Textbook Recommendations 2023-2024

June 12, 2023

Strategic Plan- Instruction & Learning

PRIORITY 3: Through strong district and building leadership, deepen implementation of high-quality practices and programming.

Objectives:

- Enhance core instructional programming PK-12.
- Enhance core instructional practices PK-12.
- Align and enhance supplemental instructional supports PK-12 to meet the needs of each student.

Equity

Each text or instructional material selection is an opportunity to move OPS closer to our goal of equitably educating with excellence.

Elementary & Middle School Textbook Adoption Proposals

- K-5 Science
- 6-8 Science

High School Textbook Adoption Proposals

- Literature & Composition 9
- American Literature
- Precalculus (Approved 21-22)
- AP Calculus BC
- Algebra I
- Psychology

OPS Textbook Adoption Process

1. Teachers review multiple textbooks using the following criteria and tools:
   a. Readability
   b. Standards Alignment
   c. Culturally Responsive Curriculum Scorecard
   d. Assessing Bias in Standards & Curricular Materials Tool

2. Approval process by Committee (Elementary), Department Chairs (KMS, CMS) or Area Coordinators (OHS)

3. Presentation & approval by District Advisory Council

4. Presentation to Board of Education.

Elementary & Middle School Science

CURRENT REALITY

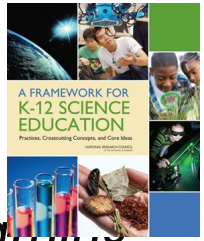
- New Michigan Science Standards were adopted in November 2015
- Last adoption:
  - Elementary- spring 2015
  - Middle School- spring 2008 & 2014/2015

REVIEW PROCESS

- Formed a K-5 & 6-8 Review Team in Fall 2023
  - Includes department chairs and teachers, special education teachers, RTI coaches, and administrators

- Review process led
  - Mrs. Tracy Ojerio, Cornell Principal
  - Mrs. Stacy Bailey, Assistant Superintendent for Curriculum & Instruction
  - Dr. Rob Stephenson, STEM Consultant & Coach at Ingham ISD

Courtesy of Dr. Stephenson



Key goals in the NRC Framework and NGSS

- Engages all students in scientific thinking and moves from *learning about* science to *figuring things out* through phenomena-driven instruction.
- Content is no longer the memorization of science facts, but is three-dimensional, incorporating the *disciplinary core ideas, cross-cutting concepts* and *science practices* that build over time.
- Supports an *equity vision* of science instruction in which all students are known, heard and supported with access and opportunities for learning.

Courtesy of Dr. Stephenson

Integrating the Goals in Classrooms

LESS OF	MORE OF
Rote memorization of facts and terminology	Facts and terminology learned as needed while developing explanations and designing solutions supported by evidence-based arguments and reasoning
Learning of ideas disconnected from questions about phenomena	Systems thinking and modeling to explain phenomena and to give a context for the ideas to be learned
Teachers providing information to the whole class	Students conducting investigations, solving problems, and engaging in discussions with teachers' guidance

