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Student Centered Instruction for Interactive and Effective Teaching Learning: Perceptions of Teachers in Bangladesh

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Abstract
This study is to assess the perceptions of the teachers on student centered instruction for interactive and effective teaching and learning. It also focuses the importance of student centered instruction for interactive and effective learning in context of Bangladesh. In the traditional approach to teaching, most of the class time is spent with the teacher lecturing and the student watching, listening and taking notes. Most of the time students work individually on tasks and assignments, and group work or collaborative learning is hardly encouraged. Traditionally instructors focus on what they are going to do in the class, what should be the teaching method and topics; not on what the students are actually learning and interested in. This emphasis on the instructor often leads the students to remain as passive learners and students do not take responsibility for their own learning. However, through this investigation the perceptions of the teachers regarding effective and active student learning have been found and therefore few recommendations have been suggested. In the end teachers also agreed that student centered instruction will improve the ability of the students to learn the content and they have to prepare differently for the class.

Keywords
Student Centered Instruction, Interactive Teaching Learning, Effective Teaching-Learning, Student Centered Teaching Method, Importance of Student Centered Instruction.

Introduction

In traditional education methodologies, teachers direct the learning process and students assume a receptive role in their education. Armstrong (2012) claimed that "traditional education ignores or suppresses learner responsibility". At present educators have largely agreed to replace traditional curriculum approaches with "hands-on" activities and "group work", in which learners determines on their own what they want to do in class. Student centered instruction is in contrast to traditional education system, by focusing on each student's interests, abilities, and learning styles, placing the teacher as a facilitator of learning. This classroom instruction method acknowledges students' role in the center of the teaching learning 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 instruction has the teacher at its center in an active role and students in a passive 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 instruction requires students to be active, responsible participants in their own learning.

John Dewey, Jean Piaget, and Lev Vygotsky, famous theorists have shown in their work focused on how students learn, is primarily responsible for the move to student centered
learning. Student centered instruction means inverting the traditional teacher centered understanding of the learning process and putting students at the center of the learning process.

Student Centered Instruction

Student centered instruction (SCI) is an instructional approach in which students influence the content, activities, materials, and pace of learning. This learning model places the student in the center of the learning process. The instructor provides students with opportunities to learn independently and from one another and coaches the students 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 followingtext examples, involving students in simulations and role plays, and using self-paced and/or cooperative (team-based) 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).

Student centered instruction (also known as learner centered or child centered learning) is an approach to learning which focus mainly on the interests of the students, rather than teachers and administrators. Student centered teaching methods transfer the focus of activity from the teachers to the learners. These methods include active learning, in which students solve problems, answer questions, formulate questions of their own, discuss, explain, debate, or brainstorm during class; cooperative learning, in which students work in teams on problems and projects under conditions that assure both positive interdependence and individual accountability; and inductive teaching and learning, in which students are first presented with challenges and learn the course material in the context of addressing the challenges. Inductive methods include inquiry-based learning, case-based instruction, problem-based learning, project-based learning, discovery learning, and just-in-time teaching.

Importance of Student Centered Instruction

Student centered methods are considered as superior to the traditional teacher centered methods of instruction as it plays more significance in: whether the learning outcome is short-term mastery or long-term retention, or depth of understanding of course, acquisition of critical thinking or creative problem-solving skills. With the use of valuable learning skills, students are capable of achieving lifelong learning goals, which can further enhance student motivation in the classroom. Therefore, when students are given the opportunity to measure their learning, learning becomes an incentive. 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. According to

Ernie Stringer, "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.

Concept of Interactive and Effective Learning

The concept about teaching and learning is constantly changing into new and innovative ways to reach diverse learners, and is impacted by new research and inquiry findings. Research shows that when teacher allows their students to make inquiries or even set the stage for his or her academic success, learning becomes more productive. In a student centered classroom the teacher acts as a facilitator, as opposed to instructor. Building a rapport with students is an essential part of teaching learning so that the teacher could utilize in order to measure students' progress in a classroom.

Interactive learning is a more hands-on, real-world process of relaying information in classrooms. Passive learning relies on listening to teacher's lecture or rote memorization of information, figures, or equations. On the other hand with interactive learning, students are invited to participate in the conversation, through technology or through role-playing group exercises in class. In addition to engaging students who are raised in a hyper-stimulated environment, interactive learning sharpens critical thinking skills, which are fundamental to the development of analytic reasoning. A student who can explore an open-ended question with imagination and logic is learning how to make decisions, as opposed to just recalling memorized information. Through effective communication skills, the teacher is able to address student needs, interests, and overall engagement in the learning process. According to Moore (1989) there are three core types of interaction necessary for quality, effective learning:

i. Learner-learner (communication between and among peers with or without the teachers presence),
ii. Learner-instructor (student teacher communication), and
iii. Learner-content (intellectually interacting with content that results in changes in learners' understanding, perceptions, and cognitive structures).

