

Using the Climbing Wall to Promote Full Access through Universal Design

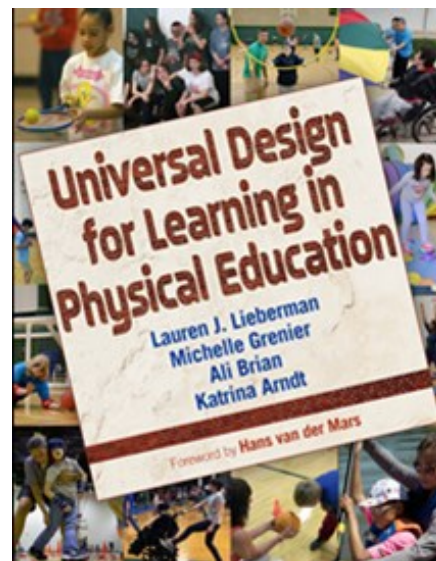
University of New Hampshire
"Theory and Practice of APA"

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[Universal Design for Learning in Physical Education](#)

Resources:

<https://www.nchpad.org/1820/7004/Laying~the~Foundation~for~Universal~Design~for~Learning~in~Physical~Education>



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What is Universal Design for Learning?

- Universal Design for Learning (UDL) is a framework to improve and optimize teaching and learning for all people.
- It is centered on design first.
- Access and the removal of barriers are KEY!
- When we clarify what we want learners to accomplish, then we can select flexible assessments, methods, and materials that effectively support that goal.
- It is not a one size fits all.

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Engagement

Stimulating students interests



A variety of equipment, rules and activity changes, and an environment conducive to learning

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Representation

Presenting information in multiple formats



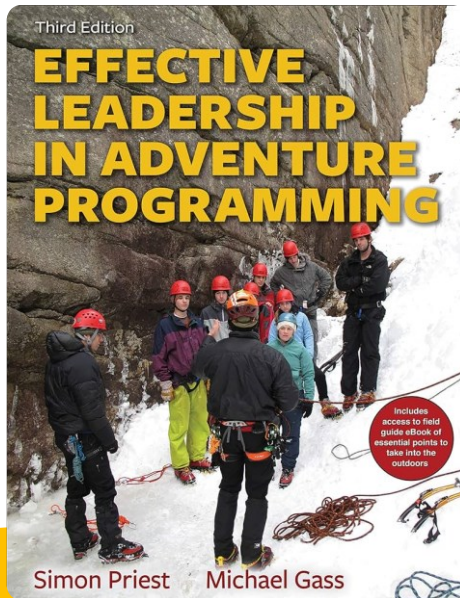
A variety of instructional styles (visual, verbal), peers, para

Action and Expression

What does ability look like?



A variety of Assessments (rubric, validated, video)



What is Adventure Education?

- Priest, S., & Gass, M. A. (2018). *Effective leadership in adventure programming*. Human Kinetics.

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What is Adventure Education?

- **Adventure experiences** were defined by as meeting the criteria of being voluntarily participated in, intrinsically motivated, and dependent on an individual's state of mind with an uncertain outcome. Can be leisure and health/wellness experiences.
- **Adventure education** is the promotion of learning through adventure centered experiences.
- **Adventure education** is a branch of outdoor education concerned primarily with interpersonal and intrapersonal relationships.

(Priest & Gass, 2018)

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Physical Education, UDL and Climbing

- Physical education is an optimal environment in which to offer Adventure Education. Incorporating Adventure Education into the curriculum allows students to be physically active in a **non-competitive setting**. This can be beneficial for some students with disabilities who may struggle with a highly competitive environment.



Why Combine the Two?

- When utilized in combination with Universal Design for Learning (UDL), the climbing wall is an effective tool for providing ALL students access to the physical education curriculum.

It is adventure experience and adventure education in a controlled setting

- It is fun!

UDL Climbing Wall



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Climbing options to know when considering UDL

1. Traversing: Climbing sideways/horizontally and low to the ground with no ropes attached. **Requires Spotting:**

Individual(s) or a team of individuals whose task is to help the traverser manage risk when climbing. This is typically done by directing and protecting the head, neck, and spine from contacting the ground.

2. Top Roping: Climbing under the protection of a rope running through an anchor located above a climber.

Requires Belaying: Numerous types of belaying are possible to enhance the design ("standard" belay w/ backup, team belay, Australian Belay, etc.). Highly skilled students can be challenged by the inherent risk that comes with scaling new heights.

