See NCHSE Dropbox for all presentations.

Angel Clark, State Lead Chair and NCHSE Executive Committee State Lead Rep welcomed everyone.

Anatomy in Clay- Kelly Canino
Kelly Canino gave an update on anatomy in clay and the new model that is available. State Leaders expressed appreciation to anatomy in clay for the breakfast they provided.

- New product – Torsikin
- Offer PD in states
- (Illinois Specific) Middle School use in IL; at least PD for teachers???
- Kelly leaving; Heidi interim

State Leader Sharing

Credentials cannot be paid for with Perkins – See Nevada Perkins V Updates and also for special populations students.

- Nevada (Randi) – Program Review (last year); 2-year pathway program to align better with dual credit. Changing programs to a 2-year program. They are “sunsetting” some programs due to Perkins V.
- Montana (Renee) – I focusing on partnerships with post-secondary and industry. Internship manual
- Idaho (Stephanie) – Streamlining program review, creating tools to create new programs, and creating pathways that are 2 years in length. Model for how to implement new POS
- Texas (Janet) – Very involved in HOSA
- Nebraska (Carol) – Rewriting state standards; using NCHSE and tweaking for state’s needs. Also, developing business and industry partnerships. Desperately needing health science teachers. Currently utilizing FCS teachers to teach health science.
- Kansas (Wendy) – Governor’s Education Council and pushing work-based learning (continuum); Aligning ILP’s with pathways. Seeing growth in their HOSA chapters.
- West Virginia (Ashley) – Working with post-secondary to develop statewide pathways in Health, IT, and STEM. NOCTI is the statewide health science exam. Utilizing simulated work based learning. Using advisory for industry credentials. Use NOCTI (credentials, assessments, standards). Simulated workplace (WBL) – business and industry reviews on programs in addition to the education agency. Starting a new program of recovery coach (due to opioid crisis). Youth are being trained as life coaches. Recovery Coach Academies (youth life coach) – for opioid and mental health (looking at this becoming a credential they can use)
• Washington (Marianna) – preparatory programs must lead to industry credential or dual credit; CTE pathway (2 courses that lead to IC or DC in the same program; looking at cluster and blended pathway). Struggling with quality IC and what is it. Governor requiring WBL. Core Plus for Aerospace (Bowing) – Wanting for IT and health science. State Superintendent wants all DC, AC, AP free for students. Health Workforce Centennial Network. Working with the workforce board to determine Perkins plan. State test is in the graduation requirements. CTE pathways meet this requirement. Students struggling with industry recognized credentials. Monitoring is ongoing. Hosting a dual credit summit.

• Lara (Oklahoma) – Career Tech education agency separate from K-12 and higher ed (works with secondary and adult ed). Health Science teacher workshop (data and info with a lot of networking and sharing time); Bringing teachers in as cohorts and do training. WBL is being encouraged. Using the WBL from NCHSE for those students not in a health pathway Governor WBL – required for all students (reminded us about NCHSE resource on this; 50 rotations). Simulation conference in Oklahoma each year (May 21).

• South Carolina (Angel) – PLTW changed scoring so working on alignment with dual credit points. Teacher retention is a big issue. Dual credit is an issue because post-secondary is not accepting all credits. Industry partners vet certifications. Keeping teachers in health science (400 teachers; about 50 new teachers each year); require health care license to teach. Vet IC (submit recs to EOC – Education Oversight Committee). SC gives each school/district a pot of money ($10,000) to pay for credentials or training for students and teachers.

• Hawaii Pacific Basin (Erica) – background in AHEC in South Carolina; bringing that background to new position (legislative and funding focus). Teacher training and retaining is challenging (Health Academies); provide training for schools who don’t have them. They find money for travel for HOSA and Health Science programs.

• Arizona (Aden) – former state HOSA advisor. New quality compliance document (used Nevada); local needs assessments with local districts. Industry-recognized credentials – was part of student’s letter grade. Schools get $1500 per student who passes a credential (health science included); money to train teachers and student training.

• Alabama (Dana) – combined Perkins and WIOA plan. List of credentials (rigorous review; in the past, state would pay for this); now task forces taking this over (Department of Ed – subject matter experts) – Compendium of Valuable Credentials. Must have occupational proficiency to teach health science; PLTW can come from science. Working all CTE down to middle schools. Teacher retention – year long training for those coming from industry (6 days) and mentoring, summer conference teacher PD, and HOSA SLC. Pharm Tech (NHA or PTCB) and Operating Room Fundamentals added. New program review plan (old was much like Nevada). Office of Apprenticeships – stipends to businesses to make this statewide and collaborating with community colleges for LPN option.

• Missouri (Shelly) – secondary up through 2-year postsecondary; most secondary are PLTW (science or health science must have bachelor). CNA most common IRC; hard to find instructors. Working with state hospital association – training in the hospital setting to help with lack of teachers. IRC Committee – random educators who make decisions; looking at more stackable options. Common Criteria Quality Indicators and CTE Certificate of Excellence (looking at data on these now). Have developed a 1-year new teacher-mentoring program.
• Michigan (Celena) – cosmetology background. Redesign of curriculum; Perkins – IRC accountability measure and K-12 WBL continuum and all courses of CTE. Teachers have to come out of B/I; Career Curriculum Development Association (looking at yearlong program). Career Pathways Grant – health science eligible for this grant, curriculum redesigned and moving to competencies instead of standards, and align competencies to WBL.

• Alaska (Andrea) – Dept of Ed has no health science specialist and no standards so they utilize NCHSE. There is no CTE professional development. Hospitals send staff out to do presentations. Have PLTW and Allied Health programs at the consortium boarding schools. Training business chemistry for working with others; behavioral (Mental Health First Aid)

• Mississippi (Estelle) – money set aside by legislature for certifications; sim lab at hospital for WBL. Utilizing certifications and WBL. Teacher turnover is an issue.

• Utah (Maren) – State wide teacher license change. Local districts will control teacher license. Putting together a mental behavior pathway. Divide between rural and urban

• Ohio (Matt) – Doing all that everyone else is doing. Concentrator and equity are big issues with Perkins V. The governor pushes industry credentials. Equity labs goes out to schools; assessments to see how they are doing. Year 5 non-compliance with program review (look at their tool – years 1-5). Flat funding state CTE programs next couple of years; helping them get a handle so no new programs opening for a few years. However, money for IRC. Just redid all Health Science standards and Behavioral Health standards. Ohio is a local controlled state so they self-report.

• Wisconsin (Christina) – Working on standards revision and adoption. Teacher licensing is being re-evaluated. Have regional career pathways. Industry partners decide pathways and have industry led career pathways. State endorsed regional career pathways (reserve funds); HOSA model with contractors working on various areas (e.g., B/I partnerships, competitive events)

• California (Carla) – Largely have the academy model. CTSO have to have career teacher advisors. Have 16 pilot schools that are doing mental health training thru HOSA.

• Iowa – There is no connection between secondary and postsecondary. Programming done through concurrent enrollment. Iowa just adopted standards (usually community college standards). Contract with someone out of state to run the state conference (HHOSA). Apprenticeship programs are being encouraged.

• Illinois – Local districts are doing innovative things. Refining the programs of study. Building their team for CTE. Doing professional learning continuum. Have aligned workforce, education and post-secondary partners.

• Kentucky – Focused on industry certifications, adding health science programs. Several pathways; 4 credit requirements. Some schools utilizing the regional academy concept to try to share money and other resources. New teacher training has changed to a two-year program with mentor coaches and mentor teachers assigned to the new teacher. Teachers are assigned in cohorts. That seems to have helped with teacher retention.

• Minnesota – Working on new Perkins plan. Have been doing partnership with secondary and post-secondary. CTSO is not part of DOE. Therefore, the CTSO has to fund the director position. Currently have full CTE staff in their DOE.
NCHSE Updates – Phyllis Johnson, Board Chair, NCHSE - https://www.healthscienceconsortium.org/  
- Survey  
- Monthly recorded webinars (teacher focused; sharing for other teachers)  
- New/updated curriculum enhancements – ready for new school year; this is the why for being members (discounts for our schools)  
  - Member $350  
  - Non-member $500  
  - If registered for pre-conference at NCHSE ($200) – free  
- WBL Package  
  - Member $100  
  - Non-member $150  
- Next year’s National Health Science Conference – Charleston, SC  
  - October 27-30, 2020  
  - Call for presentations and registration open February 10, 2020 (on NCHSE)  

Perkins V Updates (Randi Hunewill, Nevada, State Lead) http://www.doe.nv.gov/Contact/Contact/  
- Stakeholders must be involved in all decisions in the state (e.g., POS, standards, curriculum) – This has to be a focus.  
- Piloting a project in Clark County of Nevada where lack of program access to African Americans is an issue – using all special pops and nontraditional funding for this  
- Program monitoring and program review (piloted theirs 3 years before ACTE came out with their model) – focus on this; offered to allow others to go out on these visits with them. Biggest differences seen in:  
  - Equipment list (what is allowable); use B/I partnerships  
  - CTSOs – approved curriculum  
- WBL guidebook (supported by New Skills for Youth funds)  
- Governor’s Office – oversees the credential list (incorporated in standards to support paying for it)  
- College and Career Readiness Diploma  
- ACTE Teacher Retention workshop (February 26-28, Ft. Lauderdale, FL) – https://www.acteonline.org/cteteach/  
- Just starting State Improvement Plan – focus on equity and access  
- NOCTI – teacher assessment to receive additional endorsements or other ways to count industry credential to get them in the door  
- Importance of teacher preparation PD  
- Standards and equipment lists for all state courses  

HOSA Updates – Janet Villarreal, National Chair and Vivian Do, President, National Executive Council http://www.hosa.org/  
- ILC in Houston  
- National Geographic and Cengage, U.S. Public Health Service, and CareerSafe – sponsoring 15 competition assessments  
- Training of Advisor’s at the Local Level (TALL) training
Revived HOSA Foundation for donors

NCHSE Health Science Educators Association- Katrina Haynes, HSEA National Executive Council Rep

291 members – just over a year out

Groups: Health Science Educators Association – NCHSE
  - Don’t have to pay or have a membership to join
  - Place to share resources, NCHSE webinars, etc.

Google Drive is only open to members.
  - Tons of teacher resources

Email Listserv

Group Member Rates –
  - 1-25 members - $45 each
  - 26-50 members - $40 each
  - 51-100 - $35 each
  - 101-200 - $30 each
  - 201+ - $25 each

Networking is #1 reason to join.

They do have a way to track teacher use of resources, etc. (if a state did a membership for all their teachers).

CDC Science Ambassador Program:
  - Free curriculum
  - Fellowship opportunity for teachers; work with experts from CDC

National Institutes for Health – free educator resources

Building Confidence in Your Learners (LEGO Education)

Possible tool for middle school in Health Science???

Maggie – Free health science apps for iPads (virtual reality)

Nevada – K-12 computer science standards

3D models for health science

LEGO Educator Ambassador Program/LEGO Education Academy

Free lesson plans

LEGO Foundation –
  - Braille bricks for visually impaired students
  - Partnered with Sesame Street
  - White papers

Why of LEGO Education:
  - 71% of all new jobs in STEM are in computing
  - 65% of students will work in jobs that don’t exist today
  - 80% of future jobs will require science, technology, and math skills
  - Specific Skills – Combination of technological know-how, problem-solving, and critical thinking
  - Emotional Intelligence – Soft skills such as perseverance, collaboration, and empathy
  - Rapid Decision Making – Embracing accelerated innovation specifically in education and health
• Harris Poll – Confidence in Learning Poll
• 6 brick activities – Google for ideas
• NIH STEM Grant for this $500,000-$1,000,000 (February and June grant cycle)
• Contact Info: Paulette Donnellon, paulette.donnellon@LEGO.com, 760-638-0956

Parade of Publishers (sp? On names)
• Margaret Bibliss and Roz Thompson – FA Davis Publishing Co
• Leah Round and Yolanda – Biorad (biotech company)
• Tamara Mandell – University of Florida - FL company for Biotechnician Assistant Credentialing Exam (PLTW adopted)
  o National advisory board for relevance and rigor
  o Biorad 2nd ed aligned
• Mallory – Goodheart-Wilcox Publishing
• Jackie Argonbright – Pearson
• Amy Gallagher – CareerSafe
• Nicole Robinson and Chris Savey – National Geographic/Cengage
• Christian – Applied Educational System (AES)
• Laura – National Healthcareer Association (NHA)
• Tim Hemens – 3D Scientific (medical simulation)
• Denise Bodart – RealityWorks
• Nicholas Wells – Depco
• Maggie McGill – CEV
• Kathy Cilia – American Medical Technologists

Laying the Health Science Curriculum Framework: A Continuum – Cindy LeCoq, Past Chair NCHSE Board
• NCHSE alignment with Perkins V:
  o Health Science Framework
    ▪ Standards more detailed and clarified (2019)
    ▪ Four Course Template – divides NHSS 11 standards into sequential course content; focus on equal access, high rigor, WBL, and potential postsecondary credit
      • Foundations of Healthcare Professions
      • Essential Healthcare Practices (includes medical terminology)
      • Human Structure, Function, and Disease (Anatomy and Physiology—2 semesters)
    ▪ End of Program Assessment – certificate shows support from nursing associations (supported by Tri-Council of Nursing and endorsed by Health Professions Network); on back shows what the certificate attainment means with the standards
      • End of Course Assessments still available.
      • They need to develop 4 new assessments for the 4 new courses.
      • Use data for annual report card and share with advisory committees.
  o Teacher Retention/Support
- Advisory Committees
- WBL
- ???

- Partnerships are key!
  - Have advisory take assessments, annual report card, health science standard rating tool, and have them rate the assessment exams (Precision Exams have an avenue)
  - B/I specifically – same as above and also WBL resources and explain assessment certificates

- (ASK) Health Science State Leaders – Identify key teachers to review the 4 courses and right assessment questions – paid, contractual opportunity.

Open Group Discussion, Angel Clark

- Highest nationwide healthcare needs according to BOL:
  - Direct Support Personnel – national certification; SC working on state certification (https://ddsn.sc.gov)
  - Home Health Aide
  - EMTs
  - Others – Community Health Worker, CNAs

- Biotechnician Assistant Credentialing Exam (BACE) – have a list of who will hire

Adjourn