Courtesy of Dr. Stephenson

Effectively Aligned Programs Should Be…

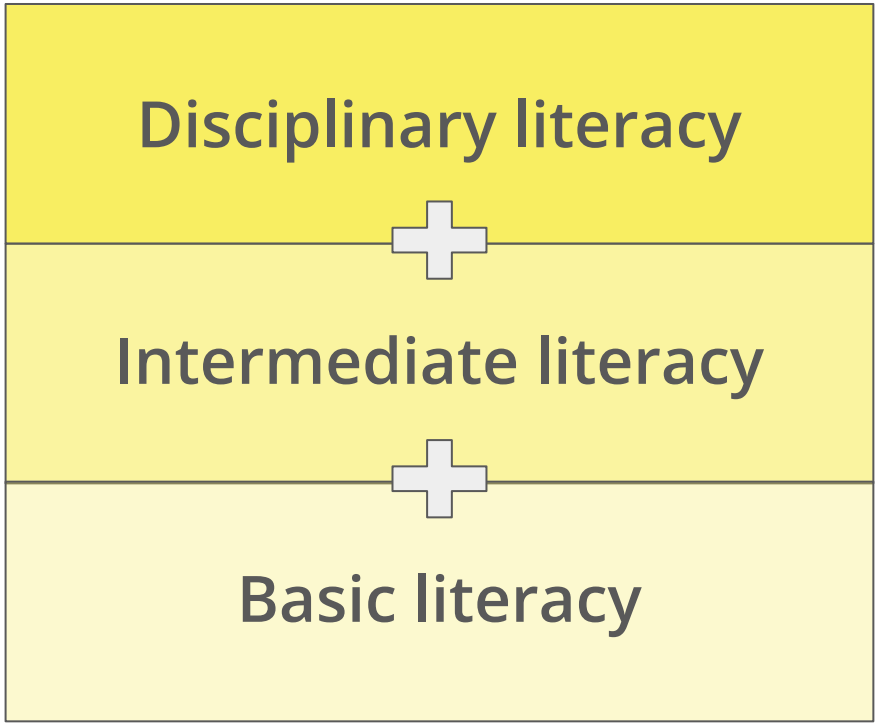
- **Phenomenon based:** An anchoring phenomenon and related phenomena motivate building ideas over time
- **Coherent from the Students' Perspective:** Coherence is grounded in the initial anchoring phenomenon and driven by students' ideas and questions.
- **Driven by Evidence:** Students seek and use evidence to figure out phenomena as they build new science ideas
- **Collaborative:** Students figure out ideas together as a classroom community
- **Equitable:** The class community values the diversity of resources students bring to science class and understand how the learning is relevant to their own lives and communities
- **Three Dimensional**

Courtesy of Dr. Stephenson

A new model

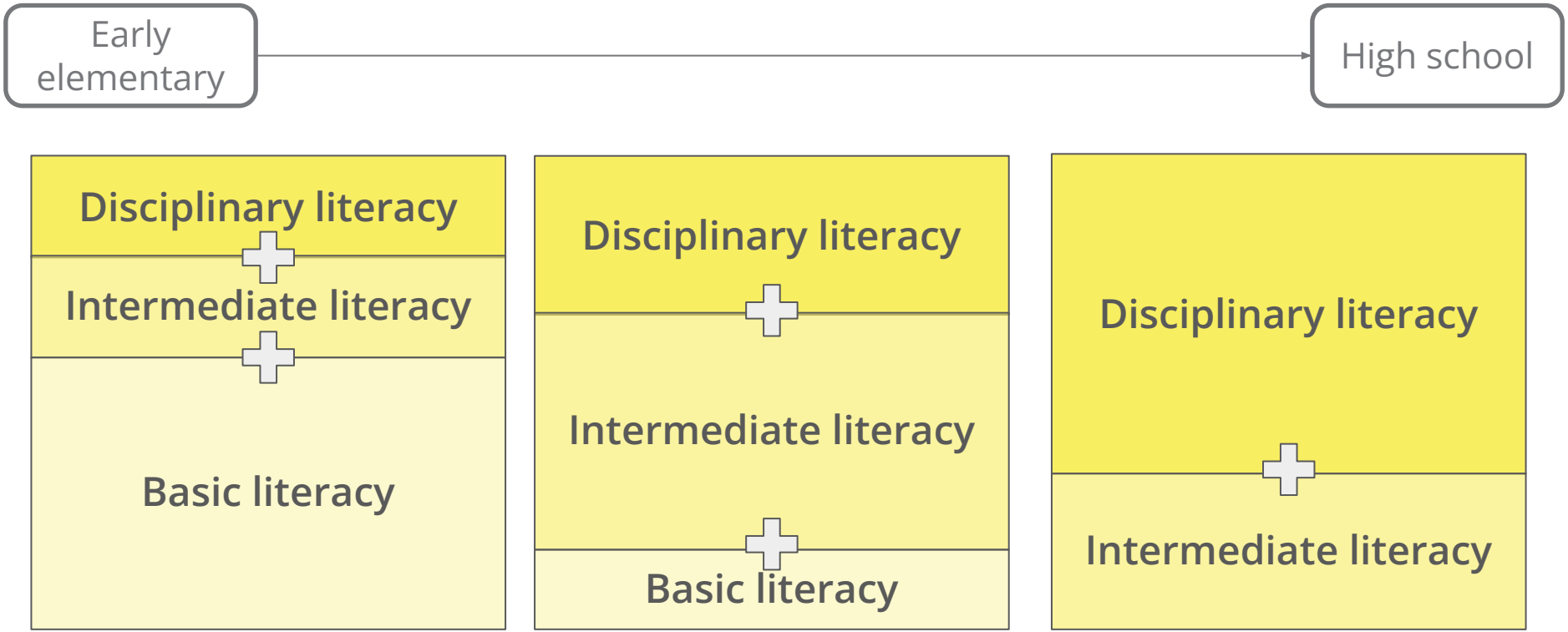
Integration of literacy stages

- Explicit disciplinary literacy instruction at all grade levels
- Sustained basic and intermediate literacy instruction at all grade levels



Courtesy of Dr. Stephenson

Integration of literacy stages



RESOURCES

Elementary K-5:

Amplify Science ✔
HMH Into Science
PhD Science ✔

Middle School 6-8:

OpenSciEd ✔
Amplify ✔
SEPUP Issue Oriented Science

Listed = reviewed
Checkmark= piloted

Elementary Pilot Results

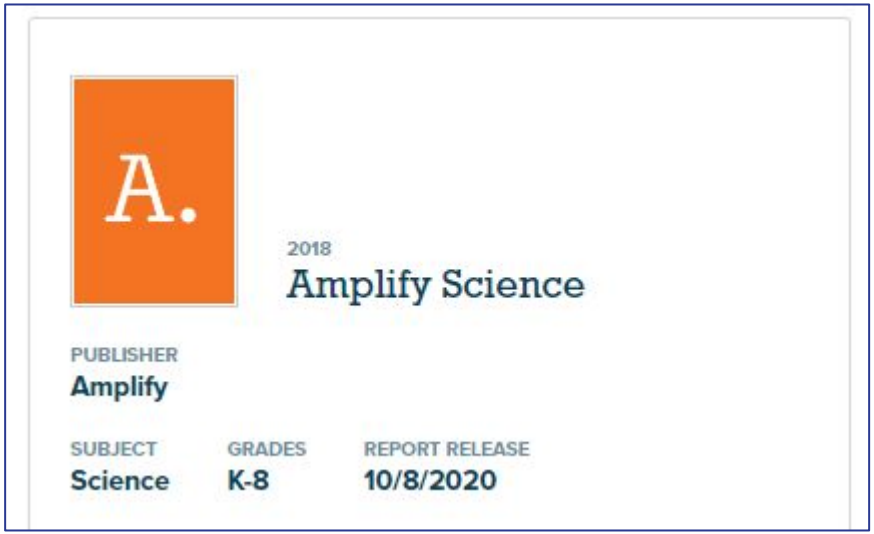
Amplify Science

- Units centered on the phenomena
- Lessons were engaging for students
- Instructional materials were well organized and easy to use- both print and electronic versions.
- Lots of resources to support students
- Opportunities for discussion and student sharing
- Some hands-on activities

PhD Science

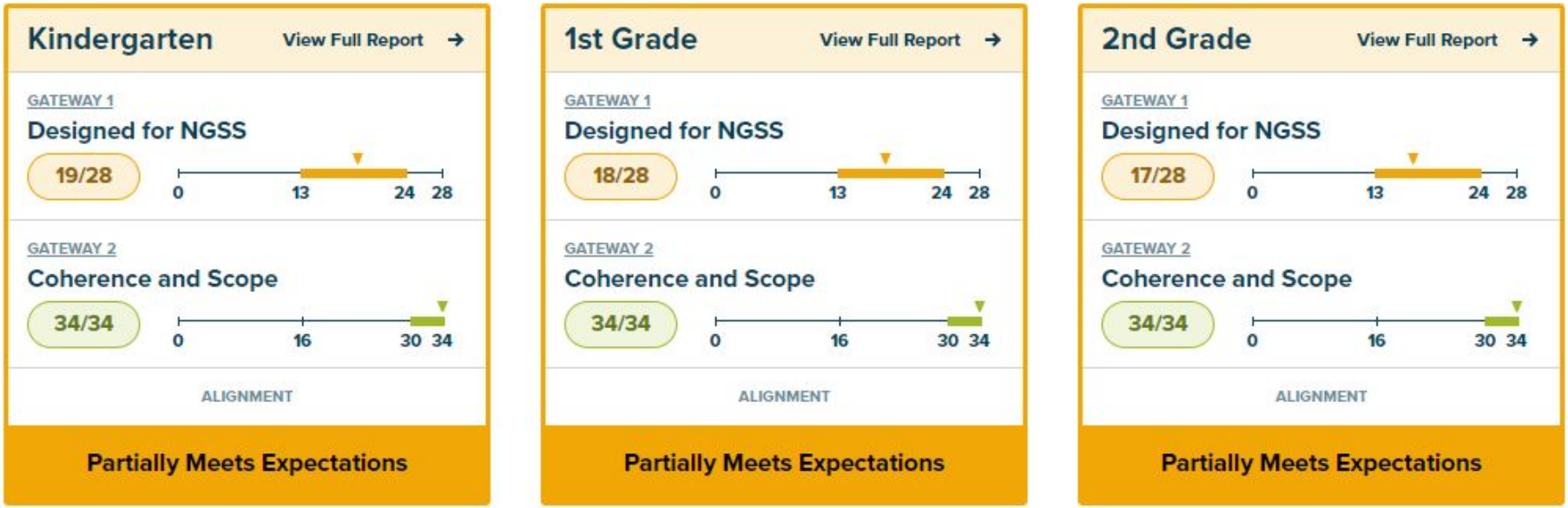
- More teacher demonstrations than student lead investigations
- Units centered on the phenomena, but some were complex and students had limited background knowledge
- Instructional materials were well thought, could be too basic
- Opportunities for discussion and student sharing

EdReports K-5: Partially Meets Expectations (1 Program)



Amplify Science (edition 1) was evaluated on the first two Gateways at each grade level. The findings are included on the following two slides.

EdReports K-5: Partially Meets Expectations (Amplify Science)



EdReports K-5: Partially Meets Expectations (Amplify Science)

Middle School Pilot Results

Amplify Science

- Constructed phenomena (i.e. fictional rocket launch)
- Evidence based heavily on simulations
- Limited student led discussion
- Instructional materials are easy to use
- Content not as challenging for students

OpenSciEd

- Real-life phenomena (i.e. cause of hailstorms)
- Lesson reflects what actual scientists do
- Many opportunities for student discussions
- Instructional materials require significant time for planning and preparation
- Open source materials and fully editable to modify as desired. Updated continuously.

6-8 Programs Currently Under Review with EdReports

OpenSciEd

The free OpenSciEd units have been the most awarded units evaluated by Acheive using the EQUIP instrument.

All eighteen of the 6-8 units were awarded the NGSS Design Badge.

*Dr. Stephenson expects EdReports will find that OpenSciEd “Meets Expectations”.

NGSS Design Badge

Questions?

OHS English

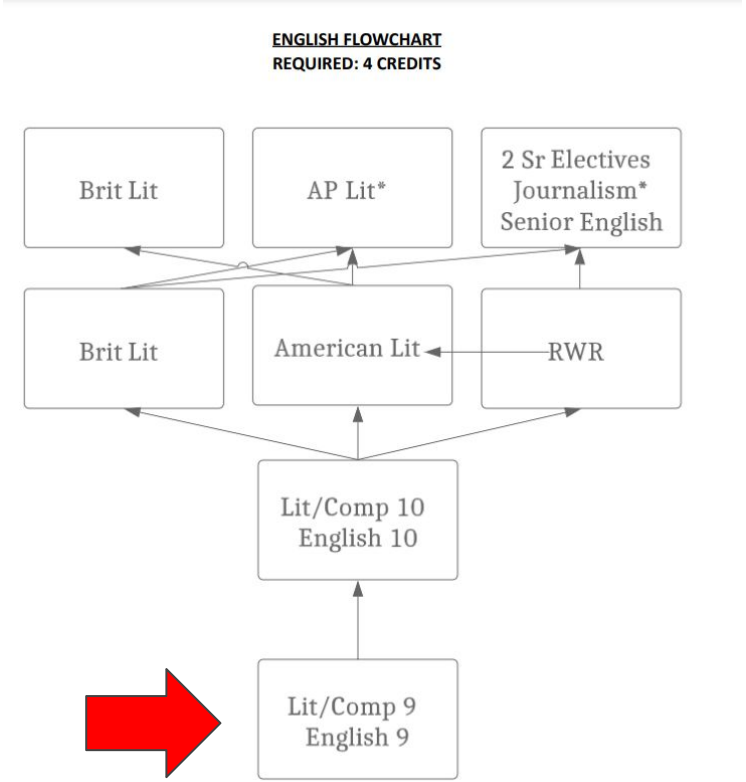
Literature & Composition 9 Last Adopted: N/A

Current Reality: Though we have some minority groups in our curriculum, they often occupy historical positions or represent the immigrant experience. This diversifies into showing many minority groups in the modern teen setting.

Recommendation:

- *Fresh Ink by Lamar Giles*

Rationale for selection:
This text contains characters and authors who are Latinx, Middle Eastern and transgender in addition to black, Asian and white characters. The variety of authors, characters and situations into which authors have place characters (non-historical; non-immigrant) can significantly diversity the perspectives offered in 9th grade. The reading level is accessible to students of all reading levels.



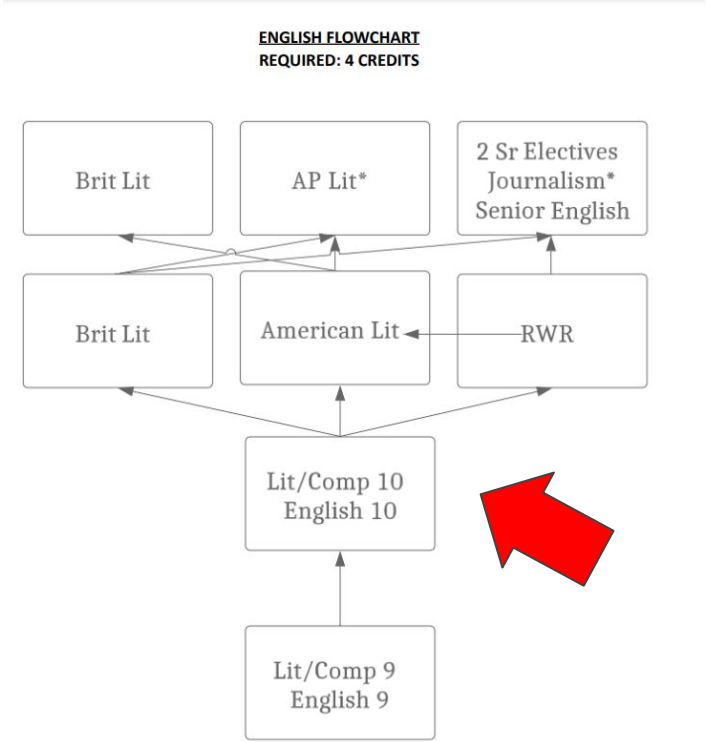
English 10 Last Adopted: N/A

Current Reality: Current texts have limited representation of Native American voices.

Recommendation:

- *Firekeeper's Daughter by Angeline Boulley*

Rationale for selection:
Firekeeper's Daughter is the story of Daunis Fontaine, a biracial, unenrolled member of the Sugar Island Ojibwe tribe. She explores the tension between her sense of duty to her ill mother and her dreams of playing hockey at the University of Michigan. An FBI investigation into a criminal conspiracy involving members of her tribal community enlists Daunis as a confidential informant. The reader follows her navigation of this multi-layered conflict. This text is important because it expands our representation of Native American voices for American Literature. Angelline Bouley is able to capture a modern Indigenous culture, including both unique strengths passed on through traditions and points of tension with the world around the tribe. She also does so in a way that employs local culture from tribes around Michigan, including language and practices that students would not experience elsewhere within our curriculum. This book can be a new anchor point for often-overlooked Indigenous perspectives within the story of American Literature. This text has won the following honors: a Printz Medal, a Morris Award, an American Indian Youth Literature Award YA Honor Book, #1 New York Times Best Seller, a TIME Magazine Best YA Book of All Time Selection, and far too many more to list.



OHS Math

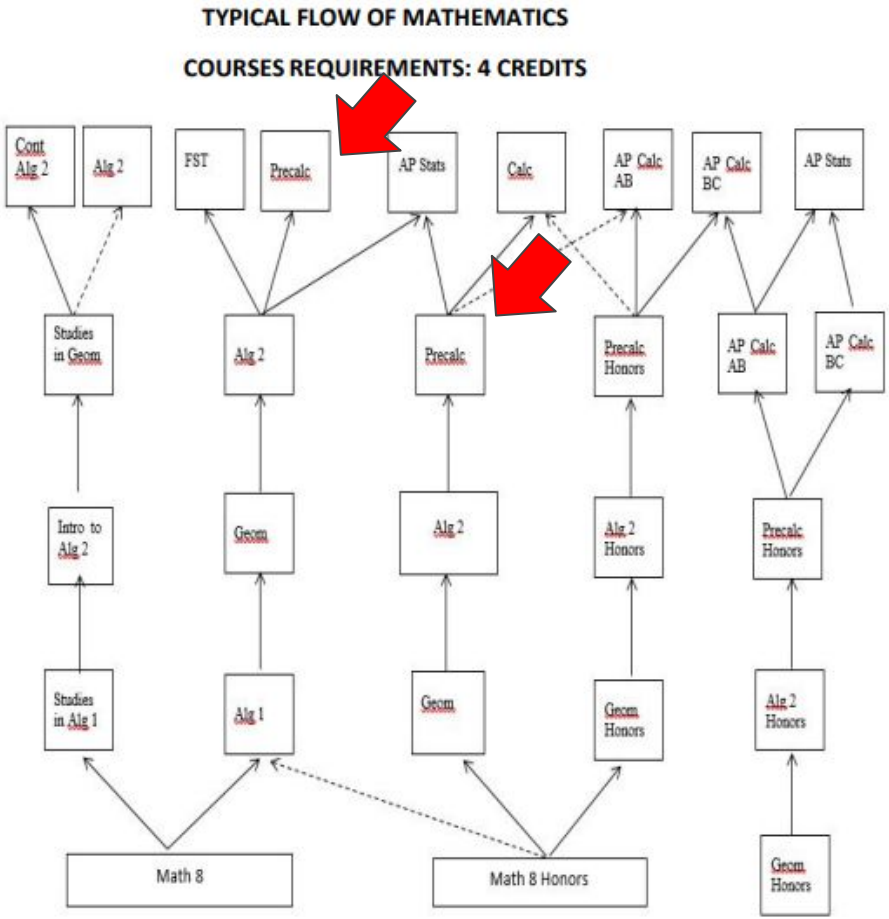
Precalculus Last Adopted: 2016

Current Reality:
Current online licenses have expired.

Recommendation: Precalculus with limits

Rationale for selection:
The content has a great balance of depth, examples and problem sets. The content allows us to preview calculus as well. The book has done a good job of trying to remove the people from to reduce bias in the materials.

APPROVED 2021-2022

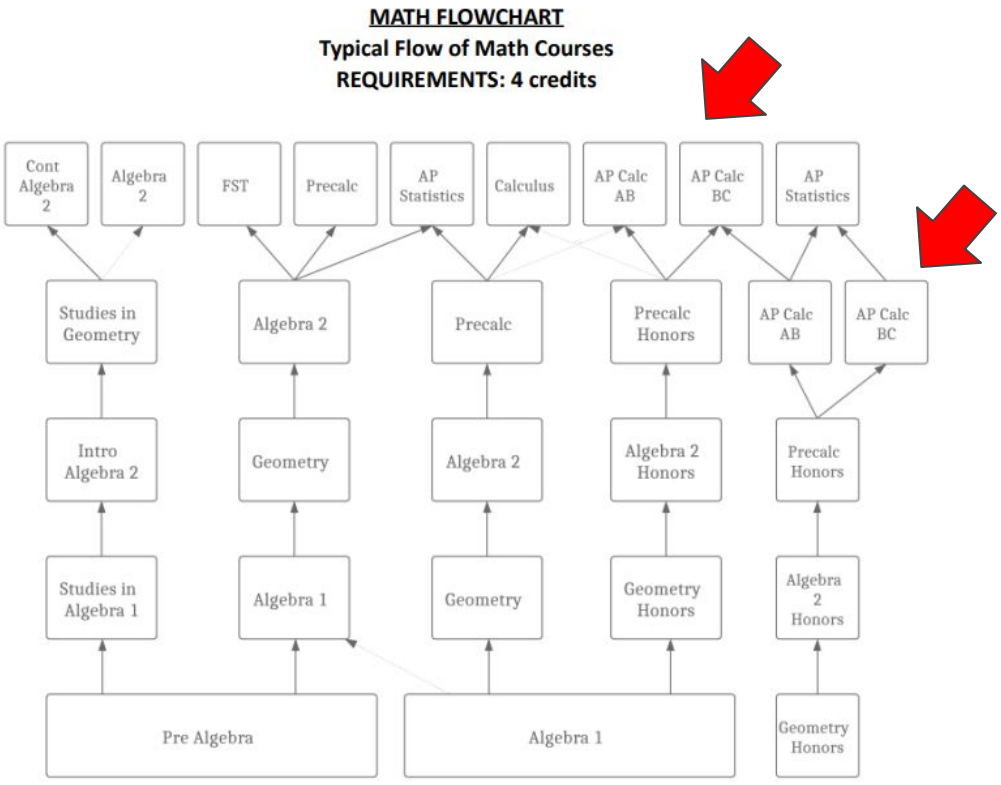


AP Calculus BC Last Adopted:

Current Reality: Books are falling apart and no digital version is available anymore. New books are geared more towards the AP Exam.

Recommendation: Calculus for AP: A Complete Course

Rationale for selection: Our AP Calculus courses have been using a Stewart text for many, many years. We find that the degree of difficulty prepares our students well for both the AP exam and for a successful Calculus II experience . This particular text is also co-written by an author who has been a Chief Reader for the AP Calculus Reading and Development Committee. I have used this text for my AP Calculus AB students and it has proven to be effective in teaching and learning for students. It prepared them well for the AP Exam.

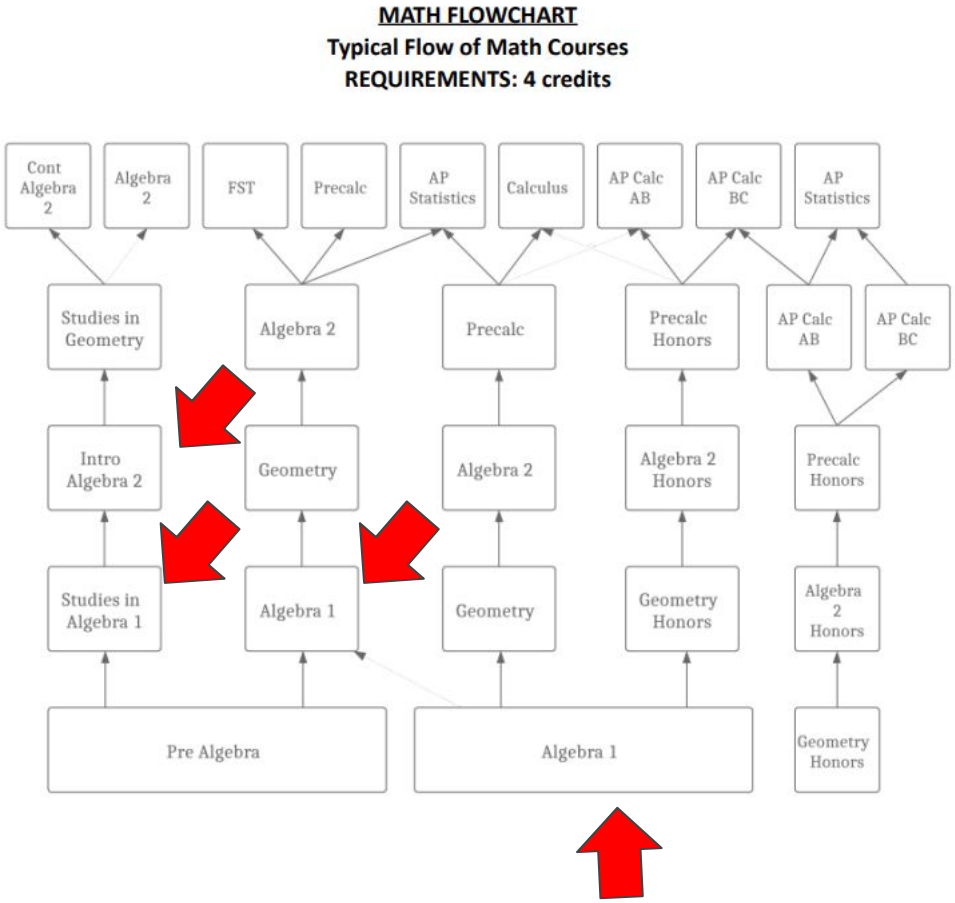


Algebra I/Studies in Algebra/Intro to Algebra 2 Last Adopted: 2014

Current Reality: The online access for staff & students is set to expire and cannot be renewed.

