

Learning-centered Instruction

Learning-centered instruction is a theory about learning also called constructivism.

It requires a shift in thinking from the traditional way of teaching, in which students are led step by step through what educators want them to do. During traditional processes, learners sometimes have minimal knowledge why they are doing it or what the end result will be. In this traditional way of teaching, teachers often end up saying, "Someday you'll see the value of this. Someday you'll thank me."

Instead, in a learning-centered or constructivist approach, the teacher focuses on defining the end result of the task that is assigned and allows the student to figure out the steps that will lead to the end result. The guidance the teacher provides throughout the lesson is called scaffolding, and is essential to the learner's success. Learners are given the chance to succeed and are given as much support as they need, but not one bit more.

Effective educators are those who can create learning environments where students can have opportunities to construct well-reasoned meanings for what they observe and experience. When planning lessons, teachers should be conscious of the main tenets of constructivist theories about learning as outlined by Brooks and Brooks, such as:

- Learning occurs when people construct their own knowledge by connecting new information with prior knowledge;
- Learning grows out of social interaction;
- Learning lasts when learners are actively engaged with information.

Lectures can be part of a constructivist based lesson as long as it addresses these tenets. Certain practices such as well-structured group work, reflection, and think-pair-share are also often reflective of constructivist theory.

To understand Constructivism better, consider the following scenario from Flynn, Mesibov, Vermette & Smith's (2008) book *Captivating Classrooms with Constructivism*.

Wouldn't *The Wizard of Oz* have been a different story if Dorothy had never left the farm? What if Glinda had visited Dorothy in Kansas and had explained why Dorothy should be grateful to be in Kansas and why she should be appreciative of all the people and surroundings that were available to her? Would Dorothy have listened for 46 minutes, nodded understandingly, and then said, "Thank you, good witch of the North, now I understand why I am so fortunate, everything I could ever want is right here in my own backyard?" Yeah, right. As Glinda says in response to a question from Scarecrow, "Dorothy had to learn it for herself."

Significant Learning

L. Dee Fink's taxonomy of significant learning in *Creating Significant Learning Experiences* helps explain learning-centered instruction. In reviewing descriptions of quality teaching and learning, Fink has created a new taxonomy, one that describes various ways in which learning can be significant. He defines learning in terms of change. For learning to occur, there has to be some kind of change in the learner. No change, no learning. And significant learning requires that there be some kind of lasting change that is important in terms of the learner's life. Fink identifies a taxonomy of six kinds of significant learning.



Southwestern Oregon Community College Learning-Centered Instruction

- Foundational Knowledge. At the base of most other kinds of learning is the need for students to know something. *Knowing*, as used here, refers to students' ability to understand and remember specific information and ideas. It is important for people today to have some valid basic knowledge, for example, about science, history, literature, geography, and other aspects of their world. They also need to understand major ideas or perspectives, for example, what evolution is (and what it is not), what capitalism (and is not, and so forth). *Foundational knowledge provides the* basic understanding *that is necessary for other kinds of learning*.
- **Application.** Besides picking up facts and ideas, students often learn how to engage in some new kind of action, which may be intellectual, physical, or social. Learning how to engage in various kinds of thinking (critical, creative, practical) is an important form of application learning. But this category of significant learning also includes developing certain skills (such as communication or playing the piano) or learning how to manage complex projects. *Application learning allows other kinds of learning to become* useful.
- Integration. When students are able to see and understand the connections between different things, an important kind of learning has occurred. Sometimes they make connections between specific ideas, between whole realms of ideas, between people, or between different realms of life (say, between school and work or between school and leisure life).
- **Human Dimension.** When students learn something important about themselves or about others, it enables them to function and interact more effectively. They

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discover the personal and social implications of what they have learned. What they learn or the way in which they learn sometimes gives students a new understanding of themselves (self-image) or a new vision of what they want to become (self-ideal). At other times, they acquire a better understanding of others: how and why others act the way they do, or how the learner can interact more effectively with others. *This kind of learning informs students about the* human significance *of what they are learning*.

• **Caring.** Sometimes a learning experience changes the degree to which students care about something. This may be reflected in the form of new feelings, interests, or values. Any of these changes means students now care about something to a greater degree than they did before, or in a different way. *When students care about something, they then have the* energy *they need for learning more about it and making it a part of their live. Without the energy for learning, nothing significant happens.*



Southwestern Oregon Community College Learning-Centered Instruction

• Learning How to Learn. In the course of their studies, students can also learn something about the process of learning itself. They may be learning how to be a better student, how to engage in a particular kind of inquiry (such as the scientific method), or how to become a self-directing learning. All these constitute important forms of learning how to learn. *This kind of learning enables students to* continue *learning in the future and to do so with* greater effectiveness.

Learning-centered Planning

Learning-centered literature suggests implications for course and curriculum planning. This literature gives busy faculty a sense of the landscape of learning-centered instruction and offer principles that can guide decision making about courses and curricula.

