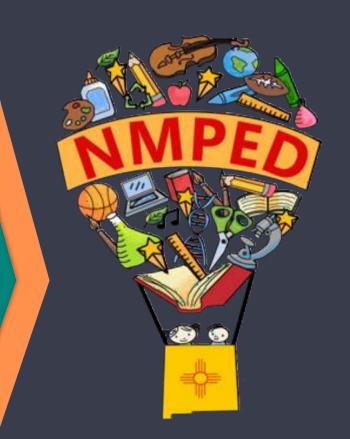
### **Graduation Requirements LESC Subcommittee Workshop**

October 5, 2021

Gwen Perea Warniment, PhD, Deputy Secretary Lynn Vasquez, Director Yanira Vazquez, Director Elaine Perea, PhD, Director



*Investing for tomorrow, delivering today.* 

#### **Presentation Overview**

- ☐ Defining the Issue and PED Recommendations
- ☐ Assessment Considerations
- ☐ Course Considerations

#### **Current Graduation Requirements**



New Mexico Statute 22-13-1.1

New Mexico Administrative Code 6.19.7 and 6.29.1.9

#### Martinez and Yazzie v. State of New Mexico

Judge Singleton's ruling included a directive that the state take immediate steps to "ensure teaching is tailored to the unique cultural and linguistic needs of students, including English-language learners and indigenous communities."

Three major limitations with current graduation policy.

#### 1. Restrictive Course Requirements

- Current course requirements restrict the options students have on their way to graduation
- Current requirements minimize options for students in preparation for their post graduation endeavors
- Restrictive options limit school's ability to serve the unique cultural and linguistic needs of students

#### 2. Mandatory "Electives"

- Students are engaged in school when they are interested in their classes and see them as important to their future, and when they feel they belong in school.
- Engaged students have good attendance, come to class prepared, and are able to navigate daily challenges in and out of school.
- Current graduation requirements include complex checklists of unrelated choices.

#### 3. A Long List of Exams

- Requiring a set of graduation exams is contrary to the recommendations of several major research organizations
- Offering a menu of assessment options might appear to be fair, but these options cannot be technically compared in a valid manner
- Standardized assessments do not measure dispositions that many New Mexico communities value: critical thinking, problem-solving, creativity, civic-mindedness, etc.

#### LESC analysis of top 15 states found high variability

- NM requires more units than many other states
- NM requires more elective units in a student's schedule than many other states

A strong education system is more than the sum of its parts and what is most crucial is that components reinforce one another.

(NCEE Blueprint for a High-Performing Education System)

#### **Proposed Solution**

- Update New Mexico's graduation requirements to:
  - Allow students space to develop their interests
  - Make competency the foundation of every class
  - Encourage local communities to develop graduate profiles
  - Promote community engagement by offering capstone projects

# **Updating Graduation Requirements to meet ALL Student's Needs**

Gwen Perea Warniment, PhD, Deputy Secretary



#### **Graduation Requirements**



New Mexico Statute 22-13-1.1

New Mexico Administrative Code 6.19.7 and 6.29.1.9

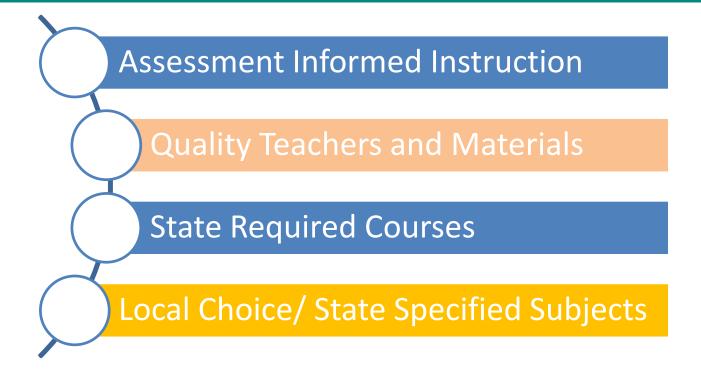
#### Graduation Requirements



#### **Equitable Access to College**

# ALL STUDENTS must take college entrance exam (or suitable replacement assessment for SPED and EL)

#### Tenets for Change



#### Components of EVERY Required Course



#### 4 Mathematics Units

| Non-negotiable courses      | Coursework Options             | Pathway Substitutions            |
|-----------------------------|--------------------------------|----------------------------------|
| Algebra I                   | Computer Science A             | Architecture CTE Concentration   |
| Geometry                    | Comp Science Principles        | STEM CTE Concentration           |
| OR                          | Algebra II                     | Finance CTE Concentration        |
| Integrated Pathway: Math I  | Algebra II/Trig                | IT CTE Concentration             |
| Integrated Pathway: Math II | Probability and Statistics     | Manufacturing CTE Concentration  |
|                             | Applied Math                   | Transportation CTE Concentration |
|                             | Fractal Mathematics            | Set Design POS                   |
|                             | Integrated Pathway: Math III   |                                  |
|                             | Mathematical Modeling          |                                  |
|                             | AP and IB courses in Math      |                                  |
|                             | Dual Credit College Level Math |                                  |

