The Nature of Educational Reform and Change: From Teacher-centered to Student-centered learning

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ABSTRACT

In the past, Indian educational system depends on didactic approach in teaching and learning that based on teachers' instructions. However, in the era of globalization, educational system nowadays are progressing with regards to approach of teaching and learning at every level towards a more active and constructive education. This article examines traditional teaching approach paradigm which is teacher-centered and a new paradigm which is student-centered, in the context of Indian educational system, viewing from an Indian educational perspective. It finds that this new paradigm could develop more active learners who have acquired the skills of problem-solving, independent thinking, and autonomous learning.

Keywords: Educational reform, teacher-centred, learner-centred, teaching style, learning

In this modern era of 21st century, the infusion of technology into teaching and learning has a remarkable influence on the instructional strategies of the educational institutions. The traditional teacher-centric method which has been going on for decades has now been modified and enhanced, owing to technology. In contrast to the traditional methods, the modern

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learning environments, students play an active role in their learning process and determine how to reach their desired learning outcomes on their own.

This student-centered approach empowers students to build up their knowledge and enables them to think critically, work in teams and solve problems collectively. Students are always enthusiastic and demonstrate positive attitudes towards the student-centered learning environment.

The student-centered learning approach is constructivist in nature it enables students to visualize a problem with multiple perspectives and allows them to participate in their own learning process. Students are now challenged to develop skills in problem-solving and to

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exercise analytical, critical and creative thinking in their work and are encouraged to learn more about their subjects. The role of the teacher now alters to being a facilitator and a consultant to the students, supporting them throughout their learning process, rather than just being a dictator in the entire process.

What is meant by Student-centred Learning (SCL)?

A variety of phrases have been coined to describe a critical shift in mission and purpose of higher education. Barr and Tagg (1995) expressed the change as a move from an—"Instruction Paradigm" in which universities delivered instruction to "transfer knowledge from faculty to students" to a "Learning Paradigm" in which universities produce learning through student discovery and construction of knowledge.

Huba and Freed (2000) used the phrase learningcentred assessment to emphasize transition in the focus of instruction and assessment from teaching to learning.

The following description of student-centred instruction provides another starting point for conversations about student-centred learning:

Student-centred instruction [SCI] is an instructional approach in which students influence the content, activities, materials, and pace of learning. This learning model places the student (learner) in the center of the learning process. The instructor provides students with opportunities to learn independently and from one another and coaches them in the skills they need to do so effectively. The SCI approach includes such techniques as substituting active learning experiences for lectures, assigning open-ended problems and problems requiring critical or creative thinking that cannot be solved by following text examples, involving students in simulations and role plays, and using self-paced and/or cooperative (teambased) learning. Properly implemented SCI can lead to increased motivation to learn, greater retention of knowledge, deeper understanding, and more positive attitudes towards the subject being taught (Collins & O'Brien, 2003).

For teachers who wish to create a more student-centered environment, things are not always easy, since creating such an environment is an intensive process which requires a lot of consideration and knowledge. First of all, they need to come out of the practice of being the 'sage on the stage', and also the students who are not used to being active participants in their learning need a good deal of adjustment. Technology can help pave the way for both teachers and students, but it certainly requires a teacher who is adept at creating a course that raises the pedagogical benefits of that technology has towards helping students meet the desired learning outcomes. A roadmap needs to be followed for matching technological tools to learning outcomes, so that technology can be used to get students to interact with course content in an engaging and productive fashion.

Here are some of the ways in which technology can help facilitate a student-centered classroom

- Empower the learner: Interactive online assignments can help students assess their learning themselves, counter their drawbacks, improve and be responsible for their own learning. Online assignments also give students opportunities to practice mastering the study material at their own pace. Teachers are not physically present while the students tackle their assignments, but their help could be sought online or afterwards, whenever students feel the need for it. The technologies that support these activities could include wikis, online quizzes, blogs and discussion boards.
- □ Organize activities: A structured and logical flow for the courses is always appreciated by students as well as teachers. If you can organize your activities well, then any kind of confusion can be avoided. Organization simplifies the workflow and approach towards learning; it eases out tasks in a systematic way. The technologies that support how you organize and communicate course materials could include an online syllabus, the learning management system and email or mobile notifications of important due dates.
- □ Adopt technological tools in the classroom to teach: When a teacher adopts technology in the classroom to aid him in teaching, he is able to create learning experiences that complement

each other whether the students are learning online or are present in the classroom physically. This helps teachers to optimize their time, efforts and resources and focus more on guiding students, rather than doing all the intensive preparations and arrangements for teaching. The technologies that support this goal include online homework, clickers and surveys.

