Educating Young Men

Language Arts/Mathematics

Grades 6 Resource- Unit 1
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.
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 than 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
Teaching Young Men

**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 a number of things that you can do to improve behavior and learning. These methods are likely to work with the majority of 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 particular 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 in order 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 do 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**
- Small class sizes
- Pedagogy that counters fear of ridicule or embarrassment
- Skills to enable expression
- A vocabulary to discuss masculinity
- A mandate to explore individuality
- Opportunity to engage “a passion”
- Opportunity to be a risk-taker
- A level playing field between types of masculinities

**BOYS NEED CURRICULUM THAT PROVIDES**
- Teachers skilled a 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 arrange 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 1
# Language Arts
## Grade 6

**Theory:** *Keeping it real-Make reading relevant to boys*

Boys will be deeply engaged in literacy when they are fully committed to the subject of the reading or writing task itself. Having boys explore real-world themes and issues – particularly, but not limited to, those that touch them personally – taps into their need for academic tasks to be purposeful, and meaningful to their lives.

<table>
<thead>
<tr>
<th>SLO/NJSLA</th>
<th>Strategy</th>
<th>Resource</th>
<th>Activity</th>
</tr>
</thead>
</table>
| **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. | - Utilize various articles and literary texts aligned to students’ reading preferences and interests.  
- Create engaging classroom discussions around the text, while providing students many opportunities to cite textual and evidence and make relevant connections.  
- Create authentic learning experiences that involve both direct instruction and students’ discovery of things on their own. | **Bridge to Terebithia** by Katherine Paterson  
Student selected reading from classroom libraries  
Boys’ classroom engagement increases when classroom methodology includes project-based education in which the teacher facilitates hands on-, kinesthetic learning. | Choose text that inspires debate.  
Start with an overarching focus question. 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, “I heard this person say something that contradicts …” or “These students all said something similar … does anyone have a different idea?”  
Have students explore a theme that matters to them for a full school year. Provide |

**SLO RL.6.1.**  
Cite textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferences drawn from the text.

---

[10 | Page]
### Special Education Strategies:

- Use close reading strategies that encompass summarizing, paraphrasing, and annotating.
- Read a wide variety of texts, including a variety of styles, genres, literary periods, authors, perspectives, and subjects, which are not limited to non-fiction and narratives.
- Distinguish important facts and details from extraneous information.
- In pairs, use a T-chart to chart claims and textual evidence.
- Model marking text and charting inferences. Use sentence frames to cite text:
  - On page _____, paragraph __ states _____
- Provide foundational instruction on the literary and rhetorical terms.

opportunities for students to work with local college students and/or the community to investigate their topic of interest. Encourage students to collect and analyze data, and then write a report to on their findings.

**Special Education:**
Provide students with a passage and three different colored highlighters or colored pencils. Students are to underline or highlight the main idea, explicit evidence, and any implicit evidence. Students could also write their inferences in the margins based on the implicit evidence.
<table>
<thead>
<tr>
<th>students will need as they move into more sophisticated forms of analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide students that struggle with taking notes with a graphic organizer</td>
</tr>
<tr>
<td>containing guided questions to answer as they read.</td>
</tr>
<tr>
<td>• Help students differentiate between relevant evidence and irrelevant information</td>
</tr>
<tr>
<td>• Examine genre characteristics</td>
</tr>
</tbody>
</table>
### Language Arts
#### Grade 6

**Theory:** *Explicit teaching offers good comprehension skills*

Research indicates that good readers are strategic in their reading, and that the explicit teaching of comprehension strategies can foster the development of comprehension skills. For many boys, literature appears to involve a secret code, one that is understood by authors, teachers, and some students, especially girls. Not surprisingly, the fact that these “insiders” all understand the code and are able to interpret “deep” or “hidden” meanings. Boys need to be let in on the “secret” of what happens when we read and write. We need to examine processes that are often hidden or left unspoken and make them clear and explicit.

