

Competency & Mastery

Report to KSDE Graduation Task-Force

March 3, 2022

Sub-committee chair: Ed Raines

Members: Daniel Archer, Teresa Brown, Kevin Cole, Briana Evans, Bill Faflick, David Fernkopf, Melanie Haas, Stephanie Harder, Kay Hill, Doug Moeckel, Scott Springston, Amanda Tackett, Mark Tallman

Are we meeting the needs of all Kansas students?

The vision of the Kansas State Board of Education states,
“Kansas leads the world in the success of each student.”

What does success look like?

The stated goal: 95% Graduation Rate

75% Post-Secondary Success rate (based on Georgetown Study)

SO...

HOW ARE WE DOING?

In 2020, Kansas boasted the highest graduation rate ever!

88.3%

- **But...** 12% of Kansas kids did not graduate from high school in 2020. That is 4,000-5,000 students in 2020 *(KSDE, September 2021)* and 40,000-50,000 students in the last 10 years.
- 65% of kids in the Foster Care system are not graduating
- 59% of inmates in Federal Prison System are HS Dropouts (Harlow, 2003)
- 75% of inmates in State Prison Systems are HS Dropouts (Harlow, 2003)

The current system works for many, but it does not work for all.

All means "EACH."

Mastery & Competency Sub-committee:

We recommend that the State BOE and KSDE clarify and provide **examples of Flexibility** as well as **criteria for Personalization Tools** which Kansas students and families have at their disposal in an effort to improve engagement and better meet the needs of ALL students.

Where are we now?

Current statutory definition of “completion” for credit:

Kansas Administrative Regulations ([K.A.R.](#)) Article 31 - Accreditation:

(pp) “Unit” means the number or amount, expressed in fractions or decimals, of credit assigned to a specific achievement. **A full unit is credit that is awarded for the successful demonstration of competency and knowledge of a content area.** (Authorized by and implementing Article 6, Section 2(a) of the Kansas Constitution and K.S.A. 2020 Supp. 72-5170; effective July 1, 2005; amended Oct. 8, 2021.)

QPA July 1, 2005, “... students may be awarded credit based upon demonstrated knowledge of the content of a course or subjects, regardless of the amount of time spent by the student in the course or subject.

School administrators are currently granted flexibility to:

- Grant course credit that is not tied to seat-time.
- Implement Competency Based Approaches to better meet the needs of students.
- Personalize learning based on the Student's IPS.
- Accept community based experiences in lieu of required coursework.
 - *example:* Basehor-Linwood HS Innovation Academy's "Sentinel Park" Project

Our stakeholders (parents, students, educators, and even some administrators) may not realize the flexibility that already exists.

Case Studies:



Kyle comes from a working class family. His passions pertain to all things mechanical as he plans to join the family farming operation after graduation. However, Kyle's school requires that he take Language Arts every year, as well as other "core courses" (U.S. History as a junior, Government as a senior, etc.) Because of this, Kyle's Individual Plan of Study has limited flexibility related to his interests and aspirations.

Our goal for Kyle: Lay education foundation before he steps into the family business upon graduation.



Jocelyn is an honor student who wants to be a doctor. She attends a large, comprehensive high school which is able to offer a wide variety of math and science classes and she benefits from the challenges these classes provide. But Jocelyn's senior year schedule is stacked with catching up on grad requirements like Physical Education and a Fine Arts credit, which she had postponed so she could focus on her passions.

Our goal for Jocelyn: Ensure that her pathway continues to match her interest. Work towards graduating with 15 hours of college credit.



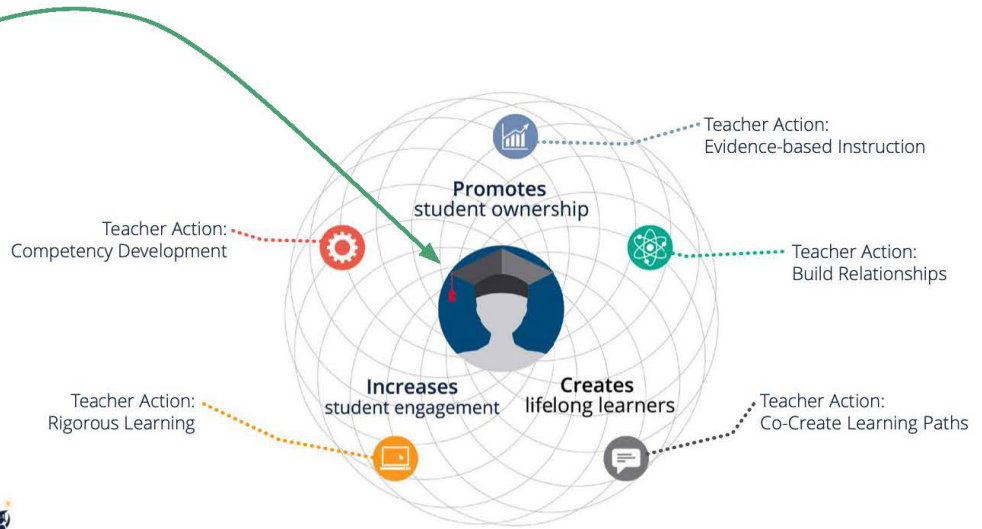
Kelly plans to work as a power lineman after attending a training program at an area vocational/technical school. He would like to gain some kind of experience in that field, but due to having to care for younger siblings, is not able to work after school. Kelly is considering dropping out of school to pursue his GED so that he can pursue the power lineman certification.

