



Third Grade

Equivalent Fractions

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Thomas Jefferson Elementary

Spring 2024 EMPACTS Project Math Structures II, Dr.
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Project Introduction

We are education majors taking Survey of Mathematical Structures II, an EMPACTS class. Our EMPACTS project consists of creating a lesson plan around a K-5 Arkansas math standard and implementing it in a current classroom with the support of our mentor, the current classroom teacher.



Elizabeth Connolley, Mrs. Bryant, and Kali Perez

Topic and Standards

Common Core Standard:

CCSS.MATH.CONTENT.3.NF.A.3.B

Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.

Arkansas Math Standard:

3.NPV.11

Learn to use number lines and visual models to recognize and generate equivalent fractions, explaining how they are equivalent in real-world and mathematical situations. Fractions include: denominators 2, 3, 4, 6, and 8.

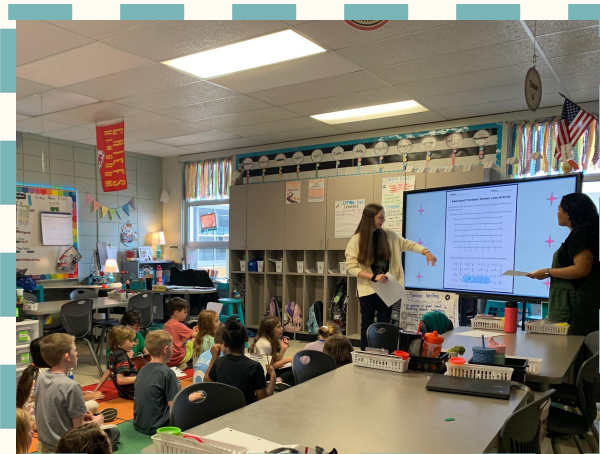
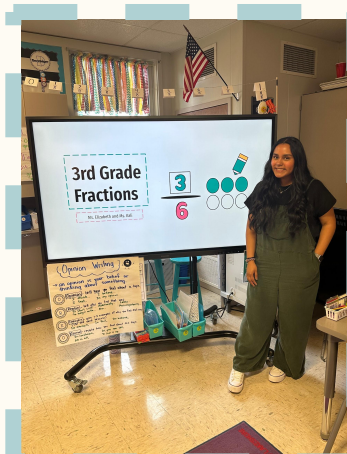
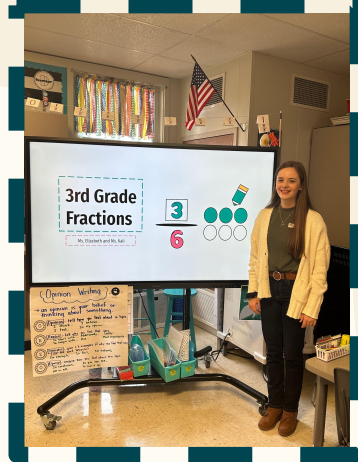
Lesson Objective

Students will understand what equivalent fractions are and recognize equivalent fraction models and how to use them. Students will be able to utilize this knowledge to generate equivalent fractions and recognize whether or not two fractions are the same.

Lesson Procedure and Activities

- Instructional Slideshow
- Equivalent Fractions Worksheet
- Jeopardy Slideshow Game

Teaching



Reflection

We enjoyed our experience teaching in a classroom. The students loved the competition aspect of the Jeopardy game, and it was a great way to increase student engagement. Upon reflection, we would have included more student interaction in the instructional slideshow, such as allowing the students to go up to the SmartBoard and interact with the virtual models. Overall, it was a positive teaching experience, and the students seemed to understand the concepts and enjoy the lesson.

Products of Learning Experience

Teaching Skills:

- **Classroom Management** - We were able to gain experience in managing a classroom with different student personalities and academic levels.
- **Lesson Planning Experience** - We practiced creating a lesson plan based on a mathematics standard and then implementing it in a classroom.
- **Time Management Skills** - We learned how to pace a lesson in the classroom to fit the time allotted to the lesson.
- **Incorporation of Educational Technology** - We expanded our skills of incorporating technology into an educational lesson by using interactive slideshows and games.

EMPACTS Skills:

- **Teamwork**- As a team of two, Elizabeth and I collaborated to create this project, using both of our individual skills and strong points.
- **Problem Solving**- When a problem came upon, we utilized our problem solving expertise to resolve issues quickly and effectively.
- **Time Management**- We exhibited efficient time management skills by organizing multiple meeting before our lesson.
- **Collaboration**- Both Elizabeth and I equally contributed to the creation of this project, as we planned out meetings discussing the information we each were going to present to the students.
- **Communication**- Our main source of communication was through iMessages and email, as we planned what days and time we intended to meet with each other and discuss details concerning our overall project.
- **Use of technology**- Technology like Google slides, Canva, and the smartboard helped with both constructing and performing our 3rd grade lesson as well as our final presentation.
- **Adaptability**- In our third grade classroom, students from all backgrounds and diverse intellectual abilities. We ensured to provide personal focus upon those who needed extra help, while we also incorporated complex math problems to challenge students who perform at a higher level.

Acknowledgements

Professor Whitmore - Our professor for Mathematical Structures II, whom we would like to thank for facilitating our class and EMPACTS project.

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Mrs. Bryant - Our host teacher and classroom mentor, whom we would like to thank letting us teach her class and supporting us throughout our lesson planning and teaching. Thank you, Mrs. Bryant!

Citations

“Arkansas Mathematics Standards: Grades 3-5.” *Arkansas Division of Elementary and Secondary Education*, <https://docs.google.com/document/d/1eVi9vE6VxxpZZGtZW3XWr5v641rmbVCu36Ykqz0zUWM/edit>. Accessed 26 February 2024.

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