

Newtown Board of Education
Newtown, Connecticut
Curriculum and Instruction Subcommittee

Minutes from the Board of Education and Instruction Subcommittee meeting held on Tuesday, May 24, 2022.

J. Vouros J. Larkin A. Uberti
D. Ramsey F. Purcaro

J. Vouros called the meeting to order at 11:01 a.m.

J. Vouros moved to approve the minutes from the 4/26/ 22 meeting.

D. Ramsey seconded the motion.

Public Participation: None

6-8 Math Pilot Presentation – F. Purcaro

Below is the link to the 6-8 Math Pilot Presentation:

<https://drive.google.com/file/d/1DVicKELHCfSGvFSdQZYwui9EF932jWuS/view?usp=sharing>

J. Larkin motioned that the Curriculum and Instruction Subcommittee recommend that we adopt the new grade 6-8 Math resource.

D. Ramsey seconded the motion.

F. Purcaro will present the 6-8 Math Pilot to the BoE at the June 7, 2022 meeting.

Curriculum Audit Update – A. Uberti

May 11th and May 12th there was a full Ed Advance training with 12 teachers. A. Uberti and W. Johnson were among the attendees with two consultants from Ed Advance. The training was on curriculum design that included Diversity, Equity and Inclusion (DEI). The CT State Department of Education in March released a document called the K-12 Universal Curricula Design Principles. The state laid out six principles to guide the development of curriculum. The principles are focused, flexibility, coherence, relevance, rigor and DEI. The two consultants were Sue Palma and Caroline Cahoun. They came with tools to help us do the audit of the curriculum. It was comprehensive and it was excellent learning. The teachers who attended for the most part were teachers who serve on the Curriculum Council. Part of what Curriculum Council does is review the curriculum. There were also several teachers from the Social Studies department at the high school, as well as the middle school, and a writer of one of the developers from the 5/6 school. We split into three teams. It was an application process. We took our teachers through a unit that they developed. We shared with Ed Advanced three units from grade 7 Social Studies, grade 8 Social Studies, and our Modern U.S. course. We shared a unit from each subject. These three subjects have recently been revised last summer. The consultants came with tools specific for the principle. We were looking at focus in a specific rubric and go through every component in that unit, to see if the curriculum met the requirement for focus. We did each of the design principles. The

tools that we used were so integrated, by the time we got to DEI a lot of those were uncovered. Things that we needed to improve on, like language, and activity. We will need more training. A. Uberti will connect with Ed Advance to discuss the next step in training.

Assistant Superintendent Update – A. Uberti

We have completed our iReady testing. We are just about done with Smarter Balanced testing. The official window closes June 3rd. We will have some end of the year data to look at for iReady. We typically do not get Smarter Balanced results until the summer.

Public Participation: None

J. Vouros adjourned the meeting at 12:14 p.m.

D. Ramsey seconded the motion.

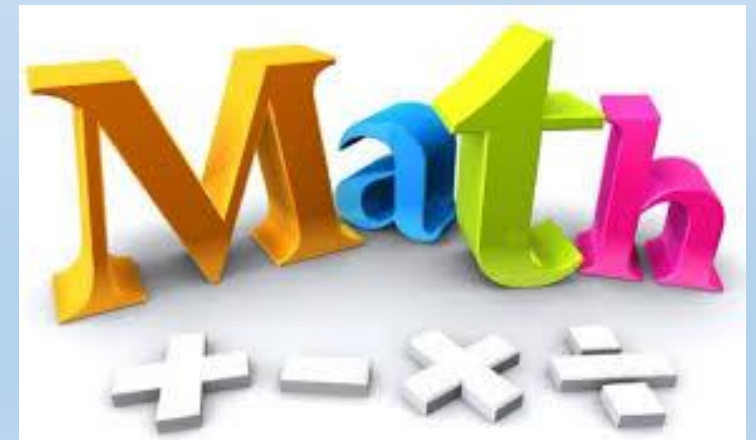
Respectfully submitted,

Donna Norling

THESE ARE DRAFT MINUTES AND ARE SUBJECT TO THE APPROVAL OF THE CURRICULUM AND INSTRUCTION COMMITTEE.

6-8 Math Pilot 2021-22

End of Year Report & Resource Selection



Agenda

- Background Information including Pilot Resource Selection Process
- Goals of the Pilot and Descriptions of the Programs
- Selection Timeline and Pilot Teams
- Evaluation Rubric Results
- Feedback and Classroom Observation Findings
- Final Resource Selection
- Next Steps

Background Information: Why Pilot?

- 2019 – Three resources exist in grades K-8, one in K-4, another in 5-6 and a third in 6-8.
- Resources in K-4 and 5-6 were outdated (2011 & 2014 editions). Negative impact in terms of standard alignment and rigor – confirmed by classroom observations, math performance on standardized testing, and feedback.
- Resource in grades 7-8 operating on a series of one year renewals, receives a “Does Not Meet” expectation from EdReports.
- Need to update K-8 and with an opportunity to reduce the number of resources students experience in the K-8 span.

Background Information: Selecting Pilot Resources

- The process for selecting a new math resource began in the Spring of 2021. Team of math teachers, specialists, and administrators met to vet resources for potential use.
- EdReports (<https://www.edreports.org/reports>) used as a guide to filter selections – Only resources that “Meet” expectations for standards alignment, rigor, and usability were selected for initial review.
- Recent publishing date also considered as a factor.

