Technology for Digital Learning

Parent & Community Workshop
April 25, 2023

Objective: Provide an overview of aspects of the district's digital learning program, including technology-infused instruction, information technology literacy (with new NJSLS technology standards), and technology education. The discussion will include these modes of instruction, as well as a description of the tools and resources we use in pursuing our goals.

The district's Technology Pan for Digital Learning is aligned with the National Future Ready Framework as well as New Jersey Future Ready Certification criteria

National Future Ready Framework – 8 Gears

White House Future Ready Summits / Alliance for Excellent Education
2015

With student learning at the center, a district must align each of the seven (7) key categories, or gears, in order to advance toward successful digital learning:

1. Curriculum, Instruction, and Assessment
2. Use of Time
3. Technology, Networks, and Hardware
4. Data and Privacy
5. Community Partnerships
6. Professional Learning
7. Budget and Resources
8. Across the Gears: Collaborative Leadership

FUTURE READY SCHOOLS
PREPARING STUDENTS FOR SUCCESS

District Commitment Phase:

- Superintendent's Future Ready Pledge
- BOE Resolution
- District Self-Assessment

Each of the key categories contains several elements, for which we have developed district goals & objectives

Technology Plan for Digital Learning

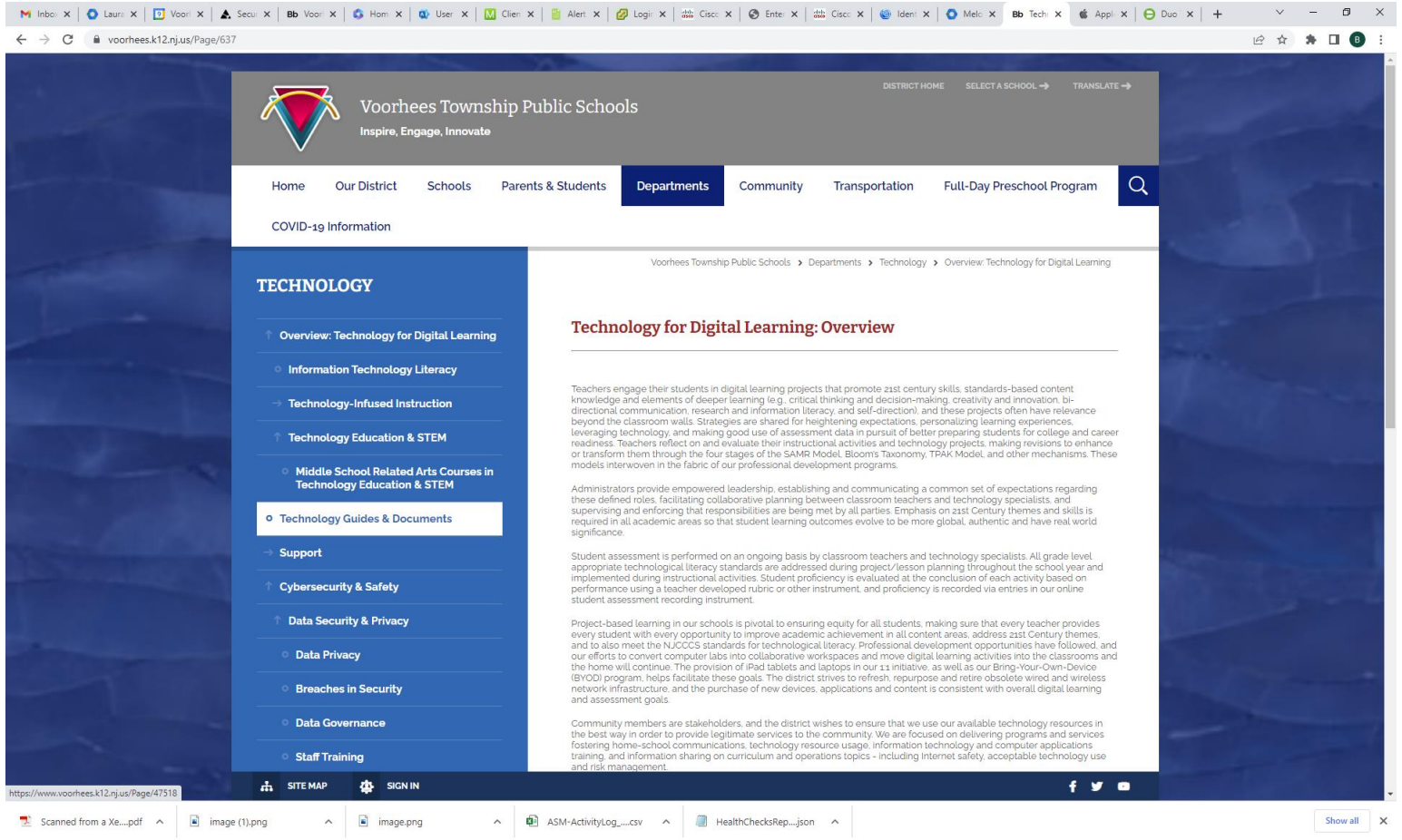
2020 – 2023

- **Curriculum, Instruction, and Assessment**
  - 21st Century / Deeper Learning
  - Personalized Learning
  - Collaborative, Relevant, and Applied Learning
  - Leveraging Technology
  - Assessment – Analytics Inform Instruction
- **Use of Time**
  - Flexible Learning, Anytime, Anywhere
  - New Pedagogy, Schedules, and Learning Environment for Personalized Learning
  - Competency-Based Learning
  - Strategies for Providing Extended Time for Projects and Collaboration
- **Technology, Networks, and Hardware**
  - Equity and Adequacy of Devices
  - Robust Network Infrastructure
  - Adequate and Responsive Support
  - Formal Cycle for Review and Replacement
- **Data and Privacy**
  - Data and Data Systems
  - Data Policies, Procedures, and Practices
  - Data-Informed Decision Making
  - Data Literate Education Professionals
- **Community Partnerships**
  - Global and Cultural Awareness
  - Digital Learning Environments as Connectors to Local and Global Communities
  - Parental/Guardian Communication and Engagement
  - District and School Brand
- **Professional Learning**
  - Shared Ownership and Responsibility for Professional Growth
  - Divers Opportunities for Professional Learning
  - Broad-Based, Participative Evaluation
- **Budget and Resources**
  - Efficiency and Cost Savings
  - Consistent Funding Streams
  - Learning Return on Investment
- **Empowered, Innovative Leadership**
  - A Shared, Forward-Thinking Vision for Digital Learning
  - A Culture of Collaboration, Innovation, Capacity Building, and Empowerment
  - High Expectations for Evidence-Based Transformations to Digital Learning
  - Transformative, Coherent Thinking, Planning, Policies, and Implementation

Our planning document can be found on the district website: https://www.voorhees.k12.nj.us/Page/637

in the Technology Guides & Documents section

Links to several of the external plans and standards with which our plan is aligned are there as well



Digital Learning (technology) planning is very important to us – the current plan is the 10th revision since 1991

A description of the planning process for each revision over time is provided in the **Historical Overview** section, so that you may review of our program's evolution

VOORHEES
TOWNSHIP
PUBLIC SCHOOLS

Technology Plan for Digital Learning

2020 - 2023

Administration Building
329 Route 73
Voorhees, NJ 08043

(856) 751-8446

www.voorhees.k12.nj.us

The **Mission statement** and **Vision** in the Executive Summary was created in conjunction with our "**Innovation Committee**," a group of teachers, administrators and parents from all schools, following several strategic planning activities

The **Evaluation Plan** includes a gap analysis performed on data gathered in both the annual **NJTRAx Digital Learning** survey administration, as well as from the **Future Ready – NJ** certification process

Table of Contents

The **Current Environment** portion of the plan offers a thorough description and status update concerning all aspects of our program, including the support structures needed and in place

Instructional Technology Programs and Initiatives include several and varied modes of instruction

Table of Contents

Current Instructional Technology Programs and Initiatives: Modes of Instruction

- **Information Technology Literacy** – knowledge and skills related to creativity & innovation; critical thinking & problem solving; communication & collaboration; information & media literacy
- **Technology-Infused Instruction** – project-based learning focusing on solving real-world authentic problems, blending technology use in academic content areas
- **Technology Education** – principles of STEM aligned with new NJSLS standards for Computer Science and Design Thinking
- **1:1 iPad Initiative** (PreK-8) – provides students with tools and resources to create a modern learning environment leading to college and career readiness
- **Bring Your Own Device** (BYOD) – precursor to the 1:1 initiative, but still may be used as a supplement as needed
- **Teaching and Learning with Computers** (TLC) – classroom learning center approach to small group instruction

Current Instructional Technology Programs and Initiatives: Modes of Instruction
- Continued -

- **Interactive Large Group Instruction** – The “electronic chalkboard” presentation method using 75” interactive panels in the classroom and library
- **Video-on-Demand** – standards aligned educational video content available on demand in the classroom or at home
- **Distance Learning / Video Conferencing** – collection of products supporting global & cultural awareness, local community outreach, electronic field trips, and access to the otherwise inaccessible resources
- **Hybrid/Remote Instruction** – collection of products and methods that support non-traditional instruction with some or all participants gathering and working while in remote locations
- **Assistive Technology** – the use of adaptive resources to help disabled children meet the goals of their individualized educational programs

The **District Action Plan** is the course we are taking in pursuit of our mission and vision over a three-year period, with goals and objectives created in each of the 8 categories

Technology Plan for Digital Learning

2020 – 2023

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Curriculum, Instruction, and Assessment Category Includes . . .

21st Century / Deeper Learning

- Align curriculum and instruction with the vision for digital learning, creating the expectation that all students will leave the district's educational program better prepared for college or career readiness.
- Promote standards-based content and elements of deeper learning (e.g., critical thinking and decision making, creativity and innovation, bi-directional communication, research and information literacy, and self-direction).
- Create opportunities for learning that empower all students to experience and master the core understandings related to that content.
- Adopt formal processes to systematically integrate 21st Century skills in support of a deeper learning model as a design feature of all curricula and instruction.

Curriculum, Instruction, and Assessment Category Includes . . .

Personalized Learning

- Leverage technology, a range of digital learning resources to personalize the competency-based learning experience for each student to ensure all students attain mastery.
- Allow students to have a significant degree of control and choice in what, when, and how they learn.
- Tailor the content, pacing, and feedback to the needs of each student, empowering all students with choice, where they regulate and take ownership of significant aspects of their learning.
- Provide all students with the opportunity to do authentic real-world work, collaborating with educators, fellow students, and others outside of the school environment on projects that often (1) involve the creation of knowledge products, (2) foster deep learning, and (3) have value beyond the classroom walls.
- Support student projects through connected teaching that engages other professionals, parents/guardians, and community members as appropriate

Curriculum, Instruction, and Assessment Category Includes . . .

Collaborative, Relevant, and Applied Learning

- Engage students in collaborative learning communities with peers, teachers, experts, and others outside the school environment.
- Empower students through digital learning environments to do projects that often involve the creation of knowledge products, foster 21st Century skills/deeper learning, and have value beyond the classroom walls.

Curriculum, Instruction, and Assessment Category Includes . . .

Leveraging Technology

- Set high expectations for evidence-based, digital learning transformations by developing a culture of digital innovation.
- Redesign physical learning spaces and digital learning environments that integrate technology seamlessly into teaching, learning, and assessment.
- Facilitate a transformation that may involve virtual learning, transition from paper to digital, digital citizenship and digital literacy for students, ensuring that students learn in a culture of digital responsibility and ethics.
- Base decisions related to technology, devices, networks, and infrastructure on the learning needs of students in a culture of digital responsibility.
- Ensure that the educators who teach in these digital learning environments have the skills to adopt and adapt to new technologies, using filters that ensure that the use of technology adds value to the learning process.
- Implement metrics to document the schools' academic return on investment.

