

Teaching Strategy

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1. Teaching Methods

Teaching, in general, is facilitating students to learn. Moreover, student-centred teaching learning reassures the learning responsibilities of the students. The level and context of education are also described earlier as these are in the scope of this book. It is now safe to define teaching methods with this narrow focus. Teaching methods are the ways of facilitating the students to learn. Teachers are responsible for creating the learning environment by utilizing existing facilities. Facilities include the varieties of resources from tangible classrooms, whiteboards, furniture, lab equipment etc. to intangible web resources. Teachers decide the appropriate teaching method(s) to be selected for the students by using effective resources. Choosing the right teaching method(s) for a course depends on a number of dynamics: subject, course type, program level, class size, teaching-learning mode, etc. Eventually, there are many teaching methods applicable to higher education levels worldwide. However, the oldest and still most widely used teaching method is lecturing or direct teaching. Some common methods are mentioned below as a reference.

Lecture method: This is, sometimes called Direct teaching, a one-way and teacher-centred teaching while the teacher delivers lectures and students listen. The major emphasis is on the presentation of the subject content. Teacher's skill is the most important driving force for effective learning by this method.

Demonstration: Teachers give not only lectures but also a demo of the topic by showing the 'things' to the students. Students get a better understanding about the theoretical knowledge as they see what happens through the teacher's demonstration activities. The teacher can use various teaching aids like models, blackboard, graphs, multimedia presentations etc. during the demonstration.

Kinesthetic: This is, sometimes called Hands-on teaching, based on the idea of requiring students to do, make, or create. Students perform physical activities rather than listen to lectures or watch demonstrations. Hands-on experiences, drawing, role-play, building, and the use of drama and sports are examples of kinesthetic activities.

Project based: This is, sometimes called Expeditionary teaching, based on the ideas of a form of project-based learning in which students go on expeditions and engage in in-depth study of topics that impact their schools and communities. This method includes multiple content areas so that the students can see how problem-solving can happen in the real world. This approach is especially suitable for collaborative learning.

Problem based solving: This is, sometimes called Inquiry-based teaching, based on student's investigation and hands-on projects started with or focusing on a real-life problem. Teachers encourage students to ask questions and consider what they want to know about the problem. Students then research their questions, find information and sources that explain key concepts and solve the hurdles they may encounter along the way. Findings might be presented as self-made videos, websites, or formal presentations of research results.

Flipped classroom: In this teaching structure, students watch pre-recorded lessons at home and complete assignments in class, as opposed to hearing lectures in class and doing homework at home. Students come to the classes prepared with the topic(s) shared earlier and ask questions during class time for better understanding and further knowledge. Teachers who implement the flipped classroom method share the study materials with the students before the actual class. They may film their own instructional videos or share relevant videos from online sources.

Game based: This teaching approach creates a learning environment where students work on quests to accomplish a specific learning objective by choosing actions and experimenting along the way. As students make certain progress or achievements, they can earn badges and experience points, just like they would get the same in their favourite video games. Teachers usually need to spend a longer time planning the game. However, different software applications are available to help manage the situation in the process of implementing this method.

Simulation: This is basically an advancement of demonstration with technological support and a facility of game-based approach. Demonstration of a particular action is digitally presented through computer programs. At the same time, students can take part by changing the parameter values in the program to see the changes in actions. Lab courses on science subjects are especially suitable for this method of simulation.

Technology is a vital part of education as like as it is in every other walk of life. The use of technology and the teacher-centred or student-centred positions are two vital dimensions for comparing the teaching methods discussed here. Figure 1 shows the comparative positions of teaching methods on the two-dimensional board with technology and teacher-student focus.

