

Getting it Right: Performance-Based Curriculum Integration in Small Learning Communities

A key component of career academies and smaller learning communities is integrating curriculum so that students learn how different content areas connect to each other and to personal goals. This workshop is designed to explore how highly motivating interdisciplinary lessons and projects of rigor and substance are built. There is a fairly simple approach that seems to be working well for many academy teams. It involves using performance maps to help teachers find connections and build lessons or projects based on standards from multiple courses. Without much more effort, there are ways to tweak the student work to get more engagement and personal investment.

Outcomes:

- Identify key elements of quality integrated curriculum
- Recognize how student performance maps can contribute to quality integrated curriculum
- Determine how performance maps can be used to create or adapt single subject or multidisciplinary lessons and projects that align with scope and sequence requirements.
- Use performance maps to find common ideas or concepts around which to build lessons or projects.

Driving Questions

1. What does a quality integrated project look like?
 - A. Levels of integrations
 - B. Identifying key elements of quality (using a rubric)
 - C. Determining rigor
2. How do performance maps add value when designing integrated lessons and projects from scratch?
 - A. Levels of mapping
 - B. Modify mapping process for working with teacher teams
3. How might you build from the identified connections to design lessons or projects?
 - A. Common links
 - B. Authentic context
 - C. Student activities and assessments
 - D. Staff roles, actions, and timelines
 - E. Instructional time, effort, and reward
4. Can existing curriculum and projects be adapted to accommodate additional subjects and/or align with specific course guides or benchmarks?
 - A. Performance map alignment
 - B. Adjustments and adaptations



Educating for Careers Conference
March 1, 2010
Penni Hudis and Kathleen Harris

DEVELOPING MULTIDISCIPLINARY INTEGRATED CURRICULUM

- 1 **Curriculum Mapping**
Each team member records and shares the scope and sequence of our course with the team. This mapping process should include standards and original performance measures that students are expected to demonstrate over the course of the year. This does help to clarify your own thinking regarding how your course is sequenced, but for integrated curriculum development the primary goal of curriculum (and performance) mapping is for all team members to become familiar with each others' subjects so the team can recognize how their subjects are related and find common connections.
- 2 **Overarching Theme**
As a team, examine the existing scope and sequence of concurrent academic and CTE classes to identify related concepts and content knowledge. Your goal is to find authentic connections between the existing standards-based curriculum and performance measures, not to insert additional curriculum into your schedules. Inclusion of CTE into this process is vital, because real-world problems are often the contexts that allow seemingly unrelated content to be connected authentically. After considering the identified possibilities, choose a theme that crosses multiple subject areas. Also consider what themes will be of interest to your students, of interest to you as instructors, whether this theme can be supported by your industry partners.
- 3 **Essential Questions**
Set up a need-to-know learning opportunity for students by framing the unit and driving the instruction with an essential question. The overarching question should be broad and open-ended, requiring students to synthesize learning from multiple classes to fully answer. This essential question can and should be broken down into smaller sub-questions that can be addressed in the individual classes through individual lessons that are brought together by the culminating project.
- 4 **Performance Assessments**
Each subject area should have individual performance assessments, but should also contribute to the culminating project as a whole. The performance assessments associated with the culminating project should provide students with the opportunity to directly apply the content they learned in each subject matter in meaningful ways.
- 5 **Industry Partners**
Industry and post-secondary partners can have roles at various stages. During curriculum development, partners can be brought in to help in planning, with identifying authentic connections and projects, and to provide specialized content knowledge. During implementation, industry professional can be co-instructors, serving as guest speakers, sponsoring site visits, or providing feedback for ongoing student work. At the end of the unit, industry and post-secondary partners can help to evaluate the final project to industry standards.
- 6 **Reflection and Revision**
During and after implementation, plan time to meet as a team to discuss how the different pieces of fit together and whether or not the lessons and the unit were effective in engaging students and achieving your anticipated learning outcomes.

