

Hybrid Learning Guide

August 2020

Office of Blended and Online Learning

Hybrid Learning Guide

Table of Contents:

How to Use the Guide	
Guide Arrangement:	2
Target Audience:	
District and School Perspective:	2
References to Commercial and Third-Party Content:	2
Clarification on Hybrid Learning:	2
Summary of Work:	4
Top Ten Considerations:	į
Organizational Self-Evaluation:	(
Self-Evaluation Framework:	
A Procedural Map of the Self Evaluation Framework:	7
Making the Self Evaluation Rubric Operational:	8
Self- Evaluation Scale:	8
Self- Evaluation Rubric:	9
Domain I: Research & Reflection 1. Preconditions	g
Domain I: Research & Reflection 2. Access & Infrastructure	10
Domain I: Research & Reflection 3. Capacity & Resources	1:
Domain I: Research & Reflection 4. Philosophical Alignment	12
Domain II: User Focused Design 1. Program Cohesion	13
Domain II: User Focused Design 2. Instructional Methods	15
Domain II: User Focused Design 3. Content & Assessment	17
Domain III: Sustainability 1. Self-Assessment	19
Domain III: Sustainability 2. Refinement	20
Appendix:	2:
Glossary of Key Terms:	2:
Resources and Reference Material:	22

How to Use the Guide

Guide Arrangement:

The Hybrid Learning Guide is designed to show paths and points of interests as an organization transitions into a Hybrid Learning instructional model. Please note, the Hybrid Learning Guide proposes one route, and not the only route. The amount and degree of what is implemented from the guide is at the user's discretion. It is also important to note that the content provided throughout the guide is primarily around Hybrid Learning instructional programs, and does not directly address topics such as transportation, budget, and other related topics.

To aid in your understanding of the content and arrangement, this guide is organized into five sections:

- 1. <u>How to Use This Guide</u>: Includes key information about audience and purpose, disclaimers, and an important overview of what is meant by "Hybrid Learning" throughout this reference guide.
- 2. <u>Summary</u>: Provides a general background and other contextual information.
- 3. <u>Top Ten Considerations</u>: Outlines high-level view of what was determined to be the most important considerations for transitioning to Hybrid Learning.
- 4. <u>Organizational Self Evaluation</u>: Takes the Top Ten Considerations and presents the Considerations in a self-evaluation framework of target domains and subdomains for evaluating organizational preparedness for the transition.
- 5. Appendix: Includes glossary terms and useful resources and reference materials.

It is important to note that the content provided throughout this guide is primarily related to Hybrid Learning instructional programs, and does not directly address topics such as transportation, budget, and other related topics.

Target Audience:

This content is specifically designed in response to Colorado schools that may find themselves needing to transition to a Hybrid Learning model for instruction during the 2020-21 school year as a response to COVID-19 and those schools that are planning to use any form of remote learning. Additionally, schools with initial success in remote or blended learning programs may find this content useful in program refinement or if transitioning into other competency-based and Personalized Learning instructional models. In all cases, the content provided is best applied in situations where decision-making is decentralized as close as possible to the local school community. The intention of this decentralization is to increase the effectiveness in having individual learner needs met by releasing autonomy and decision-making to local levels.

District and School Perspective:

The content provided is geared toward being more effective the closer the designer is to the end-user (i.e. the student). As such, the verbiage will speak from a school level perspective, but it can be easily adapted to district level needs. Additionally, it should be noted that there are specific indicators in the self-assessment rubric that reference the need for collaborative support from district teams.

References to Commercial and Third-Party Content:

Throughout this document, there are references to certain third parties and "pay-for" resources. The resources provided below are for informational purposes only. The Colorado Department of Education (CDE) does not endorse any of the vendors listed. It is the responsibility of the user to verify the validity of the resources and that they meet Colorado Academic Standards and/or any statutory requirements. They are included as exemplars and reference points, and by no means should they be seen as essential or required content to be procured.

Clarification on Hybrid Learning:

Included as part of this document's <u>appendix</u> is a short <u>glossary of key terms</u>. However, it is important to note that there is a distinct lack of agreement on the general definition of Hybrid Learning. Many sources tend to use 'Hybrid Learning' synonymously with "Blended Learning," however, for the purposes of this content, when we refer to Hybrid Learning, it is as a type of Blended Learning. In this case, the term "Hybrid Learning" is not interchangeable with "Blended Learning." To

understand them as synonymous constrains the definition of Blended Learning while ignoring the nuance that makes Hybrid Learning distinct from other forms of blended instructional methods.

As a form of Blended Learning, Hybrid Learning leverages both face-to-face and online modes of learning. For our purposes, Hybrid Learning is most similar to what would be referred to as an "Enriched Virtual" blended approach where most of the content consumption is happening online, and students typically have a fixed schedule for required face-to-face learning sessions and potentially flexible access for face-to-face support. The key element of making Hybrid most similar to Enriched Virtual over other blended models is that of the limited required face-to-face contact times. What makes Hybrid distinct from Enriched Virtual, is that it offers the opportunity for remote access to scheduled face-to-face learning sessions. In essence, Hybrid Learning allows individual students flexible remote access, as needed or as preference dictates, to synchronously participate in scheduled learning sessions occurring at the brick and mortar location.

Another potential distinction between Hybrid and other blended learning models is around the scale. Typically, blended models that have more time rooted in brick and mortar settings, (rotations, flipped, flex) can be understood around individual classroom approaches, and largely these models can be successful without broader organizational support. Hybrid Learning tends toward needing larger systematic and operational supports (scheduling, transportation, specialized infrastructure) driven by the organization to support instruction.

Finally, a rationale that is key to understanding the utility to Hybrid Learning is that it is responsive to both in-person and remote learning but provides for a greater level of continuity of learning during times where fully in-person learning is not feasible. Hybrid models are designed to support access to in-person learning to the greatest extent possible, but it also proactively prepares for the necessity of remote learning during public health emergencies such as the one we found ourselves in with the 2020 pandemic.

Summary of Work:

The rapid transition of schools to remote learning in March of 2020 in response to the COVID-19 pandemic generally left educators, learners, and families in a situation of unprecedented difficulty. For example:

- Many classroom teachers had to become online content creators for the first time.
- Students shifted to a virtual learning environment while the physical learning environment (home) shifted to one they previously had not associated with the rituals and routines of school.
- Parents were put in the precarious situation of being the de facto teacher while also navigating the shifting landscape of their work and personal lives.
- What is more, many of our Colorado teachers were put in the situation of continuing to be the teacher online and the de facto teacher to their own children.