Our goal for Kelly: Provide the option of work-based learning and allow him to pursue his certificate inside of school hours.

What is Personalized Learning?

*“Personalized learning places the **whole child** at the center of instruction. It is informed by strong relationships between educators/students/family members/community relationships to provide equity and choice in time, place, path and demonstration of learning.”*

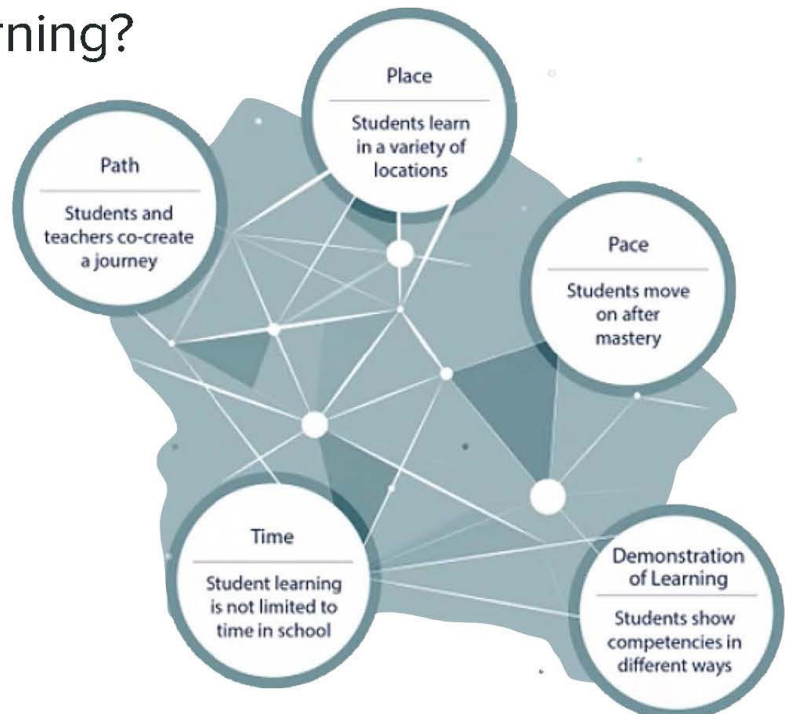
* FROM KANSANS CAN PERSONALIZED LEARNING FACT SHEET



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Personalization Effects on Achievement

Study of achievement looked at personalization implementation effort in 32 out of 62 Schools:

- 11,000 Students
- Compared to peers, students in schools using **personalized learning practices** are making **greater progress** over the course of two school years
- Greater gains in math and reading than students at more traditional schools.
- Schools with the greatest achievement gains reported strong implementation of: student grouping strategies driven by data and responsive to student needs; provision of data to students and including them in discussions of the data; and learning spaces that support personalized learning strategies.

Pane, 2015 (Rand Corporation)
http://www.rand.org/pubs/research_reports/RR1114.html

Personalization Effects on Graduation Rate

Study of 39 low-income schools received six-year grants to prepare students for college and career readiness:

- Focused on personalization, rigorous coursework, independent plans of study, relevance to student, student engagement, reflection and feedback.
- Greater gains in math and reading than students at more traditional schools.
- Graduation rates **20% higher in initiative schools** than non-initiative schools.
- The number of students taking advanced math in high school increased from 61% in 2008 to 79% in 2015. For chemistry, the numbers jumped from 33% in 2008 to 57% in 2015.

College Spark Washington, College Readiness Initiative
<https://www.gettingsmart.com/2016/02/08/culture-readiness-personalization-boosts-grad-rates/>

Ways to Personalize Learning

- Foundational to any personalization effort is a robust and fluid **Individualized Plan of Study (IPS)** which spans into post-secondary pursuits
 - Competency Based Approaches are allowed for in regulation as previously referenced
 - Flexible demonstration of mastery as it relates to progression through Kansas' graduation requirements allows for increased personalization and course selection later in high school:
 - State Assessments, ACT, ACT WorkKeys, NWEA MAP
 - Locally developed assessments
 - Granting credit for community based learning such as Boy Scouts, Youth Orchestras, 4H
-

What is CBE?