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Climbing options

3. **Sensory climbing:** Using equipment that engages sensory learners including a sound stick, ribbons and bells, laser pointer directed climbs, hand signals, and rope tugs. Sensory climbing allows even the most severely disabled students to engage with the wall and be able to express their learning by reaching for or grasping sensory/engaging piece of equipment
4. **Augmented Reality Climbing:** Climbing integrated with projected images on walls and virtual challenges.

If Top Roping is part of UDL, belaying choices and skills are necessary.

- **Standard Belaying:** To hold and manage the end of the rope opposite the climber in such a way to manage/minimize slack, catch any falls, and lower the climber back to the ground when finished. Belaying uses equipment, human power and friction. Belaying is an essential safety skill that students can perform to demonstrate learning. Climbing skills are not necessary to belay.
- **Australian Belaying:** Rather than one belayer per climber, several belayers create a belay team to act as a counter weight to support the climber and assist by hauling the climber to varying degrees. This type of climb enables students, through the support of peers or other belayers, to reach heights they might not be able to achieve on their own power.
- **Advanced Belays:** Numerous ways to belay for advanced skills, like chair ascending exist.

Seek trained professionals/additional training to learn more.

Advanced no risk ground school practice

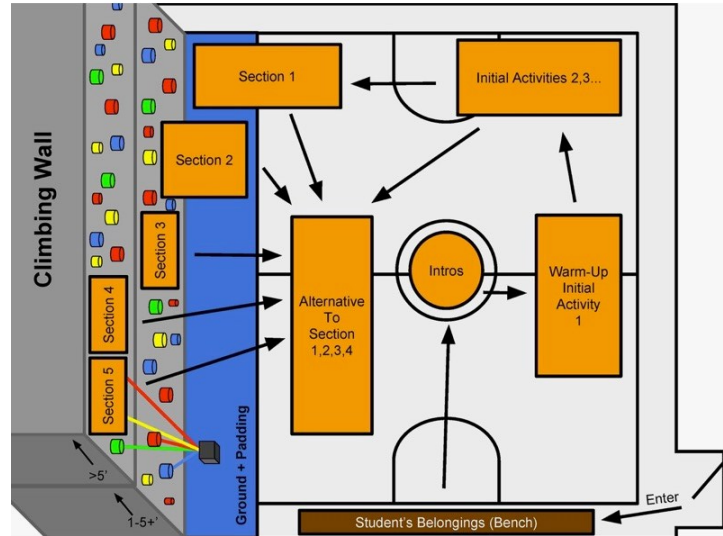
&

Redundancy

are the foundational keys to sound belaying.

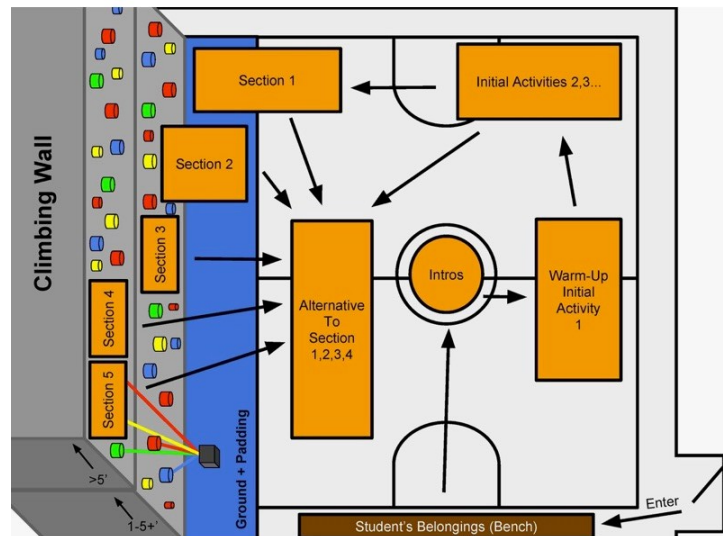
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One Example of
Implementing UDL
and Climbing
Thinking about the
space and planning



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UDL
1. Sensory
2. Traversing
3. Top Roping
4. Australian & Ascending
Belays
5. Augmented Reality
Alternatives:
Holds on Floor



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What are your
outcomes?
Options for
Choice and
Climbing



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Support and
Engage



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And challenge

S1.M25
Individual-Performance
Activities
Demonstrates correct
technique for basic skills in
one self-selected individual-
performance activity.
(S1.M25.6)



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And the Floor!



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Things to Consider

- Get to know your students' abilities, special needs, and learning styles
- After reviewing standards, determine learning needs
- Devise instructional approaches to reach greatest number of students
- Adapt methods and materials to individual student needs
- Ensure you have adequate training and can manage risk in technical climbing environments.



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QUESTIONS?

*Thank
you*

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