KEMET's PROJECTS

The KLA approach to assessment and measuring a student's acquisition of skills is to use PROJECTS to provide students with the opportunity to demonstrate their understanding. Teachers utilize thematic, interdisciplinary instruction built around long-term investigative projects that require students to demonstrate their understanding by applying their knowledge and skills to identify and solve complex, real-world problems.

The PROJECTS learning format is used to engage all students in co-designing challenging, long-term projects, rather than just content review or extended text-based activities, to culminate in a public exhibition.

Suggestions for backwards mapping assessments:

Teachers should ensure that formative and summative performance-based assessments utilize open-ended questions and multi-step problem solving that require students to analyze problems, apply knowledge, think critically, and write extensively.
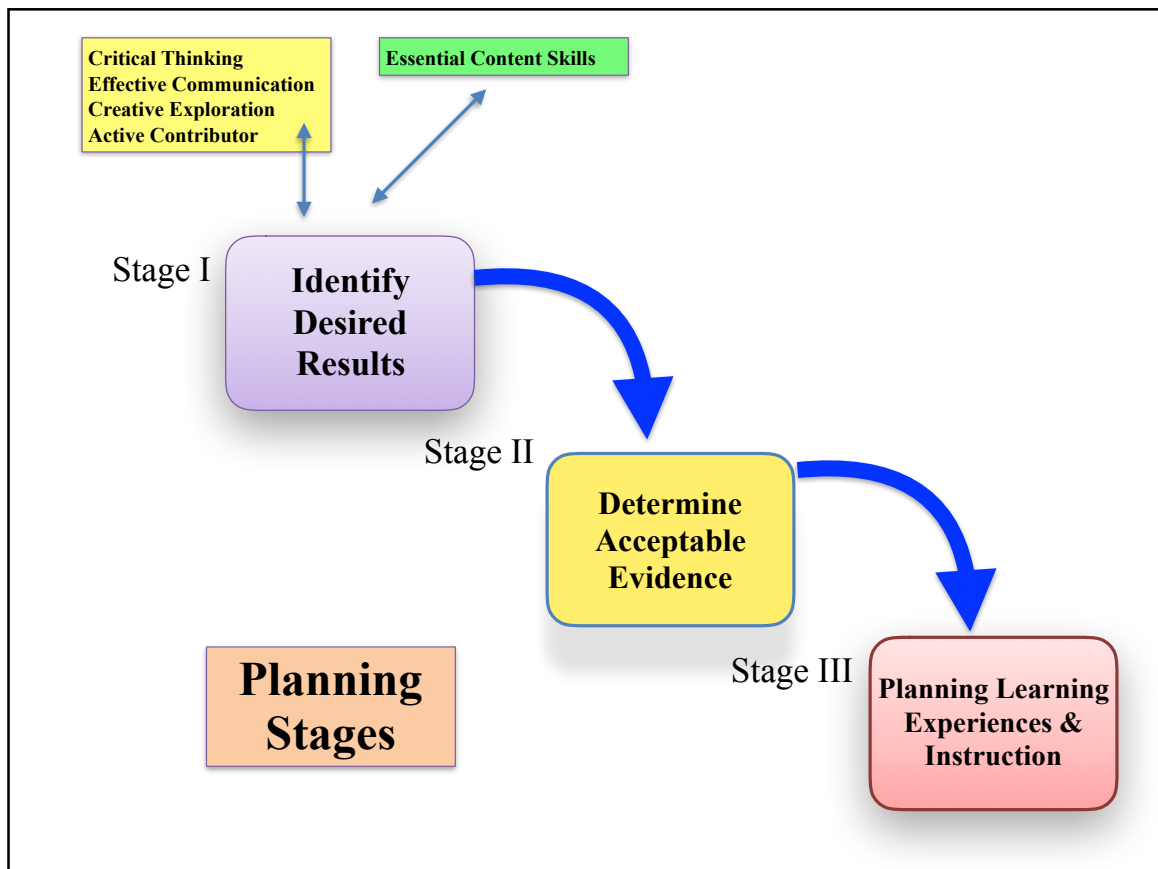
Teachers should design assessment instruments and tasks so that all students have the opportunity to demonstrate proficiency, including English language learners and students with special needs.