All of this is in the midst of the deepening digital divide and socio-economic and racial disparities that are already present in our educational system. The rapid change left little room for thoughtful planning, research, and agreement on what would work best. Moreover, the rapid shift and immense workload associated with it stretched the very limited resource of time that would have been needed to plan and react effectively to the situation. In the following months, we have seen it all: promise points of innovation, frustration and critiques in the media, optimism, skepticism, and a growing concern for what is next as we approach the 2020-2021 school year. While many states and school districts are putting together plans for how to handle the work of education in a Fall term, there is an overwhelming need to expand knowledge and resources needed to make Hybrid Learning a reality.

One of the first striking issues about the prospect of moving to Hybrid Learning in the Fall of 2020 is the general lack of agreement as to what Hybrid Learning is. Typically, "Hybrid Learning" has been used synonymously with the term "Blended Learning." As mentioned earlier, we acknowledge that Hybrid Learning as we define it is a type of Blended Learning most similar to the Enriched Virtual Blended Approach. A key concept we see with Hybrid is that the Hybrid approach must include the flexibility for learners "to choose to access brick and mortar learning activities remotely as needed or as preference dictates." In this model, schedules, resources, and staffing must be organized around the option to offer remote access to content and instruction-typically using digital means- but also possibly requiring the availability of high quality non-digital approaches. We also see Hybrid Learning as an organizational approach over an individual instructional decision.

Given our operational definition that Hybrid Learning is "a technology dependent and organizationally driven instructional approach that allows for flexible face-to-face student and teacher learning sessions and both synchronous and asynchronous remote access to coursework and learning sessions," what we can establish is that there is very little, if any, available research on this specific approach to instruction. In short, this is somewhat uncharted territory, but we have access to adjacent concepts and frameworks that can support us in this journey.

What we do know from our operational definition is that Hybrid Learning will require the use of technology and it will leverage online learning principles and flexible student-centered teaching approaches. To that, many of the resources and reference materials speak to online learning and digital citizenship standards, Blended Learning methods, and student-centered approaches like Personalized and Competency Based Learning and universal instructional design methods. What we know from our recent experience with the rapid rollout of remote learning is that it puts great strain on families, teachers who are unfamiliar to online learning, operational systems, and on the social and emotional well-being of our students. In part, to address these issues there is a need for established communications, flexible and adaptive professional development, dedicated personnel to manage the transition, and resources to support the social and emotional needs of students.

In summation, we are on the bleeding edge of innovation, and we should acknowledge that there will be certain failures of the frontier that will come about on the journey, but the following content may provide the essential tools needed to plan according to what we may expect to encounter.

Top Ten Considerations:

The following list comprises the top ten things that an organization could do to prepare for Hybrid Learning in the 2020-2021 school year. The following considerations are only recommendations and is not an exhaustive list of content, resources, or considerations. These recommendations are not prescriptive, and they are designed solely to assist organizations in the transition to Hybrid Learning. Additional information related to these considerations can be found in the Self Evaluation Rubric.

- 1. A Hybrid Learning program plan cannot stand in place of, or in conflict with CDC Health and Safety Guidelines, State and Federal Regulation for academics, intervention, and contact, district and local union regulations and operational guidance.
- 2. Hybrid Learning requires existing and reliable infrastructure, hardware, software, and consumable (non-digital) resources that are equitably accessible.
- 3. Hybrid Learning requires stakeholders within and outside the organization to work in partnership and hold a shared understanding of why Hybrid Learning is being used.
- 4. Have an identified "Hybrid Learning Transition Team," composed of an adequate representation of stakeholders with at least some decision-making authority related to purchasing, scheduling, instructional program design, professional development, program success metrics, grading policy, and crisis management.
 - a. Ideally, the Transition Team will be at the school level with district support provided to ensure relevant continuity and flexibility.
 - b. Teams should have representation from administration, classroom teachers, special education teachers, social services, and technology services.
 - c. The Transition Team should include student and parent/guardian participation directly or through empathy research.
- 5. Leverage a single learning management system (LMS) to display content, assignments, and performance.
 - a. LMS should be organized in a logical manner and utilize a consistent design throughout.
- 6. Content software used should be limited (i.e. not too many different programs), connected to current standard(s), aligned to face-to-face (F2F) curriculum, accessible via single sign-on credentials, and accessible through the LMS.
 - a. End users (students, parents, guardians) should not have to maintain multiple sign-on credentials
 - b. Assessment tools that measure/show progress performance should be clear to the end user and reported in a single location.
- 7. Create a schedule to support Hybrid Learning.
 - a. Flexible face-to-face instructional options.
 - b. Built in time for adaptive professional learning and content planning.
 - c. Built in time for frequent individual and small group check-ins.
- 8. Prioritize and streamline content standards to create shared understanding between teachers, students, and parents/guardians.
 - a. Standards are organized into highest impact and in a logical sequence.
 - b. Standards are presented in an easy-to-understand format that does not diminish the intent.
- 9. Establish a grading system that supports competency.
 - a. Grades less on face-to-face/seat time/synchronous attendance and prioritizes demonstration of student content mastery.
 - b. Separates and utilizes reporting on both content competency and behavioral success indicators.
 - c. Emphasizes frequent formative checks as well as valid summative assessments.
- 10. Have a strategic communications plan that is transparent, consistent, and coordinated for internal and external end users.
 - a. Between leadership and staff
 - b. Between organization and leadership to families and community
 - c. Between educators to students and parents/guardians

Appendix

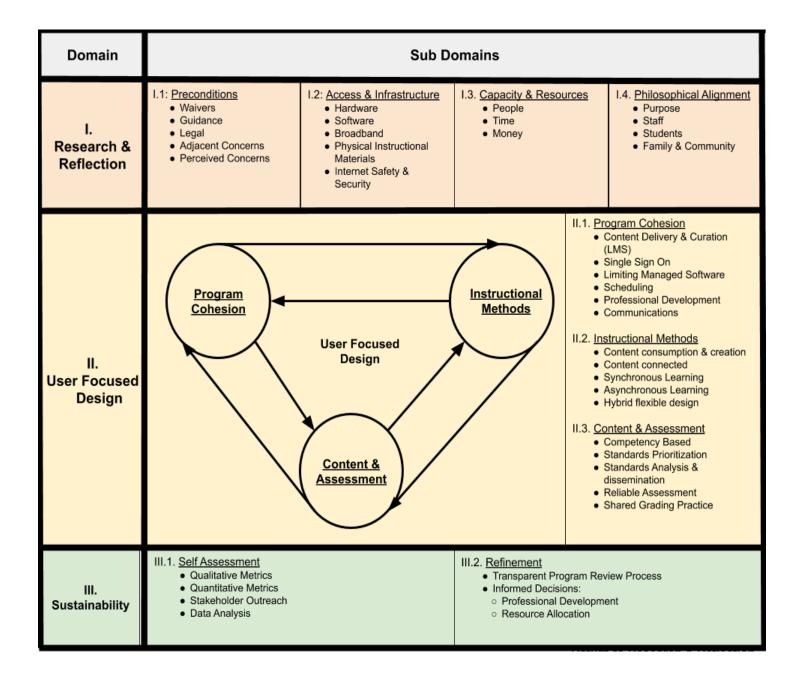
Organizational Self-Evaluation

Self-Evaluation Framework:

The Self-Evaluation Rubric is broken into three domains, each of which is broken into subdomains to aid in reflective program evaluation for preparedness. This framework is not designed to cover all possible considerations, rather it is designed to emphasize practices recognized for having the highest leverage in a Hybrid Learning program design. The domains and subdomains are as follows:

	Domain	Subdomain
I.	Research & Reflection	I.1. Preconditions
		I.2. Access & Infrastructure
		I.3. Capacity & Resources
		I.4. Philosophical Alignment
II.	User Focused Design	II.1. Program Cohesion
		II.2. Instructional Methods
		II.3 Content & Assessment
III.	Sustainability	III.1. Self-Assessment
		III.2. Refinement

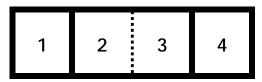
A Procedural Map of the Self-Evaluation Framework:



Making the Self-Evaluation Rubric Operational

Self-Evaluation Scale:

Users will assign a value for how they perceive their readiness with individual indicators associated with a sub domain on the self-assessment rubric. The scale score for the rubric ranges from a one to a four with one being the lowest or least desirable and four being the highest or most desirable (see image). As the user



contemplates preparedness, the objective is that upon honest reflection for each question, users can score their organization a three or higher, otherwise a score of two or lower indicates an area where additional work needs to be done prior to launching a Hybrid Learning Program. In some instances, like those related to hardware and wireless access, the organization lacks sufficient readiness without a score of four.

The purpose of the rubric is as a developmental tool, informed by a recent review of promising practices, to support local planning for Hybrid Learning. How a school or district chooses to use this tool would be determined locally.

Please note that to assist in the self-assessment, indicators have embedded resources or reference links when available. Most of these links will be to CDE resources; however, in some cases they may refer to third party resources. As mentioned earlier, these are included as examples and reference points, and by no means should they be seen as essential or required content to be procured. In situations where the decision/planning/resources relies heavily on local context, the words "site based" will be written in the area for resources or reference links.

Self-Evaluation Rubric

Domain I: Research & Reflection -- 1. Preconditions

Organizations looking to move to Hybrid Learning should organize a team to manage the complexity of the transition to the new instructional model. The rationale behind having the team is to provide more perspective, build a sense of shared investment, and to manage workload. It also allows for the distribution of responsibility and expertise, to ensure Federal, State, and other requirements are met, manage essential aspects of planning, and to mitigate problems if there is a need to rapidly modify the program plan.

Self-Assessment Indicator: I. 1 - Preconditions	1: Disagree	2: Slightly Disagree	3: Slightly Agree	4: Agree
I.1.a. Our school/organization has an Hybrid Learning Transition Team that represents a adequate cross section of our stakeholders and has decision making authority over related purchasing, scheduling, instructional program design, and professional development, program success metrics, grading policy, and crisis management. Reference/Resources: Site based	1	2	3	4
I.1.b. Our Transition Team has established decision making processes and team members understand their responsibilities. Reference/Resources: Site based	1	2	3	4
I.1.c. Our Transition team has reviewed and confidently addressed concerns related to the current CDE Guidance. Reference/Resources: CDE 2020-21 Planning Resources, CDE Instructional Policy Instructional Time, CDE 2020-21 Safe Schools (COVID-19) Resources, CDE Getting Started at Home, CDE Remote Learning Supports, CDE Pupil Count	1	2	3	4
I.1.d. Our school reviewed and confidently addressed concerns related to their current district initiatives and resources to support Hybrid and Online Learning. <i>Reference/Resources: Site based</i>	1	2	3	4
I.1.e. Our Transition Team has identified or eliminated other concerns not covered by CDE or district guidance, such as new teacher on-boarding and development, community concerns, unique individual learner needs, hardware and software selection, etc	1	2	3	4

Additional Resources and Exemplars for I.1 Preconditions

The primary goal in this section is to build a Transition Team to 1) broaden perspectives to ideally include all stakeholders, 2) distribute leadership and workload, and 3) capitalize on expertise of specialists. It will be essential that this team be able to effectively monitor, understand, and adapt to the wide breadth of information and needs of a complex organization.

Useful Tools:

- <u>National Standards for Quality (Online Programs)</u> has a collection of broad standards to help guide schools in the development of online programs. Standards associated with these indicators are B, C, and D.
- A useful graphic for screen time by age can be found at **EyePromise Screen Time Guidelines**,

Potential Reads:

• Leverage Leadership 2.0 by Paul Bambrick-Santoyo: (See chapter on Team Management)

Domain I: Research & Reflection -- 2. Access & Infrastructure

Hybrid Learning programs are distinct from strictly remote programs in their dependence on digital tools. As such, it is essential to establish that access to digital curriculum and online learning sessions is equitable and safe, as well as consistent with non-digital materials and resources.

Self- Assessment Indicator: I. 2 - Access & Infrastructure	1: Disagree	2: Slightly Disagree	3: Slightly Agree	4: Agree
I.2.a. All students have easily accessible and reliable internet outside the school. (This indicator must be a 4 for successful hybrid learning to occur) *Reference/Resources: Site based	1	2	3	4
I.2.b. Students have a reliable Wi-Fi equipped device outside the school. (This indicator must be a 4 for successful hybrid learning to occur) *Reference/Resources: Site based	1	2	3	4
I.2.c. Our organization has an effective plan for how required software updates will be made, how software will be deployed, and how technical assistance for students will be handled. <i>Reference/Resources: Site based</i>	1	2	3	4
I.2.d. All staff understand what needs to be done to maintain student internet safety and data security. Reference/Resources: CDE Data Privacy Office, CDE Learning From Home, US DoE: Privacy	1	2	3	4
I.2.e. Non-digital materials (e.g. curriculum consumables) are aligned to digital content and available for any student. Reference/Resources: Site based	1	2	3	4

Additional Resources and Exemplars for I.2. Access & Infrastructure

The essential objective of this section is to ensure that students will have usable digital tools. Much of this work will require schools to collaborate with local broadband providers and district/school level technology teams to ensure seamless digital access.

Exemplars:

• Jefferson County Public Schools created <u>this comprehensive online resource page</u> dedicated to identifying and supporting student, family, and community technical needs.

Useful Tools:

- <u>National Standards for Quality (Online Programs)</u> has a collection of broad standards to help guide schools in the development of online programs. Standards associated with these indicators are F and G.
- <u>Common Sense Media: Education</u> has a wide selection of internet safety tools and curriculum for students and online safety and privacy support for parents and educators.