Selection of Pilot Material

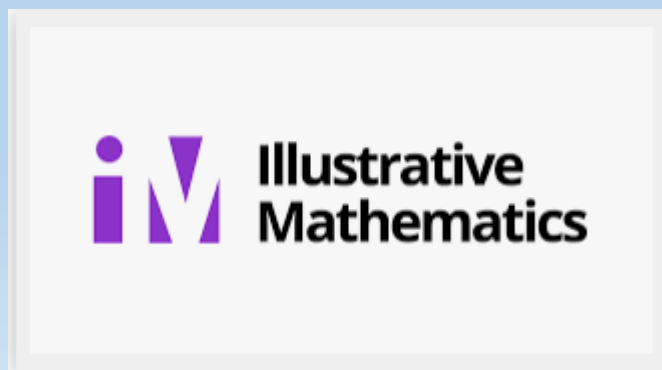
- Narrowed to 3 resources: ***LearnZillion Illustrative Math, McGraw Hill Illustrative Math, HMH Into Math.***
- Representatives from each resource invited in to present to the team and to provide both print materials and online access for review.
- Team narrows the selection down to 2 resource for Fall 2021 pilot.

Description of the Programs

Illustrative Math:

Illustrative Mathematics is a problem-based core math program for 21st century learners that focuses on preparing students to solve problems, reason, communicate, and think critically using real world examples and contexts.

Illustrative Math receives one of the highest ratings for 6-8 math programs on EdReports.



Into Math:

The ***HMH Into Math*** program emphasizes the importance of establishing conceptual understanding of math and reinforces that understanding with procedural practice with real world applications.

As with Illustrative Math, ***Into Math*** received one of the highest ratings available for 6-8 math programs on the market.



Selection Process Timeline

- ✓ Informational meeting with teachers interested in piloting – May 2021
- ✓ Assignment of teachers to specific resources & follow-up notification – June 2021
- ✓ Initial implementation PD for both pilot teams – August 2021
- ✓ Fall/Back to School - Pilot Begins – September 2021
- ✓ Comprehensive PD for each team – November 2021
- ✓ First pilot evaluation recorded into Google Forms – February 2022
- ✓ Cross-pilot spring debrief - April 2022
- ✓ Second pilot evaluation recorded into Google Forms – April 2022
- ✓ Analyze evaluation data & finalize selection – April/May 2022
- ❑ Begin ordering materials and arranging for PD – May/June 2022

Pilot Teams and Programs

	Grade 6	Grade 7	Grade 8
Illustrative Math	Ellen Buckley Dawn Ford John Sicbaldi Jessica O'Connell	Michelle Maag	Jennifer Pope
Into Math	Matt Brown Lauren Moore Shannon Ottowell	Elizabeth Stevens Jillian Morais	Bonnie Hart

Goals of the Math Pilot:

- Adopt a resource that supports rigorous math instruction and is fully aligned to current curriculum standards.
- Adopt a resource that may be used by students uniformly through the grade spans to support more consistent instructional practices. This includes finding a resource in grade 6-8 that aligns with the instructional strategies and rigor presented in Bridges Math K-5.
- Commit to a resource for multiple years to build internal capacity and understanding for staff as well as long-term familiarity for students and families.

Final Resource Selection: Considerations

- Data from Fall and Spring Resource Evaluation Rubrics, with emphasis on the “Content” category which included feedback on level of rigor, standards alignment, building conceptual understanding, and assessments.
- Classroom observations throughout the year.
- Feedback from Math Specialists and Teachers.

