This guide was developed to provide a crosswalk among the UDL Learning Spaces Idea Kit and the UDL Guidelines, including some suggested considerations within the design of learning environments. As developed by CAST (2018), the UDL Guidelines provide a foundation for considering the variability within learning environments. We hope you enjoy this crosswalk and the UDL Learning Spaces Idea Kit. We encourage you to explore more at LearningDesigned.org.

You can also view and learn more about the UDL Guidelines at http://udlguidelines.cast.org/.

We hope you will share your new ideas and AhHa! moments while using the kit. We'd love to crowd source new ideas from UDL practitioners into V2.0. Please share your thoughts and ideas on our message board: https://padlet.com/GouldEvans_UDL/LearningSpaces

As the kit evolves so will the ideas and crosswalk associated with the kit.
Stay tuned for more!

The UDL Learning Spaces Idea Kit was developed as a collaboration between GouldEvans and the UDL-IRN with a focus on distribution at LearningDesigned.org.

If you have questions, please email David Reid (david.reid@gouldevans.com) or James Basham (james.basham@udl-irn.org).

Special thanks to Sue Hardin, Bryan Dean, Meg Werner, Steve Nordmark, and our colleagues at CAST.

References
### Provide multiple means of Engagement

**Affective Networks**
- The "WHY" of Learning

### Provide multiple means of Representation

**Recognition Networks**
- The "WHAT" of Learning

### Provide multiple means of Action & Expression

**Strategic Networks**
- The "HOW" of Learning

#### Provide options for Recruiting Interest (7)
- Optimize individual choice and autonomy (7.1)
- Optimize relevance, value, and authenticity (7.2)
- Minimize threats and distractions (7.3)

#### Provide options for Perception (1)
- Offer ways of customizing the display of information (1.1)
- Offer alternatives for auditory information (1.2)
- Offer alternatives for visual information (1.3)

#### Provide options for Language & Symbols (2)
- Clarify vocabulary and symbols (2.1)
- Clarify syntax and structure (2.2)
- Support decoding of text, mathematical notation, and symbols (2.3)
- Promote understanding across languages (2.4)
- Illustrate through multiple media (2.5)

#### Provide options for Comprehension (3)
- Activate or supply background knowledge (3.1)
- Highlight patterns, critical features, big ideas, and relationships (3.2)
- Guide information processing and visualization (3.3)
- Maximize transfer and generalization (3.4)

#### Provide options for Physical Action (4)
- Vary the methods for response and navigation (4.1)
- Optimize access to tools and assistive technologies (4.2)

#### Provide options for Expression & Communication (5)
- Use multiple media for communication (5.1)
- Use multiple tools for construction and composition (5.2)
- Build fluencies with graduated levels of support for practice and performance (5.3)

#### Provide options for Executive Functions (6)
- Guide appropriate goal-setting (6.1)
- Support planning and strategy development (6.2)
- Facilitate managing information and resources (6.3)
- Enhance capacity for monitoring progress (6.4)

### Expert learners who are...

- **Purposeful & Motivated**
- **Resourceful & Knowledgeable**
- **Strategic & Goal-Directed**
STUDENT EXPERIENCE CARDS
allow students to “make space”
think about furniture as a “maker kit”—a kit-of-parts;
promote a flexible learning environment;
enable students to personalize their learning space

Card S.1 allow students to make space

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible

7.3: Minimize threats and distractions
Create an accepting and supportive classroom climate
- Vary the level of novelty or risk
- Vary the level of sensory stimulation
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation
- Involve all participants in whole class discussions

8.3: Foster collaboration and community
Encourage and support opportunities for peer interactions and supports

9.1: Promote expectations and beliefs that optimize motivation
- Support activities that encourage self-reflection and identification of personal goals

offer structured choices

give students choices of where they work, how they approach the problem/project, and with whom they work—alone or together;
be mindful of the optimal number of choices offered: 2-4 choices is suggested by research to be the sweet spot (1)

Card S.2 offer structured choices

4.1: Vary the methods for response and navigation
- Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
- Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard

5.1: Use multiple media for communication
- Compose in multiple media such as text, speech, drawing, illustration, design, film, music, dance/movement, visual art, sculpture, or video
- Use physical manipulatives (e.g., blocks, 3D models, base-ten blocks)
- Use social media and interactive web tools (e.g., discussion forums, chats, web design, annotation tools, storyboards, comic strips, animation presentations)
- Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, visual art, sculpture, or video