Curriculum, Instruction, and Assessment Category Includes . . .

Assessment – Analytics Inform Instruction

- Use technology as vehicles for quality diagnostic, formative, and summative assessments, aligned to the vision for digital learning, and include assessments for all learning standards, 21st Century skills.
- Ensure that student projects involve peer review and revision, as well as self-assessment, empowering them to excel.
- Create mechanisms (i.e., processes and digital environments) that empower staff and students to use data to improve, enrich, and guide the learning process. Educators actively use data to guide decisions related to curriculum, content, instructional strategies, and assessments.

Data Source #1:

NJTRAx Digital Learning and Digital Implementation

School-Based Action Plans are specific to each school's gap analysis findings from NJTRAx digital learning stakeholder survey data in all 8 target areas

NJTRAx Digital Learning

Readiness and Implementation Scores
2016-2023

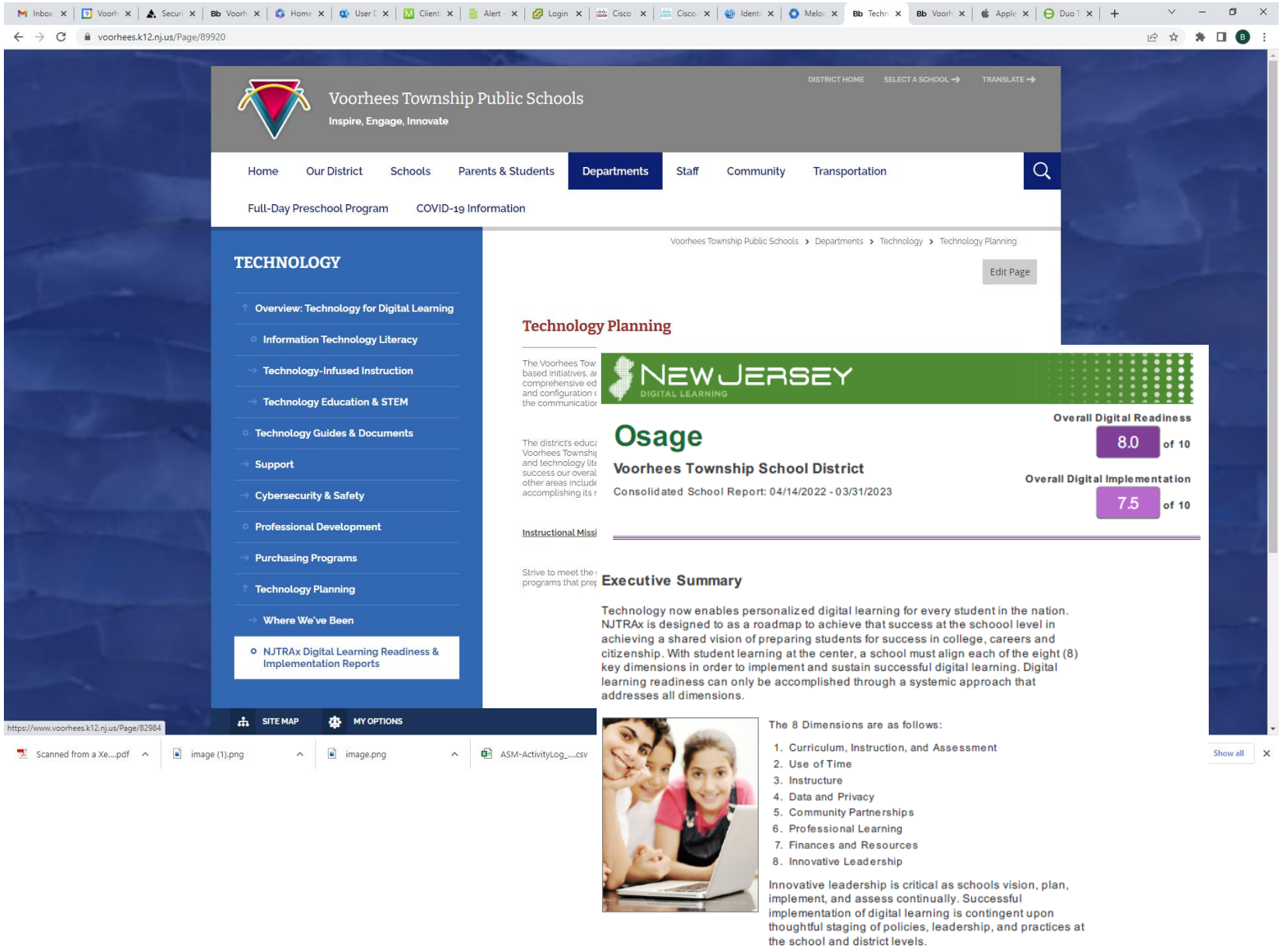
Each of our schools is now using the NJTRAx Digital Learning tool (stakeholder surveys) to document their readiness and implementation ratings for digital learning, and we use the Digital Learning framework to assist each school to be ready for digital learning.

Goals:

- Increase both Readiness and Implementation Scores
- Reduce the Gap between Readiness and Implementation

NJTRAx Digital Learning and Digital Implementation

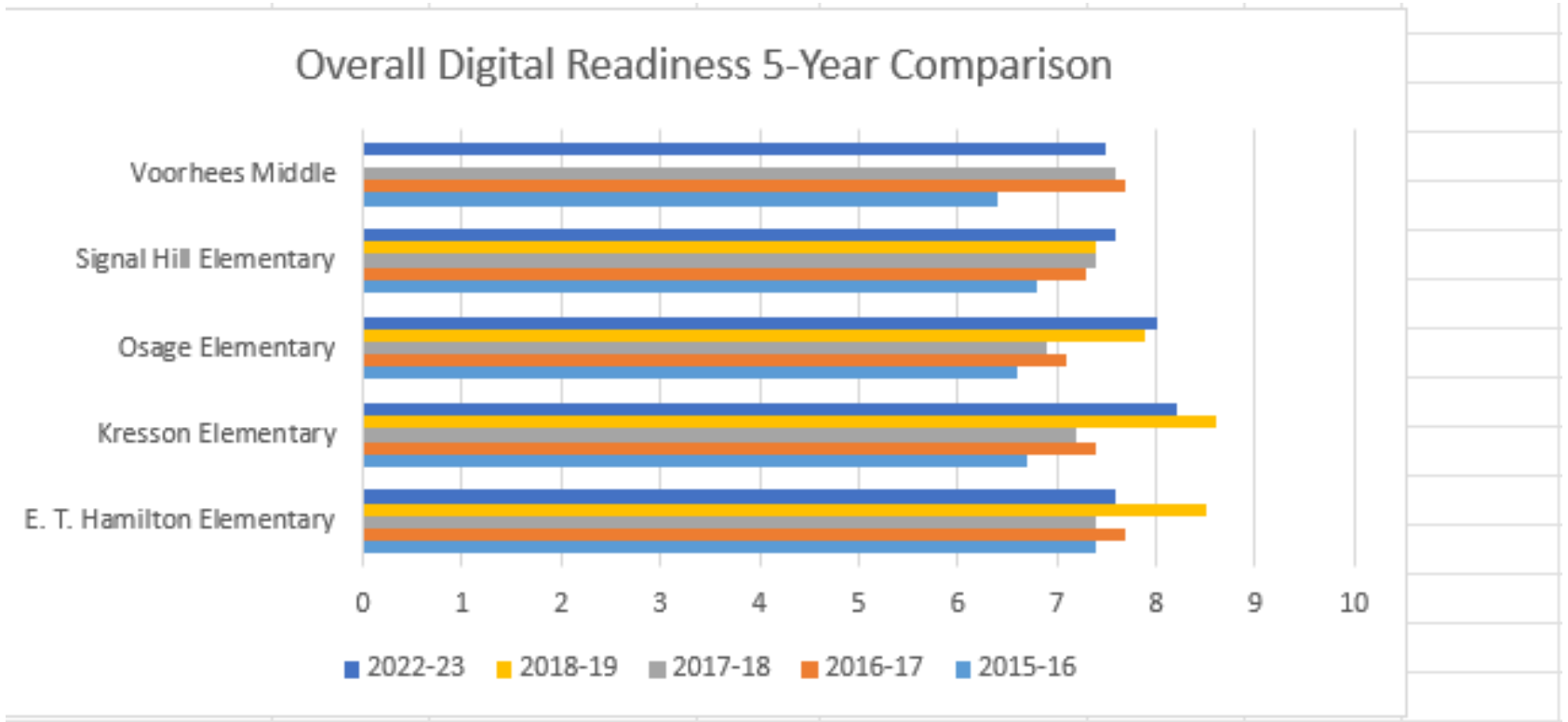
Each school's individual 100+ page report may be found at https://www.voorhees.k12.nj.us/Page/89920



2022-23 NJTRAx Overall Digital Learning Readiness Growth Report

NJTRAx Digital Learning and Digital Implementation

Growth in overall digital learning readiness and digital learning implementation has been tracked since the 2015-16 school year, with a hiatus in the past two years due to the impact of the COVID-19 pandemic



The Digital Learning Readiness Rating is scored on a continuum from Investigating, to Envisioning, Planning, and Staging for implementation. Each of the ratings is based on a scale of 0-10.

Investigating	0-3	Envisioning	4-5	Planning	6-7	Staging	8-10

2022-23 NJTRAx Overall Digital Learning Implementation Growth Report

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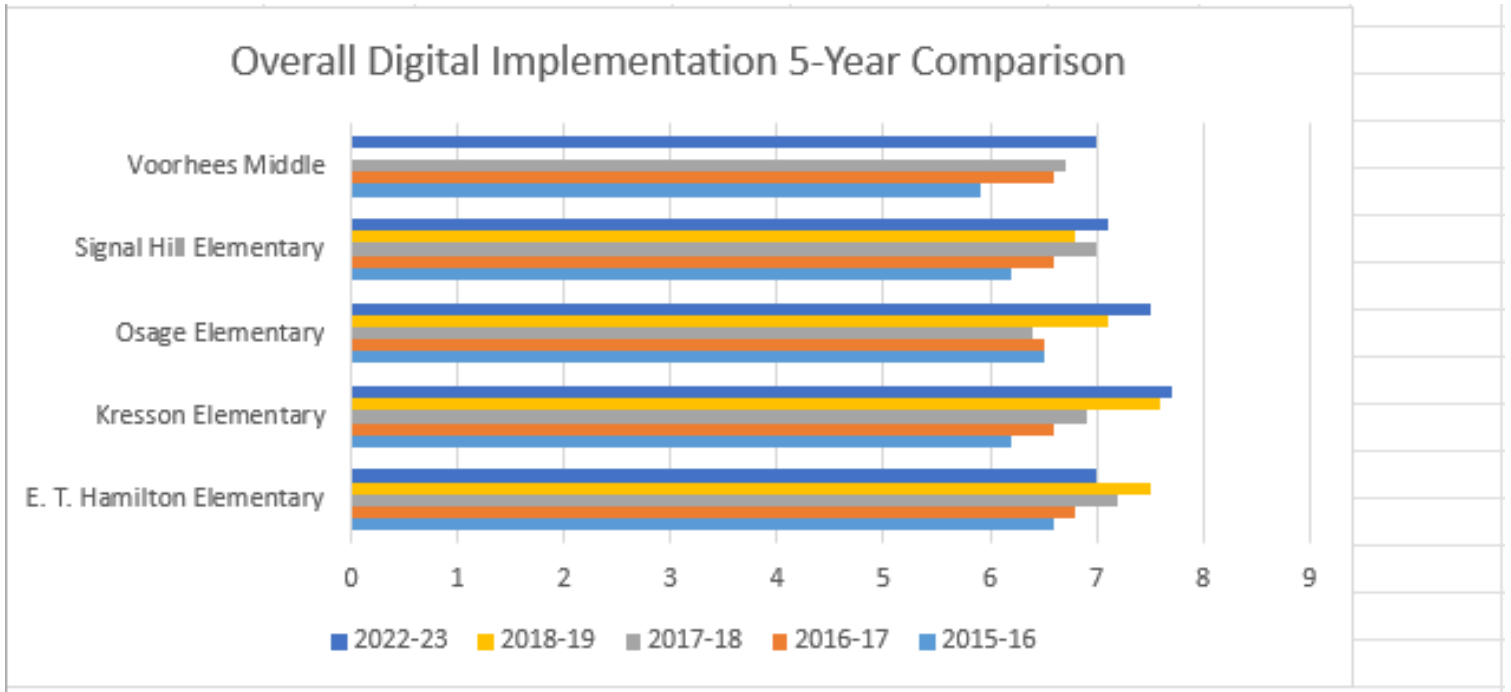


A school's implementation rating represents the extent to which digital learning is implemented with students. The Digital Learning Implementation Rating is scored on a scale of 1-10 on a continuum from no/low implementation, to moderate, and then high implementation. Only 5 of the 8 gears are used to calculate the implementation score, since the other three gears do not directly impact students.