- What are competencies
 - How are they evaluated
 - Role of Rubrics in evaluation
 - Who decides the path? Students/families vs. school district
-

What are Competencies?

- Students move through curriculum at their own pace, (pg 14)
- Alignment to Individual Plan of Study
- Broadly stated, may include groups of related Standards
- Meaningful, relevant, explores individual passions.
- Example:
 - *Numbers and Quantities: A successful student can apply and interpret units while modeling problems, formulas, graphs and data to ensure a sensible outcome. MATH.HS 1.1 N.Q.1, N.Q.2, N.Q.3*

[Navigating Change, 2020, KSDE](#)

Evaluation of Competencies and Use of Rubrics

Numbers and Quantities A successful student can apply and interpret units while modeling problems, formulas, graphs and data to ensure a sensible outcome. MATH.HS 1.1 N.Q.1, N.Q.2, N.Q.3

Mathematics				
LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	STANDARDS
I can recognize and label appropriate units based on given information.	I can compare and contrast various units and am able to distinguish their characteristics.	I can use units as a way to understand problems and to guide the solution of multi-step problems [STEAM 3, 4].	I can apply units in a problem for the purpose of real-world design and context.	N.Q.1, N.Q.2, N.Q.3
I can define appropriate quantities for the purpose of descriptive modeling.	I can choose and interpret units consistently in formulas.			
I can use estimation at a basic level to understand whether or not an answer is appropriate.	I can choose the appropriate level of accuracy on measurement when reporting quantities.	I can draw appropriate conclusions with a necessary level of accuracy depending on the real-world context [STEAM 3].		
I can identify place value and use rounding accurately.	I can choose and interpret the scale and the origin in graphs and data displays.			

Recommendations Related to IPS

- Using the [STAR Rubric](#), create an expectation for what fidelity to a comprehensive IPS should look like, at minimum, in every district, for every student. The minimum expectation should be reflected in the accreditation process.
 - In addition to core and elective requirements, an IPS is included as part of minimum graduation requirements.
 - Possible recommendation of an IPS platform that integrates with widely used student management systems. The ability to access transcripts, etc.
-

Recommendations Related to Mastery

- KSDE establishes performance standards (level 3 or 4 on State Assessments for example,) on the aforementioned assessments that would constitute the demonstration of mastery with respect to graduation requirements. Credit would be awarded based on these standards.
 - ACT
 - ACT WorkKeys
 - State Assessment Scores
 - MAP (NWEA)
 - ASVAB
 - SAT
 - Locally-developed rubrics or assessments which districts may utilize at their discretion
-

Recommendations Related to CBE

- We recommend that a competency based platform of some type be identified which could be easily leveraged by districts with limited resources. Washington State used the Big Picture Learning Model...
- KSDE or others could develop competencies to measure the standards for all courses required for graduation and then the associated rubrics with specific performance criteria. Districts would also have the autonomy to develop their own course related competencies and rubrics.

Summary of Recommendations

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Summary - Competency and Mastery

Based on the student's Individual Plan of Study, minimum graduation requirements can be achieved through the demonstration of competency or mastery on alternative measures and/or through community based experiences as agreed upon by stakeholders.

"Students may be awarded credit based upon demonstrated knowledge of the content of a course or subjects, regardless of the amount of time spent by the student in the course or subject." QPA July 1, 2005

Summary of Courses Sub-committee Recommendations

1. Recommendations of the committee
 - a. Keep the minimum number of credits to 21
 - i. Local boards can still increase credits
 - ii. Allows boards/districts to allow the minimum for at-risk students (alternative students, foster care, etc.)
 - b. Group credits into new categories, including CTE courses in addition to core
 - i. STEM (6)
 1. 3 units of science
 2. 3 units of math
 - ii. Communications (4)
 1. 3.5 units of English Language Arts
 2. .5 credit of Communications (see addition below)
 - iii. Society & Humanities (4)
 1. 2.5 units of history and government -US History, World History, Government
 2. 1.5 units of Humanities - Fine arts, foreign languages, related CTE courses, SS Electives - Psychology, Sociology, International Affairs
 - a. **Removes fine arts as a requirement for everyone
 - iv. Employability and Life Skills (4.5)
 1. ** One half unit of Physical Education and one half unit of health
 2. ** One half unit of Personal Finance
 3. ** 3 units CTE Courses/Pathway Courses
 - c. Add the following credit requirements (as seen in groupings above)
 - i. .5 Communications credit
 - ii. .5 health in place of half of the original PE unit of credit
 - iii. .5 Personal Finance credit
 - iv. 3 CTE courses throughout different areas - related to student IPS
 - v. Leaves 2 additional IPS course options
2. **Concepts discussed that need to be ironed out with other committees:**
 - a. Determining if a student's score on a standardized test can count for 1 credit in the associated subject area
 - i. Mastery could reduce the number of seat time for courses
 - ii. This would require a different funding formula
 - b. Focus on IPS
 - i. The switch to the new "groupings" would require school districts to focus on Individual Plans of Study - trainings and accountability would be required
 - c. Could include a "Diploma Plus" option if that is the direction of other committees
 - d. Remaining credits - "electives" ?

