

2016-2017

# DIGITAL LEARNING PLAN ANNUAL REPORT



**WYOMING**  
DEPARTMENT OF EDUCATION

**Report prepared by the Wyoming Department of Education**  
**Laurel Ballard, Ph. D, Student & Teacher Resource Team Supervisor**  
**Alicia Vonberg, Personalized Learning Consultant**  
**Lori Thilmany, Virtual Education Consultant**  
**Robin Grandpre, MBA, PMP, Project & Performance Manager**

**Digital Learning Advisory Panel Members:**

Amanda Nunn, Albany County School District #1  
Andy Corbin, Wyoming Community College Commission  
Brian Farmer, Wyoming School Boards Association  
Brian Greene, Wyoming State Library  
Bruce Thoren, Fremont County School District #24  
Christi Boggs, University of Wyoming  
Darrell Zlomke, Public Service Commission  
Dustin Hunt, Hot Springs School District #1  
Jaraun Dennis, Uinta County School District #1  
James Kapptie, Platte County School District #1  
Jamie Markus, Wyoming State Library  
Jeff Miller, University of Wyoming  
Jennifer Markus, Laramie County School District #1  
Jon Abrams, Laramie County School District #2  
Josh Karabetsos, Department of Enterprise Technology Services  
Joshua Jerome, Carbon County School District #1  
Kari Brown-Herbst, Laramie County Community College  
Melissa Sipe, Laramie County School District #1  
R.J. Kost, Park County School District #1  
Scott Mecca, Albany County School District #1  
Tim Sheehan, Department of Enterprise Technology Services  
Tom Wilson, Public Service Commission  
Tonia Dousay, University of Wyoming

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# Introduction

The [2017-2021 Digital Learning Plan](#)<sup>1</sup> (DLP) was written to fulfill the requirements of Wyoming State Statute 21-2-202(a)(xx) which states, “In cooperation with the state board, the Wyoming Community College Commission, University of Wyoming, Public Service Commission, Department of Transportation, Department of Enterprise Technology Services, public libraries, school district boards of trustees, classroom teachers and other appropriate groups identified by the superintendent, develop and implement a statewide education technology plan which shall address staff training, curriculum integration and network connectivity in and between schools, communities and between the state and the world, and which shall have as its goal the provision of equal access to educational instruction and information. The statewide technology education plan may include telecommunications services provided by the department of enterprise technology services pursuant to W.S. 9-2-2906(g). Not later than January 10 of each year and with the assistance of participating agencies, an annual report on the status of the statewide education technology plan shall be prepared and issued by the state superintendent.”

The ultimate goal of the DLP is to provide every student with the skills, understanding, and confidence needed to successfully enter college, a career, or the military in the digital age. The 2017-2021 DLP provides a roadmap with recommendations for action focusing on digital learning by empowering all stakeholders to provide and expand learning opportunities, to be adaptable, and to evolve with the ever changing learning environment to meet the needs of all Wyoming students. Through the implementation of the various projects identified in the plan, the Wyoming Department of Education (WDE) will work towards preparing all Wyoming students to succeed in the digital age. According to the World Economic Forum, 65% of the careers that our students will be pursuing do not yet exist today, so our focus must be to prepare our students with advanced digital skills that will equip them for success in the opportunities of the future.<sup>2</sup>

The WDE and the Digital Learning Advisory Panel split the identified priorities and tasks of the 2017-2021 DLP into a five-year strategic plan. Immediately after the inception of the plan, the WDE began implementing the projects identified as first year priorities. These priorities included: improvement of school connectivity to support digital learning and online assessment, leveraging economies of scale to reduce district expenditures, increasing professional development for technology and virtual education course development staff, creating a system for leveraging free and open resources for use in the classroom, increasing collaboration between postsecondary and national partners and agencies, and becoming a Future Ready® state.

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1 Link to the 2017-2021 Digital Learning Plan: <https://edu.wyoming.gov/in-the-classroom/technology/>

2 “World Economic Forum; Executive Summary, The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution” [http://www3.weforum.org/docs/WEF\\_FOJ\\_Executive\\_Summary\\_Jobs.pdf](http://www3.weforum.org/docs/WEF_FOJ_Executive_Summary_Jobs.pdf)

Wyoming State Statute 21-2-204(viii) details the requirements for:

- Becoming a National leader among states
- Ensuring all students leave Wyoming schools career or college ready
- Recognizing student growth and increasing the rate of that growth for all students
- Recognizing student achievement and minimizing achievement gaps
- Improving teacher, school and district leader quality
- Maximizing efficiency of Wyoming education
- Increasing the credibility and support for Wyoming public schools

The goals outlined in this statute have remained in the forefront of the 2017-2021 DLP's critical components. Throughout this report there are examples of how the DLP has helped Wyoming meet these educational goals and align to the WDE's mission to create opportunities for students to keep Wyoming strong. Provided are a few examples of the progress Wyoming has made:

In 2016, the State of Wyoming was identified as ranking #1 in the nation in classroom broadband connectivity with 100% of school districts meeting the Federal Communications Commission's 100 Kbps per student bandwidth goal for digital learning, according to EducationSuperHighway's "State of the States" report. As a leader in connectivity, Wyoming has the ability to offer our students numerous learning opportunities to assist in meeting the overarching mission of the WDE, identified as: "To significantly increase the percentage of Wyoming students that are college, career, and military ready by 2020". In meeting the priorities identified in the 2017-2021 DLP, the WDE will be meeting its overall mission to prepare all students for success in the future.

Wyoming took the Future Ready® Pledge in September of 2016 and began working with the Alliance for Education to increase professional development offerings for all educators across the state, specifically those geared towards increasing online and digital learning and use of open education resources. In addition to joining the cohort of states that have taken the Future Ready® Pledge, the WDE has succeeded in creating partnerships between state and local agencies, postsecondary institutions, and community and business leaders. In creating these partnerships, the WDE has increased the professional development opportunities for educators across our state and has allowed leaders to learn from one another and leverage available resources to ensure the success of our students.

# Five-Year Strategic Plan

## PLAN CRITICAL COMPONENTS

The five-year strategic plan was written with the goal of harnessing the power of numerous stakeholder groups throughout Wyoming in order to provide equal educational opportunities for all students across the state. By involving leaders from various stakeholders, the WDE will be better able to communicate the vision for digital learning and provide resources for supporting the implementation of digital learning opportunities for Wyoming students. The ultimate goal of the plan is to provide every student with the skills necessary for them to succeed in college, career, or the military in the digital age.

The main pillars of the DLP are identified as critical components for the implementation years 2017-2021. These critical components include: free online educational resources, improved classroom connectivity, increased online courses, increased collaboration between all agencies and districts statewide, and increased professional development offerings. These were identified as critical components during the first year of implementation in order to lay the groundwork for implementation of 2017-2018 DLP goals and proposed projects.

## DIGITAL LEARNING PLAN CRITICAL COMPONENTS

CRITICAL COMPONENTS	DESCRIPTION	BENEFITS
Free Online Education Resources	<ul style="list-style-type: none"> <li>• Easy to access, central online instructional content available to K-12 educators statewide for classroom use</li> </ul>	<ul style="list-style-type: none"> <li>• Instructional materials cost savings</li> <li>• Wyoming standards aligned content</li> <li>• Increased student engagement</li> </ul>
Improved Classroom Internet Connectivity	<ul style="list-style-type: none"> <li>• Collaborative plan to improve WiFi capacity in classrooms</li> <li>• Support districts in applying E-rate Category 2 Funding</li> <li>• Coordination of state or multi-district large scale procurement strategies</li> </ul>	<ul style="list-style-type: none"> <li>• WiFi focus to capitalize on broadband investment</li> <li>• Take full advantage of E-rate subsidies</li> <li>• Economies of scale cost savings</li> </ul>
Increased Online Courses	<ul style="list-style-type: none"> <li>• Plan to increase part-time online course opportunities offered across districts</li> <li>• Collaborative plan to provide a K-20 statewide learning management system for districts to deliver online courses</li> </ul>	<ul style="list-style-type: none"> <li>• Increased student access to equitable educational opportunities</li> <li>• Economies of scale cost savings</li> </ul>
Statewide Collaboration	<ul style="list-style-type: none"> <li>• Multiple agencies and school districts leveraging resources and working together to provide better and increased resources to school districts</li> </ul>	<ul style="list-style-type: none"> <li>• Pooling of resources and collaborative partnerships</li> <li>• Increased knowledge collective knowledge and skills</li> <li>• Economies of scale cost savings</li> </ul>
Professional Development	<ul style="list-style-type: none"> <li>• A systemic, multi-phase plan to support districts and educators in leveraging technology with a focus on the teacher as the key to quality instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Low or no cost training available statewide</li> <li>• Educators sharing best practices</li> </ul>

# Digital Learning Plan Gears

The DLP was written around the pillars of the Future Ready® Framework. This framework provides a robust structure for digital learning planning and implementation, which focuses on personalized student-centered learning. This is a research-based framework which includes seven key categories, or gears, that are critical to address during a comprehensive planning process.

The seven gears identified in the 2017-2021 DLP include:



## CURRICULUM, INSTRUCTION, AND ASSESSMENT

- 21st Century Skills/Deeper Learning
- Personalized Learning
- Collaborative, Relevant, and Applied Learning
- Leveraging Technology
- Assessment: Analytics Inform Instruction



## USE OF SPACE AND TIME

- Flexible Learning; Anytime, Anywhere
- New Pedagogy, Schedules, and Learning Environment for Personalized Learning
- Competency-Based Learning
- Strategies for Providing Extended Time for Projects and Collaboration



## ROBUST INFRASTRUCTURE

- Adequacy of Devices; Quality and Availability
- Robust Network Infrastructure
- Adequate and Responsive Support
- Formal Cycle for Review and Replacement



## DATA AND PRIVACY

- Data and Data Systems
- Data Policies, Procedures, and Practices
- Data Informed Decision Making
- Data Literate Education Professionals



## COMMUNITY PARTNERSHIPS

- Local Community Engagement and Outreach
- Global and Cultural Awareness
- Digital Learning Environments as Connectors to Local/Global Communities
- Parental Communication and Engagement
- District Brand



## PERSONALIZED PROFESSIONAL LEARNING

- Shared Ownership and Responsibility for Professional Growth
- 21st Century Skill Set
- Diverse Opportunities for Professional Learning Through Technology
- Broad-Based, Participative Evaluation



## BUDGET AND RESOURCES

- Efficiency and Cost Savings
- Alignment to District and School Plans
- Consistent Funding Streams
- Learning Return on Investment



# 5 Year Implementation Planning

## 2016-2017 SCHOOL YEAR

- Support district infrastructure of WiFi/LAN and Fiber
- Provide professional development and networking opportunities for technology directors
- Develop a professional learning network for technology directors
- Develop best practices for teaching online
- E-Rate utilization
- Collaborative procurement - Learning Management System (LMS)
- Open Education Resources (OER) project - Open Range Wyoming initiated
- Statewide K-20 digital learning conference (Wyoming Innovations in Learning)
- Data privacy requirements and support for school districts
- Partner with state and national organizations
- Professional development for online educators
- Incentivize the development of teaching online courses
- Digital Learning Innovations Award for K-12 educators initiated

## 2017-2018 SCHOOL YEAR

- Align state and federal funding sources to support digital learning
- Return on investment analysis planning and usefulness of education technology resources
- Open Education Resources (OER) project - Open Range Wyoming launch
- Develop best practices for technology replacement cycles
- Collaborative Procurement: Digital Learning, Infrastructure, LMS
- Professional Learning Networks for leaders and educators
- Develop best practices and guidelines for digital learning plans and resources selection, use of time and space, digital devices
- Develop digital learning and technology standards
- Deliver professional development for leaders
- Incentivize educators creating online and blended content
- Support schools with collecting and analyzing their own data on digital learning implementation and aligning digital learning with the priorities in the school and district
- Data privacy professional development
- Develop a guide on data privacy requirements for vendors working with school districts in Wyoming
- Convene multi-organization stakeholder workgroups to identify and publish education resources statewide
- Open Education Resources vetting and content population and public release of platform and content
- Release updated virtual education course catalog
- Expand and improve computer science education

## 2018-2019 SCHOOL YEAR

- Provide personalized professional development offerings for educators
- Create best practices related to teaching and using blended learning
- Create best practices on including students in learning standards attainment
- Coordinate with the University of Wyoming and Wyoming community colleges on educator pre-service requirements
- Create personalized professional development repository
- Professional development for Open Education Resources in the blended learning classroom

## 2019-2020 SCHOOL YEAR

- Coordinate pairing of high and low performing schools to provide technical assistance
- Working with Professional Teaching Standards Board (PTSB) and districts on badging and micro-credentialing
- Collaborate with the Professional Teaching Standards Board and the University of Wyoming College of Education to develop digital learning certifications for educators

## 2020-2021 SCHOOL YEAR

- Support competency-based education
- Develop the next five-year strategic plan for years 2021-2026





## Statewide and National Collaboration

Through the work implemented from the DLP, the WDE has placed an emphasis on the importance of collaboration, both within the state and at the national level. This collaboration can be seen in each of the projects and initiatives from the DLP's first year projects including: the Wyoming Classroom Connectivity Initiative, Open Range Wyoming, the Future Ready Initiative, Coders of the West, Quality Matters professional development, computer science education initiatives, K-20 Statewide LMS, and the creation of the Wyoming Innovations in Learning Conference. Through these collaborative efforts, numerous partnerships have been formed with state, educational, and industry entities including:

### STATE

- Department of Enterprise Technology Services (ETS)
- Department of Workforce Services
- Gannett Peak Technical Services
- Governor's Office
- Professional Teaching Standards Board
- Sheridan Programmers Guild
- University of Wyoming
- Wyoming Community College Commission
- Wyoming Community Colleges
- Wyoming Curriculum Directors Association
- Wyoming Distance Education Consortium (WyDEC)
- Wyoming State Library
- Wyoming State Museum
- Wyoming Technology Engagement Curriculum Connection (WyTECC)

### NATIONAL

- Alliance for Education-Future Ready
- Code.org
- EducationSuperHighway
- Friday Institute
- Google
- Instructure
- North Central Comprehensive Center (NCCC)
- Mid-Continent Research for Education (McREL)
- Quality Matters
- State Education Technology Directors Association (SETDA)

The emphasis on statewide collaboration has empowered each project to engage stakeholder input by leveraging the collective knowledge and skills of everyone. With this combined knowledge, the WDE has learned best practices from teams involved with similar projects and initiatives, and gathered feedback from parties directly impacted by the DLP initiatives leading to saved time and effort.