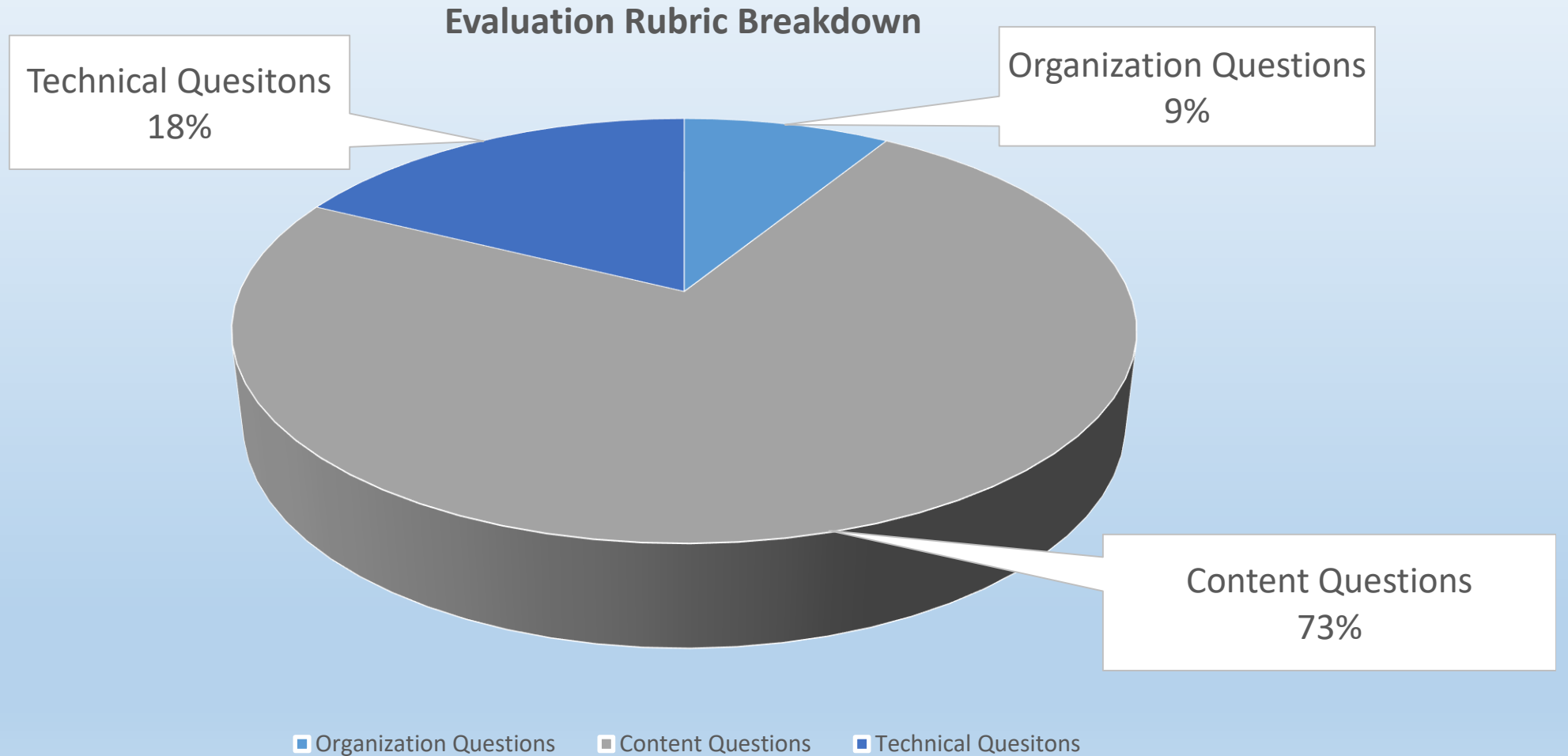


Evaluation Rubric – Key Components:

- Each team will complete an evaluation rubric twice during the pilot, once in February and another time in April.
- The evaluation rubric asks team members for feedback in three major areas: organization, content, and technology
- Team members will also be asked to provide written feedback and overall impressions as part of the evaluation.



Evaluation Rubric: Structure and Weights



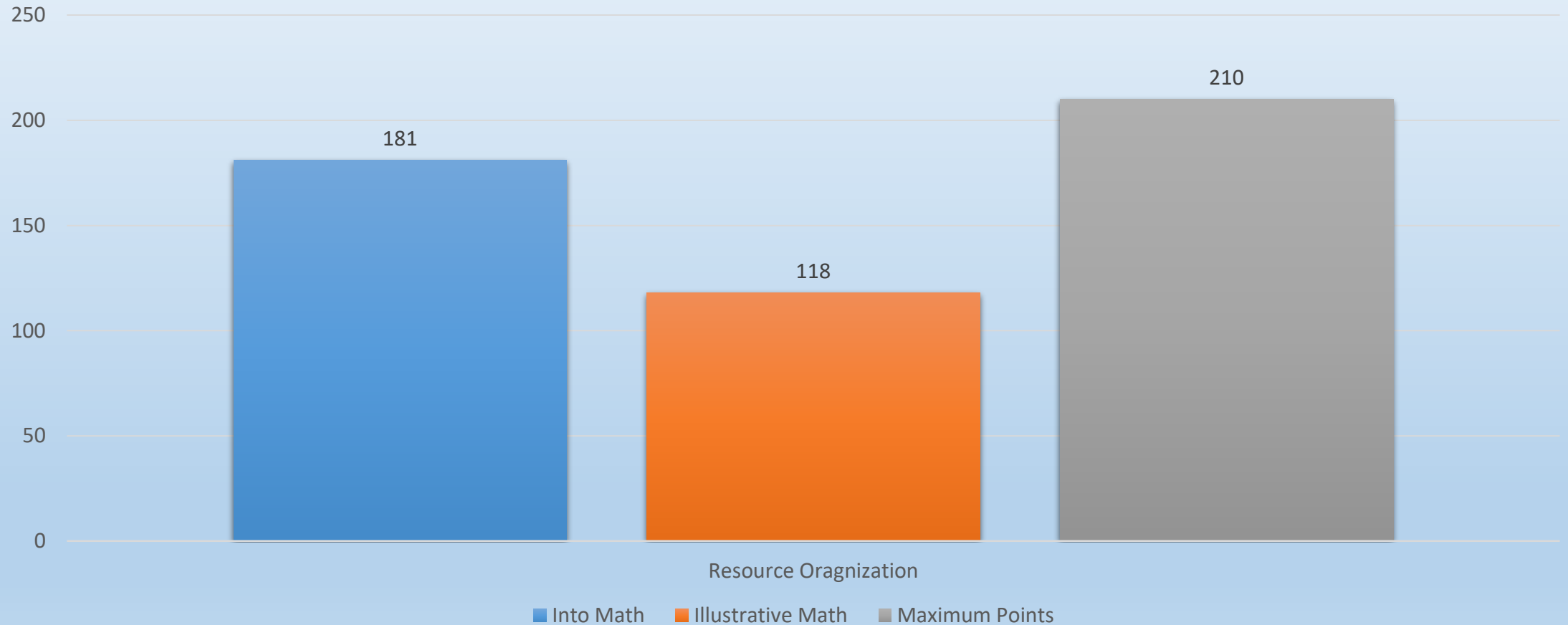
Section 1: Organization – Sample Question

