy writing very much are seven times more likely to write above the level expected for their age, compared with those who do not enjoy writing at all (50.3% versus 7.2%).


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<td>NJSLSA.W1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</td>
<td>Use debate to discuss authentic and relevant issues that can be transferred into argument writing. Such as: From what you have learned about the characteristics of a hero, reflect on Bilbo and defend whether he is a true hero based on those characteristics. <strong>Special Education:</strong> Special Education students have strong opinions, however, lack some of the language skills to express in a class. Use the posters as Response Boards. Group Special Education students in heterogeneous groups and make them the responsible person for holding up the response card once a discussion has taken place.</td>
<td>• four posters, each labeled in large letters with one of the following: Strongly Agree, Agree, Disagree, Strongly Disagree. • a teacher-generated list of statements for discussion (provided). • writing paper and pencils • <em>The Hobbit</em> high-interest debate topics in the classroom. <strong>The New York Times</strong> - An exhaustive list of topical issues for debate and persuasive writing. <strong>IDEA Database</strong> - This database/search engine links students to resources for debates on issues related to.</td>
<td>Four corner Debate: This debate strategy gets kids thinking and moving. Debate topics for all grades are included. Students will • listen to a statement on a controversial topic and decide if they strongly agree, agree, disagree, or strongly disagree with the statement. • work in groups to record information in support of their position. • reconsider their stance considering new information. • write a concise paragraph expressing their opinion about the statement. Inner Circle/Outer Circle: The inner/outer circle debate strategy emphasizes listening to others’...</td>
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| culture, the environment and animal welfare, science and technology, sports, and more. | views and writing an opinion essay. Students will
| Intelligence Squared Debates US - A debate series that provides opposing viewpoints on an array of contentious policy and cultural issues. | listen to the views of others and respond to them. |
| Ideas for Debate Topics - A list of debate topics geared towards younger students. Topics include: "Should your class be permitted to go on a field trip this year?" and "Should you be permitted to have or attend a sleep-over party?" | contemplate multiple views on a controversial issue. |
| This debate strategy focuses on listening to the views of others and responding to them. It is an excellent pre-writing or debate strategy. | develop oral speaking skills and impromptu responses in a group discussion. |
| Arrange students into four groups of equal size. Arrange students in Group 1 into a circle of chairs facing out, away from the circle. Arrange students in Group 2 into a circle of chairs around Group 1, facing the students in Group 1. Groups 3 and 4 gathers around the perimeter of the circle, facing the circle. | develop skills in supporting one's opinion with facts and examples. |
| • listen to the views of others and respond to them. | • write an editorial or position paper. |
| • contemplate multiple views on a controversial issue. | • develop oral speaking skills and impromptu responses in a group discussion. |
| • develop skills in supporting one's opinion with facts and examples. | • write an editorial or position paper. |
Select an issue that students will be motivated to discuss/debate.

If you do not have a topic in mind for this discussion, The New York Times has compiled a list of timely, high-interest topics for debate and persuasive writing.

Now, provide students in the inner circle 10-15 minutes to discuss the topic. During that time, all other students focus their attention on the students in the inner circle. No one else is allowed to speak. Other students take notes about points those students bring up; notes are used in a follow-up classroom discussion and/or for writing an editorial opinion expressing a point of view on the issue at hand.

**Special Education:** 4 corner strategy is a great strategy for Special Education students as it is kinesthetic as it requires students to move to different parts of the classroom. To maximize students’ participation first review topics and identify any misconceptions students might have about the topic. Next, designate a scribe who can write down the opinions.

Allow the special education student to be the sign holder.
| **Encourage the special education student in the group to share the reasons the members chose for their opinion.** |
| To write the paragraph, special education teacher should use opinion statements to make a frame for a paragraph and have students complete the details. |
| Inside-Out Circle: When presenting the class with Inside Outside, have the special Education children be the speakers about the topic (inside). The student in the outside circle will take the notes of the speaker. The special education student will “own” his opinion. |
**Language Arts**  
**Grade 8**

**Theory:** Some boys need to talk through their ideas before they can commit their ideas to paper. Failure to provide time for this social component, for the opportunity to verbalize ideas before reading or writing about them, can create a problem for some boys. (Ontario Education, 2004)

