IT and Math Curricula: Revision Overview

School Board
May 17, 2022

School Board & AR Requirements

SBP & AR 910:
Curriculum development and evaluation involving students, parents, teachers, and administrators. We also reach out to UAF and community organizations (FNA, TCC, NAACP, etc.).
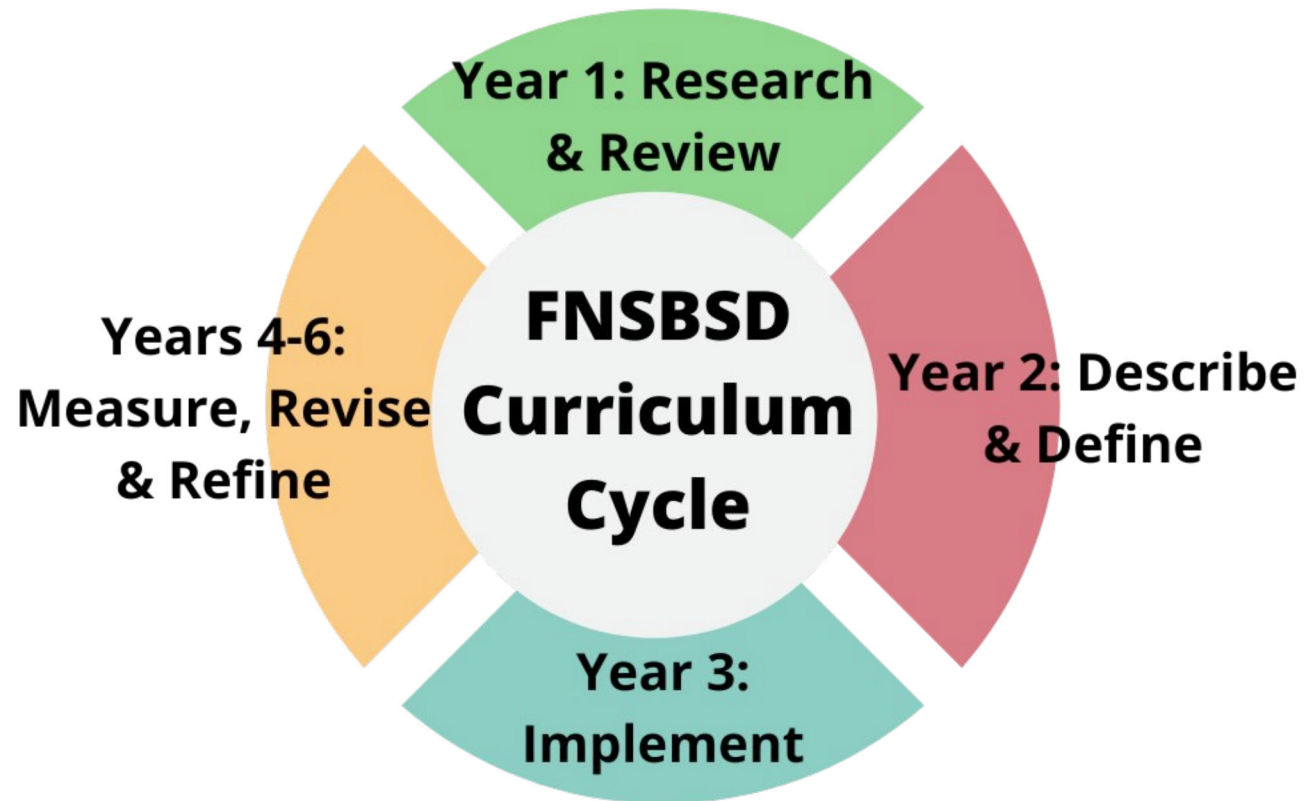
District Strategic Plan (Student Success): Increase academic achievement and social emotional well-being for all students.

> **1.1 Competency Based Learning**: Define competencies by grade level and content areas, allowing students to advance based upon demonstrated mastery rather than seat time.
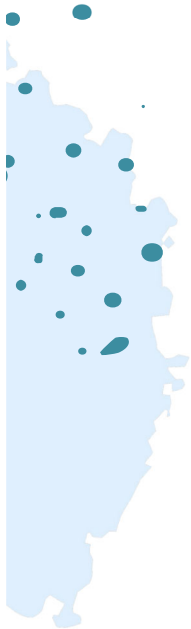
SBP & AR 236.1:
Board Curriculum Committee receives monthly updates, reviews all drafts, and makes a recommendation to the School Board.

