4.1

RHINEBECK CENTRAL SCHOOL DISTRICT
2015-16 District Goals

1. Comprehensive District Educational Planning
The Board of Education supports the completion of a multi-year academic plan that will engage members of our school community in a process that:

- is driven by a renewed District mission, vision, and core values;
- is focused on the importance of improving academic achievement through substantive and meaningful engagement with data that includes multiple measures of student growth;
- affirms the principles of stakeholder participation, collaboration, communication and shared decision-making, and:
- considers existing and anticipated curricular, instructional, and infrastructure needs, financial constraints, and enrollment trends.

2. Program Support Under the Tax Levy Cap
In recognition that the District likely will face significant financial challenges in the coming years due to the legislative limits of the New York State tax levy cap , the Board of Education will:

- examine potential options to maintain and expand educational programs through the annual budget development process and:
- reach out to and collaborate with stakeholders, including staff, parents, and community organizations, for input and assistance at a time when State government is not a reliable, responsible, or responsive partner.

3. Advocacy, The Board of Education will expand its advocacy efforts on behalf of the District's children on multiple levels regarding school finance reform, appropriate use of state assessments and other regulatory relief and legislation that will affirm local control and strengthen public schools as an essential element of a democratic society.

Adopted by BOE 9/8/15

4.3.1.1

CURRICULUM COMMITTEE MINUTES
December 22, 2015

Attendance: Laura Schulkind, Deirdre d'Albertis, Rick Walker, Joe Phelan, Marvin Kreps.

ELA Curriculum Documents

Joe noted that the BOE approved curriculum documents have been posted and are available online. A short statement will be crafted to introduce these materials to our community, ideally early in the new year.

Innovation in Technology Explorations

Marvin presented members of the committee with a charter for BMS's "Innovation in Technology Explorations," outlining how the project supports CDEP goals as well as key strategic objectives, namely to:

--retool the BMS Computer Lab to provide updated technology geared towards a more student-centered experience.
--restructure the middle school computer science curriculum to address 21st century technology competencies in a project-based approach.
--integrate technology seamlessly across the curriculum throughout the middle school.

This broad overview, which will be made available to all board members, includes a project description, desired outcomes, project deliverables, project organization, project risks, and a project plan/status update as of December 2015.

Marvin proudly noted that as of Dec 21, all the hardware and software goals in the BMS lab itself have been realized. Our students have a tremendous resource—perhaps one of the best labs now in the country—thanks to the generosity of the Rhinebeck Science Foundation. Curriculum development is still underway; there is no "perfect answer" to writing tech curriculum as it must be customized from a range of sources and over various platforms. He described a "fluid process" currently being used to individualize instruction according to student interest and capacity. Marvin advocates thinking carefully about building on such popular initiatives as "Hour of Code" to bring what is essentially a foreign language for many of our students that no one has been teaching or learning into the middle school curriculum--coding—and we want to do it well. Laurie Keating continues to work with our teachers in the area of computer science even as they work in turn with their colleagues across the disciplines to integrate tech into all subjects (the "bucket projects" model). Susan Van Vlack is also inviting parents into the lab for a session on internet safety: literacy, privacy, and data security are all important concerns.

Review of Health Curriculum

Members of the committee discussed the current health curriculum for grades K-12 in RCSD. As was mentioned in public session at our most recent BOE meeting, a specific query about this has been directed to the entire board. Members of the committee agreed that not only the request, but also a desire to strengthen this aspect of our curriculum should motivate us to review what specifically in the context of health and wellness is being taught with regard to prevention of sexual abuse. Marvin