I - Organization and Layout

The material is presented in an order that make sense for teaching: The resource provides a useful Table of Contents, Glossary, and Index; the size and format of the print is appropriate; and the non-text content (graphs, picture, charts) are accurate and well-integrated *

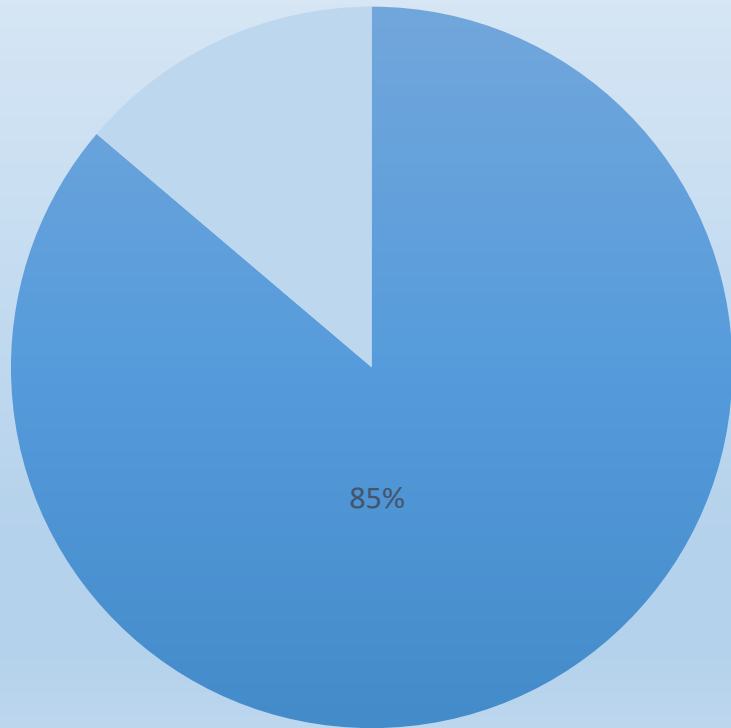
Section 1: Resource Organization Comparison

Fall and Spring Rubric Total

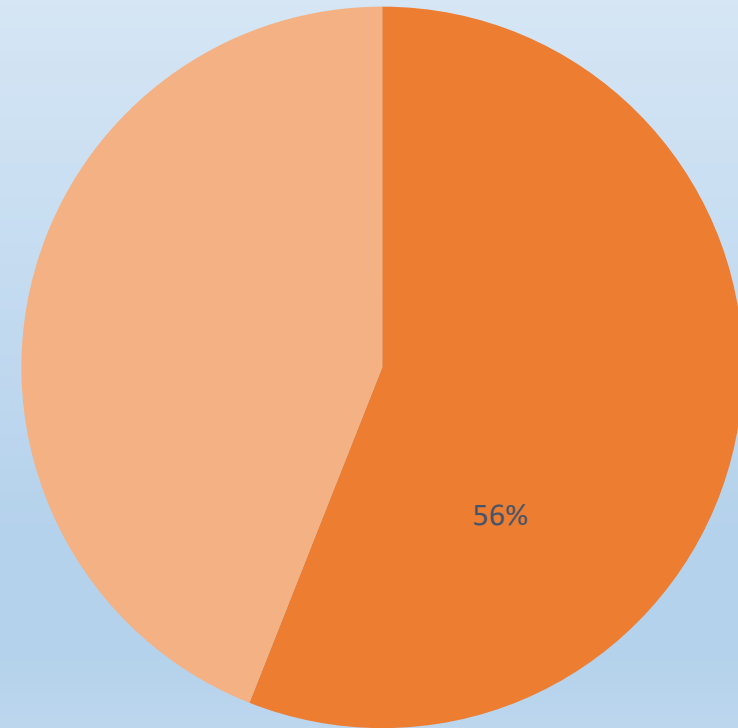


Resource Organization: Fall and Spring Combined Results

Into Math



Illustrative Math



Section 2: Content - Sample Questions

The resource provides students ample amounts of single step AND multi-step problems in order to develop students' problem solving skills.

The resource is designed to make explicit connections for students between what they have learned and how it extends to mathematical situations and real world applications.