- Making the student responsible for his own learning: Teachers should create such courses that allow students to practice building connections with the material and proceed at their own pace. Rather than trying to match up with the learning style of the fellow students of his class, now the student can comfortably practice and develop his skills in his own learning style, which is any day more beneficial for the student in the long run. The technologies that can be used to help students take responsibility of their learning include blogs, wikis, online quizzes, and Voice Thread.
- Subjecting students to regular evaluation: Evaluation certainly fosters learning and is a necessity in the process of learning. Teachers can use a variety of lowstakes grading opportunities, such as online quizzes and games. The incorporation of motivator elements like online badges and medals keep the students encouraged to learn and succeed. There are numerous technologies that can help students track their progress, including online quiz banks and online platforms that enable collaboration and peer review.

Students in technology-supported classrooms are armed with powerful tools to help them gather information, consult with fellow students or teachers and present their findings. Their confidence increases as they rely less on their teacher and more on their own initiative for knowledge-creation. Technology enables students to manipulate information in a manner that accelerates both understanding and the progression of higherorder thinking skills. As a result, students gather more real-world data, share their findings with learners beyond their school, and publish their findings to the world; their role broadens from being mere learners and knowledge seekers to being creators of their own work. For teachers, technology amplifies the resources they can offer to their students. Rather than relying on the textbook for content, computers can provide online access to content experts and up-to-date information from original sources.

Although it is undeniable that integrating technology takes a fair amount of upfront time in terms of getting past the learning curve and choosing the correct technology to support each learning objective, the result is the creation of a more engaged classroom and improved student learning. I would encourage teachers and students to come out of the traditional classrooms, incorporate technology with education and accept the fact that learning, rather than being just a practice is an active responsibility of the learners and teachers with the help of technology should assist students to have a successful education.

Teacher-Centered vs. Learner-Centered Teaching Style

Learner centered" is the perspective which focuses on the learners' experiences, perspectives, back grounds, talents, interests, capacities, and needs.

It creates a learning environment conducive to learning and promotes the highest levels of motivation, learning, and achievement for all learners.

Weimer (2002) proposed five areas that needed to change in order to achieve learner-centered teaching. These areas are: the choice of content, the instructor's role, responsibility for learning, the process of assessment, and the power relationship between teacher and Learners. Students needed to have ownership of their own learning, contribute to the design of curriculum, and the responsibility for some levels for instruction.

Similarly, Bain (2004) identified several traits of instructors who employ learner-centered instruction. Among these characteristics are that instructors touch the lives of theirs students, they place a strong emphasis on student learning and outcomes by using varied forms of assessment, and the effect on career goals.

Huba and Freed (2000) described teacher-centered learning as: students passively receive information,

emphasis is on acquisition of knowledge, and teacher's role is to be primary information giver and primary and evaluator. There is no room for student's personal growth. Liu, Qiao and Liu (2006) reports that while learner-centered language teaching has been advocated in higher education in recent years, teacher-centered teaching styles may be still dominant in actual practice. Results of their study show that most instructors still use traditional, teacher-centered styles in university settings despite the call for a paradigm shift to learnercentered ones.

Brown (2008) claimed that student-centered learning approach gives students ownership over their learning and helps them make necessary decisions and value judgments about the relevance of the content and the methods of teaching to their own lives and interests. Wolk (2010) also reports that in student-centered learning, Students play a significant role in designing their own curriculums. The teacher plays the role of a facilitator or guide who helps students achieve their goals. In their article Ng and Lai (2012) presented an exploratory study that examined whether a wiki-based project could foster student-centered learning. They concluded that wiki can facilitate student-centered activities. The article by Hannum and McCombs (2008) describe how Learner-Centered Psychological Principles (LCPs) can be used to define not only new design principles for distance learning but also a new educational paradigm.

Saulnier, Landry, and Wagner (2008) concluded in their study that learner-centered approach contributed to the construction of educational activities and provided for greater student learning and a more authentic student assessment. Findings of Walsh and Vandiver (2007) study indicated that students performed better academically because they had a say in what they learned, and the teachers only acted as facilitators in order to allow the students to learn actively. Wohlfarth, and *et al.* (2008) examined the idea that the learner-centered.