It is established by different research that students were more successful in developing mathematical skills when taught by cooperative methods which involved peer interaction and relating the principles with other disciplines rather than by traditional teaching methods (Cantone, 2001). Student learning and conceptual understanding were significantly greater when a large upper-division biology class was made more interactive by introducing student participation and cooperative problem-solving into the lectures (Knight & Woods, 2005).

Difference between Student Centered Instruction and Teacher Centered Instruction

Student centered instruction is different than the teacher centered instruction because it focuses on learners. The learners construct the knowledge by active participation and synthesis of knowledge through skills such as problem solving, critical thinking and communication. However, in the old traditional methods of teaching a teacher is the focus of attention. Knowledge is transferred from the teacher to the learners as passive recipient of it. In teacher centered method, teacher works as the information giver and the evaluator of learning where as students role is to receive the information. SCI emphasizes communicating acquired knowledge in real emerging situations and the teacher acts as a coach or a guide to facilitate the process of learning and a partner in the evaluation process with the learner.

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 assessment 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 assessment as problematic in practice.

Benefits of Student Centered Instruction

Student Centered Instruction is found to be effective by many researchers (Lea et al., 2003). This approach of teaching has several benefits to the learners as well as to the teachers. Many researchers assessed the use of Student centered learning in many settings. Kramer et al. (2007) cited in Hamza, R. A., & Al Kharusi, H. (2013) also found similar results when applying learner centered approach for students of occupational therapy. They found that students became more independent in their learning and shown accountability. The students developed their skills in performing in the community and preferred jobs in the community. Although the learners might be slower in the beginning but they will develop better understanding and study skills when using student centered learning (Lonka&Ahola 1995, cited in Hamza, R. A., & Al Kharusi, H. 2013). Learner centered approach is helpful for teachers as well. It helps the teachers by promoting their creativity (Kramer et al., 2007). Student centered learning has shown a change in teaching behavior on subject areas, planning, teaching process, classroom management, communication and evaluation skills in teachers (Kilic, 2010).

Role of Teacher in Student Centered Instruction

Students are the center of an educational system. Their learning experiences guide all their decisions; especially what needs to be done in a situation and how the things should be done. Most of the learning activities of the students are traditionally fixed and carried out by the teacher. Teacher are choosing and organizing the content and learning style and evaluating student learning, while the student roles are mainly on taking and recording the information's and writing it in the answer scripts. Weimer (2002) indicates that, in the student centered classroom the roles of teacher and student of necessity change, so that the teacher changes from the "sage on the stage" to the "guide on the side" who views the students not as empty vessels to be filled with knowledge but as seekers to be guided along their intellectual developmental journey.

According to the traditional method teacher make all the decisions and all the focus remains on teacher. In student centered instruction method students become an inactive part of teachers teaching process. But it has been proven that students learn best when they have the chance to learn it by doing themselves and involving them in the learning activities promotes their learning more sustainable. For example, if teacher could involve students as a part of the lecture and presentation and students have opportunity to learn from each other it will be more effective compare to the traditional method in where they mostly remain inactive. When the students

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respond to the instructor's invitation to give examples, applications and summaries, and they experience learning when they take part in problem-solving sessions it becomes more sustainable. Baxter and Gray (2001) cited in Gloria Brown Wright concurred that for effective learning it is desirable to move toward a model in which students are actively engaged in the learning process. No longer is the student expected to be a passive absorber of information; instead, the teacher acts as a facilitator and does not need to be an expert in the particular content (Tärnvik, 2007).

Teacher should be informed that Student-centred learning is not only about classroom interaction. It has influence on curriculum and syllabus design, and assessment. So it requires a whole change of culture within an institution. Syllabus and curricula should be considered from the point of view of the students' entry knowledge. For this reason, continuous academic and professional development is necessary. Good practice should be identified and brought to teaching and learning. It is also important for the teachers to engage with students in order to discuss and do research how the students perceive their teaching/learning environments. This allows teacher to understand the individuals in front of them, with different personalities, backgrounds, learning styles, values and expectations.