5.2: Use multiple tools for construction and composition
- Use story webs, outlining tools, or concept mapping tools
- Provide Computer-Aided-Design (CAD), music notation (writing) software, or mathematical notation software
- Provide virtual or concrete mathematics manipulatives (e.g., base-10 blocks, algebra blocks)
- Use web applications (e.g., wikis, animation, presentation)

5.3: Build fluencies with graduated levels of support for practice and performance
- Solve problems using a variety of strategies
- Provide differentiated models to emulate (i.e., models that demonstrate the same outcomes but use differing approaches, strategies, skills, etc.)
- Provide multiple examples of novel solutions to authentic problems

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible

7.2: Optimize relevance, value, and authenticity
- Vary activities and sources of information

8.2: Vary demands and resources to optimize challenge
- Differentiate the degree of difficulty or complexity within which core activities can be completed
- Provide alternatives in the permissible tools and scaffolds

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

9.2: Facilitate personal coping skills and strategies
- Provide differentiated models, scaffolds and feedback
create a diverse palette of places

provide varied places to support varied preferences of student learning;

think of your learning spaces as "open address"—sit anywhere, learn anywhere;

support a diverse range of learning activities and processes

Card S.3 create a diverse palette of places

1.3: Offer alternatives for visual information

4.1: Vary the methods for response and navigation
  - Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
  - Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard

7.1: Optimize individual choice and autonomy
  - Provide learners with as much discretion and autonomy as possible

7.3: Minimize threats and distractions
  - Create an accepting and supportive classroom climate
  - Vary the level of novelty or risk
  - Vary the level of sensory stimulation
  - Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

9.1: Promote expectations and beliefs that optimize motivation
  - Support activities that encourage self-reflection and identification of personal goals

learning prototype studio (innovation lab)

a place where teachers and school leaders can test new instructional methods, experiment with a hackable space, and can work “live” with colleagues and students directly in your school;

a place where teachers can gain courage to take new methods back into their classrooms;

a place for teachers to experiment and take risks

Card S.4 learning prototype studio

The Learning Prototype Studio is a testing bed to apply any of the UDL guidelines and test efficacy of various strategies without making firm commitments of space and investment within any other learning environments.
Card S.5 embrace fidgeting and movement

7.3: Minimize threats and distractions
Vary the level of sensory stimulation

Card S.6 leverage the floor as a great learning space

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible

8.2: Vary demands and resources to optimize challenge
- Provide alternatives in the permissible tools and scaffolds
- Vary the degrees of freedom for acceptable performance
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

Additional notes:
- By incorporating low-style furniture, you can formalize the floor as legitimate workspace—and more successfully invite the teachers to engage (a low stool to sit on). Many such furniture solutions stimulate the imagination and more readily invite students to reconfigure their setting.
Card S.7 design your negative space

4.1: Vary the methods for response and navigation
- Sometimes these methods should be physical and require space

7.3: Minimize threats and distractions
- Vary the level of sensory stimulation

Additional notes:
- Sometimes less is more when it comes to designing a learning environment

8.3: Foster collaboration and community
- Consider the space that would be needed for supporting collaboration
- Negative space is not unused

Card S.8 support varied processes; create zones

1.1: Offer ways of customizing the display of information

1.2: Offer alternatives for auditory information

1.3: Offer alternatives for visual information

3.3: Guide information processing, visualization, and manipulation
- Provide options for organizational methods and approaches
- Provide interactive models that guide exploration and new understandings
- Provide multiple entry points to a lesson and optional pathways through content (e.g., exploring big ideas through dramatic works, arts and literature, film and media)

4.1: Vary the methods for response and navigation
- Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
- Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard

5.1: Use multiple media for communication
- Compose in multiple media such as text, speech, drawing, illustration, design, film, music, dance/movement, visual art, sculpture or video
- Use physical manipulatives (e.g., blocks, 3D models, base-ten blocks)

- Use interactive models that guide exploration and new understandings
- Use social media and interactive web tools (e.g., discussion forums, chats, web design, annotation tools, storyboards, comic strips, animation presentations)
- Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, visual art, sculpture, or video
- Solve problems using a variety of strategies

5.2: Use multiple tools for construction and composition
- Use story webs, outlining tools, or concept mapping tools
- Provide Computer-Aided-Design (CAD), music notation (writing) software, or mathematical notation software
- Provide virtual or concrete mathematics manipulatives (e.g., base-10 blocks, algebra blocks)
- Use web applications (e.g., wikis, animation, presentation)