Integrated Lesson and Project Quality Criteria

Lesson/project title: *Environmental Regulation*

Level of integration:

Criteria	Yes	No	Not sure	Comments
Embeds challenging standards and student performances from multiple subjects				
Addresses standards that benefit from alternative instructional methods				
Has a well framed driving question in an authentic context				
Requires a product, performance, service or solution realistic to career area				
Embeds SCANS or 21 st Century skills				
Time required is proportional to standards and performances addressed				
Demonstrates appropriate level of mastery of the embedded performances				
Exposes students to authentic situations, environments and requirements of the workplace				
Provides an authentic audience or result				
Overall ranking (circle)	Model	Good	Needs work	

Topic: Environmental Regulation

SAMPLE PROJECT #1
EAST BAY HIGH SCHOOL
ENVIRONMENTAL SCIENCE ACADEMY
GIBSONTON, FL

STUDENT PERFORMANCES

<p>American Government:</p> <ol style="list-style-type: none"> 1. Identify specific governmental regulatory agency and describe roll it plays in safety or providing for the common good. 2. Apply specific regulation from the identified agency by identifying noncompliance issues and the consequence 	<p>Aquaculture Foundations:</p> <ol style="list-style-type: none"> 1. Research and describe aquaculture regulatory agencies and their role in public safety and environmental protection. 2. Distinguish between regulation required for raising food fish and tropical fish. 	<p>Language Arts:</p> <ol style="list-style-type: none"> 1. Locate specific technical information and restate the meaning of the text. 2. Read and summarize technical information in writing. 3. Write and outline for an informational report. 4. Write an informational report 	<p>SUBJECT:</p>	<p>SUBJECT:</p>
--	--	--	-----------------	-----------------

DRIVING QUESTION: How do state and national industry regulations protect the "common good"?

PROJECT DESCRIPTION: Students will take one of three authentic roles; a business consultant for a local aquatic business owner researching governmental regulation compliance required in a business plan, a court appointed investigator investigating a law suit or an EPA agent investigating environment law compliance). They then research state and national Department of Agriculture and Consumer Services' Division of Aquaculture regulations and apply these regulation to an aquatic business plan or an investigative report of regulation compliance/noncompliance, consistent with current industry standards, for the client

PERSONALIZATION OPTIONS

<p>Project options:</p> <ol style="list-style-type: none"> 1. Business consultant to research and draft regulations for a food or tropical fish farm required in a business plan when seeking start up capital. 2. Court ordered investigate food fish farm regulation compliance following a food poisoning incident. (CSI) 3. EPA agent investigating possible environment regulation breach contributing to sudden change in water quality.

PROJECT ACTIVITIES AND TIME LINES

Activity	Staff responsible	Timeline	Product/result
Determine option and establish project activities and timelines			
Research regulations related to chosen scenario. Review with teacher advisor.			
Secure sample of report written to industry standard			
Determine field study protocol			
Conduct field study and verify validity of findings with science teacher			
Draft report			
Culminating Activity: Present report to industry mentors and defend during panel review.			