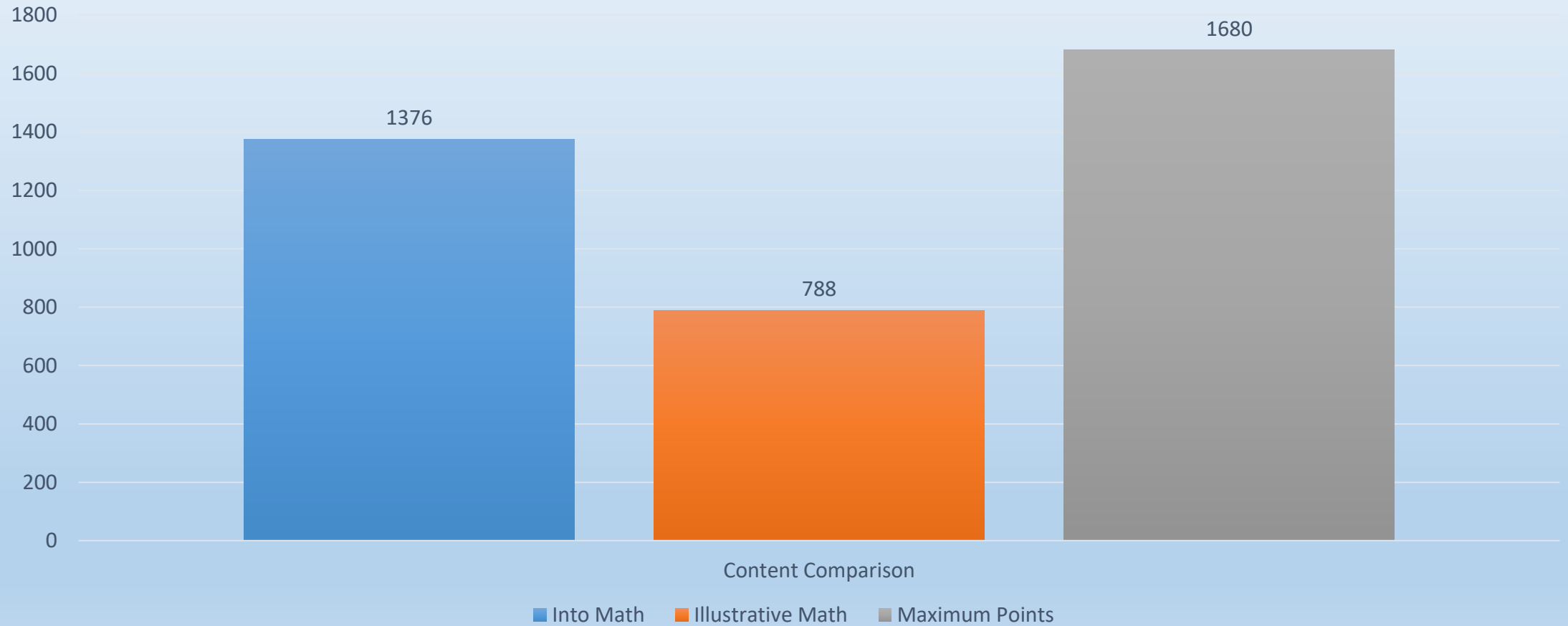
The resource is designed to build perseverance in a grade-appropriate manner giving students the opportunity to grapple with unique, non-traditional problems while applying the knowledge and skills they have learned.

The resource is designed to provide sufficient opportunities for students to reason mathematically through classroom discussion, written work, and independent thinking.

Content instruction respects the differentiated needs of all learners.