Another important benefit of statewide collaboration has been to leverage economies of scale, which can be seen in the efforts to develop and implement a K-20 Statewide LMS, which will increase equity of learning opportunities for students across the state. Currently, at least one quarter of all school districts do not have an LMS due to financial constraints. In October 2016, the WDE began working with school district representatives, community colleges, and the University of Wyoming to investigate and plan for the implementation of a K-20 Statewide LMS with the goal of decreasing costs for districts choosing to participate, which in turn would provide greater instructional benefits for all students across the state regardless of location.

By increasing collaboration between agencies, institutions, and districts across the state, the WDE has effectively increased the number and variety of professional development opportunities available to all educators. The WDE has also been able to connect both the University of Wyoming and community colleges to K-12 partners to offer additional trainings and create connections to industry experts, providing educators across the state learning and networking opportunities. This has allowed district staff, administrators, and teachers to learn additional strategies for differentiating instruction, integrating technology resources, implementing blended and personalized learning, and understanding the benefits and importance of incorporating digital learning into the classroom.





## Open Education Resources

According to the Hewlett Foundation, Open Education Resources (OERs) “are teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and re-purposing by others. Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.”<sup>3</sup> These learning materials, whether online textbooks or shared lesson plans, can be used for teaching, learning, and assessment at no cost, and can be modified or redistributed without violating copyright laws. Committing to using OERs increases access to high-quality educational opportunities for all students across all districts and enables districts to repurpose funding traditionally spent on quickly outdated textbooks for other initiatives, such as transitioning to digital learning. Providing access to high quality OERs will not only encourage districts to use digital resources and OERs to enhance student learning, but will also assist the WDE in meeting the digital learning goals outlined in both the 2017 WDE Strategic Plan and the 2017-2021 Statewide DLP.

### OPEN RANGE WYOMING

Open Range Wyoming is an open education resource platform in development to create and maintain a searchable statewide repository of openly-licensed educational resources and will support Wyoming school districts and educators as they make the transition to the use of high-quality, openly-licensed educational resources in their schools. The overall goal of this initiative is to provide high quality, vetted resources created by Wyoming educators, aligned to Wyoming standards, for educators to be used in their classrooms.

The project has grown since its original inception. The WDE has organized a committee with representation from various departments and educational organizations to ensure a broad knowledge base informs the development of this system along with the associated professional development for K-12 educators. Open Range Wyoming is scheduled to launch in August 2018.

Implementation of Open Range Wyoming meets a number of the goals and recommendations of the DLP. The creation of a statewide open resource sharing platform meets goals in each category, or gear, of the DLP.

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3 <http://www.hewlett.org/strategy/open-educational-resources/>

# OPEN RANGE WYOMING PARTNERS

Curriculum Directors Association  
Western Wyoming Community College  
Wyoming State Library

University of Wyoming  
Wyoming School Districts  
Wyoming State Museum

The goals met include:

- Using technology and data to inform educators and students for personalized instruction
- Providing models of effective digital learning to educators
- Developing partnerships between K-12 systems, postsecondary institutions, and libraries, that enable opportunities to learn from each other and leverage resources together
- Supporting districts to provide students with opportunities to connect with the global community to ensure college, career, and military readiness
- Enabling students to have access to learning opportunities outside of school by connecting to local, community, national, and global partners
- Creating a statewide network of educators and organizations focused on sharing digital learning best practices, implementation strategies, and successful outcomes

## MEASURES OF SUCCESS

The projected results and measure of success of this project will be the adoption and implementation of a statewide repository solution for openly licensed educational resources and the development of a standardized vetting process for reviewing and posting all open resources. The success of this project will be measured through the development of an OER platform, the awareness of Wyoming educators of the resources available, the use of these resources by educators both in and out of state, the creation of a vetting and curation process, and all resources aligned to Wyoming State Standards.

## DIGITAL LEARNING DAY

Increasing digital learning in the classroom not only provides opportunities for student-driven learning, but also greatly increases equity and access to quality educational opportunities for all students. Digital Learning Day began in 2012 and was started as a venue for education leaders to highlight outstanding digital learning teaching practices, and to showcase innovative teachers, leaders, and instructional technology programs that improve student achievement. Digital Learning Day is a national celebration that is not just about technology, but is also about learning and enhancing the role of the teacher in the classroom. It was started as a way to spread information about innovative practices across the country, so that all students have access to high-quality digital learning opportunities, no matter where they live.

Wyoming's focus for Digital Learning Day 2017 was the Wyoming State Museum. Since the fall of 2014, the Wyoming State Museum in Cheyenne has been offering virtual field trips to classrooms in grades K-12 as well as encouraging teachers to take part in professional development opportunities focused on using digital tools such as Skype and Google Hangouts. Over the last three school years, over 7,000 students from 44 states and 16 foreign countries have visited the Museum without actually traveling to Wyoming. The Museum has traveled more than 850,000 virtual round trip miles since its first virtual field trip. The virtual field trips are not limited to students outside Wyoming; students in Wyoming are also highly encouraged to participate.

The Museum's original goal of joining Skype in the Classroom was to reach out to more students throughout the state of Wyoming. However, it was not until the spring of 2017 that a Wyoming school participated in the program. Since then, students in Casper, Burns, and Gillette have participated, and the Museum expects to continue to grow its virtual field trips throughout the state. The Museum's programs address Wyoming Content and Performance Standards. During "Wyoming and the West," students explore exhibits at the Museum, discovering Wyoming's past and present. Topics include the Plains Indians, Mountain Men, the Frontier Army, Ranching, and Natural Resources.

## **MEASURES OF SUCCESS**

The projected results and ultimate measure of success of this project will be the number of districts participating in Digital Learning Day activities and the availability of the Wyoming State Museum's educational resources being posted for educator use on the Open Range Wyoming platform. The success of this project will be measured through the development and sharing of resources, all shared resources being aligned to Wyoming State Standards, and the use by educators both in and out of state, for use in their classrooms. The goals of this project are to increase the number of Wyoming schools participating in virtual tours hosted by the museum, increase the number of educators accessing OER resources on the Open Range Wyoming website, and encourage both schools and districts to officially register for Digital Learning Day events in 2018.





# Improved Classroom Internet Connectivity

## WYOMING CLASSROOM CONNECTIVITY INITIATIVE

The Wyoming Classroom Connectivity Initiative was developed from work completed as part of a National Governors Association policy academy focused on increasing broadband connectivity to schools and districts. Given the districts have access to the Unified Network, Wyoming chose to focus on supporting districts with classroom connectivity and supporting districts in effectively using the E-Rate program. The E-Rate program is a federal reimbursement program for school district expenses for fiber and wireless connectivity infrastructure.

In Fall 2016, the WDE and EducationSuperHighway completed a training roadshow across the state focused on E-Rate and network architecture. Following the roadshow, a webinar series was created and recorded assisting districts with understanding the E-Rate program and how to apply for reimbursement of WiFi and broadband connectivity. The WDE, ETS, and EducationSuperHighway are now hosting workshops to ensure districts are aware of federal funds available through the Universal Service Administrative Company's (USAC) E-rate program.

The Classroom Connectivity Initiative has helped reach the DLP goals under Robust Infrastructure to ensure every school has the capability to meet the LAN/WiFi standards, support a technology infrastructure providing opportunities for equitable education for all children attending Wyoming's K-12 public schools, ensuring every school has the capacity to successfully plan, procure and manage its LAN/Wi-Fi networks, and making sure every school has the capacity to provide sufficient funding, staff, and expertise to manage the LAN/Wi-Fi networks. The classroom connectivity initiative also met the Budget and Resources goal to maximize funding opportunities such as E-Rate by developing a statewide E-Rate strategy and repurposing existing funds for more effective opportunities.

## WYOMING CLASSROOM CONNECTIVITY PARTNERS

Department of Enterprise Technology Services (ETS)  
EducationSuperHighway  
Friday Institute  
Governor's Office  
Wyoming School Districts  
Wyoming State Library

In July 2017, lead partners for the Wyoming Classroom Connectivity Initiative met to plan for the second year of the initiative. Moving forward this initiative will continue to focus on collaboration between partners to reduce duplication of efforts while providing a more cohesive and comprehensive support network for school districts in improving their connectivity infrastructure and usage of E-Rate. With districts making requests for the state to assist in collective purchasing processes to allow them to receive the cost advantages associated with economies of scale, this initiative will be working to find ways to make collective purchasing viable for districts across the state.

## **MEASURES OF SUCCESS**

The first year of the Wyoming Classroom Connectivity Initiative has produced very positive results. Twenty-three (23) districts attended a nine-part webinar series to explain the Category 2 E-rate process and encourage districts to file for upgraded services. Wyoming school districts requested \$2.5 million in Category 2 purchases in 2017-2018. Nine districts filed for E-Rate reimbursement for the first time, increasing the total amount of districts' Category 2 budgets requested from 19% to 37%. In Wyoming, 34 of the 48 school districts have used at least some of their allocated E-Rate budget.

## PRIVACY REQUIREMENTS

In the 2017 legislative session, legislators amended W.S. 21-2-202(a)(xxxvii)(A-E) to establish and maintain guidelines for school districts for the collection, access, privacy, security and use of student data. The guidelines shall include the following: authorization and authentication mechanism for accessing student data; administrative, physical and logical security safeguards, including employee training and data encryption; privacy and security compliance standards; process for identification of and response to data security incidents, including breach notification and mitigation procedures; and standards for retention and verified destruction of student data.

W.S. 21-2-110(a)(xxxv) requires districts to write their own data and security policies and have them adopted by the district board of trustees and effective no later than January 1, 2018 using the guidelines established under W.S. 21-2-202(a)(xxxvii).

## **MEASURES OF SUCCESS**

The measures of success will be that the Policy Guidelines have been reviewed and approved by the collaborating agencies, with input from districts. The guidelines are posted on the WDE website Data Governance landing page: [edu.wyoming.gov/data/data-governance](http://edu.wyoming.gov/data/data-governance).



# Increased Online Courses

## VIRTUAL EDUCATION LEGISLATION SENATE FILE 35/SEA 57

2017 Senate File 35 was signed into law on March 9, 2017, and brought changes to multiple statutes and rules regarding the delivery of online courses in Wyoming. All of the statutory changes included in the legislation were based on recommendations made by the 2015 Distance Education Task Force (DETF), which was formed to resolve ongoing virtual education program issues. The DETF work was focused on removing some of the barriers in regard to students participating in part-time online classes as well as barriers facing students enrolled full-time in virtual education programs.

To address issues surrounding part-time virtual education, the DETF made recommendations to ease the burden on school districts and remove barriers associated with students taking supplemental online classes. The new legislation removed the most cumbersome requirements, including the average daily membership (ADM) calculation based on course milestones and the need for a distance learning plan. As the changes to virtual education are implemented, ADM will be calculated utilizing student participation in their online classes, which will be tracked through a district's LMS. In place of a distance learning plan, the tracking of student progress will also be made available to staff supporting the student through the learning management system.



The following items highlight the SF35 legislative changes designed to increase virtual education opportunities in Wyoming:

- Allowing districts to set and collect tuition for virtual education courses taken by students enrolled in another district. This tuition will not impact the local resources portion of the school finance model.
- The tuition amount will be included in the online course catalog of K-12 virtual education courses. Having the cost per course available will facilitate districts being able to assess and compare virtual education courses being offered in the state versus those available for single course purchase from out-of-state vendors.
- Establishing a Virtual Education Advisory Committee (VEAC) to recommend changes to rules, policies, practices and procedures and serve in an advisory capacity to school districts to improve delivery of virtual education courses across the state. Having the VEAC allows for more fluid management of virtual education issues since they will be available to modify any needed changes to policy and practice as they occur rather than waiting for legislation to be changed.
- Adding a part-time virtual education definition and district responsibilities for students participating in part-time online courses will contribute to improving access to virtual education opportunities and monitoring student progress in online courses. In the previous statutes, there wasn't a clear reference to single virtual course options.
- The WDE is now required to provide professional development regarding the development and delivery of virtual education courses for teachers and administrators.
- Making a statewide LMS available to every district for the purposes of easily tracking students in online courses as well as providing a venue for delivery of online content within schools as well as virtually.

## **MEASURES OF SUCCESS**

The ultimate measures of success for implementing Senate File 35 will be to increase the number of students taking virtual education courses. It will also be important to ensure rules and regulations are updated to support the new legislation and to help provide directions for districts. This will be especially important in ensuring districts understand the program management aspects for virtual education including documenting participation for membership and monitoring student success.