Potential Reads:

• The New One-Page Project Manager by Clark and Mick Campbell: This text offers both project management practice and simplified design. Useful for planning deployment and purchasing.

Domain I: Research & Reflection -- 3. Capacity & Resources

To support a vision for Hybrid Learning, organizations will need to be nimble enough to make local decisions over people, time and money, and to ensure that they have an action plan that anticipates resource needs, knowledge gaps, and change management processes.

Self-Assessment Indicator: I. 3 - Capacity & Resources	1: Disagree	2: Slightly Disagree	3: Slightly Agree	4: Agree
I.3.a. Our school/organization has an action plan to support the transition to Hybrid Learning. <i>Reference/Resources: Site based</i>	1	2	3	4
I.3.b. Our school/organization is confident technology services and educational technology personnel can support students, parents, and educators adequately. <i>Reference/Resources: Site based</i>	1	2	3	4
I.3.c. The instructional practices needed for our school/organization's Hybrid Learning program are consistent with state teacher effectiveness standards. *Reference/Resources: CDE Teacher Effectiveness Rubric, CDE COVID19 Principal Resources	1	2	3	4
I.3.d. Funds are budgeted for hardware repair, replacement, and refurbishment. <i>Reference/Resources: Site based</i>	1	2	3	4
I.3.e. Where needed, funds are budgeted for personnel to manage hardware, software, and other technical support. Reference/Resources: Site based	1	2	3	4
I.3.f. Personnel are assigned to maintain and manage software updates, hardware management, and software licensing. Reference/Resources: Site based	1	2	3	4

Additional Resources and Exemplars for I.3 Capacity & Resources

Shifting to a different mode of instruction is complex, and it requires change management planning for success. This section is dependent on the development of an action plan to manage that change. It is important to be able to articulate plans with an alignment of vision to how people, time, and money will be used to support it.

Exemplars:

• Colorado, <u>D11 schools leverages the Knoster Model</u> as a framework for managing complex change

Useful Tools:

- <u>National Standards for Quality (Online Programs)</u> has a collection of broad standards to help guide schools in the development of online programs. Standards associated with these indicators are E and F.
- The <u>Chrome Auto Update Policy</u>, specifically the expiration dates, may be useful for budget planning to Google Apps for Education schools that are using Chromebooks.

Potential Reads:

• Better Together, by Vander Ark and Dobyns has useful information on program scaling, advocacy, and change management and an extensive list of schools curated that serve as potential exemplars of innovation promise points.

Domain I: Research & Reflection -- 4. Philosophical Alignment

Successful programs using online and remote learning options often have shared understanding around program purpose and direction. Looking to larger shared philosophical beliefs of the community not only speaks to purpose, but they also add to the general clarity and shared investment in program direction.

Self-Assessment Indicator: I. 4 - Philosophical Alignment	1: Disagree	2: Slightly Disagree	3: Slightly Agree	4: Agree
I.4.a. There is a shared understanding between stakeholders as to the purpose of education and how it connects with the mission and vision of the educational organization. Reference/Resources: Site based	1	2	3	4
I.4.b. Organizational leadership and staff have a mindset supportive of the use of digital tools. *Reference/Resources: ISTE Leadership Standards, ISTE Educator Standards	1	2	3	4
I.4.c. Our school/organization is confident that Hybrid Learning is the best direction for our educational program, and we can explain through comparison to other options why Hybrid Learning is the best option for our setting. *Reference/Resources: CDE Teacher, Family, & Staff Preparation	1	2	3	4
I.4.d. Parents, guardians, and community members understand their roles in supporting the vision and needs of the educational organization. Reference/Resources: CDE Teacher, Family, & Staff Preparation	1	2	3	4

Additional Resources and Exemplars for I.4 Philosophical Alignment

To have philosophical alignment within a program and between stakeholders requires that all involved be able to speak to "Why" the program is designed the way it is. The goal is to have commonality in purpose and shared agreements on process.

Exemplars:

- The Beacon Network in Denver, CO, has an articulated purpose, which answers the "why?" for their program.
- The <u>Iris Center learning module</u> for parents to support learning and accommodations from home during the COVID 19 closures serves as an example of active outreach for parental involvement in fulfilling a vision and purpose for education.

Useful Tools:

• National Standards for Quality (Online Programs) has a collection of broad standards to help guide schools in the development of online programs. Standards associated with these indicators are A, C, E, G, H, and M.

Potential Reads:

• "<u>Transforming K-12 Rural Education through Blended Learning: Barriers and Promising Practices</u>" by Werth, Werth, and Kellerer may serve as a rationale for schools looking to invest in a technology rich program as a long term plan.

Domain II: User Focused Design -- 1. Program Cohesion

To increase process predictability for the learner, the virtual learning environment and communication streams must be consistent. For an ideal user experience, there needs to be consistency in design horizontally (class to class), vertically (grade to grade) within a school, and if possible, peripherally (school to school). This benefits parents and guardians by reducing the number of programs, pathways, and individual communications they are subjected to in supporting their student(s). This has the added benefit of reducing the costs associated with investing in software, professional development, technology support, and instructional evaluation.

Self-Assessment Indicator: II. 1 - Program Cohesion	1: Disagree	2: Slightly Disagree	3: Slightly Agree	4: Agree
II.1.a. All of our organization's digital content is available on a common online Learning Management System (LMS) that works through multiple devices. <i>Reference/Resources: Site based</i>	1	2	3	4
II.1.b. Student use software is limited, curated at a site level, protects student data, and accessible via single sign-on integration that works through multiple devices. Reference/Resources: Site based, CDE Data Privacy and Security	1	2	3	4
II.1.c. The anticipated master schedule and calendar are designed to support Hybrid Learning. Reference/Resources: CDE 2020-21 Planning Resources Page, CDE Pupil Count, CDE 2020-21 School Scenarios	1	2	3	4
II.1.d. Professional development time is set aside dedicated to support our Hybrid Learning program. Reference/Resources: CDE PD Guidelines, CDE Teacher, Family, & Staff Preparation, CDE Professional Standards	1	2	3	4
II.1.e. Our organization has prompt and reliable internal and external communication processes to effectively relay system level adjustments and crisis management information and uses appropriate translation services. Reference/Resources: CDE English Learners 2019-20 Distance Learning Guidance, CDE Teacher, Family, & Staff Preparation	1	2	3	4
II.1.f. Our stakeholders understand how decisions are made, how to voice concerns, and how information is communicated. Reference/Resources: Site based, CDE Teacher, Family, & Staff Preparation	1	2	3	4
II.1.g. There is commonality and continuity between feeder school patterns between our online systems (e.g. LMS), instructional programs (i.e. vertical alignment), and performance reporting (e.g. competency grading). Reference/Resources: CDE Teacher, Family, & Staff Preparation	1	2	3	4

Additional Resources and Exemplars for II.1. Program Cohesion

A cohesive program will require deliberate decisions around design and measures to not inundate students and families with different software and communication streams. When it comes to content delivery and curation, having a central repository of information and predictable communication modes and timeframes makes teaching and learning easier for all involved. Remember, the challenge in learning should not be figuring out what the expectation is.