5.3: Build fluencies with graduated levels of support for practice and performance
- Provide differentiated models to emulate (i.e., models that demonstrate the same outcomes but use differing approaches, strategies, skills, etc.)
- Provide multiple examples of novel solutions to authentic problems

6.4: Enhance capacity for monitoring progress
- Provide differentiated models of self-assessment strategies (e.g., role-playing, video reviews, peer feedback)
Card S.8 (Continued) support varied processes; create zones

7.2: Optimize relevance, value, and authenticity
- Vary activities and sources of information
- Provide tasks that allow for active participation, exploration and experimentation
- Invite personal response, evaluation and self-reflection to content and activities

7.3: Minimize threats and distractions
- Vary the level of novelty or risk
- Vary the level of sensory stimulation
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.1: Heighten salience of goals and objectives
- Display the goal in multiple ways
- Demonstrate the use of hand-held or computer-based scheduling tools

8.2: Vary demands and resources to optimize challenge
- Differentiate the degree of difficulty or complexity within which core activities can be completed
- Provide alternatives in the permissible tools and scaffolds
- Vary the degrees of freedom for acceptable performance
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

9.2: Facilitate personal coping skills and strategies
- Provide differentiated models, scaffolds and feedback

Additional Notes:
- Studies indicate that confidence to learn challenging tasks increases when learners sense there is more than one pathway to competence.
- Choice of processes improves engagement and motivation.
- Develop/promote skills in cognitive flexibility... if one approach isn’t working, consider alternative processes. This process helps foster creativity while developing grit and perseverance.

Card S.9 space for management of tools and resources

4.2: Optimize access to tools and technologies

8.2: Vary demands and resources to optimize challenge
- Provide alternatives in the permissible tools and scaffolds
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

Additional notes:
- Allowing students to have “free” access to resources & places to work is fundamental to developing self-regulated learners.
- At STEAM Studio, they don’t believe it’s necessary to provide 1:1 ratio of supplies – resources can be scarce in the real world, and school is a great place to learn the adaptive skills needed to navigate this condition.
- Clear organizational system for supplies – students do best when they can access what they need, when they need it (like in the real world). Thus, understanding where things go is important for them to access tools and put things away when completed.

Space for management of tools and resources

diverse collection of tools and resources to support different processes;
ensure tools are accessible for all learners and that they know how to use them;
tools and resources need a clear "home"—easy for students to access and return tools on their own;
keep resources visible using transparent bins to discourage hoarding

Additional Notes:
- Studies indicate that confidence to learn challenging tasks increases when learners sense there is more than one pathway to competence.
- Choice of processes improves engagement and motivation.
- Develop/promote skills in cognitive flexibility... if one approach isn’t working, consider alternative processes. This process helps foster creativity while developing grit and perseverance.
**mobile digital studio**

allow no “black holes” (unusable space) when fixed technology isn’t being used;

provide tools to support a “storytelling lab”;

low fidelity (quick and easy) content creation and editing

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**Card S.10 mobile digital studio**

1.1: Offer ways of customizing the display of information

1.2: Offer alternatives for auditory information

1.3: Offer alternatives for visual information

3.3: Guide information processing, visualization, and manipulation
- Provide options for organizational methods and approaches
- Provide multiple entry points to a lesson and optional pathways through content (e.g., exploring big ideas through dramatic works, arts and literature, film and media)

**Card S.11 content consumed and delivered in multiple mediums**

1.1: Offer ways of customizing the display of information

1.2: Offer alternatives for auditory information

1.3: Offer alternatives for visual information

3.3: Guide information processing, visualization, and manipulation
- Provide options for organizational methods and approaches
- Provide multiple entry points to a lesson and optional pathways through content (e.g., exploring big ideas through dramatic works, arts and literature, film and media)

8.2: Vary demands and resources to optimize challenge
- Provide alternatives in the permissible tools and scaffolds
- Vary the degrees of freedom for acceptable performance
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

**8.3: Foster collaboration and community**
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

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**content consumed and delivered in multiple mediums**

choice of medium offers new avenues of engagement and supports multiple ways to learn content and express understanding

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Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard

5.1: Use multiple media for communication
- Compose in multiple media such as text, speech, drawing, illustration, design, film, music, dance/movement, visual art, sculpture or video
- Use physical manipulatives (e.g., blocks, 3D models, base-10 blocks)
- Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, visual art, sculpture, or video
- Solve problems using a variety of strategies

5.2: Use multiple tools for construction and composition
- Use story webs, outlining tools, or concept mapping tools
- Provide Computer-Aided-Design (CAD), music notation (writing) software, or mathematical notation software

5.3: Build fluencies with graduated levels of support for practice and performance
- Provide differentiated models to emulate (i.e., models that demonstrate the same outcomes but use differing approaches, strategies, skills, etc.)
- Provide multiple examples of novel solutions to authentic problems

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible

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Provide virtual or concrete mathematics manipulatives (e.g., base-10 blocks, algebra blocks)
- Use web applications (e.g., wikis, animation, presentation)
Card S.11 (Continued) content consumed and delivered in multiple mediums

7.2: Optimize relevance, value, and authenticity
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Invite personal response, evaluation and self-reflection to content and activities
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

7.3: Minimize threats and distractions
- Vary the level of sensory stimulation
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.1: Heighten salience of goals and objectives
- Display the goal in multiple ways
- Demonstrate the use of hand-held or computer-based scheduling tools

8.2: Vary demands and resources to optimize challenge
- Differentiate the degree of difficulty or complexity within which core activities can be completed
- Provide alternatives in the permissible tools and scaffolds
- Vary the degrees of freedom for acceptable performance
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

9.2: Facilitate personal coping skills and strategies
- Provide differentiated models, scaffolds and feedback

9.3: Develop self-assessment and reflection
- Offer devices, aids, or charts to assist individuals in learning to collect, chart and display data from their own behavior

Card S.12 variety of collaboration settings

1.1: Offer ways of customizing the display of information

1.2: Offer alternatives for auditory information

1.3: Offer alternatives for visual information

4.1: Vary the methods for response and navigation
- Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible
- Allow learners to participate in the design of classroom activities and academic tasks

7.2: Optimize relevance, value, and authenticity
- Provide tasks that allow for active participation, exploration and experimentation

7.3: Minimize threats and distractions
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

9.2: Facilitate personal coping skills and strategies
- Provide differentiated models, scaffolds and feedback
cockpits and enclaves

spaces to "get away";
provide support for students who are easily distracted;
support preferences for introverts

Card S.13 cockpits and enclaves

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible

7.3: Minimize threats and distractions
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

9.1: Promote expectations and beliefs that optimize motivation
- Support activities that encourage self-reflection and identification of personal goals

huddle space

small collaboration spaces for 2-4 people;
quick, impromptu collaboration

Card S.14 huddle space

7.3: Minimize threats and distractions
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work
team space

collaborative space for 4-8 people;
options for enclosed and open team space (varying levels of sound control and privacy);
equip with both low-tech options like writable surfaces, and high-tech tools for digital collaboration

Card S.15 team space

7.3: Minimize threats and distractions
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

interactive walls

make wall space within kids’ reach a content creation space;
dedicated wall space for casual collaboration, sharing ideas, and idea dialogue

Card S.16 interactive walls

1.1: Offer ways of customizing the display of information
1.3: Offer alternatives for visual information
3.3: Guide information processing, visualization, and manipulation
- Provide options for organizational methods and approaches
- Provide interactive models that guide exploration and new understandings
3.4: Maximize transfer and generalization
- Provide checklists, organizers, sticky notes, electronic reminders
8.1: Heighten salience of goals and objectives
- Display the goal in multiple ways
- Demonstrate the use of hand-held or computer-based scheduling tools
8.2: Vary demands and resources to optimize challenge
- Provide alternatives in the permissible tools and scaffolds
8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work
9.3: Develop self-assessment and reflection
- Offer devices, aids, or charts to assist individuals in learning to collect, chart and display data from their own behavior
Card S.17 engage with any surface

1.1: Offer ways of customizing the display of information
1.3: Offer alternatives for visual information
7.1: Optimize individual choice and autonomy
   - Provide learners with as much discretion and autonomy as possible
   - Allow learners to participate in the design of classroom activities and academic tasks
8.1: Heighten salience of goals and objectives
   - Display the goal in multiple ways
8.2: Vary demands and resources to optimize challenge
   - Provide alternatives in the permissible tools and scaffolds
   - Vary the degrees of freedom for acceptable performance
   - Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition
8.3: Foster collaboration and community
   - Encourage and support opportunities for peer interactions and supports
   - Create expectations for group work

Card S.18 spaciousness for projects

1.3: Offer alternatives for visual information
4.1: Vary the methods for response and navigation
   - Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard
7.2: Optimize Relevance, Value & Authenticity – allow space for real-world projects
8.3: Foster collaboration and community
   - Encourage and support opportunities for peer interactions and supports
   - Create expectations for group work
Card S.19 recharge; places that offer a mental respite

mental and physical restoration are facilitated by connections to the natural environment;
connections to natural settings aid in concentration;
connections to daylight have proven benefits to improve mental wellbeing and test performance

Card S.20 tie learning to broader systems

sustainability literacy helps students connect learning content to the world around them, offering opportunities for improved relevancy;
education in environmental literacy is essential in the future mitigation of negative global issues; environmentally, economically, and socially

7.2: Optimize relevance, value, and authenticity
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

Additional notes:
A primary aspect of this idea is to promote the value and relevance of collaboration across disciplines—to understand how networks and systems are increasingly interacting in today’s complex world.
Card S.21 every square foot used for learning

8.2: Vary demands and resources to optimize challenge
   - Vary the degrees of freedom for acceptable performance

8.3: Foster collaboration and community
   - Encourage and support opportunities for peer interactions and supports
   - Create expectations for group work

Card S.22 playgrounds as rich outdoor learning spaces

1.2: Offer alternatives for auditory information - Provide visual or tactile (e.g., vibrations) equivalents for sound effects or alerts

1.3: Offer alternatives for visual information

4.1: Vary the methods for response and navigation
   - Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
   - Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard

7.1: Optimize individual choice and autonomy
   - Provide learners with as much discretion and autonomy as possible

7.2: Optimize relevance, value, and authenticity
   - Vary activities and sources of information
   - Provide tasks that allow for active participation, exploration and experimentation
   - Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

7.3: Minimize threats and distractions
   - Vary the level of novelty or risk
   - Vary the level of sensory stimulation
   - Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.1: Heighten salience of goals and objectives
   - Display the goal in multiple ways

8.3: Foster collaboration and community
   - Encourage and support opportunities for peer interactions and supports
   - Create expectations for group work

9.2: Facilitate personal coping skills and strategies
   - Provide differentiated models, scaffolds and feedback
**presentation/pitch space**

a place to share original ideas with authentic audiences, including business partners from the community;  

a place to formally practice "the pitch";  

flexible to support smaller and larger groups

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**Card S.23 presentation/pitch space**

6.2: Support planning and strategy development  
- Embed prompts to "show and explain your work" (e.g., portfolio review, art critiques)

6.4: Enhance capacity for monitoring progress  
- Provide differentiated models of self-assessment strategies (e.g., role-playing, video reviews, peer feedback)

7.2: Optimize relevance, value, and authenticity  
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants  
- Provide tasks that allow for active participation, exploration and experimentation  
- Invite personal response, evaluation and self-reflection to content and activities

7.3: Minimize threats and distractions  
- Involve all participants in whole class discussions

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**Card S.24 create learning neighborhoods**

1.1: Offer ways of customizing the display of information

5.1: Use multiple media for communication  
- Compose in multiple media such as text, speech, drawing, illustration, design, film, music, dance/movement, visual art, sculpture or video

5.2: Use multiple tools for construction and composition  
- Provide Computer-Aided-Design (CAD), music notation (writing) software, or mathematical notation software

7.1: Optimize individual choice and autonomy  
- Provide learners with as much discretion and autonomy as possible

7.2: Optimize relevance, value, and authenticity  
- Vary activities and sources of information

7.3: Minimize threats and distractions

8.3: Foster collaboration and community  
- Encourage and support opportunities for peer interactions and supports  
- Create expectations for group work
big work space!

support different scales of projects;

big projects, supporting authentic real-world challenges, often demand more space than the classroom can afford;

capture/re-appropriate space in the school for large-scale, long-term projects

Card S.25 big work space!

4.1: Vary the methods for response and navigation
- Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
- Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard

5.1: Use multiple media for communication
- Use physical manipulatives (e.g., blocks, 3D models, base-ten blocks)
- Solve problems using a variety of strategies

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible
- Allow learners to participate in the design of classroom activities and academic tasks

7.2: Optimize relevance, value, and authenticity
- Vary activities and sources of information
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

7.3: Minimize threats and distractions
- Vary activities and sources of information
- Learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.1: Vary demands and resources to optimize challenge
- Provide alternatives in the permissible tools and scaffolds
- Vary the degrees of freedom for acceptable performance
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

9.1: Promote expectations and beliefs that optimize motivation
- Support activities that encourage self-reflection and identification of personal goals

9.2: Facilitate personal coping skills and strategies
- Provide differentiated models, scaffolds and feedback

Additional notes:
- Authentic tasks can be effective to stimulate student engagement. What’s authentic for one student may be inauthentic for another.
- Many such ideas as this move to the school-wide scale—beyond the scale of the classroom or even the learning neighborhood.

exhibit original work to the public

engage students in authentic projects that will be shared with authentic audiences;

capitalize on the fact that students are more motivated when their work is shared with a broader audience

Card S.26 exhibit original work to the public

7.2: Optimize relevance, value, and authenticity
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation

9.1: Promote expectations and beliefs that optimize motivation
- Support activities that encourage self-reflection and identification of personal goals

Additional notes:
- According to research by Cathy Davidson in her book “Now you see it”, students worked much harder on papers when they knew they would be published and read by more people than just their teacher.
- According to Larry Rosenstock, founder of High Tech High, the incentive of public exhibition night causes kids to work much harder than they would work for just a grade.
“grown-up environments”
children’s behaviors and mindsets change when they experience “grown-up environments”;
use this increased tendency for accountability to your advantage in developing self-regulated learners

Card S.27 “grown up environments”

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible

7.3: Minimize threats and distractions
- Create an accepting and supportive classroom climate
- Vary the level of novelty or risk
- Vary the level of sensory stimulation
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

Card S.28 assembly areas as learning spaces

7.1: Optimize Individual Choice and Autonomy

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

assembly areas as learning spaces
leverage underutilized spaces such as dining commons and assembly spaces for breakout learning
EDUCATOR EXPERIENCE CARDS
**E.1 faculty “scrum space”**

- a place for faculty to “roll their sleeves up” and dig into messy problems;
- support collaborative professionalism in quality space that does not double as the faculty break room;
- free educators from “solitary confinement” in their classrooms—promote peer mentoring and collegiality

**Card E.1 faculty “scrum space”**

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and support
- Create expectations for group work

9.2: Facilitate personal coping skills and strategies
- Provide differentiated models, scaffolds and feedback

**shared work offices**

**shared faculty studios**

help to boost camaraderie, collaboration, and professional growth among educators (2)

**Card E.2 shared work offices**

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

**Card E.3 integrate design thinking**

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

9.1: Promote expectations and beliefs that optimize motivation
- Support activities that encourage self-reflection and identification of personal goals

**Card E.3 integrate design thinking**

- leverage design thinking as a proven process to develop metacognitive skills and foster self-regulation among learners (3);
- support the 5 C’s of learning and take students through the 6 learning orders of Bloom’s Taxonomy (3)
- use design thinking as a process to redesign your classroom

**Card E.4 teachers doing PBL with teachers**

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

9.2: Facilitate personal coping skills and strategies
- Provide differentiated models, scaffolds and feedback

**Card E.4 teachers doing PBL with teachers**

- promote PBL efforts among teachers, as a basis of professional development, to advance instructional delivery methods in creative ways;
- utilize design thinking as an integral part of professional development—contextualize it to each teacher’s specific needs
“live p.d.” with educators and students

“live p.d.” helps develop the interaction behaviors important to development of self regulated learners (4);

for example, wait time, answering questions with questions, and promoting student autonomy

Card E.5 “live p.d.” with educators and students

9.2: Facilitate personal coping skills and strategies
- Provide differentiated models, scaffolds and feedback

Card E.6 support collaboration among teachers and classes

Card E.7 create a culture of learning among faculty

Card E.8 make space within space

create a culture of learning among faculty

treat teachers like professionals—provide UDL-based, personalized and differentiated learning opportunities for teachers to meet their specific contextual needs;

create a culture where teachers are nurturing and being nurtured, teaching and learning among themselves and their peers

Card E.7 create a culture of learning among faculty

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

9.1: Promote expectations and beliefs that optimize motivation
- Support activities that encourage self-reflection and identification of personal goals

Card E.8 make space within space

7.1: Optimize individual choice and autonomy
Provide learners with as much discretion and autonomy as possible

7.3: Minimize threats and distractions
Create an accepting and supportive classroom climate
- Vary the level of novelty or risk
- Vary the level of sensory stimulation
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

9.1: Promote expectations and beliefs that optimize motivation
Support activities that encourage self-reflection and identification of personal goals

9.2: Facilitate personal coping skills and strategies
Provide differentiated models, scaffolds and feedback
Card E.9 equity of space in the classroom

7.3: Minimize threats and distractions
   - Create an accepting and supportive classroom climate
   - Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.3: Foster collaboration and community
   - Encourage and support opportunities for peer interactions and supports
   - Create expectations for group work
PARADIGMS
Card P.1 redefine innovation as more than technology

1.1: Offer ways of customizing the display of information
1.2: Offer alternatives for auditory information
4.1: Vary the methods for response and navigation
   • Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
   • Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard
5.1: Use multiple media for communication
   • Compose in multiple media such as text, speech, drawing, illustration, design, film, music, dance/movement, visual art, sculpture or video
   • Use physical manipulatives (e.g., blocks, 3D models, base-ten blocks)
   • Compose in multiple media such as text, speech, drawing, illustration, comics.
5.2: Use multiple tools for construction and composition
   • Use story webs, outlining tools, or concept mapping tools
   • Provide Computer-Aided-Design (CAD), music notation (writing) software, or mathematical notation software
   • Provide virtual or concrete mathematics manipulatives (e.g., base-10 blocks, algebra blocks)
7.2: Optimize relevance, value, and authenticity
   • Vary activities and sources of information
   • Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
   • Provide tasks that allow for active participation, exploration and experimentation
   • Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways
7.3: Minimize threats and distractions
   • Create an accepting and supportive classroom climate
   • Vary the level of sensory stimulation
8.2: Vary demands and resources to optimize challenge
   • Provide alternatives in the permissible tools and scaffolds
   • Vary the degrees of freedom for acceptable performance
   • Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

Card P.2 defeat the stigma of “school”

7.1: Optimize individual choice and autonomy
   • Allow learners to participate in the design of classroom activities and academic tasks
7.3: Minimize threats and distractions
   • Create an accepting and supportive classroom climate
9.1: Promote expectations and beliefs that optimize motivation
   • Support activities that encourage self-reflection and identification of personal goals

for many students, “school” brings stigmas and labels that inhibit learning growth;
create “anti-classrooms”: learning spaces have “different rules and expectations” that unlocks latent creativity and offer new learning approaches;
offer students a “clean slate”—a fresh start
create a “maker ethos” throughout school

the act of making (project-based learning) should be allowed to happen anywhere, anytime; it should not be relegated just to “maker spaces”—it should have no such limits

Card P.3 create a “maker ethos” throughout the school

7.2: Optimize relevance, value, and authenticity
- Vary activities and sources of information
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

7.3: Minimize threats and distractions
- Create an accepting and supportive classroom climate
- Vary the level of novelty or risk
- Vary the level of sensory stimulation
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.2: Vary demands and resources to optimize challenge
- Differentiate the degree of difficulty or complexity within which core activities can be completed
- Provide alternatives in the permissible tools and scaffolds
- Vary the degrees of freedom for acceptable performance
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

Card P.4 library as kitchen vs. library as grocery store

rather than being a place where students come to pick out resources and leave, think about the library as the place where they come to access resources and make things, both digital and analog

7.2: Optimize relevance, value, and authenticity
- Vary activities and sources of information
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

7.3: Minimize threats and distractions
- Create an accepting and supportive classroom climate
- Vary the level of novelty or risk
- Vary the level of sensory stimulation
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.2: Vary demands and resources to optimize challenge
- Differentiate the degree of difficulty or complexity within which core activities can be completed
- Provide alternatives in the permissible tools and scaffolds
- Vary the degrees of freedom for acceptable performance
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work
Card P.6 convert STEM to STEAM

4.1: Vary the methods for response and navigation
- Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
- Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard
  
5.1: Use multiple media for communication
- Compose in multiple media such as text, speech, drawing, illustration, design, film, music, dance/movement, visual art, sculpture or video
- Use social media and interactive web tools (e.g., discussion forums, chats, web design, annotation tools, storyboards, comic strips, animation presentations)
- Compose in multiple media such as text, speech, drawing, illustration, comics, storyboards, design, film, music, visual art, sculpture, or video

5.2: Use multiple tools for construction and composition
- Use story webs, outlining tools, or concept mapping tools
- Provide Computer-Aided-Design (CAD), music notation (writing) software, or mathematical notation software

7.1: Optimize relevance, value, and authenticity
- Vary activities and sources of information
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

