Experiential Learning and the Art of Reflective Practice

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Youth Learning in 4-H

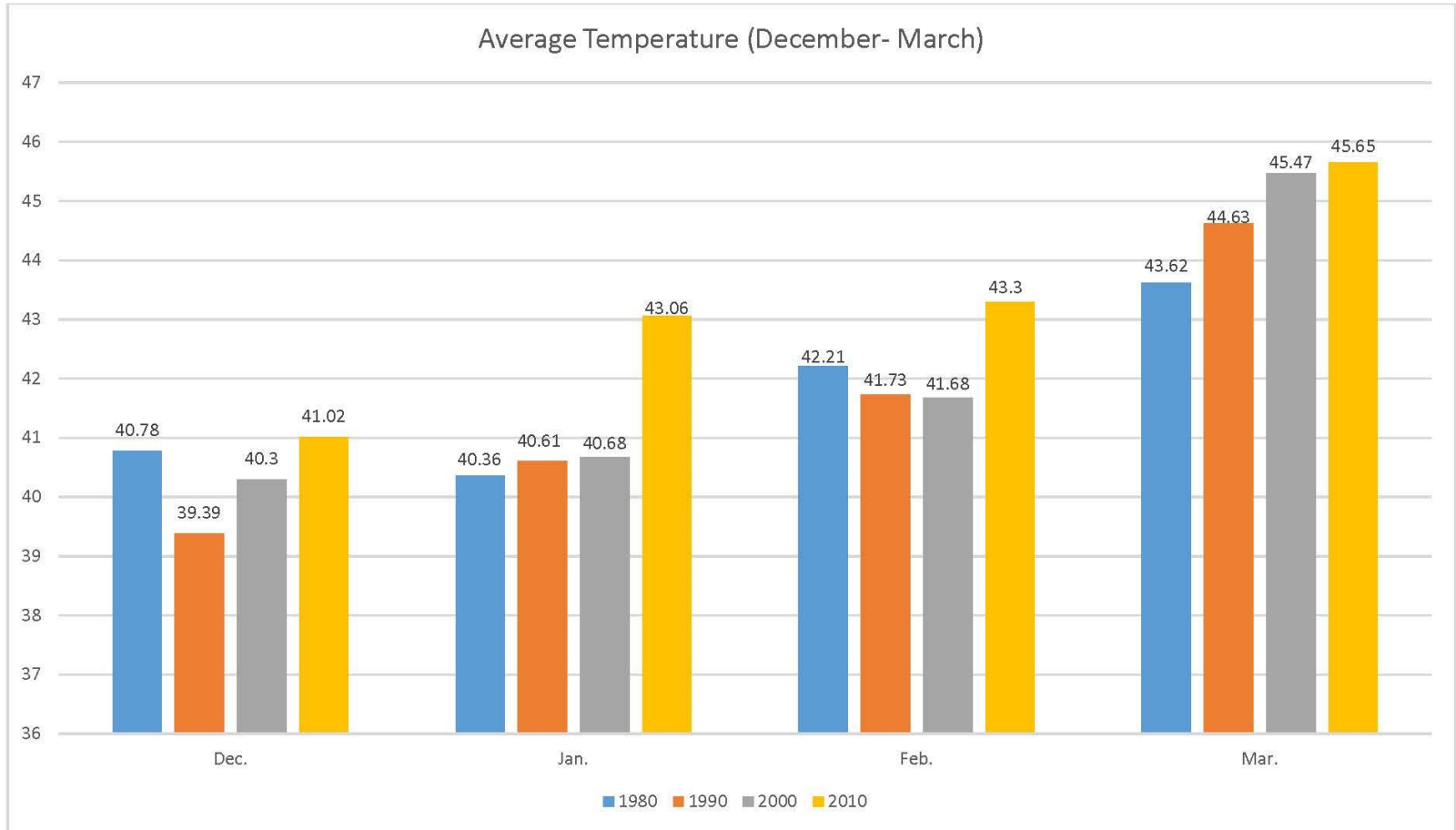
- Explain what you understand the motto of “learn by doing” to mean.
- Describe your understanding of Experiential Learning.
- Discuss what you see as the role of an educator – 4-H volunteer, staff member, or teen – to be when facilitating an activity with 4-H youth.