counseled that we look at state standards, recommendations made by the Commissioner of Education, and best practices currently being advocated by state and national associations. He plans to reach out to his own professional contacts to gather information prior to our next meeting. So too, he is glad to perform an audit on our current health curriculum. New regulations for school psychologists encourage greater integration with teaching in classroom settings; training teachers yearly as mandated reporters is another trend. There are tools and techniques for recognizing the prevalence and impact of abuse. It is important, he pointed out, to raise awareness of the professional faculty in these matters to "protect kids" even as we "inoculate a population." Unfortunately, as both state and federal authorities have put pressure on measuring education via test scores and narrow "academic" measures, there is less and less time to address the social/emotional or affective dimension of young people's school experience. That is a great and serious loss. Our question is, "how should a progressive, caring district address these concerns and help to avoid them in future?" This is a long-range project—and one that we hope will find a place in the ongoing conversations taking place under the aegis of CDEP.

Agenda:

--Audit of Health Curriculum (prevention of abuse)
--How can this committee interface most productively with CDEP?
--In an extremely austere fiscal climate, how can the district preserve the academic program? Are there cooperative arrangements/practices that could be tried in Rhinebeck?

Next Meeting:

January 26, 2015 at 9:30 AM in the District Offices.

Respectfully submitted,

Deirdre d'Albertis

4.3.1.2

Rhinebeck Central School District

Bulkeley Middle School

Innovation in Technology Explorations

Project Charter

December 10, 2015

This project supports the following District Goals:

Comprehensive District Educational Planning:

- that considers existing and anticipated curricular, instructional, and infrastructure needs, financial constraints, and enrollment trend

This project supports the following strategic objectives:

1. *Retool the BMS Computer Lab to provide updated technology geared towards a more student-centered experience.*
2. *Restructure the middle school computer science curriculum to address 21st century technology competencies in a project-based approach.*
3. *Integrate technology seamlessly across the curriculum throughout the middle school.*

Priority

X **High** (Critical for [Enterprise]'s continuation, legal or legislative mandate, health or safety issue)

_____ **Medium** (Broad-based economic or performance benefit to [Enterprise])

_____ **Low** (Clear benefit to departments/divisions within [Enterprise])

1.0 Project Description

The long range goal of this project is to engage in a 21st century redesign and upgrade of the Bulkeley Middle School technology lab and curriculum for grades 6-8. To achieve this, RCSD is retooling the BMS computer lab with new hardware, a teacher presentation station, and a designated area for a Maker Space, which will be available to all middle school teachers when the lab is not used for scheduled technology classes. To ensure the success of this initiative, the teachers will redesign the curriculum to teach technology skills in context and work with grade level teachers to create curriculum-related projects for students to work on in Technology class.

2.0 Desired Outcomes

(List the Desired Results of this Project below with proposed completion dates.)

	Desired Outcome	Target Completion
2.1	Replace existing computer lab equipment with state of the art computer hardware and software to accommodate multiple platforms to support a total curricular redesign.	9/15/2015
2.2	Revise and redesign the technology curriculum at grades six, seven and eight to incorporate, at a minimum, the following curricular strand: • Digital Citizenship • Programming • Productivity software • Computer skills • Multi-disciplinary integration with the core academic program	12/31/2015
2.3	Professional development for instructors to implement best practice instructional strategies using technology.	9/1/2016
2.4	Provide a 21st century learning center that may be utilized by multiple instructors for students and faculty for instruction, professional development and model demonstration.	9/1/2016

3.0 Project Deliverables

(List the Deliverables that this Project will produce below. These Deliverables need to achieve the Desired Outcomes listed above.)