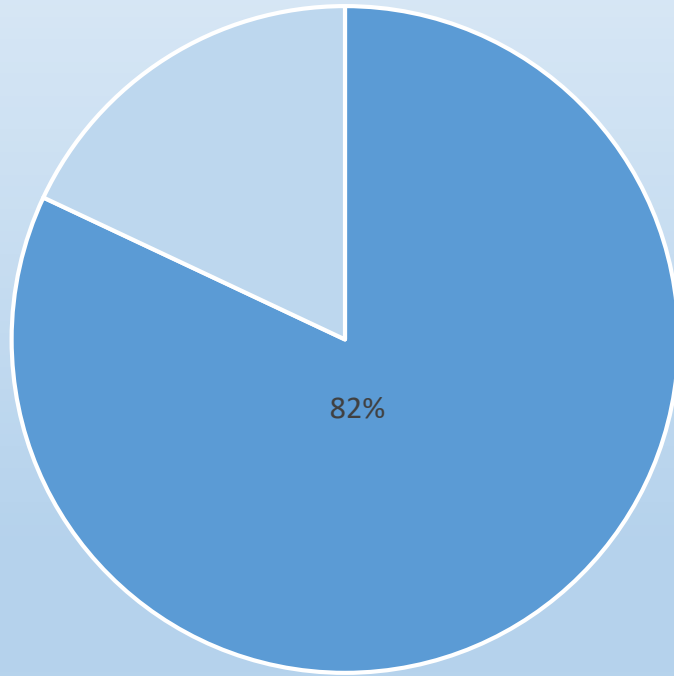
Section 2: Content Comparison

Fall and Spring Rubric Totals

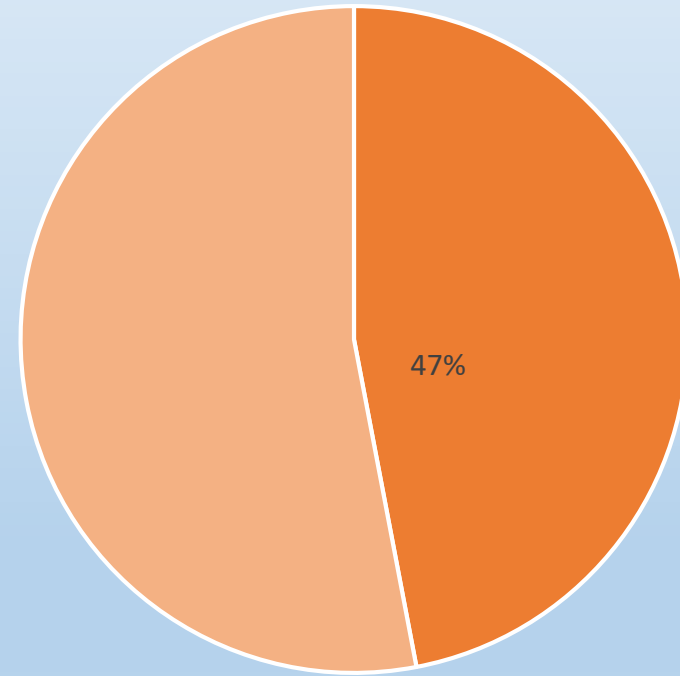


Content Comparison: Fall and Spring Combined Results

Into Math



Illustrative Math



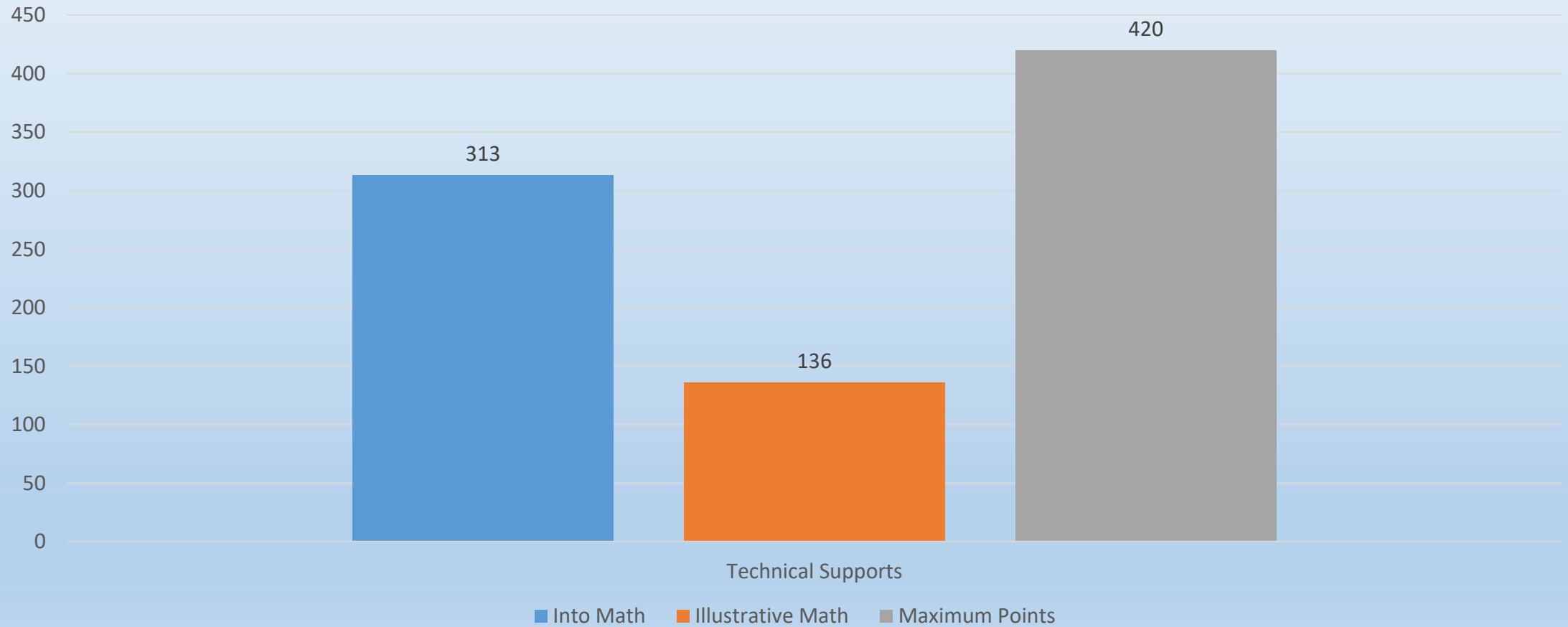
Section 3: Technical Supports – Sample Question

III - Technology

Technology that comes with the text/series enhances and compliments instruction.

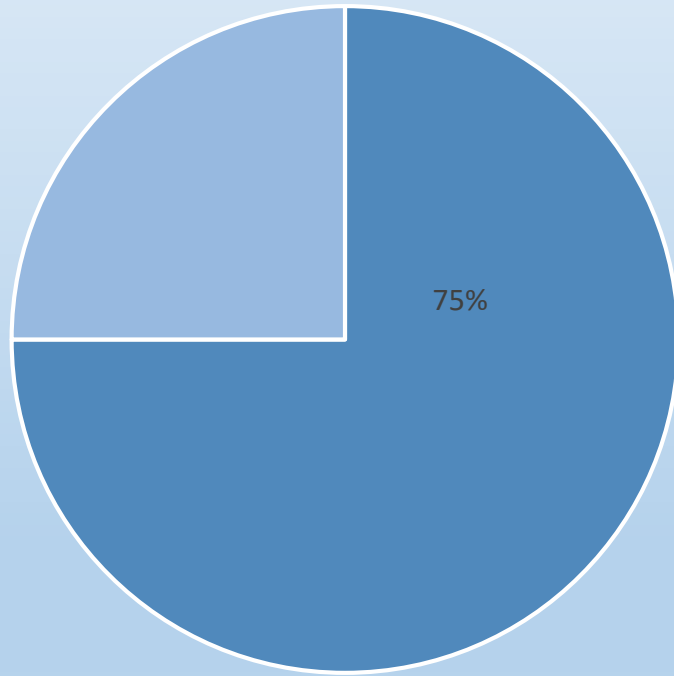
Section 3: Technical Supports Comparison