As the focus is on individual students rather than whole class structures in the student centered instruction, teachers often offer choices, which empower students' 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. The result of student centered learning is a person who arguably develops self-confident and critical thinking. In student centered learning; there are some skills that teachers need to develop in order to be effective with student centered approaches. These include: giving useful practical suggestions; constructive feedback; monitoring student work; coping with the unexpected; coping with students with different learning styles; creating their own materials and approaching the community for help.

Objective of the Study

The main objective of the study is to find out the perceptions of teachers in Bangladesh regarding student centered instruction for interactive and effective teaching learning at secondary school level.

Methodology

The methodology of the study is described through: the sampling design, respondents, tools of data collection and data analysis. These are spelled out in the following sections.

The sampling design

In order to select the sample of schools purposeful sampling procedure has been taken. Lists of schools were collected. Within the schools teachers have been selected following simple random sampling.

Samples of 20 schools have been chosen purposefully from both the capital city and the rural areas of Bangladesh. The numbers of schools have been chosen based on the result criterion and availability of time and financial support.

Respondents

The respondents in this study were teachers from different secondary schools in Bangladesh. They taught math, science and English language courses. Total 100 Teachers have been selected as participant to share their perception on student centered instruction for interactive and effective teaching learning.

Data collection tool

This study used a survey to collect data using a questionnaire that was adopted from a study by Hamza, R. A., & Al Kharusi, H. (2013) to evaluate teachers' perceptions of student centered learning in ministry of health institutes in Oman. The questionnaire was initially tested in a pilot group and wording was changed based on the feedback. The final questionnaire had 18 items to assess the opinion and perception of the teachers regarding the course content, structure, assessment, teaching and learning preferences for student, preparation for class and examination in student centered instruction. 17 questions were measured on 'Likert scale' from 1 to 5 and one question was open ended. The questionnaire was in native language to provide a comfort feeling to the respondents and later it was translated in English with answers. A total of 100 questionnaires were sent to the selected institutes for collecting information from teachers.

Data Analysis

Data were analyzed manually. Data from questionnaire have been presented in both quantitative and narrative form. The quantitative data have been shown in tables in terms of percentages of total response. Tables were formulated and data were interpreted. In analyzing the qualitative data obtained from questionnaire a descriptive approach has been used. Different themes emerged from the data related to teachers' perception on student centered instruction have been identified and data have been analyzed under each theme.

Findings of the study

A total number of 96 teachers were answering the questionnaire. The required evidence and information about perceptions of teachers regarding student centered learning, the effectiveness of student centered instruction for both interactive and effective teaching learning, role of students and teachers in student centered instruction, barriers of student centered instruction and such related things were collected through the questionnaire. The following section shows the perception of teachers on different issues.

Table 1 summarizes the feedback received on the questionnaire from the sample teachers. Around 35% and 42% of the teachers strongly agreed and agreed that student centered instruction will involve the students more into their learning and students ability to learn the content will be improved and increased. They strongly agreed (45.8%) that the students have to prepare differently for the class and that they will have increased opportunities to demonstrate that they had learned the content (28.1%). 52% of the teachers agreed that the student have to study differently for the exams and 41.7% agreed that the environment will be less stressful for learning. More than half of the sample (69.8%) agreed that the students will have increased opportunities to demonstrate mastery of course material. Around 75% of the teachers agreed that SCI will provide adequate feedback to guide their learning throughout the course. The respondents teachers strongly agreed (30.2%) that the students will have more control in determining their overall course grade. 53.1% agreed that the students will have less pressure to

perform well on every exam or assignment and the same number of teachers strongly agreed that the students will be able to focus on learning rather than just getting a good grade on an exam or assignment. Moreover, (53.1%) of the sample agreed and (20.8%) of the sample strongly agreed that assignments and group activities will help the students to understand the contents presented in class more than studying alone.Approximately 42% strongly agreed that the course rules and objectives will be transparent (clearly stated and openly available to students) and will be supporting the students' learning in the course. Nearly half of the sample (44.8%) strongly agreed teachers need to prepare differently for the class in practicing student centered instruction. However, over 80% teachers think that they will face the threat to lose control on students in this approach. At the same time, 22.9% strongly agreed and 54.2% agreed that they are confident to practice student centered instruction rather than traditional instruction approach.