No/Low Implementation	0-3	Moderate Implementation	4-7	High Implementation	8-10

Data Source #2:

School-Based Action Plans are specific to each school's gap analysis findings from 2018-19 **Future Ready Schools New Jersey School Certification Program** in all 8 target areas

A coalition of NJIT, the NJSBA, and the NJDOE, is a certification program designed to support the organization of schools' and districts' efforts through the national **Future Ready Framework** to best prepare their students for success in the digital age, while fostering and enabling collaboration both within and between schools and districts throughout the state of New Jersey.

School-Based Participation/Certification Phase:

- School Declaration of Participation – Building Principal
- School-Based Future Ready Task Force
- Indicator Evidence Collection, School Narrative, School Video

Future Ready Schools New Jersey

School FRS-NJ teams conducted a gap analysis using the feedback data provided by the FRS-NJ awards committee for both Bronze and Silver Certification

Osage 2018 Indicator Tracking Sheet

File Edit View Insert Format Data Tools Extensions Help Last edit was made on February 12, 2020 by Osage Elementary

Share

A1:B1 | School Profile

School Profile

Official School Name	Osage Elementary School
Official District Name	Voorhees Township Public Schools
Grade Levels Served	K - 5
Number of Students Served	674
Teacher/Student Ratio	1:12
Graduation Rate	100%
Link to School Website	https://www.voorhees.k12.nj.us/osage

Bronze Progress Tracking

	Leadership	Technology	Education	TOTAL
Priority 1 Points Completed	36	27	36	99
Min. Priority 1 Points Needed	-12	-9	-12	-33
Total Points Completed	95	96	85	276
Total Points Needed	-50	-56	-45	-136

Bronze Awards Committee Review Tracking

	Leadership	Technology	Education	TOTAL
Priority 1 Points Completed	36	27	27	90
Min. Priority 1 Points Needed	-12	-9	-3	-24
Total Points Completed	95	88	83	266
Total Points Needed	-50	-48	-43	-126

Silver Progress Tracking

	Leadership	Technology	Education	TOTAL
Priority 1-2 Points Completed	66	51	46	163
Min. Priority 1-2 Points Needed	-18	-21	-10	-49
Total Points Completed	95	96	85	276
Total Points Needed	-45	-51	-40	-116

Silver Awards Committee Review Progress Tracking

	Leadership	Technology	Education	TOTAL
Priority 1-2 Points Completed	66	47	46	159
Min. Priority 1-2 Points Needed	-18	-17	-10	-45
Total Points Completed	95	88	83	266
Total Points Needed	-45	-43	-38	-106

Mission Statement	https://drive.google.com/open?id=1SOi7cZFwh_Ra5uJJ3q6GBDF1cqAa7TBB7HMSF4MJIMg
Osage Particpation Letter	https://drive.google.com/open?id=1OArH37MhAhk9WeuwKogMK1j7U8EXn8db
Osage Narrative	https://drive.google.com/open?id=1Q-NLzc625IKAunaYBjefn3qVw3OcFScA
Osage Video	https://www.voorhees.k12.nj.us/site/default.aspx?PageType=3&ModuleInstanceID=91736&ViewID=94B66785-F3F0-41A8-8414-1E55691D3E9E&RenderLoc=0&FlexDataID=95559&PageID=5420

School Action Plans - we have identified areas to be included in our action planning at the school level based on perceived significance from **NJTRAx** and **FRS-NJ** Gap Analysis data

FRS-NJ Bronze Certification Top Indicators Needing Improvement by School

Indicators	HES	KES	OES	SHES	VMS	Total
Student Choice	1	1	1	1	1	**5**
Student-Driven, Self-Directed	1	1	1	1	1	**5**
Ongoing Reflection and Refinement	1	1	1	1	1	**5**
Personal Learning Network	1	1			1	**3**
Professional Learning to Support Integrated Instructional Technology		1		1		**2**
Professional Learning Plan	1					**1**
Communicating and Celebrating 21st Century Learning			1			**1**
Computer Science			1			**1**
Blended Learning					1	**1**
Flexible Instruction Process				1		**1**

<u>Going Forward</u>:

Digital Schools Star certification and recognition

- embraces the mindful implementation of effective digital learning and communication tools, resources, and practices
- a commitment that is evident in its mission, culture, classrooms, and interactions with its stakeholders

Digital Schools Star Certification - 12 Actions:

DIGITAL LEARNING LEADERSHIP

1. District Commitment to Digital Learning
2. Equitable Access to Digital Learning
3. Community Engagement
4. District Professional Development Plan

DIGITAL LEARNING PRACTICES

1. Authentic Application of Digital Learning Tools and Content
2. Digital Citizenship
3. Personalized Learning and Growing Independent Learners
4. Professional Growth and Collaboration

Data Source #3:

2020 New Jersey Student Learning Standards Computer Science and Design Thinking

Cross-Curricular Core Technology Ideas by Grades 2, 5 & 8

8.1 Computer Science

8.2 Design Thinking

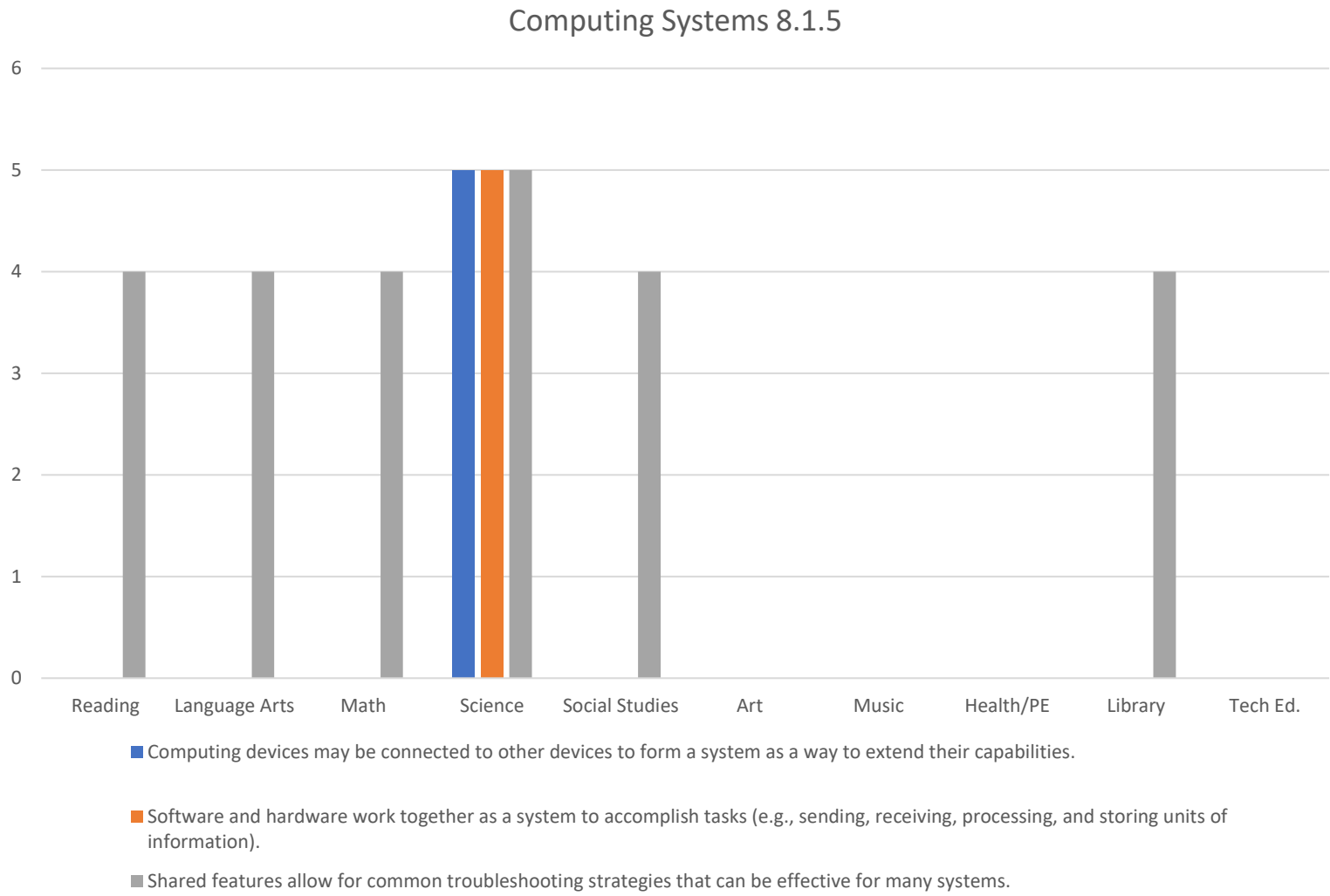
9.4 Life Literacies and Key Skills

Curriculum Crosswalk

Example: Cross-Curricular Core Technology Ideas by Grade 5

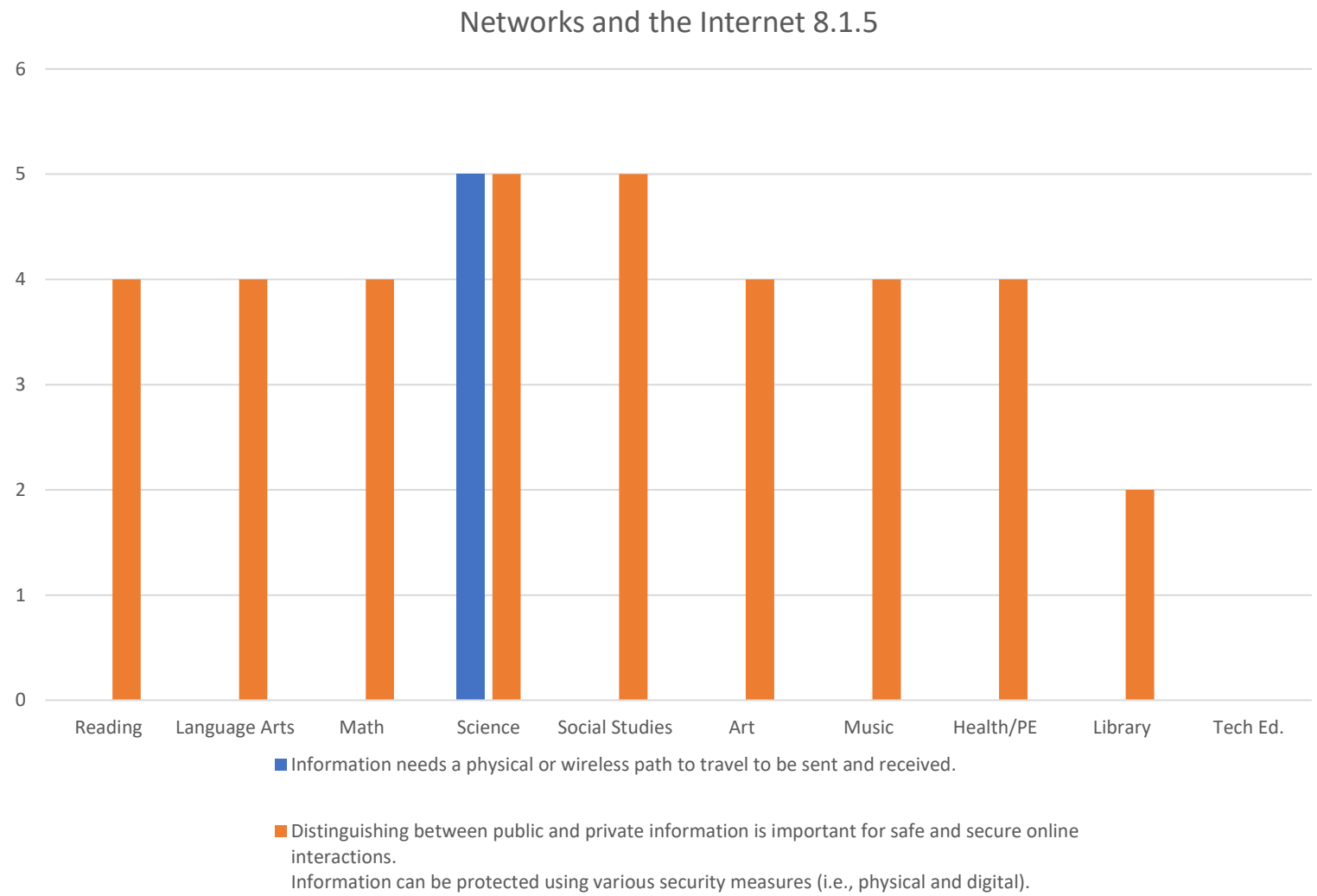
Cross-Curricular Core Technology Ideas by Grade 5

8.1 Computer Science



Cross-Curricular Core Technology Ideas by Grade 5

8.1 Computer Science



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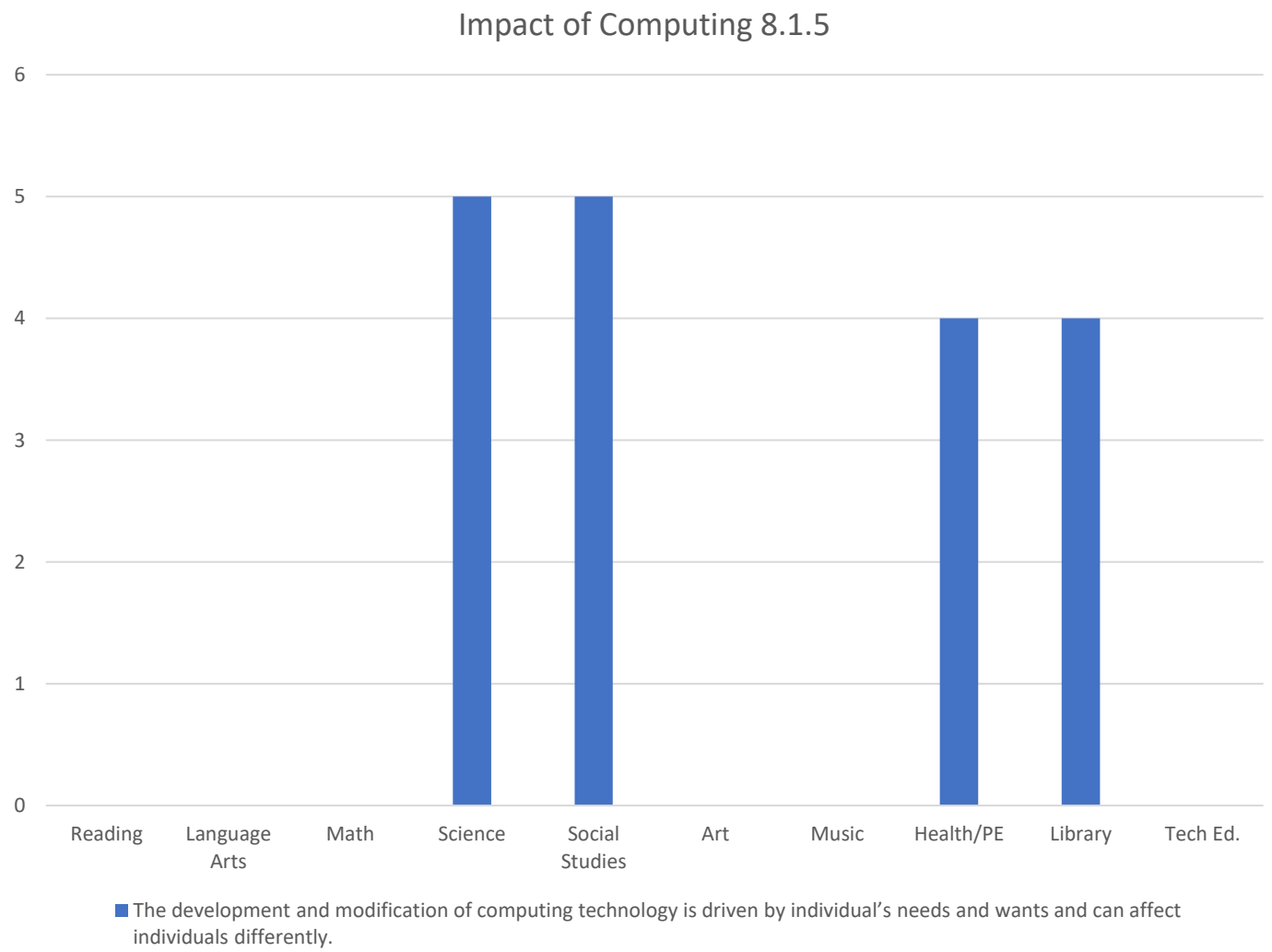

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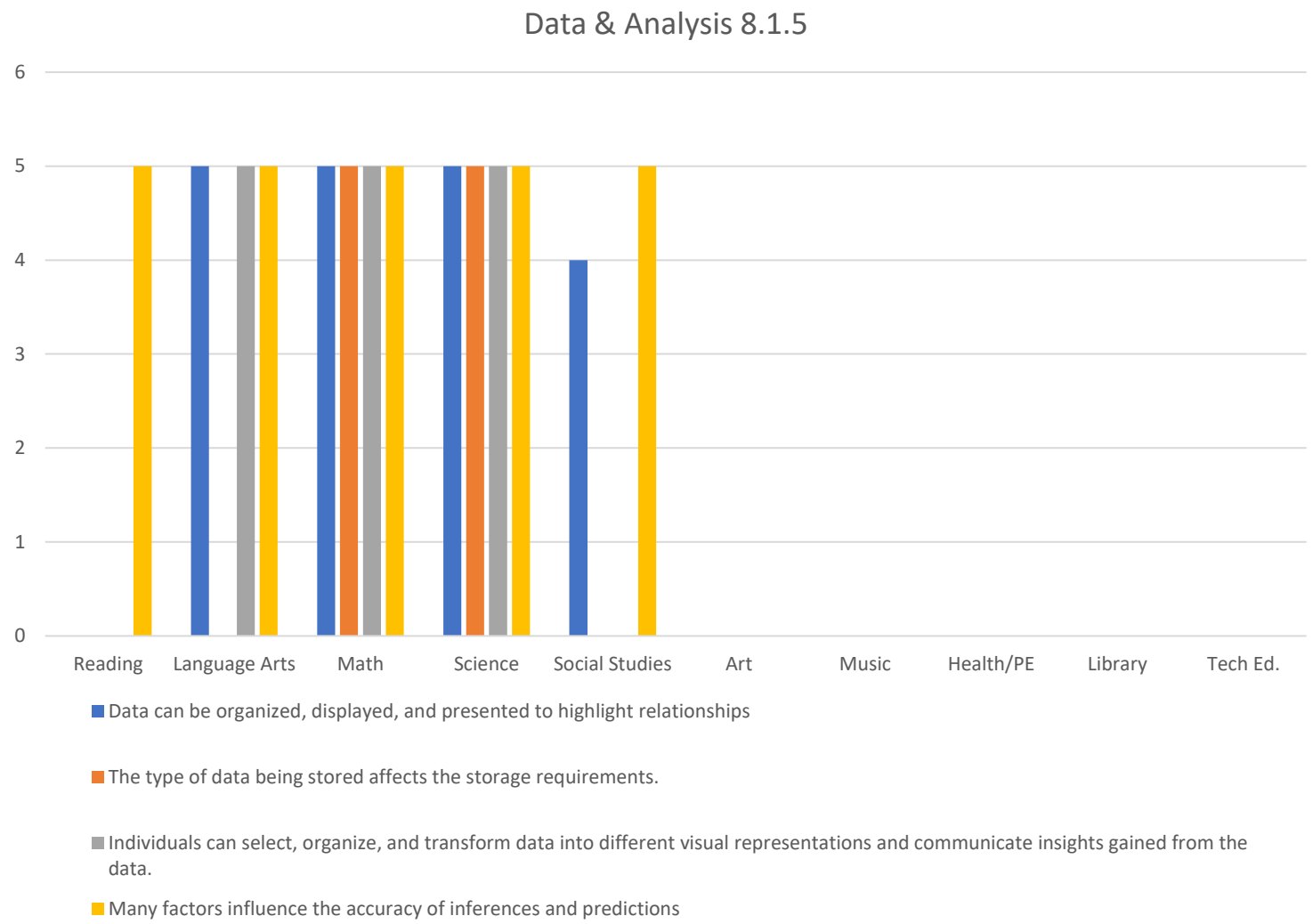

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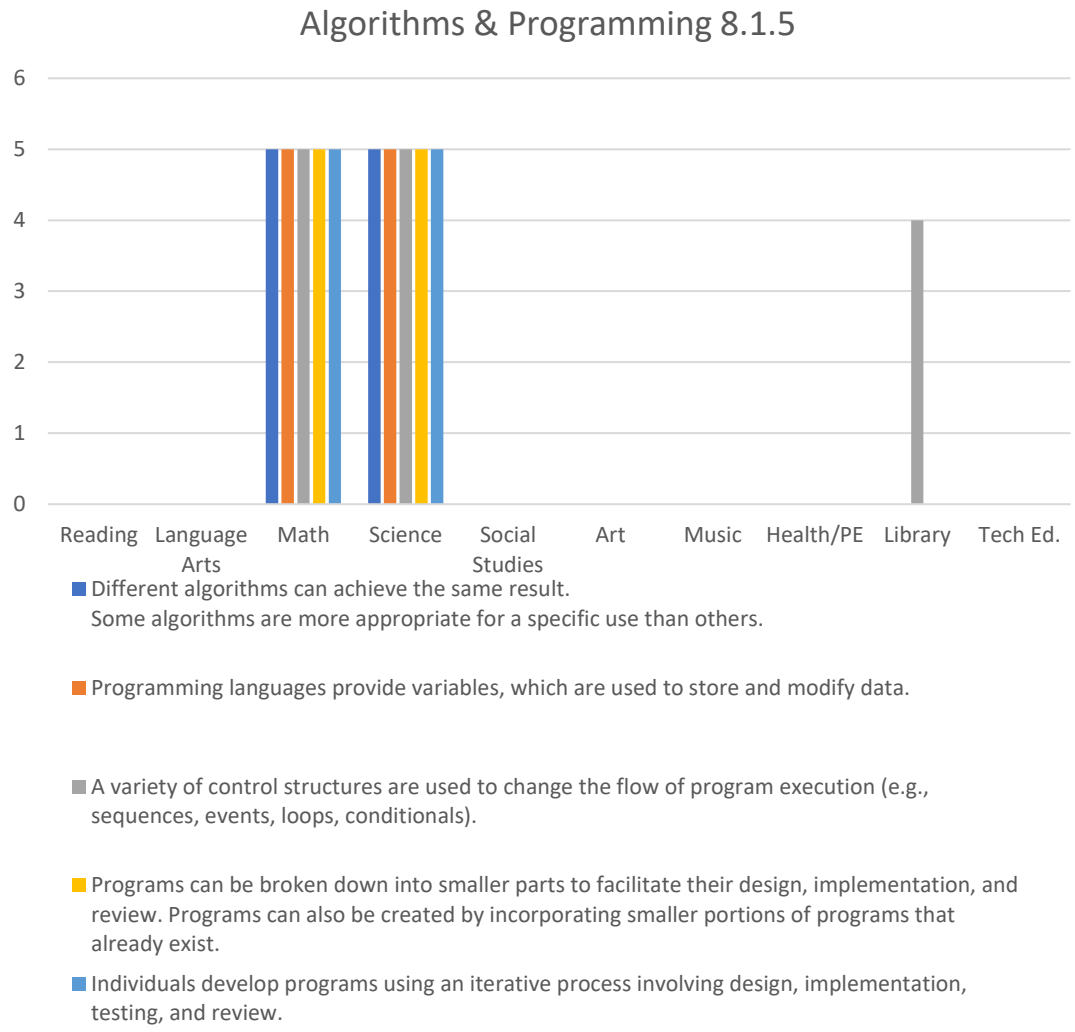

