

# CONSTRUCTIVISM & STUDENT CENTERED LEARNING

## 2. STUDENT-CENTERED LEARNING: THEORIES & PRACTICES

### 2.1 Background Information: Student-Centered Learning

Student-centered learning, also called child-centered learning, is an approach of education focusing on the interests of the students, rather than those of others involved in the educational process, such as teachers and administrators. This approach has many implications for the design of the curriculum, course content and interactivity of courses. Student-centered learning, or putting students' interests first, is in contrast to traditional education. Student-centered learning is focused on each student's interests, abilities, and learning styles, placing the teacher as a facilitator of learning. This classroom teaching method acknowledges student voice as central to the learning experience for every learner, and differs from many other learning methodologies. In a student-centered classroom, students choose what they will learn, how they will learn, and how they will assess their own learning. Teacher-centered learning has the teacher at its center in an active role and students in a passive, receptive role. In a teacher-centered classroom, teachers choose what the students will learn, how the students will learn, and how the students will be assessed on their learning. Student-centered learning requires students to be active, responsible participants in their own learning.

In traditional education methodologies, teachers direct the learning process and students assume a receptive role in their education. Some claim that traditional education ignores or suppresses learner responsibility. With the advent of progressive education in the 19th century, and the influence of psychologists, some educators have largely replaced traditional curriculum approaches with hands-on activities and group work, in which a child determines on their own what they want to do in class. Primary among these changes is the premise that students actively construct their own learning. Theorists like John Dewey, Jean Piaget, and Lev Vygotsky, whose collective work focused on how students learn, is primarily responsible for the move to student-centered learning. Carl Rogers' ideas about the formation of the individual also contributed to the growth of student-centered learning. Again, student-centered learning means inverting the traditional teacher-centered understanding of the learning process and putting students at the center of the learning process. Maria Montessori was also an influence in center based

learning, where preschool children learn through independent self-directed interaction with previously presented activities.

Student-centered learning allows students to actively participate in discovery learning processes from an autonomous viewpoint. Students spend the entire class time constructing a new understanding of the material being learned in a proactive way. A variety of hands-on activities are administered in order to promote successful learning. Unique, yet distinctive learning styles are encouraged in a student-centered classroom, and provide students with varied tools, such as learning conscious methodologies, creating a better environment for students to learn. With the use of valuable learning skills, students are capable of achieving lifelong learning goals, which can further enhance student motivation in the classroom. Self-determination theory focuses on the degree to which an individual's behavior is self-motivated and self-determined. Therefore, when students are given the opportunity to gauge their learning, learning becomes an incentive. In being active agents in their learning, students corroborate Carl Rogers' theory that the only learning which significantly influences behavior and education is self-discovered. Because learning can be seen as a form of personal growth, students are encouraged to utilize self-regulation practices in order to reflect on his or her work. For that reason, learning can also be constructive in the sense that the student is in full control of his or her learning.

## **2.2. Changing Roles & Self-Directed Learning**

Such emphasis on learning has enabled students to take a self-directed alternative to learning. In the teacher-centered classroom, teachers are the primary source for knowledge. Therefore, the focus of learning is to gain information as it is proctored to the student, providing rationale as to why rote learning or memorization of teacher notes or lectures was the norm a few decades ago. On the other hand, student-centered classrooms are now the norm where active learning is strongly encouraged. Students are now researching material pertinent to the success of their academia and knowledge production is seen as a standard. In order for a teacher to facilitate a student-centered classroom, he or she must become aware of the diverse backgrounds of his or her learners. To that end, the incorporation of a few educational practices such as Bloom's Taxonomy and Gardner's Theory of Multiple intelligences can be beneficial to a student-centered classroom because it promotes various modes of diverse learning styles, thereby accommodating the

varied learning styles of students. The following provides a few examples of why student-centered learning should be integrated into the curriculum:

- Strengthens student motivation
- Promotes peer communication
- Reduces disruptive behavior
- Builds student-teacher relationships
- Promotes discovery/active learning
- Responsibility for one's own learning

These changes have impacted educator's methods of teaching and the way students learn. In essence, one might say that we teach and learn in a constructivist-learning paradigm. It is important for teachers to acknowledge the increasing role and function of his or her educational practices to work within their own biases, and create a student-centered environment. As educational practices evolve, so does the approach to teaching and learning. The mindset about teaching and learning is constantly evolving into new and innovative ways to reach diverse learners, and is impacted by new research and inquiry such the dialogue on multiple intelligences. When a teacher allows their students to make inquiries or even set the stage for his or her academic success, learning becomes more productive.