e. ELA - add .5 communication to existing 3 years or separate out .5 similar to PE

Original Credits	Proposed Changes/Groupings	Final Product
<p>3 units of Science</p> <p>3 units of Math</p> <p>4 units of ELA</p> <p>3 units of History & Govt</p> <p>1 unit of Fine Arts</p> <p>1 unit of PE</p> <p>6 units of Electives</p>	<p>STEM</p> <p>Communications Add .5 communications</p> <p>Society & Humanities Reduce SS by .5</p> <p>Add 1.5 related CTE course</p> <p>Change fine arts from required to option in Humanities</p> <p>Employability & Life Skills Reduce PE credit by .5 Add .5 Health Add .5 Personal Finance Add 1.5 related CTE courses</p>	<p>STEM (6) 3 - Math (Algebraic and Geometric concepts) 3 - Science (Physical, Biological, Earth/Space)</p> <p>Communications (4) 3.5 - ELA (Reading, Writing, Literature, Technical) .5 - Communications (Speech, Debate, Forensics, Public Speaking,)</p> <p>Society & Humanities (4) 2.5 - Social Studies (World, US, Govt) .5 - Fine Arts (Music, Dance, Art, Theater, etc.) 1- Humanities (Foreign Lang., Elective SS course - Psychology Sociology, Women's Studies, Additional Fine arts, etc.)</p> <p>Employability & Life Skills (7) .5 Physical Education .5 Health .5 Personal Finance 5.5 - IPS Choices (Emphasis on CTE/Pathway courses)</p>

**Value Added Diplomas
Sub-committee Report to the
Graduation Task Force Members
March 3rd, 2022**

Charge: To look at the need and benefit of value-added diplomas as a graduation requirement. (How does a graduate demonstrate they are ready for the next level)

How we got to where we are now:

- **We have had excellent and engaging conversations during all of our sub-committee meetings.**
- **Reviewed the Kaufman Foundation Market Value Assets**
- **During our third meeting, Natalie Clark, KSDE Consultant was our featured speaker and shared information about market-value assets, Industry Recognized Certifications, work-based experiences, job shadowing, apprenticeships, real-world experiences, work-based experiences and Individual Plans of Study. She provided examples and schools around the state that have already implemented these experiences.**
- **Recognized very quickly the importance of schools having the flexibility to determine local value-added or market-value assets.**
- **We want these value-added achievements to demonstrate how the graduates are prepared to be successful in postsecondary life and not be a barrier to graduation.**
- **At our October 7th meeting, Polly Vader, Real-World Learning Coordinator, CTE Coordinator from Piper High School was featured speaker and informed members of what they are doing in the Piper District with their CTE classes and real-world experiences to prepare their students for post-secondary life.**
- **Discussed how the Rose Capacities, KSDE's Vision and Goals can be addressed by having value-added and market-value assets**
- **Subsequent meetings the committee discussed and began to develop a list of added-value assets and market-value assets. Went from having three categories and narrowed that down to two categories.**
 - **Academic & Work-Based/Real-World Experiences**
- **The importance of having a rigorous Individual Plan of Study for each student was recognized and needs to be stressed.**
- **Ensuring that Added-Value and Market-Value Assets are attainable for all schools - from the largest 6A to the smallest 1A is extremely important to making the attainment of the added value diplomas successful.**
- **Still have work to do in addressing - in making sure that those students who fall under the special populations (ie - Special Education, State custody, Dropout Recovery programs, Virtual Schools, Alternative Schools, etc... are able to meet this criteria)**

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Students will demonstrate they are prepared for postsecondary life through academic, real world and work-based experiences. Students will have two or more Career focused experiences and/or post-secondary readiness accomplishments to meet this requirement.

****A student's IPS should include which value-added/MVA they plan to earn/achieve**

Examples of Value-Added/Market Value Assets:

Academic

ACT Composite Score of 21 - suggested score - follow University/College requirements (meets the "Without" the need for remediation

Work Keys (Silver Level - equates to qualifying for 71% of jobs in US according to ACT)

9+ College Hours (this is a good start to having 12 to 15 College hours to

State Assessment Scores of 3 or 4 for Math, English Language Arts, Science - College Readiness)

ASVAB

Senior Project/Senior Exit Interviews

SAT (Cut Score 1080 - Equivalent to an ACT score of 21)

Local District Value-Added Asset approved by KSDE

Kansas Honor Scholar

Regents Curriculum

Work -Based & Real World

Youth Apprenticeships

Entrepreneurial Experiences

Community Service Hours (Minimum of 40 Hours)

Client Centered Projects

Work-based Experience

Regionally Vetted Assets

Industry Recognized Certifications-approved by KSDE

Seal of Biliteracy

Completing Basic Training (Military)

CTE Pathway Completer

Completed TEC School

Eagle Scout/Gold Scout/4-H (Years of

Athletics/Activities - parameters??? - needs more clarification (Athletics/FFA/Debate, ...