Table 1: Teachers perceptions toward Student Centered Instruction

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Student centered instruction will involve the students more into their learning	35.4%	41.7%	14.6%	8.3%	0%
The students' ability to learn the content presented in class will be improved and increased.	35.4%	41.7%	17.7%	5.2%	0%
The students will have to prepare differently for the class.	45.8%	35.4%	14.6%	4.2%	0%
The students will be provided with increased opportunities to demonstrate that they had learned the content.	28.1%	49.0%	17.7%	5.2%	0%
The students will have to study differently for exams.	24.0%	52.1%	14.6%	9.4%	0%
The students will be in a less stressful learning environment.	17.7%	41.7%	27.1%	13.5%	0%
The students will have increased opportunities to demonstrate mastery of course material.	29.2%	40.6%	21.9%	8.3%	0%
The students will be provided adequate feedback to guide their learning throughout the course by their teacher.	33.3%	41.7%	17.7%	7.3%	0%
The students will have more control in determining their overall course grade.	30.2%	43.8%	22.9%	3.1%	0%
The students will have less pressure to perform well on every exam or assignment.	25.0%	53.1%	12.5%	9.4%	0%
The students will be able to focus on learning rather than just getting a good grade on an exam or assignment.	25.0%	53.1%	13.5%	8.3%	0%
The assignments and group activities will help the students to understand the contents presented in class more than studying alone.	20.8%	53.1%	17.7%	8.3%	0%
Course rules and objectives will be clearly stated and openly available to students.	41.7%	35.4%	13.5%	9.4%	0%
Course rules and objectives will be supporting the students' learning rather than adding pressure.	42.7%	34.4%	16.7%	6.2%	0%
Teachers will have to prepare differently for the class.	44.8%	37.5%	13.5%	4.2%	0%
In this approach teachers will face the threat to lose control on students.	32.3%	50.0%	13.5%	4.2%	0%
Teacher will be more confident to practice student centered instruction rather than traditional approach.	22.9%	54.2%	13.5%	9.4%	0%

Table 2 specifies the mean and the standard deviations of each question.When looking at the teachers' perceptions, the items with the highest level of teachers' agreement (mean +/- SD) are; the students will have to prepare differently for the class (4.23 +/- .852) and teachers will have to prepare differently for the class (4.23 +/- .840).That means, most of the teachers agreed they need to prepare and deliver differently rather than the traditional approach of teaching along with the student in order to have an effective teaching learning through student centered instruction.

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Table 2: The Mean and the Standard Deviation according to each Question

Statements	Mean	Std. Deviation
Student centered instruction will involve the students more into their learning	4.04	.917
The students' ability to learn the content presented in class will be improved and increased.	4.07	.861
The students will have to prepare differently for the class.	4.23	.852
The students will be provided with increased opportunities to demonstrate that they had learned the content.	4.00	.821
The students will have to study differently for exams.	3.91	.872
The students will be in a less stressful learning environment.	3.64	.930
The students will have increased opportunities to demonstrate mastery of course material.	3.91	.919
The students will be provided adequate feedback to guide their learning throughout the course by their teacher.	4.01	.900
The students will have more control in determining their overall course grade.	4.01	.814
The students will have less pressure to perform well on every exam or assignment.	3.94	.868
The students will be able to focus on learning rather than just getting a good grade on an exam or assignment.	3.95	.851
The assignments and group activities will help the students to understand the contents presented in class more than studying alone.	3.86	.841
Course rules and objectives will be clearly stated and openly available to students.	4.09	.963
Course rules and objectives will be supporting the students' learning rather than adding pressure.	4.14	.913
Teachers will have to prepare differently for the class.	4.23	.840
In this approach teachers will face the threat to lose control on students.	4.10	.788
Teacher will be more confident to practice student centered instruction rather than traditional approach.	3.91	.859

Barriers of student centered instruction as perceived by the Teachers

According to the teachers who have responded in this study, informed that there are several barriers of student centered instruction. The barriers they mentioned are mainly coming from students, teachers and resources, curriculum and teaching system aspects. Responses from the participants are presented in below:

Barriers from students' aspects according to the teachers

Teachers who participated in this study thought that, lack of students' learning skills and abilities that will prepare them to take part in student centered instruction. In addition to this, there are so many misperceptions among the students regarding SCI. Students' willingness and motivation to participate in this approach is one of the biggest challenges as they are very much used to the traditional approach. In traditional approach students are more focused on grades and final result, thus it will be difficult for them to adjust with the new system. Few of the respondents feel that, student centered instruction will increase the workload of the students as well.