Activity

- Working as a group:

1. Review temperature graphs from Tahoe region
2. Review precipitation graphs from Tahoe region
3. Review fire maps
4. Draw inferences from the data
5. Explain inferences based on the data

Sierra Nevada Mountains; Tahoe Region



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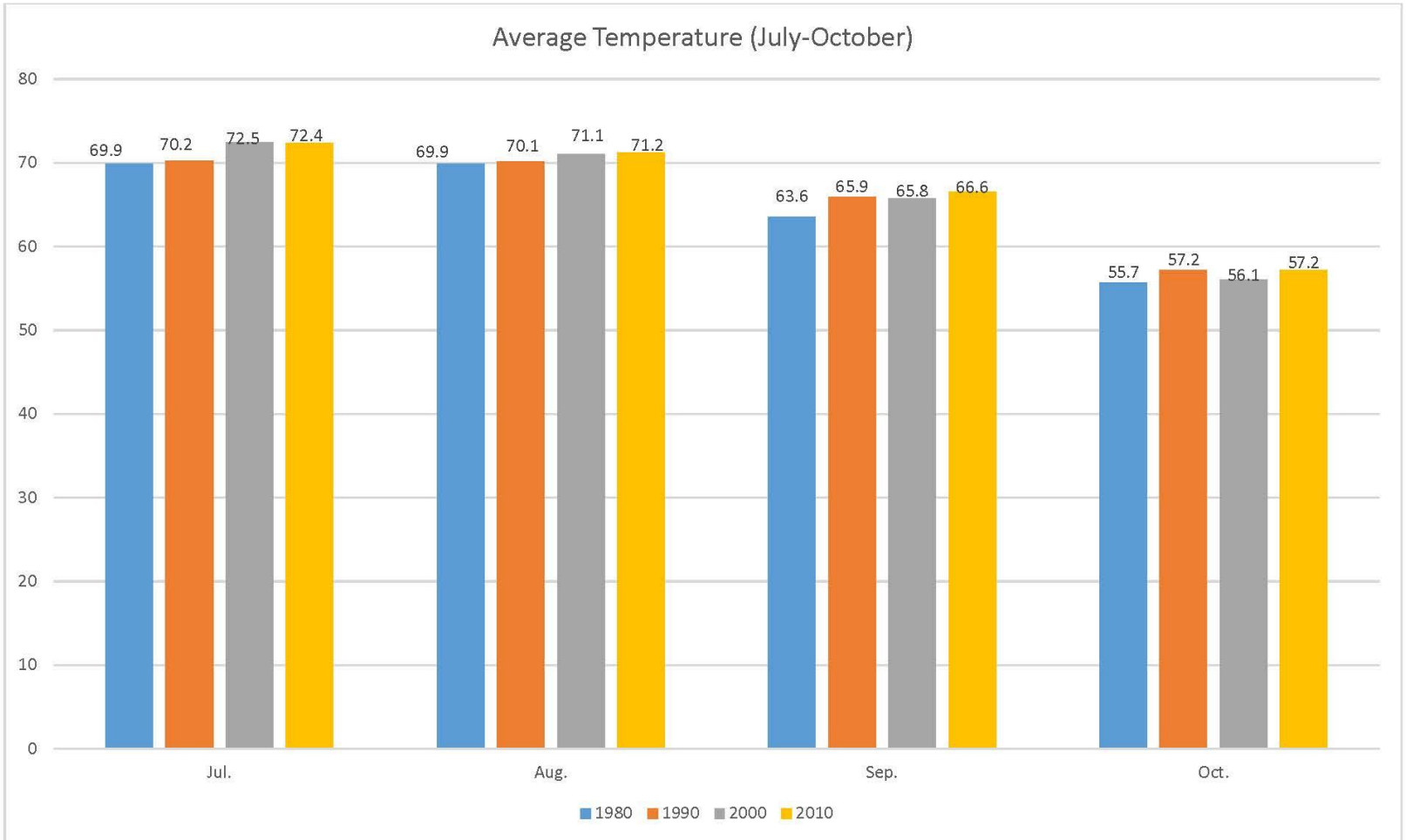