KLA Guidelines for PROJECTS:

PROJECTS must demonstrate an aspect(s) from each of the four cross-cutting competencies.

PROJECTS provide student with multiple ways to choose his/her topic and present his/her learning.

KLA exhibition rubrics must be used to assess learning leading up to the PROJECTS.

Critical Thinking
Effective Communication
Creative Exploration
Active Contributor

Essential Content Skills

Stage I — **Identify Desired Results**

Stage II — **Determine Acceptable Evidence**

Stage III — **Planning Learning Experiences & Instruction**

Planning Stages

KLS Guidelines for All PROJECTS:

*PROJECTS must demonstrate an aspect(s) from each of the four cross-cutting competencies
*PROJECTS must provide student with multiple ways to choose his/her topic and present his/her learning
*KLA exhibition rubrics must be used to assess learning leading up to the PROJECT

Social Studies PROJECT

Competencies: There are four competency statements for each subject area.

CCC Competency 1

<u>Critical Thinking:</u> Students can demonstrate the ability to apply critical thinking skills to evaluate or create an argument, problem or system, & relate learning to other subjects, their own personal growth, & /or what is significant in larger community.

CCC 1.1 **Problem Identification**
CCC 1.2 **Evaluate/Analyze Information**
CCC 1.3 **Strategic Thinking**

CCC Competency 2

<u>Effective Communication:</u> Student can demonstrate the ability to use a variety of methods to communicate effectively, including reading, writing, listening, speaking & discussing, & using visual aids or video/audio representations that are appropriate to the purpose & audience.

CCC 2.4 **Use of Language**

CCC Competency 3

<u>Creative Exploration:</u> Students can demonstrate the ability to draw on personal knowledge, interest & passion, to discover their potential, develop their inner voice, & explore their place in the world.

CCC 3.6 **Creative Products**

CCC Competency 4

<u>Active Contributor:</u> Students can demonstrate the ability to holistically define their lives in broader social, global, and environmental contexts and act autonomously & collaboratively through projects, internships, &/or personal actions.

CCC 4.4 **Taking Action**
CCC 4.6 **Self-Assessment**

Description of task: *Students will…*
identify and explore a social and/or historical problem, develop questions and claims, and plan inquiries. The investigation will require a student to evaluate and analyze sources, summarize and synthesize the information, and interpret and communicate the knowledge discovered about their topic. The student will then shape the new knowledge into a presentation product to share the constructed argument, findings, interpretation and solution to demonstrate their understanding of why the research was both meaningful and significant to taking action and makes a difference in society today.

Guidelines for the PROJECT in Social Studies

Description of task: *Students will…*
- **Identify** and **explore a social and/or historical problem or question** that they are curious about and interested in studying. Their investigation and research will require them to **summarize, analyze, synthesize and interpret the knowledge they discover** about their topic.
  - **Shape** the new knowledge into a presentation product that constructs **an argument, interpretation and solution** which demonstrates their understanding of why their research is both meaningful and significant for either understanding the past or taking action to make a difference in society today. Cite all resources used in their work
- S**hare their final work with both the school and larger community** to inform and educate about their **findings and conclusions** as well as share possible actions their findings support.
- Students will be able to **choose the problem (topic)** and **format or product design** to share and present their research and findings. Examples include:
-Traditional research, evidence referenced paper
-Public exhibit that could be displayed in a museum, school or community center
-Documentary or docudrama film, or a special web site
-Oral history project around the life of a person who is meaningful to the student.
All products need to be approved by the student's teacher.