# STATEWIDE LEARNING MANAGEMENT SYSTEM

As outlined previously, 2017 Senate File 35 established requirements for the WDE to offer a centralized statewide LMS for districts to use to document, track, report and deliver virtual education courses. The LMS will assist districts with being able to provide equal access to educational opportunities for all students, and will increase ease of access and continuity for students throughout their education. A statewide LMS will open up new opportunities for educators to work together across districts and will allow easier access to additional Hathaway Success Curriculum courses, Advanced Placement courses, coding courses, credit recovery courses, and additional world language options. The LMS will be made available to all school districts in the state, though districts can still choose to establish or continue using their own individual LMS.

The WDE and postsecondary partners came together to establish the K-20 Statewide LMS. These groups have been investigating the best option that would be able to meet the needs of both K-12 and postsecondary institutions throughout the state. This K-20 Statewide LMS will allow students single sign-on access to courses they are taking in their district, other districts and postsecondary institutions. The same is true for a teacher who is also a student at one of the community colleges or the University of Wyoming. This coordination allows for both K-12 districts and postsecondary institutions to reap reduced costs. The partners are also looking to develop a shared professional development model to be offered to K-20 to teachers, instructors, professors, and administrators.

## MEASURES OF SUCCESS

As of August 1, 2017, five of the seven community colleges and the University of Wyoming have joined the K-20 Statewide LMS initiative. Ten school districts and the WDE have also opted in to using the K-20 statewide LMS. As this initiative continues to move forward, additional measures of success will include the number of educators participating in professional development and training opportunities provided by the WDE and Canvas for use of the LMS, the number of courses available to Wyoming students to increase equity of learning opportunities, and lowering the costs for districts to provide an LMS solution by leveraging economies of scale.

## STATEWIDE LMS PARTNERS

Wyoming School Districts  
Central Wyoming College  
Eastern Wyoming College  
Laramie County Community College  
Northern Wyoming Community College District  
University of Wyoming  
Western Wyoming Community College  
Wyoming Community College Commission

## VIRTUAL EDUCATION COURSE CATALOG

The WDE is in the process of developing an upgraded virtual education course catalog website with an updated online catalog for K-12 virtual education courses offered in the state. The new version of the virtual education course catalog site will include features to assist counselors, principals, institutional staff, students, and parents in locating online course options and making registration requests and will also include the cost of part-time course offerings when applicable.

Wyoming Distance Education Consortium (WyDEC) developed the WyCLASS website to provide a comprehensive listing of all college classes offered via distance delivery in the state. In partnership with WyDEC, the WDE was able to adopt the WyCLASS database and use it as the foundation for the revised online course catalog website. This partnership is an example of leveraging resources that resulted in saving the WDE \$46,000.

The revised virtual education course catalog will launch in the Fall of 2017 and will include a searchable database of classes and pre-registration system that informs district registrars in the form of auto generated emails when students are interested in courses. If a student is interested in a class offered by a district other than the one in which they are residing, their home district is notified to help facilitate communication between districts. An online survey tool has also been added to help facilitate the supply and demand aspects of district-to-district online course needs, offerings and participation. Information about each approved virtual education program available to Wyoming students, as well as an online contact form for each program, is also included on the site. This improved website is intended to serve the purpose of creating a centralized location for all information regarding K-12 virtual education in our state.

### MEASURES OF SUCCESS

The ultimate measures of success of the online course catalog will be having all virtual education courses available statewide, including tuition costs for single course offerings. Another measure of success will be the utilization of the virtual education course catalog website. In order to help with the adoption of the online course catalog statewide, training will be provided across the state to help users understand the course pre-registration and survey interest system features. The ultimate goal of the revised virtual education course catalog is to increase the overall enrollment in virtual education courses throughout the state by 2020, as identified in the [WDE's strategic plan](#).<sup>4</sup>

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4 <http://wyomingmeasuresup.com/>



# Computer Science Education

## CODERS OF THE WEST

Schools throughout Wyoming have struggled with having sufficient resources to provide students with work-based experiences that allow the students to explore career opportunities, acquire the knowledge/skills needed to be successful in those careers, and to connect academic knowledge with “real world” application.

To address this challenge, the WDE and Gannett Peak Technical Services came together with their education and industry partners to provide students with a unique experience to learn about the large scale software development industry and careers. Eleven students between Sheridan and Cheyenne came together, with mentors from two software development companies to form an internship pilot program called Coders of the West. This program provided students with an unique opportunity to learn computer programming by working with industry partners on a software development project.

Since the students had no prior coding experience, they participated in an intensive two-week coding camp. These coding camps were team-taught on community college campuses by college instructors and industry professionals. After the coding camp, students were placed in internships where they worked alongside their industry partners on the development of Wyoming’s Career Exploration System. Students participated in the software development life cycle process, were exposed to various coding skills, gained valuable employability skills, and received high school credit from their respective school districts for the internship.

## COMPUTER SCIENCE EDUCATION PARTNERS

code.org  
Gannett Peak Technical Services  
Laramie County Community College  
Northern Wyoming Community College District  
Sheridan Programmers Guild  
Western Wyoming Community College  
Wyoming School Districts

Wyoming's Career Exploration System is being rolled out to Wyoming K-12 schools during Fall 2017. The system provides students with an engaging experience allowing them to explore Wyoming career opportunities and gain an understanding of the skills and knowledge needed to be successful in those careers. The system also provides other career details along with secondary course recommendations including scholarship qualification courses and postsecondary program offerings. As Phase I of the Coders of the West pilot comes to an end, the WDE is expanding the project. Phase II will allow for additional districts and students to participate in work-based learning experiences, including internships. To help students be better prepared for their internships, the WDE is working with curriculum directors, coding teachers, and industry partners to create an online course that will prepare students to work with the industry. The goal is to have the online class taken by students in the fall to prepare them for their internship in the spring.

## **MEASURES OF SUCCESS**

There are several indicators of this project's success. Students learned about different components of software development from working with clients to define customer requirements, as well as frontend and backend development, cloud hosting, and geographic information systems (GIS). These students also learned a host of employability skills, including showing up to work on time, perseverance, team collaboration, working with remote teammates, and self-management. All student interns learned how to document their work to show to prospective employers, and how to describe their work on a resume.

Participating students completed a two week coding bootcamp. Eleven students participated: eight males and three females; three were from an alternative high school, and eight were considered at-risk. The internship fostered coordination on the needs of computer science education between K-12, postsecondary, and industry participants, as well as helped to increase the number of students taking computer science classes at the postsecondary level. Of the participants, five will take postsecondary computer science courses; one will continue postsecondary computer science courses at a community college; two will enter the military, one student left the program, reporting that coding is not going to be his future career, and one student will be entering the 11th grade. The industry partners look forward to being able to recruit an increased number of employees from Wyoming, and the WDE is proud to report an increased number of students from diverse backgrounds participating in computer science.

Another measure of success is that both of the districts that participated in Phase I are looking at ways to continue and expand these efforts while developing ways to insure computer science education is integrated throughout their K-12 systems. Other school districts are looking into ways to make this program work in their districts, as well. A key outcome includes the development of an online introductory computer science course designed to meet industry needs that any high school student in Wyoming can take and possibly receive college credit for completing.

## HOUR OF CODE & COMPUTER SCIENCE EDUCATION WEEK

The Hour of Code is a global movement reaching students in over 180 countries with a focus of expanding access to computer science and coding lessons. An Hour of Code event can be organized by anyone, anywhere! In December of 2016, the Wyoming Department of Education organized a statewide Hour of Code initiative to encourage all Wyoming schools to participate in one hour of coding activities for students from Kindergarten through 12th grade. Participating schools were encouraged to publicize their Hour of Code events through local and social media outlets and invite community members to join in their efforts. Each school officially registering with [hourofcode.org](http://hourofcode.org) received a signed certificate of participation from both Superintendent Balow and Governor Matt Mead. In addition to schools being encouraged to participate in the event, all members of the WDE were asked to participate in Hour of Code by dedicating one uninterrupted hour of the workday to participate in a coding activity offered by [code.org](http://code.org).

In addition to the Hour of Code events taking place around the state, Governor Matt Mead also signed a proclamation declaring the week of December 5-11, 2016 “Computer Science Education Week”.<sup>5</sup> The proclamation signing took place on December 5, 2016 at the Governor’s Office with members from the Wyoming State Legislature, Wyoming Department of Education, the University of Wyoming, Laramie County Community College, members of the press, and members of the public in attendance.

Hour of Code planning activities for 2017 have begun with members from five different teams within the WDE. The 2017 goal is to have students across the state participating in one hour of coding at the same time. Encouraging all Wyoming schools to participate in Hour of Code activities meets goals identified in the Community Partnerships and Empowered Innovative Leadership sections of the DLP. These goals include providing students access to learning opportunities beyond the school walls by connecting to local, community, national, and global partners. Enabling educators to access additional opportunities to collaborate and problem solve in innovative ways, assists school districts in developing collaborative partnerships and increase the educational reach of our state’s educators.

### **MEASURES OF SUCCESS**

The success of this program will be measured by the number of schools choosing to participate in an Hour of Code activity and officially registering on the Hour of Code website at [code.org](http://code.org). In 2015, only 22 schools were officially registered on the [code.org](http://code.org) website as participating in or hosting an Hour of Code activity. In 2016, after extensive communication and encouragement for participation by the WDE and the Governor’s Office, 132 schools were officially registered as hosting Hour of Code events during Computer Science Education Week. In February of 2016, the WDE was recognized by representatives from [code.org](http://code.org) for being a regional leader in school participation of Hour of Code activities.

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5 [edu.wyoming.gov/blog/2016/12/05/wyoming-schools-celebrating-computer-science-education-week/](http://edu.wyoming.gov/blog/2016/12/05/wyoming-schools-celebrating-computer-science-education-week/)



# Professional Development

## WYOMING INNOVATIONS IN LEARNING

The Wyoming Innovations in Learning Conference is being developed through a partnership with the WDE, postsecondary institutions, and the Wyoming State Library. The Wyoming Distance Education Consortium (WyDEC) and UW have put on their own conferences in the past. Moving forward these two events are being combined with the WDE efforts to provide digital education learning opportunities to K-12 educators resulting in a combined conference with a K-20 audience. This leveraging of knowledge and resources has enabled the inaugural Wyoming Innovations in Learning Conference to be held in November of 2017.

This conference will feature professional development on the following conference tracks: open educational resources, innovations in teaching, digital learning, student learning assessment, online and blended learning, educational technology tools, computer science, and using a learning management system. This conference has contributed to the Community Partnership goals for the DLP to help coordinate the opportunity for these institutions to learn from each other and leverage resources together as a combined K-20 group.

## PROFESSIONAL DEVELOPMENT PARTNERS

Alliance for Education-Future Ready

Google

Quality Matters

University of Wyoming

Wyoming Community Colleges

Wyoming School Libraries

Wyoming State Library

Wyoming Distance Education Consortium (WyDEC)

Wyoming Technology Engagement Curriculum Connection (WyTECC)

## MEASURES OF SUCCESS

The measures of success will be delivering a conference to address the needs of K-20 educators while building relationships that enable opportunities for coordinated and aligned high quality professional development opportunities across educational institutions in Wyoming. Another measure of success for this conference will be the leveraging of resources to help reduce the burden of cost for each institution. By being a partner in this conference, the University of Wyoming immediately saw a savings of approximately \$18,000.

## FUTURE READY WYOMING

The WDE announced the launch of the statewide Future Ready Initiative in September of 2016 by signing the pledge to be a Future Ready state. In taking part in this initiative, Wyoming joined a cohort of 17 states dedicated to preparing students for success in college, career, and citizenship through personalized student learning. The benefits of becoming a Future Ready state include free access to tools and resources that assist district leadership teams plan systemically to use technology more effectively to engage students, empower teachers, and improve overall learning outcomes.<sup>6</sup>

The process for districts and states to become “Future Ready” is outlined in the Future Ready Framework®, which is comprised of 7 key categories (listed above) designed to ensure a successful conversion to digital and personalized learning. Collaborative Leadership is a foundational element to becoming a Future Ready state and is emphasized as an integral part of each gear in order to create an innovative school culture. The goal of our state in becoming Future Ready is to provide additional personalized learning opportunities, provide additional supports and resources to districts and schools, and improve the overall educational opportunities and engagement for all Wyoming students.

The DLP was written around the Future Ready Framework, which provides a strong structure for visioning, planning and implementation which is focused on Personalized Student Learning. This framework was used as scaffolding for organizing and communicating Wyoming’s 2017-2021 DLP as well as providing updates within the 2018 Annual Report in order to best address the Digital Learning priorities of our state. Through utilization of this framework, Wyoming will systematically approach change by increasing Digital Learning practices throughout the state and increasing the number of students graduating from our school system being identified as “Future Ready”.

## MEASURES OF SUCCESS

The success of this program will be measured by the number of Wyoming school districts officially taking the Future Ready Pledge. In summer of 2016, only six Wyoming school districts had taken the pledge. By September of 2016 that number had grown to twelve. Additionally, the success of this program will be measured by the number of districts participating in the Wyoming Future Ready Summit, which will be held in February 2018.

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<sup>6</sup> Current Future Ready States include: California, Indiana, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, New Mexico, Utah, Vermont, West Virginia, and Wisconsin. Additional information can be found at: [futureready.org](http://futureready.org).

## QUALITY MATTERS WORKSHOPS AND COURSES

Quality Matters (QM) professional development includes workshops aimed at helping K-12 educators design, review and teach virtual education courses. Through the WDE QM consortium membership, QM workshops are available to all Wyoming educators. The QM training prepares individuals to become certified course reviewers and the online K-12 QM Rubric and tools enable them to conduct reviews for online courses across the state. QM offers a number of face-to-face, online, and webinar workshops to help educators use the QM Program tools and improve online and blended courses. Detailed workshop descriptions may be found on the Quality Matters website.