#### 4 Language Units\*

| Non-negotiable courses | Coursework Options                 |
|------------------------|------------------------------------|
| ELA 1/ELA-ELD I        | ELA 4 /ELA-ELD IV                  |
| ELA 2 /ELA-ELD II      | Literacy Ready                     |
| ELA 3 /ELA-ELD III     | Research/Technical Writing         |
|                        | Creative Writing                   |
|                        | Journalism                         |
|                        | Communications                     |
|                        | Debate                             |
|                        | World Language levels 2+           |
|                        | English Learner Development        |
|                        | AP and IB courses in Language Arts |
|                        | Dual Credit College Level Language |

<sup>\*</sup> with major emphasis on grammar, nonfiction writing and literature

#### 4 Science Units

| Non-negotiable courses | Coursework Options                 | Pathway Substitutions        |
|------------------------|------------------------------------|------------------------------|
| 2 Laboratory Sciences  | Core Science codes                 | Health CTE Concentrator      |
|                        | Computer Science A                 | STEM CTE Concentrator        |
|                        | Computer Science Principles        | Agriculture CTE Concentrator |
|                        | Scientific Technologies            |                              |
|                        | Health Science                     |                              |
|                        | AP and IB courses in Science       |                              |
|                        | Dual Credit College Level Science  |                              |
|                        | Dual Credit College Level Computer |                              |
|                        | Science                            |                              |

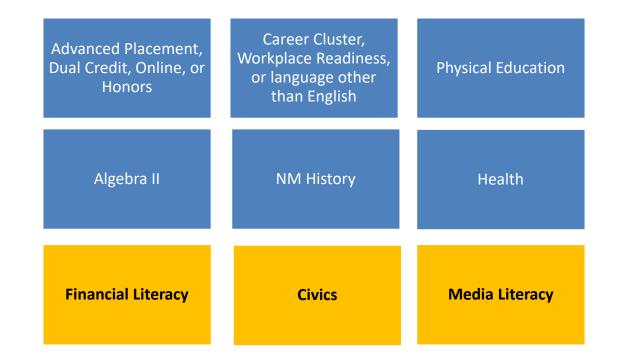
#### 4 Social Studies Units

| Non-negotiable courses    | Coursework Options                  | Pathway Substitutions          |
|---------------------------|-------------------------------------|--------------------------------|
| US History & Geography    | 0.5 U.S. Government                 | Community Learning w/ Capstone |
| World History & Geography | 0.5 N.M. History                    | Business CTE Concentration     |
|                           | 0.5 Civics                          | Government CTE Concentration   |
|                           | Economics & Financial Literacy      | Law & Safety CTE Concentration |
|                           | AP and IB courses in Social Studies | Teacher Education POS          |
|                           | Dual Credit College Level History   |                                |
|                           | Dual Credit College Level Social    |                                |
|                           | Science                             |                                |

#### 8 Elective Units

| Non-negotiable courses                             | Coursework Options                    |
|--|---------------------------------------|
| 2 Unit Pathway Concentration                       | any offered academic course           |
| • Sports   | any offered holistic course           |
| <ul> <li>World Language</li> </ul>                 |                                       |
| Fine Arts  |                                       |
| <ul> <li>Military</li> </ul>                       |                                       |
| CTE program  |                                       |
| <ul> <li>Community Learning w/ Capstone</li> </ul> |                                       |
| <ul> <li>2 units of Work Based Learning</li> </ul> | All Dual Credit College Level Courses |

#### Proposed Current Requirements Eliminated



## Assessment Considerations

Assessment and Learning Management Systems Division Lynn Vasquez, Director

#### Demonstration of Competency Requirements



- A standardized measure in five content areas:
  - Math
  - Reading
  - Writing
  - Science
  - Social studies

#### Historical Context: Demonstration of Competency

#### Prior to 2019

- New Mexico required students to use the annual spring state assessment (SBA, PARCC, etc) as a primary demonstration of competency
- District and Charters had to request a waiver from the PED to use an alternative demonstration of competency.