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| NJSLSA.R1.        | Let them Talk  
Talk is a precursor to reading and writing responses and an easier mode of expression for many students.  
Enabling conversations in the classroom helps students to make sense of new knowledge and new ideas. Allow students to engage in talk about culminating activities prior to writing final thoughts.  
**Special Education:**  
Minimize the anchor chart: separate into components and color-code to separate.  
I wonder why...  
I agree with...  
I disagree...  
I liked...   | Anchor chart with menu of conversation prompts:  
I wonder why...  
I have a question about...  
I agree with...  
I disagree with... because...  
This reminds me of...  
I do understand...  
I predict... because...  
I figured out...  
I liked/disliked... because...   | **Bookends:** Have pairs of students meet before and after a lesson.  
Before the lesson, they discuss what they know and any questions they have about the topic. After the lesson, they meet again to discuss and confirm their learning.  
**Mock Press Conference:** Direct boys to come up with questions and answers very quickly on a topic. This might become an improvised or rehearsed scene similar to some of the sketches on the CBC television program This Hour Has 22 Minutes.  
**Investigation:** Investigate the merits of using talk to scaffold your boys’ learning. Teach one lesson on a given topic and assign a writing task without allowing the boys to talk. Teach a second lesson and promote conversation and talk as a rehearsal for the writing task. Which approach results in the most robust writing? |
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<tr>
<th><strong>I disliked...</strong></th>
<th><strong>Special Education: Allow students to participate as the cameraman which will allow the student to participate and listen. Other students can be set designers and news directors. Any Special Education writing task should be accompanied by graphic organizers.</strong></th>
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<td>Put starters on response boards to respond and justify orally.</td>
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<td>Color Code levels on the rubric. Focus on one portion of the assignment specifically how the student cites the text rather than grammar.</td>
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## Language Arts
### Grade 8

**Theory:** Boys thrive on the visual language of television, cartoons, and video games. Similarly, boys respond well when presented with opportunities to present their ideas and written work using visual forms. Research suggests that boys respond positively to images because boys are more oriented to visual/special learning (Ontario Education, 2004)

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| NJSLSA.R2 | Go to the Net | Computer, citing textual evidence graphic organizers (Prove it!) | Find sights on the Internet, to help your students understand real world issues connected to Playing’ Up such as:  
1. bravery  
2. greed |
|          | Use web-based sites such as Glogster to get boys interested in literacy while capitalizing on their preoccupation with computers. | Novel: The Hobbit, Glogster: [https://edu.glogster.com/glog/the-hobbit/1rxhwa5krod](https://edu.glogster.com/glog/the-hobbit/1rxhwa5krod) | Pose discussion questions that allow student to connect to the text, such as:  
It is mentioned in the book that goblins may have invented ingenious devices for killing large numbers of people at once. How does this connect to the real world? What do you think Tolkien is trying to say about the world with this statement?  
Be sure to have students make real world connections by addressing the impact these topics have on our society.  
During discussion, send students back to the text for more evidence by prompting them to expand on a classmate’s idea or deepen the discussion. Prompt students by saying, |
| SLO: RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of the text. | \ | |
| SLO: RL.8.1 Determine a theme or central idea of a text and analyze its development over the course of the text. | \ | |
| NJSLSA.R1 | Special Education: Special Education students sometimes have difficulty visualizing the characters in fantasy books. Gauge their knowledge on how much they know about Harry Potter and try to have the students make images in their heads. Show clips of the movie so students can understand. When reviewing the theme, discuss and choose things they noticed about Bilbo. Try to facilitate conversation around Bilbo’s courage. Give the students a theme statement and | \ | |
| | \ | |
| SLO: RL.8.1. Cite the textual evidence and make relevant connections | \ | |

- **Go to the Net**  
  Use web-based sites such as Glogster to get boys interested in literacy while capitalizing on their preoccupation with computers.

- **Special Education:** Special Education students sometimes have difficulty visualizing the characters in fantasy books. Gauge their knowledge on how much they know about Harry Potter and try to have the students make images in their heads. Show clips of the movie so students can understand.