	Deliverable	Due Date
3.1	Updated BMS Innovation Lab	9/15/2015
3.2	Professional Development Plan for Technology Instructors	12/31/2015
3.3	Best Practices for Integration	ongoing
3.4	Technology-Rich Curriculum Models	11/1/2015

4.0 Project Organization

Role	Description	Staff Assigned
Project Sponsor (member of Executive Staff)	Has ultimate authority over and responsibility for the project, its scope, and deliverables.	Marvin Kreps
Project Managers	Develops and maintains the project plan and project schedules, executes project reviews, tracks and disposes of issues and change requests, manages the budget, and is responsible for overall quality of the deliverables.	John Kemnitzer Steve Jensen Marvin Kreps
Project Team	Are responsible for performing the activities necessary for implementation of the project.	Susan Van Vlack (Coordinator, Grades 6-8) Gideon Moor John Kemnitzer Marvin Kreps Steve Jensen Laurie Keating (consultant)
Key Stakeholders	Provide expert understanding of their organization and represent area for which the project is intended to support/serve.	Bulkeley Middle School (students, teachers, parents) Rhinebeck Science Foundation Rhinebeck Central School District

5.0 Project Risks

(Identify any risks that might threaten the success of the Project, assess the degree of impact on the Project, and include a strategy for mitigating the risk.)

Risk (brief description)	Degree of Impact	Mitigation Strategy
Ownership - Successful implementation depends on a shared vision and the full commitment of all. It is not clear who will be the owner of this project.	High	Assign one stakeholder as the primary owner of the lab with responsibility and accountability to follow the guidelines defined in the grant.
Technical Support - Network or equipment issues will impede instruction.	Medium	In the event of an issue, the Help Desk must respond in a timely fashion.
Communication - Communication between the members of the project team is critical to the success of the project.	High	The project team will meet on a regular basis to ensure that communication is ongoing.
Financial - The district will need sufficient funding for software, peripherals, and professional development.	Low	Take a Total Cost of Ownership approach to ensure all costs are understood when allocating funds for projects.
Professional Development - Projects that involve change in teacher practice must include professional development.	High	Ensure adequate financial allocation to support professional development for all projects.

6.0 Project Plan and Status (as of 12/21/2015)

The following table presents the project plan for the Innovations in Technology Exploration project. Status estimates and notes are provided in the appropriate columns.

Summary

The project began on an aggressive schedule. Construction began during mid-summer of 2015, including removing the half-wall in the middle of the room, painting, replacing the carpet, and rewiring. The furniture and computers arrived just prior to school and were installed and configured. The teacher station, projectors, and classroom management software had not yet arrived, but teachers were able to begin with what was available.

During the summer of 2015, Google Apps for Education was made available and the District adopted Microsoft Office 365 as an email system. Both Google and Microsoft productivity tools were made available to teachers. New students (6th grade and those who were new to the school) needed accounts set up. Steve Jensen, Director of Technology and Communication, accommodated by attending computer classes for a few days to make sure that all students had accounts and were able to login and access them. During the following weeks, the interactive projectors, classroom management software, and typing subscription were set up. It would be helpful for teachers to have training on the projectors and classroom management software so that they can take advantage of all of the features. This could be in the format of a demonstration (onsite or webinar), tutorial, or school visit.

The teachers worked during the summer on mapping the curriculum to cover Internet Safety, introduce Keyboarding, begin coding, and work on content-related units that integrate technology competencies. Students took a self-assessment survey which revealed a range of skills at all grades.

- When asked about basic computer operations (start up and shut down computer system and peripherals, open/close a file, start an application, and create a document), 80% responded that they can do this "pretty well" or "teach others," while 20% responded that they can "do it a little" or "don't know how to do this."
- When asked about navigating using scroll bars, arrow keys, special keys, and mouse, 84% responded that they can do this" while 16% responded that they can "do it a little" or "don't know how to do this."
- When asked about file management skills (Save, retrieve, manage, and organize files), 61% responded that they can do this "pretty well" or "teach others," while 39% responded that they can "do it a little" or "don't know how to do this."
- When asked about searching on the internet, 61% responded that they can do this "pretty well" or "teach others," while 22% responded that they can "do it a little" or "don't know how to do this."
- When asked about creating and sending email, 78% responded that they can do this "pretty well" or "teach others," while 29% responded that they can "do it a little" or "don't know how to do this."
- When asked about using web-based applications like Google Docs, 70% responded that they can do this "pretty well" or "teach others," while 30% responded that they can "do it a little" or "don't know how to do this."