AMER GOV'T	STUDENT PERFORMANCE	ABOVE STANDARD 4	AT STANDARD 3	BELOW STANDARD 1	NOT MET 0	SCORE
	Identify specific governmental regulatory roles.	Student identifies and understands the function of a variety (more than three) of federal state, and local regulatory agencies.	Student identifies and understands the function of several, at least three, regulatory agencies at each level of government: federal state, & local.	Student identifies and understands the function of at least three regulatory agencies.	Student attempts to identify a few regulatory agencies.	
	Apply aquaculture-related regulations (identified in Aquaculture Foundations course) to identify non-compliance issues related in the Profile.	Student identifies all appropriate regulations pertaining to all noncompliance issues described in the T. Lapia Farm Profile.	Student identifies most (60%) of the appropriate regulations pertaining to most of the non-compliance issues described in the Profile.	Student identifies appropriate regulations pertaining to some (at least 50%) non-compliance issues described in the Profile.	Student identifies regulations pertaining to a few of the non-compliance issues.	
AQUACULTURE FOUNDATIONS	STUDENT PERFORMANCE	ABOVE STANDARD 4	AT STANDARD 3	BELOW STANDARD 1	NOT MET 0	SCORE
	Identify appropriate aquaculture business regulatory agencies.	Student identifies and understands the function and role of federal, state, and local regulatory agencies that regulate local aquaculture businesses.	Student identifies and understands the function and role of federal, state, and local regulatory agencies that regulate local aquaculture businesses.	Student identifies some of the regulatory agencies that regulate local aquaculture businesses.	Student identifies a few of the regulatory agencies that regulate local aquaculture businesses.	
	Identify possible non-compliance issues based on T. Lapia Farm Profile description.	Student identifies all non-compliance issues presented in the T. Lapia Farm Profile.	Student identifies most of the noncompliance issues.	Student identifies some of the noncompliance issues.	Student identifies a limited number (4 or less) of the non-compliance issues.	
	Analyze and apply the compliance regulations.	Student creates an action plan for T. Lapia Farms citing all appropriate federal, state, and local regulations for all of the noncompliance issues and provides steps to be taken in order to reach compliance.	Student creates an action plan appropriately citing federal, state, and local regulations for most of the noncompliance issues and provides steps to be taken in order to reach compliance.	Student creates an action plan based on regulations for some of the noncompliance issues and provides steps to be taken in order to reach compliance.	Student creates an action plan for T. Lapia Farms based on regulations.	
ENGLISH LANGUAGE ARTS	STUDENT PERFORMANCE	ABOVE STANDARD 4	AT STANDARD 3	BELOW STANDARD 1	NOT MET 0	SCORE
	Cite regulatory agency documents.	Student uses proper quotation, citation, and bibliography format to precisely cite regulatory documents.	Student uses proper citation format to cite regulatory documents.	Student correctly cites regulatory documents most of the time.	Student uses incorrect citation format.	
	Research, read, and summarize regulatory documents.	Student demonstrates ability to efficiently use research tools to locate regulations. Student is able to accurately summarize regulations based on careful reading.	Student demonstrates ability to use research tools. Student accurately summarizes regulations.	Student demonstrates use of research tools. Student summarizes regulations.	Student is not able to summarize regulations accurately.	
	Write an outline for a business report.	Student produces an organized outline for a written business report containing clearly identified noncompliance issues linked to cited and summarized regulations that must be met, as well as recommendations for actions to be taken to meet all compliance issues.	Student produces an organized outline for a written business report containing identified noncompliance issues linked to regulations that must be met and a recommendations of steps to be taken to meet all compliance issues.	Student produces an outline for a written business report containing some noncompliance issues linked to regulations that must be met but lacks the recommendation of steps to be taken to meet all compliance issues.	Outline is poorly organized and incomplete	
	Write a business recommendation report.	Student produces an organized written business report containing clearly identified noncompliance issues linked to cited and summarized regulations that must be met, as well as recommendations for actions to be taken to meet all compliance issues.	Student produces an organized written business report containing identified noncompliance issues linked to regulations and a recommendation of steps to be taken to meet compliance issues.	Student produces a written business report containing some noncompliance issues but regulations identified and the recommendation suggested are incomplete or incorrect.	The plan is poorly organized and does address key regulations or suggestions.	

Integrated Lesson and Project Quality Criteria

Lesson/project title: *Forensic Investigation*

Level of integration:

Criteria	Yes	No	Not sure	Comments
Embeds challenging standards and student performances from multiple subjects				
Addresses standards that benefit from alternative instructional methods				
Has a well-framed driving question in an authentic context				
Requires a product, performance, service or solution realistic to career area				
Embeds SCANS or 21 st Century skills				
Time required is proportional to standards and performances addressed				
Demonstrates appropriate level of mastery of the embedded performances				
Exposes students to authentic situations, environments and requirements of the workplace				
Provides an authentic audience or result				
Overall ranking (circle)	Model	Good	Needs work	

Topic: Forensic Investigation

SAMPLE PROJECT #2
DEER VALLEY LAW HIGH SCHOOL
DEER VALLEY LAW ACADEMY
ANTIOCH, CA

STUDENT PERFORMANCES

Foundations of Law:

1. Understand specialized investigative techniques, devices and equipment to enhance investigation regarding compliance with laws and regulations.
2. Conduct interviews and interrogations with individuals using proper procedures to ensure the protection of individual rights and information gathering.
3. Apply active listening skills to obtain and clarify information.
4. Analyze and interpret nonverbal communication.

Biology:

1. Explain how the coordinated structures and functions of organ systems allow the internal environment of the human body to remain relatively stable (homeostatic) despite changes in the outside environment.
2. Compare the general structures and functions of DNA, RNA and protein. Know how basic DNA technology (restriction digestion by endonucleases, gel electrophoresis, ligation and transformation) is used.
3. Conduct blood typing on a blood sample through antigen testing.

Language Arts:

1. Analyze interactions between main and subordinate characters in a literary text and explain the way those interactions affect the plot.
2. Analyze and trace an author's development of time and sequence, including complex literary devices (e.g., foreshadowing, flashbacks).
3. Apply appropriate interviewing techniques; prepare and ask relevant questions; make notes of responses; compile and report responses;

Algebra I:

1. Solve multistep problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification for each step.
2. Graph a linear equation and compute the x- and y-intercepts.
3. Verify that a point lies on a line, given an equation of the line.
4. Derive linear equations by using the point-slope formula.

Geometry:

1. Construct and judge the validity of a logical argument and give counterexamples to disprove a statement.
2. Prove theorems by using coordinate geometry, including the midpoint of a line segment, the distance formula, and various forms of equations of lines and circles.

World History:

1. Describe events and explain the issues associated with war crimes and crimes against humanity, and identify the role forensic science

DRIVING QUESTION: What are the appropriate roles for scientific technology and human judgment in bringing criminal charges against a defendant?

PROJECT DESCRIPTION: Students will take on the role of crime scene investigators to solve a murder that has occurred at the school. They will integrate math, science and language arts into the study of forensic science and associated careers such as law enforcement officers and district attorneys. Students will secure the crime scene, conduct a law enforcement investigation, conduct interviews, interrogate witnesses and suspects, write up a narrative police report with witness statements, including scientific lab report attachments, and present their findings. The culminating assessment will be a presentation to the District Attorney of the written report, and an oral report with a multimedia PowerPoint of the evidence. The goal is to persuade the DA of the suspect's guilt and the charges to be brought.

PERSONALIZATION OPTIONS

<p>Project options:</p> <ol style="list-style-type: none"> Students can extend the multimedia components of the evidence collection to use scenes from videotaped witness interviews.
--

PROJECT ACTIVITIES AND TIME LINES			
Activity	Staff responsible	Timeline	Product/result
Establish project activities and timeline	Law Teacher and team	09/10/09	Project plan
Scenario and evidence collection	Law Teacher, Math Teacher, Biology Teacher, Law Enforcement Experts	10/30/09	Crime Scene Blood typing report Math scenarios report DNA Report
Instruction on conducting interviews and interrogations with law enforcement expert	English Teacher, Law Enforcement Expert	11/02/09	Notes, handouts, students interview each other
Instruction on writing interviews	English Teacher	11/04/09	Notes, handouts, students interview each other
Conducting interviews.	Law Teacher and witnesses	11/06/09	Students interview witnesses and suspects
Draft Report #1 with expert input	Law Teacher, English Teacher	11/11/09	Draft narrative police report
Draft Report #2 with expert input and multimedia component	Law Teacher, English Teacher	11/20/09	Draft narrative police report with attachments
Culminating Activity: Present persuasive written and oral report with multimedia presentation to industry mentor (District attorney) and defend during oral interview.	All teachers and industry mentor (District Attorney)	12/11/09	Narrative written report, oral report, multimedia presentation

Rubric: Presentation to DA

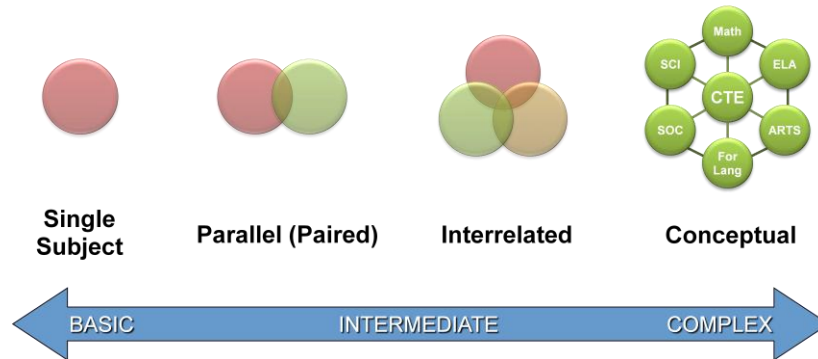
CATEGORIES	Rating Score	Exemplary 3	Proficient 2	Unsatisfactory 1
Decorum		<ul style="list-style-type: none"> Follows proper rules of procedure Interacts and addresses all parties appropriately and stands to present Does not laugh inappropriately or otherwise detract from the seriousness of the proceeding Is properly dressed; is not wearing a hat Is not eating/drinking/chewing gum Has electronic devices turned off Maintains credibility 	<ul style="list-style-type: none"> Displays proper proceeding behavior except for some minor deviations from #3 Maintains substantial credibility 	<ul style="list-style-type: none"> Major deviations from #3 Obviously does not take the exercise seriously and deviates so substantially from the proceeding behavior that the performance of other students is adversely affected Shows lack of credibility
Delivery & Persuasiveness		<ul style="list-style-type: none"> Displays ease in communication and is easily understood Speaks clearly with precise pronunciation and enunciation Volume and pace reflect intensity of main points Uses proper language and grammar; Exhibits very few disfluencies such as "ahs", "uhms" or "you know" Makes appropriate eye contact Uses body language, facial expressions, and movement to make remarks, questions, or responses persuasively, confidently and convincingly Responses are directed appropriately, and responsive to the question that was asked 	<ul style="list-style-type: none"> Communication is adequate and understood Volume and pace are consistent Eye contact is intermittent Lapses in sentence structure Some grammatical errors or disfluencies Body language, facial expressions and movements are used hesitantly or reflect nervousness Responses are directed adequately and responsive to the question that was asked most of the time 	<ul style="list-style-type: none"> Shows difficulty communicating Lack of eye contact Rate is too fast or slow; pauses are at inappropriate spots Responses or questions are not clearly articulated or audible; voice projection is poor Is asked to repeat questions because they are not heard or understood Uses improper language and grammar; exhibits many disfluencies Lack of interest or focus Body language, facial expressions, and movement to make remarks, questions, or responses are done with little persuasion, confidence, conviction and/or with much nervousness Responses are not directed appropriately, or are not responsive to the question that was asked
Opening & Closing Statements		<ul style="list-style-type: none"> A persuasive opening statement is delivered without notes that explains the theory and shows how the testimony, burden of proof, and relevant law compel the conclusion that the theory should prevail Persuasively summarizes the theory of the case and the law, showing why the burden of proof has been met in favor of the officer Thanks the DA 	<ul style="list-style-type: none"> An opening statement is delivered with minimal use of notes that explains the theory and adequately shows how the testimony, burden of proof, and relevant law compel the conclusion that the theory should prevail Outlines the strengths of the witnesses but was unable to be flexible and adjust statement to weaknesses and contradictions Most of the evidence needed to prove the case is present Used notes minimally Physical evidence and/or state applicable statutes were not mentioned Reminder to the DA of the required burden of proof and/or requesting the verdict were hastily mentioned Thanking the DAs 	<ul style="list-style-type: none"> Position not clearly established Closing statement was lacking evidence needed to prove the case. Does not outline the strengths of the witnesses and did not adjust statement to weaknesses and contradictions Argument was not organized Heavy use of notes Failed to remind prosecutor of the required burden of proof and/or requesting the verdict Did not thank the DA
Analytical & Strategic Mastery		<ul style="list-style-type: none"> Demonstrates full knowledge of the case with explanations and elaboration that is factually accurate Provides a logical and relevant sequence of events Develops the case theory and explains away inconsistencies Enhances the credibility of the witness statements and evidence Asks relevant questions and stops when ahead Questions strengthen the theory of the case or attack the credibility of an opposing witness Adapts quickly to unexpected statements and incorporates such into the closing argument 	<ul style="list-style-type: none"> The theory of the case can be discerned, and is not clearly contradicted, but could have been more persuasively and convincingly highlighted Arguments show some recognition of a coherent theory of the case, but the strategy is less apparent or not as persuasively articulated or developed as in #3 Use of notes in questioning or in opening and closing statements detract from effectiveness and persuasiveness. 	<ul style="list-style-type: none"> There does not seem to be a theory of the case, or mutually contradictory theories are offered The arguments show virtually no indication of a case theory The questions are often irrelevant and many relevant questions are omitted The possible bias of witnesses is unexplored and reliance on notes is such that it is apparent that there has been inadequate preparation or that the materials were prepared in haste The presentations show a lack of understanding of the burden of proof and the law of the case
Research & Preparation		<ul style="list-style-type: none"> Obtained information from favorable witnesses in order to prove the facts of the case Has reviewed witness statements and evidence in advance; Preparation for the proceeding is evident Information is complete Applicable rules of law have been researched thoroughly 	<ul style="list-style-type: none"> If is clear at times that more reviewing of questions and answers would have made for a more effective presentation in terms of preparation of witness statements and evidence in that witness statements are only slightly credible There are some indications of adequate preparation, but not in all instances where it might have helped Applicable rules of law have been researched minimally 	<ul style="list-style-type: none"> There is a clear lack of preparation in that witness statements lack credibility, with many questions clearly being a surprise to the DA Preparation is lacking Information is incomplete There is a lack of research of applicable rules of law
Visual Presentation		<ul style="list-style-type: none"> Exhibits and documents are properly offered for identification and for admission as evidence in the case Visuals are appropriate, explainable, and reinforce the theory of the case Demonstrates remarkable use of technology resources to present visuals 	<ul style="list-style-type: none"> Most of the exhibits and documents are offered for identification and for admission as evidence in the case Visuals are adequate to help the case but need further explanation Demonstrates proficient use of technology resources 	<ul style="list-style-type: none"> There are no exhibits and documents are offered for identification and for admission as evidence in the case or they are substantially lacking Visuals are inappropriate and/or inadequate in reinforcing the theory of the case and need much explanation Visuals are lacking or not used Demonstrates lack of competence using technology resources or no technology incorporation

REFLECTION QUESTION 1

What does a quality integrated project look like?

A. Levels of integrations

- What levels of integration are currently in use within your program area or discipline?
- What are the expectations for pathways regarding the number and level of integrated projects?
- Do expectations vary by teacher, pathway, and/or site? Why and how?



B. Identifying key elements of quality (using the rubric on page 3)

- Of the integrated activities or projects that you currently see in use, what elements are in place?
- What elements may need some work?

C. Determining rigor

How would you assure the principals, teachers, and concerned parents that integrated activities and projects are adequately preparing students for standardized test and post secondary options?



Performance Map Template

Subject					

Weekly Performance Map: One Month Sample

Subject	WEEK: NOV 2-6	WEEK: NOV 8-12	WEEK: NOV 15-19	WEEK: NOV 21-25	WEEK: NOV28- DEC 2
BIOLOGY	<p>Use the fluid mosaic model to illustrate and explain the structure and function of the cell membrane.</p> <p>Predict the movement of different types of molecules across semi-permeable membranes.</p> <p>Distinguish between active and passive transport along concentration gradients.</p>	<p>Analyze the structural differences between viruses and bacteria.</p> <p>Compare and contrast prokaryotic cells and eukaryotic cells.</p>	<p>Explain the role of ER, Golgi apparatus, and secretory vesicles in protein synthesis and transport.</p> <p>Differentiate between the functions of smooth ER and rough ER.</p>	<p>Illustrate how the cytoskeleton or cell wall gives shape and internal organization to the eukaryotic cell.</p> <p>Describe the structure and function of microtubules, flagella, and cytoskeleton</p>	<p>Determine the relationship of cell structure with function.</p> <p>Differentiate among multiple cells types an functions</p>
LANGUAGE ARTS	<p>Research a topic using a minimum of five different text and multimedia resources.</p> <p>Evaluate the credibility and reliability of resources.</p>	<p>Summarize research on to note cards, one thought, fact, or quote per card.</p>	<p>Paraphrase research into one's own words.</p> <p>Formulate a preliminary thesis statement to reveal the specific point of a paper.</p> <p>Using note cards, prepare a working outline.</p>	<p>Draft a final thesis statement</p> <p>Use internal citations after learning MLA format.</p> <p>Correctly apply MLA format to the citations.</p> <p>Prepare a formal outline using proper outlining form.</p> <p>Write rough draft of a research paper.</p>	<p>Peer edit another's draft with comments.</p> <p>Review peer feedback on the rough draft and make adjustments</p> <p>Write the final project in proper MLA format.</p> <p>Prepare a Works Cited page using proper MLA citations</p> <p>Prepare a Table of Contents</p>
ALGEBRA	<p>Solve a linear equation systematically using addition and subtraction.</p> <p>Solve problems, including word problems, involving linear equations in one variable.</p> <p>Isolate the variable and solve equations using inverse operations.</p> <p>Solve linear equations using multiplication and division.</p> <p>Define the term "reciprocal."</p>	<p>Find the solution to multi-step equations.</p> <p>Use two or more steps to solve a linear equation.</p> <p>Using variables on both sides of the equation, find the answer.</p> <p>Produce the answer to math questions using decimal equations</p>	<p>Apply a formula to an algebraic equation that relates two or more quantities.</p> <p>Use a formula to solve a temperature conversion problem.</p> <p>Use ratios and rates to solve real-life problems</p> <p>Describe unit rates, such as 60 miles per gallon</p>	<p>Find a unit rate (such as comparing miles and kms).</p> <p>Apply unit analysis, such as converting dollars into pesos.</p> <p>Solve percent problems using percents and base numbers.</p>	<p>Solve multi-step problems, including word problems, involving linear equations in one variable.</p> <p>Solve percent problems by reading tables and graphs.</p>