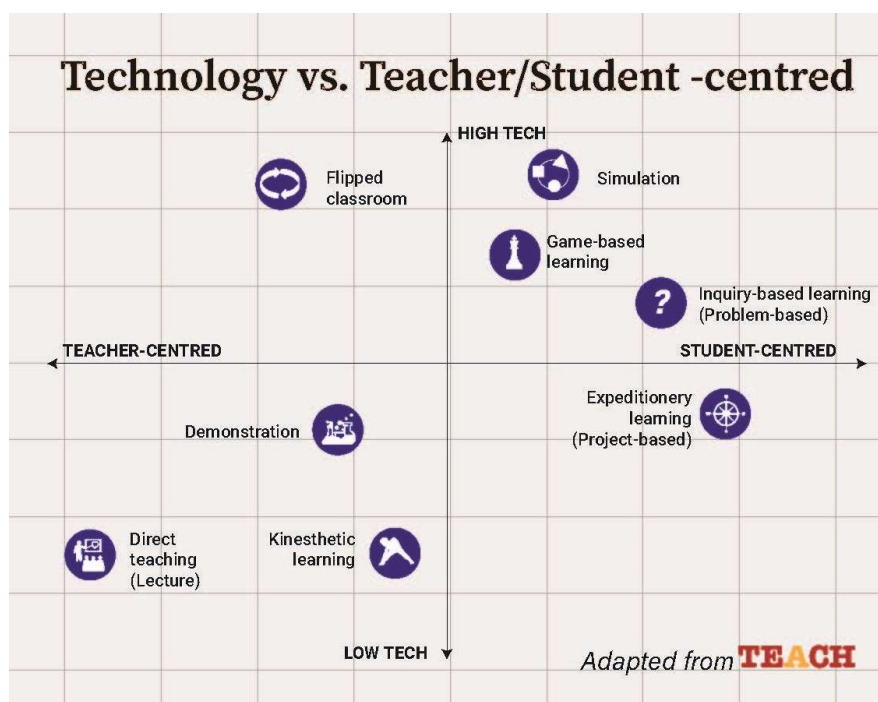
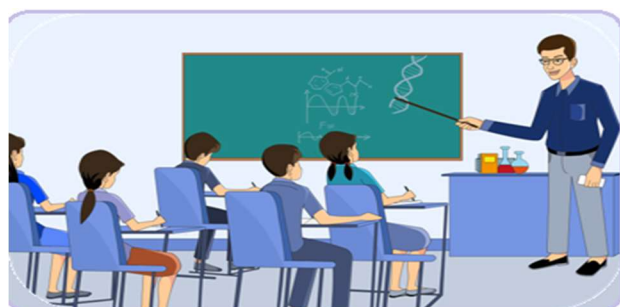


Figure 1 Teaching methods by two dimensions of technology and teacher/student

More often, we generalise that the student-centred approach of teaching-learning is better than that in the teacher-centred approach. As a matter of fact, it is not. The Lecture method can be equally effective for better learning compared to that in the student-centred approach when the teacher is well-prepared and accepted by the students. In the other point of view, a student-centred approach may fail if the teacher's supervision is not appropriate. Sketch 1 shows the effective teaching-learning environments both in teacher-centred and student-centred approaches. The first one is a good example of the lecture method where the teacher is well trained, experienced and equipped with teaching aids having satisfactory speaking abilities. The second one is another good example of active learning where students are willing to learn and take part in the process.



The teacher is well trained and experienced having good qualities of conducting a lecture method for ensuring effective learning in a class. Lecture method fosters effective learning when the method is deliberately organized and conducted properly.

The students learn by themselves in the active learning approach. They quest, discern, participate, share and discuss to come to a conclusion. That is how they learn. Teacher facilitates the learning.



Sketch 1: Good examples of teacher-centred and student-centred teaching-learning

2. Relevant Terminologies

Some more terminologies in teaching-learning are relevant to discuss here. These are not actually teaching methods. Rather, these are the types or characteristics of teaching methods. For example, Interactive Learning is not a teaching method, but rather a characteristic of the teaching method. Every teaching method should be interactive.

Interactive Learning: Students sufficiently and meaningfully interact with the teacher and other students inside the class. Sharing knowledge among learners in various forms and attributes is the main strength of successful learning. Some teaching methods are interactive by their design; others need to be interactive by the teacher's intervention. It depends on the teacher's self-efficacy. Some methods, lecturing as an example, are very hard to make interactive. The interactive teaching approach drags the method from teacher-centred towards students-centred.

Active Learning: Students learn because they want to. A teacher helps create the environment for the students to be active in learning. Active learning can be ensured in any teaching methods discussed earlier. Again, it makes the method more student-centred by nature. But the students are the deciding factor here. The teacher makes or modifies the subject contents to meet the needs and desires of students. An appropriate teaching plan is also prepared accordingly by ensuring active learning.

Blended Learning: This is often insufficiently described as a blend of face-to-face (F2F) and online teaching environments. F2F and online teaching are blended not for the sake of only being blended. The goal of the approach has to be more worthy than either of the individual methods. The teacher deliberately plans for an effective mixture of F2F and online teaching to ensure better learning for students. Blended learning must be designed in a way that ensures better learning of the students than that in either F2F or online teaching settings. Teaching-learning activities are suitably divided into two groups so that the students learn better and learn actively.

Universal Design for Learning: All students get equal opportunity to succeed with the Universal Design for Learning (UDL) approach to teaching and learning. UDL may sound like finding one way to teach all students. But UDL actually takes the opposite approach. The goal of UDL is to use a variety of teaching methods to remove any barriers to learning. It's about building flexibility to adjust the learning process for every person's strength and need.