Required Elements

- A formal proposal for a research topic that is completed and approved by the social studies teacher. A draft of the proposal will be submitted prior to the student working on their final product
- Include a project log that documents major steps in the student's research and reporting process and includes project conferences with the student's teacher. Complete and submit additional written documents such as a reflection response, self-assessment or written interpretation that may be required for a non-literary exhibition product such as an exhibit, work of art, website, etc.
  - Cite all resources used in their work
  - Students will share their work with the larger community

Description of the PROJECT (Task) (Social Studies)	
Students will…	
Identify and explore a social and/or historical problem or question. The investigation will require a student to summarize, analyze, synthesize and interpret the knowledge discovered about their topic. The student will then shape the new knowledge into a presentation product to share the constructed argument, findings, interpretation and solution to demonstrate their understanding of why the research was both meaningful and significant to taking action and making a difference in society today.	
What must be included?	
1. Make a **formal proposal** for a research **problem (topic)** exhibition that is completed and approved by the social studies teacher. A draft of the proposal will be submitted prior to the student working on their final product. Examples include: -Traditional research, evidence referenced paper -Public exhibit that could be displayed in a museum, school or community center -Documentary or docudrama film, or a special web site -Oral history project around the life of a person who is meaningful to the student.	CCC… Content…
Example:	e.g. Voice/Choice
2. **Identify** and **explore a social and/or historical problem or question** that they are curious about and interested in studying. Their investigation and research will require them to **summarize, analyze, synthesize and interpret the knowledge they discover** about their topic.	CCC… Content…
Example:	e.g. Voice/Choice
3. **Shape** the new knowledge into a presentation product that constructs **an argument, interpretation and solution** which demonstrates their understanding of why their research is both meaningful and significant for either understanding the past or taking action to make a difference in society today. Students must cite all resources used in their work.	CCC… Content…
Example:	e.g. Voice/Choice
4. Include a project log that documents major steps in the student's research and reporting process and includes project conferences with the student's teacher. Complete and submit additional written documents such as a reflection response, self-assessment or written interpretation that may be required for a non-literary exhibition product such as an exhibit, work of art, website, etc.	CCC… Content…
Example:	e.g. Voice/Choice
5. Students will share their work with the larger community.	CCC… Content…
Example:	e.g. Voice/Choice

Math Exhibition of Learning

Competencies: There are four competency statements for each subject area.

CCC Competency 1

Critical Thinking: Students can demonstrate the ability to apply critical thinking skills to evaluate or create an argument, problem or system, & relate learning to other subjects, their own personal growth, & /or what is significant in larger community.

CCC 1.1 **Problem Identification**
CCC 1.2 **Evaluate/Analyze Information**

CCC Competency 2

Effective Communication: Student can demonstrate the ability to use a variety of methods to communicate effectively, including reading, writing, listening, speaking & discussing, & using visual aids or video/audio representations that are appropriate to the purpose & audience.

CCC 2.3 **Organization**
CCC 2.7 **Technology: Visual and/or audio aids**

CCC Competency 3

Creative Exploration: Students can demonstrate the ability to draw on personal knowledge, interest & passion, to discover their potential, develop their inner voice, & explore their place in the world.

CCC 3.3 **Draw upon Personal Knowledge and Make Connections**

CCC Competency 4

Active Contributor: Students can demonstrate the ability to holistically define their lives in broader social, global, and environmental contexts and act autonomously & collaboratively through projects, internships, &/or personal actions.

CCC 4.3 **Planning Action**
CCC 4.6 **Self-Assessment**

Guidelines for the PROJECTS in Mathematics

Description of task: *Students will…*
Explore and analyze a real world issue with personal and local or global relevance that can be addressed, at least in part, by applying mathematical reasoning. Students will demonstrate the ability to solve problems, process information, interpret data and make decisions based on that data.

Required Elements

- Effectively state problem or issue that includes the student's reason for choosing it and a hypothesis or prediction of a solution
- An explicit outline connecting the exhibition to the self, society or the world
- Evidence of exploration of the problem or issue including the strategy or process used to evaluate and revise the student's work
- Demonstration of the student's mathematical knowledge through the justification of all mathematical concepts used
- Use of mathematical modeling to describe and investigate the problem or issue
- Clearly stated results and/or solutions, including justification and student reflection, that are presented in verbal or written form
- Cite all resources and mathematical tools used in their work

Description of the PROJECT (Task) (Math)	
Students will…	
Explore and analyze a real world issue with personal and local or global relevance that can be addressed, at least in part, by applying mathematical reasoning. Students will demonstrate the ability to solve problems, process information, interpret data and make decisions based on that data.	
What must be included?	
1. Effectively state a problem or issue that includes the student's reason for choosing it and a hypothesis or prediction of what will be concluded	CCC… Content…
Example:	e.g. Voice/Choice
2. An explicit outline connecting the exhibition to the self, society or the world	CCC… Content…
Example:	
3. Evidence of exploration of the problem or issue including the strategy or process used to evaluate and revise the student's work	CCC… Content…
Example:	
4. Demonstration of the student's mathematical knowledge through the justification of all mathematical concepts used	CCC… Content…
Example:	e.g. Voice/Choice
5. Use of mathematical modeling to describe and investigate the problem or issue	CCC… Content…
Example:	e.g. Voice/Choice
6. Cite all resources and mathematical tools used in the work	CCC…
Example:	
7. Clearly state results and/or solutions, including justification and student reflection, that are presented in verbal or written form.	CCC… Content…
Example:	e.g. Voice/Choice

KLA Guidelines for All PROJECTS:

KLA Guidelines for All PROJECTS:

*Exhibition must demonstrate an aspect(s) from each of the four cross-cutting competencies
*Exhibitions must provide student with multiple ways to choose his/her topic and present his/her learning
*KLA PROJECT rubrics must be used to assess learning leading up to the PROJECT

English/Language Arts PROJECTS

Competencies: There are four competency statements for each subject area.

CCC Competency 1

Critical Thinking: Students can demonstrate the ability to apply critical thinking skills to evaluate or create an argument, problem or system, & relate learning to other subjects, their own personal growth, & /or what is significant in larger community.

CCC 1.2 **Evaluate/Analyze Information**
CCC 1.3 **Strategic Thinking**

CCC Competency 2

Effective Communication: Student can demonstrate the ability to use a variety of methods to communicate effectively, including reading, writing, listening, speaking & discussing, & using visual aids or video/audio representations that are appropriate to the purpose & audience.

CCC 2.2 **Focus**
CCC 2.3 **Organization**
CCC 2.4 **Use of Language**

CCC Competency 3

Creative Exploration: Students can demonstrate the ability to draw on personal knowledge, interest & passion, to discover their potential, develop their inner voice, & explore their place in the world.

CCC 3.3 **Draw upon Personal Knowledge and Make Connections**

CCC Competency 4

Active Contributor: Students can demonstrate the ability to holistically define their lives in broader social, global, and environmental contexts and act autonomously & collaboratively through projects, internships, &/or personal actions.

CCC 4.2 **Identify Perspectives**
CCC 4.3 **Planning Action**

PROJECTS in English Language Arts

Description of task: *Students will…*

choose a theme/problem and analyze its personal, local, and global relevance. Students will also critique how multiple literary and multimedia works engage this theme/problem, considering craft, structure, and social impact.

Required Elements

- Choose a theme/problem and analyze its personal, local, and global relevance
- Reference multiple genres and informational texts/media
- Include a formal written component that is revised based on formal feedback
- Present in a format appropriate to the topic and exhibition goals
- Include student's assessment of his/her demonstration of competency
- Cite all resources used in their work
- Culminate in a proposal for future learning or action related to the student's topic. Some *examples* include (but are not limited to) a proposal for a service learning project, plans to raise awareness about or address the issue, or plans for future studies or research related to the topic