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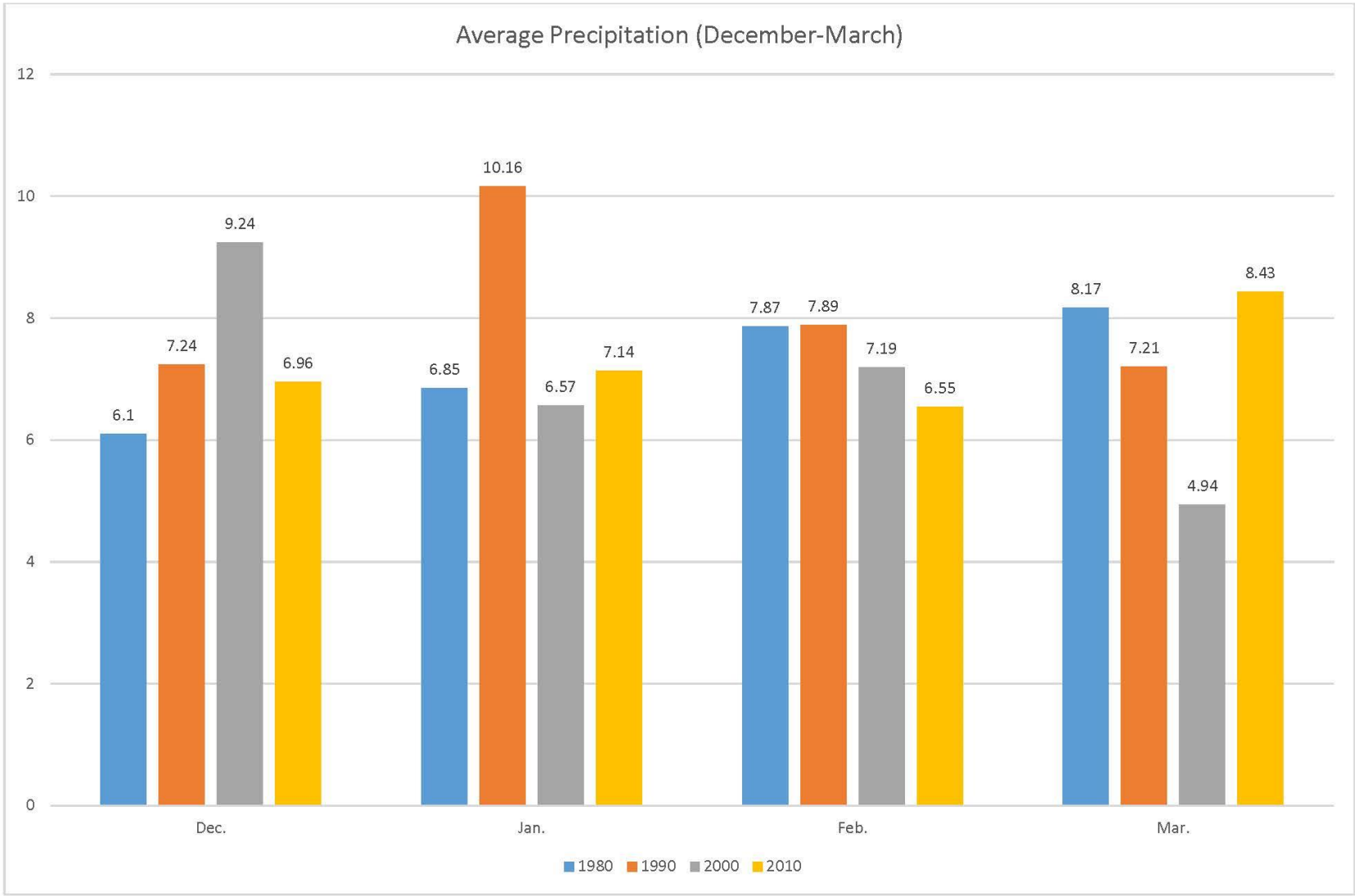

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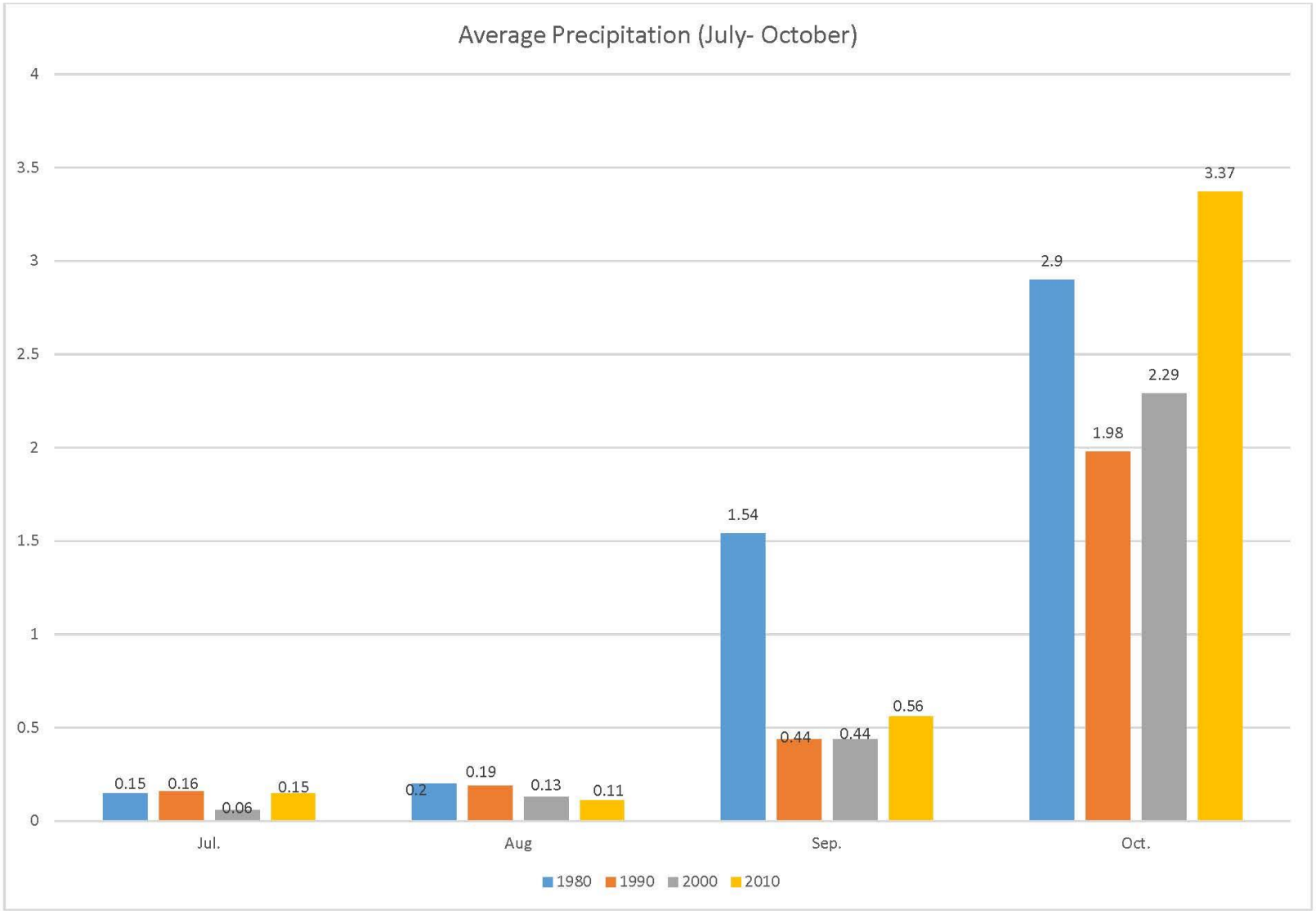
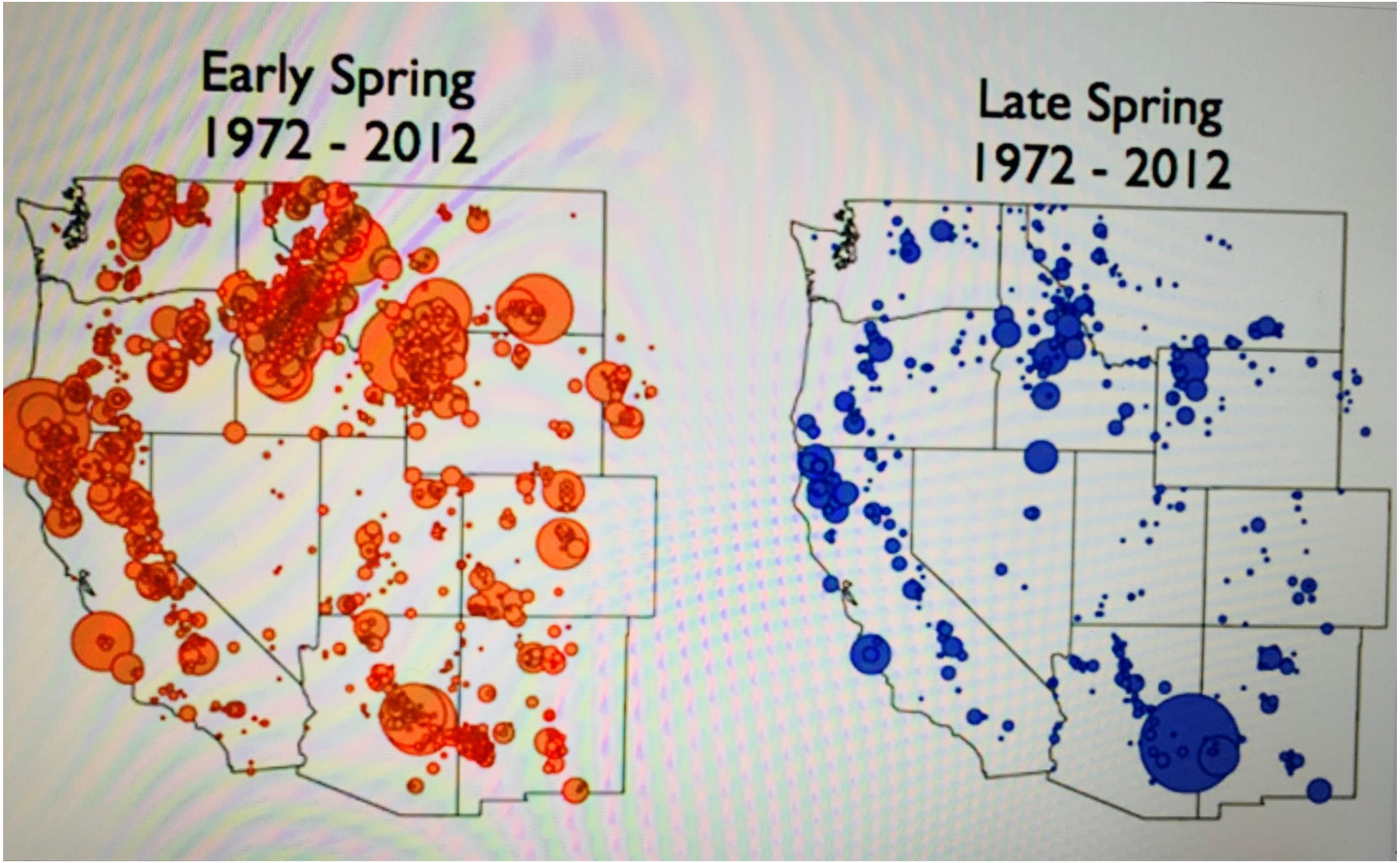



Early Spring
1972 - 2012
Late Spring
1972 - 2012

Reflection & Term/Concept Discovery/Introduction

- Explain your inferences based on the data provided. Discuss your understandings.
- Climate: Average weather conditions that persist over multiple decades (at least three) or longer
- Weather: The state of the atmosphere with respect to wind, temperature, cloud cover, precipitation, atmospheric pressure, etc. Weather refers to these conditions at a given point in time (e.g., today' high temperature)
- Runoff: The draining of water from the surface of an area of land.
- Evaporation: The process of turning from liquid into vapor.
- Evapotranspiration: The process by which water evaporates from the land into the atmosphere from the soil and other surfaces and by transpiration from plants.
- Changes in wildfire frequency and intensity are strongly linked to drying from warming temperatures and earlier spring snowmelt.

Activity Debrief

- Describe what you perceive the learning process was for this activity.
- Explain how this was similar to or different from other learning experiences you have had.
- What would you describe as advantages to this approach?
- What would you describe as disadvantages to this approach?

Learning Theory: Constructivism

- Constructivism holds that knowledge is developed through experience (i.e., *learn by doing*).
- According to Dewey (1933), learning experiences are interactions between learners and their environment, each new experience draws upon prior ones, modifying them in some way.
- Constructivism is an active process; specifically, knowledge is constructed through two processes: new information challenges prior knowledge – the process of *assimilation* – and an adjustment in understanding – the process of *accommodation* – is necessary (Richardson, 2003).

Inquiry: A Constructivist-Based Learning and Teaching Strategy

"Inquiry is a process that all individuals naturally use in approaching new situations and solving problems in life. By engaging in inquiry, …[individuals]…gain experience…that will improve their capacity to handle life situations and solve everyday problems."

- Edmund Marek and Ann Cavallo (1997)

Elements of Inquiry

- Inquiry includes:
  - Active investigation
  - Open-ended questioning
  - Observing and manipulating (mentally or physically) objects, phenomena, and/or nature
  - The acquisition/discovery of new knowledge
  - ***Key point:** Inquiry is typically embedded in the experiential learning cycle.

Inquiry and the Learners

- Learners:
  - Take responsibility for their own learning.
  - Improve their written and oral communication skills.
  - Develop problem-solving, decision-making, and research skills critical for lifelong learning.
  - Learn how to continue learning.

Inquiry and Educators

- The inquiry approach:
  - Places the educator in the role of being a facilitator of learning, rather than a disseminator of known information. (The ***guide on the side;*** not the ***sage on the stage***.)
  - Allows educators to better understand their learners, what they know, interests they may have, and how their minds work.

Two Main Types of Inquiry

- **Guided inquiry*:** Learners are provided with a problem to investigate and the materials necessary to carry out the investigation. The learners devise their own procedure to solve the problem.

  * The most common method used in 4-H.

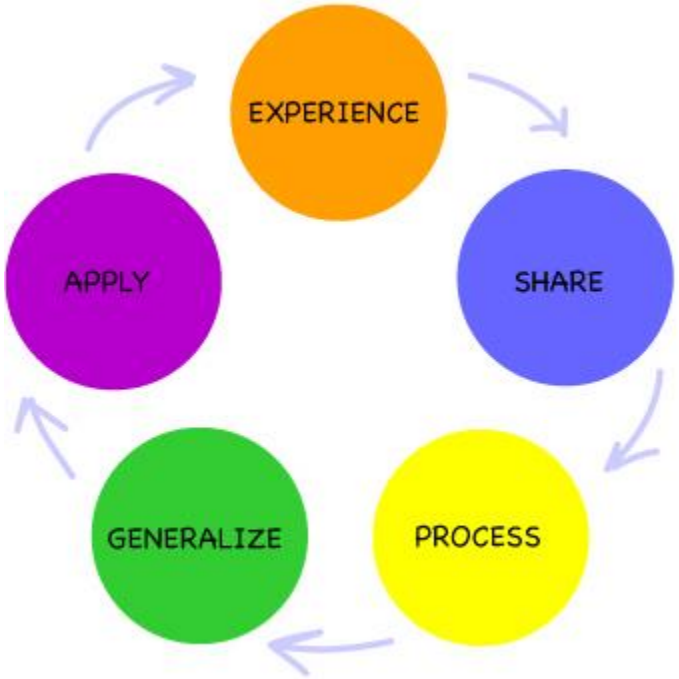
- **Open inquiry**: The learners formulate their own problem to investigate and devise strategies to carry out their investigation. Common in activities such as service-learning or youth participatory action research (YPAR)

What does Inquiry Embedded in an Experiential Learning Cycle Look Like?

- There are many examples of EL cycles – 3-step, 4-step, 5-step, and even 6-step cycles!
- However, all EL cycles must include the following:
  - Concrete **Experience**
  - Period of **Reflection**
  - Intentional **Application** of New Knowledge and Skills

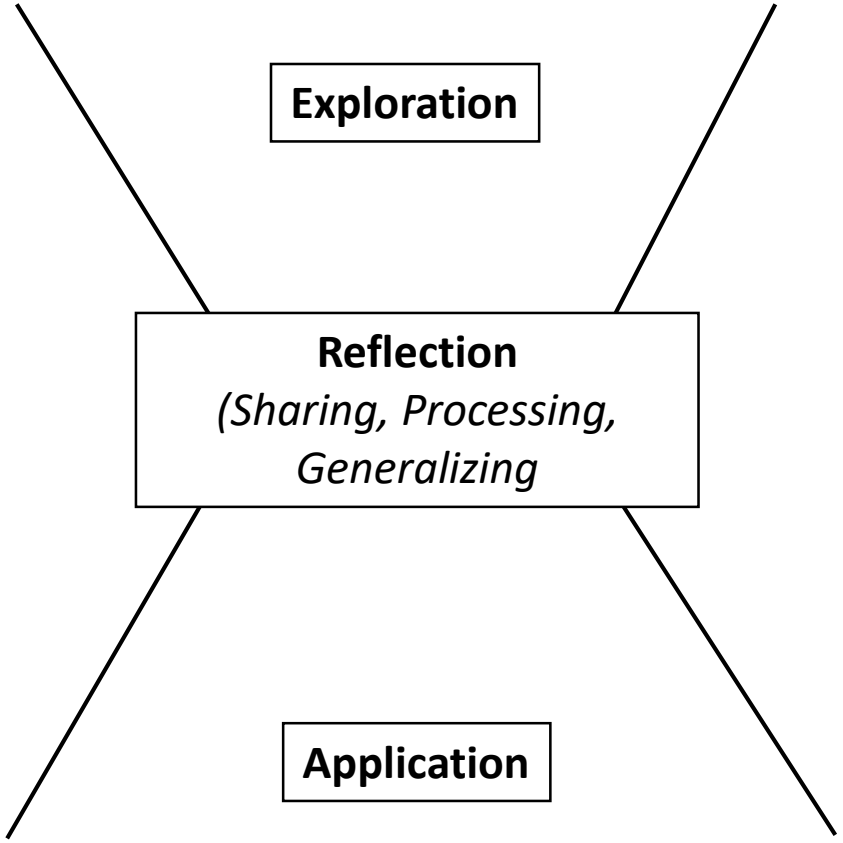
5-Step Learning Cycle used in 4-H

(Pfeiffer & Jones, 1983)



3-Step Learning Cycle

(Marek & Cavallo, 1997)



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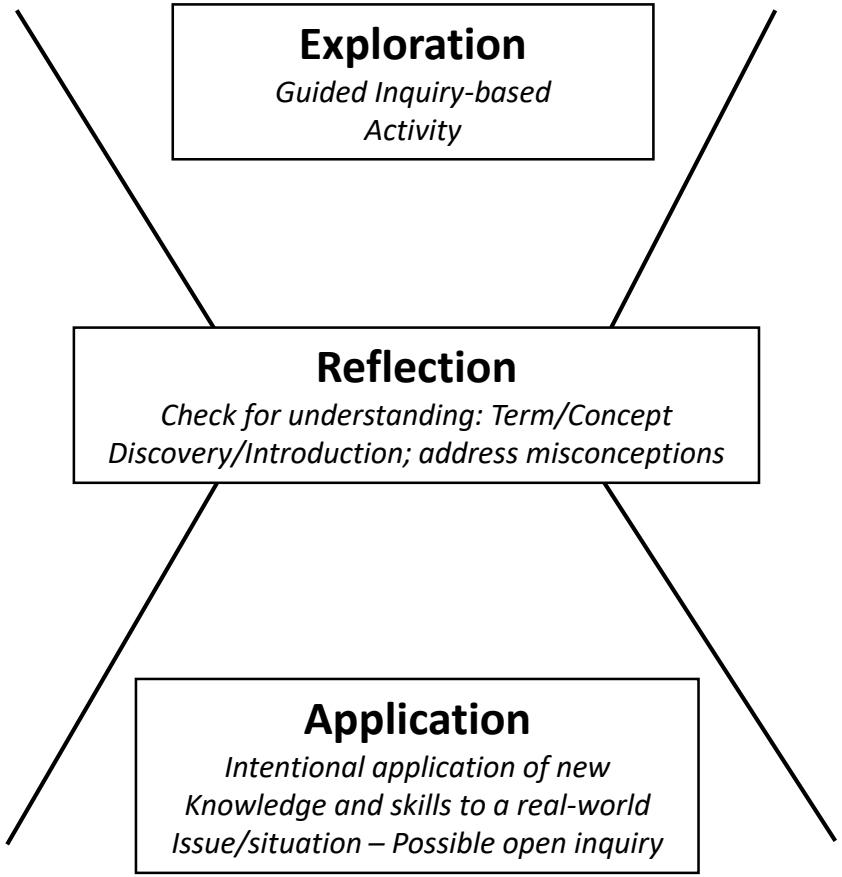

Let’s take another trip to Tahoe

- Recap the experience in your own words. How would you describe the experience as being guided inquiry?
- Describe how, if at all, that activity was embedded in the three-step experiential learning cycle we just discussed.
- Describe some examples of intentional applications that could be added to complete the learning cycle.

Who reflects, when, and why?

- Reflection is “the key” to understanding in experiential learning and guided inquiry.
- Reflection provides learners and educators with “currency” in the form of interpreted information.
- If information is misinterpreted, however, that “currency” is “counterfeit” and misunderstandings can be perpetuated when we use it.

The Reflective Process: How Does it Work?

- Reflective practice is a process whereby individuals assume the perspective of an external observer in order to identify and *challenge assumptions* and feelings that underlie their understanding (learners; educators) and/or practice (educators).
- Once assumptions are identified, individuals speculate about how they might influence their understanding (learners; educators) and/or practice (educators).

Why Reflect?

- Reflective practice is a method to enhance professional development.
- Enables educators to become more skillful and more effective.
- Leads to greater self-awareness, the development of new knowledge about professional practice, and to a broader understanding of the problems that confront educators in authentic settings.
- To accomplish this, educators need sufficient time to reflect on their lessons, to collaborate with others, and to experiment with instructional practices.

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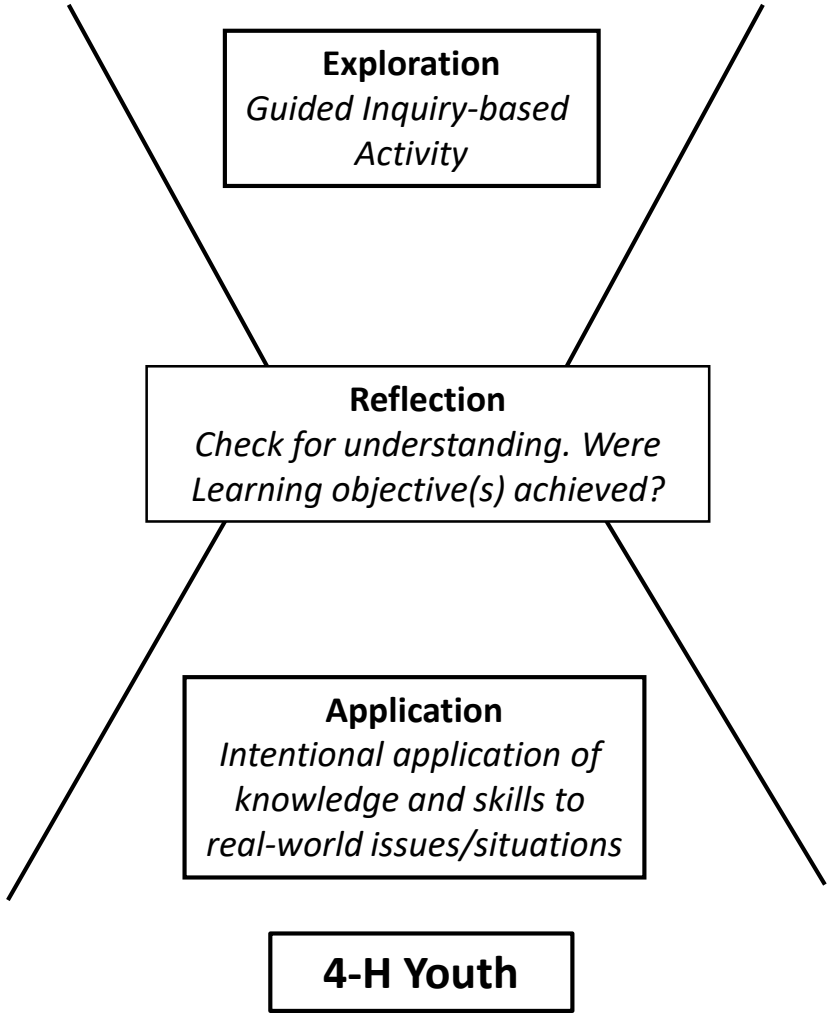
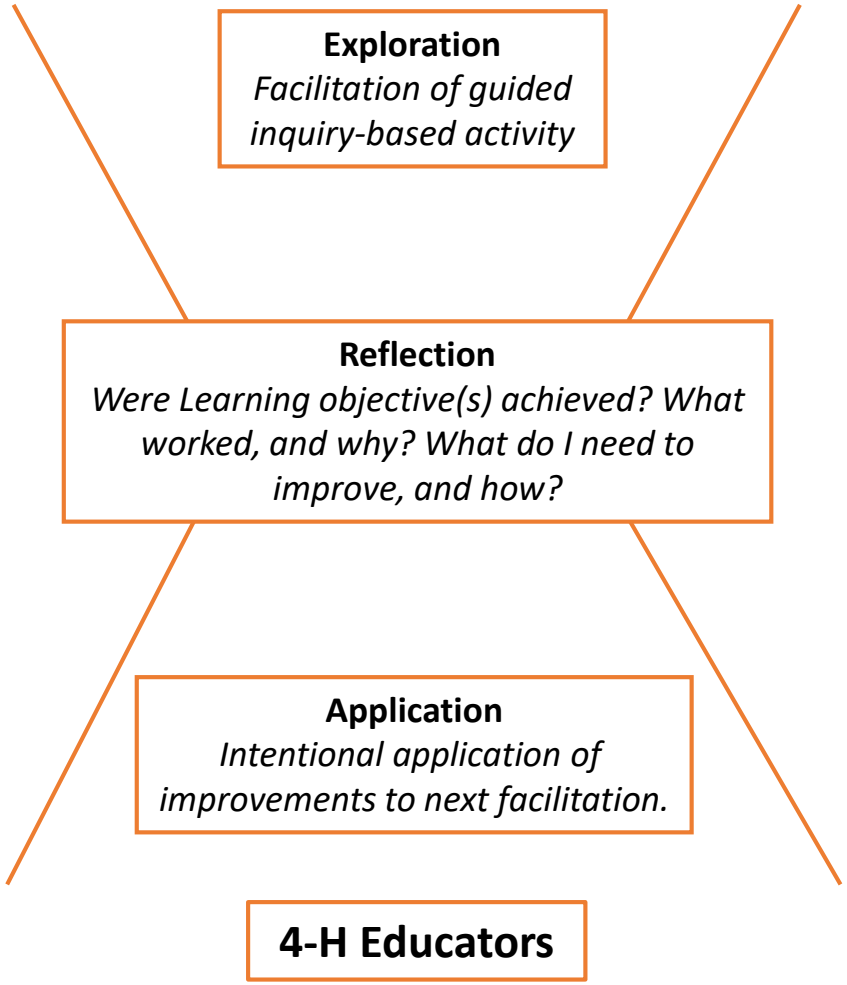
The Reflective Process: How Does it Work?

- Three main phases in the Reflective Process to consider:
  - ***Returning to the experience:*** Recalling salient events.
  - ***Connecting with feelings:*** Using helpful feelings; removing obstructive ones.
  - ***Evaluating the experience:*** Re-examining the experience using the original intent and existing knowledge; integrating new knowledge.

3-Step Learning Cycle & The Reflective Process

(Marek & Cavallo, 1997)





Learner Reflections

How do I collect reflections from my youth participants? Make it fun and engaging!

- Open-ended prompts during discussions.
- Post-It Notes: Something that worked well; something I would improve
- Index Cards: Something that worked well; something I would improve
- Graffiti Wall: Today I learned…; I would improve…
- Word Cloud: Today I learned…; I would improve…
- Etc.

Facilitator Reflections: Plus/Delta Sheet

+		△	
Describe what worked	Describe why	Describe what did not work	Describe why; provide an alternative
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Describe what worked	Describe why	Describe what did not work	Describe why; provide an alternative

Summary Thoughts

- Experiential Learning: It’s systematic and intentional.
- Guided Inquiry: Be the guide on the side; don’t be the sage on the stage.
- Reflective practice:
  - Misconceptions happen. Check for understanding when learners are reflecting; do not let misunderstandings be perpetuated.
  - Educators make assumptions: Challenge them. Look closely at your practice as it relates to whether or not learning is happening. Make data-driven decisions when changing your practice.

Questions?

Mission Not-So-Impossible

- Your challenge/assignment/”mission” between today and our next webinar:
  1. Implement one 4-H activity that uses guided inquiry and is embedded in the EL cycle. **Note:** This may be from a specific curriculum that was developed using these pedagogical strategies, or it may be an activity you choose to adapt to use guided inquiry and EL.
  2. Reflect on that experience. Collect reflection data from the youth; use a plus/delta sheet or some other form of self reflection (e.g., journal) to collect your own reflection data.
  3. Make revisions to the activity.
  4. Be prepared to share this experience with the group during the next webinar. **Note:** This is referred to as *making your practice public,* a key step in improving teaching and learning.

More question? Contact me!

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THANK YOU!