Fall and Spring Rubric Totals

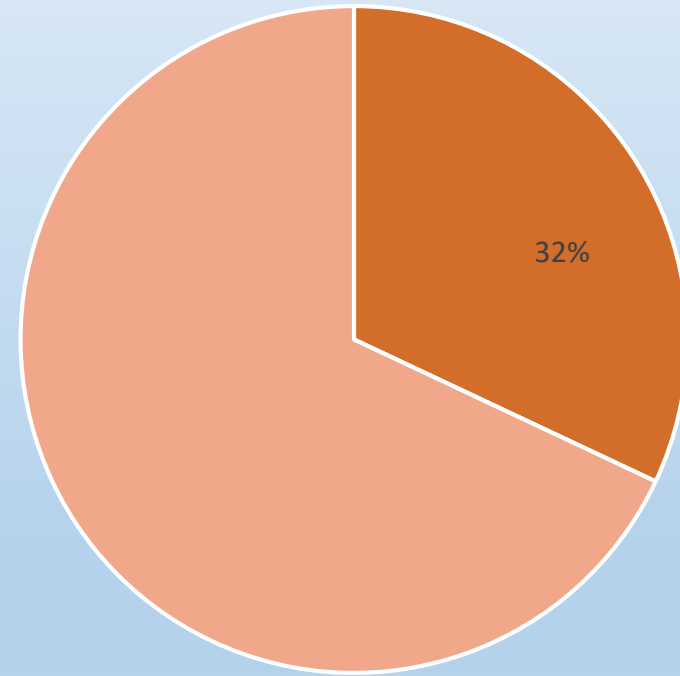


Technical Supports: Fall and Spring Combined Results

Into Math



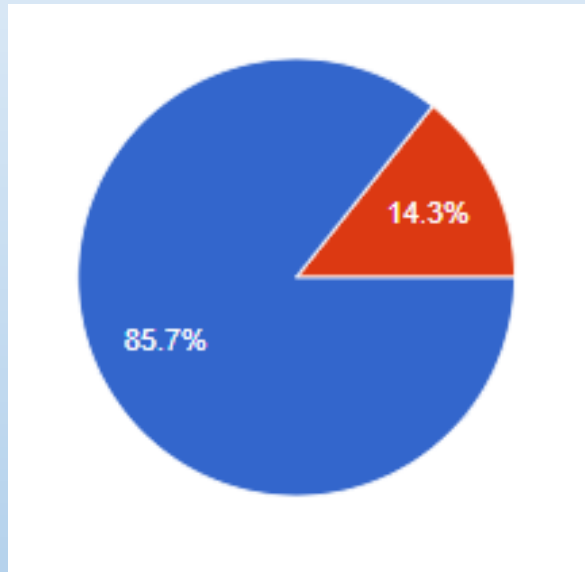
Illustrative Math



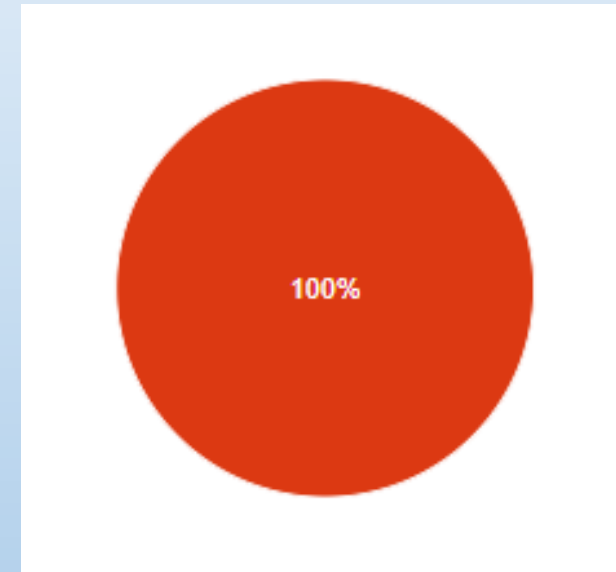
Overall Impressions Comparison

Please choose one of the following that best reflects your overall impressions of the text/series piloted thus far...