Description of the PROJECT (Task) (ELA)	
Students will…	
Choose a theme/problem and analyze its personal, local, and global relevance. Critique how multiple literary and multimedia works engage this theme/problem, considering craft, structure, and social impact.	
What must be included?	
1. Choose a theme/problem and analyze its personal, local, and global relevance	CCC… Content…
Example:	e.g. Voice/Choice
2. Reference multiple genres and informational texts/media	CCC…
Example:	Content…
3.Include a formal written component that is revised based on formal feedback	CCC… Content…
Example:	e.g. Voice/Choice
4.Present in a format appropriate to the topic and exhibition goals	CCC… Content…
Example:	e.g. Voice/Choice
5. Include student's assessment of his/her process and demonstration of competency	CCC… Content…
Example:	
6. Culminate in a proposal for future learning or action related to the student's topic. Some examples include (but are not limited to) a proposal for a service learning project, plans to raise awareness about or address the issue, or plans for future studies or research related to the topic	CCC… Content…
Example:	e.g. Voice/Choice

KLA Guidelines for All PROJECTS:
*PROJECTS must demonstrate an aspect(s) from each of the four cross-cutting competencies
*PROJECTS must provide student with multiple ways to choose his/her topic and present his/her learning
*PROJECTS rubrics (KLA) must be used to assess learning leading up to the PROJECT

Science PROJECT Rubric

Competencies: There are four competency statements for each subject area.

CCC Competency 1
7. **Critical Thinking:** Students can demonstrate the ability to apply critical thinking skills to evaluate or create an argument, problem or system, & relate learning to other subjects, their own personal growth, & /or what is significant in larger community.

CCC 1.1 **Problem Identification**
CCC 1.4 **Personal Reflection**

CCC Competency 2
8. **Effective Communication:** Student can demonstrate the ability to use a variety of methods to communicate effectively, including reading, writing, listening, speaking & discussing, & using visual aids or video/audio representations that are appropriate to the purpose & audience.

CCC 2.3 **Organization**
CCC 2.6 **Altering the Structure** (altering structure or format while working towards final communication product)

CCC Competency 3
9. **Creative Exploration:** Students can demonstrate the ability to draw on personal knowledge, interest & passion, to discover their potential, develop their inner voice, & explore their place in the world.

CCC 3.2 **Question Making and Selecting Ideas**
CCC 3.5 **Applying Knowledge to Contemporary Global Contexts**

CCC Competency 4
10. **Active Contributor:** Students can demonstrate the ability to holistically define their lives in broader social, global, and environmental contexts and act autonomously & collaboratively through projects, internships, &/or personal actions.

CCC 4.3 **Planning Action**
CCC 4.6 **Self-Assessment**

Guidelines for the PROJECTS in Science
Description of task: *Students will…*
Identify a local/global problem, develop open-ended questions, and propose a solution. Students will design a scientific investigation and conduct the designed scientific investigation (collecting appropriate data) in an attempt to test the hypothesis or predictions to demonstrate their understanding of the scientific method and to demonstrate their insights into the big ideas and organization of knowledge in the sciences (modeling).

Required Elements
- Identify a local/global problem or issue
- Research background information on the problem or issue and develop questions that can be researched
- Hypothesize and/or make predictions to answer the problem/issue
- Design a scientific investigation and conduct the designed scientific investigation (collecting appropriate data) in an attempt to test the hypothesis or predictions
- Sort, analyze and interpret the data
- Make meaningful conclusions based on the results
- Develop a model that represents a system
- Propose real world applications/solutions to the problem or issue
- Cite all resources used in their work
- Communicate the conclusions to an audience of parents, peers, and professionals (Use of appropriate technology)

PROJECTS must provide student with **multiple ways to choose his/her topic** and **present his/her learning**

Example topics might include:
- Global Environmental Issues (climate change, biodiversity and ecosystem loss, fisheries depletion, deforestation, and food and water shortages)
- Genetics (Ancestry, disorders, disease, research related to GMO, cloning, gene modification, etc.)
- Technology (advances in medicine, STEM)
- Nutrition/Health/Fitness
- Energy (Renewable, non-renewable, energy efficiency, alternate sources)

Presentation of Learning **might include:**

• Research Project	• Perform an Experiment
• Research Paper	• Multimedia Production
• Develop a model	• Scientific Demonstration
	• Any combination of the above