This estimation was supported by teacher observation as students learned to use their accounts and began the initial instructional activities. In some cases, these estimates seemed optimistic, as students required a high level of assistance in getting started. The decision was made to spend the time needed on basic operations and skills so that students would have a strong foundation and be confident moving more quickly once these were understood.

Three templates were created for technology-rich units that the technology teachers will present to the teaching staff for collaboration. These focus on research skills, data collection skills (spreadsheet and graphing), and multimedia skills.

Implementation plans for the next phase of this project follow the project plan/status.

Bulkeley Middle School Technology Innovation Plan Project Status

#	Project Step	Priority	Owner	Start	End/ Milestone	Status	Comments / Next Steps
0	**Project Management**	**High**					
	Grant	**High**	MK/SJ/SVV	06/01/15	06/30/15		complete
	Planning sessions	**High**	MK/LK/SJ	06/01/15	07/16/15		complete
	Project Plan	**High**	LK	07/16/15	07/31/15		complete
	Bimonthly Status Report	**High**	LK/MK	08/31/15	04/30/16		ongoing
1	**Computer Lab Construction**						
	painting	**High**	SJ/JK	06/30/15	09/04/15		complete
	Re-carpeting	**High**	SJ/JK	06/30/15	09/04/15		complete
	moving circuits and drops from center	**High**	SJ/JK	06/30/15	09/04/15	In Process	Resolved by using shorter tables to accommodate more computers along the walls.
	wall-length whiteboard	**High**	SJ/JK	06/30/15	09/04/15		The whiteboard arrived with one section broken. This has been replaced.
2	**Order and setup Lab Equipment**						
	Computers and monitors	**High**	SJ	06/30/15	09/04/15		complete
	Printers	**High**	SJ	06/30/15	09/04/15		complete
	Teachers Workstations	**High**	SJ	06/30/15	09/04/15		Done.
	Projector(s)	**High**	SJ	06/30/15	09/04/15		Installed and configured.
	Software	**High**	SJ	06/30/15	09/04/15		Software is installed.
	Management Software (Vision-Pro)	**Medium**	SJ	06/30/15	09/04/15	In Process	The software is installed. Training is needed.

Bulkeley Middle School Technology Innovation Plan Project Status

	All the Right Type upgrade	**Medium**	MK	08/01/15	09/01/15		Program implemented
3	**Curriculum Development - - grades 6, 7, and 8**						
	Identify Learning Objectives	**High**	SVV/GM LK	07/20/15	08/30/15		ongoing
	Define Gap Analysis strategy	**High**	SVV/GM LK	07/20/15	08/30/15		ongoing
	Define Platform Readiness Strategy	**High**	SVV/GM LK	07/20/15	08/30/15		ongoing
	Create Project "containers" for PBL (gr 6-7)	**High**	SVV/GM LK	07/20/15	09/04/15		LK created
	Identify teachers for initial projects	**High**	SVV/GM LK	07/20/15	12/31/15	In Process	Meeting in November 2015
	Review Curriculum with Project Team	**High**	SVV/GM LK	07/20/15	12/31/15		ongoing
	Discuss Plan for the year	**High**	SVV/GM LK	07/20/15	12/31/15		LK will create project charter
	Identify teachers for subsequent projects	**High**	SVV/GM LK	07/20/15	12/31/15	In Process	Meeting in November 2015
	Onsite visits	**High**	LK	09/04/15	05/30/16		Visited 10/14 and 11/12. Next visit 1/16
4	**Professional Development**						
	Microsoft IT Academy/GAFE	**High**	SVV/GM	08/01/15	12/31/15	In Process	determine format, review as PD
	PLC for teachers on integration	**High**	LK/SVV	09/01/15	04/30/16	In Process	Planning ongoing
	identify PD opportunities for instructors	**High**	LK	08/15/15	12/31/15		
5	**Outreach**						
	"Ribbon Cutting Day"	**Medium**	team	TBD	Fall 2016		Highlight student work
	Website	**Medium**	SJ	TBD	Fall 2016		Increase web presence for middle school computer lab

