

# Lesson Planning of Outdoor Activities

By  
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Have you ever presented a concept only to find later that no one understood it? Ever had a person who could not understand what you were teaching? Anyone in the guiding profession could find himself or herself in the position of having to instruct the participant. Effective instruction involves a good presentation, but there is more to it than that. One should set a good foundation for the lesson and plan for ways to work through the information, because learning is a two-part process: comprehension and retention. A lesson plan that uses brain research on learning will maximize both. The 4MAT system of lesson planning for instruction is based on current brain research on learning. This article will present a brief overview of the theory of learning styles and a step-by-step process for developing simple, yet effective lesson plans for instruction.

## **Learning styles**

Learning is a two-part process in which an individual will perceive and process information to create new knowledge. It is important to understand that this new learning is highly individual and is extremely dependent on two things: having value and making sense to the learner.

Learning begins with perceiving new information. This is an important process for learning and is accomplished in two basic ways, concretely or abstractly. A person who perceives concretely will tend to work with information physically rather than listening, or discussing ideas. Abstract people will tend to discuss, read about, think or listen to an idea to perceive it.

Once the information is gathered, people will need to process the information to link it to prior knowledge to create new knowledge. This process is either linear or random. Linear processing follows a sequential series of steps. Accountants, sales associates, and scientists are examples of people who use linear processing. Random processing jumps around while processing information. Artists and creative design people tend to process randomly.

It is important to understand that neither processing type is better than the other, only different. It is our role as instructors to develop lessons to reach all types of people. It is our tendency to want to teach in the way we learn best, which of course limits who we reach.

## Putting it together

If one overlays perception style and the processing style in a graph, one will be able to see the four basic styles of learning according to the brain research (see figure

1). First, place abstract perception on the right horizontal axis, and concrete on the left to represent the two extremes. On the vertical axis, random processing is placed on the top and linear is placed on the bottom (see Figure 1). This will create four quadrants: abstract random, abstract linear, concrete linear, and concrete random.

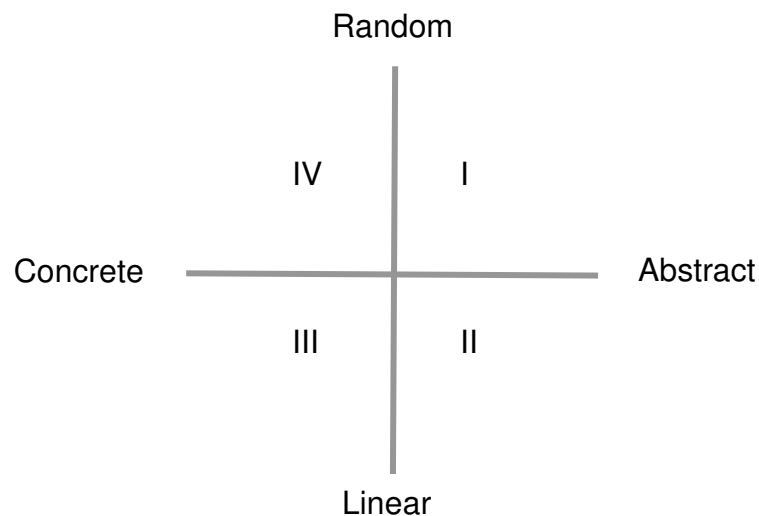
The first quadrant is abstract random. This type of learner is always asking the question why. They tend to be interested in personal connections, seek meaning, need to be involved personally and learn by listening and sharing. They are interested in people and culture. Professionally, they tend to be personnel managers, elementary school teachers, sale associates, and therapists.

The second quadrant is the abstract linear learner. This type of learner asks the question, "What do I need to know?" They will tend to seek out experts, seek facts, and learn by thinking through ideas. They are less interested in people and more interested in ideas. Professionally, they tend to be accountants, doctors, high school teachers and professors.

The third quadrant is the concrete linear learner. This style of learner is always asking, "How does this work?" They are the type to tear apart something to figure out how it works. They will seek usability, need to know how things work and learn by testing theories. They are not concerned with experts or prior knowledge, but systematic self-discovery, physically working through the information. They tend to be scientists and mechanics.

The final quadrant is the concrete random learner or quadrant four. This type of learner is creative and works well with self-discovery. They will seek hidden possibility, need to know what can be done with things and learn by trial and error. They tend to ask the question, "What can this become?" They will want to tear down something, not to learn about, but to see what they can create with it. They tend to be CEO's and artists.

