## Graduation Requirements LESC Subcommittee Workshop

 October 5, 2021Gwen Perea Warniment, PhD, Deputy Secretary Lynn Vasquez, Director
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Investing for tomorrow, delivering today.

## Presentation Overview

$\square$ Defining the Issue and PED Recommendations
$\square$ Assessment Considerations
$\square$ 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

$\square$ 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



New Mexico
Diploma of
Excellence

## Equitable Access to College

## ALL STUDENTS

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

## Tenets for Change

Assessment Informed Instruction

Quality Teachers and Materials

State Required Courses

Local Choice/ State Specified Subjects

## 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
ELA 1 /ELA-ELD I
ELA 2 /ELA-ELD II
ELA 3 /ELA-ELD III

Coursework Options
ELA 4 /ELA-ELD IV
Literacy Ready
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

* with major emphasis on grammar, nonfiction writing and literature


## 4 Science Units

Non-negotiable courses Coursework Options<br>2 Laboratory Sciences<br>Core Science codes<br>Computer Science A<br>Computer Science Principles<br>Scientific Technologies<br>Health Science<br>AP and IB courses in Science<br>Dual Credit College Level Science<br>Dual Credit College Level Computer<br>Science

## Pathway Substitutions

Health CTE Concentrator
STEM CTE Concentrator
Agriculture CTE Concentrator

## 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 <br> Science |  |
|  |  |  |

## 8 Elective Units

## Non-negotiable courses

2 Unit Pathway Concentration

- Sports
- World Language
- Fine Arts
- Military
- CTE program
- Community Learning w/ Capstone
- 2 units of Work Based Learning


## Coursework Options

any offered academic course
any offered holistic course

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/college-career-readiness/graduation/

## Survey of States on Exit Exam to Graduate

States Requiring a Graduation Exam


Top 15 Education States Requiring a Graduation Exam


## Shifting Demonstration of Competency

MEASURES AT CLASSROOM
\& LOCAL DISTRICT LEVEL ALIGNED TO LOCAL
scope and sequence

FORMATIVE PRACTICES
e.g. Exit Tickets Quick Checks for Understanding During Classroom Instruction

## LOCALASSESSMENTS

e.g.. Interims, Projects

Performance-based Tasks

COURSE COMPEIENCY
e.g., Final Exams, Project-Based Demonstrations, Capstones

What might happen if we made this change?
$\square$ More Timely
$\square$ More Culturally Responsive
$\square$ Less Constrained
$\square$ Less Expensive

IMPROVEMENT


ACCOUNTABILITY

## 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 <br> 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 <br> 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

Required Math Credits


Highest Level Math Course by States


## 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 |  |  |
| :--- | :---: | :---: |
| Course Name | Students Enrolled |  |
| 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 require 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

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| English with major emphasis on grammar, nonfiction writing, and literature | 4 credits |
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## 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

## 19-20 CTE Participation

## 1 unit of

Career Cluster,
Workplace Readiness, or Language other than English.

19-20 Grad Rate



## 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



## 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 <br> 2019-20 Graduates <br> (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

## (?)? ? ? ? ? ? ?