The QM consortium membership provides each educator in Wyoming with access to the research-supported online course evaluation QM Rubric, course review tools, and opportunities for professional development. The QM K-12 Rubric empowers teachers, schools, and districts to create and adapt effective online and blended courses that serve the needs of their students and improve learning outcomes. Under the consortium, any educator in Wyoming can access the online QM Course Review Management System to review and evaluate online content.



The Quality Matters K-12 Secondary Rubric includes eight critical standards (as well as a ninth optional standard) that are used to evaluate and design online courses:

1. Course Overview and Introduction
2. Learning Objectives (Competencies)
3. Assessment and Measurement
4. Instructional Materials
5. Course Activities and Learner Interaction
6. Course Technology
7. Learner Support
8. Accessibility and Usability
9. State (or other) course content standards

With the consortium subscription, training is available for local educators to become QM certified trainers and provide the K-12 Applying the QM Secondary Rubric workshop. The QM Teaching Online Certificate is also available to educators which enables them to demonstrate their knowledge mastery of online teaching. The certificate is composed of seven workshops that include competencies and background knowledge for teaching online.

## **MEASURES OF SUCCESS**

The success of the Quality Matters training will be measured by four Wyoming educators prepared to be QM Coordinators in each quadrant of the state, at least ten educators completing the QM reviewer course each year, providing two-day face-to-face workshops for districts developing online courses at the rate of two per year, at least 20 educators completing one or more QM online course and at least ten educators completing the Teaching Online QM certificate program each year. In the 2016-17 school year, there have been 39 educators that attended face-to-face QM workshops, one educator has completed the online QM course, and three have completed the QM reviewer course.

## **K-12 DIGITAL LEARNING INNOVATIONS AWARDS**

The K-12 Digital Learning Awards are being created to honor leaders and educators who create cultures of innovation and forward-thinking through effective uses of digital, 21st century technologies to engage students while empowering them in owning their learning. The Digital Learning Innovations Award acknowledges educators utilizing new and innovative ways to incorporate digital learning into their work. This award recognizes educators in three categories: Educator (School Level including school leaders), District Leader (District Level), and Policy Makers or Program Leaders (Statewide Level). Winners of this award will be recognized at the Wyoming Innovations in Learning Conference.

These awards have helped reach the DLP goal under Personalized Professional Learning to provide recognition for educators to continue their professional growth toward implementing effective Digital Learning practices.

## MEASURES OF SUCCESS

The measures of success for the K-12 Digital Learning Innovations Awards is the sharing of outstanding practices and work accomplished throughout the state and providing recognition to those districts for going above and beyond. With challenges facing the State's budget, it is important to continue to communicate how integral educators are to the success of Wyoming's educational system.

## DATA RETREATS

Data Retreats feature a full day and a half of intensive professional development for school leadership teams facilitated by a cross-team group of WDE staff. The objective is to provide guided analysis to school teams as they work collaboratively to review school data. This culminates in a root cause analysis which provides the foundation for reflecting on strategies in the existing school improvement plan to determine next steps for achieving improved student outcomes.

Comments from school staff participating in these retreats include:

**"THESE TWO DAYS WERE WONDERFUL FOR ME. WALKING THROUGH THE PROCESS WAS WELL DONE. I AM LEAVING WITH A GREATER UNDERSTANDING OF THE WHOLE PROCESS. LOVE THE NOTE-TAKING GUIDES!"**

**"AWESOME! GREAT TO DRILL DOWN TO GET TO STUDENT LEVEL NEEDS. THE '5 WHY'S' ARE VERY HELPFUL."**

**"I WISH WE HAD PARTICIPATED IN THIS RETREAT EARLIER IN THE SCHOOL YEAR!"**

## MEASURES OF SUCCESS

The measures of success for the Data Retreats include schools developing a better understanding of the data and how to apply this understanding to school improvement planning. Another measure of success is the number of schools and districts participating in the Data Retreats. During the 2016-17 school year Data Retreats were prescribed for all priority schools. Of the total 17 priority schools, 13 participated in Data Retreats. Retreats were waived for four of the schools due to related professional development offerings provided locally. Data Retreats were also offered to any interested school. In 2016-17 a total of 98 schools participated in Data Retreats representing 20 school districts.

## THIRD PARTY DIGITAL LEARNING PROFESSIONAL DEVELOPMENT

To further digital learning professional development across the state, the WDE supports and promotes relevant activities being provided by school districts or other third parties. The WDE promoted and supported the e-Volution Technology Forum by participating on the planning committee, sending announcements about the event to Wyoming educators across the state and presenting at the conference. WDE support for the WyTECC conference included sending registration and other information to educators. Support for the Google Summit included marketing the event through WDE communication channels and providing registration waivers.



### **e-Volution Technology Forum**

The Annual e-Volution technology forum is presented by the University of Wyoming Outreach School, Ellbogen Center for Teaching & Learning, UW Libraries, Laramie County Community College, and the Wyoming School-University Partnership. The central goal of e-Volution is to help teachers and trainers discover and share innovative ways of using technology to enhance teaching and learning. The e-Volution conference provides a free forum in which educators share “best practice” examples of technology use at university, community college, K-12 and other learning environments. The WDE provided a session titled “2017-2021 Statewide Digital Learning Plan” and participated on the opening panel to provide the K-12 perspective on innovative classroom and online practices. The e-Volution Conference was held October 3, 2016, on the University of Wyoming campus.

### **Wyoming Technology-Curriculum-Engagement Connection (WyTECC)**

WyTECC is the Wyoming International Society for Technology in Education (ISTE) Affiliate with an aim “to connect a diverse statewide community of educational and community leaders from across Wyoming for the purpose of discussing and sharing information and ideas relating to technology, engagement, and curriculum in PK-20 classrooms”. The WyTECC 6th annual conference, “Teach the Future to Fish,” was held in May 6, 2017, in Green River, Wyoming. Over 200 educators and professionals participated in the conference. WDE team members hosted an informational table for the duration of the conference and were available to answer questions for Wyoming educators.

### **EdTech Team Summits Featuring Google for Education**

This two-day high-intensity event focuses on deploying, integrating, and using Google Apps for Education (and other Google tools) to promote student learning in K-12 and higher education. The program features Google for Education Innovative Educators, Google for Education Certified Trainers, practicing administrators, and other solution providers. Google Apps for Education provides Google Apps Unlimited features for free to nonprofit K–12 and higher education institutions in the U.S. and other countries.

EdTechTeam held one Google Apps for Education (GAPE) Summit, which was offered statewide to teachers in June 2017. On June 1-2, 2017, Campbell County School District 1 hosted a Summit for over 400 educators including 118 who received WDE sponsored registrations.



# Lessons Learned & Promising Practices

## LESSONS LEARNED

Throughout this process the WDE has gained experience that will improve future digital learning practices. Key lessons learned include stakeholder analysis, stakeholder engagement, building collaborative relationships, and measures of success.

### LESSON 1: STAKEHOLDER ENGAGEMENT AND ANALYSIS

In addition to identifying stakeholders early in the process, active engagement in the project from the beginning is essential. Including different perspectives from stakeholders is important to ensure that the overall project will be a better product, and also that the product will be used. If the participants using the products are not consulted, then the value to them will not be known.

Stakeholder input at the beginning of a project is critical. To ensure proper inclusion and coordination with key stakeholders, a stakeholder analysis was created to identify potential stakeholders prior to starting work on projects. The WDE has also developed project charters to ensure that stakeholders know what to expect from the project, including the measures of success, and the pertinent information associated with the project from the beginning. Utilizing both the project charter and stakeholder analysis are essential for ensuring successful project implementations.<sup>1</sup>

### LESSON 2: BUILDING COLLABORATIVE RELATIONSHIPS

The WDE has learned the importance of building relationships from stakeholder feedback and engagement. Building relationships with organizations that can provide information to help project development is essential. These organizations include national and local partners that can be seen throughout this report. The WDE has also learned build relationships with other states. By working with other state departments that have created similar processes and programs, the WDE can gather information about their lessons learned and resources that were used. It is also essential that WDE works with postsecondary institutions and industry partners to ensure that our goals and efforts are all aligned.

### LESSON 3: PILOT PROGRAMS

Throughout the first year of the DLP implementation, the WDE has learned the importance of pilot programs. Pilot programs like Coders of the West allow for smaller projects and initiatives to be tested with little risk to the Department to see if it is going to be a success. Smaller pilot programs allow for easier modifications throughout the pilot before launching into the full-scale implementation. This can help the department test several aspects before deciding to continue the project in the future. Pilot programs are also a great opportunity to build partnerships with new entities without adding too much pressure or work to either party. As with the Coders of the West pilot, the WDE and Gannett Peak Technical Services were able to come together and work on the project as a whole.

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<sup>1</sup> See Appendix B for examples of the stakeholder analyses completed for the various initiatives.

## LESSON 4: EVALUATION AND RETURN ON INVESTMENT

In the current budget situation, the WDE will need to have project evaluations in place to ensure that we are getting a reasonable return on investment (ROI) and are having the desired outcomes. The projects in the DLP can greatly impact Wyoming school districts. To ensure that these projects are providing the anticipated value to school districts, the WDE will need to ensure the ROI analyses and project evaluations are in place to make ensure the money, time, and resources are not wasted. Part of this process will be partnering with those impacted by the project to get their feedback from the start and not just assume that it is something that will benefit them. As budgets continue to shrink, partnering and leveraging economies of scale will become increasingly more important. By having project evaluations and ROI discussions, projects can be weighted and prioritized to allow for the most beneficial projects to be implemented first. Throughout this evaluation process, ensuring student success will continue to be at the forefront of the plan.

### PROMISING PRACTICES

Innovation is thriving throughout Wyoming. Listed below are a few ways that innovative practices are being used in Wyoming school districts:



#### ALBANY COUNTY SCHOOL DISTRICT #1

Albany County School District #1 received funding from the Wyoming Education Trust Fund Grant in July of 2015. With these funds the district planned to pilot two new courses through “Project Lead the Way (PLTW): Introduction to Engineering and Principles of Engineering” to high school students in an effort to incorporate all four components of STEM into the classroom. As of 2016, Laramie High School began offering both freshman and sophomore level PLTW courses, which expose the students to advanced engineering topics and disciplines so that they can decide if engineering is a field they are interested in pursuing and choosing as a career. The goal of this project was to increase interest in Engineering courses so that Laramie High School can continue offering PLTW courses, determine a qualified instructor to participate in training to teach the course, purchase additional materials and software, and provide space for the courses to be taught. Data collected throughout the 2015-2016 school year showed that interest and enrollment in these courses increased by 194%. This data shows that the goal has already been met and exceeded. The hope is to continue growing interest in PLTW courses, increase students’ overall interest in engineering, and to encourage pursuing engineering courses in their undergraduate education.



## PLATTE COUNTY SCHOOL DISTRICT #1

Platte County School District #1 received Wyoming Education Trust Fund Grant funds in July of 2015 and used those funds throughout the 2015-2016 school year to implement the “Music Technology for Comprehensive Musicianship” program in the sixth through twelfth grades in Wheatland, Wyoming. The goal of the project was to purchase new technology for those students enrolled in band to make practice time more engaging and efficient in order to increase overall practice time outside of school hours and increase the number of students meeting all Wyoming Performing Arts standards and benchmarks. The project proved to be very effective, as the lead educator noticed his students showing more interest in practicing their instruments during personal time outside of school. When given a survey as to how often students practiced outside of class time, there was a dramatic increase in the number of students spending two to three hours of time practicing on their own.



## PLATTE COUNTY SCHOOL DISTRICT #1

Mrs. Brittany West, a Family and Consumer Sciences Middle School teacher from Platte County School District #1, has embraced using technology by recording herself demonstrating a variety of skills the students were going to practice in order to use a sewing machine effectively and safely. These videos were then uploaded to YouTube for students to access in the future. She further engaged the students by using a web-based platform called EdPuzzle where she downloaded added voice annotations to highlight points in the videos she wanted the students to pay special attention to. These videos were then shared with the students through Google Classroom. She tracked who had watched the videos and how many times they had watched them in order to gather feedback on the concepts the students needed extra help in learning.



## SHERIDAN COUNTY SCHOOL DISTRICT #2

Ms. Julie Weitz, Librarian and Media Specialist at Sheridan Junior High School (SJHS), teacher for Sheridan County School District #2, is a true innovator in digital learning. Ms. Weitz has led efforts to transform her library into the school's learning center. She and her team were instrumental in rolling out 1:1 Chromebooks at SJHS. Since the rollout, Ms. Weitz and her team have provided ongoing support, teacher training, repair, and leadership to keep the 1:1 program strong. She re-envisioned the unused computer labs at her school and created the SJHS Einstein Lab, a high-tech makerspace available to all students and teachers in the school. This makerspace now supports a strong after school program, where students create and tinker in a variety of technology-rich courses. Ms. Weitz also uses technology to help students select books and create video book talks and link them to QR codes. Students can then access the videos using tablets or phones to help them decide what book to read next. She has also worked to build up her storehouse of e-books for students who wish to read in a digital format.



## SWEETWATER COUNTY SCHOOL DISTRICT #1 AND LINCOLN COUNTY SCHOOL DISTRICT #2

Both school districts applied for and received Distance Education Grants for the 2016-17 award cycle to support the development of original online courses to be delivered through each district's virtual education program. The courses were developed in teams with a lead teacher guiding the work. Each district participated in the Quality Matters workshops centered on designing and evaluating online courses. Informal reviews of the courses developed will be conducted through the Quality Matters online rubric and tools. Each district developed six courses: Sweetwater #1 developed American Government Economic Systems, Entomology, Pharmacology, Creative Writing and World Cultures, and Lincoln #2 developed English 9 & 10, Algebra II, Geometry, Health/PE, and American History.



## WASHAKIE COUNTY SCHOOL DISTRICT #1

Ms. Carla Bryant is a kindergarten teacher for West Side Elementary in Washakie County School District #1. Two years ago, Ms. Bryant requested permission to conduct a pilot program where she would teach coding skills to her Kindergarten students using Osmo, a mobile gaming accessory that assists student learning. Her students worked through progressively more difficult and increasingly complex coding tasks. They worked together to solve problems involving logic and learned to code. Ms. Bryant's students have also learned about physics, art, and tangram mathematics. Through this program, they have improved their spelling, word, and math skills.



## WESTON COUNTY SCHOOL DISTRICT #7

Ms. Linda Crawford, the Upton High School principal for Weston County School District #7, has lead her district in redesigning the high school experience toward mass customized or personalized and student-directed learning. Ms. Crawford currently facilitates a blended learning format of learning for all 9th-12th grade students in the courses of English, Math, Science, and Social Studies. This flexible, 24/7 learning opportunity for students has lessened scheduling constraints, as well as helped alleviate the issue of students and staff missing school days for events. In addition, the self-paced nature of the design allows for students to be met with just-in-time learning. Ms. Crawford uses analytics to improve instruction and creates opportunities for her staff to learn with her as the district culture changes from teacher-centered to student-driven learning.



## WESTON COUNTY SCHOOL DISTRICT #7

Ms. Summer Stephens, Superintendent of Weston County School District #7, has been instrumental in moving the district forward into the age of technology with the introduction of mass customized/ personalized and blended learning. She encourages teachers and administrators to find innovative solutions to better support students. She has supported the district with facility changes, technology enhancements, schedule changes, curriculum adjustments, professional development, budget allocations, and staffing. The majority of the curriculum is now accessible at any time, from anywhere. District teachers provide small group and one-to-one support, and students can receive immediate feedback on their work. In classes where the curriculum is not fully online, Ms. Stephens has supported requiring teachers to move to a more blended learning situation. She is always open to hearing ideas and supports changes across the district. Weston #7 now uses Google Drive extensively for meetings and classes; thanks to Ms. Stephens' advocacy for using digital innovative practices. Ms. Stephens has worked tirelessly to spread the word as to how digital innovation will make a positive impact on the lives of students.



## WESTON COUNTY SCHOOL DISTRICT #7

Mrs. Darrow and Mr. McCoy, Upton Elementary 4th grade teachers in Weston County School District #7, have helped students write and design animations. Students work in collaborative teams through the entire process of conceptualizing the video, devising a premise, selecting characters, and writing scripts. They learn the critical skill of iteration as they complete table reads and run-throughs of their work, eliciting feedback from their peers, animating the videos, and editing them with Adobe Premiere. Students then have opportunities to share their work publicly; this year two groups won national awards for their Halloween Safety videos and their videos are being viewed nationwide with Quantum Learning's 8 Keys of Excellence.

# Conclusion

The WDE and its partners have worked to lay the groundwork based on the critical components for the DLP. The Classroom Connectivity Initiative has made Wyoming a leader in classroom broadband with 100% of districts doubling the Federal Communications Commission's 100 Kpbs per student bandwidth goal according to EducationSuperHighway's "State of the States" report. This initiative has given all of the other 2016-2017 digital learning initiatives a strong foundation to start providing digital learning across the state.

The groundwork for the DLP has increased awareness and engagement, and in 2017-18 school year these efforts will continue to grow and help develop the remainder of the plan. It will become increasingly important to align federal and state funding to support the growth of digital learning. It is also important for the educators and leaders across the state to use digital resources and digital access to professional development. The 2017-18 school year will focus on developing standards centered on digital learning and aligning those standards with best practices, resources, and guidelines for digital learning. There will be a drive to increase the use of blended and personalized learning in the classroom. The major milestones for the next year will include the implementation of the K-20 Statewide LMS and launching of the OER platform, Open Range Wyoming. These systems will help incentivize educators to create and use digital resources, as these platforms will allow for ease of access to high-quality resources aligned to Wyoming standards. Professional development opportunities will be offered regarding these platforms, and the WDE will provide communication about the benefits and best practices for utilizing these resources. Another major milestone will be the launch of the revised virtual education course catalog to assist in searching for virtual education courses that are available throughout the state as well as single courses offered within districts.

This collaborative plan will take effort from the entire community, including Pre-K-12, postsecondary, teachers, district leaders, state policymakers, libraries, businesses, students, parents, communities, other states, and partners across the country to reach these goals. The ultimate goal of the DLP remains to provide every Wyoming student with the skills, understanding, and confidence they need to successfully enter college, a career, or the military in the digital age.



# Appendix A

Below are the Digital Learning Plan’s Goals and Recommendations with the initiatives that are being used to reach those goals.

## CURRICULUM, INSTRUCTION, AND ASSESSMENT

 <b>GOAL</b>	<b>RECOMMENDATION</b>	<b>INITIATIVE</b>
<p>Provide a common understanding of what students should know, understand, and be able to do, specific to Digital Learning and digital citizenship.</p>	<p>Develop K–12/16 Digital Learning and Computer Science Education standards, guidelines, and a scope and sequence that educators can access and utilize to understand and engage in best practices at each grade level to meet the legislative requirements outlined in W.S. 21-2-202(a) (xx)</p>	<ul style="list-style-type: none"> <li>• Hour of Code</li> <li>• Inaugural Computer Science Education Week in Wyoming</li> </ul>
<p>Technology is used to gather and utilize data to inform educators and students with personalizing instruction.</p>	<p>Establish collaborative procurement for Digital Learning resources and processes.</p>	<ul style="list-style-type: none"> <li>• Learning Management System</li> </ul>
	<p>Provide guidelines for evaluating and selecting Digital Learning resources that enable educators and students to use student data to improve teaching and learning.</p>	<ul style="list-style-type: none"> <li>• Data Retreats</li> <li>• Open Range Wyoming</li> </ul>
<p>Educators use instructional practices that shift their role to be facilitators of learning.</p>	<p>Provide a menu of differentiated professional development offerings for educators that includes face-to-face, online, and blended options that can be personalized and tailored to educators’ needs and assist with understanding the changing role of educators.</p>	<ul style="list-style-type: none"> <li>• Quality Matters workshops</li> </ul>

# USE OF SPACE AND TIME



GOAL	RECOMMENDATION	INITIATIVE
<p>Students will be provided with a continuum of high quality learning opportunities that can be easily identified, personalized, and accessed.</p>	<p>Facilitate the reduction of barriers to implementation such as ‘seat time’ requirements that focus on time in class rather than competency based learning, Carnegie unit requirements, or the ability to take classes from more than one district.</p>	<ul style="list-style-type: none"> <li>• Changes to virtual education program through 2017 SF35</li> <li>• Virtual education course catalog website development with course pre-registration feature</li> </ul>
<p>Educators across the state will have access to models of effective Digital Learning across time and space</p>	<p>Develop a clearinghouse with models of effective Digital Learning across time and space.</p>	<ul style="list-style-type: none"> <li>• Open Range Wyoming</li> </ul>
<p>Offer quality online and blended courses for students that include opportunities for students to demonstrate mastery of content in a variety of ways.</p>	<p>Develop a best practices guide for teaching online and blended courses.</p>	<ul style="list-style-type: none"> <li>• Quality Matters Online Teaching Certificate</li> </ul>
	<p>Incentivize the development and teaching of high quality online and blended courses.</p>	<ul style="list-style-type: none"> <li>• Quality Matters Online Teaching Certificate</li> </ul>

# ROBUST INFRASTRUCTURE



GOAL	RECOMMENDATION	INITIATIVE
Every school has the capability to meet the LAN/Wi-Fi standards.	Adopt LAN/Wi-Fi infrastructure standards.	<ul style="list-style-type: none"> <li>Wyoming Classroom Connectivity Initiative</li> </ul>
Support a technology infrastructure providing opportunities for equitable education for all children attending Wyoming’s K–12 public schools.	All school sites are on fiber optic and all districts can provision at least 1 Mbps of internet access per student.	<ul style="list-style-type: none"> <li>Wyoming Classroom Connectivity Initiative</li> </ul>
	Report annually through the DLP on school connectivity and utilization and support schools with improving connectivity.	<ul style="list-style-type: none"> <li>Wyoming Classroom Connectivity Initiative</li> </ul>
Every school has the capacity to successfully plan, procure, and manage their LAN/Wi-Fi networks.	Across state agencies, schools, and partners, work to leverage all available resources and support to identify which schools need support and engage the resources to support them and achieve sustainability.	<ul style="list-style-type: none"> <li>Wyoming Classroom Connectivity Initiative</li> </ul>
Every school has the capacity to provide sufficient funding, staff, and expertise to manage LAN/Wi-Fi networks.	Across state agencies, schools, and partners, work to leverage all available resources and support to identify which schools need support and engage the resources to support them and achieve sustainability.	<ul style="list-style-type: none"> <li>Wyoming Classroom Connectivity Initiative</li> </ul>
Technology directors, superintendents, curriculum directors, and other stakeholders consistently collaborate to support a common vision for supporting teaching and learning.	Align the planning process across infrastructure, devices, curriculum, facilities, and professional development.	<ul style="list-style-type: none"> <li>Wyoming Classroom Connectivity Initiative</li> </ul>
All schools have the capacity to sustainably provide the devices needed for learning.	Provide guidance and framework for considering best practices for device implementation, evaluation, criteria, evaluating funding options.	<ul style="list-style-type: none"> <li>Wyoming Classroom Connectivity Initiative</li> </ul>

# DATA AND PRIVACY



GOAL	RECOMMENDATION	INITIATIVE
<p>Student and educator data will be protected, with privacy maintained in accordance with state and federal mandates.</p>	<p>Provide guidelines and support for the mechanisms, safeguards, processes, and standards for protecting and maintaining student and educator data.</p>	<ul style="list-style-type: none"> <li>▪ Data Privacy</li> </ul>
	<p>Provide professional development and support to ensure district and vendor personnel understand student data privacy laws once they are in place and when they change to maximize both safety and learning opportunities for Wyoming Students.</p>	<ul style="list-style-type: none"> <li>▪ Technology Directors Conference</li> </ul>
	<p>Provide guidelines and professional learning opportunities for educators to build skills toward data-based decision making and including students in the process.</p>	<ul style="list-style-type: none"> <li>▪ Data Retreats</li> </ul>
<p>All teachers will use assessment data that enables them to personalize instruction and increase student achievement</p>	<p>Provide guidelines for evaluating and selecting Digital Learning resources that enable educators and students to use student data to improve teaching and learning.</p>	<ul style="list-style-type: none"> <li>• Quality Matters workshops</li> <li>• Open Range Wyoming</li> </ul>
<p>All students will use data to understand their progression through the learning standards.</p>	<p>Provide guidelines and professional learning opportunities for educators to build skills toward data-based decision making and including students in the process.</p>	

# COMMUNITY PARTNERSHIPS



GOAL	RECOMMENDATION	INITIATIVE
<p>Develop learning spaces in local communities that engage all learners (K–12, postsecondary, businesses, parents, etc.)</p>	<p>Develop a communication plan so all community members know what learning resources are available.</p>	
<p>Develop partnerships between K–12 systems, postsecondary institutions, and libraries that enable opportunities to learn from each other and leverage resources together.</p>	<p>Convene a workgroup to identify and coordinate the utilization of education resources available statewide and across institutions.</p>	<ul style="list-style-type: none"> <li>• Open Range Wyoming</li> </ul>
	<p>Partner with postsecondary institutions to integrate Digital Learning best practices into pre-service coursework and to increase digital learning pedagogy course offerings for pre-service educators.</p>	<ul style="list-style-type: none"> <li>• Wyoming Innovations in Learning Conference</li> <li>• Open Range Wyoming</li> <li>• K-20 Statewide LMS</li> </ul>
<p>Students have access to learning opportunities beyond the school walls by connecting to local community, national, and global partners.</p>	<p>Develop a clearinghouse of resources to support districts with providing students with opportunities to connect with global communities and projects to ensure college, career, and military readiness.</p>	<ul style="list-style-type: none"> <li>• Open Range Wyoming</li> </ul>

# PERSONALIZED PROFESSIONAL LEARNING



GOAL	RECOMMENDATION	INITIATIVE
<p>Ensure all educators across Wyoming know what personalized professional learning opportunities are available.</p>	<p>Develop a communication plan so all community members know what personalized professional learning opportunities are available.</p>	<ul style="list-style-type: none"> <li>• K-20 Statewide LMS</li> <li>• Open Range Wyoming</li> </ul>
	<p>Provide a professional development repository that is easily accessed where educators can pick and choose from offerings that result in micro credentials, University of Wyoming, Professional Teaching Standards Board (PTSB) credit to complete a personalized learning path.</p>	
<p>Provide educators with a continuum of professional development choices that can be easily identified, personalized, and accessed.</p>	<p>Provide a menu of differentiated professional development offerings for educators that includes face-to-face, online, and blended options and that can be personalized and tailored to educators' needs and assist with understanding the changing role of educators.</p>	<ul style="list-style-type: none"> <li>• Quality Matters workshops &amp; courses</li> <li>• Open Range Wyoming</li> <li>• Wyoming Classroom Connectivity Initiative</li> </ul>
	<p>Use existing data regarding effective Digital Learning practices to pair high performing schools with novice or lower performing schools to increase capacity and improve Digital Learning practices.</p>	
	<p>Incorporate and model Digital Learning within all professional learning opportunities.</p>	<ul style="list-style-type: none"> <li>• Open Range Wyoming</li> <li>• K-20 Statewide LMS</li> </ul>
<p>Provide recognition (e.g. micro-credentialing, credit, higher degrees) for educators to continue their professional growth toward implementing effective Digital Learning practices.</p>	<p>Work with the University of Wyoming Professional Studies and Outreach School to develop certificates from different disciplines.</p>	<ul style="list-style-type: none"> <li>• Quality Matters Teaching Online Certificate includes a QM Digital Credential</li> </ul>
	<p>Develop guidance for districts to incentivize educators to engage in badging or micro-credentialing (e.g., bump on pay scale, recertification credit).</p>	
<p>Statewide network of educators and organizations focused on sharing Digital Learning best practices, implementation strategies, and successful outcomes.</p>	<p>Form a professional learning network among the education technology organizations that already exist in Wyoming to include WyTECC, WyDEC, e-Volution, Information Power Institute, and others coming together for a shared annual conference and a variety of other peer-to-peer learning opportunities.</p>	<ul style="list-style-type: none"> <li>• Wyoming Innovations in Learning Conference</li> </ul>

# BUDGET AND RESOURCES



GOAL	RECOMMENDATION	INITIATIVE
<p>Increase cost savings and reduce costs when appropriate for Digital Learning.</p>	<p>Maximize funding opportunities like E-Rate (develop a statewide E-Rate strategy, repurpose existing funds for more effective opportunities).</p>	<ul style="list-style-type: none"> <li>Classroom Connectivity Initiative</li> </ul>
	<p>Coordinate purchasing opportunities to increase efficiencies—including partnering with higher education for economies of scale.</p>	<ul style="list-style-type: none"> <li>K-20 Statewide LMS</li> </ul>
	<p>Use of free, open source, and open education resources.</p>	<ul style="list-style-type: none"> <li>Open Range Wyoming</li> </ul>
<p>Develop innovative use of funds to incentivize work on Digital Learning.</p>	<p>Repurpose existing funds to incentivize Digital Learning.</p>	<ul style="list-style-type: none"> <li>Virtual Education Course Catalog</li> <li>Open Range Wyoming</li> <li>K-20 Statewide LMS</li> <li>Wyoming Classroom Connectivity Initiative</li> </ul>
	<p>Promote collaboration between district technology leaders with other district leaders to understand how technology/Digital Learning can be funded.</p>	<ul style="list-style-type: none"> <li>Wyoming Classroom Connectivity Initiative</li> </ul>
<p>Leverage partnerships with businesses to increase funding opportunities.</p>	<p>Build partnerships with industries across the state and nationally to support education and create new funding opportunities.</p>	<ul style="list-style-type: none"> <li>Coders of the West</li> </ul>
<p>Provide guidance for developing sustainable technology and Digital Learning procurement plans.</p>	<p>Develop guidance for developing replacement cycles and budgetary requirements.</p>	
<p>Provide guidance for prioritizing investments.</p>	<p>Develop return on investment analyses to assist in prioritizing efforts around Digital Learning.</p>	<ul style="list-style-type: none"> <li>Adding evaluation metrics at beginning of initiatives and projects</li> </ul>

# Appendix B

## OPEN RANGE WYOMING CHARTER

OPEN RANGE WYOMING DESIGN TEAM CHARTER	
FEBRUARY 16, 2017	
Team Name	Open Range Wyoming Design Team
Team Chair	Alicia Kerns
Team Membership	Wyoming Department of Education, Wyoming State Libraries, University of Wyoming, Wyoming Community Colleges, Wyoming Curriculum Directors Association, Wyoming public school district representatives
Project Description	To create and maintain a statewide repository of openly-licensed educational resources and support Wyoming school districts and educators as they make the transition to the use of high-quality, openly-licensed educational resources in their schools.
Meeting Schedule	This committee will meet virtually once per month using WebEx Software. The first meeting will be held on February 16, 2017 at 9:00 a.m.
Subcommittee Needs	<ul style="list-style-type: none"> <li>• Platform and Integration</li> <li>• Curation of Resources</li> <li>• Resource Vetting</li> <li>• Professional Development</li> <li>• Launch/Roll Out Committee</li> </ul> * All subcommittees will create a charter to determine process and needs
Team Mission	To create the opportunity for Wyoming educators and students to easily access high quality openly licensed educational resources (OERs) aligned to Wyoming State Standards in order to increase educational opportunities for success of all students.
Decision Making Approach	All decisions need to be made as a team. Should there be decisions that cannot reach consensus, a vote will take place and majority will rule. All decisions remain recommendations to the Wyoming State Superintendent.
Budget	Digital Learning Team General Budget, 15-9-205-4608-9
Assumptions/Constraints	<b>Assumption:</b> <ul style="list-style-type: none"> <li>• Understanding of OER</li> <li>• Purpose and Goals of Committee</li> </ul> <b>Constraints:</b> <ul style="list-style-type: none"> <li>• Federal funds need to be encumbered by September 2017 and spent by December 2017</li> <li>• Limited availability or resources</li> </ul>

# OPEN RANGE WYOMING DESIGN TEAM CHARTER

FEBRUARY 16, 2017

Milestones	<ul style="list-style-type: none"> <li>• Official Name Created - "Open Range Wyoming"</li> <li>• Committee Formation</li> <li>• Development of Communication Plan</li> <li>• Communication of availability of resources to districts</li> <li>• Platform Creation</li> <li>• Vetting Documents Developed and Reviewed</li> <li>• Curation Process Determined• Curation of Resources (Science, 10 resources)</li> <li>• Curation of Lesson Plans (Science, 10 lesson plans)</li> <li>• Population of Resources onto Platform</li> <li>• Launch of Platform• Curation of OER Professional Development Plan</li> </ul>	
In Scope/Out of Scope	<p><b>In Scope:</b></p> <ul style="list-style-type: none"> <li>• Choosing a platform to host all OER resources</li> <li>• Creating and implementing a statewide strategy encouraging use of OERs in Wyoming classrooms</li> <li>• Creating and implementing a standardized vetting and creation process for OERs</li> <li>• Creating a review process to ensure all OERs meet the high standards necessary to be recommended for use by Wyoming educators</li> <li>• Providing access to professional development and networking opportunities for educators participating in the use of OERs</li> </ul> <p><b>Out of Scope:</b></p> <ul style="list-style-type: none"> <li>• Determining how districts should proceed with implementation of OER - all implementation plans should be the decision of each district</li> </ul>	
Risk Planning	Potential budget cuts as determined by Wyoming State Legislature Potential changes to Risk Monitoring and scope of project	
Expected Results and Measures of Success	<b>RESULTS</b> <span style="float: right;"><b>MEASURES OF SUCCESS</b></span>	
	Adopt/Implement a statewide technology strategy that includes the use of openly licensed resources as a central component	<ul style="list-style-type: none"> <li>• Awareness of resources for Wyoming educators</li> <li>• Use of resources by Wyoming educators</li> </ul>
	Develop and maintain a sustainable statewide repository solution for openly licensed resources	<ul style="list-style-type: none"> <li>• OER platform developed• OER updates/addition of resources</li> </ul>
	Develop and create a standardized vetting process for reviewing and posting all openly licensed educational resources	<ul style="list-style-type: none"> <li>• Vetting process has been established and is available for educator use</li> <li>• Vetting process aligning all resources to Wyoming State Standards is developed</li> </ul>
	Create a review process for all developed resources to ensure continued relevance and accuracy of information	<ul style="list-style-type: none"> <li>• Maintenance of existing OER resources and relevance determined (ongoing)</li> <li>• Regular use by Wyoming educators</li> </ul>

# OPEN RANGE WYOMING STAKEHOLDER ANALYSIS

OPEN RANGE WYOMING STAKEHOLDER ANALYSIS				
Stakeholder (Who needs this information?)	Objective (What do we want to communicate?)	Medium (What is the communication vehicle?)	Responsibility (Who is responsible for development and delivery?)	Frequency (How often should the communication happen?)
State Superintendent/ Chief of Staff	<ul style="list-style-type: none"> <li>• Top level information/ Overview</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Brent Bacon</li> <li>• Shelley Hamel (in Brent's absence)</li> </ul>	<ul style="list-style-type: none"> <li>• As needed</li> </ul>
Executive Team/ Leadership	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• Financials</li> </ul>	<ul style="list-style-type: none"> <li>• Executive Reviews</li> <li>• Emails</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> <li>• Robin Grandpre (in Laurel's absence)</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly</li> </ul>
WDE OER Design Team	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Alicia Kerns</li> <li>• Ken Reynolds</li> <li>• Kari Eakins</li> <li>• Barb Marquer</li> <li>• Rob Anderson</li> <li>• Sharla Dowding</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>
State Libraries	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Paige Bredenkamp</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>
Wyoming Curriculum Directors Association (WCDA)	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• RJ Kost</li> <li>• Amanda McAdams</li> <li>• Doug Rigby</li> <li>• Scott McBride</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>
University of Wyoming	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Tonia Dousay</li> <li>• Rachel Watson</li> </ul>	<ul style="list-style-type: none"> <li>• Bi-Weekly</li> </ul>
Wyoming State Museum	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Nathan Doerr</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>
Wyoming Public School Educators	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Colby Gull</li> <li>• Scott Mecca</li> <li>• Angie Spann</li> <li>• Jeff Brewster</li> <li>• Summer Stevens</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>

# Appendix C

## VIRTUAL EDUCATION ADVISORY COMMITTEE CHARTER

VIRTUAL EDUCATION ADVISORY COMMITTEE PROJECT CHARTER	
APRIL 26, 2017	
Committee Name	Virtual Education Advisory Committee
Team Advisor	Chief Academic Officer, WDE
Team Chair	State Education Technology Director
Team Membership	<p><b>Business Manager:</b> Richard Parker  <b>School Finance Data Advisory Committee Member:</b> Steve Hopkins  <b>In-District Virtual Education Program:</b> Laurie Davis  <b>Statewide Virtual Education Program:</b> Jeff Verosky  <b>Parent:</b> Zeta Anderson  <b>Virtual Education Teacher:</b> Angelique Littlejohn  <b>Curriculum Director:</b> RJ Kost  <b>Curriculum Director:</b> Jamie Christensen  <b>Superintendent:</b> Summer Stephens  <b>Legislator:</b> Representative John Freeman  <b>Legislator:</b> Senator Affie Ellis  <b>PTSB:</b> Nick Bellack  <b>Alternative High School Principal:</b> Mike Maloney  <b>HEI Dual/Concurrent Enrollment:</b> Nancy Johnson  <b>WISE Coordinator:</b> Kate Swistowicz</p>
Meeting Schedule	Meet at least quarterly with virtual meetings unless a face-to-face is necessary. Meet as frequently as needed when legislative, rules and policy items need to be addressed.
Subcommittee Needs	Subcommittees can be formed to address specific topics
Team Mission	To advise districts and analyze information to ensure the implementation and improvement of virtual education in the state is agile and continuously advances educational opportunities for all Wyoming students. The Virtual Education Advisory Committee reports to and makes improvement recommendations to the School Finance and Data Advisory Committee and the State Superintendent of Public Instruction.
Decision Making Approach	<p>The Virtual Education Advisory Committee will aim for consensus. If consensus cannot be achieved, decisions become consultative to the Virtual Education Advisory Committee Advisor.</p> <p><b>Consensus:</b></p> <ul style="list-style-type: none"> <li>Everyone has had a chance to be heard and the will of the larger group has become evident. Everyone can live with the decision and agrees not to speak poorly of the decision.</li> </ul> <p><b>Consultative:</b></p> <ul style="list-style-type: none"> <li>Input is given to the team leader, and the team leader will make the decision.</li> </ul>

# VIRTUAL EDUCATION ADVISORY COMMITTEE PROJECT CHARTER

APRIL 26, 2017

Assumptions/Constraints	The short timeline for making rules and policy revisions based on 2017 EA57 will present time and resources challenges	
In Scope/Out of Scope	<p><b>In Scope</b></p> <ul style="list-style-type: none"> <li>The role of the VEAC includes making recommendations to modify rules, policies, practices and procedures and to serve in an advisory capacity to school districts to improve the delivery of virtual education.</li> </ul> <p><b>Out of Scope</b></p> <ul style="list-style-type: none"> <li>Making recommendations inconsistent with the virtual education statutes W.S. 2008 Wyoming Session Laws 204-05, Chapter 41 Rules and Regulations; W.S. 21-2-202(a)(xx) Duties of the Superintendent; W.S. 21-13-330 Virtual education</li> </ul>	
Expected Results and Measures of Success	<b>RESULTS</b>	<b>MEASURES OF SUCCESS</b>
	Developing solutions for continuously improving Wyoming's virtual education system	Recommendations to the State Superintendent for improvements to Wyoming's virtual education system are enacted.
	Evaluating the effectiveness of Wyoming's virtual education system	Annual report to the State Superintendent and Legislature on the effectiveness of Wyoming's virtual education system

# VIRTUAL EDUCATION ADVISORY COMMITTEE STAKEHOLDER ANALYSIS

VIRTUAL EDUCATION ADVISORY COMMITTEE STAKEHOLDER ANALYSIS				
Stakeholder (Who needs this information?)	Objective (What do we want to communicate?)	Medium (What is the communication vehicle?)	Responsibility (Who is responsible for development and delivery?)	Frequency (How often should the communication happen?)
State Superintendent/ Chief of Staff	<ul style="list-style-type: none"> <li>• Top level information/ Overview</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Executive Team</li> </ul>	<ul style="list-style-type: none"> <li>• As needed</li> </ul>
Executive Team/ Leadership	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• Financials</li> </ul>	<ul style="list-style-type: none"> <li>• Executive Reviews</li> <li>• Emails</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> <li>• Robin Grandpre (in Laurel's absence)</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly</li> </ul>
Virtual Education Advisory Committee	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> <li>• Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>• Every other week and as needed through fall 2017, monthly and as needed thereafter</li> </ul>
WDE VE Coordination Team	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> <li>• Laurel Ballard</li> <li>• Shelley Hamel</li> </ul>	<ul style="list-style-type: none"> <li>• Every other week and as needed through fall 2017, monthly and as needed thereafter</li> </ul>
State Board of Education	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• Stakeholder Input</li> <li>• VEAC Recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Meeting Reports</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>
University of Wyoming	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Tonia Dousay</li> <li>• Rachel Watson</li> </ul>	<ul style="list-style-type: none"> <li>• Bi-Weekly</li> </ul>
Governor's Office	<ul style="list-style-type: none"> <li>• Final Chapter 8 and Chapter 41 Revisions</li> </ul>	<ul style="list-style-type: none"> <li>• Rules Packet</li> </ul>	<ul style="list-style-type: none"> <li>• Julie Magee</li> </ul>	<ul style="list-style-type: none"> <li>• As recommendations are finalized</li> </ul>
Attorney General's Office	<ul style="list-style-type: none"> <li>• Chapter 8 and 41 Revisions</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> <li>• WDE VE Coordination Team</li> <li>• Julie Magee</li> </ul>	<ul style="list-style-type: none"> <li>• As needed and as recommendations are finalized</li> </ul>
Secretary of State	<ul style="list-style-type: none"> <li>• Final Chapter 8 and Chapter 41 Revisions</li> </ul>	<ul style="list-style-type: none"> <li>• Rules Packet</li> </ul>	<ul style="list-style-type: none"> <li>• Julie Magee</li> </ul>	<ul style="list-style-type: none"> <li>• As recommendations are finalized</li> </ul>

**VIRTUAL EDUCATION ADVISORY COMMITTEE**  
STAKEHOLDER ANALYSIS

Stakeholder (Who needs this information?)	Objective (What do we want to communicate?)	Medium (What is the communication vehicle?)	Responsibility (Who is responsible for development and delivery?)	Frequency (How often should the communication happen?)
Joint Education Interim Committee	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• VEAC and State Board Recommendations</li> <li>• Final Chapter 8 and Chapter 41 Revisions</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Memo</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> </ul>	<ul style="list-style-type: none"> <li>• June and September JEIC Committee Meetings</li> <li>• As available</li> </ul>
LSO/Management Council	<ul style="list-style-type: none"> <li>• Final Chapter 8 and Chapter 41 Revisions</li> </ul>	<ul style="list-style-type: none"> <li>• Rules Packet</li> </ul>	<ul style="list-style-type: none"> <li>• Julie Magee</li> </ul>	<ul style="list-style-type: none"> <li>• As recommendations are finalized</li> </ul>
WY Virtual Education Program Districts	<ul style="list-style-type: none"> <li>• Rules &amp; Policy Revisions</li> <li>• VEAC Recommendations</li> <li>• Rules Revisions</li> <li>• Policy Guidelines &amp; Information</li> </ul>	<ul style="list-style-type: none"> <li>• Email, phone &amp; site visits</li> <li>• VE Website Updates</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>• As needed through fall 2017; monthly and as needed thereafter</li> </ul>
Superintendents/ WASA/	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• VEAC and State Board Recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Memos</li> <li>• VE Website Updates</li> <li>• Meetings &amp; Conferences</li> </ul>	<ul style="list-style-type: none"> <li>• WDE - Memos</li> <li>• WDE &amp; VEAC Members - Meetings</li> <li>• Lori Thilmany-Website Updates</li> </ul>	<ul style="list-style-type: none"> <li>• As needed and as rules, recommendations and policy are finalized and produced</li> </ul>
Community Colleges	<ul style="list-style-type: none"> <li>• VE Policy Updates re Concurrent and Dual Enrollment</li> </ul>	<ul style="list-style-type: none"> <li>• VE Guidelines</li> <li>• Meetings &amp; Conferences</li> </ul>	<ul style="list-style-type: none"> <li>• WDE &amp; VEAC Members</li> <li>• Laurel Ballard</li> <li>• Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>• As needed and as rules, recommendations and policy are finalized and produced</li> </ul>
FLP Advisors	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• VEAC and State Board and other Recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> <li>• Phone</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> <li>• Laurel Ballard</li> <li>• Shelley Hamel</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly and as needed</li> </ul>
PTSB	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• VEAC and State Board and other Recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> <li>• Phone</li> </ul>	<ul style="list-style-type: none"> <li>• WDE VE Coordination Team</li> <li>• Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>• As needed and as rules, recommendations and policy are finalized and produced</li> </ul>

## VIRTUAL EDUCATION ADVISORY COMMITTEE

### STAKEHOLDER ANALYSIS

Stakeholder (Who needs this information?)	Objective (What do we want to communicate?)	Medium (What is the communication vehicle?)	Responsibility (Who is responsible for development and delivery?)	Frequency (How often should the communication happen?)
School Finance and Data Advisory Committee	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• VEAC and State Board and other Recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> <li>• Phone</li> </ul>	<ul style="list-style-type: none"> <li>• WDE VE Coordination Team</li> <li>• Jed Cicarelli and Kim Morrow</li> </ul>	<ul style="list-style-type: none"> <li>• As needed and as rules, recommendations and policy are finalized and produced</li> </ul>

# Appendix D

## STATEWIDE LMS CHARTER

STATEWIDE LEARNING MANAGEMENT SYSTEM (LMS) CHARTER	
DRAFT - JULY 2017	
Team Name	Statewide LMS
Team Chair	Laurel Ballard - WDE John Wood - Central Wyoming Community College Brady Frackrell - Northern Wyoming Community College
Team Membership	Eastern Wyoming College Wyoming Community College Commission WYTECC University of Wyoming Northern Wyoming Community College District Laramie County Community College Western Wyoming Community College Wyoming Association of Community College Trustees Northern Wyoming College Wyoming Department of Education Casper College School Districts
Project Description	Implementation of a K-20 Statewide LMS
Meeting Schedule	Twice per month and as needed
Subcommittee Needs	K-12 LMS Input Subcommittee
Team Mission	The team will be determining the feasibility of implementing a K-20 Statewide LMS. If it is possible, the team will be coordinating efforts in negotiating and implementing a contract. We will also be working together to implement the system by Fall 2018.
Decision Making Approach	Consensus
Budget	Budgets are determined by the individual agencies and institutions involved.
Assumptions / Constraints	One of the most significant constraints to this proposed solution is budgetary. We are currently facing a significant budget shortfall. However, this statewide solution will offer a more cost effective solution for the state allowing the budget from the districts to take money currently being used on their current LMS to be used for other important instructional purposes.

# STATEWIDE LEARNING MANAGEMENT SYSTEM (LMS) CHARTER

DRAFT - JULY 2017

Milestones	<ul style="list-style-type: none"> <li>• Building a committee</li> <li>• Writing a business case and receiving approval to proceed</li> <li>• Selecting a vendor</li> <li>• Obtaining a contract with that vendor</li> <li>• Project implementation and kick-off</li> <li>• Development of the solution including testing</li> <li>• Training</li> <li>• Launching LMS</li> </ul>	
In Scope / Out of Scope	<p><b>In Scope</b></p> <ul style="list-style-type: none"> <li>• Building a K-20 LMS</li> </ul> <p><b>Out of Scope</b></p> <ul style="list-style-type: none"> <li>• Entities outside of those of listed above can be brought in at a later time.</li> </ul>	
Expected Results and Measures of Success	RESULTS	MEASURES OF SUCCESS
	Vetting of potential LMS options for the K-20 System	<ul style="list-style-type: none"> <li>• Look at all of the must haves, nice to haves, and must not haves of the stakeholder group</li> <li>• Listening to vendor presentations to ensure K-20 system needs could potentially be met.</li> </ul>
	Selection of LMS platform for the K-20 system	<ul style="list-style-type: none"> <li>• Select the best option for the K-20 system with stakeholder input</li> </ul>
	Contract with the LMS platform selection and put together implementation plan	<ul style="list-style-type: none"> <li>• Negotiate state rates for all stakeholders, including K-12 Districts</li> <li>• Plan for implementation and training prior to roll out</li> </ul>
	Get K-12 districts on board with LMS platform selection	<ul style="list-style-type: none"> <li>• Create communication plan to tell districts what is included in the contract and negotiated rates</li> </ul>
	Training for statewide users	<ul style="list-style-type: none"> <li>• Create training for all stakeholders and users of the LMS system that have signed up</li> </ul>
	Launch LMS platform	<ul style="list-style-type: none"> <li>• Launch the statewide LMS across the state of Wyoming</li> </ul>

# STATEWIDE LMS STAKEHOLDER ANALYSIS

STATEWIDE LMS STAKEHOLDER ANALYSIS				
Stakeholder (Who needs this information?)	Objective (What do we want to communicate?)	Medium (What is the communication vehicle?)	Responsibility (Who is responsible for development and delivery?)	Frequency (How often should the communication happen?)
State Superintendent/ Chief of Staff	<ul style="list-style-type: none"> <li>• Top level information/ Overview</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Executive Team</li> </ul>	<ul style="list-style-type: none"> <li>• As needed</li> </ul>
Executive Team/ Leadership	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• Financials</li> </ul>	<ul style="list-style-type: none"> <li>• Executive Reviews</li> <li>• Emails</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> <li>• Robin Grandpre (in Laurel's absence)</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly</li> </ul>
LMS Coordinating Committee	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• John Wood (CWC)</li> <li>• Brady Frackell (NWCCD)</li> </ul>	<ul style="list-style-type: none"> <li>• Bi-weekly and as needed</li> </ul>
K12 LMS Input Committee	<ul style="list-style-type: none"> <li>• Detailed information and next steps</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>
WDE Financial Office	<ul style="list-style-type: none"> <li>• Financials</li> </ul>	<ul style="list-style-type: none"> <li>• Financials</li> <li>• RFP</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> </ul>	<ul style="list-style-type: none"> <li>• As needed</li> </ul>
Districts	<ul style="list-style-type: none"> <li>• What is happening that will impact them</li> <li>• Financials</li> </ul>	<ul style="list-style-type: none"> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Committee Representative</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>
Community Colleges	<ul style="list-style-type: none"> <li>• What is happening that will impact them</li> <li>• Financials</li> </ul>	<ul style="list-style-type: none"> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Committee Representative</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>
Wyoming Community College Commission	<ul style="list-style-type: none"> <li>• What is happening that will impact them</li> <li>• Financials</li> </ul>	<ul style="list-style-type: none"> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Committee Representative</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>
University of Wyoming	<ul style="list-style-type: none"> <li>• What is happening that will impact them</li> <li>• Financials</li> </ul>	<ul style="list-style-type: none"> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Committee Representative</li> </ul>	<ul style="list-style-type: none"> <li>• Monthly</li> </ul>

# Appendix E

## WSN CHARTER

### PHASE I: WSN WEBSITE REDESIGN CHARTER

ORIGINAL 1/10/17 - UPDATED 5/2/17

Team Name	WSN (or VE) Website Redesign
Team Chair	Lori Thilmany
Team Membership	Laurel Ballard, Ali Kerns, Robin Grandpre, Laurel Shelley-Reuss, Shelley Hamel and Jo Ann Numoto (optional team member)
Project Description	<ul style="list-style-type: none"> <li>• A complete restructuring of the WSN website to improve site functionality, presentation, navigation structure, and content management.</li> <li>• Development of two additional site features:             <ul style="list-style-type: none"> <li>◦ Course pre-registration process with communication to/from district contacts and the WDE.</li> <li>◦ Course interest survey to include counts (demand) with communication to districts/WDE and a process for districts to respond to course demand.</li> </ul> </li> <li>• WSN site/content migrated and hosted on WDE server</li> </ul>
Meeting Schedule	Weekly
Subcommittee Needs	Not at this time
Team Mission	<ul style="list-style-type: none"> <li>• Provide an updated and sustainable website to fulfill the statutory requirements of W.S. 21-2-202 (a)(xxxi)(A) to establish, approve, facilitate and monitor “a state network of virtual education courses” and “annually publish a course catalog identifying the courses available and the tuition to be assessed on a per course basis as established by the school district instructing the course;” that Wyoming educators, counselors, students, and families can easily access and use.</li> <li>• Fulfill the Chap 41 Section 10. (b) annual course needs/instructional availability survey requirements.</li> <li>• Provide an effective method for the WDE to publish the annual course catalog in a timely and functional fashion.</li> </ul>
Decision Making Approach	<ul style="list-style-type: none"> <li>• Team majority unless the team is split. For those decisions, Laurel Ballard and/or Team Chair will use a consultative decision process.</li> <li>• All decisions remain recommendations to Brent Bacon and Shelley Hamel.</li> </ul>
Budget	<ul style="list-style-type: none"> <li>• \$25,782 for contractor to transfer site into WordPress, adapt database course features and contacts to K-12, develop new features, training and maintenance through one year post development/launch.</li> <li>• Additional funds may be necessary for a contract amendment for revisions per focus group outcomes.</li> </ul>

## PHASE I: WSN WEBSITE REDESIGN CHARTER

ORIGINAL 1/10/17 - UPDATED 5/2/17

<p>Assumptions/ Constraints</p>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>• No major revisions to the current development site will be necessary after focus groups are conducted</li> <li>• Any revisions to the site that are needed now or after focus groups can be completed by the contractor in time to meet the projected timeline deadlines and due dates</li> <li>• Funds will be available for any needed contract amendments</li> <li>• Staffing and other resources will be adequate to meet the projected timeline deadlines and due dates</li> </ul> <p><b>Constraints</b></p> <ul style="list-style-type: none"> <li>• Given all the work that needs to be completed May through August 2017, it may not be possible to meet the September 1 launch date and legislative requirement dates</li> <li>• The September 1 launch date may need to be delayed if the site isn't up to quality and performance expectations given the restricted timeline and quantity of work</li> <li>• Time limitations if stakeholder input yields the need for major revisions.</li> </ul>
<p>Milestones</p>	<ul style="list-style-type: none"> <li>• Survey, Focus Groups and Stakeholder Analysis Completed</li> <li>• Contract Amendment Completed (if needed)</li> <li>• All 2017-18 Course Submissions from Providers Received and Approved</li> <li>• 2017-18 Approved Courses Uploaded/Published</li> <li>• Site Development (function, coding, etc.) Revisions/Updates Completed</li> <li>• Training by Contractor Completed (HJS to provide for WDE)</li> <li>• External Testing Completed (with scripts from a variety of devices)</li> <li>• Final Internal Testing Completed</li> <li>• Site Launched</li> </ul>
<p>In Scope/Out of Scope</p>	<p><b>In Scope</b></p> <ul style="list-style-type: none"> <li>• Site launched Sept or Oct 2017</li> <li>• 2017-18 courses posted in fall 2017</li> <li>• 2018-19 courses posted by January 2018</li> <li>• Training conducted fall 2017</li> </ul> <p><b>Out of Scope</b></p> <ul style="list-style-type: none"> <li>• Phase II</li> <li>• Content standards approval process online</li> <li>• Content standards posted with courses</li> </ul>
<p>Risk Planning</p>	<ul style="list-style-type: none"> <li>• Reevaluate the projected timeline and make adjustments if needed after the focus group input analysis and contractor amendment feasibility have been completed</li> <li>• Prepare items in advance of deadlines (e.g. draft contract amendment documents, testing scripts, website content updates, course submission information, etc.) to facilitate meeting projected timelines and launch date</li> <li>• Prioritize project chair and project team work to meet projected timelines and launch date</li> <li>• A contract amendment for Phase I revisions to the current development site could take longer than the projected timeline which could delay the September 1 launch date             <ul style="list-style-type: none"> <li>◦ Provide HJS with statement of work(SOW) information as it becomes available through the stakeholder input process and request that they furnish the SOW on or before 6/19/17</li> <li>◦ Have all contract amendment docs drafted in advance of 6/14/17 stakeholder input closing date</li> </ul> </li> </ul>

## PHASE I: WSN WEBSITE REDESIGN CHARTER

ORIGINAL 1/10/17 - UPDATED 5/2/17

	RESULTS	MEASURES OF SUCCESS
Expected Results and Measures of Success	Implementation of the SF35 changes by publishing an online course catalog that includes tuition for each course	<ul style="list-style-type: none"> <li>• Meet the fall 2017 launch date</li> <li>• All courses from VE providers (statewide and in district) are submitted and included the courses published on the site</li> <li>• Any tuition for single courses is included in the course submissions</li> </ul>
	Develop and maintain a site that meets the needs of district staff, students and families	<ul style="list-style-type: none"> <li>• Focus group input is incorporated in the site development</li> <li>• Additional input after the site is launched is incorporated in the Phase II work</li> <li>• Provide an avenue for users to provide comments and feedback after the site is launched</li> <li>• Online courses for the following school year are published prior to the start of the registration process each January</li> </ul>
	Create a process that will facilitate the supply and demand of single online course offerings through a course need and fulfillment survey tool	<ul style="list-style-type: none"> <li>• Districts and other users will use the course survey tool to publicize course needs and fulfillment of requests</li> <li>• There will be increased development and delivery of single online courses supplied by districts</li> </ul>
	Develop a process for course submission, review and posting that is manageable, monitored and maintained	<ul style="list-style-type: none"> <li>• Districts know, understand and meet deadlines and criteria for submitting courses for approval and posting on a biannual basis</li> <li>• All available online courses will be published prior to the start of each school year</li> <li>• All available online courses for the following school year will be published prior to the start of course registration each January</li> </ul>
	K-12 virtual education will be more transparent and streamlined	<ul style="list-style-type: none"> <li>• All current policy information will be posted to the website and easy to understand</li> <li>• Information for all current providers and provider courses will be available and accessible year round</li> </ul>

# WSN STAKEHOLDER ANALYSIS

## WSN WEBSITE REDESIGN STAKEHOLDER ANALYSIS

Stakeholder (Who needs this information?)	Objective (What do we want to communicate?)	Medium (What is the communication vehicle?)	Responsibility (Who is responsible for development and delivery?)	Frequency (How often should the communication happen?)
State Superintendent/ Chief of Staff	<ul style="list-style-type: none"> <li>• Top level information/ Overview</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Executive Team</li> </ul>	<ul style="list-style-type: none"> <li>• As needed</li> </ul>
Executive Team/ Leadership	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• Financials</li> </ul>	<ul style="list-style-type: none"> <li>• Executive Reviews</li> <li>• Emails</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> <li>• Robin Grandpre (in Laurel's absence)</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly</li> </ul>
Division Leadership/ Shelley Hamel	<ul style="list-style-type: none"> <li>• Milestone Progress</li> <li>• Financials</li> <li>• Admin Time</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• LiquidPlanner (LP) Dashboard</li> </ul>	<ul style="list-style-type: none"> <li>• Laurel Ballard</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly</li> </ul>
Team Leadership/ Laurel Ballard	<ul style="list-style-type: none"> <li>• Detailed Information</li> </ul>	<ul style="list-style-type: none"> <li>• Update Meetings</li> <li>• Project Meetings</li> <li>• Email</li> <li>• LP Dashboard and Posts</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly and As Needed</li> </ul>
Project Team Members	<ul style="list-style-type: none"> <li>• Detailed Information</li> </ul>	<ul style="list-style-type: none"> <li>• Project Team Meetings</li> <li>• Email</li> <li>• LP</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly</li> </ul>
Student & Teacher Resource (STRT) Team Members	<ul style="list-style-type: none"> <li>• Summary Information</li> </ul>	<ul style="list-style-type: none"> <li>• STRT Mon Meetings</li> <li>• LP Dashboard</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly and As Needed</li> </ul>
Comms Team	<ul style="list-style-type: none"> <li>• Summary Information</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> <li>• Laurel Shelley-Reuss</li> </ul>	<ul style="list-style-type: none"> <li>• As Needed</li> </ul>
Project Manager	<ul style="list-style-type: none"> <li>• Detailed Information</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• LP</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly and As Needed</li> </ul>
Division Administrative Assistant	<ul style="list-style-type: none"> <li>• Financials (Contract and Invoices)</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Email</li> </ul>	<ul style="list-style-type: none"> <li>• Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>• As Needed</li> </ul>

## WSN WEBSITE REDESIGN

### STAKEHOLDER ANALYSIS

Stakeholder (Who needs this information?)	Objective (What do we want to communicate?)	Medium (What is the communication vehicle?)	Responsibility (Who is responsible for development and delivery?)	Frequency (How often should the communication happen?)
WDE Finance	<ul style="list-style-type: none"> <li>Contract and Invoice Payment</li> </ul>	<ul style="list-style-type: none"> <li>Email</li> <li>In Person</li> <li>Phone Calls</li> </ul>	<ul style="list-style-type: none"> <li>Brittany Scherden</li> </ul>	<ul style="list-style-type: none"> <li>As Needed</li> </ul>
District and School Site Administrators	<ul style="list-style-type: none"> <li>PR and Detailed Information re Training, Process and Updates</li> </ul>	<ul style="list-style-type: none"> <li>Memos</li> <li>Meetings</li> <li>Email</li> <li>Phone Calls</li> <li>In Person Site Visits</li> <li>Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Lori Thilmany</li> <li>Comms</li> <li>Project Team</li> </ul>	<ul style="list-style-type: none"> <li>At Least Monthly To Start - As Frequently As Needed Thereafter</li> </ul>
District and School Site Users	<ul style="list-style-type: none"> <li>PR and Detailed Information re Training, Process and Updates</li> </ul>	<ul style="list-style-type: none"> <li>Memos</li> <li>Meetings</li> <li>Email</li> <li>Phone Calls</li> <li>In Person Site Visits</li> </ul>	<ul style="list-style-type: none"> <li>Lori Thilmany</li> <li>Comms</li> <li>Project Team</li> </ul>	<ul style="list-style-type: none"> <li>At Least Monthly To Start - As Frequently As Needed Thereafter</li> </ul>
WDE Site Administrators	<ul style="list-style-type: none"> <li>Detailed Information on Training, Use, Process and Updates</li> </ul>	<ul style="list-style-type: none"> <li>Meetings</li> <li>Email</li> <li>Phone Calls</li> <li>Person</li> </ul>	<ul style="list-style-type: none"> <li>Lori Thilmany</li> <li>Project Team</li> </ul>	<ul style="list-style-type: none"> <li>At Least Monthly To Start - As Frequently As Needed Thereafter</li> </ul>
WDE Site Users	<ul style="list-style-type: none"> <li>Summary Information</li> </ul>	<ul style="list-style-type: none"> <li>Meetings</li> <li>Email</li> </ul>	<ul style="list-style-type: none"> <li>Lori Thilmany</li> <li>Project Team</li> </ul>	<ul style="list-style-type: none"> <li>As Needed</li> </ul>
VE Course Providers	<ul style="list-style-type: none"> <li>Detailed Information on Training, Policy, Practice, Process and Updates</li> </ul>	<ul style="list-style-type: none"> <li>Meetings</li> <li>Email</li> <li>Phone Calls</li> <li>In Person Site Visits</li> <li>Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Lori Thilmany</li> <li>Project Team</li> </ul>	<ul style="list-style-type: none"> <li>At Least Monthly To Start - As Frequently As Needed Thereafter</li> </ul>
Dual and Concurrent Enrollment College Coordinators	<ul style="list-style-type: none"> <li>PR and Detailed Information re Concurrent Online Courses, Site Use and Process</li> </ul>	<ul style="list-style-type: none"> <li>Memos</li> <li>Meetings</li> <li>Email</li> <li>Phone Calls</li> <li>In Person Site Visits</li> </ul>	<ul style="list-style-type: none"> <li>Lori Thilmany</li> <li>Project Team</li> <li>Community College Concurrent Coordinators</li> </ul>	<ul style="list-style-type: none"> <li>At Least Monthly To Start - As Frequently As Needed Thereafter</li> </ul>

## WSN WEBSITE REDESIGN

### STAKEHOLDER ANALYSIS

Stakeholder (Who needs this information?)	Objective (What do we want to communicate?)	Medium (What is the communication vehicle?)	Responsibility (Who is responsible for development and delivery?)	Frequency (How often should the communication happen?)
Dual and Concurrent Enrollment BOCES/BOCHES Coordinators	<ul style="list-style-type: none"> <li>PR and Detailed Information re Concurrent Online Courses, Site Use and Process</li> </ul>	<ul style="list-style-type: none"> <li>Meetings</li> <li>Email</li> <li>Phone Calls</li> <li>In Person Site Visits</li> <li>Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Lori Thilmany</li> <li>Project Team</li> <li>Enrollment Coordinators</li> </ul>	<ul style="list-style-type: none"> <li>At Least Monthly To Start - As Frequently As Needed Thereafter</li> </ul>
WyDEC	<ul style="list-style-type: none"> <li>PR, Detailed and Summary Information</li> </ul>	<ul style="list-style-type: none"> <li>Meetings</li> <li>Email</li> <li>Phone Calls</li> </ul>	<ul style="list-style-type: none"> <li>Lori Thilmany</li> </ul>	<ul style="list-style-type: none"> <li>Monthly to As Frequently As Needed</li> </ul>
Wyoming Institutions	<ul style="list-style-type: none"> <li>PR, User Training and Summary Information</li> </ul>	<ul style="list-style-type: none"> <li>Memos</li> <li>Meetings</li> <li>Email</li> </ul>	<ul style="list-style-type: none"> <li>Lori Thilmany</li> <li>Jo Ann Numoto</li> </ul>	<ul style="list-style-type: none"> <li>As Needed</li> </ul>
Wyoming HEI	<ul style="list-style-type: none"> <li>PR and Summary Information</li> </ul>	<ul style="list-style-type: none"> <li>WDE Website</li> <li>Email</li> <li>Social Media</li> <li>Meetings</li> <li>Conference Presentations</li> </ul>	<ul style="list-style-type: none"> <li>Laurel Ballard</li> <li>Lori Thilmany</li> <li>Comms Team</li> </ul>	<ul style="list-style-type: none"> <li>As Needed</li> </ul>

Wyoming  
**WYOMING**  
DEPARTMENT OF EDUCATION

I am excited to provide an update on how we are meeting goals set forth in Wyoming's statewide education five-year strategic plan for technology. The ultimate goal is to provide a roadmap to ensure that every student acquires the skills, understanding, and confidence needed to successfully enter college, a career, or the military in the digital age.

In the last year, we were able to accomplish an extraordinary amount of work in a short amount of time. This report outlines the progress made in the first year of implementation of the five-year plan. Our achievements were only possible because of the thoughtful engagement by partners across the state and nation, including the Alliance for Excellent Education by aligning our work to the Future Ready® Framework.

Major projects and initiatives from the first year of implementation include: Open Range Wyoming, Future Ready Wyoming, Digital Learning Day, Hour of Code, Coders of the West, Wyoming Classroom Connectivity Initiative, Statewide Learning Management System, Virtual Education Course Catalog, and the Wyoming Innovations in Learning Conference. In addition, the WDE worked with stakeholders and the Wyoming Legislature to pass revised statutes aimed at providing students with greater opportunities to take virtual education courses.

We look forward to continuing this excellent work over the next few years.

Sincerely,



Jillian Balow  
**Superintendent of Public Instruction**