Year 1: Research & Review

Year 2: Describe & Define

Year 3: Implement

Years 4-6: Measure, Revise & Refine

FNSBSD Curriculum Cycle

Per SBP/AR 910, we are required to engage in a curriculum cycle.

Revised Curriculum Calendar

ADMINISTRATIVE REGULATION

910 Appendix A - FNSBSD Curriculum Cycle Calendar

Content Area	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029
Health Curriculum: K-12: 2016 Materials: K-6: 2008; 7-12: 2016	Research & Review	Develop & Define	Implement	Measure- Refine- Revise			Research & Review
PE Curriculum: K-12: 2016	Research & Review	Develop & Define	Implement	Measure- Refine- Revise			Research & Review
Science Curriculum: K-12: 2016 Materials: K-6: 2009; 7-8: 2018; 9-12: 2009, 2016	Research & Review	Develop & Define	Implement	Measure- Refine- Revise			Research & Review
Art Curriculum: K-12: 2017	Measure - Refine - Revise	Research & Review	Develop & Define	Implement	Measure- Refine- Revise		
Music Curriculum: K-12: 2017 Materials: K-6: 2010; 7-12: 2015	Measure - Refine - Revise	Research & Review	Develop & Define	Implement	Measure- Refine- Revise		
World Language Curriculum: 6-12: 2018 Materials: 6-8: 2010; 9-12: 2018 French: 2010	Measure- Refine- Revise		Research & Review	Develop & Define	Implement	Measure- Refine- Revise	
Social Studies Curriculum: K-12: 2020 Materials: K-12: 2020	Measure- Refine- Revise		Research & Review	Develop & Define	Implement	Measure- Refine- Revise	
English Language Arts Curriculum: K-6: 2011, rev. 2014; 7-12: 2020 Materials: K-6: 2018; 7-12: 2020; English 11: 2021	Measure- Refine- Revise			Research & Review	Develop & Define	Implement	Measure - Refine - Revise
Math Curriculum: K-5: 2014 6-12: 2022 Materials: K- Algebra 2: 2021	Implement	Measure- Refine- Revise			Research & Review	Develop & Define	Implement
~~**Technology**~~ ~~Curriculum: 2011~~							

CTE Curriculum Revision

2022/2023

Fall: STEM

Spring: Arts/AV

                       Hospitality & Tourism (Culinary)

2023/2024

Fall: Architecture & Construction

Spring: Health Science

                    WBL & Capstone

2024/2025

Fall: Automotive & Small Engines

Spring: Aviation

Information Technology

Process
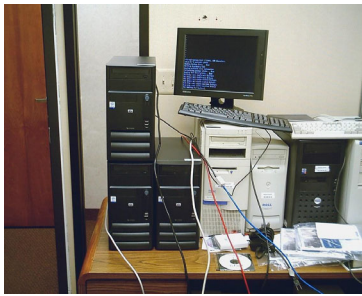
2019-2020

Teachers, Industry, and Postsecondary Representatives

2020-2021

Focused Discovery for Programs to Fit the Needs From the Research Team
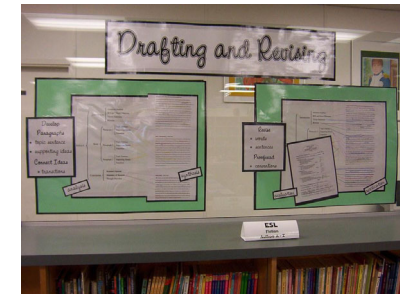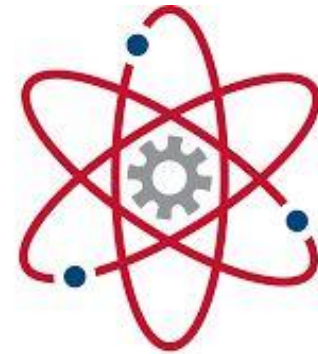

2021-2022

Writing and Revising

Project Lead The Way

Middle School

Gateway

High School

Information Technology Pathway

GRADES 6-8

App Creators

Computer Science for Innovators and Makers

Grades 9-12

Computer Science Essentials

Computer Science Principles

Computer Science A

Cybersecurity

IT Networking

Special Projects

Job Shadow & Internships

Industry Certifications

Networking+ (CompTIA)

Security+ (CompTIA)

A+ (CompTIA)**

Courses Removed From Curriculum

Middle School

Computer Essentials

Exploring Computer Essentials

High School

Introduction to IT

IT Essentials

Mobile Apps

Web Design

Gratitude

Thank you to all the teachers and industry and postsecondary collaborators for all their hard work on this project!!!