Findings and Recommendations:

1. Microsoft 365 and Google Apps for Education (GAFE) are currently in use in the Middle School. It appears that some teachers are using each platform. Consultant recommends that a decision should be made to standardize on one platform for the middle school, however, there are ongoing internal conversations regarding the merits of various platforms. At this time the disposition is to remain platform agnostic and flexibly deploy digital resources in service of learning objectives.
2. To finalize the implementation of the technology labs (both the Innovation Lab and the 1st floor lab that is used in Period 1), teachers who use these spaces should create a punch list of open items and meet with the Technology Director to review on a monthly basis.
3. Create a Curriculum Committee to contribute to the development of the 6th to 8th grade Technology Curriculum. While the Technology Teachers will be primarily responsible for this, the committee members will provide valuable input on the gaps they see in their classroom, helping to define the outcomes by grade level, and reviewing the curriculum documents.
4. Explore the options for purchasing a Learning Management System as a platform in which to develop, distribute, and archive curriculum beginning with the Technology Curriculum.
5. Conduct professional development to provide teachers the opportunity to learn implementation strategies to use in their classrooms. Invite teachers who are currently integrating at a high level to present. To reinforce this, include time for teachers to work collaboratively on developing a deliverable based on the training.
6. Provide clarification on administrative roles and functions within the organizational structure.

7.0 Implementation Plans: To be completed by Project Team

Implementation Plan				
Name of Project: Professional Development				
Item #	Deliverable, Tasks, and Activities	Responsible Person	Start Date	Projected End Date
1	Identify goals for instruction. • Digital Citizenship: Implemented • Programming: Implemented • Productivity software: Implemented • Computer skills: Implemented • Multi-disciplinary integration: ongoing	Project team	7/15	Ongoing 9/16
2	• Determine competency expectations for student mastery by grade level.	Project team	7/15	Ongoing 9/16
3	• Use Student Survey and observation to assess starting level of competency.	Project Team	Fall 2015	Ongoing
4	Create a Scope and Sequence for Productivity Skills within 6th grade, 7th grade, and 8th grade. (This will be updated each year as student competency increases.) • Word Processing • Spreadsheets • Presentation tools • File Management Multimedia	Project Team	Fall 2015	Ongoing
5	Develop Unit Planner template including: • expectations • standards • activities • assessment • guiding questions.	Consultant	Summer 2015	Ongoing

Implementation Plan				
Name of Project: **Professional Development**				
Item #	**Deliverable, Tasks, and Activities**	**Responsible Person**	**Start Date**	**Projected End Date**
6	Develop units based on this planner to include identified competencies.	Project Team	Summer 2015	Ongoing
7	Map curriculum against school calendar.	Project Team	Summer 2015	Ongoing
8	Select instructional materials and resources to use with instruction.	Project Team	Summer 2015	Ongoing

Implementation Plan				
Name of Project: Professional Development				
Item #	**Deliverable, Tasks, and Activities**	**Responsible Person**	**Start Date**	**Projected End Date**
1.0	**Training for Instructors**			
1.1	Determine hardware and software training needs (if any) associated with new lab: (What can be self-taught? What needs demo or tutorial? • Interactive projector; Installed • Teacher Station: Installed • Vision Classroom Management Software: Implemented • Web-based Type to Learn Software: Implemented • NetSmartz or iSafe Internet Safety Curriculum: Implemented • Tynker programming: Exploring a variety of program languages	Project Team	Initiated	Ongoing
1.2	Google Educator Training (minimum recommendation). (These web-based trainings are self-paced and consist of approximately 12 hours of training for each level and a 2 hour test at the end.) • Google Educator Certificate 1 • Google Educator Certificate 2 • Google Devices / Administrator training	Project Team	TBD	TBD
1.3	Google Suite Training (optional). (These include web-based training, a portfolio, training video for trainer) • Certified Google Trainer • Google Innovator • Google Administrator (selected staff)	Project Team	TBD	TBD
1.4	Technology Integration Training (some of this is covered in the Google Educator training) • Workshops - track NYSCATE • Conferences - ISTE, NYSCATE	Project Team	TBD	TBD
2.0	**Training for Faculty**			

