

Experiential Learning Sample Lesson Plan

Description

This is a general lesson plan for a course on how to plant and grow an organic, backyard vegetable garden.

Context

It is mid-May of a given year, and local, urban residents are excited to begin planting their own vegetable gardens. Many gardeners are experienced, having learned successful methods and techniques from their parents. Indigenous knowledge that is passed on from one generation to the next can be invaluable to learners. Unfortunately though, not everyone is lucky enough to be privy to such knowledge!

In the absence of indigenous learning, non-formal community based learning opportunities may offer excellent programs for budding gardeners. A local nursery, in an effort to increase sales of gardening supplies, has decided to place one employee in charge of teaching a free course that explains how to prepare for an organic vegetable garden, how to feed and care for it, how to harvest it, and how to prepare it for the winter season.

The learning forum is at the nursery and no formal classroom is available. There is no conference room, either. However, they do have an outdoor patio furniture section with numerous tables, plenty of seating, and retractable awnings which offer cover in the event of rain. It is decided that this section of the nursery will be used as an outdoor classroom. In the absence of a chalkboard, whiteboard, or projector, a paper chart-stand is available and can be used if necessary, but that's it!

This setting offers one excellent benefit that most formal, continuing education programs lack. Beyond the patio furniture section is a beautiful, mini-gardening area that has been set up for this very class! Students can get their hands dirty and actually garden as part of their learning!

In order to attract students, the nursery has placed a sign by the road that says "The Cheapest Organic Vegetables in the City – Ask Us How!" Surprisingly, many young adults enter the store to inquire about the sign, and this course is explained to them. The most interested are parents of young children. Their concern is feeding their children genetically modified foods that are loaded with pesticides, while organic produce is generally too expensive to purchase regularly. The majority of the students in this class are young adults, and parents of young children.

Rationale

A key consideration in ensuring the success of this course is in selecting the appropriate instructional strategy. The strategy must take into account the following three points:

1. Since gardening is such a hands-on activity, a hands-on learning approach can greatly increase chances of successful learning and integration.
2. Gardening is not only a motor skill. There is much knowledge to be learned in gardening.
3. Learners are emotionally attached to the content because it will benefit their health, and the health of their children, and they are highly motivated.

The first point above shows that a main part of the learning is in the psychomotor or physical domain. The second point indicates that some of the learning is in the cognitive domain. Finally, the last point above demonstrates that some of the learning is also within the affective domain. This simple, gardening class spans across all three human learning domains!

In order to teach this course effectively, a holistic strategy that exists in all three domains needs to be selected. Experiential learning is a holistic teaching approach, and thus an excellent choice for this class. Furthermore, since many teaching strategies support experiential learning, it offers the instructor creativity and flexibility in lesson planning.

Lesson Plan Format

The format of each lesson will be based on Merrill's (2009) four-phase cycle of instruction (p.52). All four phases need to be integrated into each learning task. These four phases are listed below:

- Activation
- Demonstration
- Application
- Integration

In addition to the above, each lesson must also address all four cycles of the "ECHO" stages of experiential learning (La Prad & Mink, *The ECHO model of experiential learning*, 2009):

- Explore
- Create
- Harvest
- Own

The two cycles above share enough in common with each other, that they can be combined to create the following list, which can be used to structure a lesson:

1. Explore the learning content and activate cognitive structures.
2. Demonstrate the material to learners.
3. Apply the skill by creating a vegetable garden at the nursery.
4. Integrate newly learned knowledge by engaging in reflective practices.
5. Integrate new learnings into personal contexts beyond the classroom.

Sample “Experiential Learning” One-Hour Lesson

Step 1: Explore the learning content and activate cognitive structures. (10 minutes)

In-Theory:

According to Merrill (2009), during the activation phase, learners must “recall, describe or demonstrate relevant *prior knowledge or experience*” (p.50).

According to the ECHO model, during this step, an inquiry based approach should be used to discover what participants want to learn, and what they already know. (La Prad & Mink, The ECHO model of experiential learning, 2009).

In-Practice:

The goal at the beginning of each and every learning session is to explore learning content and activate relevant cognitive structures. In our gardening class, students arrive for their first session and seat themselves at the patio tables. A discussion with the students is encouraged by the teacher using open-ended questions to help students connect with backyard vegetable gardening, connect with the teacher, and connect with one another.

Each question asked by the instructor is carefully thought out to maximize the connections listed above. Following is a list of questions that the facilitator asks:

- “Has anyone here had any gardening experience? How much? What type of gardening? How successful have you been at it in the past?”
- “Do you know of any friends or relatives that have green thumbs? How do you know them? Have you learned any gardening tricks from them?”
- “Why would people want to grow vegetables in their backyards in the first place? Is it worth the effort?”
- “What are our benefits to growing our own vegetables? How does it affect us? How does it affect our lives? How does it affect our families? In a broader sense, how does it affect society?”

All notable points given by the learners are written in short-form on the chart-stand as they come up. Towards the end of the discussion, these points are quickly revisited and summarized by the instructor. Because the main points all come from the students, they feel that they are given a hand in directing the learning which can increase their engagement level.

While encouraging discussion, the teacher's role is to listen, to look into the eyes of the speakers, and offer positive remarks regarding their responses. This discussion is only 10 minutes long, so the teacher needs to be efficient and timely.

Step 2: Demonstrate the material to learners. (20 minutes)

In-Theory:

Merrill (2009) states that demonstrations are appropriate for teaching "how-to" or "what-happens" skills. This demonstration must be consistent with the content to promote learning. It is enhanced by peer discussion and peer demonstration (p.44).

In-Practice:

This is the first learning session, and the lesson is on tilling the soil to prepare it for planting. Prior to giving the demonstration, the material that will be covered will be distributed to learners on photocopied handouts. The instructor gives a brief lesson on tilling. The following list describes key points that are covered in the lesson:

- "What is tilling?"
- "Why is it done and how does it benefit the growth vegetables?"
- "When should tilling be done and when should it not be done?"
- "How to tell if the soil is ready to be tilled."
- "What should be done to the soil prior to tilling, if anything? Why?"

The above five points need to be covered in as little time as possible. The purpose of the above lesson can be viewed as an introduction to the demonstration that will be given. After the learning topics are covered, students are given a few minutes for a brief question and answer session. Students should be encouraged to answer each other's questions.

Approximately 12 minutes should be left for a demonstration. The teacher and learners all get up and walk over to the gardening area. The teacher grabs a piece of soil and shows the learners what to look for to check if it is ready to till. The garden is scanned for weeds and the instructor pulls a few out, highlighting that the entire weed, root and all, must be pulled. The instructor opens up a bag of manure or triple-mix and scatters it over a small area of the garden. The soil in that section of the garden is tilled manually with a garden shovel.

During each process above, the facilitator describes what is being done, and why, so that learners can hear verbally what they are seeing visually. Questions and discussion are encouraged throughout.

Once complete, a few minutes are dedicated to a brief question and answer session, or discussion.

Step 3: Apply the skill by creating a vegetable garden at the nursery. (20 minutes)

In-Theory:

According to Merrill (2009), learners need to engage in application of the acquired skill and receive corrective feedback. Their learning is enhanced if they are coached, and coaching is gradually withdrawn. Furthermore, peer-collaboration enhances learning (p.47)

According to the ECHO model, this stage is an opportunity for students to engage in a common experience (La Prad & Mink, The ECHO model of experiential learning, 2009).

In-Practice:

During this step, learners will all be given an opportunity to check the soil for its readiness to till. They are all asked to grab a piece of soil with their hands and decide for themselves. They will be asked to pull out weeds fully so that they aren't tilled into the soil. This portion of the lesson may bring up a few points to consider:

- Regardless of whether or not the soil in this mini-garden is ready to till, the students need to practice tilling it to learn the proper techniques.
- The garden cannot be infested with weeds, nor can it be weed-free. This needs to be prepared prior to the class so that each learner has the opportunity to pull out five to ten weeds.

The students each get a bag of manure or triple-mix, open it up, and scatter it over a small section of the garden. While they do this, the teacher needs to encourage them to spread it evenly.

Finally, during the last 10 minutes of the application step, students will each get a shovel and start tilling the soil. The instructor will coach them on their technique. By the end of this step, students should be able to till without being coached.

Step 4: Integrate newly learned knowledge by engaging in reflective practices. (5 minutes)

In-Theory:

Merrill (2009) states that “learning is promoted” when learners are “directed to *reflect-on*, discuss, or defend their new knowledge or skill” (p. 53).

In the “harvest” stage of the ECHO learning cycle, participants are invited to reflect on their common experience (La Prad & Mink, The ECHO model of experiential learning, 2009).

In-Practice:

While still at the mini-garden, students are asked to reflect on their experience. Once again, open-ended questions are asked to encourage the reflective process. They are asked the following questions:

- “How do you feel you did? How did you do compared to others?”
- “Can you see the difference in the soil after having tilled it? How would you describe that difference?”
- “Does tilling for the first time help you understand the benefits of it?”
- “It is not an easy task to till a larger garden at home, but many people do it each year because they feel that it is worth it. If somebody asked you why it is worth the effort, what would your answer be?”
- “Did your parents till for your benefit? How does that make you feel? If you have children, do you think that they will appreciate it enough to do it for their own in the future?”

There may not be enough time to fully cover all of the reflective discussion points, so they can be handed a photocopy of the questions before leaving, to reflect afterwards.

Step 5: Integrate new learnings into other contexts beyond the classroom. (5 minutes)

In-Theory:

Merrill (2009) states that learning “is enhanced when learners create, invent, or explore *personal ways to use* their new knowledge or skill” (2009).

In the “own” stage of the ECHO learning cycle, learners are suggested to transform and transfer their experiences into their own contexts (La Prad & Mink, The ECHO model of experiential learning, 2009).

In-Practice:

This is the final step of the experiential learning process outlined in this plan. It is also the most important. As a result, the instructor needs to be keenly aware of this. Students are given the

task to apply the newly learned material into their own lives. They are asked to do the following prior to the next learning session:

- Check the soil in their backyard vegetable gardens to see if it is ready for tilling. If they do not have a garden, they are encouraged to create one, or clear an existing section of a flower bed to reserve for this project.
- Clear their backyard gardens of any weeds or unwanted plants.
- Scatter some manure or triple-mix (or both) evenly across the garden. The nursery can help them calculate the amount needed at the time of purchase.
- Till their gardens manually until complete.

Afterwards, students should be asked to describe their tilling experience to at least one other person, possibly their spouse or a close friend. They will also be asked to email a photo of their tilled garden to the instructor so that printouts of their work can be commended by peers during the activation phase of the next session.