

Hearing Brief

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Competency Requirements

Earning a high school diploma in New Mexico requires not only the completion of 24 units of specified coursework, but successful completion of demonstrations of competency. These demonstrations of competency are culminating assessments or projects, designed to show students have gained a comprehensive and proficient understanding of an academic subject. State statute requires competency to be demonstrated in all core academic subjects including mathematics, reading, writing, science, and social studies.

Options to Demonstrate Competency

Until 2019, New Mexico required students to take federal Every Student Succeeds ACT (ESSA) proficiency assessments as a primary demonstration of competency. If a student wished to use an alternative demonstration of competency—such as a portfolio project—a waiver was required from PED.

Beginning in the 2019-2020 school year, however, PED did away with its primary and alternative model. Effectively, PED has created a "menu of options" to demonstrate competency, allowing students the flexibility to choose from this menu for a variety of ways to demonstrate competency in core academic subjects.

Each cohort of graduating students receives such a menu specific to their graduating class. For example, the 2023 cohort menu is for students graduating in the 2023 school year. See Attachment A: Cohort 2023 Menu of Options and Attachment B: 2024 Menu of Options. Options to demonstrate competency include the following:

- ESSA Required Assessments: Include 11th grade required assessments. Students must still earn passing scores on these assessments, with specific "cut scores" established by PED. See Attachments A and B: Cohort 2023 and 2024 Menu of Options for a full list of assessments and cut scores for the cohorts of 2023 and 2024.
- Local Demonstrations of Competency: May include rigorous portfolio projects or competency-based options such as earning an industry-recognized credential. Local demonstrations other than the portfolio and competency-based options must still be

Key Takeaways

Competency requirements are designed for students to show a comprehensive understanding of core academic subjects: mathematics, reading, writing, science, and social studies.

Page 1

PED is no longer using a primary and alternative model to demonstrate competency. Students may choose from a menu of options. School districts and charter schools still have local discretion about which options are available to their students.

Pages 1-2

Assessments are still a widely used form of demonstrating competency.

Pages 1-2



approved by PED. See Attachments C, D, and E: Guidance for Local Demonstrations of Competency.

• Innovative Assessment Options: Being newly developed by PED in partnership with a community of practice. These options are currently being piloted but are anticipated to be made available statewide in 2023, culminating in student exhibitions to demonstrate learning.

Not all of these competency options are available in all schools. While PED makes all of these options available, local education agencies have the authority to determine which competency options to offer. LEAs may also establish more rigorous requirements, such as higher cut scores for assessments than those set by PED.

This menu of options being used in place of the primary and alternative model has potentially created more student choice by allowing several "equivalent" demonstrations of competency. However, in such a model, focused on leveling of various options to demonstrate competency, there is also the potential for these various methods to result in inappropriate equivalencies.

Innovative Assessment Option Pilot Project

As noted above, PED has been exploring the use of capstone projects as an assessment alternative. Utilizing an 18-month grant, <u>the department has partnered</u> with Future Focused Education, a New Mexico based nonprofit organization, to define and pilot these new alternatives. Alternatives include senior capstone exhibitions and community development of graduate profiles. As of October 2021, PED reported the following schools and districts are piloting the capstone requirements:

- ACE Leadership High School (locally-chartered charter school in Albuquerque)
- Amy Biehl High School (state-chartered charter school in Albuquerque)
- Cuba Independent School District
- Farmington Municipal Schools
- Health Leadership High School (locally-chartered charter school in Albuquerque)
- Santa Fe Public Schools
- Siembra Leadership High School (locally-chartered charter school in Albuquerque)
- South Valley Academy (locally-chartered charter school in Albuquerque)
- Vista Grande Charter High School (locally-chartered charter school in Taos)
- Zuni Public Schools

New Mexico's high school graduation rate for the class of 2021 was 77 percent, up two percentage points from the cohort of 2020. The national four-year graduation rate is 85.3 percent. New Mexico lags nearly 8 percentage points behind other states.

Other States Requiring High School Exit Exams

Research from Education Week, a nonpartisan organization focused on K-12 education research and journalism, found that as of 2019, 11 states—New Mexico among them—require exit exams as part of graduation requirements. The other 10 states requiring assessments as part of graduation requirements are Florida, Louisiana, Maryland, Massachusetts, Mississippi, New Jersey, New York, Ohio, Texas, and Virginia.



While assessments are not the only method of demonstrating competency in New Mexico, PED has previously reported assessments continue to be widely used as forms of demonstrating competency. Since all graduation requirements are verified at the school district level in New Mexico, there is not currently data on the number of students completing various forms of demonstrations of competency.

Pandemic Changes to Demonstrating Competency

Due to pandemic-related interruptions to standardized testing, PED is allowing the continuation of the passing of required coursework to demonstrate competency for students graduating in 2022 and 2023, as allowed for those in the 2021 graduating class. This is a temporary change to allow flexibility for students because of the disruptions to standardized testing that have occurred as a result of the Covid-19 pandemic. See Attachment F: PED Memorandum on Cohorts 2022 and 2023 Demonstration of Competency.

PED also allowed school districts and charter schools to submit non-standardized test administration waivers as a result of the pandemic. Typically, all state- and federally-required assessments and screeners must be administered at an official district location to ensure valid results.

Common Questions

- How are graduation requirements set? Graduation requirements are set in statute (Section 22-13-1.1 NMSA 1978).
- What entity oversees graduation requirements? The College and Career Readiness Bureau (CCRB) at PED oversees coursework requirements. The Assessment Bureau et PED oversees competency requirements.

Graduation requirements are set in statute (Section 22-13-1.1 NMSA 1978). NMAC 6.19.7 sets forth pathways for demonstrating competency in core academic subjects.

Assessment Bureau at PED oversees competency requirements.

- What happens if a student does not demonstrate competency, but has completed coursework? Section 22-13-1.1, Subsection O specifies that if a student has not met competency requirements, the student shall receive an appropriate state certificate indicating the number of credits earned and the grade completed. The student is then given five years to satisfy competency requirements.
- How do graduation requirements apply to students with individualized education programs (IEPs)? Students with IEPs demonstrate competency in the way best matched to their individual needs. Next Step Plans are embedded in IEPs for students with disabilities. These IEPs must specify which assessments each student will participate in and what, if any, accommodations or modifications are needed for that student. Students with IEPs who do not need individualized graduation modifications follow guidelines consistent with students without IEPs. If a student does not need individualized graduation criteria, there are two options to demonstrate competency:
 - 1. A **Modified Option**, which can include:
 - Students taking primary assessments with individualized passing scores set by IEP teams;



- Students taking alternative assessments; or
- Students completing competency-based alternatives such as a portfolio or capstone project, similar to those for students without IEPs, but with additional flexibility in passing scores.
- 2. An **Ability Option**, which is designed for students with severe cognitive impairments. For these students, Dynamic Learning Maps, serves as both the state-approved primary and alternate assessment. This assessment is designed to meet requirements of both the Elementary and Secondary Education Act and the Individuals with Disabilities Education Act. The ability option also allows for competency-based alternatives.
- How did Covid-19 impact assessments and competency requirements? During the pandemic, PED issued guidance that allowed students additional flexibility in options to demonstrate competency. For the 2021 cohort of graduating students, PED was granted a waiver by the federal Department of Education to bypass assessment and accountability requirements. Some of these options are still in place for the graduating classes of 2022 and 2023. Due to pandemic-related interruptions to standardized testing, PED allowed the passing of required coursework to demonstrate competency for the 2022 and 2023 cohorts, the same as allowed for the 2021 cohort of students. Despite the interruptions to standardized testing, students must still complete the 24 statutorily required academic units to graduate.

Questions to Consider

- How does the Public Education Department decide which options to make available as ways to demonstrate competency?
- What is the most common option used by students to demonstrate competency?
- How do other states that do not require exit assessments determine students' proficiency in academic subjects?
- What are some examples of local demonstrations of competency outside of portfolios and competency-based options look like?
- How might career technical education and career pathways for students be incorporated into options to demonstrate competency?
- How does PED anticipate implementing an innovative assessment option?





COHORT 2023 GRADUATION REQUIREMENTS Menu of Options to Demonstrate College and/or Career Readiness

Revised 8/19/2020

In what subject areas does a student need to show demonstration of competency?

In addition to meeting course requirements, New Mexico public high school students who entered grade 9 in school year 2019-2020 must be able to demonstrate postsecondary and/or workforce readiness in five content areas: Math, Reading, Writing, Science, and Social Studies.

What policy change now allows for multiple ways for students to demonstrate competency?

Until 2019, New Mexico required students to use the Every Student Succeeds Act (ESSA) required proficiency assessment as a **primary** demonstration of competency and to request a waiver from the PED to use an **alternative** demonstration of competency. Students may now choose from a **menu of options** to demonstrate competency without a waiver. <u>PED is no longer using primary and alternative structures</u>.

Local school boards have the flexibility to make available all or some of the menu options or can develop Local Demonstration of Competency (LDC) Requirements.

ESSA-REQUIRED ASSESSMENTS	OTHER DEMONSTRATION OF COMPETENCY			
Math: Transition Algebra I*, Geometry, or Integrated Math II (725) SAT School Day Mathematics (TBD) ¹ Reading:	1	•	•	
SAT School Day Reading and Writing TBD Spanish Reading SBA (1137)	LOCAL DEMO	ISTRATION OF	INNOVATIVE ASSESSMENT	
Writing: SAT School Day Reading and Writing (TBD) SAT School Day Essay (TBD)	A variety of local dem		OPTION In partnership with a <u>Community of Practice</u> , NMPED is	
Science: NM Assessment of Science Readiness (NM-ASR) (TBD)	rigorous <u>portfolio projects</u> and <u>competency-based</u> <u>options</u> may be used as LDCs. LDCs other than the portfolio and competency-based options must		developing a new statewide graduation option that culminates with student exhibitions to demonstrate learning. Guidelines will be provided in August 2021	
* Transition Algebra I can only serve as a demonstration of competency if a student has passed the Algebra II course	be <u>approve</u>	ed by PED.		
	OTHER NATIONA	L ASSESSMENTS		
Math: Next-Gen ACCUPLACER Quantitative Reasoning (252) Advanced Al ACT Mathematics (19), Pre-ACT Mathematics (19) ACT ASPIRE Mat Applied Mathematics (3) ACT WorkKeys Graphic Literacy (3) AP Calculus AB or BC or Statistics (2) ASVAB AFQT Composite (31) IB Mathematics (4) PSAT 10 Mathematics TBD SAT Subject Mathematics Level 1 (580) or Level 2 (640) Reading: Next-Gen ACCUPLACER Reading (241) ACT Reading (18), Pre-ACT Reading (18) ACT ASPIRE Reading (424) ACT WorkKeys Workplace Documents (3) AP English Language & Composition or English Literature & Compos (31) IB Language & Literature (4) PSAT 10 Evidence-based Reading & Writing (430) SAT Subject Liter Reading & Writing (430)	hematics (431) ACT WorkKeys ition (2) ASVAB AFQT Composite	IB Language & Literature (4) PSAT 10 Evidence-based Reading SAT Evidence-based Reading & W Science: ACT Science (20), Pre-ACT Science ACT Aspire Science (431) ACT WorkKeys Applied Technolog AP Biology, Chemistry, Computer S Composite (31) IB Experimental Sciences (4) SAT Subject Chemistry (640), Ecol Social Studies: AP Art History, European History, C	n (15) ing (428) 3) on or English Literature & Composition (2) & Writing (430) /riting (430) ce (20)	
Abbreviations: <u>ACT: American College Testing</u>	<u>AP: Advanced Placement</u> <u>ASVAB: Armed Services Vocational Ap</u>		AFQT: Armed Forces Qualification Test IB: International Baccalaureate	
¹ SAT and PSAT 10 Results are TBD as standards ² An EOC score earned prior to, and after, the CO	s setting will take place fol VID-19 release can be us	lowing the initial administrated as an LDC.	ation in spring 2021	
Students following the modified option , whose IEPs estable competency. Students following the ability option, PED enco	· ·		3	
		Graduation Requirements		
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ATTACHMENT B



COHORT 2024 GRADUATION REQUIREMENTS Menu of Options to Demonstrate College and/or Career Readiness

Revised 8/26/2021 In what subject areas does a student need to show demonstration of competency? In addition to meeting course requirements, New Mexico public high school students who entered grade 9 in school year 2020-2021 must be able to demonstrate postsecondary and/or workforce readiness in five content areas: Math, Reading, Writing, Science, and Social Studies. What policy change now allows for multiple ways for students to demonstrate competency? Students may choose from the menu of options to demonstrate competency. PED no longer uses primary and alternative structures. All assessments shown below are ways that students can demonstrate comptency. Local school boards have the flexibility to make available all or some of the menu options or can develop Local Demonstration of Competency (LDC) Requirements. STATE ESSA ASSESSMENTS OTHER DEMONSTRATION OF COMPETENCY Math: SAT School Day Mathematics (TBD)1 Reading: SAT School Day Reading and Writing (TBD) Spanish Reading SBA (1137) LOCAL DEMONSTRATION OF INNOVATIVE ASSESSMENT OPTION Science: **COMPETENCY (LDC)** NM Assessment of Science Readiness (TBD) A variety of local demonstrations including In partnership with a <u>Community of Practice</u>, NMPED is rigorous portfolio projects and competency-based developing a new statewide graduation option that options may be used as LDCs. LDCs other than culminates with student exhibitions to demonstrate the portfolio and competency-based options must learning. Guidelines will be provided in August 2021. be approved by PED. **OTHER NATIONAL ASSESSMENTS** Writing: Math[.] Next-Gen ACCUPLACER Quantitative Reasoning (252) Advanced Algebra (252) Next-Gen ACCUPLACER Writing (236) ACT Mathematics (19), Pre-ACT Mathematics (19) ACT ASPIRE Mathematics (431) ACT WorkKeys ACT English (18), Pre-ACT English (15) Applied Mathematics (3) ACT ASPIRE English (428) or Writing (428) ACT WorkKeys Graphic Literacy (3) ACT WorkKeys Business Writing (3) AP English Language & Composition or English Literature & Composition (2) AP Calculus AB or BC or Statistics (2) ASVAB AFQT Composite (31) IB Language & Literature (4) IB Mathematics (4) PSAT 10 Evidence-based Reading & Writing (430) PSAT 10 Mathematics TBD SAT Evidence-based Reading & Writing (430) SAT Subject Mathematics Level 1 (580) or Level 2 (640) Science: ACT Science (20), Pre-ACT Science (20) Reading: ACT Aspire Science (431) Next-Gen ACCUPLACER Reading (241) ACT WorkKeys Applied Technology (3) ACT Reading (18), Pre-ACT Reading (18) AP Biology, Chemistry, Computer Science, Environmental Science, or Physics (2) ASVAB AFQT ACT ASPIRE Reading (424) Composite (31) ACT WorkKeys Workplace Documents (3) IB Experimental Sciences (4) AP English Language & Composition or English Literature & Composition (2) ASVAB AFQT Composite SAT Subject Chemistry (640), Ecological Biology (590), Molecular Biology (620) or Physics (630) (31)Social Studies IB Language & Literature (4) PSAT 10 Evidence-based Reading & Writing (430) SAT Subject Literature (570) SAT Evidence-based AP Art History, European History, Government & Politics (Comparative), Government & Politics (US), Reading & Writing (430) Human Geography, Macroeconomics, Microeconomics, Psychology, US History, or World History (2) IB Individuals and Society (4) Abbreviations: AP: Advanced Placement AFQT: Armed Forces Qualification Test ASVAB: Armed Services Vocational Aptitude Battery ACT: American College Testing IB: International Baccalaureate SAT and PSAT 10 Results are TBD as standards setting will take place following the initial administration in spring 2022 An EOC score earned prior to, and after, the COVID-19 release can be used as an LDC. Students following the modified option, whose IEPs establish individualized passing scores, should default to their individualized score when determining demonstration of competency. Students following the ability option, PED encourages the use of local demonstration of competency as well as DLM as the primary assessment.

For additional information, visit the Graduation Requirements page at: <u>https://webnew.ped.state.nm.us/bureaus/college-career-readiness/graduation/</u>

Standards-Based Portfolios Overview

With the support of stakeholders and field experts, PED has developed the requirements and grading protocols for standards-based portfolios to be used uniformly across the state. Portfolio outlines for writing, science, and social studies follow in pages 25 – 51 and include the following key components:

- Requirements
- Sample portfolios
- Checklists
- Score summary
- Rubrics

It is the responsibility of schools, districts, and local review team participants to ensure that all requirements for standards-based portfolios **and** any additional requirements adopted by the local school district or state-chartered charter school are met.

Schools and Districts

Each district or state-charter school choosing to allow standards-based portfolios as a demonstration of competency will have **primary ownership over key procedural and implementation decisions.** These decisions include, but are not limited to, the following:

- How to provide support for students when determining their options for demonstrating competency and what is best for them
- Whether to provide teacher or counselor advisement and/or create an elective to support students with compiling and finalizing portfolios
- Whether to require more than what is required by the portfolio outlines and rubrics (schools and districts may add to, but not take away from the minimum requirements established in this manual)
- How to recruit and select local review team members
- Whether to compensate local review team members
- All scheduling decisions, including the selection of a final submittal date that is at least 30 days prior to the graduation date
- How to store and collect student artifacts over time, so long as the requirement to store student portfolios and scoring documents for five years is met

Local Review Teams

Review team members shall independently grade the portfolio using the PED checklists and rubrics. The score given by each reviewer should be added to score summary and averaged to calculate the student's final score. **No partial points may be given.**

Standards-Based Writing Portfolio

Portfolio Requirements

A portfolio in writing must include a minimum of <u>three</u> artifacts and a written reflection for each artifact. Any work completed in English language arts from grades 10–12 may be included in the portfolio.

Permitted Artifacts		
Argumentative essay	Literary analysis essay	
Blogs or Wiki page	Memoir	
Cause/effect analysis	News article	
Compare/contrast analysis	Position paper	
Editorial	 Procedural writing 	
• Fictional writing (including short stories,	 Pro-con analysis 	
scripts, storyboards, novel excerpts, etc.)	Proposal	
Lab report	Research paper	

The portfolio must meet the following requirements:

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Requirement One: The **three artifacts** represent at least two of the three writing genres addressed in the Grade 11–12 New Mexico Common Core Writing Standards. **Requirement Two:** The **three artifacts** align with the Grade 11–12 New Mexico Common Core Writing Standards for the Requirement Three: Each artifact includes a written reflection of 250 to 500 words in length.

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Requirement One: The three artifacts represent at least two of the three writing genres addressed in the Grade 11–12 New Mexico Common Core Writing Standards.

applicable genre.

Artifact One	Artifact Two	Artifact Three
Independently completed sample of narrative writing	Independently completed sample of informational/ explanatory writing	Independently completed sample of argumentative writing

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-	Two: The three artifacts align with the Grade 11–12 New Mexico Common Core or
Genre	New Mexico Common Core Writing Standard
All genres	 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. Develop and strengthen writing—as needed—by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
Narrative	 Write a narrative to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.
Informational/ Explanatory	 Write an informative/explanatory text, including the narration of historical events, scientific procedures/experiments, or technical processes. Conduct a research project to answer a question (including a self-generated question) or solve a problem, narrow or broaden the inquiry when appropriate, and synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. Gather relevant information from multiple, authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas; avoid plagiarism and overreliance on any one source; and follow a standard format for citation.
Argumentative	 Write an argument to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source; and follow a standard format for citation.

Requirement Three: Each artifact includes a written reflection of 250 to 500 words in length. Students must consider the following questions.

Reflection Questions

Part One: All three reflections must answer questions 1–4.

- **1.** What is the artifact?
- 2. What was the assignment?
- **3.** How does the artifact align to the writing standard(s)? When possible, annotate the artifact.
- **4.** What changes in your thought process occurred as a result of working on this artifact? (i.e., Did your opinion or perspectives change?)

Part Two: Each reflection must also address at least two of the following questions.

- What academic strengths does the artifact highlight?
- What areas for improvement does the artifact highlight?
- How does the artifact demonstrate your ability to think critically?
- How could your work on the artifact be applied to the real world? / What makes the artifact relevant to the real world?

Sample Portfolios

The sample artifacts below are intended to guide students, teachers, and counselors when brainstorming the types of work students might choose to submit as artifacts. The list of sample artifacts below is not exclusive, nor is it nearly extensive enough to represent all possibilities.

Portfolio Sample: Two Writing Genres

- Argumentative Writing: Editorial arguing for the replacement of fossil fuels with solar and wind power as energy sources
- Informational/Explanatory Writing: Compare/contrast essay detailing and explaining the differences between North and South Korea
- Informational/Explanatory Writing: Blog post describing how to set up your own blog, including detailed descriptions of copyright considerations, coding, marketing, and available interfaces

Portfolio Sample: Three Writing Genres

- Argumentative Writing: Literary analysis essay on the poem, "Out, Out—" by Robert Frost
- Informational/Explanatory Writing: Research paper (with citations) on a topic of student interest
- Narrative Writing: Fictional short story

Combination Portfolios

Writing artifacts may simultaneously be used as an artifact in a social studies or science portfolio, so long as two separate reflections are completed. Below are samples of combination portfolios.

Portfolio Sample: Writing + Science

- Informational/Explanatory Writing: Research paper (with citations) analyzing three different species, explaining their evolutionary progress, and detailing potential threats to their continued survival.
- Argumentative Writing: Argumentative essay proposing a possible solution(s) to climate change, supported by scientific reasoning for the success of the proposal
- Argumentative Writing: Literary analysis essay on the poem, "Out, Out—" by Robert Frost

Portfolio Sample: Writing + Social Studies

- Argumentative Writing: Argumentative essay utilizing research that supports/opposes the implementation of protectionist tariffs on the US economy
- Informational/Explanatory Writing: Compare/contrast essay on the effectiveness of checks and balances between local, state, tribal, and/or national governments, or between two administrations, Congress/legislatures, or courts
- Argumentative Writing: Literary analysis essay on the poem, "Out, Out—" by Robert Frost

Writing Portfolio Checklist

Student Name:

Cumulative Requirements

□Portfolio contains three independently created student artifacts

 $\Box \mathsf{Combined},$ the three artifacts represent at least \mathbf{two} different writing genres

 \Box Each artifact includes a written reflection of 250 to 500 words in length

Artifact One		
Title:		
Writing genre: Narrative Informational/Example:	planatory Argumentative	
Artifact type:		
□ Argumentative essay	□Literary analysis essay	
□Blogs or Wiki page	□Memoir	
□Cause/effect analysis	□News article	
□Compare/contrast analysis	□Position paper	
□Editorial	□Procedural writing	
□Fictional writing (including short stories, scripts,	□Pro-con analysis	
storyboards, novel excerpts, etc.)	□Proposal	
□Lab report	□Research paper	

Artifact Two

Title:				
Writing genre:	□Narrative	□Informational/Exp	olanatory	□Argumentative
Artifact type:				
□Argumentative	e essay		Literary	ry analysis essay
🗆 Blogs or Wiki p	page		□Memoi	bir
□Cause/effect analysis		□News a	article	
Compare/contrast analysis		□Positio	on paper	
Editorial			\Box Proced	dural writing
□Fictional writing (including short stories, scripts,		nort stories, scripts,	Pro-con analysis	
storyboards, novel excerpts, etc.)				
□Lab report			Resear	rch paper

Artifact Three					
Title:				_	
Writing genre:	□Narrative	□Informational/Exp	lanatory	□Argumentative	
Artifact type:					
□Argumentative	e essay		□Literar	ry analysis essay	
□Blogs or Wiki page		□Memoir			
□Cause/effect analysis		□ News a	article		
□Compare/cont	rast analysis		□Positio	on paper	
Editorial			Proced	dural writing	
Fictional writing (including short stories, scripts,		Pro-con analysis			
storyboards, nov	el excerpts, et	c.)	Propos	sal	
□Lab report			Resear	rch paper	

Writing Portfolio Score Summary

Student Name: _____

The signatures below indicate that each reviewer has independently reviewed each artifact using the PED rubric and can verify that each artifact is authentic and independently-created by the student.

Score Summary		
Name of ReviewerSignature	Title/Position	Score: /20
Name of ReviewerSignature	Title/Position	Score: /20
Name of ReviewerSignature	Title/Position	Score: /20
Name of ReviewerSignature	Title/Position	Score: /20
Name of ReviewerSignature	Title/Position	Score: /20
	Student Average Passing Score: 15/20 (75%) Competency Demonstrated?	/20 □ yes □ no

Writing Portfolio Rubric

Directions: All rows of the rubric must be scored. No partial scores (e.g., 2.5 points, 3.75 points) may be given. Students must meet all of the criteria in each box in order to receive the correlating score.

Development of IdeasPresents inappropriate, irrelevant, or undeveloped ideas or claims to task, purpose, and audience.Presents inconsistent ideas or claims that are less appropriate or partially developed to the task, purpose, and audience.Mostly presents consistent ideas or claims that are appropriate to the task, purpose, and audience.Clearly and consistently pres meaningful and relevant ide claims that are appropriate to the task, purpose, and audience.OrganizationPresents an undeveloped central idea or claim that is irrelevant or inappropriate to the audience, purpose, and task. Lacks introduction and/or conclusion.Partially establishes and inconsistently develops a central idea or claim that is loosely appropriate to the audience, purpose, and task. Lacks introduction and/or conclusion.Mostly establishes and consistently maintains a central idea or claim that is loosely appropriate to the audience, purpose, and task. Lacks introduction and conclusion thatClearly establishes and claims that are appropriate to the audience, purpose, and task, with an introduction and conclusion thatClearly establishes and claims in a logical way that is appropriate to the audience, purpose, and task, with an introduction and conclusion thatClearly establishes and consistently maintains a central idea or claim that is appropriate to the audience, purpose, and task, with an introduction and conclusion thatClearly establishes and consistently maintains a central idea or claim that is appropriate to the audience, purpose, and task, with an introduction and conclusion that leads the reader through a mostlyClearly establishes and claims that are appropriate to the audience, purpose, and task, with an introduction and c	s or sose, tently im ience,	_/4
OrganizationPresents an undeveloped central idea or claim that is irrelevant or inappropriate to the audience, purpose, and task. Lacks introduction and/or conclusion.inconsistently develops a central idea or claim that is loosely appropriate to the audience, purpose, and task. Lacks introduction and/or conclusion.maintains a central idea or claim that is loosely purpose, and task, with an introduction and conclusion thatmaintains a central idea or claim that is appropriate to the audience, purpose, and task, with an introduction and conclusion thatmaintains a central idea or claim that is appropriate to the audience, purpose, and task, with an introduction and conclusion thatmaintains a central idea or claim that is appropriate to the audience, purpose, and task, with an introduction and conclusion thatmaintains a central idea or claim that is appropriate to the audience, purpose, and task, with an introduction and conclusion that	im ience,	
Unclear progression of ideas.minimally connects ideas for the reader with very few transitions.clear progression of ideas with appropriate transitions.progression of ideas with appropriate transitions.	hat gical	/4
Tone and StyleTone or style is inappropriate, irrelevant, or undeveloped, with little to no sentence variety and 	e word hat are nd	/4
Writing ConventionsLacks command of grammar, conventions, fluency, and spelling. Frequent errors interfere with understanding.Demonstrates partial command of grammar, conventions, fluency, and spelling. Errors partially impede 		/4
ReflectionsReflections do not relate to the artifact and include little to no supporting details. Student lacks annotations and/or does not connect the artifact to the appropriate grade-level standards.Reflections attempt to relate to the artifact but include limited examples and supporting details.Reflections are related to the artifact and include some examples and supporting details.Reflections relate to the artifact but include limited examples and supporting details.Reflections are related to the artifact and include some examples and supporting details.Reflections relate to the artifact and include examples and supporting details.	les and early id/or	/4

TOTAL /20

Standards-Based Science Portfolio

Portfolio Requirements

A portfolio in science must include a minimum of <u>three</u> artifacts and a written reflection for each artifact. Any work completed in science courses from grades 10–12 may be included in the portfolio.

Permitted Artifacts

- Data models, including graphs, charts, diagrams, computer graphics, etc.
- Research projects and/or presentations (including citations)

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• Lab reports

The portfolio must meet the following requirements:

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Requirement One: The three artifacts align with the high school NM STEM Ready! Science Standards by meeting the requirements for one of two options (outlined below). Requirement Two: The three artifacts align with at least one of the Engineering, Technology, and Applications of Science (ETS)

standards.

Requirement Three:
 Each artifact must
 represent a different
 Science and
 Engineering Practice
 (SEP).

Requirement Four: Each artifact includes a **written reflection** of 250 to 500 words in length.

Requirement One: The **three artifacts** align with the high school NM STEM Ready! Science standards by representing student knowledge of the science domains and the topics falling under each domain.

Domain	Earth and Space Science	Life Science	Physical Science
Topics	 Space Systems History of Earth Earth's Systems Weather and Climate Human Sustainability 	 Structure and Function Matter and Energy in Organisms and Ecosystems Interdependent Relationships in Ecosystems Inheritance and Variation of Traits Natural Selection and Evolution 	 Structure and Properties of Matter Chemical Reactions Forces and Interactions Energy Waves and Electromagnetic Radiation

Requirement One, continued:

Option 1 One domain

Students may choose to focus on **one domain**, but the portfolio must include artifacts that represent at least **three different topics**.

OR

Option 2 Different domains

Students may choose to focus on **different domains** (either two or three). Each artifact should represent a **different topic**.

Requirement Two: The three artifacts align with at least one of the Engineering, Technology, and Applications of Science (ETS) standards seen below. It is equally as acceptable for a student to submit only one artifact in alignment with an ETS standard as it is for a student to submit two or three artifacts that align with an ETS standard.

ETS Standards

- **1. HS-ETS1-1:** Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
- **2.** HS-ETS1-2: Design a solution to a complex, real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.
- **3.** HS-ETS1-3: Evaluate a solution to a complex, real-world problem based on prioritized criteria and tradeoffs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
- **4.** HS-ETS1-4: Use a computer simulation to model the impact of proposed solutions to a complex, real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.

Requirement Three: Each artifact must represent a different Science and Engineering Practice (SEP). Artifacts may reflect more than one SEP.

Science and Engineering Practices

- Asking questions and defining problems
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking
- Constructing explanations and designing solutions
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

Requirement Four: Each artifact includes a written reflection of 250 to 500 words in length. Students must consider the following questions.

Reflection Questions

Part One: All three reflections must answer questions 1–4.

- **1.** What is the artifact?
- 2. What was the assignment?
- **3.** How does the artifact align to the standard(s) in science? When possible, annotate the artifact.
- **4.** What changes in your thought process occurred as a result of working on this artifact? (i.e., Did your opinion or perspectives change?)

Part Two: Each reflection must also address at least two of the following questions.

- What academic strengths does the artifact highlight?
- What areas for improvement does the artifact highlight?
- How does the artifact demonstrate your ability to think critically?
- How could your work on the artifact be applied to the real world? / What makes the artifact relevant to the real world?

Sample Portfolios

The sample portfolios below are intended to guide students, teachers, and counselors when brainstorming the types of work students *might* choose to submit as artifacts and how the artifacts *might* be combined to meet the science portfolio requirements. The list of artifacts in the sample portfolios below is not exclusive, nor is it nearly extensive enough to represent all possibilities.

Option 1 One domain

	Торіс	Artifact	SEP	ETS Standard
	Artifact One: History of Earth	Gather evidence and support the claim that life on Earth co-evolved with Earth's systems. (HS-ESS2-7)	Obtaining, evaluating, and communicating information	Analyze a major
Sample: Earth & Space	Artifact Two: Weather and Climate	Compile real-time and historical data to predict future weather patterns citing evidence. (HS-ESS3-5)	Analyzing and interpreting data	global challenge to specify qualitative and quantitative criteria and constraints for
Science	Artifact Three: Human Sustainability	Research why a global phenomenon impacting the Earth's systems has occurred and propose possible correctives in a research paper or presentation. (HS-ESS3-4)	Engaging in argument from evidence	solutions that account for societal needs and wants

	Торіс	Artifact	SEP	ETS Standard
Artifact One: Structure and Function	Use data to create visual representations to support findings that plants have feedback mechanisms to maintain homeostasis related to the amount of water in their cells. (HS-LS1-3)	Using mathematics and computational thinking	Evaluate a solution to a complex real-world problem based on prioritized criteria	
Sample: Life Science	Artifact Two: Interdependen t Relationships in Ecosystems	Design two interacting ecosystems, each with their own limiting factors, and determine the implications of each on the other. (HS-LS2-6)	Developing and using models	and tradeoffs that account for a range of constraints— including cost, safety, reliability, and aesthetics, as well as
	Artifact Three: Natural Selection and Artifact Three: Natural Selection and Artifact Three: Natural Selection and Artifact Three: Natural Selection and Artifact Three: Natural Selection and Artifact Three: Natural Selection and Artifact Three: Natural	Constructing explanations and designing solutions	possible social, cultural, and environmental impacts	

ATTACHMENT C

	Торіс	Artifact	SEP	ETS Standard
Sample: Physical Science	Artifact One: Structure and Properties of Matter	Use molecular models and the periodic table to develop models of the atoms involved in the energy production at a coal-fired power plant and nuclear plant. Analyze the differences in the type and amount of energy released. (HS-PS1-1)	Asking questions and defining problems	Design a solution to a complex, real-world
	Artifact Two: Forces and Interactions	Design a device to land cargo on a planetary surface. Include design modifications needed, charts, and graphs. (HS-PS2-3)	Constructing explanations and designing solutions	problem by breaking it down into smaller, more manageable problems that can be solved through engineering
	Artifact Three: Energy	Research and predict which of the various energy production methods conserves the most energy when considering the entire energy production cycle. (HS-PS3-3)	Obtaining, evaluating, and communicating information	

Option 2 Different domains

	Торіс	Artifact	SEP	ETS Standard
Combo	Physical Science Artifact: Structure and Properties of Matter	Use molecular models and the periodic table to develop models of the atoms involved in the energy production at a coal-fired power plant and nuclear plant. Analyze the differences in the type and amount of energy released. (HS-PS1-1)	Asking questions and defining problems	Design a solution to a complex real-world problem by breaking
Combo	Life Science Artifact: Interdependent Relationships in Ecosystems	Design two interacting ecosystems, each with their own limiting factors, and determine the implications of each on the other. (HS-LS2-6)	Developing and using models	it down into smaller, more manageable problems that can be solved through engineering
	Earth Science Artifact: Weather and Climate	Compile real-time and historical data to predict future weather patterns citing evidence. (HS-ESS3-5)	Analyzing and interpreting data	

Science Portfolio Checklist

Student Name: _____

Cumulative Requirements

□ Portfolio contains three independently created student artifacts

Each artifact aligns with the NM STEM Ready! Science Standards and represents a different science topic

□ At least one of the artifacts represents a high school ETS standard

- 1. Analyze a major global challenge
- 2. Design a solution to a complex, real-world problem
- 3. Evaluate a solution to a complex, real-world problem
- **4.** Use a computer simulation to model the impact of proposed solutions to a complex, real-world problem

Standard # _____represented by:
Artifact One Artifact Two Artifact Three

Each artifact represents a different SEP

 \Box Each artifact includes a written reflection of 250 to 500 words in length

Artifact C	Dne			
Title:				
Domain:	□Earth and Space Science	□Life Scienc	e	□Physical Science
Topic:	☐ Space Systems ☐ History of Earth ☐ Earth's Systems ☐ Weather and Climate ☐ Human Sustainability	 Structure and Function Matter and Energy in Organisms and Ecosystems Inter. Relat. in Ecosystems Inher. and Variation of Traits Nat. Selection and Evolution 		□Structure and Prop. of Matter □Chemical Reactions □Forces and Interactions □Energy □Waves and Elec. Radiation
Science and Engineering Practice (at least one must be Asking questions and defining problems Developing and using models Planning and carrying out investigations Analyzing and interpreting data Using mathematics and computational thinking		Constructing e solutions	explanations and designing gument from evidence aluating, and communicating	
Artifact ty	r pe: □Lab report □Data n	nodeling 🗆 F	Research project	

ATTACHMENT C

Artifact T	wo				
Title:					
Domain:	□Earth and Space Science	□Life Scien	ce	□Physical Science	
Topic:	 □ Space Systems □ History of Earth □ Earth's Systems □ Weather and Climate □ Human Sustainability 	□ Matter an Organisms a □ Inter. Rel	and Function nd Energy in and Ecosystems at. in Ecosystems d Variation of ction and	 Structure and Prop. of Matter Chemical Reactions Forces and Interactions Energy Waves and Elec. Radiation 	
Science an	nd Engineering Practice (at least	t one must be	e represented):		
-	questions and defining problems	S	-	explanations and designing	
	oing and using models		solutions		
	g and carrying out investigation	S	Engaging in argument from evidence		
-	ng and interpreting data		Obtaining, evaluating, and communicating		
⊔Using m	nathematics and computational	thinking	information		
Artifact ty	γpe: □Lab report □Data r	nodeling	☐Research project		

Artifact T	hree		
Title:			
Domain:	□Earth and Space Science	□Life Science	□Physical Science
	□ Space Systems □ History of Earth □ Earth's Systems □ Weather and Climate □ Human Sustainability Ind Engineering Practice (at leas questions and defining problem	•	 Structure and Prop. of Matter Chemical Reactions Forces and Interactions Energy Waves and Elec. Radiation
 Developing and using models Planning and carrying out investigations Analyzing and interpreting data Using mathematics and computational thinking 		Obtaining, evaluating, and communicating	
Artifact ty		nodeling Research project	

Science Portfolio Score Summary

Student Name: _____

The signatures below indicate that each reviewer has independently reviewed each artifact using the PED rubric and can verify that each artifact is authentic and independently-created by the student.

Score Summary		
Name of Reviewer	Title/Position	
		Score:
Signature		/20
Name of Reviewer	Title/Position	
		Score:
Signature		/20
Name of Reviewer	Title/Position	
		Score:
Signature		/20
Name of Reviewer	Title/Position	
		Score:
Signature		/20
Name of Reviewer	Title/Position	
		Score:
		/20
Signature		/ 20
	Student Average Passing Score: 15/20 (75%)	/20
	Competency Demonstrated?	□ yes
	• •	🗆 no

Directions: Not all rows of the rubric will be utilized. Please indicate the three Science and Engineering Practices you are evaluating (one per artifact) by selecting the boxes below. Four boxes should remain unselected and not factor into the student's score. No partial scores (i.e. 2.5 points, 3.75 points, etc.) may be given. Students must meet all of the criterion in each box in order to receive the correlating score.

	Below Expectations	Approaching Expectations	Meets Expectations	Exceeds Expectations	
Criterion	(1 point)	(2 points)	(3 points)	(4 points)	Score
□Asking Questions and Defining Problems	 Asks general, imprecise questions that require greater specificity to be testable. Identifies variables with unclear predicted relationships. Identifies inappropriate control(s) (if applicable) and/or inappropriate model(s). Defines a problem or design statement that partially matches the intent of the problem or the constraints. 	 Asks testable questions that require sufficient and relevant evidence to answer. Identifies predicted relationships between variables with minor errors. Identifies control(s) (if applicable) OR relationships in the relevant model(s) with minor errors or omissions. Defines a problem or design statement that matches the intent of the problem and identifies the constraints. 	 Asks precise, testable questions that require sufficient and relevant evidence to answer. Discusses predicted relationships between variables. Identifies appropriate control(s) (if applicable) OR relationships in the relevant model(s). Defines a problem and explains specific design elements necessary for a suitable design (e.g., fit to the problem, addresses the constraints). 	 Asks precise, testable questions that require sufficient and relevant evidence to answer and evaluates the ability to test the questions. Discusses predicted relationships, including quantitative relationships, between variables and appropriate controls (if applicable). Thoroughly explains the predicted relationships in the relevant model(s). Defines a problem precisely and thoroughly explains why specific design elements are necessary for a suitable design (e.g., fit to the problem, addresses the constraints). 	/4
□Developing and Using Models	 Designs and explains a model that generates data to support explanations, predict phenomena, analyze systems, and/or solve problems. Design or explanation of the model includes major errors or omissions. Uses or tests the model and identifies the limitations OR accuracy of the model (with minor errors or omissions) to support explanations, predict phenomena, analyze systems, or solve problems. Explanation or evaluation of the model includes major errors or omissions. 	 Designs and explains a model that generates data to support explanations, predict phenomena, analyze systems, and/or solve problems. Design or explanation of the model includes minor errors or omissions. Uses or tests the model and evaluates the accuracy and limitations of the model to support explanations, predict phenomena, analyze systems, or solve problems. Explanation or evaluation of model includes minor errors or omissions. 	 Designs and explains a model that generates data to support explanations, predict phenomena, analyze systems, and/or solve problems. Uses or tests the model and evaluates the accuracy and limitations of the model to support explanations, predict phenomena, analyze systems, or solve problems. Makes recommendations to revise the model. 	 Designs, explains, and evaluates a model to generate data to support explanations, predict phenomena, analyze systems, and/or solve problems. Uses or tests two different models of the same proposed tool, process, mechanism, or system. Evaluates the accuracy and limitations of the two different models in order to select a model that best fits the evidence or design criteria.]/

ATTACHMENT C

□Planning and Carrying out Investigations	 Designs an investigation that will produce relevant data. Includes incomplete description of data collection procedures that impede replication. Describes general evidence to be used to answer the question(s) with minimal detail. Uses appropriate methods and collects multiple trials (if appropriate) of relevant data, but the data is not consistent within a reasonable range. 	 Designs an investigation that will produce relevant data, but with minimal detail of the variables. Includes data collection procedures that are mostly replicable. Identifies tools/instruments and type of measurements that will produce relevant data and/or evidence to answer the question(s). Uses appropriate methods and collects multiple trials (if appropriate) of relevant data consistent within a reasonable range. 	 Designs an investigation identifying and explaining the variables, including which variables are controlled. Includes sufficiently detailed description of replicable data collection procedures. Describes tools/instrument and type of measurements that will produce relevant data and/or evidence to answer the question(s). Uses appropriate methods and systematically collects multiple trials (if appropriate) of relevant data consistent within a reasonable range. Evaluates the consistency (precision) of the data. 	 Designs and evaluates an investigation identifying and explaining the data that will be collected as evidence. Identifies possible confounding variables. Includes, thorough description of replicable data, collection procedures. Justifies the selection of the tools/instruments and type of measurements that will produce relevant data and/or evidence to answer the question(s). Uses appropriate methods and systematically collects multiple trials (if appropriate) of relevant data consistent within a narrow range. Evaluates the consistency (precision) of the data as well as the appropriateness of the data collection procedures. 	/4
□Analyzing and Interpreting Data	 Attempts to analyze data using tools, technologies, and/or models (e.g., computational, mathematical) in order to identify patterns, to make scientific claims, or to determine an optimal design solution. Analysis or explanation includes major errors or omissions. Identifies the limitations of the data analysis (e.g., measurement error, sample selection) with incomplete or inaccurate elements. 	 Analyzes and explains data using tools, technologies, and/or models (e.g., computational, mathematical) in order to identify patterns, to make reasonable scientific claims, or to determine an optimal design solution. Analysis or explanation includes minor errors or omissions. Identifies the limitations of the data analysis (e.g., measurement error, sample selection). 	 Analyzes and explains data using tools, technologies, and/or models (e.g., computational, mathematical) in order to identify patterns, to make reasonable and supported scientific claims, or to determine an optimal design solution. Evaluates the limitations of the data analysis (e.g., measurement error, sample selection) and identifies some implications for the findings. 	 Analyzes and evaluates data using tools, technologies, and/or models (e.g., computational, mathematical) in order to identify patterns, to make reasonable and well-supported scientific claims, or to determine an optimal design solution. Distinguishes between correlation and causation. Thoroughly evaluates the limitations of data analysis (e.g., measurement error, sample selection) and provides a detailed explanation of the implications for the findings. 	/4