Into Math EOY

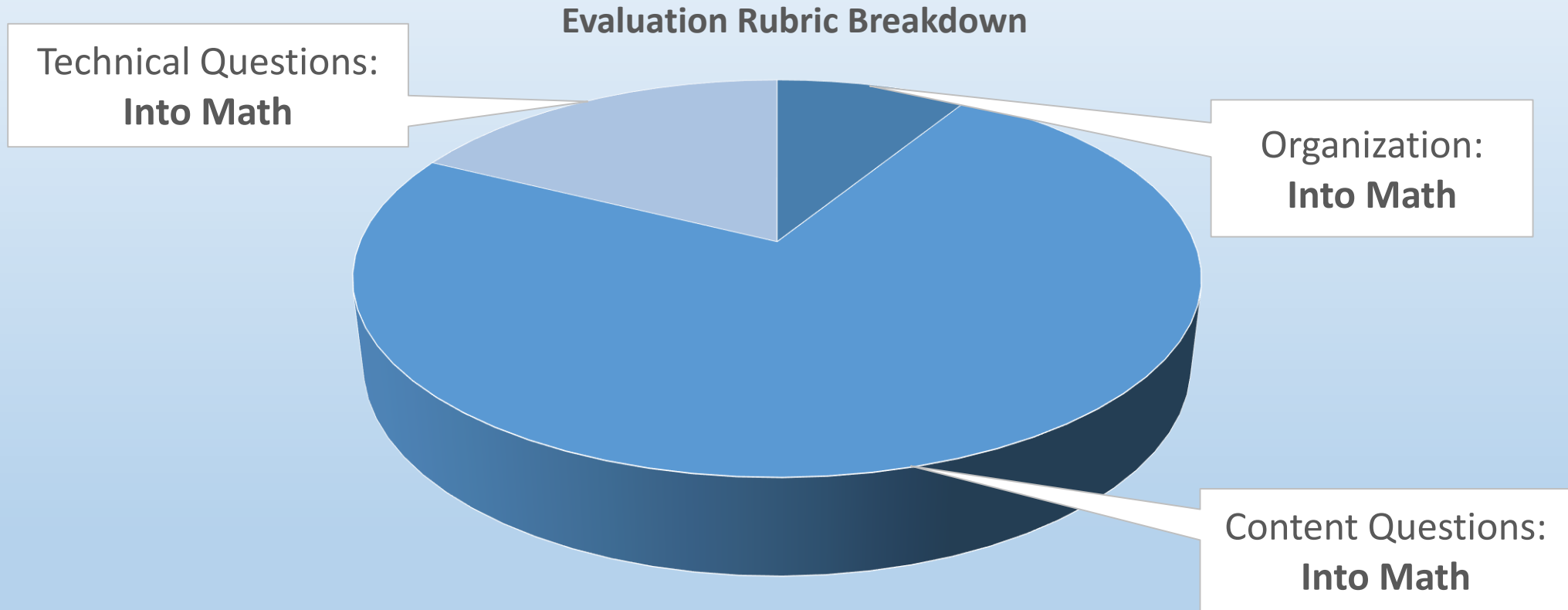


Illustrative EOY



- At this point, piloting this resources has been a positive experience overall.
- At this point, piloting this resource has been a negative experience overall.

Evaluation Rubric: Structure and Weights



Evaluation Rubric: Final Results



Into Math Prevails In All Three Categories

- Into Math Rubric Totals:
- Organization: 86%
- Content: 82%
- Technical Supports: 75%



Illustrative Math Rubric Totals:

- Organization: 46%
- Content: 47%
- Technical Supports: 32%

Verbal/Written Feedback & Classroom Observations

- Anecdotal data collected through verbal and written feedback, as well as classroom observations for ***Into Math*** were extremely positive, especially in regard to building problem solving skills, perseverance, and opportunities for engagement in real world application.
- ***Into Math*** feedback emphasized the extensive materials available for students in need of support and enrichment.
- Teacher feedback indicated that ***Illustrative Math***, although rigorous, was not supportive of the differentiated needs of students, as there were a limited number of problems offered in each lesson.

Into Math Comments:



- **This resource will definitely help our students strengthen their problem solving skills!**
- The **online resources are quite extensive** and match the text resource quite nicely. Obviously, there is a learning curve necessary for navigating the dashboard, but it is quite easy once familiarity has been achieved.
- The resource does a particularly good job at posing problems that require **students to build perseverance solving problems** they are unfamiliar with. The resource encourages reading, writing, and speaking about the content. **Students spend quite a bit of time collaborating and reasoning through the problems.**

Into Math Comments:

- Within each lesson, **I particularly like the way the tasks are scaffolded.** Each lesson begins with "Spark Your Learning" which provides exposure to the overarching concept. Then Task 1 and Task 2 builds understanding of the key concept, whereas Task 3 and sometimes 4 (or even 5) dives deeper. By Task 3, many of the students have made connections and are able to work more independently (or with their groups), with the **teacher serving as facilitator, freeing up the teacher to provide more support to the struggling learners.**

Illustrative Math Comments:

- **Resource did encourage discussion among students but it did not offer enough foundational support for students.** They were often confused by expectations. **Resource often jumped to new concepts before students had enough practice to fully understand concepts.**
- **Compared to our old program (enVision) I do think there is increased rigor.** However I have heard from parents that it is challenging to help their child at home. The information is presented in a way that many parents are unfamiliar with. While there are "Family Letters" for each unit, parents find these do not offer the degree of information that they would like to have.

Illustrative Math Comments:



- **I do not like the technology included with this resource.** I have had better luck with the Kendall Hunt version, as well as other teacher-made resources to accompany Illustrative Math.
- While there are online questions that can be modified, it is not easy to do so, and there have been many technical glitches.
- **Some pros regarding this resource are that it does align to the common core learning standards. It provides real-world examples so that students could relate the mathematical concepts to real-world situations.** The questions are presented in a variety of ways, similar to SBAC style questioning, and goals and objectives are clearly stated at the beginning of each lesson.
- **I feel that the cons of this resource far outweigh the pros.**

Final Resource Selection:

Considerations:

- Data from Fall and Spring Resource Evaluation Rubrics, with emphasis on the “Content” category.
- Classroom observations throughout the year.
- Verbal and written feedback.

Resource Choice:

- ✓ Into Math
- ✓ Into Math
- ✓ Into Math



Final Resource Selection:



Next Steps/Resource Rollout:



- Meet with Math Teachers and Specialists to finalize the order of material.
- Meet with Into Math representatives to finalize professional development for the Fall.
- Scheduled support through the school year as needed.
- Written communications to parents and families.



A special thank you to all the teachers involved in the math pilot this year. We are deeply appreciative of your dedication and commitment throughout the pilot process - this included Special Education and the 6-8 Math Specialists.

We would also like to thank the Superintendent and the members of the Board of Education. As always, we are extremely grateful and appreciative for your for all of your support throughout the year.

Questions/Comments

