

## UbD & UDL Session Plan

Name: Jake Taylor

Date: 11th November, 2020

Session Topic: Navigation

Session Length: 80 minutes

### Desired Results

Focus of session: *(key ideas & content)*

The session will continue to address the **EQI** *How can I be safe in the mountains?* The theme for this session continues to be *Planning & Preparing / Traveling and Camping*. The direct question being addressed is: What skills and knowledge are required of a Mountain Leader to be safe and effective? The specific content to be covered during this session include using a compass, using a map, and using them in conjunction.

Know: *(recall & application)*

- I can identify the following parts of a compass: bezel, baseplate, and compass needle.
- I can explain the following aspects of a map: scale, contour lines, and declination.
- I can identify the following land features: summit, saddle, wash, spur, and ridge.

Know: *(strategic & extended)*

- I can begin to apply map and compass skills in planning and during the hike.
- I can begin to distinguish micro and macro features on a map to make sense of the terrain.

Do: *(ability to perform)*

- I can begin to interpret hiking maps.
- I can use a compass to find a direction and determine the direction of an object.
- I can use a compass to determine bearings on a map and account for declination.

Learning Environment: *(physical, social, & emotional elements)*

**In-Person:** COVID guidelines and precautions will be followed, and they include: physical distancing, donning of masks, and cleaning shared materials. The physical space needs to be open for movement and desk space for work. If possible, an outdoor venue should be easily accessed. Team norms and expectations for a positive learning environment need to be revisited. Small group pairings need to be appropriate for staying on task and open dialogue.

**Remote:** Team norms and expectations for a positive learning environment need to be revisited and include elements specific to online and synchronous sessions. Physical spaces should have minimal distractions.

### Assessment Evidence

Performance Tasks: *(supporting evidence)*

- Map & Compass Exercise [SHEET](#) & [KEY](#)
- Land Features [Exercise](#)
- Compass Exercise

Other Evidence: *(products, exercises, etc.)*

- Self-assessment [FORM](#)
- Follow-up [FORM](#)
- Review ELO Pair-Share

### Session Plan - Representation, Expression, & Engagement

Preceding Sessions: *What sessions, activities, or skills would occur prior to this session?*

- Information Session - Why the MLC? How is the process? What are the details?
- Session 1 - Scope & Purpose of Mountain Leader, Roles & Responsibilities of a ML
- Session 2 - Plan Ahead & Prepare, care & well-being, accessing & organizing
- Session 3 - Travelling & Camping, planning for weather & location
- Preview prior to session [Topo Map Reading](#) and [Using a Compass](#)

Instructional Styles: *(Command, Practice, Reciprocal, Self-check, Inclusion, Guided Discovery)*

- Command style will be used with initial compass exercises.
- Practice style will be used with navigation handout.
- Reciprocal style will be used with reviewing ELO and compass exercise.
- Self-check style will be used when presenting 5'Ds of navigation and compass bearings.
- Inclusion style will be used with tiered land exercise.
- Guided Discovery style will be used with orienting a map.
- Differentiation:
  - Product - Xerox Copier exercise and difficulty of image
  - Process - Mixed and flexible groupings for discussions and sharings
  - Content - Land exercise is tiered relative to amount of information

Framing: *Provide necessary safety briefing and educational purpose.*

- COVID framing includes guidelines and expectations modelled and reminded.
- Safety framing includes general reminders of physical space and surroundings.
- Educational framing involves a reminder of the scope and purpose of the MLC, and how this fits into the larger sequence and progression of the course.

Activities: *Specific activity/activities with a sequence and progression.*

- (3) [Overview](#) of Session and the learning targets are presented to all students, and there is an opportunity for questions and clarification to ensure students make sense of the purpose.
- (3) Self-Assessment [Form](#) is to be completed by all students, and the teacher will review responses during the peer review of the ELO. If needed individual check-ins may occur with students who ranked themselves as low emotionally and learner readiness for class. Consistent questions may be presented to all immediately. Their responses will be referenced during the 'concluding the session.'
- (5) Review [ELO Session 2](#) - *Ensuring group members have the appropriate gear and equipment.* Students will conduct **Pair-Share** on the scenario they chose for ELO session 2, and they will be asked to identify a similarity and difference between their responses. Time dependent, select pairs may be asked to share what they identified to the whole group.
- (5) Team Games with Aims - [Xerox Copier](#). Students will be split into small groups, and one student will be selected to have an image that they must describe to the other members of the group by only describing aspects of shapes and lines. Students will then present their images as a group, and discuss what was difficult during this exercise and what strategies were helpful.
- (15) Map Part I - Students will be asked to generate a short list of what information is presented on a topographic map. Students will then pair up into small groups to discuss how they can make use of that information as a mountain leader. The teacher will present a suggested list of information around the question of, 'what should we know about maps?' The teacher will present examples of how land features appear on topographic

maps, and students will complete an [exercise](#) of identifying and drawing land features. The teacher will explain the differences between true north and magnetic north and the concept of magnetic declination through a visual means and using a formula.

- (15) Compass Part 1 - Students will be presented with the basic parts of a compass, and they will be reminded that they are using it as a tool to measure angles. As a group students will locate around 4 distinct compass directions. As a group students will locate the direction of at least 3 objects from their position using their compass. If time, students will pair up and they will take turns explaining to another person the steps as if they were doing this for the first time.
- (15) Map & Compass - Students will be presented with a guided discovery task to use their compass to orient their map to face north. Statements to facilitate are: where is north on the map? Where is north with your compass? How can you align them? What can you do to check-and-challenge? Peer learners may be asked to assist others once they have demonstrated the skill. As a group students will conduct compass bearings using their compass, map, and straight edge.
- (15) Trip Planning Part 2 - Students will be presented with a Navigation [exercise handout](#) to complete individually within small groups. The teacher will move around between groups for questions and assistance. Following the exercise, there will be a review of the 5 D's of navigation and general speeds for a group to assist in trip planning.
- (4) Concluding the Session - The learning targets will be presented again, and students will be asked to rank their achievement on them using the thumb-o-meter. Students will be asked if any questions from the self-assessment form have not been addressed. The ELO following this session will be presented, and students will complete a [follow-up form](#) before departing.

Closure: *Key learnings to be highlighted and/or emphasized.*

- "If you don't use it, you lose it!" with navigation skills.
- Topographic map reading and navigation is a constant check-and-challenge.

Materials/Resources Needed: *props, teaching aids, etc.*

- Session [Slides](#) & Session [Overview](#)
- Compass, VT hiking map, pencil, straight edge, & paper
- [Xerox Copier](#) Team Game with an Aim
- Land Feature [Exercise](#)
- [Navigation Handout](#) & [Handout Key](#)
- Map Section [Copy](#)

## Post Session

Reflection: *Reflective questions to further development of delivering effective sessions.*

- *How successful was the session in meeting desired results?*
- *What additions or subtractions would be made?*
- *How was student engagement and involvement during session?*

Following Sessions: *What additional sessions, skills, or activities would follow?*