Using Mathematics and Computational Thinking	•Identifies mathematical concepts or methods (e.g., ratio, rate, percent, basic operations, algebra, functions) relevant to scientific questions or engineering problems but applies them with major errors or omissions.	•Applies appropriate mathematical concepts or methods (e.g. ratio, rate, percent, basic operations, algebra, functions) relevant to scientific questions or engineering problems but applies them with minor errors or omissions.	•Accurately applies appropriate mathematical concepts and methods (e.g., ratio, rate, percent, basic operations, algebra, functions) to answer scientific questions or engineering problems.	•Accurately applies appropriate mathematical concepts and methods (e.g., ratio, rate, percent, basic operations, algebra, functions) to represent and solve scientific questions or engineering problems and explains whether the answer "makes sense".	/4
□Constructing Explanations and Designing Solutions	 Proposes a design plan and description that misses one or more important aspects of the criteria, constraints, OR intent of the problem. Uses inaccurate or irrelevant evidence (data or scientific knowledge) to explain how the design addresses the problem/constraints OR identifies an impractical redesign without explanation or supporting evidence. 	 Proposes a design plan and provides a general description that addresses the criteria, constraints, or intent of the problem. Uses minimal relevant evidence (data or scientific knowledge) to explain how the design addresses the problem/constraints OR identifies a potential redesign with limited explanation and supporting evidence. 	 Proposes a design plan with detailed explanation that completely addresses the criteria and constraints. Uses relevant and adequate amounts of evidence (data or scientific knowledge) to explain how the design addresses the problem/constraints AND uses the evidence to explain an appropriate redesign of the original model or prototype. 	 Proposes a design plan and evaluates the suitability of the design to address the criteria, constraints, AND intent of the problem. Uses detailed and multiple sources of evidence (data or scientific knowledge) to evaluate how well the design addresses the problem as well as constraints AND provides a detailed rationale with supporting data for the appropriate redesign of the original model or prototype. 	/4
□Engaging in Argument from Evidence	 The student is able to present arguments on disciplinary content that are unfocused or unsupported with evidence. The student is able to communicate some procedures but lacks details needed for others to replicate. 	 The student is able to present arguments on disciplinary content, which are logical and focused, but lack evidence that supports the argument. The student is able to provide step- by-step procedures that lack the detail needed for others to replicate. 	 When conducting independent research, selects multiple, relevant scientific sources and evaluates the evidence and credibility of each source. The student communicates in a way that is clear and coherent and in which the development, organization and style are appropriate to task, purpose, and audience. 	 When conducting independent research, selects multiple, relevant, high-quality, scientific sources representing a variety of viewpoints and thoroughly evaluates the evidence and credibility of each source. The student communicates in a way that is clear and coherent and in which the development, organization, and style are appropriate to the task, purpose, and audience. 	/4

Dobtaining, Evaluating, and Communicating Information	 When conducting independent research, relies on one or two relevant sources without evaluating their credibility. The student is able to communicate with some clarity but concepts may be inaccurate or inappropriate as related to the task, purpose or audience. 	 When conducting independent research, selects a limited number of relevant scientific sources and evaluates their credibility minimally. The student is able to communicate in a way that is clear and coherent, but the organization and style may not be appropriate to the task, purpose or audience 	 When conducting independent research, selects multiple relevant scientific sources, and evaluates the evidence and credibility of each source. The student communicates in a way that is clear and coherent, and in which the development, organization and style are appropriate to task, purpose and audience. 	 When conducting independent research, selects multiple relevant, high-quality scientific sources representing a variety of viewpoints, and thoroughly evaluates the evidence and credibility of each source. The student communicates in a way that is clear and coherent, and in which the development, organization and style are appropriate to the task, purpose and audience. 	
□Reflection	•Reflections do not relate to the artifact and include little to no supporting details. Student lacks annotations and/or does not connect the artifact to the appropriate grade-level standards.	•Reflections attempt to relate to the artifacts but include limited examples and supporting details. Student partially annotates and/or connects the artifact to the appropriate grade- level standards.	•Reflections are related to the artifacts and include some examples and supporting details. Student annotates and/or connects the artifact to the appropriate grade-level standards.	•Reflections relate to the artifact, are thorough, and include examples and supporting details. Student clearly and consistently annotates and/or connects the artifact to the appropriate grade-level standards.	/4
TOTAL The total will be the sum of the three selected rows and the reflection score.					/16

Rubric content adapted from *Student Work Rubric Optional Dimensions for NGSS Science Integration – Grades 9-12* by the Literacy Design Collaborative. Original source material can be found at: <u>https://ldc.org/sites/default/files/LDC-SCI-TTRubric-Dimensions-9-12-March2016.pdf</u>.

Standards-Based Social Studies Portfolio

Portfolio Requirements

A portfolio in social studies must include a minimum of **three** artifacts and a written reflection for each artifact. Any work completed in social studies courses from grades 10–12 may be included in the portfolio.

Permitted Artifacts	
 Analysis of an event, period, concept, 	Editorial
ideology, or phenomenon	 Historical fiction writing
Blog/wiki page	Position paper
Cause/effect analysis	 Pro-con analysis
Compare/contrast analysis	 Research paper or project
 Document-based question (DBQ) essay 	• Speech (written)

The portfolio must meet the following requirements:

♣

Requirement One: Each artifact aligns with a different benchmarks for US Government or Economics. Requirement Two: At least one artifact includes analysis of a primary source document. **Requirement Three:** Each artifact includes a written reflection of 250 to 500 words in length.

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Requirement One: Each artifact aligns with a different New Mexico Social Studies benchmark for US Government or Economics.

New Mexico Social Studies Benchmarks

US Government

Benchmark 3-A: Demonstrates student ability to compare and analyze the structure, power, and purpose of government at the local, state, tribal, and national levels, as set forth in their respective constitutions or governance documents.

Benchmark 3-C: Demonstrates student ability to compare and contrast the philosophical foundations of the United States' political system in terms of the purpose of government, including its historical sources and ideals, with those of other governments in the world. **Benchmark 3-D:** Demonstrates student ability to understand how to exercise rights and responsibilities as citizens by participating in civic life and using skills that include interacting, monitoring, and influencing.

New Mexico Social Studies Benchmarks

Economics

Benchmark 4-A: Demonstrates student ability to analyze the ways individuals, households, businesses, governments, and societies make decisions, are influenced by incentives (economic and intrinsic) and the availability and use of scarce resources, and that their choices involve costs and varying ways of allocating. **Benchmark 4-B:** Demonstrates student ability to analyze and evaluate how economic systems impact the way individuals, households, businesses, governments, and societies make decisions about resources and the production and distribution of goods and services.

Benchmark 4-C: Demonstrates student ability to analyze and evaluate the patterns and results of trade, exchange, and interdependence between the United States and the world since 1900.

Requirement Two: At least one artifact includes analysis of a primary source document.

Permitted primary source documents include:

- Archives and manuscript material
- Autobiographies and memoirs
- Books, newspapers, and magazine clippings published at the time
- Government publications
- Journals, letters, and diaries

- Photographs, cartoons, posters
- Records of organizations
- Research data, such as public opinion polls and census statistics
- Speeches

Requirement Three: Each artifact includes a written reflection of 250 to 500 words in length. Students must consider the following questions.

Reflection Questions

Part One: All three reflections must answer questions 1-4.

- 1. What is the artifact?
- 2. What was the assignment?
- **3.** How does the artifact align to the benchmark in US Government or Economics? When possible, annotate the artifact.
- **4.** What changes in your thought process occurred as a result of working on this artifact? (i.e., Did your opinion or perspectives change?)

Part Two: Each reflection must also address at least two of the following questions.

- What academic strengths does the artifact highlight?
- What areas for improvement does the artifact highlight?
- How does the artifact demonstrate your ability to think critically?
- How could your work on the artifact be applied to the real world? / What makes the artifact relevant to the real world?

Sample Portfolios

The sample portfolios below are intended to guide students, teachers, and counselors when brainstorming the types of work students *might* choose to submit as artifacts, and how the artifacts *might* be combined to meet the social studies portfolio requirements. The list of artifacts in the sample portfolios below is not exclusive, nor is it nearly extensive enough to represent all possibilities. Students may choose to create a portfolio in whatever way best represents their social studies knowledge, so long as three different benchmarks are represented.

Portfolio Sample: US Government benchmarks only

- Artifact One, Benchmark 3-A: Editorial identifying a policy conflict between levels of government (e.g., state/federal) that analyzes which level of government has legal standing to deal with it and proposes a solution to the conflict. (e.g., gambling, marijuana, water/natural resources, education)
- Artifact Two, Benchmark 3-C: Presentation comparing the ideas in a given primary source selection (historical government documents, historical essays, etc.) with the way that the ideas have been implemented in contemporary US government.
- <u>Artifact Three, Benchmark 3-D:</u> Policy proposal (from the perspective of media, interest groups, pollsters, lobbyists, grassroots lobbyists, etc.) for an issue of local/state/tribal/national importance that includes development of a strategy to get the policy implemented.

Portfolio Sample: Economics benchmarks only

- <u>Artifact One, Benchmark 4-A:</u> Hypothetical investment portfolio that tracks the performance of the portfolio, analyzes economic ramifications, articulates the strategy used, and evaluates its effectiveness.
- <u>Artifact Two, Benchmark 4-B</u>: Analysis of economic data (unemployment, inflation, economic growth, etc.) to inform and develop a business plan that can be presented to potential investors from the perspective of a business owner.
- <u>Artifact Three, Benchmark 4-C:</u> Newspaper article utilizing primary source documents to evaluate the causes of the Great Depression and the economic impacts of New Deal programs.

Portfolio Sample: Combination of US Government and Economics benchmarks

- <u>Artifact One, Benchmark 3-C:</u> Speech taking the position of a federalist or anti-federalist arguing for or against a strong federal government system.
- <u>Artifact Two, Benchmark 4-A:</u> Editorial addressing the importance of programs that develop employability skills in the schools, such as school-to-work initiatives, service learning, CTE courses, mentorship, internships, as they relate to the needs of the state and local business community.
- <u>Artifact Three, Benchmark 3-A:</u> Compare/contrast essay on the effectiveness of checks and balances between local, state, tribal, and/or national governments or between two administrations, Congress/legislatures, or courts.