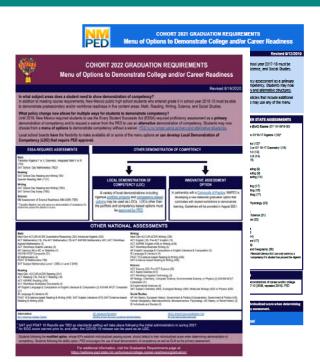
Multiple attempts model but high cost & high stress

#### 2019 to Present

Students may now choose from a menu of options to demonstrate competency; all options are "equivalent" demonstrations of competencies.



Leveling model but inappropriate equivalencies



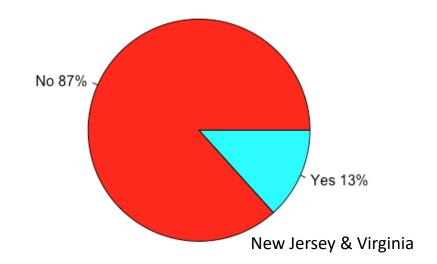
https://webnew.ped.state.nm.us/bureaus/collegecareer-readiness/graduation/

#### Survey of States on Exit Exam to Graduate

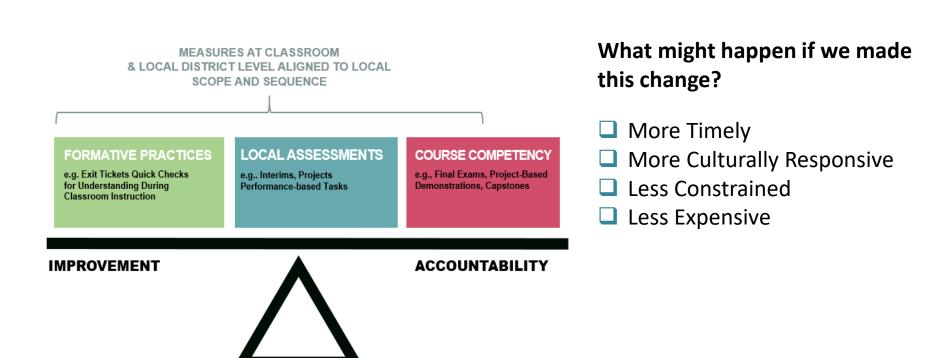
States Requiring a Graduation Exam

No 88% Yes 12%

Top 15 Education States Requiring a Graduation Exam



#### Shifting Demonstration of Competency



#### Capstone projects as an assessment alternative

#### 18 month grant to define and pilot new assessment alternatives

- Senior capstone exhibitions
- Community development of graduate profile
- PED workgroups re-envisioned capstones as a course

Schools and districts that piloted the senior capstone requirements in 2021 included:

- ACE Leadership
- Amy Biehl High School
- Cuba Independent School District
- Farmington Municipal Schools
- Health Leadership

- Santa Fe Public Schools
- Siembra Leadership
- South Valley Academy
- Vista Grande HS
- Zuni Public Schools

## **Assessment Breakout Activity**

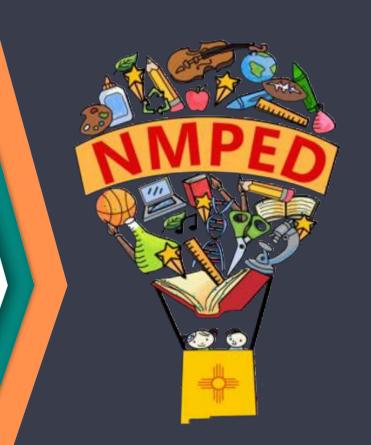


#### Activity 1: Assessment Breakout Discussion

- 1. You will receive a handout with a table titled "What is the Role of Assessments?"
- 2. Fill out the chart on your own. (5 minutes)
- 3. After 5 minutes, LESC staff will notify you to find a talking partner to briefly discuss your responses. (5 minutes)
- 4. We will then do a subcommittee share out. (10 minutes)