- **SLO:** RL.8.2 Determine a theme or central idea of a text and analyze its development over the course of the text.

- **NJSLSA.R1.** Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

- **SLO:** RL.8.1. Cite the textual evidence and make relevant connections
| that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text. | have them find the text evidence in the book. Earmark pages Graphic Organizers | “I heard this person say something that contradicts …” or “These students all said something similar … does anyone have a different idea?” Special Education: The concept of exhibiting bravery is one in which adolescent boys can immediately identify with. Have students identify ways Bilbo exhibited bravery and how he had to learn skills he didn’t know he had. Have students share how they can relate to this theme. Choose different quotes for the students and have them identify how it is relevant for them and to the real world. “It’s a dangerous business, walking out one’s front door.” Gandolf “You will have to manage without pocket-handkerchiefs, and a good many other things before you get to the journey’s end. -Dwalin Use the graphic organizer for the quote on one side and application to the real world on the other. |
**Mathematics**
**Grade 8**

**Theory:** Competitive learning includes classroom debates, content-related games, and goal-oriented activities; these are often essential for boy-learning and highly useful for the life success of girls, too. Games give students opportunities to explore fundamental concepts and strategies. Engaging mathematical games can also encourage students to explore important mathematical concepts. Further, they afford opportunities for students to deepen their mathematical understanding and reasoning. Teachers should provide repeated opportunities for students to play games, then let the mathematical ideas emerge as students notice new patterns, relationships, and strategies.

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<td><strong>SLO #4:</strong>&lt;br&gt;Model a linear relationship by constructing a function from two (x, y) values. Interpret the rate of change and initial value of the linear function in terms of the situation it models, and in terms of its graph or a table of values. <strong>NJSLA: 8.F.B.4</strong></td>
<td>• <strong>Project-Driven and Kinesthetic:</strong>&lt;br&gt;Classroom methodology includes project-based education in which the teacher facilitates hands-on, kinesthetic learning and is strategic about using manipulatives.&lt;br&gt;Students can discover practical, real-life ways to apply math skills.&lt;br&gt;<strong>Special Education:</strong> Talk or Text modified activity sheet.</td>
<td><strong>Talk or Text:</strong>&lt;br&gt;• Computer with Internet access (optional)&lt;br&gt;• Information about current cell phone plans (optional)&lt;br&gt;• Talk or Text? Activity Sheet&lt;br&gt;• Talk or Text? Answer Key</td>
<td><strong>Talk or Text:</strong>&lt;br&gt;1. Begin by asking students who has a cell phone. Ask what type of plan they have, and how they chose it. Discuss different options provided by plans, rates charged for text messaging, and rates for voice minutes.&lt;br&gt;2. Distribute “Talk or Text” activity. Depending on students' ability levels and familiarity with the concepts, you may want to put students in groups of 2 to 4.&lt;br&gt;3. Give groups time to complete</td>
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Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. *(benchmarked)*

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<th>Text Message</th>
<th>Voice Minutes</th>
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<tbody>
<tr>
<td>Plan A</td>
<td>.15/message</td>
<td>.05/minute</td>
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<th></th>
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<tr>
<td>Plan B</td>
<td>.05/minute</td>
<td>.10/minute</td>
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Rephrase the questions: How much to send messages on Plan A? How much to send messages on Plan B? Which one allows you to send the most? Continue to modify worksheet as needed for the students. Give only one problem at a time. For writing the equations write the x and y and have students identify how to put in the numbers. To graph the equations, supply large grid graph paper and x and y axis color coded. Special Education teacher to read the text to students.

Questions 1 to 5. Walk around the room and help students as needed. When they are finished, bring the whole class together to discuss the answers (found on the Talk or Text? Answer Key).

4. When students have finished the activity sheet, lead a whole class discussion on what they have found out about the phone plans by answering the questions.