The sample artifacts above could include, but not be exclusively limited to, student-created political cartoons, data collection/analysis (polls), maps, brochures/magazines, recorded participation in a discussion/debate, PowerPoint presentations, student-created websites, interactive games/projects, and infographics.

Social Studies Portfolio Checklist

Student Name: _____

Cumulative Requirements

□Portfolio contains three independently created student artifacts

Each artifact represents a different US Government or Economics benchmark

 $\Box At$ least one artifact includes analysis of a primary source

 \Box Each artifact includes a written reflection of 250 to 500 words in length

Artifact One				
Title:				
Benchmark:	Government 3-A Economics 4-A	Government 3		□Government 3-D □Economics 4-C
Artifact type:				
or phenomen Blog/wiki p Cause/effec Compare/ca Document-	age ct analysis ontrast analysis based question (DBQ) ce analyzed:	essay	□Hi □Pc □Pr □Re □Sp	ditorial distorical fiction writing position paper pro-con analysis desearch paper or project peech (written)
Artifact Two				
Title:				
Benchmark:	□Government 3-A □Economics 4-A			□Government 3-D □Economics 4-C
Artifact type:				
 Analysis of an event, period, concept, ideology, or phenomenon Blog/wiki page Cause/effect analysis Compare/contrast analysis Document-based question (DBQ) essay 		□ H □ Pe □ Pi □ Re	Editorial Historical fiction writing Position paper Pro-con analysis Research paper or project Speech (written)	

Artifact Two	(continued)	
AILIIALLIWU	Continueur	

Primary Source analyzed: \Box yes \Box no

If yes, name of primary source: ______

Artifact Thre	e			
Title:				
Benchmark:	□Government 3-A	□Government 3	8-C	□Government 3-D
	Economics 4-A	Economics 4-E	3	Economics 4-C
Artifact type:				
□Analysis of	an event, period, cond	ept, ideology,	ΠE	Editorial
or phenomen	on		ШΗ	Historical fiction writing
□Blog/wiki pa	age		□Position paper	
□Cause/effec	ct analysis		□Pro-con analysis	
Compare/contrast analysis		□Research paper or project		
Document-based question (DBQ) essay		□Speech (written)		
Primary Source analyzed: 🗆 yes 🛛 no				
If yes, name o	of primary source:			

Social Studies Portfolio Score Summary

Student Name: _____

The signatures below indicate that each reviewer has independently reviewed each artifact using the PED rubric and can verify that each artifact is authentic and independently-created by the student.

Score Summary		
Name of Reviewer	Title/Position	
		Score:
Signature		/16
Name of Reviewer	Title/Position	
		Score:
Signature		/16
Name of Reviewer	Title/Position	
		Score:
Signature		/16
Name of Reviewer	Title/Position	
		Score:
Signature		/16
Name of Reviewer	Title/Position	
		Score:
Signature		/16
	Student Average	
	Passing Score: 12/16 (75%)	/16
	Competency Demonstrated?	□ yes □ no

Social Studies Portfolio Rubric

Directions: All rows of the rubric must be scored. No partial scores (e.g., 2.5 points, 3.75 points) may be given. Students must meet all of the criteria in each box in order to receive the correlating score.

Criterion	Below Expectations (1 point)	Approaching Expectations (2 points)	Meets Expectations (3 points)	Exceeds Expectations (4 points)	Score
Benchmark Alignment	 Artifacts do not align with the selected benchmarks. Artifacts demonstrate little to no mastery of the relevant performance standards for each of the selected benchmarks. 	 Artifacts attempt to, but do not sufficiently align to, the selected benchmarks. Artifacts demonstrate developing mastery of the relevant performance standards for each of the selected benchmarks. 	 Artifacts mostly align with the selected benchmarks. Artifacts demonstrate mastery of the relevant performance standards for each of the selected benchmarks. 	 Artifacts fully align with the selected benchmarks. Artifacts demonstrate mastery of the relevant performance standards for each of the selected benchmarks and make purposeful connections to additional content standards. 	/4
Use of Evidence/ Citations	 Lacks evidence or includes evidence that does not contribute to the overall purpose and quality of the artifacts. Contains gross factual inaccuracies that detract from the product's purpose and effectiveness. Evidence is not cited or does not come from credible sources. 	 Selects evidence that is weak, misinterpreted, or underdeveloped and minimally contributes to the overall purpose and quality of the artifacts. Contains factual inaccuracies that slightly detract from the overall purpose and effectiveness of the product. Evidence is referenced but attempts at citation are inaccurate or incomplete. Some evidence may come from questionable sources. 	 Selects evidence that appropriately and adequately contributes to the overall purpose and quality of the artifacts. Contains no factual inaccuracies. Evidence is accurately cited and pulled from credible sources. 	 Precisely selects evidence that appropriately and substantially contributes to the overall purpose and quality of the artifacts. Contains no factual inaccuracies. Evidence is accurately cited and pulled from a variety of credible sources. 	/4

Social Studies Portfolio Rubric

	•Organization and	•Organization and	 Organization and 	•Organization and	
	presentation detracts from the	presentation somewhat	presentation adequately	presentation enhances the	
	quality of the artifacts.	detracts from the quality of	supports the quality of the	quality of the artifacts.	
Presentation &		the artifacts.	artifacts.		/4
Conventions	 Language is undeveloped or 			 Language is consistently 	
	unclear.	 Language is understandable 	 Language is mostly clear, 	clear, specific, and utilizes	
		but lacks clarity, specificity,	specific, and utilizes academic	academic vocabulary precisely	
		and academic vocabulary.	vocabulary.	and purposefully.	
	 Reflections do not relate to the 	 Reflections attempt to relate to 	 Reflections are related to the 	 Reflections relate to the 	
	artifacts and include little to no	the artifacts but include limited	artifacts and include some	artifact, are thorough, and	
	supporting details.	examples and supporting details.	examples and supporting details.	include examples and supporting details.	1.
Reflection	 Student lacks annotations 	 Student partially annotates 	 Student annotates and/or 		/4
	and/or does not connect the	and/or connects the artifact to	connects the artifact to the	 Student clearly and consistently 	
	artifact to the appropriate grade-	the appropriate grade-level	appropriate grade-level	annotates and/or connects the	
	level standards.	standards.	standards.	artifact to the appropriate grade-	
				TOTAL	/16

Demonstration of Competency Programs of Study Required Coursework Option

For each program of study below, students must complete **THREE courses in sequence with a GPA of at least 3.0** in order for a program of study to be used as a demonstration of competency. Courses are listed below in their appropriate sequence.

Content Area	Program of Study	Course Code	Course Name
		0207	Accounting
		0210	Advanced Accounting
Mathematics	Finance/Accounting	0212	Cost Accounting
		0299 or 2060	Dual Credit in Finance/Accounting or AP Statistics
Science		0133	Intro to the Science of Agriculture
	Animal Systems	0161	Science of Large Agriculture Animals
Reading	,	0162	Science of Small Animals
		0199	Dual Credit in Animal Systems
Writing		1905	Introduction to Multimedia Writing & Technology
	Multimedia	1906	Multimedia Productions I
	Production	1907	Multimedia Productions II
Reading		1904 or 1999	Multimedia Productions III or Dual Credit in Multimedia Communications
Mathematics	Clean Energy	1678	Advanced Career - Clean Energy Systems
mathematics	Technology –	1679	Advanced Career - Clean Energy Applications
Science	Advanced Career	1680	Advanced Career - Clean Energy Strategies
Science	SREB	1681	Advanced Career - Clean Energy Innovations
Mathematics	Programming &	0344	PLTW Computer Science Essentials
	Cybersecurity -	0345	AP PLTW Computer Science Principles
Science	PLTW	0346	AP PLTW Computer Science A
		0347	PLTW Cybersecurity
	- 0.5	2503	Community Protection
	Emergency & Fire	2523	Fire Fighting
Social Studies	Management Services	1517	Emergency Medical Technician
	Services	2599	Dual Credit in Emergency & Fire Management Services
		0133	Intro to the Science of Agriculture
Science	Plant & Biotechnology	0141 or 0143	Horticulture/Botany or Greenhouse/Nursery Operations
Reading	Systems	0144 or 145	Landscape or Floriculture
		0199	Dual Credit in Plant & Biotechnology Systems
		0912	Auto Technologies
Colonar	Transportation/Auto	0920	Auto Tech 2
Science		0921	Auto Tech 3
		0999	Dual Credit in Transportation/Auto