## High School Core Academic Courses Considerations

Math and Science Bureau Yanira Vazquez, Director



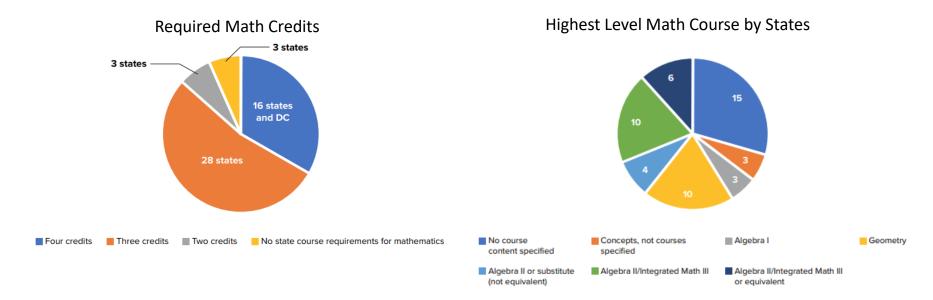
#### Current Coursework Requirements

| Courses   | Credits Required |
|---|------------------|
| Math in high school (one of which shall be the equivalent to or higher than the level of Algebra II)            | 4 credits        |
| English with major emphasis on grammar, nonfiction writing, and literature                                      | 4 credits        |
| Science   | 3 credits        |
| U.S. history and geography, world history and geography, government and economics and N.M. History (0.5 credit) | 3.5 credits      |
| Physical education  | 1 credit         |
| Career cluster course, workplace readiness, or a language other than English                                    | 1 credit         |
| Electives that meet department content and performance standard   | 7.5 credits      |
| Health  | 1 course         |

#### Current Trends – Mathematics Education

- A recent 50-state policy scan found that 29 states recommend, but do not require, Algebra 2 for high school graduation. (Achieve, 2020)
- Some postsecondary institutions continue to require Algebra 2 for admission, making it the most common third credit math option. (ERDC, 2020; ECS, 2020)
- There is strong evidence that students can succeed in rigorous college level math without being proficient in Algebra 2. (ECS, 2020)

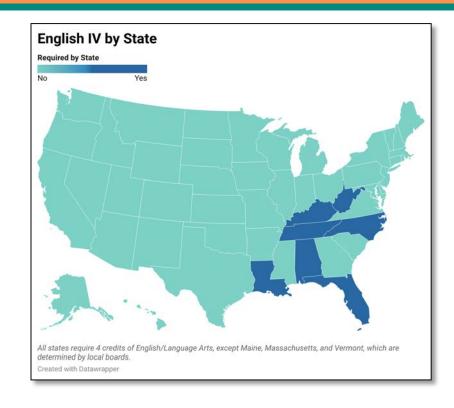
#### Mathematics by State



Achieve, 2020

#### English Language Arts by State

- Forty-seven states require four credits of English Language Arts
- Local school boards in three states determine requirements
- Only seven states require English I through IV as courses
  - Others allow various course combinations or individual courses



#### World language and/or English requirements

Major national research indicates 2 or more years of "foreign" language are critical for developing critical thinking skills

- 2 in a single language Center for American Progress 2018
- 3 National Center for Educational Statistics 2001
- 2 or more U.S. Department of Education 2006
- 2 State Scholars Initiative 2005
- Linguistically Responsive Education is an essential component as we consider the needs of the identified groups in Yazzie Martinez

#### Science in New Mexico

- Next Gen Science Standards includes important constructs throughout the curricula
  - Engineering
  - Computer and Media Literacy
- Computer Science and Health are options for science credit
- Almost all states specify some laboratory courses

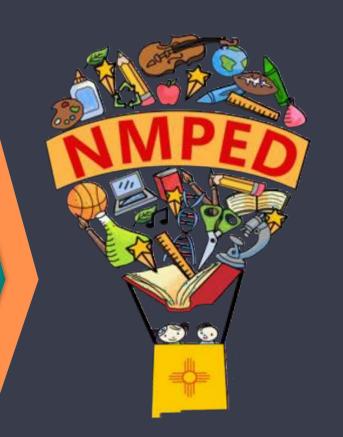
| HS Science Enrollment SY 2020-2021 |                          |  |
|------------------------------------|--------------------------|--|
| <b>Course Name</b>                 | <b>Students Enrolled</b> |  |
| Biology/Life Science               | 24,095                   |  |
| Chemistry                          | 19,556                   |  |
| Physics                            | 10,578                   |  |
| Other Courses                      |                          |  |
| Environmental Science              | 5,328                    |  |
| Anatomy & Physiology               | 2,158                    |  |

#### **Social Studies**

- Few states <u>require</u> courses in state-specific history courses
- Financial literacy is often integrated into economics courses in social studies (instead of math)
  - States include: AL, AR, AZ, CO, NC, NH, FL & WV
- Standards are also an important part of how we influence the specific information students learn

# High School Elective Courses Considerations

College and Career Readiness Bureau Elaine Perea, Director



## **Current Coursework Requirements**

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| Career cluster course, workplace readiness, or a language other than English                                    | 1 credit         |
| Electives that meet department content and performance standard   | 7.5 credits      |
| Health  | 1 course         |

### The Purpose of Electives ... Student Choice and Voice

#### How do...

- cultural and linguistically relevant courses,
- hands-on experiential learning,
- in-depth career exploration, and
- work-based learning

...fit into graduation requirements?