Figure 1 Perception and Processing



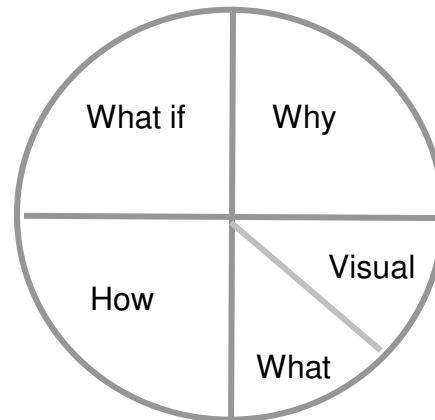
Based on these learning styles, the first priority of any lesson is to establish relevance. Why do you need to learn this material? Failure to do this will result in losing the quadrant one learner. There is more. These four quadrants now set forth a sequential system for instruction. Learning is most effective when the lesson follows a specific sequence. Without getting into too much detail, the proper lesson sequence answers the following questions in order: why, what, how, and what if (see figure 2).

The lesson begins with quadrant one and answers the question *why*. The instructor should establish the reason for learning by presenting a topic, role-playing, or simulations, and then personalizing it to the individual. Personalize this by asking participants introspective questions about prior experiences or goals for future experiences. Remember, this two-part process is first instructor centered, and then participant centered. Create a situation and relate it back to them.

Next, the lesson should create a visual link. This is the first part of the “What” quadrant. This is critical for comprehension of material. This could be in the form of diagrams, demonstration, video, pictures, and simulations. This will set the framework for linking prior knowledge and comprehension of the new knowledge. The second part of quadrant two presents the new knowledge. Present only the facts of the concept. State only correct learning and avoid “don’t do this” type of instruction. Try to restate critical information three times throughout. Activities include lecture, demonstrations, and written material. This is not a good time for participant experiential learning. It should be instructor directed. Otherwise, the content may get lost and the participant remembers negative outcomes or incorrect understanding, but associates them with positive outcomes or correct understanding.

The third quadrant answers *how*. This quadrant begins with the participant engaging in guided practice. Here there is a lot of coaching and cuing questions. This is the time for experimentation and allowing for negative outcomes. If this occurs, direct the participant toward positive outcomes by using cuing and prompting questions. The instructor should function as a facilitator and use feedback frequently. Check for comprehension before the participant engages in the activity. Activities include drills, role-playing and problem solving with guidance. Guided practice works well with large groups before breaking into smaller groups for individual practice. The second part of the quadrant is individual practice. Here the instructor is a coach and should take a secondary role. The amount of coaching is reduced and participants are allowed to work things out themselves. Tasks are linked to create a more complex situation for the participant.

Figure 2: Quadrants



The fourth quadrant answers *what if*. In this quadrant, the instructor becomes a mirror for the participant, reflecting on the situation, and asking prompting questions such as “what if you do this?” The practice is random and varied. The participants should have a role in selection of the activity or situation. Seek out real world possibilities and opportunities to change the situation.

### Creating a Lesson Plan

#### Step one

Begin in quadrant two by creating a presentation that delivers the material. Begin with the end in mind. For a serial task, for example, break the serial task down into simple tasks and decide what needs to be taught for a person to perform the serial task. Determine any sequence if necessary for the simple task and then develop demonstrations and key questions for each simple task.

#### Step Two

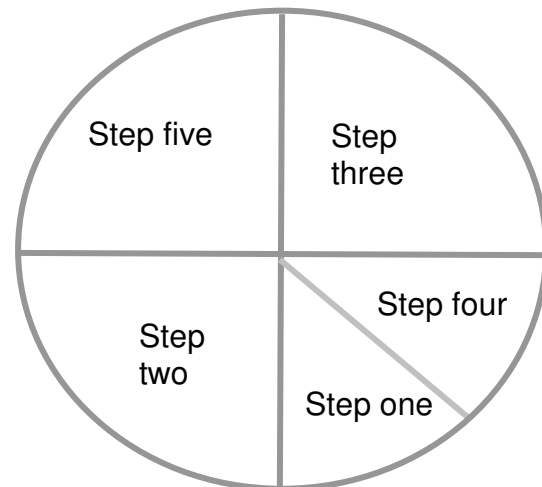
Complete quadrant three by devising a series of drills for the participant to work with the new knowledge. Drills should follow four concepts: isolate, exaggerate, repetition and progression. When working with material for the first time, a participant needs to focus on one thing. Develop drills that focus on one particular concept at a time. You can use auditory cuing words, props, checklists and anything else that accomplishes this. For example, using the cue word of “1 – 2- place” will cause the climber to slow down

placing the foot on a hold and cause them to focus on the act of placing his or her foot. Hopefully, this will get them to place feet with precision. Exaggeration of the drill can include hesitating, shifting from extremes, time allowances, and the use of props. For example, stepping over a pack to exaggerate the weigh shifts will work to teach weight shifts. Repetition is the act of repeating the task again. It can be random or blocked. Block repetition is repeating the same task over. Random is repeating a variety of tasks. Use block repetition first and transition to random. Progression is using drills that build on one another. Accomplish this by combining two simple drills in a more complex one.