ATTACHMENT D

Content Area	Program of Study	Course Code	Course Name
		2752	Contemporary World Issues
Social Studies	Foreign Services	2504	Public Administration
	Ũ	0294 or 0295	AP Microeconomics or AP Macroeconomics
		0299	Dual Credit in Foreign Services
		0221	Introductory Business
	Business	0223	Business Management
Social Studies	Management	0294 or 0295	AP Microeconomics or AP Macroeconomics
		0299	Dual Credit in Business Management
Mathematics	Computer	0320	Computer Technology Assistant I - GenYES
	Technology	0321	Computer Technology Assistant II - GenYES
Science	Assistant - GenYES	0322	Computer Technology Assistant III - GenYES
		0336	AP Computer Science Principles
	Law	2761	Law Studies
Writing		2762	Consumer Law
		2763	Business Law
		2765 or 2773	Mock Trial or AP Psychology
	Global Logistics &	0925	Advanced Career- Introduction to Logistics
	Supply Chain	0926	Advanced Career- Functional Areas in Logistics
Reading	Management – Advanced Career	0927	Advanced Career- Global Logistics Management
	SREB	0928	Advanced Career- Logistics & Supply Chain Management
		0480	NCCER Core Curriculum-Intro
Mathematics	Carpentry - NCCER	0481	NCCER Carpentry Level 1
		0482	NCCER Carpentry Level 2
		0483	NCCER Carpentry Level 3
		0314	Database Foundations – Oracle Academy
Mathematics	Database Design &	0330	Database Design & Programming – Oracle Academy
Science	Programming – Oracle Academy	0331	Database Programming with SQL – Oracle Academy
		0399	Dual Credit in Computer & Information Technology

ATTACHMENT D

Content Area	Program of Study	Course Code	Course Name
		0314	Database Foundations – Oracle Academy
Mathematics	Database Design &	0330	Database Design & Programming – Oracle Academy
Science	Programming – Oracle Academy	0331	Database Programming with SQL – Oracle Academy
		0399	Dual Credit in Computer & Information Technology
		2414	Welding
Science	Manufacturing -	2416	Welding 2
Stichec	Welding	2417	Welding 3
		2499	Dual Credit in Manufacturing - Welding
		1615	PLTW Intro to Engineering Design
		1617	PLTW Principles of Engineering
Science	Engineering - PLTW	1616 or 1739	PLTW Digital Electronics or AP Physics 1
		1620 or 1740	PLTW Capstone-Engineering Design/Development or AP Physics 2
	Biomedical Sciences - PLTW	1660	PLTW Principles of Biomedical Sciences
Science		1661	PLTW Human Body Systems
Selence		1662	PLTW Medical Intervention
		1664	PLTW Biomedical Innovation
		0504	Nutrition
	Restaurants &	0532	ProStart I
Social Studies	Food/Beverage	0533	ProStart II
	Services	0539 or 0599	ProStart Internship or Dual Credit in Restaurants & Food/Beverage Services
		0323	Computer Science/Programming
Mathematics	Java Programming	0324	Programming
Science	- Oracle	0325 or 0326	Advanced Programming or Computer Programming-Other Lang
		0327 or 0336	AP Computer Science A or AP Computer Science Principles
	Health Informatics-	1560	Advanced Career-Health Informatics Data & Use
Science	Advanced Careers SREB	1561	Advanced Career-Health Informatics Transforming Data into Information
	SKER	1562	Advanced Career-Health Informatics Transforming Info into Knowledge
		1563	Advanced Career-Health Informatics Problems & Solutions

ATTACHMENT D

Content Area	Program of Study	Course Code	Course Name
	Innovations in	1670	Advanced Career-Nature of Science & Technology
Science	Science & Technology –	1671	Advanced Career-Core Applications of Science/Technology
	Advanced Careers SREB	1672	Advanced Career-Impacts of Science & Technology
		1673	Advanced Career-Creativity & Innovations
Mathematics	Aerospace Engineering – Advanced Careers SREB	1674	Advanced Career-Fundamentals Aerospace Tech
		1675	Advanced Career-Advanced Aerospace Technology
Science		1676	Advanced Career-Aeronautics Engineering Apps
		1677	Advanced Career-Astronautics Engineering Apps
		0550	Child Development
Social Studies	Teacher Education	0562	Teacher Academy 1
		0563	Teacher Academy 2
Reading		0597 or 0599	Teaching & Practicum or Dual Credit Teacher Education

Demonstration of Competency Industry-Recognized Credential and Certificate Option

The options available to students in the world of Career and Technical Education are constantly evolving and growing. However, with the exception of additions to the list of credentials and certificates below, the list will not be subject to change for the class of 2022.

The PED will continue to review and explore new certificates and credentials and welcomes petitions for the inclusion of new credentials and certificates. Those seeking to make a petition should email the College and Career Readiness Bureau at grad.questions@state.nm.us. Petitions should be supported by a rationale (e.g., XYZ certification is a rigorous assessment that is aligned with industry standards, is valued in the field among hiring managers, and assesses high levels of math that correspond with common core algebra I and geometry standards.)

Decisions of whether to accept petitions for additional credentials and certificates will be made by the PED on a case-by-case basis.

Content Area	Industry-Recognized Credentials and Certificates
Mathematics	Auto CAD Automotive Technician (ASE) National Center for Construction Education & Research (NCCER) Carpentry NCCER Electrical NCCER HVAC NCCER Industrial Maintenance NCCER Masonry NCCER Plumbing NCCER Sheet Metal NCCER Sheet Metal NCCER Welding Welding Certification - AWS
Reading	Certified Landscape Technician (CLT) Certified Veterinary Assistant Floriculture Adobe Certified Professional
Writing	Adobe Certified Professional DECA School Based Enterprise Individual Certification
Social Studies	 A*S*K Assessment of Skills and Knowledge for Business Certificate Film Production Certificate Child Development Associate Educational Assistant License Paraprofessional Certification NM Early Care Education and Family Support Police Explorer Certification

Content Area	Industry-Recognized Credentials and Certificates
Science	Automotive Service Technician (ASE) Basic Wildland Firefighting Certification Certificate in Biofuels Certification: Gas Metal Arc Welding Certification: Gas Tungsten Arc Welding Certification: Shielded Metal Arc Welding Certified Coding Associate (CCA) Certified Medical Assistant (CMA) Certified Novell Administrator Certified Novell Administrator Certified Novell Administrator Certified Novell Administrator Certified Novell Administrator Certified Novell Administrator Certified Novel Associate Certified Otovell Administrator Certified Novel Associate Certified Use Designer Certified Use Technician Comp TIA Security+ Comp TIA Security+ Comp TIA Server+ Computer Maintenance Technician Dental Assistant (CDA) Emergency Medical Technician (EMT) Flux Core Arc Welding D9.4 4 2F i-Net+ Certification j Cert JAVA Programmer Certification Pharmacy Technician (CPHT) PhlebFlux Core Arc Welding D9.4 4 2F i-Net+ Certification j Cert JAVA Programmer Certification Pharmacy Technician (LVN) Macromedia Director Certification Licensed Vocational Nurse (LVN) Macromedia Director Certification Microsoft Technology Associate: Windows Operating System Fundamentals National Health Care Foundation Skill Standards NCCER Welding Phlebotomy Technician (CPT) Health Assistant License Welding Technician Certified Veterinary Assistant



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Kurt Steinhaus, Ed.D. Secretary of Education, Designate

MICHELLE LUJAN GRISHAM GOVERNOR

August 24, 2021

MEMORANDUM

TO: Superintendents, Charter School Administrators School Counselors, District Test Coordinators

FROM: Gwendolyn Perea Warniment, PhD, Deputy Secretary of Teaching, Learning & Assessment

RE: Cohorts 2022 and 2203 Demonstration of Competency and Pandemic Related Non-Standard Administration Waiver Request for Interim Assessments and Screeners

This memorandum provides information on requirements pertaining to graduation demonstration of competency for cohorts 2022 and 2023 and pandemic related non-standard administration waivers for interim assessments and screeners.

Demonstration of Competency Allowances for Cohorts 2022 and 2023

Due to pandemic-related interruptions to standardized testing, PED allows the continuation of the passing of required coursework to demonstrate competency for cohort 2022 and 2023 graduates, as allowed for cohort 2021.

Pandemic-Related Non-Standard Administration Waiver Request

All state and federally required assessments and screeners per the <u>Assessment-Schedule-2021-</u> <u>22</u> must be administered on-site at an official district location to ensure valid results. However, due to extenuating circumstances related to the pandemic, districts and charters may submit a non-standardized test administration waiver. The waiver can be located on the <u>DTC Resources</u> <u>page</u> and submitted to <u>ped.assessment@state.nm.us</u>.

PED will host optional office hours for District Test Coordinators (DTCs) to address questions related to this memorandum on August 27, 2021, at 9:00 AM MT. Office hours registration is available <u>here.</u>

For questions regarding this memorandum, please contact Deputy Director of Assessment, Alicia Abney, at Alicia.Abney@state.nm.us.

Assessment Related Updates August 24, 2021 Page **2** of **2**

cc: Kurt Steinhaus, PhD., Secretary of Education
Vickie Bannerman, Ed.D., Deputy Secretary of Identity, Equity & Transformation
Katarina Sandoval, Deputy Secretary of Academic Engagement & Student Success
Alexis Alvarez, Interim Director, Research, Evaluation and Accountability
Jacqueline Costales, Division Director, Curriculum and Instruction
Deborah Dominguez-Clark, Division Director, Special Education
Brenda Kofahl, Director, Early Childhood
Elaine Perea, Director of College and Career Readiness
John Sena, Director of Policy
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