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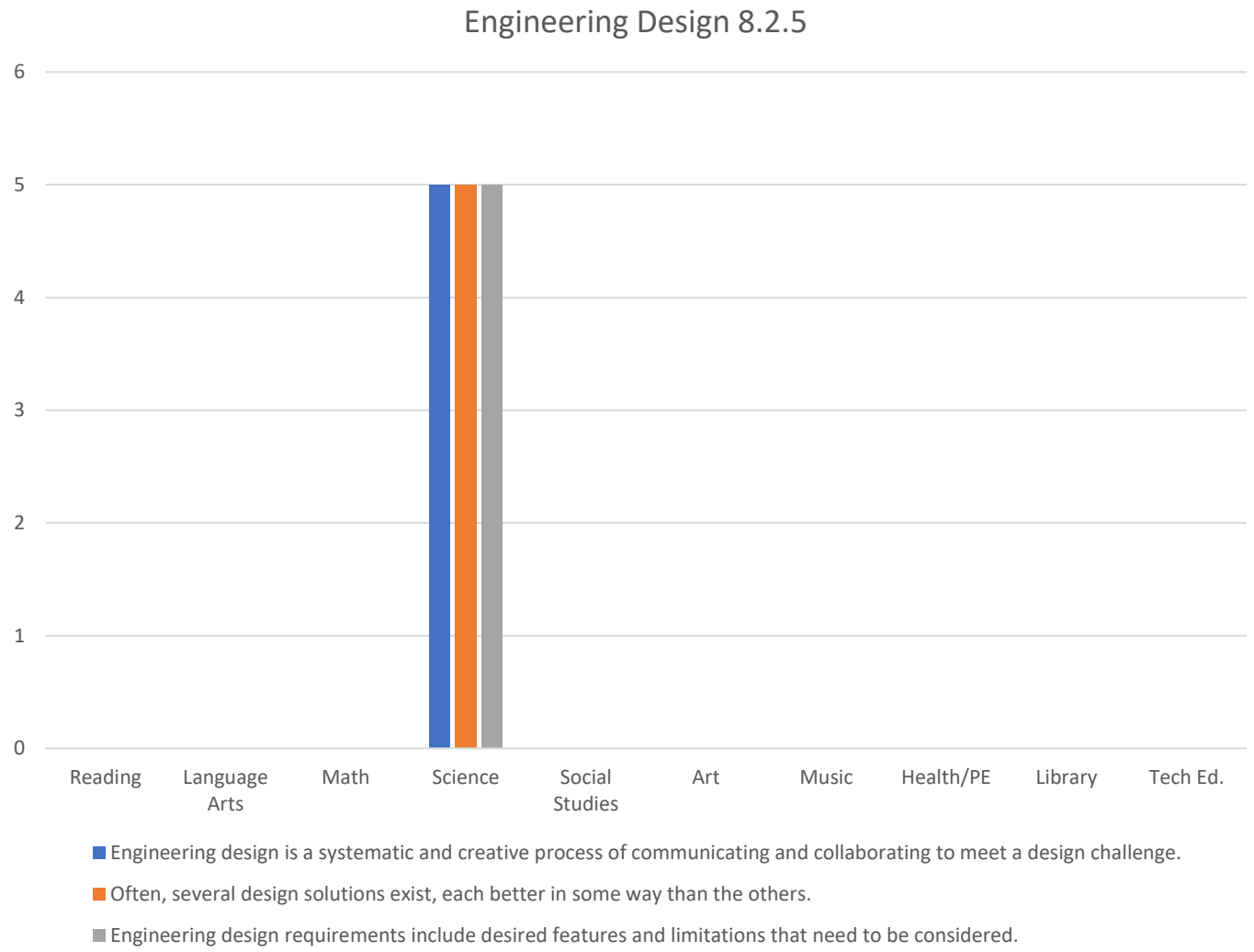

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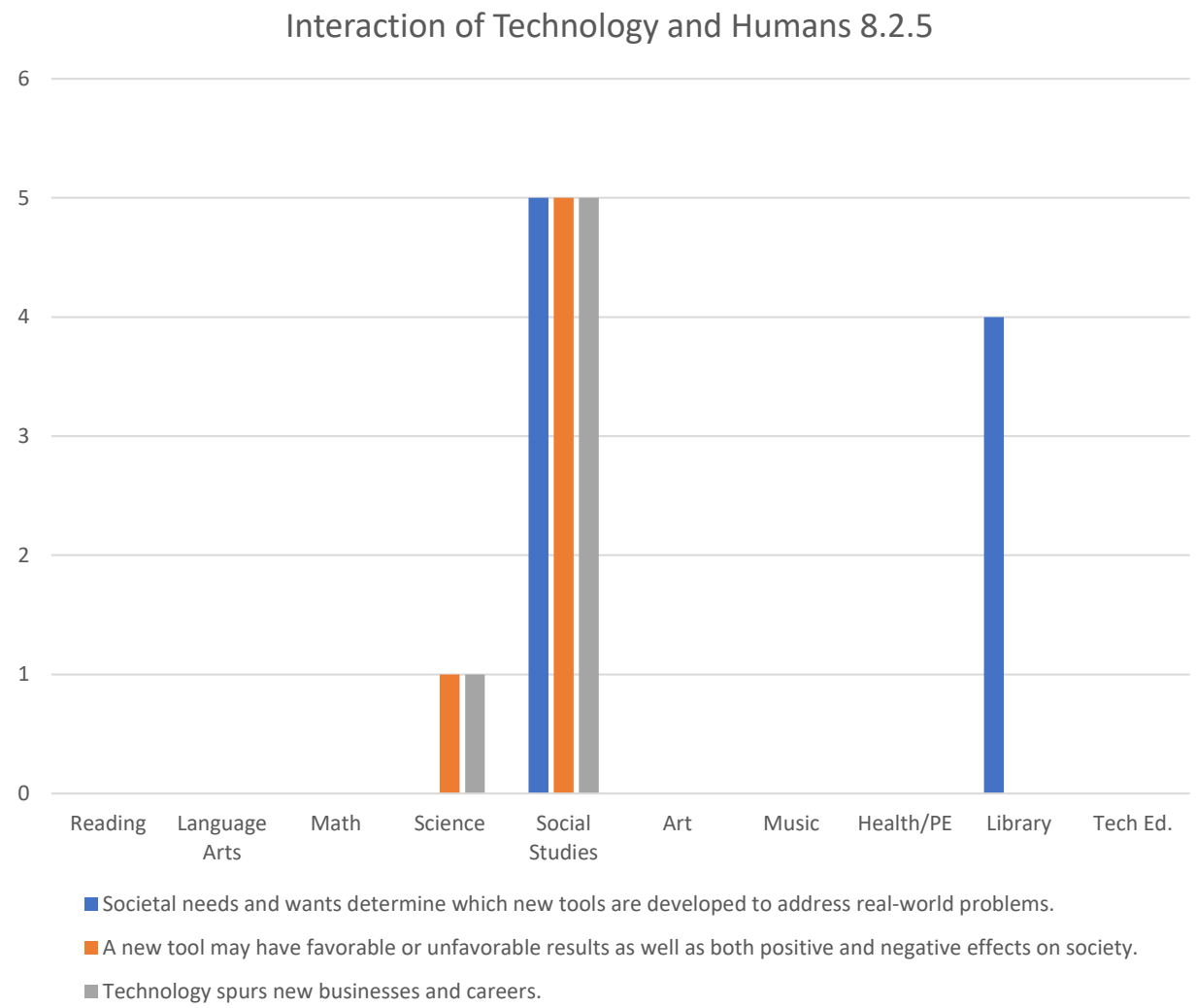

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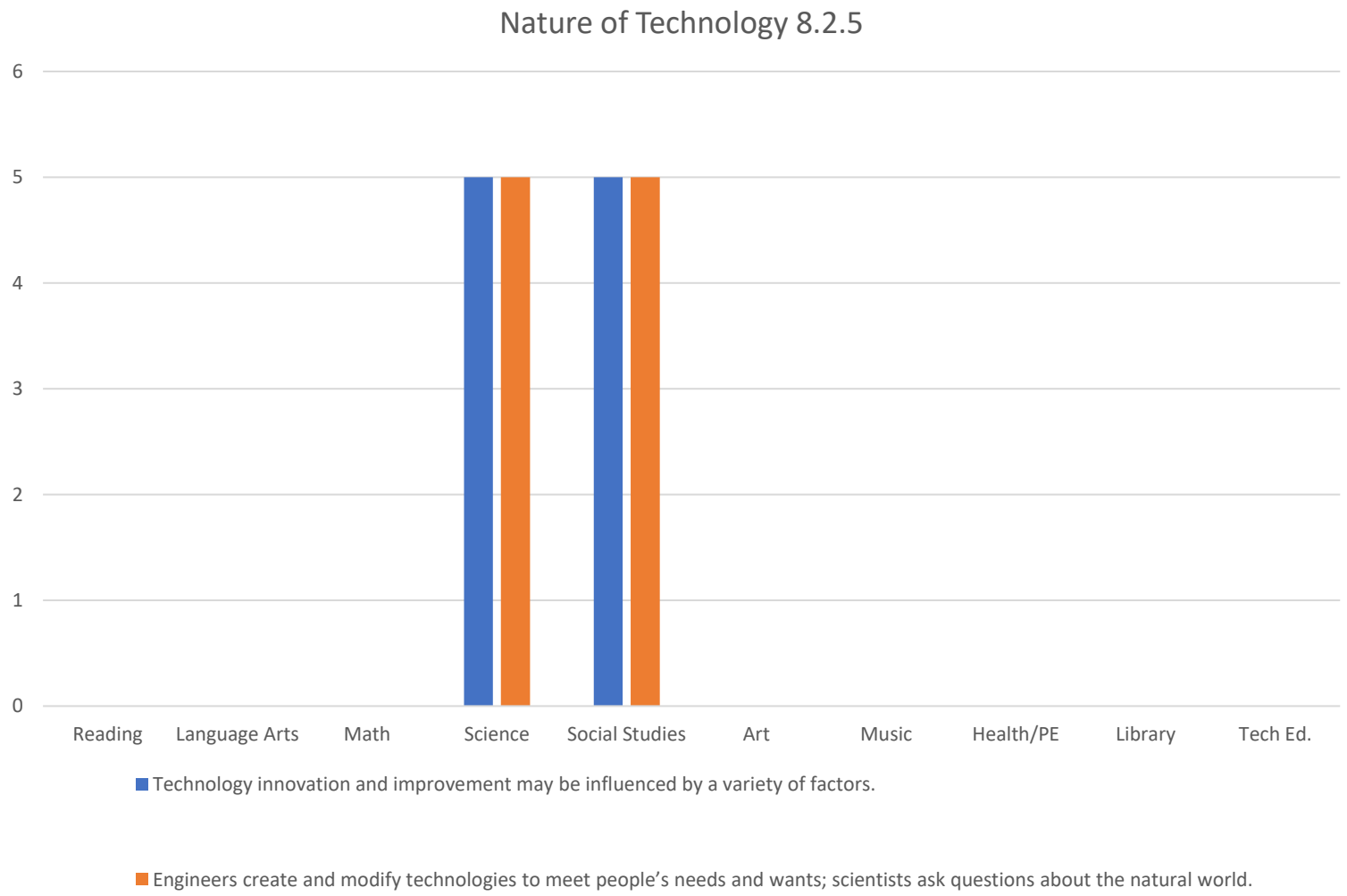

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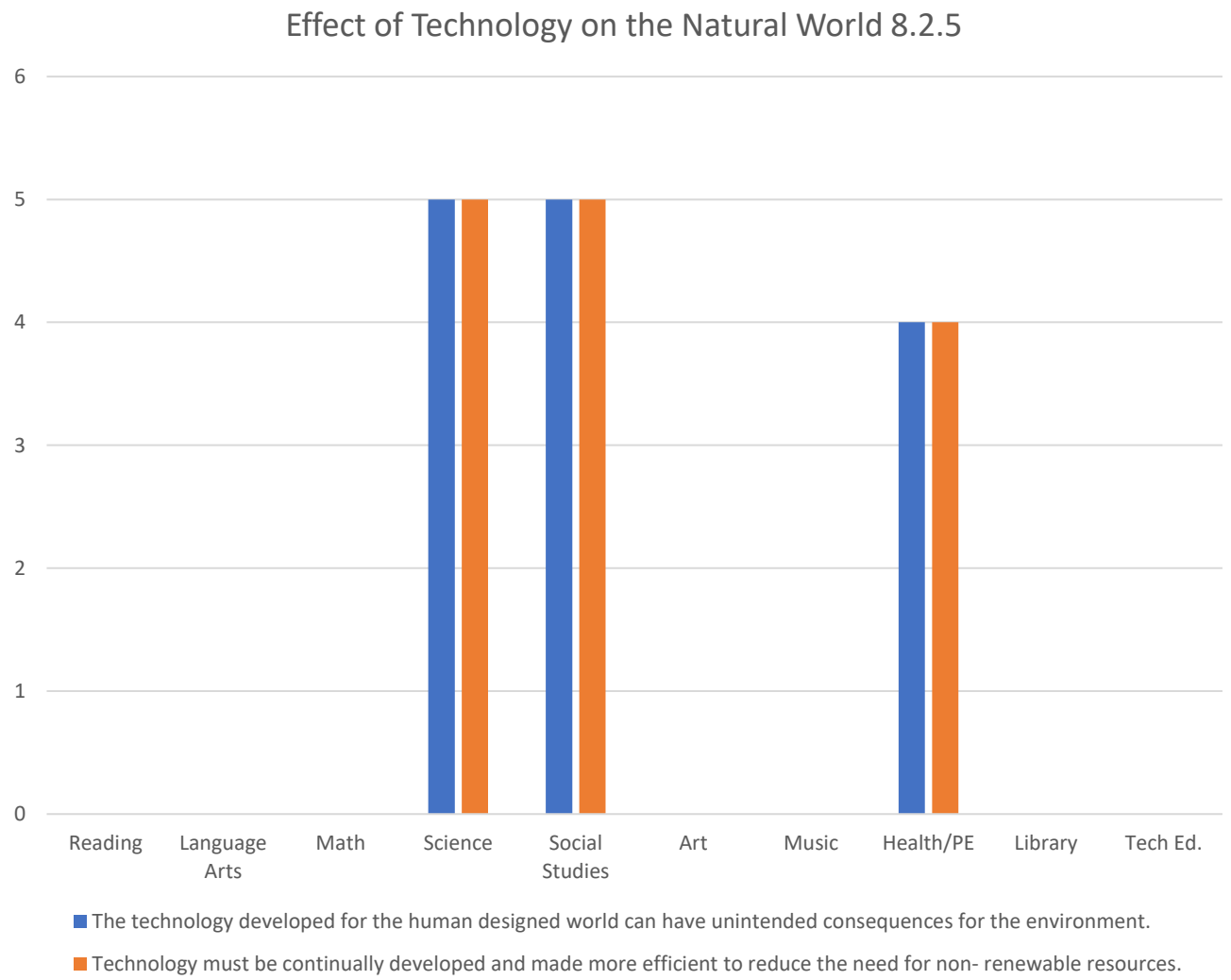

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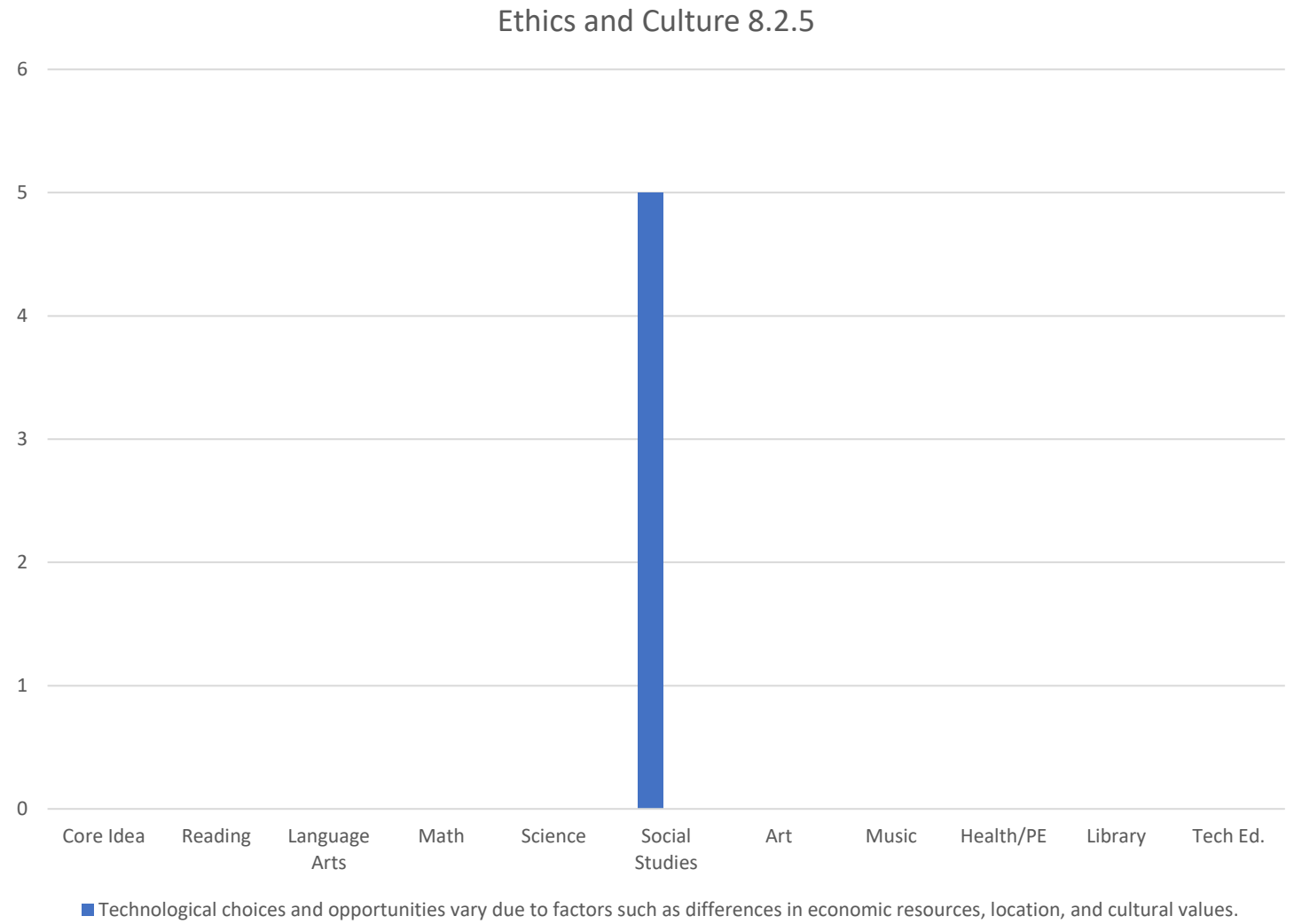
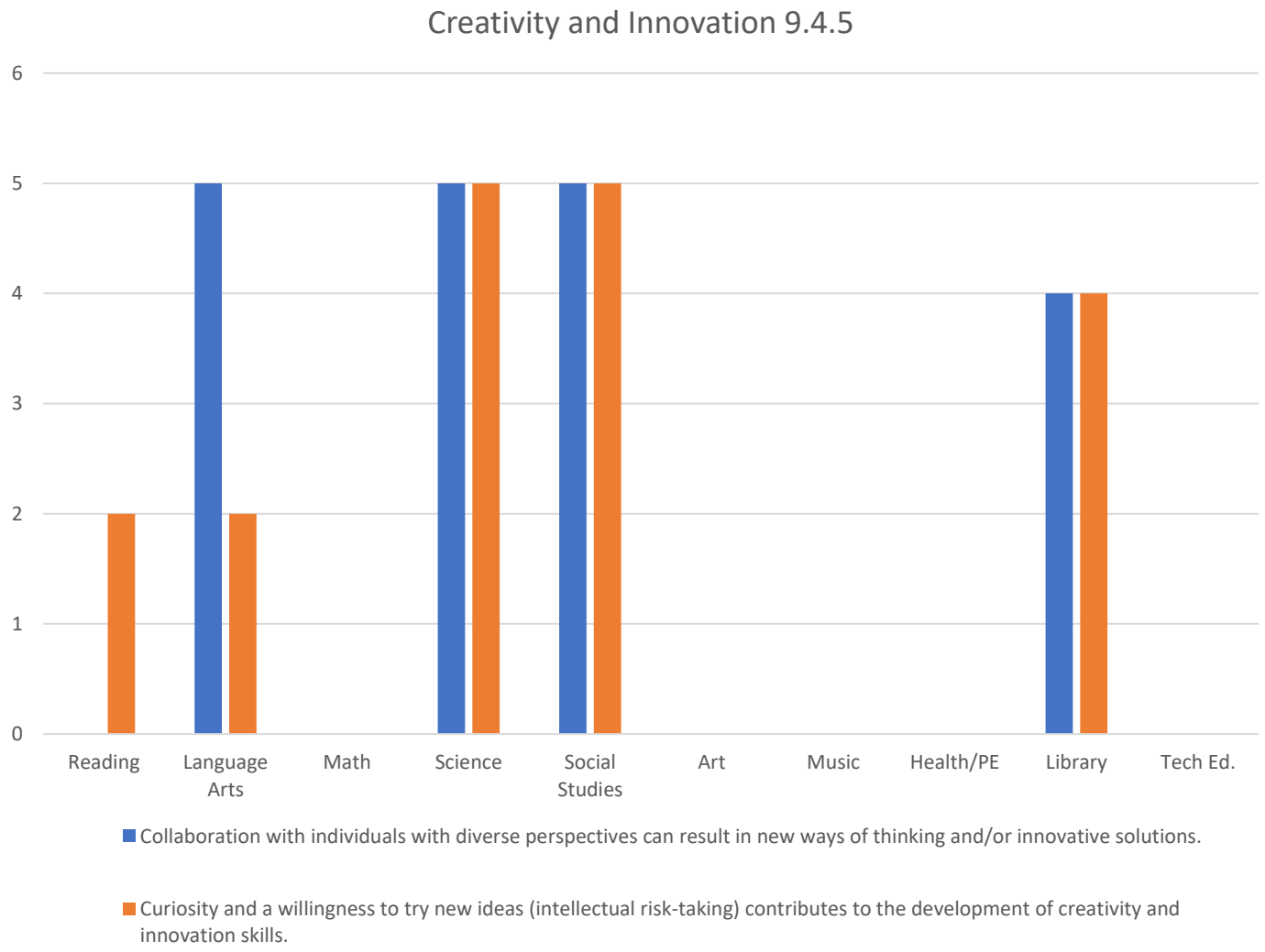


Cross-Curricular Core Technology Ideas by Grade 5

9.4 Life Literacies and Key Skills



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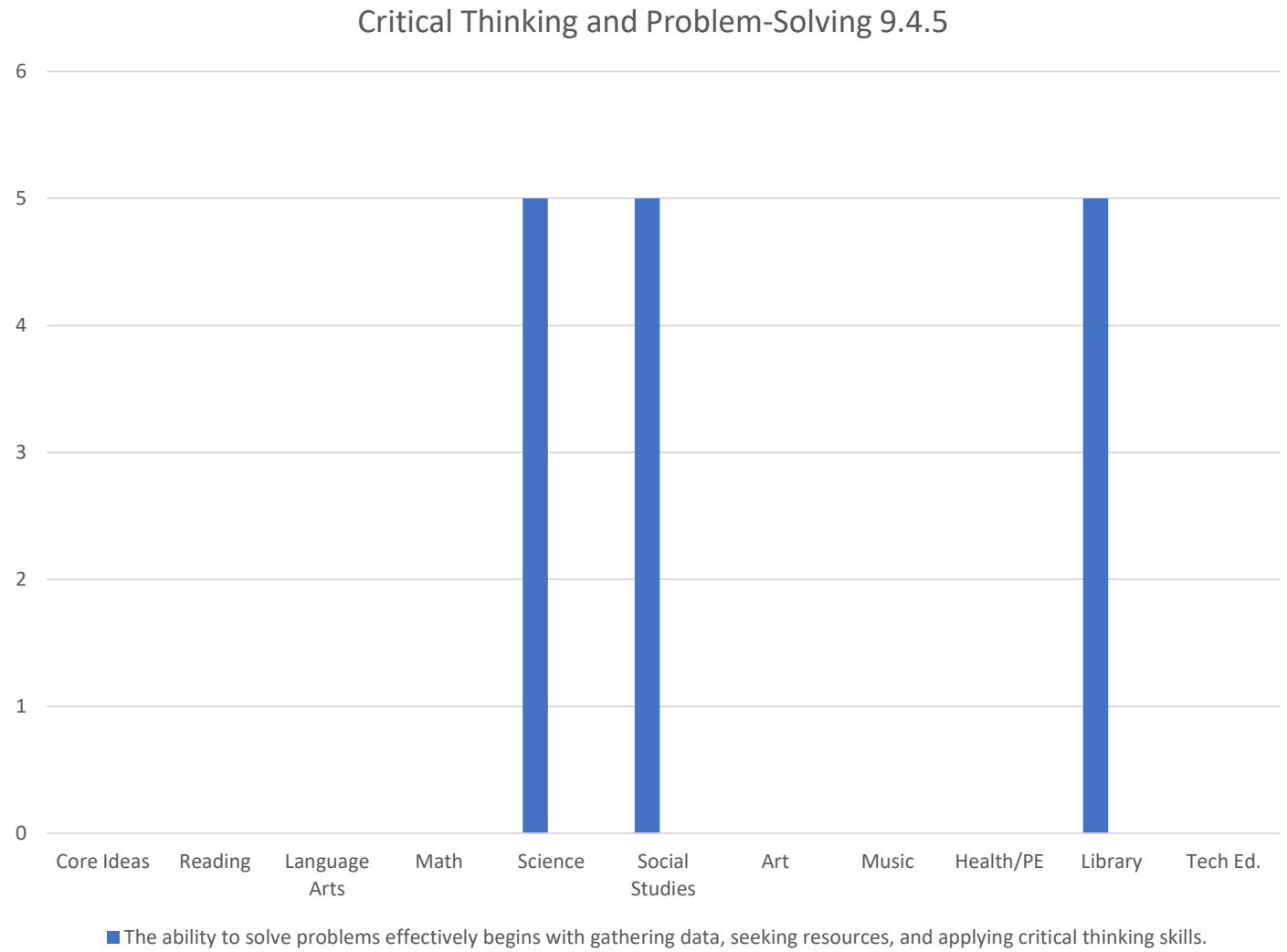

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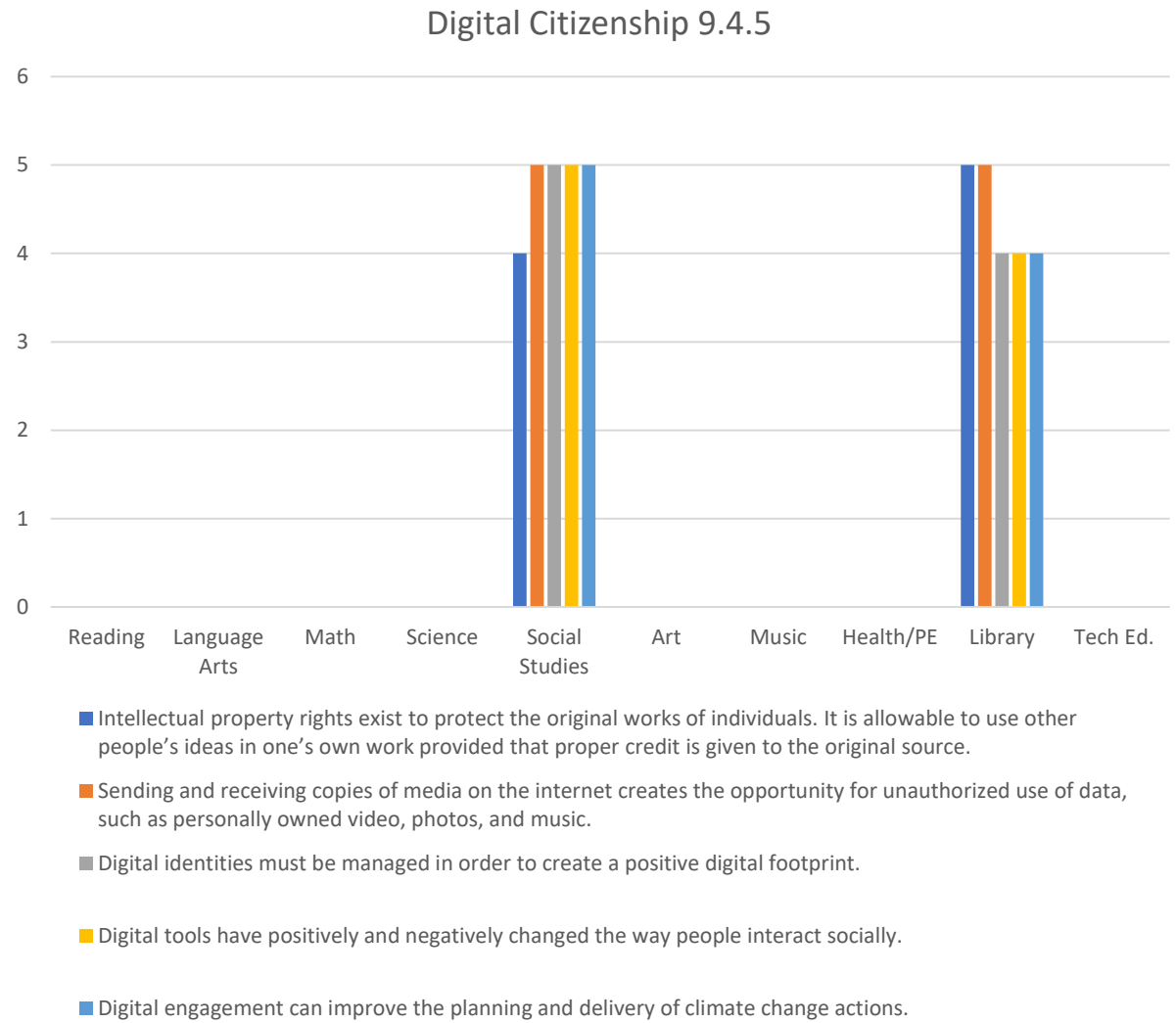

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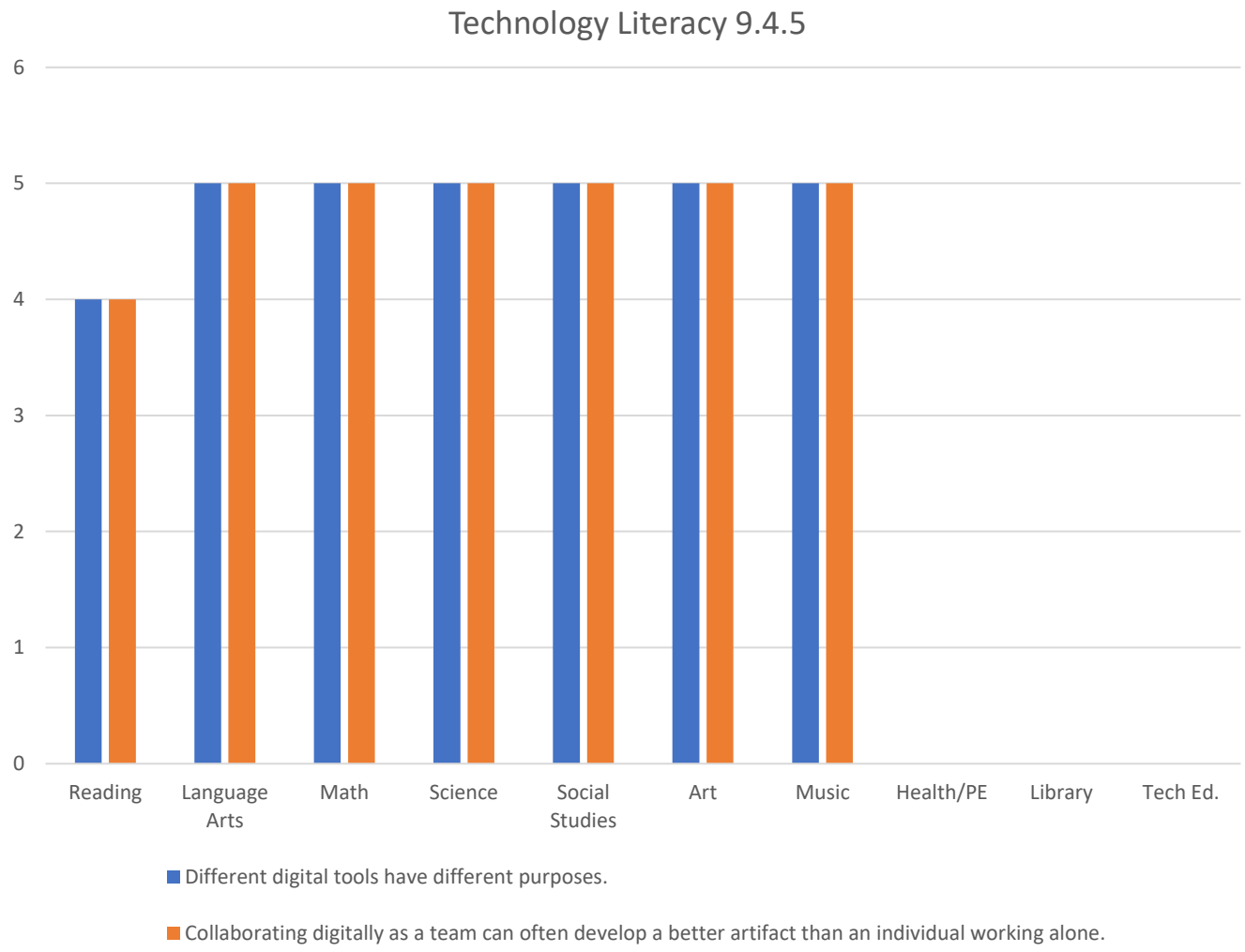

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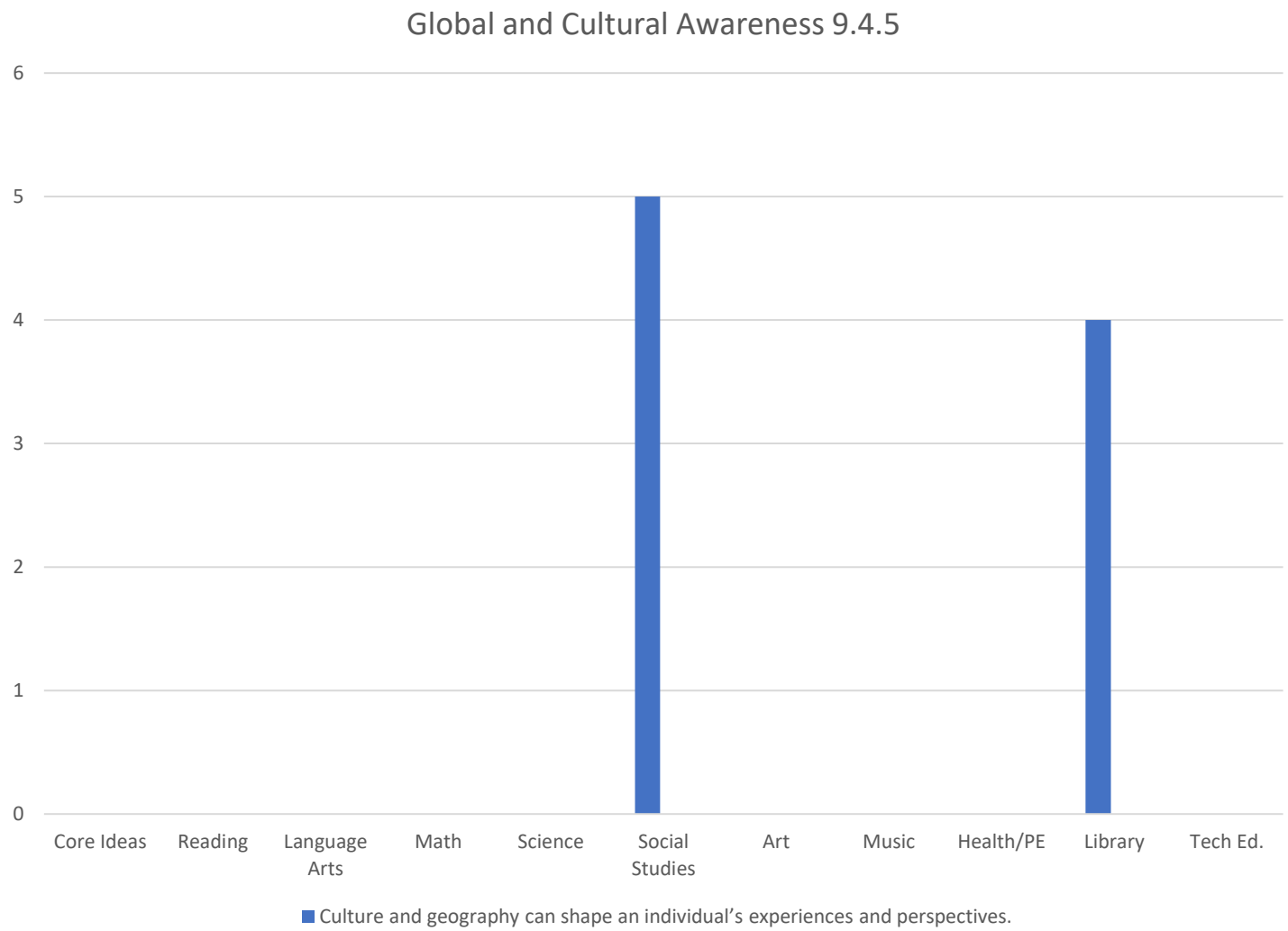

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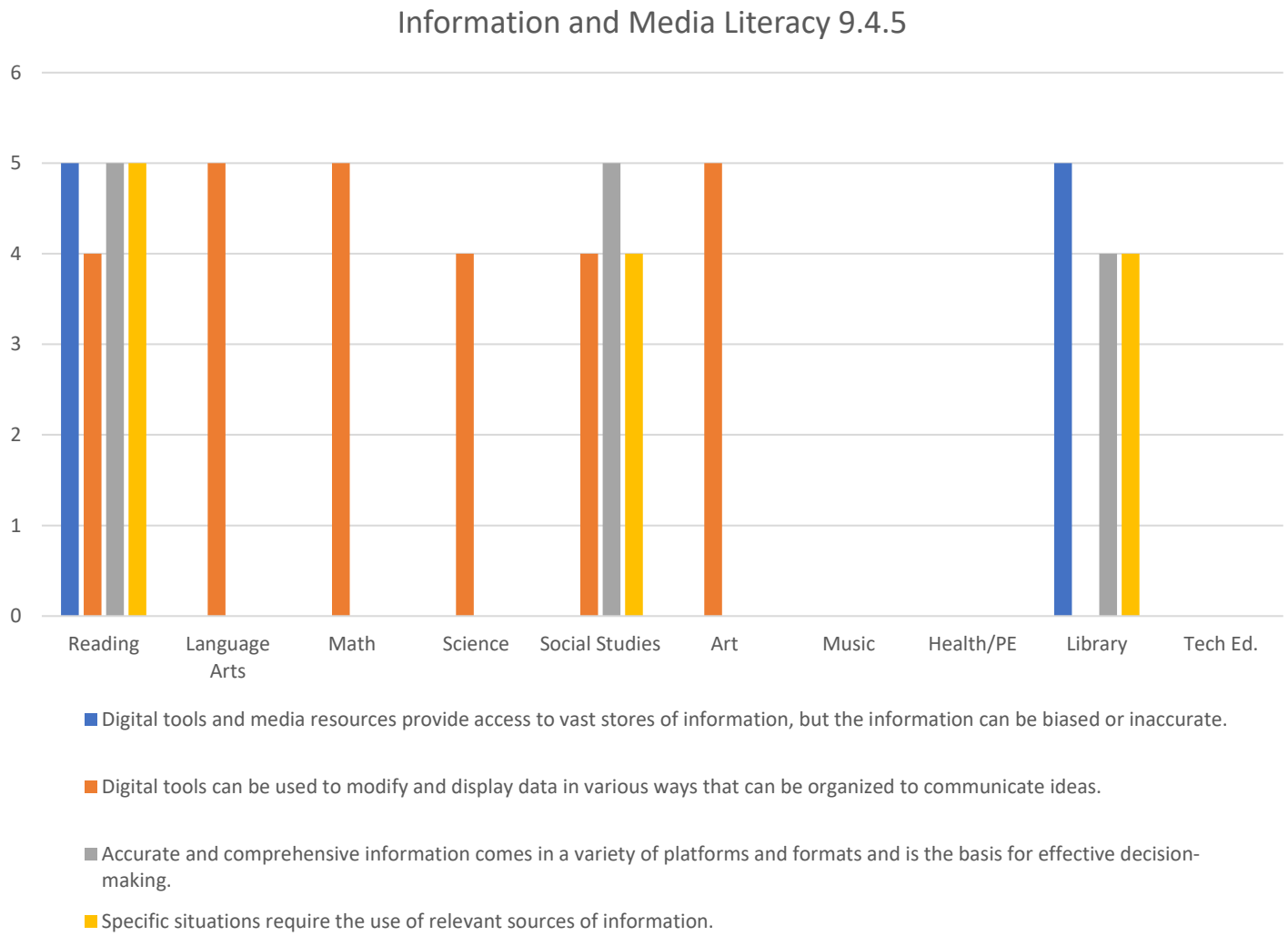

Atlas Curriculum Management -
Resources for Technology
Standards 8.1, 8.2, 9.4

By the End of Grade 5

Strand	Resource	Curriculum Area
8.1.5.CS	BrainPop - Computers	Grade 4 - Science - Unit 3
	BrainPop - Computer Programming	
8.1.5.NI	CommonSense Education - Password Power-Up	Grade 3 - Library - Unit 2
	Common Sense Education - Private and Personal Information	Grade 4 - Library - Unit 2
	BrainPop - Internet	Grade 5 - Library - Unit 2
	BrainPop - Information Privacy	Grade 4 - Science - Unit 3
8.1.5.DA	BrainPop - Data Storage Devices	Grade 4 - Science - Unit 3
	BrainPop - Problem Solving Using Tables	
	BrainPop - Climate Change	
8.1.5.AP	Coding Resources	Grade 3 - Math - Topic 7
	BrainPop - Computer Programming	Grade 4 - Math - Topics 4, 5
	BrainPop - Variables	Grade 5 - Math - Topics 6, 12, 15
	BrainPop - Loops	
8.2.5.ED	BrainPop - Engineering Design Process	Grade 4 - Science - Units 2, 7
8.2.5.ETW	BrainPop - Energy Sources	Grade 4 - Science - Unit 2
	BrainPop - Climate Change	
9.4.5.CT	BrainPop - Computational Thinking	Grade 3 - Science - Unit 4
		Grade 4 - Science - Unit 2
		Grade 5 - Science - Unit 5
9.4.5.DC	CommonSense Education - A Creator's Rights and Responsibilities	Grade 3 - Library - Unit 2
	CommonSense Education - This is Me	Grade 4 - Library - Unit 2
	CommonSense Education - Our Online Tracks	Grade 5 - Library - Unit 2
	BrainPop - Copyright	
	BrainPop - Digital Etiquette	
	BrainPop - Social Media	
9.4.5.IML	CommonSense Education - Is Seeing Believing?	Grade 3 - Library - Unit 6
	CommonSense Education - Reading News Online	Grade 3 - Library - Unit 9
	BrainPop - Media Literacy	Grade 3 - Language Arts - Unit 3

The **Appendices** in the digital learning plan include lists of the hardware, software and online resources we use for instruction, data management and productivity purposes

Questions?

Executive Summary

The Voorhees Township School District has evolved as an organization that recognizes the benefits of providing technology-based initiatives, and it continues to demonstrate a high level of commitment in the implementation of a successful and comprehensive educational technology program. In both instructional and administrative settings, the appropriate selection and configuration of software and hardware resources has truly enhanced the quality of the teaching/learning process and the communication and management of related information.

The district's educational technology mission statement reflects a perception characteristic of the educational community in Voorhees Township that the integration of technology in all academic content areas, the development of information, media and technology literacy skills, and the establishment of a foundation for life-long learning are critical contributors in the success our overall educational program. With both the National and New Jersey Future Ready Framework at its focus, all other areas included in this plan provide the support structures required for the district as an organization to be successful in accomplishing its mission for digital learning.

Instructional Mission Statement

Strive to meet the unique needs of all stakeholders by providing comprehensive, innovative, and creative instructional programs that prepare lifelong learners to succeed in an ever-changing global society.