7.2: Optimize relevance, value, and authenticity
- Vary activities and sources of information
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

8.1: Heighten salience of goals and objectives
- Display the goal in multiple ways

8.2: Vary demands and resources to optimize challenge
- Provide alternatives in the permissible tools and scaffolds
- Vary the degrees of freedom for acceptable performance
- Emphasize process, effort, improvement in meeting standards as alternatives to external evaluation and competition

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work

Card P.5 library as “venture accelerator”

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible

7.2: Optimize relevance, value, and authenticity
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

7.3: Minimize threats and distractions
- Create an accepting and supportive classroom climate
- Vary the level of novelty or risk
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work
students’ ownership of their space

host a classroom design competition by using PBL to align the design, documentation, budgeting, and presentation process with curricular requirements;

offer students a voice in the configuration of their learning environment—it goes miles in student ownership and motivation

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engage students in the work of adults

create authentic projects for authentic users;

seek opportunities to partner with community service organizations;

extend learning experiences to provide an important need for others—build service learning and social justice into the learning

gouldevans | LEARNING

Card P.7 students’ ownership of their space

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible
- Allow learners to participate in the design of classroom activities and academic tasks

7.3: Minimize threats and distractions
- Create an accepting and supportive classroom climate
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

9.1: Promote expectations and beliefs that optimize motivation
- Support activities that encourage self-reflection and identification of personal goals

Card P.8 engage students in the work of adults

7.2: Optimize relevance, value, and authenticity
- Design activities so that learning outcomes are authentic, communicate to real audiences, and reflect a purpose that is clear to the participants
- Provide tasks that allow for active participation, exploration and experimentation
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

7.3: Minimize threats and distractions
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation
Card P.10 develop self-regulated learners

4.1: Vary the methods for response and navigation
- Provide alternatives in the requirements for rate, timing, speed, and range of motor action required to interact with instructional materials, physical manipulatives, and technologies
- Provide alternatives for physically interacting with materials by hand, voice, single switch, joystick, keyboard, or adapted keyboard

6.2: Support planning and strategy development
- Embed prompts to “stop and think” before acting as well as adequate space
- Embed prompts to “show and explain your work” (e.g., portfolio review, art critiques)

6.3: Facilitate managing information and resources
- Provide graphic organizers and templates for data collection and organizing information

6.4: Enhance capacity for monitoring progress
- Show representations of progress (e.g., before and after photos, graphs and charts showing progress over time, process portfolios)
- Provide differentiated models of self-assessment strategies (e.g., role-playing, video reviews, peer feedback)

7.1: Optimize individual choice and autonomy
- Provide learners with as much discretion and autonomy as possible

7.2: Optimize relevance, value, and authenticity
- Provide tasks that allow for active participation, exploration, and experimentation
- Include activities that foster the use of imagination to solve novel and relevant problems, or make sense of complex ideas in creative ways

7.3: Minimize threats and distractions
- Create an accepting and supportive classroom climate

9.1: Promote expectations and beliefs that optimize motivation
- Support activities that encourage self-reflection and identification of personal goals

9.2: Facilitate personal coping skills and strategies
- Provide differentiated models, scaffolds and feedback

9.3: Develop self-assessment and reflection
- Offer devices, aids, or charts to assist individuals in learning to collect, chart and display data from their own behavior

Definition of Self Regulation: the ability to set motivating goals, to sustain effort toward meeting those goals, and to monitor the balance between internal resources and external demands.
Card P.11 engage family members with hospitality

7.3: Minimize threats and distractions
- Create an accepting and supportive classroom climate
- Vary the social demands required for learning or performance, the perceived level of support and protection and the requirements for public display and evaluation

8.3: Foster collaboration and community
- Encourage and support opportunities for peer interactions and supports
- Create expectations for group work
- Connections to a broader community

Card P.12 archive sacred customs

Often there are customs (customary practices) that become very entrenched despite the obsolescence. This idea is here to challenge you to think about and acknowledge any such custom(s) that are impeding more effective application of UDL principles.
stop digging

is there something that has put us in a hole that we need to stop doing?

sometimes you have to abandon ideas you’re attached to and start afresh

Card P.13 stop digging

Many of us often find ourselves set on a goal with absolute determination to complete that goal. However, we can often find ourselves in a situation where our efforts to accomplish this goal are meeting diminishing returns. The idea to “stop digging” is about reassessing your current practices, and consider some fresh approaches.