- 1. Assess students' prior knowledge and skills to avoid unfounded assumptions about what they know about the subject matter being studied. Sometimes students know more than we think they do. Sometimes they hold profound misconceptions about the content. The only way to know what student bring to a course is to collect information from them that reveals their current levels of knowledge and understanding. That information can prevent many course and curricula planning errors.
- 2. **Don't assume that students know how to learn.** We can debate at length whether they should come to college knowing how to learn, but it's a mistake to plan a course assuming they do. Students must be introduced to appropriate learning strategies and made aware of the strategies that they use, especially if they are using approaches that do not expedite acquisition of the content in this course.
- 3. Acknowledge that learning, motivation, and engagement are affected by attitudes and emotions. What students believe about themselves as learners matters. If they don't believe that they can learn some kinds of content, it will affect their motivation and performance in class. Teachers must discover and address attitudes that hinder learning. Ignoring the role of attitudes and emotions in course planning will likely compromise learning outcomes.
- 4. **Design academic plans that connect students' personal and academic goals to enhance motivation and engagement.** Students need to see how what they are being asked to learn is relevant to their goals and future plans. Teachers can address students' goals in course planning only if they have discovered what those goals are. Knowing what students care about and where they are headed makes it possible to design courses that connect with students more and effectively engage then in learning.
- 5. Recognize that students with different beliefs about knowledge have different expectations of their instructors and different attitudes toward learning activities. Students are diverse. They bring different cultural backgrounds to the learning table. They should be encouraged to take responsibility for their learning by examining their views about education and considering how those views influence their learning experiences. Again, knowing what students believe and expect makes it easier to plan meaningful learning experiences.
- 6. **Treat students as apprentices who need assistance in learning the language, ways of thinking, and inquiry methods of academic fields.** Students don't come to our field knowing how knowledge there is organized or advanced. That must be taught explicitly, and students must be given the opportunity to make connections between course content and their own experiences and prior understandings.



- 7. **Promote development of complex views of knowledge and recognize that students are at different stages of epistemological development.** Lattuca and Stark explain "Challenge students to apply integrate, evaluate, and construct knowledge by engaging them in collaborative, complex problem-solving activities." Students should not just be knowledge consumers.
- 8. Learn about learning and discuss with colleagues how knowledge about student learning can be put to use in courses and programs. The abilities of students should be viewed as malleable. They are not fixed and unchanging. Different abilities can be trapped in different courses and by different curricula.

Learning-centered Relevance

Students frequently wonder and sometimes ask, "Why are we doing this? Why do I need to know this? Why are we spending so much time on this? Why do we have to do this busywork?"

When students don't see the connection between the content and activities of the course and their future lives, they question what's happening and what we ask them to do. Research confirms that perceived relevance is a critical factor in maintaining student interest and motivation in learning-centered instruction. It also contributes to higher student ratings on course evaluations.

Three straightforward practices can help faculty establish the relevance of course content and activities: faculty should

- Regularly share and discuss the learning outcomes of the course;
- Clearly tie those learning outcomes to the required activities and assignments; and
- Orient students at the beginning of each class period by asking the "What, Why, and How" of that day.

Learning outcomes—in the syllabus and during class discussions. Clear learning outcomes are the foundation of a learned-centered syllabus and a basic tenant of all instructional design. Outcomes help clarify what students will know and do when they complete the course. Moreover, faculty should do more than just list the learning outcomes. They should also clearly and frequently discuss the relevance of the outcomes with students. Students need to know why the knowledge and skills identified in the learning outcomes are important in their future lives.

Link assignment descriptions and learning outcomes. Most faculty do not regularly tie the assignments described in the syllabus to the learning outcomes. Faculty may think that the links are obvious to students, but that's not always a valid assumption. Every assignment should be clearly defined in terms of how it should be done, and each assignment should be clearly justified by answering questions such as, "How does this assignment relate to the course outcomes? How will this assignment fulfill them? What should the student be able to know or do better after completing the assignment? Why was this assignment chosen to achieve the learning outcomes?" When students understand what the assignments are helping them accomplish, they see the assignments' utility and find the work more meaningful.

Establish relevance at the start of every class period. Some faculty members present an outline of the day's material on the board or in a PowerPoint. This is a useful practice that can aid student note taking, but students are even more motivated when the day's content and activities are placed in the context of the course and their lives.



Kicking off class with a simple orientation that answers three questions—What? Why? and How?—can get students on track, motivate them, and help them put the day's content and activities into context.

- What? What are we doing in class today? What questions will we try to answer? What concepts will we address? What questions will we answer? What activities will we do?
- **Why?** Why are we studying this? How are today's content and activities tied to the course learning outcomes? What should I know or be able to do after today's class? How can the information and skills be used in everyday life?
- **How?** How are we going to address the content? Will we use lectures? Activities? Discussions? How will different learning styles be accommodated?

When students understand clearly the value, purpose, and procedures for course activities and the logic by which teachers arrived at their design, they are more likely to see the value of what they are being asked to learn and, consequently will participate more fully in the course.