### **2.3 Teacher Facilitators**

A further distinction from a teacher-centered classroom to that of a student-centered classroom is when the teacher acts as a facilitator, as opposed to instructor. Over the past few decades, a paradigm shift in curriculum has occurred where the teacher acts as a facilitator in a student-centered classroom. In essence, the teacher's goal in the learning process is to guide students into making new interpretations of the learning material, thereby experiencing content, reaffirming Rogers' notion that significant learning is acquired through doing. In terms of curriculum practice, the student has the choice in what they want to study and how they are going to apply their newfound knowledge. Student learning processes are greatly enhanced when they participate in deciding how they may demonstrate their competence in a body of knowledge or the performance of skills. This pedagogical implication enables the student to establish his or her unique learning objectives, and mate them to their specific learning biases and needs. This aspect of learning holds the learner accountable for production of knowledge that he or

she is capable of producing. In this stage of learning, the teacher evaluates the learner by providing honest and timely feedback on individual progress. Building a rapport with students is an essential strategy that educators should utilize in order to gauge student growth in a student-centered classroom. Through effective communication skills, the teacher is able to address student needs, interests, and overall engagement in the learning material, creating a feedback loop that encourages self-discovery and education. According to some, there are three basic principles of democratic living, which are not yet established in our society in terms of education. The three basic tenets, which are called the 3S's of teaching for democratic living, are:

- Subject Learning: Students learn best from subject matter thoughtfully presented.
- Self-Learning: One must engage oneself in the generative process.
- Social Learning: Empathy is wealth in this regard, social interaction with diverse others the target for generosity.

Through peer-to-peer interaction, collaborative thinking can lead to an abundance of knowledge. In placing a teacher closer to a peer level, knowledge and learning is enhanced, benefitting the student and classroom overall. According to Lev Vygotsky's Zone of Proximal Development (ZPD), students typically learn vicariously through one another. Through a sociocultural perspective on learning, scaffolding is important when fostering independent thinking skills. Vygotsky proclaimed that learning which is oriented toward developmental levels that have already been reached is ineffective from the viewpoint of the child's overall development. It does not aim for a new stage of the developmental process, but rather lags behind this process. In essence, instruction is designed to access a developmental level that is measurable to the student's current stage in development. In teacher-directed instruction:

- Students work to achieve curricular objectives to become critical thinkers
- Students finish activities designed by the teacher to achieve academic success
- Students respond to positive expectations by the teacher as they progress
- Students are given extrinsic motivators like grades/rewards which motivates them to internalize information and objectively demonstrates their understanding of concepts
- Student work is evaluated by the teacher

A teacher-directed approach to learning recognizes that children require achievable expectations and that students must have a solid foundation before learning a new concept. For example, in order to learn multiplication properly, a student must understand repeated addition and grouping. This process cannot be discovered by most students without the direction of a teacher. To implement a student-centered learning environment, attention must be given to the following aspects of learning:

- What the child is curious about learning
- Teaching strategies to accommodate individual needs: intellectual, emotional
- Student's social needs: collaboration, communication, peer approval
- Overall curriculum goals

Because the focus is on individual students rather than whole class structures, teachers often offer choices and adaptations within lessons, which empowers student growth. This is a role teachers must be comfortable with if they are to implement a student-centered learning environment. To be considered a student-centered learning environment it has to be open, dynamic, trusting, respectful, and promote children's subjective as well as objective learning styles. Students may collaborate in hands-on problems and draw their own conclusions, or develop their own learning based on self-direction. This experiential learning involves the whole child, their emotions, thoughts, social skills, and intuition. The result of student-centered learning is a person who arguably develops self-confidence and critical thinking.

## **2.4 The Role of Assessments & Higher Education**

One of the most critical differences between student-centered learning and teacher-centered learning is in assessment. In student-centered learning, students participate in the evaluation of their learning. This means that students are involved in deciding how to demonstrate their learning. Developing assessments that supports learning and motivation is essential to the success of student-centered approaches. One of the main reasons teachers resist student-centered learning is the view of assessments as problematic in practice. Since teacher-assigned grades are so tightly woven into the fabric of schools, expected by students, parents and administrators alike, allowing students to participate in assessments can be somewhat contentious.

Additionally, the student-centered learning environment has been shown to be effective in higher education. A certain university sought to promote student-centered learning across the entire university by employing the following methods:

- Analysis of good practice by award-winning teachers, in all faculties, to show that, they made use of active forms of student learning.
- Subsequent use the analysis to promote wider use of good practice.
- A compulsory teacher training course for new junior teachers, which encouraged student-centered learning.
- Projects funded through teaching development grants concerned with the introduction of active learning experiences.
- A program level quality enhancement initiative which utilized a student survey to identify strengths and potential areas for improvement.
- Development of a model of a broadly based teaching and learning environment influencing the development of generic capabilities, to provide evidence of the need for an interactive learning environment.
- The introduction of program reviews as a quality assurance measure.

The success of this initiative was evaluated by surveying the students. After two years the mean ratings indicating the students' perception of the quality of the teaching and learning environment at the university all rose significantly. The success of the initiative at the university in this study indicates that by adapting a more student-oriented approach to education, the students will enjoy a more positive learning experience which will likely help them develop greater passion for learning and lead to more success in their learning endeavors. As well, this approach involves students in their overall education, creating a proactive involvement in learning.