Paradigm departs from traditional teaching models by focusing on students more than teachers and learning more than teaching. Graduate students in learnercentered classrooms were surveyed about perceptions of their experiences in relation to the key dimensions of the learner-centered paradigm and noted that the approach contributed to their feeling respected as learners, developed their critical thinking skills, and encouraged their self-directedness. The overall findings, graduate students in learning-centered classrooms agreed that their classroom experiences were indeed learner-centered, as described by Weimer (2002). Furthermore, qualitative data collected, in the form of student quotes, strongly supported the move to a learner-centered paradigm as a positive shift. From the review of literature, the present study attempted to identify the teaching style of education instructors at a Midwestern University in the U.S.

Comparison of Teacher-centered and Learner-centered paradigms (Learner-Centered Assessment on College Campuses by Huba and Freed 2000)		
Teacher-Centered Paradigm	Learner-Centered Paradigm	
Knowledge is transmitted from professor to students	Students construct knowledge through gathering and synthesizing information and integrating it with the general skills of inquiry, communication, critical thinking, problem solving and so on	
Students passively receive information	Students are actively involved	
Emphasis is on acquisition of knowledge outside the context in which it will be used	Emphasis is on using and communicating knowledge effectively to address enduring and emerging issues and problems in real-life contexts	
Professor's role is to be primary information giver and primary evaluator	Professor's role is to coach and facilitate Professor and students evaluate learning together	

Teacher-centered vs. Learner-centered paradigms Comparison

Teaching and assessing are separate	Teaching and assessing are intertwined
Assessment is used to monitor learning	Assessment is used to promote and diagnose learning
Emphasis is on right answers	Emphasis is on generating better questions and learning from errors
Desired learning is assessed indirectly through the use of objectively scored tests	Desired learning is assessed directly through papers, projects, performances, portfolios, and the like
Focus is on a single discipline	Approach is compatible with interdisciplinary investigation
Culture is competitive and individualistic	Culture is cooperative, collaborative, and supportive
Only students are viewed as learners	Professor and students learn together

Teacher-centered vs. Learner-centered paradigms

Teaching-Centered versus Learning-Centered instruction (Assessing Academic Programs in Higher Education by Allen 2004)		
Concept	Teacher-Centered	Learner-Centered
 Teaching goals 	Cover the discipline	 Students learn: How to use the discipline
		 How to integrate disciplines to solve complex problems
		 An array of core learning objectives, such as communication and information literacy skills
 Organization of the curriculum 	Courses in catalog	 Cohesive program with systematically created opportunities to synthesize, practice, and develop increasingly complex ideas, skills, and values
Organization of the curriculum	Courses in catalog	 Cohesive program with systematically created opportunities to synthesize, practice, and develop increasingly complex ideas, skills, and values Course structure
		Faculty cover topics
		 Students master learning objectives

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How students learn	▶ Listening	 Students construct
	► Reading	knowledge by integrating new learning into what
	 Independent learning, often in competition for grades 	they already know
	in competition for grades	 Learning is viewed as a cognitive and social act
 Pedagogy 	 Based on delivery of information 	 Based on engagement of students
Course delivery	Lecture	Active learning
	 Assignments and exams for summative purposes 	 Assignments for formative purposes
		Collaborative learning
		 Community service learning
		Cooperative learning
		 Online, asynchronous, self- directed learning
		 Problem-based learning
Course grading	 Faculty as gatekeepers Normal distribution expected 	 Grades indicate mastery of learning objectives
Faculty role	Sage on the stage	 Designer of learning environments
Effective teaching	well and those who can	 Engage students in their learning
	will learn	 Help all students master learning objectives
		 Use classroom assessment to improve courses
		 Use program assessment to improve programs

Conclusion

In order to Vision 2020, India needs active learners who have acquired the skills of problem-solving, independent thinking, and autonomous learning, as well as the ability to work cooperatively. Therefore, teaching methods and educational goals have to be directed at producing individuals who have faith in their abilities and who will work at developing their capabilities throughout their lives. Education should prepare individuals to cope with changes rather than become dependent on habits. In other words, education for the future should place emphasis on developing creative and thinking minds.

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