<table>
<thead>
<tr>
<th>SLO/NJSLA</th>
<th>Strategy</th>
<th>Resource</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJSLSA.R2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.</td>
<td>Provide direct, explicit mini-lessons on:</td>
<td>Bridge to Terebithia by Katherine Paterson</td>
<td>Utilize a graphic organizer to identify key details within a text.</td>
</tr>
</tbody>
</table>
| RL.6.1. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. | - Monitoring one’s understanding of a text and making adjustments (e.g., rereading a passage) as needed  
- Identifying key details about a topic  
- Paying attention to and determining or “uncovering” a text’s structure and development  
- Summarizing a text | Student selected reading from classroom libraries  
Boys’ engagement increases when classroom methodology includes project-based education in which the teacher facilitates hands-on, kinesthetic learning. | Utilize the “Sum it Up for $2.00” strategy to determine the central idea or theme of s text.  
**“Sum it Up for $2.00”**  
A way to summarize an article or literary text. A summary reduces an article to just its main ideas.  
**Model:**  
- Read the selection and underline the key words and main ideas. |
**Special Education Strategies:**

- Model summarizing a song by using a graphic organizer
- Create an anchor chart of possible themes and visuals
- Have students watch a video related to summarizing a text

**Rationale of the Strategy:**

Summarizing helps readers take a large selection of text and reduce it to the main points for more concise understanding. Upon reading a passage, summarizing helps students learn to determine essential ideas and consolidate important details that support them. It is a technique that enables students to focus on keywords and phrases of an assigned text that are worth noting and remembering.

- Write the key word
down.
- Write a one-sentence SUMMARY of the article, using as many main idea words as you can. (Imagine you have only $2.00, and each word you use will cost you 10 cents. See if you can “sum it up” in twenty words!)
<table>
<thead>
<tr>
<th>Special Education:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have students create a board game that includes the characters, settings, a plot, a conflict, and a possible solution. Students must create questions about the novel or particular story being read in class.</td>
</tr>
<tr>
<td>Directions: Have students pretend that they are a game manufacture, and they have been assigned the task of creating a board game that will help students review everything they read in a fun and interesting way. Students must make sure…</td>
</tr>
<tr>
<td>- The board game is neat, colorful, interesting, and creative</td>
</tr>
<tr>
<td>- Create questions and answers for the game that relate to the novel or character/article of their choice</td>
</tr>
</tbody>
</table>
The questions must be incorporated into the game.

Type directions for the game explaining how to play the game.

Must submit the rubric provided by the teacher along with the project.

http://www.readwritethink.org/files/resources/lesson-docs/NovelBoardGameRubric.pdf
Theory: Have the right stuff—Choosing appropriate classroom resources for boys
It might be easy to conclude that boys do not like to read. However, in many cases it is not that boys do not like to read, but rather that they do not like to read what is presented to them in the classroom. Building an engaging literacy environment includes offering a varied mix of materials that align to boys’ reading preferences.

<table>
<thead>
<tr>
<th>SLO/NJSLA</th>
<th>Strategy</th>
<th>Resource</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJSLSA.R10. Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.</td>
<td>• Read aloud with expression, so students can hear how a capable and fluent reader sounds.</td>
<td>Build classroom libraries with:</td>
<td>Develop fun reading activities such as:</td>
</tr>
<tr>
<td>SLO RL.6.10. By the end of the year read and comprehend literature, including stories, dramas, and poems at grade level text-complexity or above, scaffolding as needed.</td>
<td>• Use visuals, such as illustrated texts, where appropriate, to help students construct meaning.</td>
<td>• books that reflect their image of themselves</td>
<td>Fantasy sports league: Have boys nominate players for a fictional “dream team” by having them read about their favorite sports figures and make a case for why those athletes should be on the team.</td>
</tr>
<tr>
<td>RL.6.10. By the end of the year read and comprehend literary nonfiction at grade level text-complexity</td>
<td>• Remember the Web, using it to find texts that require students to think, analyze, and discuss.</td>
<td>• books that make students laugh and that appeal to their sense of mischief</td>
<td>• Cool at school: Link reading to current trends or personalities of interest to students.</td>
</tr>
<tr>
<td></td>
<td>• Plan personal reading time for students, in regularly scheduled blocks of time every day.</td>
<td>• fiction, but preferably fiction that focuses on action more than on emotions</td>
<td>• Book party: Give students a voice in choosing the books you acquire, and hold a box opening party when the new books arrive.</td>
</tr>
</tbody>
</table>
or above, with scaffolding as needed.