Barriers from teachers' aspect

Lack of teachers' experience and qualifications along with the perceptions regarding traditional approach are the biggest concern for teachers to apply student centered instruction in the teaching system. In addition teachers' willingness to apply and practice SCI approach is also one of the concerns. According to the respondents, teachers may perceive that students will have more power to their learning and teachers will lose control on students.

Barriers from resources, curriculum and teaching system aspects

According to the informants few other barriers are listed below:

- Lack of resources (e.g. library, spaces, labs, computers etc.)
- Lack of advanced technology to foster student centered instruction (e.g. internet connection)
- Lack of appropriate modern teaching learning environment
- Inadequate time to achieve the learning out come through SCI
- Rigidity of the education system

Discussion

The use of student centered instruction appears to be reflective of modern society where choice and democracy are important concepts. Several studies on student centered learning found that overall it is an effective approach. Students having the impact of student centered approach on them felt there was more respect for the student in this approach. It was more interesting, exciting, and it boosted their confidence. Although there are many different reasons why teachers' can choose to adopt a student centered learning approach, they might be placed into two broad categories. First, it is enjoyable. Second, there is a growing set of results on how these approaches lead to improved student learning.

In this study most of the teachers agreed that through student centered instruction the chance of student learning ability will increase and student learning will be more interactive and effective. The student will not only focusing on the grade and examinations, rather they will focus on the learning which should be the ultimate goal of any teaching learning process. The findings of this study

conform to Kramer et al. (2007) where they found that the students become more accountable and independent in their learning and also with Hamza, R. A., & Al Kharusi, H. (2013). Student centered instruction reinforce the involvement of students in class more than studying alone. Teachers perceive that SCI will improve the ability of the students to learn the content. It will increase the opportunities to demonstrate mastery of course content so they will be more focused on mastering their learning rather than only improving their grades and passing the exams. Botha the teachers and students will have to prepare differently for the class. Students will have to prepare differently for the exams and will have a less stressful learning environment and less pressure in the exams. Teachers also perceived that, course rules and objectives will be transparent and supporting to students learning in student centered instruction. Although most of the teachers perceived that there will be threat to lose the control over the student and their learning in a student centered instruction, they preferred to teach courses which use student centered approach rather than teaching using traditional approach.

Teachers also mentioned some common barriers in applying the student centered instruction despite the benefits. These barriers were mainly identified related to students, teachers, resources and the curriculum by the respondent teachers. From the perceptions of teachers the barriers students might face are lack of learning skills and abilities and misperception of students regarding student centered instruction. They also mentioned students' lack of willingness and lack of motivation as threat. Barriers related to teachers were mainly related to lack of teachers' training and experience and also the biggest threat to lose control over the students. According to the teachers' lack of resources such as proper libraries, laboratories and classrooms, advanced technologies can crate barriers to student centered approach. The system of education in Bangladesh is centralized and rigid; which could also be a barrier to the implementation of student centered instruction.

Conclusion and Recommendations

Teachers need to introduce student centered instruction for strengthening students' motivation; promoting peer communication; reducing disruptive behavior; building student-teacher relationships; promoting discovery/active and interactive learning and responsibility for one's own learning. Based on the results and the findings of this study, it is clear that the teachers are willing to practice student centered instruction in their teaching approach. However, there are several barriers noted from the answers of the participants. In order to practice student centered instruction in secondary schools in Bangladesh, following steps could be taken by the proper authority:

- Students need to be trained properly to understand the concept of student centered instruction and they should be informed about their roles and responsibilities.
- Students must have proper skills on student centered instruction and they should express their own interest in order to take active part in SCI activities.
- Teachers should be given training programs that can orient them to student centered instruction and enhance their willingness and creativity toward SCI. They should be motivated to apply student centered approach. Teachers should be encouraged to share their experiences in order to manage their time and the workload. Administrations should consider revising the workload of the teachers.
- Curriculum objectives need to be revised in order to accommodate student centered instruction in it.
- Proper resources to foster student centered instruction in schools should be ensured by doing a need base analysis of the resources.

Limitations of the study

Although this study had a good response from the teachers, still many of the respondents were unaware of the SCI concept as they were lacking proper training and experience. This study did not cover all teacher population; rather it includes and assesses the perceptions of selected participants. Therefore, the finding of this study is restricted to the specific teacher community who work as a sample. Moreover, Student Centered instruction is not practiced in the secondary schools that much. However, based on the finding of this study the further steps to implement student centered instruction for both interactive and effective learning can be taken by the teachers and educators.

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