HEALTH SCIENCE FOUNDATIONS	<p>Distinguish between pathogenic and non-pathogenic organisms.</p> <p>Describe how various organisms manifest symptoms in human hosts</p> <p>Determine common modes of transmission for bacteria, viruses and fungi.</p> <p>Define vector, fomite, and vermin</p>	<p>Research modes of transmission for a list of common pathogenic organism</p> <p>Determine appropriate precautions for specific organisms.</p> <p>Distinguish between sterilization and disinfection.</p> <p>Differentiate between aseptic and sterile technique</p>	<p>Demonstrate aseptic hand washing technique</p> <p>Utilize appropriate aseptic and/or isolation techniques according to posted precautions</p> <p>Define, endemic, pandemic and epidemic.</p> <p>Determine common risk behaviors shared among endemic infectious diseases.</p>	<p>Utilizes proper sterile technique when assisting with, or performing, sterile procedures.</p> <p>Safely and correctly operate disinfection and sterilizing equipment and machines</p> <p>Employ appropriate protective equipment and apparel according to organism identified.</p> <p>Locate public health warnings and advisories for a list of infective diseases</p>	<p>Clinical assignments</p>
---------------------------------------	--	---	--	--	-----------------------------

Daily Performance Map: One Week Sample					
Subject	Monday	Tuesday	Wednesday	Thursday	Friday
BIOLOGY	1a Cell Biology Use the fluid mosaic model to illustrate and explain the structure and function of the cell membrane.	Predict the movement of different types of molecules across semi-permeable membranes.		Distinguish between active and passive transport along concentration gradients.	

REFLECTION QUESTION 2

How do performance maps add value when designing integrated lessons and projects from scratch?

A. Intervals of mapping

- How might pathway teams use pacing guides and benchmark testing in their mapping process?

- To what extent must team members adhere to scope and sequence within the separate subject coursework?

- How much flexibility in pacing guides and benchmark testing should the district allow in order to support integrated projects?

B. Modify mapping process for working with specific teams.

- What format might work best for the different teams of teachers you support (daily or weekly, semester)?

- What time spans should be worked on at time (consider whether teachers are on block or traditional scheduling, and the available collaboration opportunities of teachers)?

TOPIC, IDEA,
OR SKILL:

STUDENT PERFORMANCES

SUBJECT:

SUBJECT:

SUBJECT:

SUBJECT:

SUBJECT:

DRIVING QUESTION:

PROJECT DESCRIPTIONS:

PERSONALIZATION OPTIONS

--

PROJECT ACTIVITIES AND TIME LINES

Activity	Staff responsible	Timeline	Product/result
Culminating Activity:			

REFLECTION QUESTION 3

How might you build from the identified connections to design lessons or projects?

A. Common links (ideas, concepts, skills)

What process for finding common links will teachers be most comfortable using?

B. Authentic context

- How will you get needed input to match academic performances with authentic applications?
- How might industry partners assist you in making the project authentic and provide exposure to actual workplace environments and expectation?

C. Student activities and assessments

What strategies might be used to assure that the project requires mastery of the identified academic and technical performances?

D. Staff roles, actions and timelines for interdisciplinary work

Who will assure that projects are well organized and that responsibilities are being met?

E. Time and resources required

How do you decide which standards and learning outcomes require more or less time and resources?

RUBRIC TEMPLATE

Student Performance				

REFLECTION QUESTION 4

Can existing curriculum and projects be adapted to accommodate additional subjects and/or align with specific course guides or benchmarks?