#### Step Three

Define the *why quadrant* by asking yourself these two questions: what is the value of learning this and how do I make this important to the participant? First present an idea and then try to personalize it. This can be as simple as a discussion about a concept and then asking the participant how they see it and why. Guide the discussion with prompting questions. For example, one could ask, “What if this happens” or “How would this change the situation?” This could be started with a role-playing situation, or

Figure 3: Lesson planning sequence



props if needed. Be sure to write down one or two critical questions that will focus the participants.

#### Step Four

Develop the first part of quadrant two, the visual. Creating a visual link is essential and should not be skipped. Develop a visual demonstration that is less instructional, but more a broad picture of what it is you want the participant to learn. Save the instructional demonstrations for the presentation. Think “big picture” here. If you are teaching climbing movement for example, you may climb a section of rock that demonstrates the concepts to be covered. Use demonstrations, video, diagrams, pictures or models for this section.

#### Step Five

The last step is completing quadrant four. This may or may not be part of the lesson. It could be the expectation that the participant will take the learning and apply it in the future. However if you decide to include it, this activity should be holistic and try to simulate the big picture. For example if you were teaching climbing movement, it could be the challenge route of the day.

#### Conclusion

The 4MAT lesson planning is a step-by-step process for developing lessons that follows current brain research. Once you become familiar with the steps, it will greatly speed up the process for developing new lessons. Learning begins with comprehension. Comprehension requires that the new knowledge make sense and is valuable. The first quadrant and the image section on the second quadrant accomplish this by laying a foundation for the presentation of material. Many people are good presenters, however, learning depends not just on comprehension but retention, and after just listening to a lecture how much do we really retain? For information to be useful, it must be retained for the future. This is where the third and fourth quadrant extends the learning by building retention. This system lays out the proper sequence for instruction and allows for flexibility in the lessons by changing the individual activities.

#### Reference:

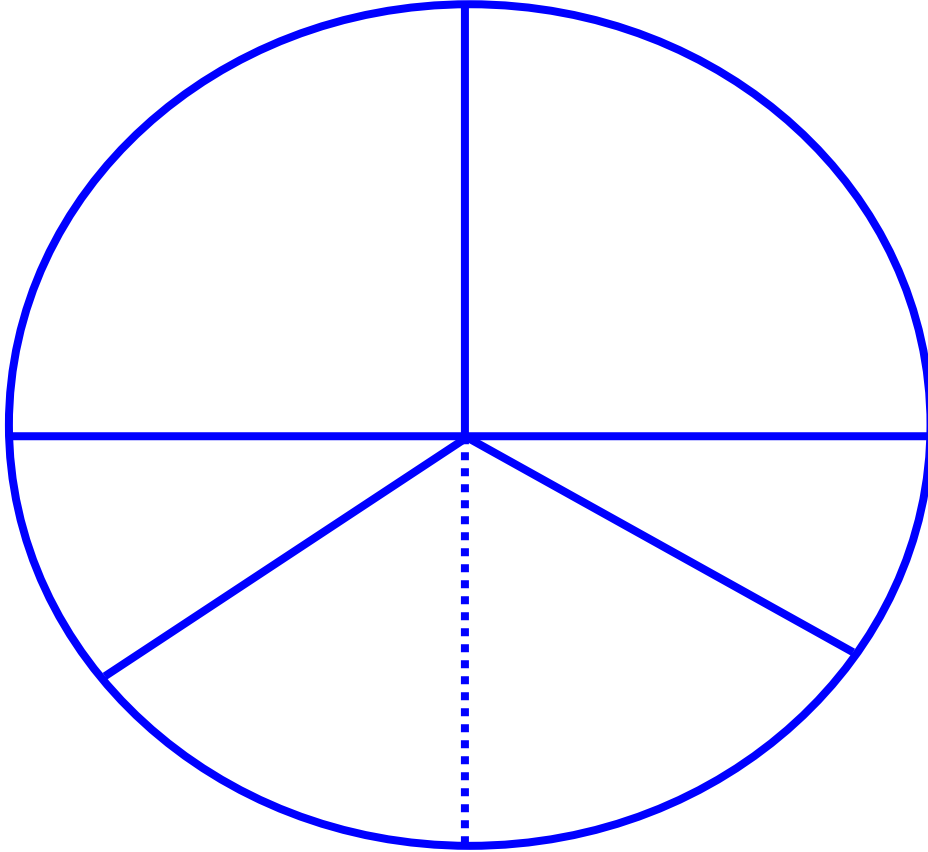
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CA: Corwin Press, Inc.

Lesson Cycle



Topic:
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Outcomes

List the outcomes for the learning. Outcomes should be observable changes in the participant.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Quadrant One Why:

Situation: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Discussion Questions

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_

Quadrant Two What:

Image: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Instruction: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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Quadrant Three *How:*

Guided Practice:

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Individual Practice:

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Quadrant Four *What If:*

Extension: \_\_\_\_\_

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Materials Needed

Notes: