

In the Classroom 77

Weaving Kolb's Learning Styles and Experiential Learning Cycle into Your Classroom

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Stan Skrabut: Thanks ever so much for taking time to join me on this podcast episode. I really appreciate it. I know you can be doing other things, perhaps you are doing other things, but you're still hanging out with me, really appreciate it. Where I'm at, at this moment in time when I'm recording this, it is a beautiful sunny day. I have to be honest, it's a little hot, and it's a lot hotter than I like it, but can't complain. The sun's out and the windows are open, just enjoying the world right now.

This week, we're going to take a look at Kolb's learning cycle and learning style inventory. This was basically put together by David Kolb back in 1984. What it does is gives us another opportunity to develop content and experiences that meet students where they're at, and thus increases the chances that students will grasp the material that you are presenting. Learners tend to have preferences for how they learn. I know for me, this is true. For a lot of people, it's true. The science is not entirely solidified around this, but if we can meet students where they're at, then we stand a greater chance of getting them to learn.

Kolb's work in this area helps to provide some ideas for instructional design, and these are ideas that I want to share with you. I'm going to go into detail about Kolb's learning cycle and the learning style inventory. Before I get to that point, I want to talk about why you would want to even consider this. First of all, according to Kolb, learning is a process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it. This is what Kolb had to say back in 1984.

Getting into the why, here are some reasons why we would want to consider this. One, you can develop and achieve effective personal development plans and learning opportunities for learners. So, knowing, understanding this cycle, understanding these learning styles, you can put together activities that are more conducive to learning and basically create opportunities where more students of your class can participate, rather than focusing on just one particular way, by having a combination of these, and using this cycle, you can touch everybody and get them where they're at.

Basically, you're developing learning activities that cater to each type of learner, and just weaving these into the course. To do this, you guide learners through a learning cycle by strategically laying out activities in a particular sequence. I'll be talking about that sequence here in a few minutes. Before we go any further, let's talk a little bit about learning style theories. Learning style theories are largely unproven

methodology. There's been a lot of criticism, especially in the last couple of decades that we haven't gone out and prove that learning styles work.

However, I personally think that these are just another tool in an educator's toolbox, that this is another strategy, another tactic that you can layer in. If you can get a student to learn because you've used that tactic, more power to you. With learning styles, whether it's the VARK learning styles where it's visual, auditory, and kinetic, I believe that just having those different styles, you're reaching out to more students. It's very much, in my mind, in line with universal design for learning.

I'm a huge fan of that because you can- by providing these options and thinking about these different learning styles, you create layers where you can accommodate more students, and learning styles provides some of these options. The big thing is just don't do any harm. Make sure that you understand what you're doing and why you're doing it. If it's not working out for your class, pull it out. That is, do no harm. Let's dive in.

Kolb's experiential learning cycle. Kolb's experiential learning cycle is a four-stage learning cycle. As learners are learning new skills, they move through these different stages. They basically go through them in a specific sequence. Effective learning only occurs when the learner has executed all four stages of the model. Typically, once you've gone through one cycle of the model, then you go through another cycle, but it's at a different level. You go through another cycle and it's at a higher level. You keep doing this based on where they're at, but it just keeps going round and round and round.

Those four stages include concrete experience, reflective observation of the new experience, abstract conceptualization, and active experimentation. So, those four stages, concrete experience, reflective observation of the new experience, abstract conceptualization, and active experimentation. Two of those sit on a perception continuum. Those two happen to be the concrete experience and the abstract conceptualization. If you were to imagine a piece of paper in front of you, at the very top of the page, at the north-south, you would have concrete experience.

At the bottom of the page on the southern part of the page, you would have abstract conceptualization. These are on the perceptive continuum, or, basically, the emotional response, how we think or feel about something. Those two, concrete experience and, on the other side, abstract conceptualization. Kolb believed that you could only do one or the other at a time. You'll go through all four, go through all four different parts as you're going around the cycle, but only at one time are you doing one or the other. You're either feeling it, you're actually doing it, or you're thinking about it.

Then, on the other side, you have reflective observation and active experimentation. These sit on the processing continuum. This is how we approach the task, we're either doing it or we're watching it. They sit on the east-west. On the east side, on the far right-hand side of your paper, that's where you have the reflective observation

written in, and then on the left-hand side of the paper or on the west side, that is where you have active experimentation.

If you start at the top with concrete experience, and you move clockwise, the next item that you're getting to is reflective observation. Then, you're going to move through abstract conceptualization, up to active experimentation, and then back to concrete experience. That's how it works in a clockwise direction. The cycle, it starts with a concrete experience. The learner would then reflect on it, would reflect on that experience. From this reflection, they develop a new idea or a modification on that experience, and then they start to actively experiment with this new idea. This new experience starts a new cycle, so it keeps going in that direction.

Let's talk about each of these different concepts in more depth. First, starting with the concrete experience. The concrete experience is about having that experience. It is a feeling, you're involved, you're doing, you're having the experience. This is a situation, it's a stimulus for getting the cycle going, so you have that experience. In the classroom, this is where you have that activity, which then causes the student to move to the next cycle, which is reflective observation. This reflective observation, this is about reviewing or reflecting on that experience. What they're trying to do is, based on what they observe and what they understand, is trying to reconcile that. See if they can come to some sort of understanding.

Then, they move into abstract conceptualization. This is where they come to a conclusion, or where the actual learning has taken place. That they've had that experience, they thought about it, and they have come to figure it out, and therefore learning has taken place. Now, moving to the next cycle, or the next part of the cycle, is active experimentation. This is where the learner takes what they've learned, puts a twist on it, so they can test it, so they can try it in different scenarios. This is then what moves into another experience. They keep going around this. They keep learning based on their experiences and basically solidifying what they are learning.

That is pretty much the learning cycle. This is something that certainly we can do in the classroom, that we have an activity, we want students to reflect on this and demonstrate their learning. We can make sure that they know something, but then we want to put it into practice. We want them to have another activity where they are taking what they have just learned, making some modifications to it to strengthen their knowledge of this and set it in motion once again.

That reflection piece is absolutely huge. I talked about this in self-directed learning, having that reflection piece and making sure that that was in there. So, that is the cycle. Now, attached to it is a learning style inventory. This is what occurs between the different elements on the learning cycle. These learning styles are tied specifically to the learning cycle. People tend to have a preference of a learning style. This is based on all kinds of different factors. It can be based on their education, what career that they're in, the environment that they grew up in, the social influences. All this affect somebody's preferred learning style. If somebody has a clear learning style preference, they will tend to learn more effectively if whatever they're learning is oriented to their preference. As educators, one of the things that

we may want to do is do an inventory of all the students to find out what their learning style is, and ensure that in the classroom setting, that we are accommodating those different learning styles as part of the instructional design, that we give a balanced approach that everybody's learning style is attended to in designing the course.

Like I said, I think this is very much in line with Universal Design for Learning and having those elements in place. The Kolb learning styles are basically a product of the processing continuum, which is how we approach a task, doing or watching, and the perception continuum, which is if we think or feel about a particular task. The four learning styles are diverging, assimilating, converging, and accommodating.

Now, Peter Honey and Alan Mumford put a twist on Kolb's work. They labeled these learning styles as activist, reflector, theorist, and pragmatist. We're going to take a look at these in a little more depth of these different learning styles and what kind of learners that you may have based on those styles. The first one is diverging. This is where we take that concrete experience and that reflective observation. Right in between there, this is where diverging is occurring. This is the reflector, as Honey and Mumford would say, this is the reflector.

These individuals, these learners prefer to watch rather than do. They gather information, they use imagination to solve problems. They're looking at the why-type questions. Why is this happening? They're able to see what's happening from different viewpoints. These learners also perform better in situations that require idea generation. If you're having a brainstorming session, these folks are knee-deep into it. They're gathering information, they're deep thinkers, they're generating ideas, they are imaginative, emotional, they're strong in the arts. This is that type of individual.

They will work in groups. They'll listen with an open mind and provide their feedback to that group. Specific learners tend to be in the arts, drama, language, music, art, journalism, those type of things, but also in political science, anthropology, sociology, psychology, those type of careers. Kolb and his team have mapped these out. They've done study of tens of thousands of different students and on a variety of different levels to include what program that they're majoring in. This is how they've come to figure out these types of students based on this inventory.

Those inventories are available. I think I put one in the show notes. I will double-check and make sure I did. You can always go check the show notes. I put a variety of articles in the show notes. I encourage you go take a look at it. Most of them have a conceptual drawing that you can take a look at. I would encourage you to do that to get a better understanding of this. That is diverging, figuring out the why, idea generation, they're thinkers.

Assimilating, assimilating is between the reflection, reflective observation and the abstract conceptualization. These are the theorists. They tend to work solo. They like to work independently. Their learning preferences tend to be more of a logical approach. They like ideas and concepts more than working with people. They prefer a clear explanation rather than a practical opportunity. They excel at lots of

information that is organized in a clear and logical format. In your course, if you're providing these layers of information, they're going to be very happy with that, where the diverging, they're looking for opportunities where they can converse and share ideas and generate ideas, so you want that built into your class.

The assimilating folks, they're looking at logically sound theories and approaches that have a practical value. These type of learners tend to align themselves with the sciences, so sciences, geography, physiology, botany, chemistry, mathematics, physics, the STEM area. They tend to move in that direction.

As far as providing learning for these individuals, as I mentioned, readings or lectures, they're good with hanging on to a lecture, exploring analytical models and also having that time to think through all these things and make sense of it, so sense-making, I would definitely put them in that group. That's the group number two. This is going through, from that concrete experience through that reflection to the abstract conceptualization. Those two learning styles are over on that particular side. They're on the east side, the right side of the paper.

The next group is converging. This is a product between abstract conceptualization, where they're doing the thinking, and the active experimentation, where they're doing. Pragmatists are in this particular group. They also like to work solo. They like working on problems and deductive reasoning type activities. They want to know how, so they're always asking those type of questions. They're very much into solving problems, and so they're good at those technical tasks. With this particular group, they are trying to find practical solutions to questions and problems.

They tend to be folks that are in technology, business, engineering, ecology. They're trying to find those solutions and trying to find a practical application to what they have learned, so that, if you can find activities around that, they're going to be tremendously happy. Then, finally, we have accommodating. Accommodating is the product of active experimentation and concrete experience. They are the activists. They like hands-on. It doesn't matter if necessarily they're well-grounded in this.

They're going to go out and experiment, they're going to try things. They'll take a practical, experiential approach to things. They like to carry out plans. They're very proactive. They work on a gut feeling rather than logical analysis, they will rely on information that others have provided rather than their own analysis. This group tends as far as careers be in marketing or sales, in business, social work, education, medicine, those type of specific careers. They will definitely work with others to get the assignment done and set goals, do fieldwork, they'll test out different things, this is what they're doing.

Once again, if you can accommodate those in your learning design, your instructional design, you're going to end up with a much happier group of learners. Each one is a little different. Some prefer to work alone; some prefer to work with others. Others want a lot of information, so they can digest it, others prefer hands-on. Having these mix of activities, you're going to be able to accommodate a lot more

students and satisfy their needs. These are some ideas that you want to weave into the classroom.

One of the first things is educating your students. Take time to review Kolb's learning styles and the learning cycle with your students. If you explain to them this is what's going to happen and here's how you fit into this at these different stages, you will have learners that are going to be more aligned with what you're trying to do. I have repeated this over and over and over but explaining the why. Why are you doing this? What is the logic behind this? If you take care of that, you're going to have more receptive learners than if you force something on them.

Part of this is have students discover what their preferred learning style is in terms of Kolb, so Kolb's learning style inventory. Do an inventory with each student to get an idea of what their preferences are and show them where they fit in that particular cycle in terms of their learning style, so that'll be useful. As far as putting this into practice in your classrooms, start with a concrete experience for students to work through, and then have them reflect on both the process and the results of that experience that they've had.

Then, from there, have them have an opportunity to deep dive into the information, the knowledge so they can solidify what they have learned before you send them out to work on a bigger project where they're applying what they have learned. To keep that cycle going, you start with the initial concrete experience. Then, as you're giving them a variant on that, a deeper project that may be a group project, they are going to keep the cycle going. Then, information to accommodate these different learning preferences. So, remember, somebody who is diverging, they like to work in groups, they have an open mind, they like getting this personal feedback as they move from this concrete to this reflective observation. The assimilators, they're into reading, lectures, analytical models, thinking things through.

The convergers, they want to experiment with these new ideas. Simulations are great, laboratory experiments, practical applications, this is where they're going to do. These folks are also- when you give an exam, they want a single correct answer. Now, the accommodators, they like to work with others to get assignments done, setting goals, performing fieldwork, testing different approaches, and they're solving problems through trial and error based on information that others have provided.

You want to make sure that you're trying to accommodate these different styles, because if you have somebody who has an assimilating learning style, they're not going to be good if you just don't provide them with rich information that they can study up on and learn about something, whereas somebody who's accommodating, if they're forced to do all this reading ahead of time, they will tend to get frustrated. They want to get hands-on as quick as possible.

I hope this helps a little bit. Once again, I'm going to talk about different learning theories as we're going on through these different podcast episodes, because, I think, they add to your toolbox. I just wanted to introduce you to Kolb's learning style inventory because, I think, this adds to the toolbox. Having these four different

learning styles gives you options in the classroom if you can figure out how to work these different learning styles in.

When you're building a course, just keeping in mind what the cycle is and what the learning styles are and finding appropriate activities for your students so that way you are tending to all their needs as much as possible. This will just increase the opportunity for learning for those students. One of the learning theories-- I have gone through my different books and notes, and there's a number of other theories that I want to introduce you to so you can expand your toolbox. Those will be coming up. I plan to talk about those in the future. For now, time to go. Here's a quick plug for my book.