Multiple years, (Completed 2 or more Activities for 2 or more years??)

District Value-Added Asset

**Value Added Diplomas
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JROTC participation

Additions:

- 1) Concerns still to address
 - a) Outside opportunities/Local Board Decisions of added-value
 - b) Drop-out Recovery Programs- **Further discussion needed**
 - c) Special Education & Special Populations - Language needed to address these groups- **Virtual Schools, alternative schools, special programs**
 - d) Out-of-State or In-State Transfers- **Waivers/Stair-step idea-Discussion**
- 2) Review list of Added-Value Assets/MVAs from 12/2

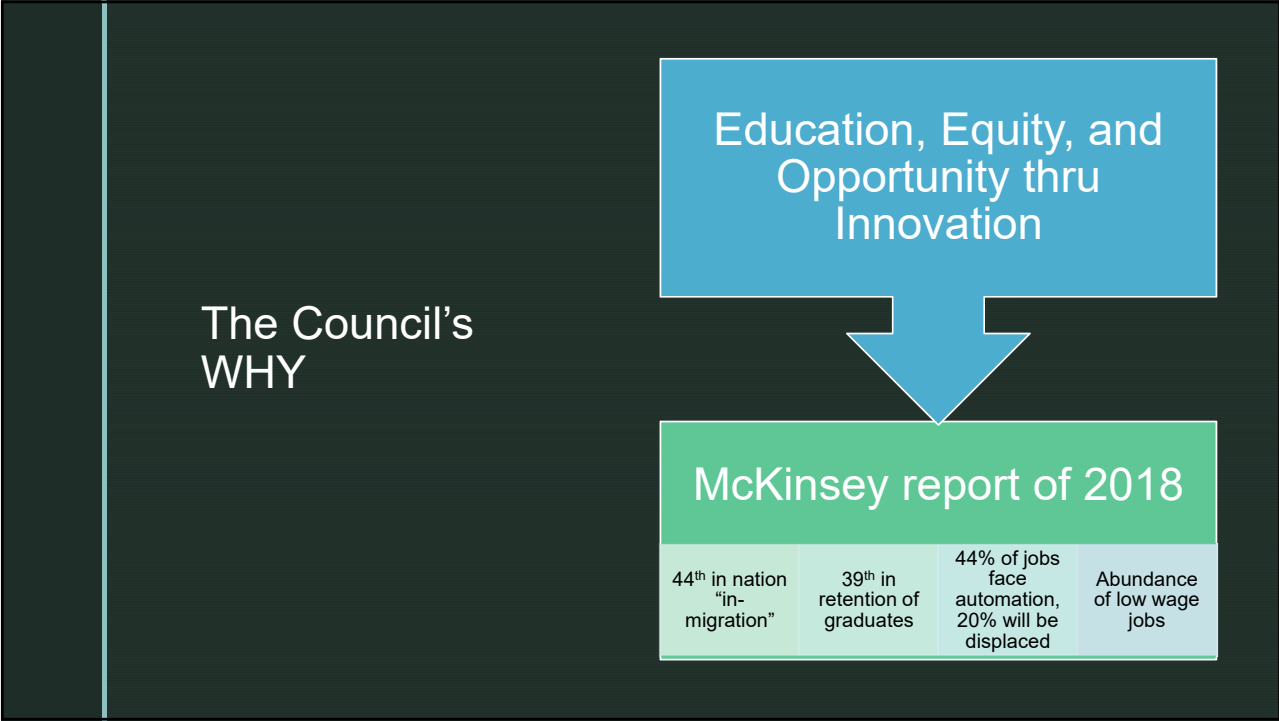
- 1) Approval of this- At BOE discretion (Local Decisions)
- 2) Acceptable definition of what it means
 - a) Value based experiences
 - b) Career based experiences

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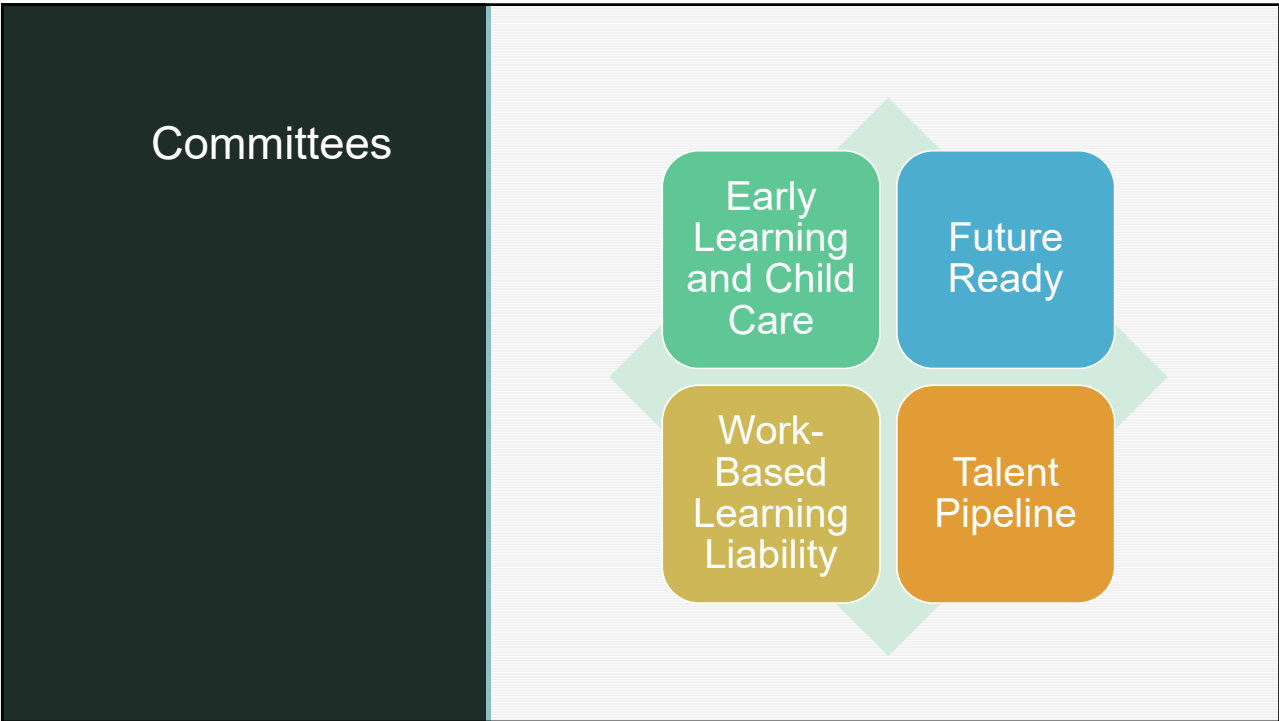
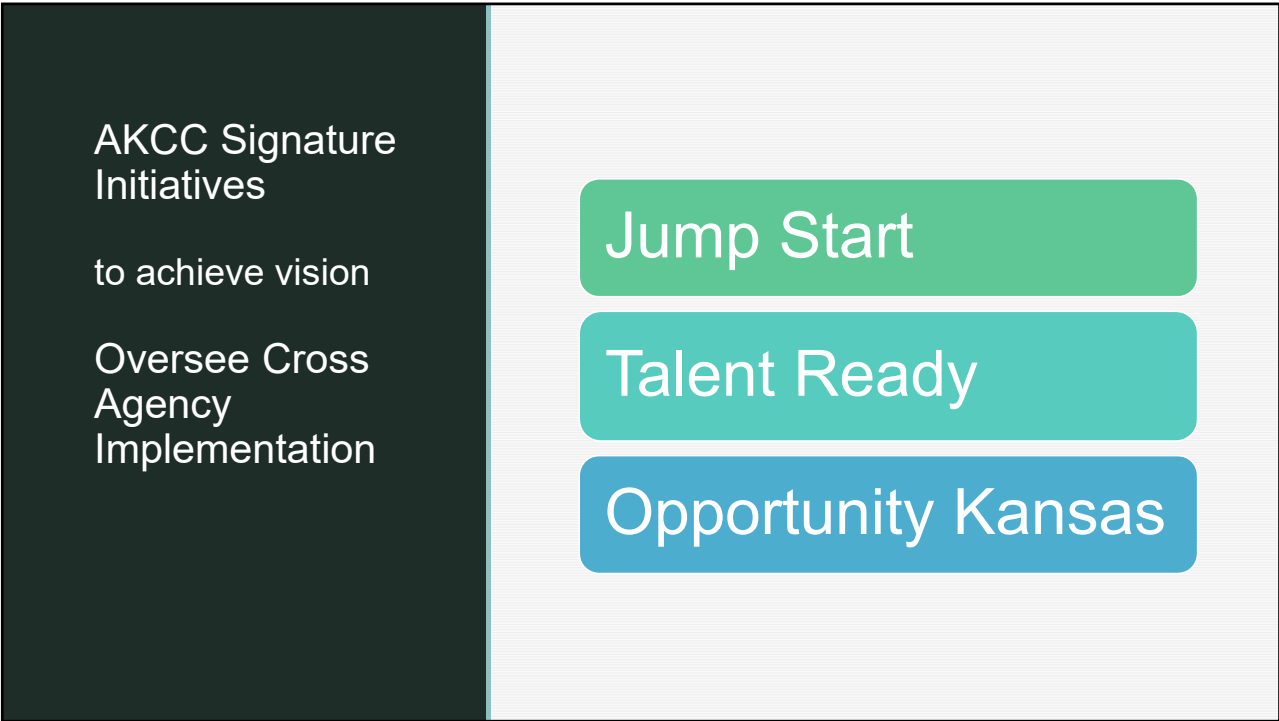
Background

- Established 2019
- 55 members representing business and industry, K12, Higher Ed., workforce boards, all regions of the state
- Charged to align education and business to grow opportunities and the economy
- Policy influence is the primary focus



Advantage Kansas Coordinating Council

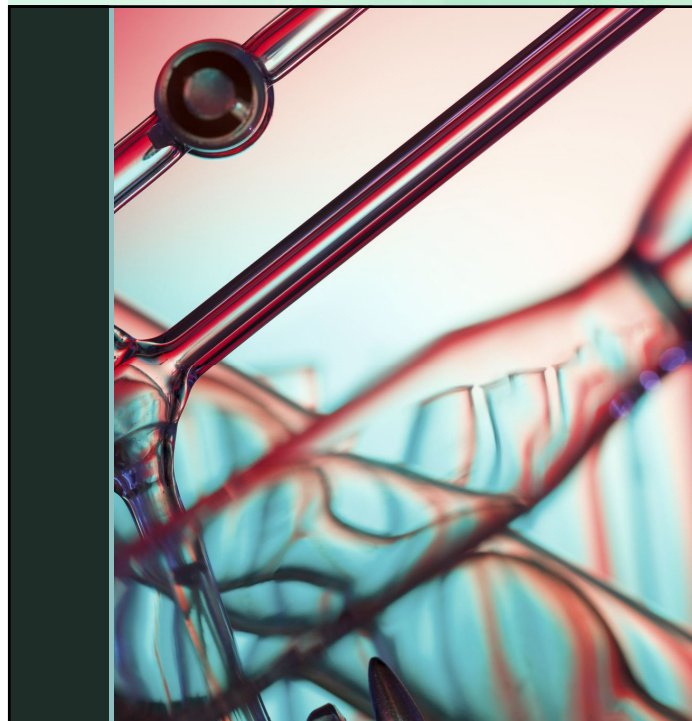
- Established on GCE's recommendation by Governor Kelly
- Co-Lead by Education and The Kansas Chamber
- Drive a robust economy with the highest skilled and educated workforce
- Goal - Best in the Midwest and beyond



Early Learning and Child Care Recommendations

Improve KS
Child Day Care
Assistance
Credit

Blend and Braid
Funding



Future Ready Recommendations

- Prioritize and Invest in systems to accelerate talent pipeline in **Computer Science and Information Technology**

Talent Pipeline

Fund Technology and Equipment Upgrades to support Correctional Setting Higher Education

Convene Commission on Health Care to review career pathways

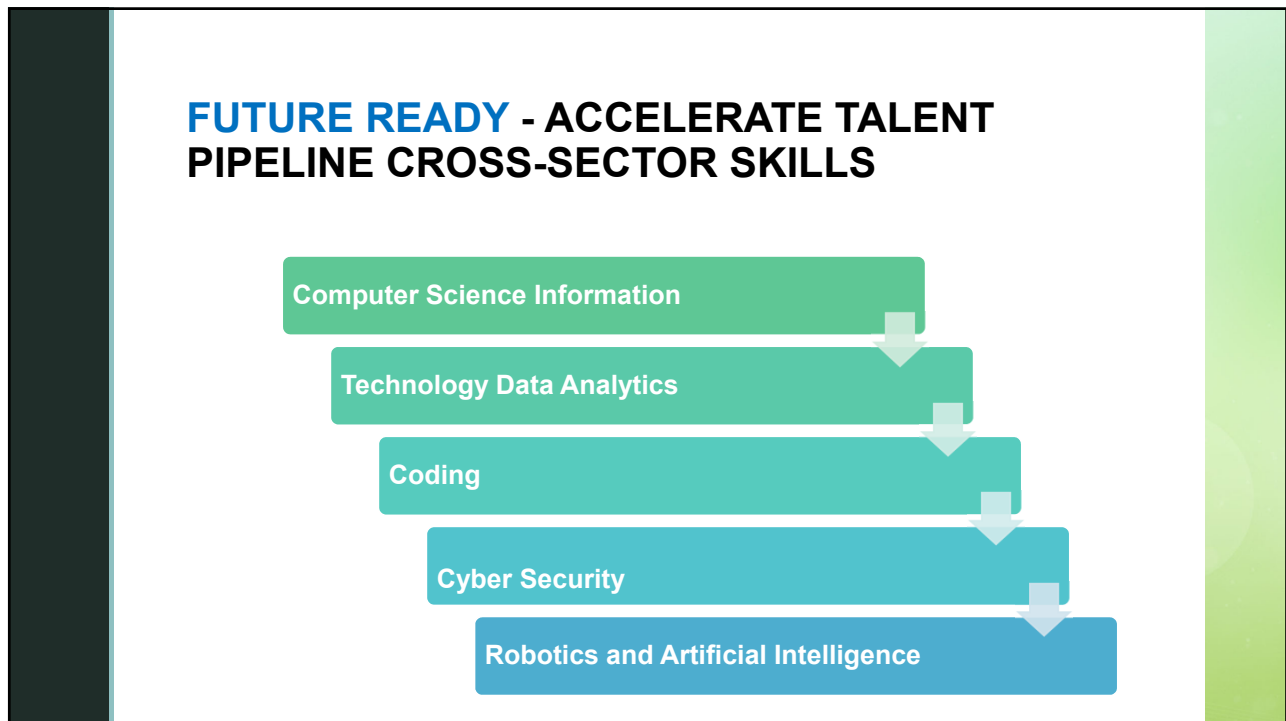
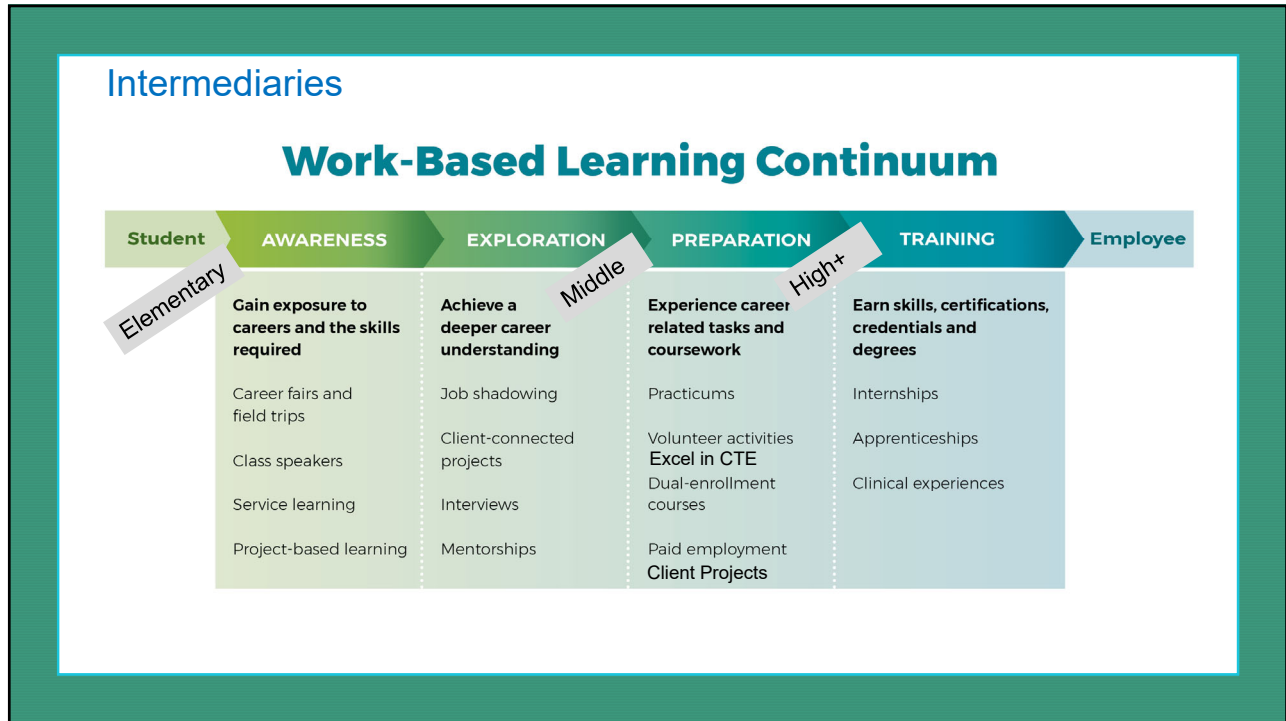
Work-Based Learning

Solve Issues relating to work-based learning liability

Provide sustainable funding for intermediaries

<p>Convergence between SBOE Graduation Task Force</p> <p>Advantage Kansas Coordinating Council</p> <p>Kansas Board of Regents</p>	<p>Work-Based Learning</p> <p>Future Ready</p>
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<p>Work-Based Learning Liability</p>	<p>Unpaid Internships experiences are education (credit)</p> <p>Paid Internships are covered by workman's compensation as employees</p>
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Success Requires Coordinated Effort



Develop statewide pilot to introduce data analytics



Collaborate across agencies and industry to scale



(year 2) Expand certifications

data analytics
add precision
measurement
mechatronics



Utilize CompTia to expand certifications

information technology
artificial intelligence
cybersecurity



Convergence