6-12 Math

Overview of the Revision Process

2019-2020

34 Teachers, 3 Meetings

Portrait of a Graduate

Development of K-12 Competencies

2020-2021

8 Teachers, 6 Meetings

Review Stakeholder Feedback Collected

Board Adopts Core Materials

2021-2022

8 Teachers, 6 Meetings

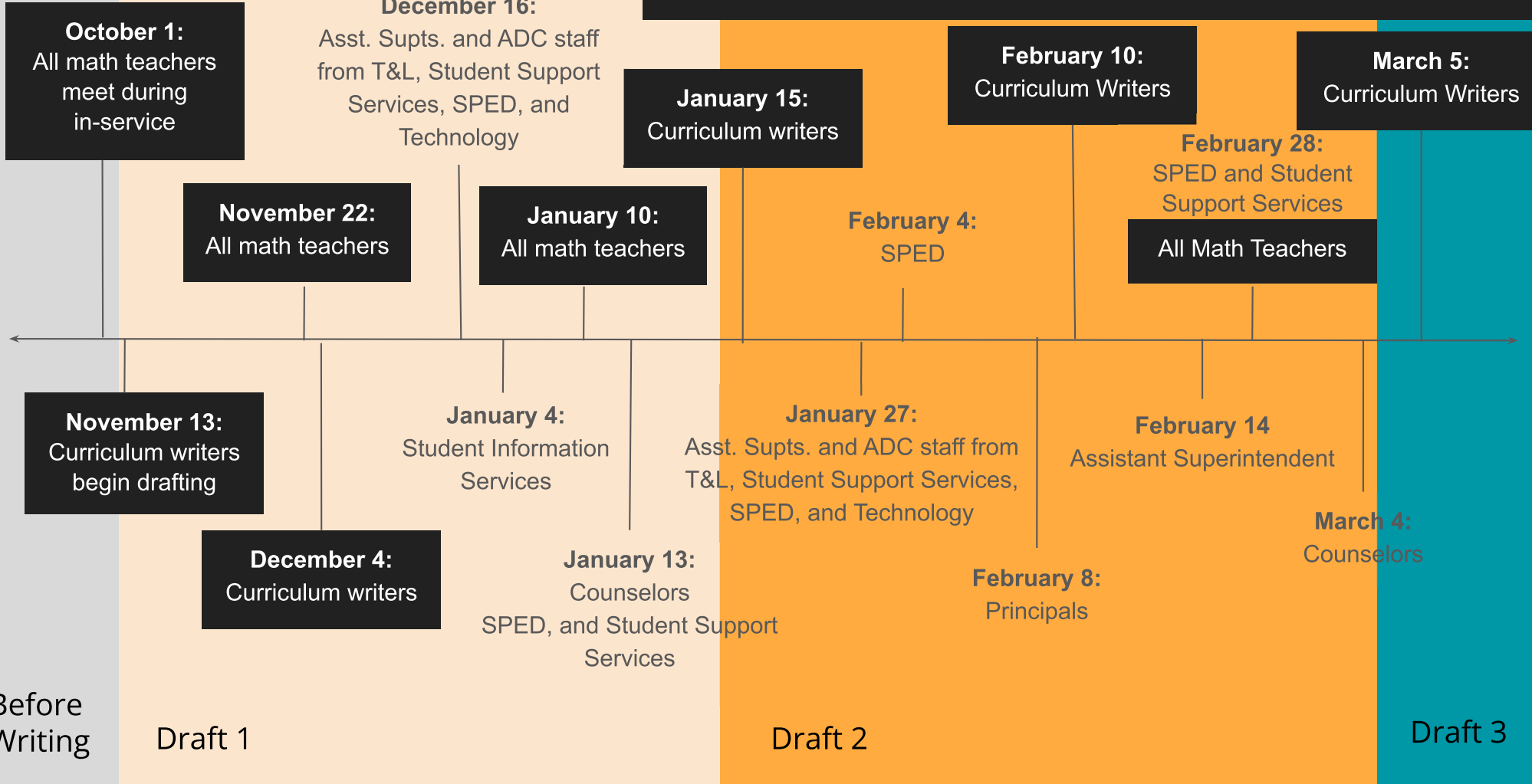Revise the Existing Math Curriculum

Developed with the Community

Groups we met with: UAF Math Department, NAACP, Board Curriculum Committee

General schedule of input: Pre-writing surveys, Surveys after each draft, In-person meetings as needed

Who was notified: Monroe, FNA, TCC, University Departments (Math, IT, School of Education), Alaska PTA & School PTAs, NAACP

How they were notified: Facebook, district website, targeted emails, district digest, T&L newsletter

Developed with Educators

October 1:
All math teachers meet during in-service

November 13:
Curriculum writers begin drafting

November 22:
All math teachers

December 4:
Curriculum writers

December 16:
Asst. Supts. and ADC staff from T&L, Student Support Services, SPED, and Technology

January 4:
Student Information Services

January 10:
All math teachers

January 13:
Counselors
SPED, and Student Support Services

January 15:
Curriculum writers

January 27:
Asst. Supts. and ADC staff from T&L, Student Support Services, SPED, and Technology

February 4:
SPED

February 8:
Principals

February 10:
Curriculum Writers

February 14:
Assistant Superintendent

February 28:
SPED and Student Support Services

All Math Teachers

March 4:
Counselors

March 5:
Curriculum Writers

Before Writing

Draft 1

Draft 2

Draft 3

Thank you to the eight writers who took on this work *this* year!

Streamlining Middle School Courses

Overlap of Alaska Math Standards

6th Grade

8th Grade
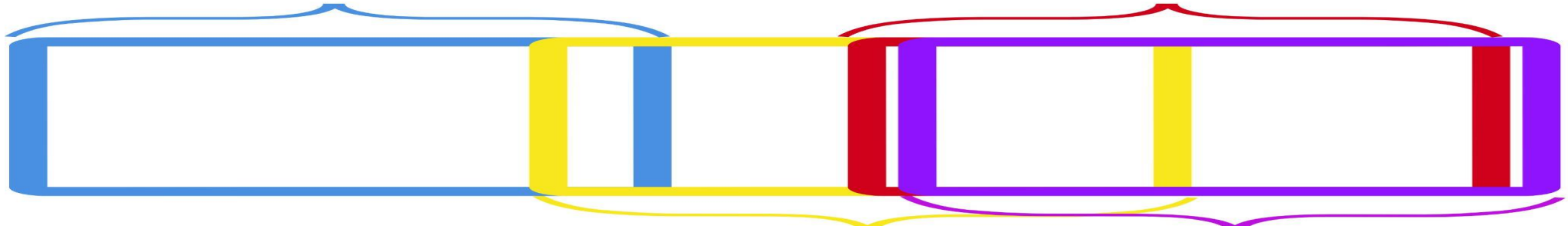
7th Grade   Algebra 1

Not condensing courses; Advancing students to the level that is appropriate so that they can explore and understand the content more deeply
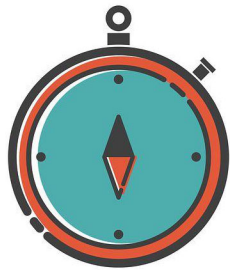
Pre-Reqs should match the work done in the course!

-Math Teachers

- Removed the Algebra 2, Semester 1 requirement for all math elective courses

- Reviewed Pre-Requisites for all courses to see how we could increase access to engaging math electives

Ensuring Students Pass Algebra 1

Start Early

Middle School Math Lab

Providing personalized interventions to students at their point of need

Focus Support

Equitable placement in 2-Year Algebra 1

Identifying students in need of this intervention using key data points

Explore New Paths

More math electives that do not require Algebra 1

Math for the Trades
Accounting
Computer Programming

Why Statistics?

- Statistics is the place where Math meets the "real world"
- It allows you to make informed decisions
- Critically analyze information that is presented as fact
- Used in almost any career paths
- Students have been exploring statistics since kindergarten

From our Community

My kids should be able to understand taxes and make financial decisions!

Math should be useful to my kids after they graduate (whether they go to college or not)!

We want our students to be engaged citizens!

Preparing Students for Life

Current Graduation Requirements

3.0 CREDITS TOTAL

1.0 Credits Algebra 1

2.0 Credits Math Electives

Revised Graduation Requirements

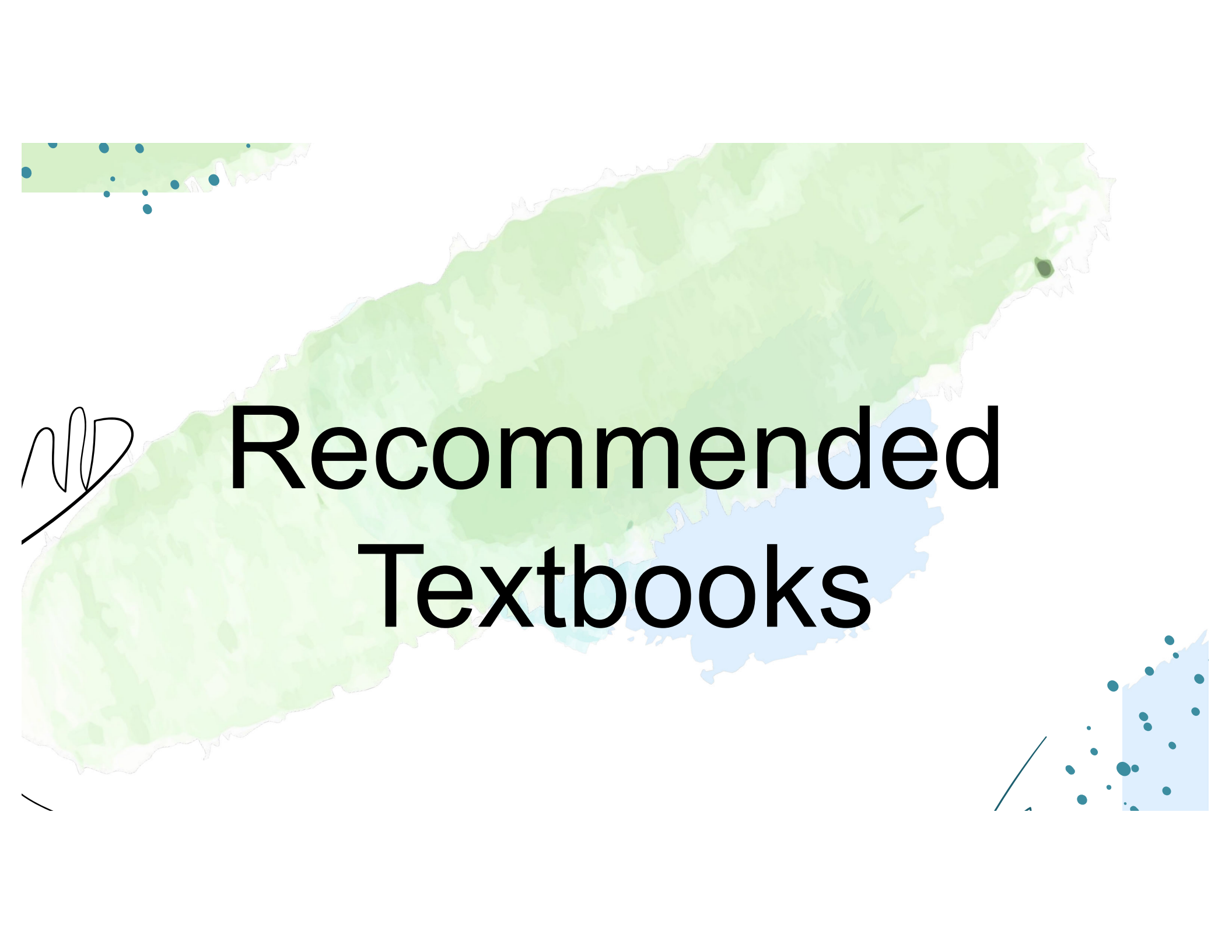**All students will earn 3.0 credits of Math IN HIGH SCHOOL**

1.0 Credits Algebra 1 (or another math elective if the student earned credit for Algebra 1 in middle school)

0.5 Credits Statistics by taking 1 of the following courses:
- Survey of Math and Society
- Intro to Data and Statistics
- Algebra 2, semester 2
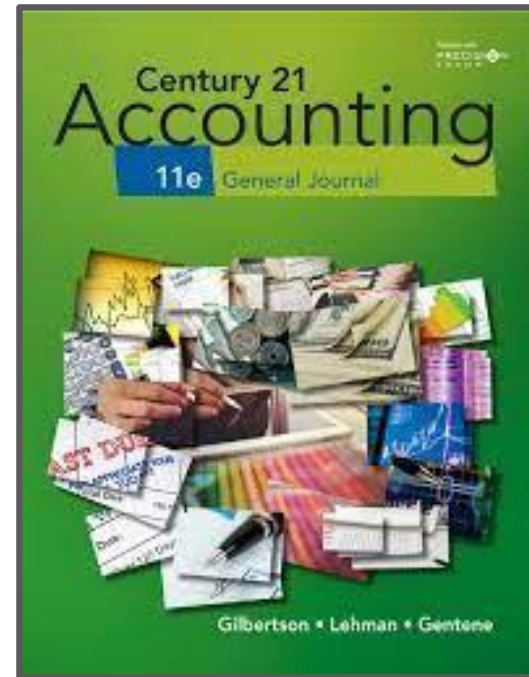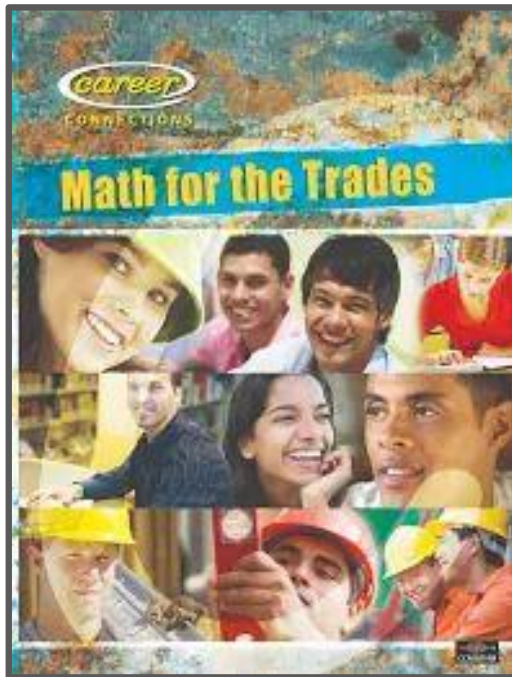- AP Statistics

1.5 Credits of Math Electives

The Board Curriculum Committee recommends that we adopt the Math and IT Curriculum revisions.
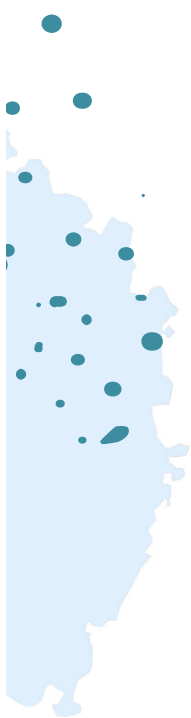
Recommended Textbooks

Recommended Textbooks

The Board Curriculum Committee recommends that we adopt these materials.

In your packet for today

- Board reports
- Letters of recommendation from the Board Curriculum Committee and from District Administration
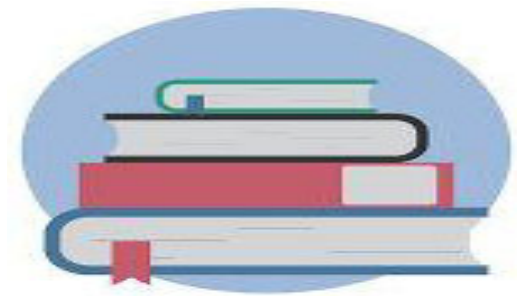- Summary of changes
- Curriculum documents

June 7, you will vote on

Adopting the math curriculum

Adopting the IT curriculum

Adopting Materials for:

- Math for the Trades
- Accounting