<table>
<thead>
<tr>
<th>Special Education Strategies:</th>
<th>Special Education:</th>
<th>Special Education:</th>
</tr>
</thead>
<tbody>
<tr>
<td>In small groups, discuss reading strategies with students and post anchor chart</td>
<td>Provide boys with the opportunity to develop literacy skills through the exploration of lyrics and discussions about musical tastes, the role of music in students’ lives, and so on;</td>
<td>Have students listen to a song multiple times and complete a graphic organizer with a partner (I hear, Think and Wonder).</td>
</tr>
<tr>
<td>Use songs as mentor text in mini lessons</td>
<td>Use a variety of texts such as magazines, newspapers, comic books, graphic novels, songs, poems…</td>
<td>Use a close reading sheet and have students complete it as they listen to the song multiple times. By completing the close reading sheet, students will be able to share the meaning of the song, main idea, highlight evidence to support their answers, and share a possible theme.</td>
</tr>
<tr>
<td>Have a class discussion on how songs can contain meaningful stories and lessons.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have students take a popular song interest survey</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Mathematics
#### Grade 6

**Theory:** Teachers increase the use of graphics, pictures, and storyboards in math-related classes and assignments. When teachers use pictures and graphics more often (even well into high school), boys write with more detail, retain more information, and get better grades on written work across the curriculum. Teachers should provide repeated opportunities for students to play games, then let the mathematical ideas emerge as students notice new patterns, relationships, and strategies.

<table>
<thead>
<tr>
<th>SLO/NJSLA</th>
<th>Strategy</th>
<th>Resource</th>
<th>Activity</th>
</tr>
</thead>
</table>
| SLO #2: Construct visual fraction models to represent quotients of fractions and use the relationship between multiplication and division to explain division of fractions. 6.NS.A.1 | **Interactive Graphic Lessons**  
- This standard call for students to translate a comparative situation into equations and then solve.  
- Teachers use interactive lessons to engage students by making the mathematics come alive through graphics, as a guided investigation of each essential question, and maintain the cognitive demand.  
- After each interactive lesson students can work in small groups, pairs, or individually to write their own stories to represent the problem. | **Interactive Graphic Lessons**  
- Paper  
- Pencil  
- Technology for visual models | **Interactive Graphic Lessons**  
- Dividing Whole numbers by fractions in word problems: [https://www.khanacademy.org/exercise/divide-whole-numbers-by-fractions](https://www.khanacademy.org/exercise/divide-whole-numbers-by-fractions)  
- Dividing mixed numbers: [https://www.khanacademy.org/exercise/divide-mixed-numbers](https://www.khanacademy.org/exercise/divide-mixed-numbers) |
using concrete models or drawings and strategies based on place value to represent their math.

**Special Education Strategies:**

- Use fraction bars to provide a visual and tactile model of fractions.
- Create a story context for division of fractions.
- Create a divisional fraction model to show the quotient.
- Provide Math reference sheets.
- Create pictures that represent problems making it easier to see and prove the solutions.

**Resources UDL - Visual and Auditory Learner(s):** Division of fractions by fractions using visual fraction models

https://www.youtube.com/watch?v=pnSRT3ghEDU

Interpreting and Computing Division of a Fraction by a Fraction—More Models -

https://youtu.be/hX4xMDoGvNU

Divide whole numbers by a fraction

https://www.youtube.com/watch?v=eeKrcBPSAP8
Mathematics
Grade 6

**Theory:** The more learning is project-driven and kinesthetic, the more boys' bodies will be engaged in learning—causing more information to be retained, remembered, and displayed on tests and assignments. Also, when teachers use manipulatives, pictures, and graphics more often (even well into high school), boys produce responses with more detail, retain more information, and get better grades on work across the curriculum.