A. Performance map alignment

- Do teachers currently employ predesigned integrated curriculum?

- How well do those projects align to your standards and serve your desired learning outcomes?

B. Adjustments and adaptations

- Are you confident predesigned curriculum aligns to the quality criteria used earlier (p. 3)?

- How can performance maps be used to align and modify an existing curriculum to match requirements and expectations across the subjects?

Finding Your Motivation

<p>People and Relationships</p> <ul style="list-style-type: none"> <input type="checkbox"/> You are outgoing and social <input type="checkbox"/> You join clubs, groups, and teams <input type="checkbox"/> You want to “talk out” problems <input type="checkbox"/> You care about issues that affect people <input type="checkbox"/> You want to make an impact or difference <input type="checkbox"/> You need to be heard <input type="checkbox"/> Recognition is important to you <input type="checkbox"/> You value harmony above all else <input type="checkbox"/> You have empathy for others <input type="checkbox"/> You want to provide comfort to others <input type="checkbox"/> You work well in a team <input type="checkbox"/> Human life is sacred to you <input type="checkbox"/> You sometimes dominate a conversation or cut people off to get your say <input type="checkbox"/> Your pets are treated as humans <input type="checkbox"/> You have good people skills 	<p>Things and Functions</p> <ul style="list-style-type: none"> <input type="checkbox"/> You can see numbers in your head <input type="checkbox"/> Math and/or science came easy for you <input type="checkbox"/> You enjoy brain teaser games <input type="checkbox"/> You like structure and logical thinking <input type="checkbox"/> You attend to details and complete tasks <input type="checkbox"/> You value facts when solving a problem <input type="checkbox"/> You need order around you <input type="checkbox"/> You are good at building or fixing things <input type="checkbox"/> You like to solve problems <input type="checkbox"/> You can be insensitive to people's emotional needs <input type="checkbox"/> You can design detailed drawings and plans <input type="checkbox"/> You can figure out the square footage of a room in your head <input type="checkbox"/> You prefer to work alone until you solve a problem <input type="checkbox"/> You need to be right <input type="checkbox"/> You can see maps in your head
<p>Artistic Expression</p> <ul style="list-style-type: none"> <input type="checkbox"/> You are happiest when creating something original <input type="checkbox"/> You have a great sense of color and form <input type="checkbox"/> You need to express yourself <input type="checkbox"/> Sometimes you are restless and unfocused <input type="checkbox"/> You are flexible and adaptable <input type="checkbox"/> You think outside of the “box” <input type="checkbox"/> Sometimes you show off <input type="checkbox"/> You love sports and play at least one <input type="checkbox"/> You love music, and play an instrument or dance well <input type="checkbox"/> Your mood is affected by music <input type="checkbox"/> You get bored with routine <input type="checkbox"/> You have great imagination <input type="checkbox"/> You remember details of movies and plays <input type="checkbox"/> You often create solutions to problems <input type="checkbox"/> You can see shapes, maps, and room details in your “mind’s eye” 	<p>Discovery and Processes</p> <ul style="list-style-type: none"> <input type="checkbox"/> You love being outside <input type="checkbox"/> You notice details in nature <input type="checkbox"/> You can see all the steps in a process at once <input type="checkbox"/> You like to discover things <input type="checkbox"/> You back up your thinking with research <input type="checkbox"/> You like to experiment <input type="checkbox"/> You can get bored with a project once things are figured out <input type="checkbox"/> You like structured thinking, but don't always attend to practical details <input type="checkbox"/> You like to be with and observe animals <input type="checkbox"/> You feel strongly about ecological issues <input type="checkbox"/> You need to correct improper thinking in others <input type="checkbox"/> You can be stubborn when you think you are right <input type="checkbox"/> You may hurt people's feelings <input type="checkbox"/> You need to work things out alone <input type="checkbox"/> You enjoy science related activities

REFLECTION QUESTION 5

How might you modify activities to increase student motivation and investment?

A. Motivation preferences and learning

- How are students' interests currently addressed in teaching and learning?

- Would purposefully addressing motivation be of benefit?

B. Career theme is half the battle

Are student purposely placed in pathway programs based on interest?

C. Fine tuning for maximum effect

How can designing options within projects be a meaningful way to differentiate curriculum?