Remember when...

## Physical Education & Health

#### 1 unit of:

Interscholastic Sports, JROTC, or Marching Band

#### **AND**

1 *course* in health, in middle or high school

| Available Elective Units | 7.5 |
|--------------------------|-----|
| Sports or Music          | 4   |
| Second Year of Language  | 1   |
| Fourth Year of Science   | 1   |
| CTE Completer            | 3   |

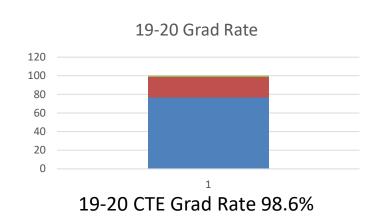
- States with no requirement
  - Arizona, Maine, Minnesota, Oklahoma, Wyoming
  - Colorado, Pennsylvania (local)
  - Idaho (.5 health only)
- States with higher requirements
  - California, Louisiana, Nevada, Oregon, Utah, Virginia, Washington, West Virginia 2 units
  - Massachusetts K-12, New Jersey 3 units
- Other Interesting ideas
  - Kansas 1 unit covers physiology, safety, first aid
  - Vermont proficiency based PE & health

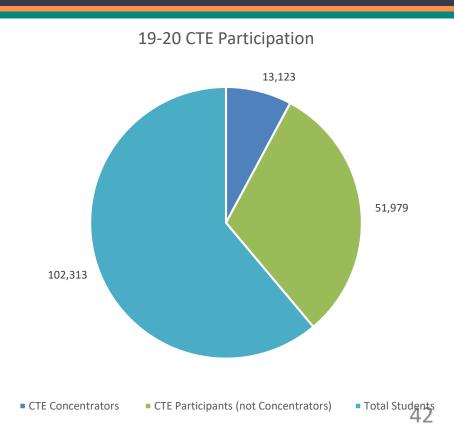
## CTE Completion Increases Graduation Rates *but* Access is Limited

1 unit of

Career Cluster,

Workplace Readiness, or Language other than English.





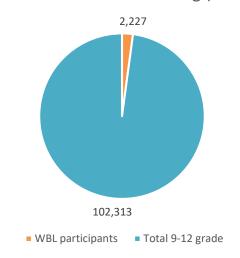
## Other States Focus on CTE as a requirement

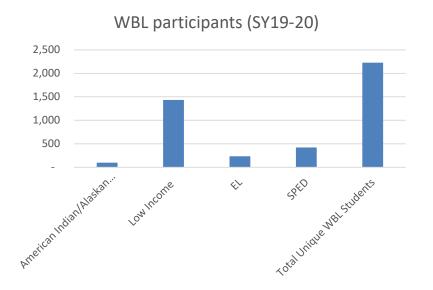
- At least 12 states offer an endorsement, seal, or special diploma
- Several states require a certain number of electives to be "career focused" or "aligned with students' post-high school plans."
- At least two states allow students to replace one of the five required competency exams with a comparably rigorous technical, arts or other assessment, as defined and approved by the state.

### Only 2% of students have access to Work Based Learning

#### **Workplace Readiness Courses**

Access to Work Based Learning (SY19-20)





## Biliteracy As a Valued Asset in New Mexico

#### State Seal of Bilingualism Biliteracy (SSBB)

Students can earn the seal by:

- > Tribal certification
- 4 units of credit and a national assessment
- > 4 units of credit and a portfolio
- National assessment and a portfolio

5% of 2019-20 Graduates (1,005 students)

## More Requirements ... a College Prep Course

#### 1 unit of:

- > Honors,
- Advanced Placement,
- Dual Credit, or
- > Online



**Pre-pandemic** – This requirement drove dual credit enrollment

Pandemic Era – Online is now a fact of life for most high school students

## **Coursework Activity**



## Activity 2: Next Step Plan

- 1. You will receive a handout of a Next Step Plan.
- 2. You are free to work solo or find a partner to begin to review the Next Step Plan and formulate questions about it (10 minutes). You are welcome to begin to try to fill out the plan from the perspective of a high school student or to simply review the document.
- 3. After 10 minutes, LESC staff will bring the group together for a share out.

## Activity 2: Next Step Plan



#### 4. Some guiding questions to consider as you review the plan:

- ■What resources and information would a student need to effectively complete a Next Step Plan?
- •Who might a student need support from?
- ■How might a student fit their desired career trajectory in with course requirements?
- ■Does this plan provide a useful roadmap or process for students?

## Questions/Discussion