Implementation Plan				
Name of Project: Professional Development				
Item #	**Deliverable, Tasks, and Activities**	**Responsible Person**	**Start Date**	**Projected End Date**
2.1	Identify core group of teacher leaders to participate in Google training one semester ahead of larger teacher group. • Google Educator Certificate 1 • Google Educator Certificate 2	Project Team	TBD	TBD
2.2	All teachers complete Google Educator Certificate 1 and are encouraged to complete Google Educator Certificate 2	Project Team	TBD	TBD
2.3	Identify at least one staff member within the district to complete Google Certified Trainer and Google Innovator	Project Team	TBD	TBD
2.4	Instructional Technology Support - work with grade level groups	Project Team	TBD	TBD
2.5	Collaboration with Technology Teachers	Project Team	TBD	TBD
2.6	Develop use of BMS lab / Maker Space	Project Team	TBD	TBD
2.7	Google Boot Camp (1 or 2 day summer program)	Project Team	TBD	TBD
2.7	Technology Fair	Project Team	TBD	TBD

Training Matrix by Audience

Audiences:

T = Instructional Staff (Classroom Teachers, Special Area Teachers, Media Specialist, Other School-Based Instructional Staff)
TL = Teacher Leaders (Classroom Teachers, Special Area Teachers, Media Specialist, Other School-Based Instructional Staff)
A = School/District Administrators
IT = IT Staff

Training Requirements:

R = Required
O = Optional
S = Selected

Training Module	Audience			
	T	TL	A	IT
Google Teacher Level 1	R	R	O	O
Google Teacher Level 2	O	R		
Google Trainer		O		
Google Devices		O		R
Google Innovator		O		
Google Boot Camp	R	R	O	O
Technology Fair	R	R	R	R
Tech Conferences	S	S	S	S

Project Scope of Work/Status Report				
Name of Project: Communication / Marketing				
Item #	Deliverable, Tasks, and Activities	Responsible Person	Start Date	Projected End Date
1.0	Project Team Communication			
1.1	Schedule and hold a weekly or bi-weekly meeting of the technology teachers to collaborate on curriculum and resources for the technology classes, focusing on the scope and pacing of content presented across grades and coordinating the shift as students gain experience.	Project Team	9/2015	Ongoing
1.2	Schedule and hold a monthly meeting with the "teacher leader" group who will be the early users of the Innovation Lab.	Project Team	Initiated	Ongoing
1.3	Schedule and hold a monthly meeting of the project team, including the technology teachers, Technology Director, middle school principal, and Assistant Superintendent of Curriculum to discuss status and plan future applications of the innovation lab.	Project Team	9/2015	Ongoing
2.0	Marketing / Communicating with School Community			
2.1	Develop an information sheet to share information, availability, and applications inviting teachers to use the Innovation Lab.	Project Team	TBD	TBD
2.2	Create a website describing the lab. This could be a student project.	Project Team	TBD	Fall 2016
2.3	Hold a professional development session or staff meeting in the lab, introducing teachers to the tools that are available and the curriculum containers as templates for possible technology-rich projects.	Project Team	TBD	TBD
2.4	Conduct a technology fair for the school community and parents. Invite all teachers to showcase their favorite technology projects.	Project Team	TBD	TBD
2.5	Plan and host a "Ribbon Cutting" event for the RSF and School Committee.	Project Team	TBD	TBD

Research Template

Unit Description

Students follow a step by step process for gathering and organizing information, citing references, and developing an essay. In the process, they develop productivity skills as well as information literacy and digital citizenship

Use note taking to identify essential elements of a source, sort and categorize this information in a graphic organizer, develop an outline to organize information, synthesize it in clear sentences, then develop these into an essay.

Context

Grade:
Teacher:
Subject:

Alignment to Standards

NYSED Common Core Learning Standards

Content Standards

- This will be completed by the teacher.
-
-
-

Reading and Writing

RL 6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
RL. 6.4 - Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

W 6.1 Write arguments to support claims with clear reasons and relevant evidence.
W 6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
W 6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.

ISTE Technology Standards for Students and Teachers

Targeted ISTE NETS S:

3-Research and Informational Fluency -- Students apply digital tools to gather, evaluate, and use information
c. Evaluate *and select information sources and digital tools based on the appropriateness to specific tasks.*
b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
6. Technology Operations and Concepts- Students demonstrate a sound understanding of

technology concepts, systems, and operations.
a. Understand and use technology systems
b. Select and use applications effectively and productively
d. Transfer current knowledge to learning of new technologies

ISTE NETS T:

1. Facilitate and Inspire Student Learning and Creativity
2. Design and Develop Digital Age Learning Experiences and Assessments
b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting
their own educational goals, managing their own learning, and assessing their own progress
4. Promote and Model Digital Citizenship and Responsibility
a. Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including
respect for copyright, intellectual property, and the appropriate documentation of sources
b. Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources.

Sample Lessons

1. Identifying Sources
2. Note-taking
    a. Paraphrasing
    b. Citing Sources
3. Using a Graphical Organizer
4. Outlining
5. Composing an Essay

Data Collection Project Template

Unit Description

Students follow a step-by-step process to plan a data-collection instrument, conduct the research to populate it, analyze and chart the findings, and graphically present the results in a PowerPoint format. The project could involve a survey, lab assignment, or categorizing data about like entities, such as countries, states, authors, or another topic which would lend itself to multiple fields.

Context

Grade:
Teacher:
Subject:

Alignment to Standards

NYSED Common Core Learning Standards

Content Standards

- This will be completed by the teacher.
-
-

Mathematics Standards

Statistics and Probability (6 SP)
Develop understanding of statistical variability.
1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.
2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.

Summarize and describe distributions.
5. Summarize numerical data sets in relation to their context, such as by:
   b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.
   c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.

Equations and Expressions (6 EE)
9. Represent and analyze quantitative relationships between dependent and independent variables.
Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable.

ISTE Technology Standards for Students and Teachers

Targeted ISTE NETS S:

3-Research and Informational Fluency -- Students apply digital tools to gather, evaluate, and use information

a. Plan strategies to guide inquiry
b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
d. Process data and report results

4 - Critical thinking, problem solving, and decision making -- Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

a. Identify and define authentic problems and significant questions for investigation
b. Plan and manage activities to develop a solution or complete a project
c. Collect and analyze data to identify solutions and/or make informed decisions

6. Technology Operations and Concepts- Students demonstrate a sound understanding of technology concepts, systems, and operations.

a. Understand and use technology systems
b. Select and use applications effectively and productively
d. Transfer current knowledge to learning of new technologies

ISTE NETS T:

1. ***Facilitate and Inspire Student Learning and Creativity***
   b. Engage students in exploring real-world issues and solving *authentic problems using digital tools and resources*
2. Design and Develop Digital Age Learning Experiences and Assessments
   b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
4. Promote and Model Digital Citizenship and Responsibility
   a. Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
   b. Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources.

Sample Lessons

1. Select and design a research topic. (This could be a research of traditional information sources, a survey, or a lab report.
2. Create the data collection instrument.
3. Collect data and populate the tool.
4. Review and analyze the data using various sort and filtering strategies.
5. Create a PPT to present results.

Multimedia Template

Unit Description

Building on the research approach described in the ***Technology-Rich Unit: Research Template***, students conduct research on an assigned topic, organize it in a graphic organizer, and plan a multimedia presentation in the form of a movie or animation. Students develop a storyboard, search for royalty-free copyrighted images in an image library like Creative Commons, and create the presentation using an assigned tool.

Context

Grade:
Teacher:
Subject:

Alignment to Standards

NYSED Common Core Learning Standards

Content Standards

- This will be completed by the teacher.
-
-
-

Reading and Writing

RI.6.7. Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.
SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
SL.6.5 Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.

ISTE Technology Standards for Students and Teachers

Targeted ISTE NETS S:

1-Creativity and innovation *-- Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.*
a. Apply existing knowledge to generate new ideas, products, or processes
b. Create original works as a means of personal or group expression
4. Critical thinking, problem solving, and decision making-- *Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.*
b. Plan and manage activities to develop a solution or complete a project
d. Use multiple processes and diverse perspectives to explore alternative solutions

3-Research and Informational Fluency *-- Students apply digital tools to gather, evaluate, and use information*
b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
6. Technology Operations and Concepts- *Students demonstrate a sound understanding of technology concepts, systems, and operations.*
b. Select and use applications effectively and productively
d. Transfer current knowledge to learning of new technologies

ISTE NETS T:
1. Facilitate and Inspire Student Learning and Creativity - Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.
a. Promote, support, and model creative and innovative thinking and inventiveness

2. Design and Develop Digital Age Learning Experiences and Assessments *-- Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the Standards•S.*
a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity.
b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting
their own educational goals, managing their own learning, and assessing their own progress
4. Promote and Model Digital Citizenship and Responsibility
b. Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources.

Sample Lessons

Begin with lessons from Research Template for

1. Identifying Sources
2. Note-taking
    a. Paraphrasing
    b. Citing Sources
3. Using a Graphical Organizer
4. Outlining

Continue with:

5. Selecting images (Creative Commons or other Copyright-friendly source)
6. Storyboarding
7. Movie Presentation - Design and setup
8. Movie Creation

4.3.2

School Start Time Ad Hoc Committee Minutes

January 7, 2016

Present: Deirdre d'Albertis, Diane Lyons, Laura Schulkind, Joe Phelan, Tom Burnell, and invited guest Brett King.

CLS Challenges

The group met with Principal King to focus on concerns raised by teachers at CLS as well as parents about the impact of any proposed change in RHS/BMS school start time on our younger students.

Those concerns largely revolve around lengthening a day that some believe may already begin and ends later than is optimal for K-5 students (who are often most energetic early in the day).

As Joe reiterated, we have received detailed and thoughtful feedback from teachers and parents. It is crucial to engage with and be respectful of that input. Today's meeting made this our main order of business.

Brett King shared his basic willingness to think creatively and flexibly about scheduling challenges, particularly since this committee has vowed NOT to recommend any scenario that will cost the district more money. He will continue to brainstorm with Fern Lox to generate problem-solving strategies (perhaps slightly altering dismissal procedures, for instance).

The committee is looking, literally, to shave minutes from the timetable at this point; our goal is to create as little alteration of the CLS start and end times as possible.

Next Steps

Diane will create a new mockup of the schedule for each building for the proposed "shift" option (moving start time in BMS and RHS to 8 AM), incorporating shorter time for passing between periods in addition to a few other minor adaptations. All suggested changes will be highlighted for discussion. We plan to circulate this model to all three principals for their feedback/ suggestions first and then share with teachers, parents, the board. Tom has begun preliminary routing for bussing in 2016-17 to aid in developing just such a very precise proposal.

The group's next meeting is scheduled for Wednesday, January 13 at 9:30 AM.

Respectfully submitted,

Deirdre d'Albertis