Recommendation: Algebra I by Big Ideas

Rationale for selection: The committee found the overall organization and availability of materials for this textbook to be the best fit for both staff and students. We believe that this text is inclusive to a diverse population of learners and includes representation for diverse groups and cultures. We found the language used in the text to be inclusive and not harmful. The text does a good job of showcasing diverse groups, and narratives when appropriate. The primary function of the textbook is to teach students algebra 1, but it does do so in an inclusive way. We feel this book will be the best fit for our students.



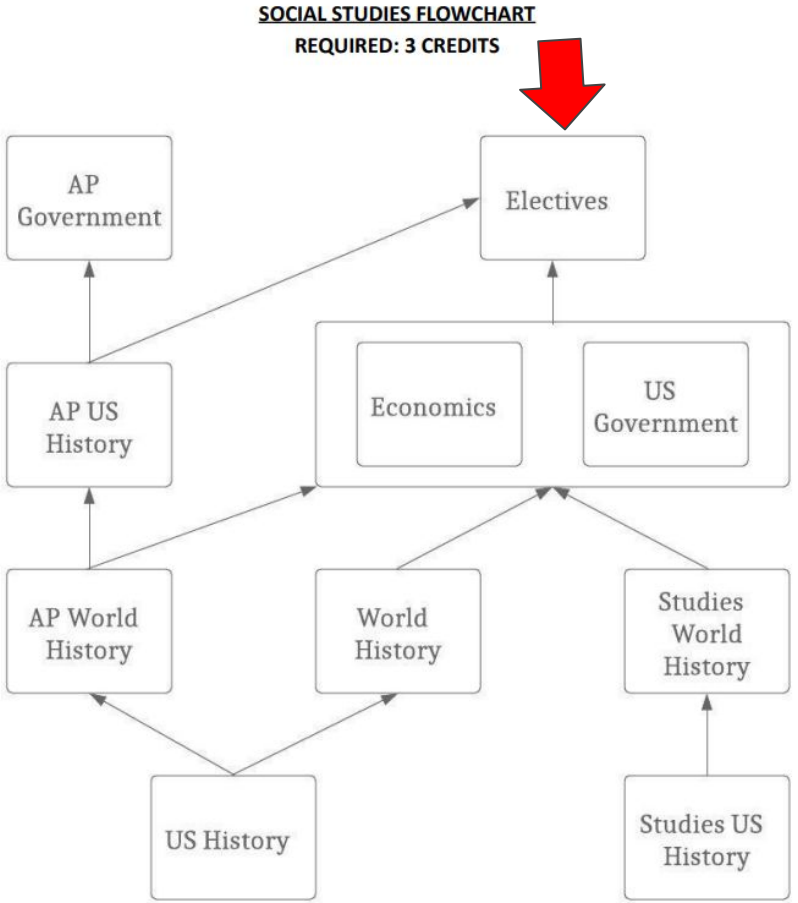
OHS Social Studies

Psychology Last Adopted: 2001

Current Reality: The psychological concepts in the current textbook are outdated with a lack of representation of non-white, non-male contributors to psychological science, and it is lacking in useful and interesting student activities and learning tools.

Recommendation: Understanding Psychology by McGraw-Hill

Rationale for selection:
This textbook was the most impressive book in terms of organization & layout, readability, student learning activities, and its depiction of people from diverse backgrounds, genders, and cultures contributing to the field of psychology. This textbook provides not only images of people from many cultures, but also non-binary people and differently abled people. It provides vignettes about various psychological subjects from multiple cultural perspectives, as well as highlighting the achievements of both white and non-white people in psychology. It similarly balances the information of achievements by men and women.



In Conclusion

- These textbooks and materials will maintain and enhance the instructional excellence and learning at all levels. These materials will help to meet learners needs' academically, provide diverse perspectives and cultures, and utilize the district's 1:1 initiative.
- The materials will position us well for the future, both in person and online.
- All of these proposed textbooks have been reviewed by the District Advisory Council.
- Materials are available for parent review at Central Office for the next two weeks.
- District textbook review calendars will be reviewed and updated to ensure timely review and implementation of instructional resources.

Questions?