Special Education students and lower level students can use the modified activity sheet.
**Mathematics**  
**Grade 8**

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| **SLO #5:** Sketch a graph of a function from a qualitative description and give a qualitative description of a graph of a function. | • **Project-Driven and Kinesthetic:**  
  - Classroom methodology includes project-based education in which the teacher facilitates hands-on, kinesthetic learning and is strategic about using manipulatives.  
  - Students can move around as needed in classrooms, and they are taught how to practice self-discipline in their movement. | **Walking to Class:**  
  • Graph paper  
  • Matching Graphs Activity Sheet  
  • Matching Graphs Answer Key  
  • Class Schedule Activity Sheet  
  • Class Schedule Answer Key  
  • Sample Data Activity Sheet  
  • Stop watches or regular watches | **Walking to Class:**  
  1. Use the Matching Graphs Activity Sheet to introduce the lesson to students. Have students work alone or in pairs.  
  2. Beginning at their lockers, students will measure the distance to their classes (in steps). They will record the time it takes to travel as well as the time spent in class. The data collection process takes about 15 – 20 minutes. If time is a concern, the data collection could be assigned as an out-of-class activity, or students can... |

**NJSLA: 8.F.B.5** Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the
| function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. | Special Education: use a pre-existing set of data for matching graph activity. Give two sets of data. | use a pre-existing set of data in the Sample Data Activity Sheet.  
3. Have students read through the Class Schedule Activity. To collect the data, students should work alone or in pairs. If working in pairs, select one student's schedule as the source of the data to be collected. The two types of data to be collected should be the number of walking strides from the student's locker to each classroom, and the amount of time it takes the student to walk to and from each classroom. If students are working in pairs, they should decide who will walk, count steps, and record time.  
4. Have students Complete Class Schedule Activity Sheet  
**Special Education: Matching Graph Activity:**  
Create data cards and equations to match the data. Use Math notebook as an interactive notebook where students must match the data cards and/or
function tables) to the equations.

Class Schedule Activity: students should be paired. One student should carry the stopwatch (can use phone timer) and the other student could count the steps (an activity tracker such as a Fitbit or Apple Watch can count the steps.)
**Mathematics**  
**Grade 8**

**Theory:** Competitive learning includes classroom debates, content-related games, and goal-oriented activities; these are often essential for boy-learning and highly useful for the life success of girls, too. Games give students opportunities to explore fundamental concepts and strategies. Engaging mathematical games can also encourage students to explore important mathematical concepts. Further, they afford opportunities for students to deepen their mathematical understanding and reasoning. Teachers should provide repeated opportunities for students to play games, then let the mathematical ideas emerge as students notice new patterns, relationships, and strategies.

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| SLO #7:   | **Gamify lessons:** appeal to the gaming culture by writing instructions for games and offering students the opportunity to respectfully compete. | Amazing Profit:  
- Markers or colored pencils  
- Rulers  
- Amazing Profit Overhead  
- Amazing Profit Activity Sheet | Amazing Profit:  
1. To begin the lesson, ask students questions such as:  
   - What is eBay?  
   - What is an auction?  
   - What is a bid?  
2. Allow students to discuss their thoughts and share any personal experiences they may have. The starter questions are a lead-in for the activity sheet.  
3. Display the Amazing Profit Overhead. Hide the equations on the bottom and give students time to figure out the equations. |

**NJSLA: 8. EE.C.8**

Analyze and solve pairs of simultaneous equations by graphing, explain that points of intersection satisfy both equations simultaneously, and interpret solutions in context.

- Khan Academy
- Anchor Chart: eBay, auction, opening bid,
linear equations. *(benchmarked)

a) Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. *(benchmarked)

b) Solve systems of two linear equations in two variables algebraically and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.

c) Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the

Review the answers at the bottom and provided additional examples of problems relating to linear equations if necessary.

**Special Education:** Review vocabulary presented.

Give students note sheets with pictures and definitions from anchor chart.

Put students in heterogeneous groups for discussion.

Read the Introductory sheet to the student pointing out application to anchor chart.

Independent activity, overhead sheet should have the profit line highlighted for visual discrimination. Students can plot the line on graph and given a choice of linear equations to match the graph.

Assessment:

One activity/score with modified rubric.
line through the first pair of points intersects the line through the second pair.

<table>
<thead>
<tr>
<th>Day</th>
<th>Mean Closing Bid on eBay</th>
<th>Profit on a $400 X Box</th>
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</thead>
<tbody>
<tr>
<td>0</td>
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<tr>
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### References

(i.e. scholarly journals)