<table>
<thead>
<tr>
<th>SLO/NJSLA</th>
<th>Strategy</th>
<th>Resource</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SLO #7:</strong> Create and complete tables of equivalent ratios to solve real-world and mathematical problems using ratio and rate reasoning that include making tables of equivalent ratios, solving unit rate problems, finding percent of a quantity as a rate per 100. <strong>NJSLA: 6. RP.A.3a, 3b, 3c</strong> Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape</td>
<td><strong>Project-Driven and Kinesthetic:</strong> Classroom methodology includes project-based education in which the teacher facilitates hands-on, kinesthetic learning and is strategic about using manipulatives. <strong>Special Education Strategies:</strong> • Create tables of equivalent ratios relating quantities with whole-number measurements. • Apply problem solving with ratios to situations of high</td>
<td><strong>Project-Driven and Kinesthetic:</strong> • graph paper • pencil • Technology</td>
<td><strong>Project-Driven and Kinesthetic:</strong> <strong>Fast Food and Unit Rate</strong> <a href="https://betterlesson.com/lesson/558011/unit-rate-problems-part-3-of-3?from=cc_lesson">https://betterlesson.com/lesson/558011/unit-rate-problems-part-3-of-3?from=cc_lesson</a> <strong>Scale Drawings</strong> <a href="https://betterlesson.com/lesson/434835/scale-drawings?from=cc_lesson">https://betterlesson.com/lesson/434835/scale-drawings?from=cc_lesson</a> <strong>Loans and Savings</strong> <a href="https://betterlesson.com/lesson/463117/loans-and-savings?from=cc_lesson">https://betterlesson.com/lesson/463117/loans-and-savings?from=cc_lesson</a></td>
</tr>
</tbody>
</table>
| diagrams, double number line diagrams, or equations. | interest for students (driving to a game).  
- Encourage students to use models and manipulatives to explain their thinking process while solving ratio problems in context. | Special Education:  
Khan Academy: Ratios and Proportions  
https://www.khanacademy.org/commoncore/grade-6-RP |
## 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.

<table>
<thead>
<tr>
<th>SLO/NJSLA</th>
<th>Strategy</th>
<th>Resource</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO #3: Solve real-world problems involving quotients of fractions and interpret the solutions in the context given.</td>
<td>Gamify Lessons</td>
<td>Dividing Fractions</td>
<td>Dividing Fractions Interactive Games</td>
</tr>
<tr>
<td>NJSLA: 6. NS.A.1 Interpret and compute quotients of fractions and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.</td>
<td>• Appeal to the gaming culture by writing instructions for games and offering students the opportunity to respectfully compete with each other. • Students can discover practical, real-life ways to apply math skills. • Students who have differing levels of skills and ways of thinking can learn from each other.</td>
<td>• graph paper • pencil • technology • visual models</td>
<td><a href="https://www.opened.com/game/basketball-dividing-fractions-math-play/402693">https://www.opened.com/game/basketball-dividing-fractions-math-play/402693</a> <a href="https://www.opened.com/game/drag-n-drop-fractions/212618">https://www.opened.com/game/drag-n-drop-fractions/212618</a> <a href="https://www.opened.com/game/math-word-problems-with-katie-multiplication-and-division/8990991">https://www.opened.com/game/math-word-problems-with-katie-multiplication-and-division/8990991</a></td>
</tr>
</tbody>
</table>
- Students can explore math in formats they know and enjoy (like on video game systems).
- Students can test new strategies and ideas without feeling the pressure of being graded.

**Special Education Strategies:**

- Use fraction bars to provide a visual and tactile model of fractions.
- Create pictures that represent problems making it easier to see and prove the solutions.

https://www.opened.com/game/dividing-fractions-math-playground/403090

https://www.opened.com/game/relate-division-and-multiplication/8849097

**Special Education:**

Division of fractions by fractions using visual fraction models
https://www.youtube.com/watch?v=pnSRT3ghEDU

Interpreting and Computing Division of a Fraction by a Fraction—More Models -
https://youtu.be/hX4xMDoGvNU
## References

(i.e. scholarly journals)

- Amanjot Toor, Joyce Mgombelo. Teaching mathematics through storytelling: Engaging the ‘being’ of a student in mathematics. Konrad Krainer; Naďa Vondrová. CERME 9 - Ninth Congress of the European Society for Research in Mathematics Education, Feb 2015, Prague, Czech Republic. pp.3276-3282, Proceedings of the Ninth Congress of the European Society for Research in Mathematics Education. <hal-01289881>