Description of the PROJECT (Task)	(Science)	
	Students will…	
Identify a local/global problem, develop open-ended questions, and propose a solution. Students will design a scientific investigation and conduct the designed scientific investigation (collecting appropriate data) in an attempt to test the hypothesis or predictions to demonstrate their understanding of the scientific method and to demonstrate their insights into the big ideas and organization of knowledge in the sciences (modeling).		
What must be included?		
1. Identify a local/global problem or issue **Example topics** might include: • Global Environmental Issues (climate change, biodiversity and ecosystem loss, fisheries depletion, deforestation, and food and water shortages) • Genetics (Ancestry, disorders, disease, research related to GMO, cloning, gene modification, etc.) • Technology (advances in medicine, STEM) • Nutrition/Health/Fitness • Energy (Renewable, non-renewable, energy efficiency, alternate sources)		CCC 1.1 Problem Identification
Example:		e.g. of Voice/Choice
2. Research background information on the problem or issue and develop questions that can be researched		CCC… Content…
Example:		
3. Hypothesize and/or make predictions to answer the problem/issue		CCC… Content…
Example:		e.g. of Voice/Choice
4. Design a scientific investigation and conduct the designed scientific investigation (collecting appropriate data) in an attempt to test the hypothesis or predictions		CCC… Content…
Example:		e.g. of Voice/Choice
5. Sort, analyze and interpret the data and develop a model that represents a system		CCC… Content…
Example:		
6. Make meaningful conclusions based on the results		CCC… Content…
Example:		
7. Develop a model that represents a system		CCC… Content…
Example:		e.g. of Voice/Choice
8. Propose real world applications/solutions to the problem or issue		CCC… Content…
Example:		
9. Communicate the conclusions to an audience of parents, peers, and professionals (Use of appropriate technology)		CCC… Content…
Might include: • Research Project • Research Paper • Develop a model	• Perform an Experiment • Multimedia Production • Scientific Demonstration • Any combination of the above	
Example:		e.g. of Voice/Choice

KLA Guidelines for All PROJECTS:
*PROJECTS must demonstrate an aspect(s) from each of the four cross-cutting competencies *PROJECTS must provide student with multiple ways to choose his/her topic and present his/her learning *KLA exhibition rubrics must be used to assess learning leading up to the PROJECT

(Template) **_____ PROJECT**

Competencies: There are four competency statements for each subject area.

CCC Competency 1
<u>Critical Thinking:</u> Students can demonstrate the ability to apply critical thinking skills to evaluate or create an argument, problem or system, & relate learning to other subjects, their own personal growth, & /or what is significant in larger community. CCC1.

CCC Competency 2
<u>Effective Communication:</u> Student can demonstrate the ability to use a variety of methods to communicate effectively, including reading, writing, listening, speaking & discussing, & using visual aids or video/audio representations that are appropriate to the purpose & audience. CCC2.

CCC Competency 3
<u>Creative Exploration:</u> Students can demonstrate the ability to draw on personal knowledge, interest & passion, to discover their potential, develop their inner voice, & explore their place in the world. CCC3.

CCC Competency 4
<u>Active Contributor:</u> Students can demonstrate the ability to holistically define their lives in broader social, global, and environmental contexts and act autonomously & collaboratively through projects, internships, &/or personal actions. CCC4.

Guidelines for the PROJECTS in Mathematics
Description of task: *Students will…*

Required Elements

Description of the PROJECTS (Task)	**(Template)**

Students will…	
Identify …	
What must be included?	
1. …	CCC… Content…
Example:	e.g. of Voice/Choice
2. …	CCC… Content…
Example:	e.g. of Voice/Choice
3. …	CCC… Content…
Example:	e.g. of Voice/Choice
4. …	CCC… Content…
Example:	e.g. of Voice/Choice
4. …	CCC… Content…
Example:	e.g. of Voice/Choice
5. …	CCC… Content…
Example:	e.g. of Voice/Choice
6. …	CCC… Content…
Example:	e.g. of Voice/Choice