Exemplars:

- Aurora Public Schools use of translation services in their communications plan in their <u>remote learning announcement</u> from March 2020.
- Boulder Valley School District resource curation and limited software <u>Student, Family and Community Technical</u> Resources page.
- Denver Public Schools outlined an <u>emergency remote learning plan</u> which was a modified version of <u>Palm Beach County</u> Schools' plan.
- Douglas County School District put out this <u>resources for families page</u> as part of their communicated crisis management plan.

Useful Tools:

- For schools still looking to determine what Learning Management System (LMS) to use, the <u>EdSurge product index</u> has an extensive list of existing LMS's, and other software, including program requirements, user reviews, case studies, technical data, and etc.
- <u>National Standards for Quality (Online Programs)</u> has a collection of broad standards to help guide schools in the development of online programs. Standards associated with these indicators are I and M.
- When identifying professional development needs, the <u>iLearn Collaborative (ILC)</u> works with <u>Colorado Empowered</u> Learning (CEL) offer related Blended and Online PD.

Potential Reads:

- Quality Matters and Virtual Learning Leadership Alliance also outlines <u>standards for online courses</u> and <u>online teaching</u> that may be useful in identifying program needs, and these standards are rooted in the <u>2014 iNACOL Blended Learning Teacher Competency Framework</u>.
- Universal Principles of Design by Lidwell, Holden, and Butler speaks to good design elements in general.

Domain II: User Focused Design -- 2. Instructional Methods

Instruction in a Hybrid Learning model meets the high level of quality expected from any other style of instruction with the added need to ensure that digital and non-digital content materials are consistent with each other and in-classroom instruction and interaction is still accessible remotely.

Self-Assessment Indicator: II. 2 - Instructional Methods	1: Disagree	2: Slightly Disagree	3: Slightly Agree	4: Agree
II.2.a. Our instructional and support staff have contact time and plans for communicating student expectations and building rituals and routines to support Hybrid Learning (e.g. technology usage, digital citizenship, etc.). Reference/Resources: Site based	1	2	3	4
II.2.b. Our instructional staff has dedicated time for frequent remote individual and small group contact. Reference/Resources: CDE 2020-21 School Scenarios	1	2	3	4
II.2.c. Our digital and analog content and curriculum is standards aligned, engaging, appropriately challenging (at grade level), and aligned to each other. Reference/Resources: CDE Implement the 2020 CAS	1	2	3	4
II.2.d. Our face-to-face instructional times are available in a synchronous remote option and curated immediately and logically for asynchronous access. Reference/Resources: <u>CDE 2020-21 School Scenarios</u>	1	2	3	4
II.2.e. Our school/organization has procured additional hardware (e.g., video cameras, mics, earpieces) and software (remote access video platform) needs that will make remote access to learning sessions possible. Reference/Resources: Site based	1	2	3	4
II.2.f. Online and analog content and resources integrate learning in authentic ways, promote natural opportunities for language development, and provide appropriate scaffolds for our English language learners. Reference/Resources: CDE English Learners 2019-20 Distanced Learning Guidance, CDE CLDE	1	2	3	4
II.2.g. Our lesson plans provide opportunities, modifications, and accommodations that are consistent with learning plans for all students including, but limited to, students with an IEP, with a 504, Gifted and talented, etc. Reference/Resources: CDE Gifted Education, CDE GT COVID Resources, CDE Nimble, Flexible Instruction, CDE Office SpEd, CDE Visually Impaired, CDE Resources for Families with Students with Disabilities	1	2	3	4
II.2.h. Our instructional design provides access to and challenging content for all learners. Reference/Resources: CDE Nimble, Flexible Instruction	1	2	3	4

Additional Resources and Exemplars for II.2. Instructional Methods

The key to success with instructional methods is to translate effective and evidence-based teaching practices into the virtual world. Additionally, having the right hardware and software is essential to providing rich learning experiences for all students to be able to consume and contribute content from the classroom to remote locations in real time or in flexible times.

Exemplars:

- LEAP Innovations provides a curated list of exemplar of remote learning in the field, and related tools and resources.
- The <u>CAST UDL Guidelines</u> provides an interactive framework for best design practices for learning. The site also serves as an exemplar for online content presentation.

Useful Tools:

- <u>National Standards for Quality (Online Programs)</u> has a collection of broad standards to help guide schools in the development of online programs. Standards associated with these indicators are I and J.
- For schools still booking to procure digital tools, there may be money available through the <u>CARES Act</u> (see the "<u>Allowable Expenditures</u>" guidance).
- Stay up to date on CDE Guidance for Online learning by joining the listserv on the <u>CDE Blended and Online Learning page</u>.
- The Iris Center has a curated list of <u>evidence based practice summaries</u> for instructional strategies and interventions that
 may be useful in supporting students. Likewise, their "<u>selecting an accommodation</u>" section of the Iris Center's
 perspectives and resources provides useful scenarios for professional learning and practice.

Potential Reads:

Universal Principles of Design by Lidwell, Holden, and Butler speaks to good design elements in general.

Domain II: User Focused Design -- 3. Content & Assessment

Hybrid and remote learning scenarios require students to work with more autonomy than is often required in more traditional settings. As such, students will need to be more active participants in the learning process, scheduling and time management, goal setting, personal advocacy, and other local considerations. Incorporating design elements of competency-based education models to track student capacity for academic and non-academic indicators (such as homework completion, class participation, and etc.) would support students with this level of agency, as they provide the clarity needed to limit the field of potential objectives through prioritization, user-friendly objective language, transparent assessment methods, and consistent reporting structures.

Self-Assessment Indicator: II. 3. Content & Assessment	1: Disagree	2: Slightly Disagree	3: Slightly Agree	4: Agree
II.3.a. Our content standards are prioritized to maximize time spent on highest impact content. Reference/Resources: CDE COVID19 Principal Resources, Marzano Competency Based Education,	1	2	3	4
II.3.b. Our prioritized standards are presented in a format that can be understood by students and in a way that does not diminish the intent of the standard. Reference/Resources: Marzano Competency Based Education, CDE Colorado Academic Standards	1	2	3	4
II.3.c. Student content grades are not affected by student behavioral or success indicator grading. Reference/Resources: Marzano Competency Based Education	1	2	3	4
II.3.d. Our teachers leverage individual and small group check-ins for formative assessment and establishing performance trends. Reference/Resources: Marzano Competency Based Education, Best Practices for Educators	1	2	3	4
II.3.e. Our assessments are valid measures of performance that are done independently and are clearly measuring identified standards. *Reference/Resources: Marzano Competency Based Education*	1	2	3	4
II.3.f. Our school/organization has a predictable way to determine reasonable student technology skills for content consumption and creation in digital spaces. Reference/Resources: CDE Supplemental Resource: CCSS K-12 Tech Skills (adapted)	1	2	3	4
II.4.g. Our school/organization has valid standards that can be used to provide consistent feedback on non-academic success indicators. Reference/Resources: CDE CO Essential Skills	1	2	3	4

Additional Resources and Exemplars for II.3. Content & Assessment

Content and Assessment in a Hybrid Learning model can be best supported by competency-based learning methods and in developing students' personal skills. Below are some resources that may help.

Exemplars:

<u>Marzano Research</u> provides a wide range of examples of competency based education, and more, <u>on their resources</u> <u>list</u>.

Useful Tools:

- <u>National Standards for Quality (Online Programs)</u> has a collection of broad standards to help guide schools in the development of online programs. Standards associated with these indicators are found in section K.
- CDE Standards prioritization worksheets for <u>Math</u> and <u>ELA</u> and other CBL resources on the <u>CDE COVID19 Principal</u> <u>Resources</u> page.
- For schools looking to support students with personal skills development, Colorado Education Initiative has a <u>NextGen</u>
 <u>Toolkit</u> and CASEL has a comprehensive list of <u>SEL Competencies</u> that schools may find useful in their program articulation.

Potential Reads:

• A Handbook for Personalized Competency-Based Education by Marzano, Norford, Finn, and Finn III, is a leading resource for competency-based programs.

Domain III: Sustainability -- 1. Self-Assessment

In order to effectively manage progress towards sustainability, programs have clear success indicators and goals achieving success. In ideal settings, these goals are constructed of shared lead and lag measures and unbiased data collection and analysis.

Self-Assessment Indicator: III. 1 -Self Assessment	1: Disagree	2: Slightly Disagree	3: Slightly Agree	4: Agree
III.1.a. Our school/organization has a strong understanding of lead and lag measures and how they work in relation to building reliable programs. Reference/Resources: <u>CDE DARE Resource</u> , <u>CDE Program Evaluation</u>	1	2	3	4
III.1.b. Our school/organization is confident that we have established the correct qualitative metrics (e.g. stakeholder satisfaction or opinion) to measure our Hybrid Learning program's success. *Reference/Resources: CDE DARE Resource, CDE Program Evaluation	1	2	3	4
III.1.c. Our school/organization is confident that we have established the correct quantitative metrics (e.g. content mastery, active engagement, etc.) to measure our Hybrid Learning program's success. Reference/Resources: CDE DARE Resource, CDE Program Evaluation	1	2	3	4
III.1.d. Our school/organization has an effective process using analog and digital tools and in a variety of formats (e.g. surveys, focus groups, interviews, benchmarking) to collect feedback on our Hybrid Learning program from all stakeholders. Reference/Resources: CDE DARE Resource, CDE Program Evaluation	1	2	3	4
III.1.e. Our school/organization performs usability audits of our online content to ensure consistent and intuitive design and alignment with our non-digital resources. Reference/Resources: CDE DARE Resource, CDE Program Evaluation	1	2	3	4
III.1.f. Our school/organization frequently uses unbiased third parties to perform design audits and administer qualitative information sessions and data analysis. Reference/Resources: Site based	1	2	3	4

Additional Resources and Exemplars for III.1. Self -Assessment

Having good measures and collecting evidence in a variety of reliable ways is the key to gathering the right information to gauge program success.

Useful Tools:

• <u>National Standards for Quality (Online Programs)</u> has a collection of broad standards to help guide schools in the development of online programs. Standards associated with these indicators are found in section N.

Potential Reads:

• A Handbook for High Reliability Schools by Marzano, Warrick, and Simms.

Domain III: Sustainability -- 2. Refinement

Self-assessment and data analysis show where programs are successful and where improvements need to be made, and program refinement comes in the form of the augmentation or elimination of metrics that missed the mark and the conscious continuation of metrics that are determined to be promise points for programmatic success.

Self-Assessment Indicator: III. 2. Refinement	1: Disagree	2: Slightly Disagree	3: Slightly Agree	4: Agree
III.2.a. Our Transition Team uses analysis of this self-assessment and data from our identified qualitative and quantitative metrics as part of decision making and action planning. Reference/Resources: CDE DARE Resource, CDE Program Evaluation	1	2	3	4
III.2.b. Our school/organization articulates clear goals [e.g. SMART (Specific, Measurable, Attainable, Relevant, Time-based)] to meet program objectives. Reference/Resources: CDE DARE Resource, CDE Program Evaluation	1	2	3	4
III.2.c. Our decisions for professional development needs are informed by our self-assessments. Reference/Resources: CDE DARE Resource, CDE Program Evaluation,	1	2	3	4
III.2.d. Our decisions for software and digital tool selection are informed by our self-assessments. Reference/Resources: Site based	1	2	3	4
III.2.e. Our Transition Team has the ability to modify our program goals, metrics, assessment methods, as objectives are met, as time frames expire, or as new knowledge or situations demand programmatic changes. <i>Reference/Resources</i> : <u>CDE DARE Resource</u> , <u>CDE Program Evaluation</u>	1	2	3	4
III.2.f. Our school/organization re-administers this self-assessment regularly to monitor changes on key self-assessment indicators. Reference/Resources: Site based	1	2	3	4

Additional Resources and Exemplars for III.2. Refinement

After the data is collected, this section is about analysis and action. What to do with the data and how to set up a process of continuous improvement.

Useful Tools:

- <u>National Standards for Quality (Online Programs)</u> has a collection of standards to help guide schools in the development of online programs. Standards associated with these indicators are found in section N.
- When identifying professional development needs, <u>iLearn Collaborative(ILC)</u> and <u>Colorado Empowered Learning (CEL)</u> offer related Blended and Online PD.
- The Ohio Department of Education put out a support resource on writing SMART Goals.
- The International Society for Technology in Education (ISTE) has a complete list of standards related to using technology for <u>students</u>, <u>educators</u>, <u>school leaders</u> and <u>instructional coaches</u> that may be useful in supporting and credentialing professional learning.

Potential Reads:

- Leverage Leadership 2.0 or Driven by Data 2.0 both by Paul Bambrick-Santoyo: (Content is included in each on leading professional development and data analysis).
- Education Elements <u>Personalized learning guide</u> is an easy to navigate resources that models much of the process outlined throughout this self-evaluation.

Appendix:

A. Glossary of Key Terms:

- **Asynchronous Learning** a general term that is used to describe educational models where instruction or learning happens at different times and often at different locations.
- **Blended Learning** an educational program or method in which content consumption happens at least in part through digital technologies as well as in part through in-person learning.
- End User the person that uses the final product.
- **Hybrid Learning** a technology dependent and organizationally driven instructional approach that allows for flexible face-to-face (F2F) student and teacher learning sessions and both synchronous and asynchronous remote access to coursework and learning sessions.
- **Learning Management System (LMS)** a software application that is used for the purpose of administering, curating, tracking, reporting, and automating content delivery for educational courses.
- Remote Learning an educational model characterized by a physical separation of learner and educator. This
 model is typically dependent on digital technologies for learning management and communications. In a
 remote learning arrangement, instruction and interactions may be synchronous or asynchronous.
- **Synchronous Learning** a general term that is used to describe educational models where instruction or learning happens at the same time and often at the same location.

The above is not an exhaustive list of terms. For additional language and terminology, the <u>Christensen Institute</u> offers a list of definitions and examples of Blended Learning models, and the Great Schools Partnership has a <u>comprehensive</u> <u>glossary</u> of other education-related terminology. To see how the above terms are related to Student October Count for the 2020-21 school year, see the <u>CDE Addendum to the 2020-21 Student October Count Guidebook</u>.

B. Resources and Reference Material:

The Colorado Department of Education does not endorse, represent, or warrant the accuracy or reliability of any of the information, content, services, or other materials provided by these educational service providers. Any reliance upon any information, content, materials, products, services, or vendors included on or found through this listing shall be at the user's sole risk.

- Aurora Public Schools (2020). *Remote learning in APS begins March 31*. Retrieved from: https://aurorak12.org/2020/03/23/remote-learning-in-aps-begins-march-31/
- Bambrick-Santoyo, P. (April 2019). Driven by data: a practical quide to improve instruction. San Francisco: Jossey-Bass.
- Bambrick-Santoyo, P. (July 2018). Leverage leadership 2.0: A practical guide to building exceptional schools. San Francisco: Jossey-Bass.
- Beacon Network Schools (2015) BNS facets of blended learning & personalization shifts (V2). Retrieved from: http://tinyurl.com/GBMSFBL
- Boulder Valley School District (2020). *Student, family and community technical resources*. Retrieved from: https://www.bvsd.org/departments/information-technology/student-family-and-community-technical-resources
- CAST (2018). Universal design for learning guidelines version 2.2. Retrieved from: http://udlguidelines.cast.org
- Christensen Institute (2020) Blended learning universe. Retrieved from: http://www.blendedlearning.org/models/
- Collaborative for Academic, Social, and Emotional Learning (2020) *Core SEL competencies*. Retrieved from: https://casel.org/core-competencies/
- Colorado Education Initiative (2020) *Next generation learning toolkit.* Retrieved from: https://www.coloradoedinitiative.org/Resources/next-generation-learning-toolkit/
- Colorado Empowered Learning (2020). Educator PD. Retrieved from: https://www.colorado.gov/pacific/cel/profdev
- Colorado Department of Education (2020). *Addendum to the 2020 Student October Count Audit Resource Guide*. Retrieved from:
 - https://www.cde.state.co.us/planning20-21/schoolscenarios#remoteapproach
- Colorado Department of Education (2020). 2020-21 school scenarios. Retrieved from: https://www.cde.state.co.us/cdefinance/2020 pupilcount addendum
- Colorado Department of Education (2020). *Best practice for educators*. Retrieved from: https://www.cde.state.co.us/learningathome/bestpracticeseducators
- Colorado Department of Education (2020). *Blended and online learning*. Retrieved from: https://www.cde.state.co.us/onlinelearning
- Colorado Department of Education (2020). *CDE Policy on instructional time and student attendance for the 2020-21 academic year.* Retrieved from:

http://www.cde.state.co.us/cdefinance/cde_policy_on_instructional_hours_and_attendance

- Colorado Department of Education (2020). *Colorado academic standards*. Retrieved from: http://www.cde.state.co.us/standardsandinstruction
- Colorado Department of Education (2020). *Colorado essential skills*. Retrieved from: https://www.cde.state.co.us/standardsandinstruction/essentialskills
- Colorado Department of Education (2020). *COVID-19 resources for principals*. Retrieved from: https://www.cde.state.co.us/educatortalent/covid-19principalresources
- Colorado Department of Education (2020). *COVID-19 resources for schools*. Retrieved from: https://www.cde.state.co.us/safeschools
- Colorado Department of Education (2020). *Data, accountability, reporting and evaluation (DARE)*. Retrieved from: https://www.cde.state.co.us/fedprograms/dper/index
- Colorado Department of Education (2020). *Data privacy and security*. Retrieved from: https://www.cde.state.co.us/dataprivacyandsecurity
- Colorado Department of Education (2020). *Getting started at home*. Retrieved from: https://www.cde.state.co.us/learningathome/gettingstarted
- Colorado Department of Education (2020). *Implement the 2020 Colorado Academic Standards*. Retrieved from: https://www.cde.state.co.us/standardsandinstruction/2020implementation
- Colorado Department of Education (2020). Long beach unified school district: Common core state standards K-12 technology skills scope and sequence. Retrieved from:

 https://www.cde.state.co.us/cdesped/accommodationsmanual ccss k12 techscope
- Colorado Department of Education (2020). *Nimble, flexible instructional options*. Retrieved from: https://www.cde.state.co.us/planning20-21/instructionaloptions#resources
- Colorado Department of Education (2020). *Office of culturally and linguistically diverse education*. Retrieved from: http://www.cde.state.co.us/cde_english
- Colorado Department of Education (2020). Office of gifted education. Retrieved from: http://www.cde.state.co.us/gt
- Colorado Department of Education (2020). *Office of special education services*. Retrieved from: https://www.cde.state.co.us/cdesped
- Colorado Department of Education (2020). *Planning for the 2020-21 school year*. Retrieved from: https://www.cde.state.co.us/planning20-21
- Colorado Department of Education (2020). *Program evaluation*. Retrieved from: https://www.cde.state.co.us/fedprograms/progevaltrainings
- Colorado Department of Education (2020). *Professional development*. Retrieved from: https://www.cde.state.co.us/cdeprof/cdeprofsvc/purposeprinciplespd
- Colorado Department of Education (2020). *Professional standards, core knowledge and competencies*. Retrieved from: https://www.cde.state.co.us/educatortalent/professionalstandardscoreknowledgecompetencies

- Colorado Department of Education (2020). *Pupil count*. Retrieved from: https://www.cde.state.co.us/cdefinance/auditunit_pupilcount
- Colorado Department of Education (2020). *Resources for learning at home*. Retrieved from: https://www.cde.state.co.us/learningathome
- Colorado Department of Education (2020). *Resources for families with students with disabilities during COVID-19*. Retrieved from: https://www.cde.state.co.us/cdesped/covid19-family
- Colorado Department of Education (2020). *Remote learning guidance and supports*. Retrieved from: https://www.cde.state.co.us/onlinelearning/remotelearningsupports
- Colorado Department of Education (2020). *Rubric for evaluating Colorado teachers*. Retrieved from: https://www.cde.state.co.us/educatoreffectiveness/revised-teacher-rubric
- Colorado Department of Education (2020). *Teacher, staff, and family, preparation for next school year*. Retrieved from: https://www.cde.state.co.us/planning20-21/preparationfornextschoolyear
- Colorado Department of Education Office of Standards and Instructional Support (2020). *Colorado academic standards*. Retrieved from: http://www.cde.state.co.us/standardsandinstruction
- Colorado Department of Education (2020). Support for gifted learners at home during COVID-19. Retrieved from: https://www.cde.state.co.us/gt/gt/ge_covid
- Common Sense Media (2020). Common sense education. Retrieved from: https://www.commonsense.org/education/
- Denver Public Schools (2020). *Remote Learning Plan: For emergency closures of DPS schools.* Retrieved from: https://www.dpsk12.org/wp-content/uploads/2020 remote learning plan.pdf
- Douglas County School District (2020). *Local resources for families during closure*. Retrieved from: https://www.dcsdk12.org/cms/One.aspx?portalld=220484&pageId=11767381
- Education Elements (2020). Personalized learning guide: A comprehensive personalized learning guide for educators, administrators, and parents. Retrieved from: https://www.edelements.com/personalized-learning
- EdSurge (2020). The EdSurge product index. Retrieved from: https://www.edsurge.com/product-reviews
- EyePromise (2020). Screen time guidelines by age. Retrieved from:

 https://www.eyepromise.com/wp-content/uploads/2019/05/Screentime-Recommendation-Chart-Final_AAP-WHO.pdf
- Great Schools Partnership (2014) Glossary of Education Reform. Retrieved from: https://www.edglossary.org/
- Google Chrome Enterprise Help (2020). *Auto Update Policy*. Retrieved from: https://support.google.com/chrome/a/answer/6220366
- iLearn Collaborative (2020). *Professional development course descriptions*. Retrieved from: https://www.ilearncollaborative.org/pd-catalog#block-f968a1071e04b2f98054
- International Society for Technology in Education (2020). *ISTE standards for coaches*. Retrieved from: https://www.iste.org/standards/for-coaches

- International Society for Technology in Education (2020). *ISTE standards for education leaders*. Retrieved from: https://www.iste.org/standards/for-education-leaders
- International Society for Technology in Education (2020). *ISTE standards for educators*. Retrieved from: https://www.iste.org/standards/for-educators
- International Society for Technology in Education (2020). *ISTE standards for students*. Retrieved from: https://www.iste.org/standards/for-students
- Iris Center (2020). *Evidence based practice summaries*. Retrieved from: https://iris.peabody.vanderbilt.edu/resources/ebp_summaries/
- Iris Center (2020). *Perspectives and resources- Page 4: selecting and accommodation.* Retrieved from: https://iris.peabody.vanderbilt.edu/module/acc/cresource/q2/p04/
- Iris Center (2020). *Parents supporting learning during the COVID-19 pandemic*. Retrieved from: https://iris.peabody.vanderbilt.edu/module/c19/
- Jefferson County Public Schools (2020). *Student, family & community technical resources*. Retrieved from: https://jeffcopublicschools.org/technical_resources
- Knoster, T., Villa, R., & Thousand, J. (2000). A framework for thinking about systems change. Restructuring for caring and effective education: Piecing the puzzle together, 93-128. See also: (CO D11 has a useful PDF of the Knoster Model)
- LEAP Innovations (2020). *Remote learning resources*. Retrieved from: https://www.leapinnovations.org/tools-resources/
- LEAP Innovations (2020). Tools and resources. Retrieved from: https://www.leapinnovations.org/tools-resources/
- Lidwell, W., Holden, K., Butler, J. (2003). *Universal principles of design.* Beverly: Rockport Publishing. *Related digital resources can be found at:* http://universalprinciplesofdesign.com/
- Marzano, R., Norford, J. Finn, M. Finn III, D., et al. (2017). *Handbook for personalized competency-based education*. Bloomington: Marzano Research. *Related digital resources can be found at* https://www.marzanoresearch.com.
- Marzano, R., Warrick, P., Simms, J., (2014). *High reliability schools: the next step in school reform*. Bloomington: Marzano Research. *Related digital resources can be found at https://www.marzanoresearch.com*.
- Campbell, C., Campbell, M., (2013). *The new one-page project manager.* Hoboken: John Wiley & Sons. *Related digital resources can be found at:* https://oppmi.com/
- Office of Educational Technology, US Department of Education (2020) *Privacy*. Retrieved from: https://tech.ed.gov/privacy/
- Ohio Department of Education (2011). *Ohio resident educator program: The journey to excellence SMART goals.*Retrieved from: http://www.huronhs.com/Downloads/smart-goals.pdf

- Palm Beach County School District (2020). Instructional continuity support plan: For emergency closures of district schools. Retrieved from:
 - https://www.palmbeachschools.org/UserFiles/Servers/Server_270532/File/Covid19/ICSP%20-%20Print%20Version%20Final.pdf
- Powell, A., Rabbit, B., Kennedy, K., (2014, October) *iNACOL blended learning teacher competency framework*. Retrieved from: https://aurora-institute.org/wp-content/uploads/iNACOL-Blended-Learning-Teacher-Competency-Framework.pdf
- Quality Matters and Virtual Learning Leadership Alliance (2020). *National standards for quality:*Quality online programs. Retrieved from: https://www.nsqol.org/the-standards/quality-online-programs/
- Quality Matters and Virtual Learning Leadership Alliance (2020). *National standards for quality:*Quality online courses. Retrieved from: https://www.nsqol.org/the-standards/quality-online-courses/
- Quality Matters and Virtual Learning Leadership Alliance (2020). *National standards for quality:*Quality online teaching. Retrieved from: https://www.nsqol.org/the-standards/quality-online-teaching/
- Vander Ark, T., Dobyns, L. (2018). Better together: How to leverage school networks for smarter personalized and project-based learning. San Francisco: Jossey-Bass. Related digital resources can be found at: https://www.gettingsmart.com/categories/series/network-effect/
- Werth, E., Werth, L., Kellerer, E. (2013, October). *Transforming K-12 rural education through blended learning: barriers and promising practices*. Retrieved from: http://www.aurora-institute.org/wp-content/uploads/transforming-k-12-rural-education.pdf