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Similarities and Difference between LCT and TCT

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Abstract

In the field of pedagogical practices, two aspects have been studied with great interest. Educators have long been researching how to make classroom delivery effective in the 21st century. In this context, the difference between LCT and TCT has been studied for the long time. Some scholars have emphasized on TCT while many other scholars educators have emphasized on LCT. TCT is a very old and prevalent teaching and learning method. This method has its own advantages and disadvantages. Due to this reason this method is still prevalent today and many classrooms are being used unhindered. But philosophers such as Rousseau, Pestalozzi, Froebel, and Dewy have criticized TCT and advocated for LCT. Now, it is important to be clear about the difference between LCT and TCT. This study also attempts to clarify the differences between the two teaching methods. This article is prepared on the basis of in-depth study of various articles, research reports, books, various levels theses, etc. published in different literatures over the past few years, as well as my own long teaching-learning experience. In the present article, topic such as: learning theories: from teacher-centered to learner-centered; TCT-characteristics; teacher-centered classrooms, teacher-centered pedagogy; LCT-characteristics, learner-centered classrooms, learner-centered pedagogy and comparison and contrast between TCT and LCT have been analyzed and described from the different perspectives.

Keywords: Teacher centred teaching; learner centred teaching; similarities in TCT and LCT; difference between TCT and LCT; teaching; learning

Context of the Study

Kanuka (2010) differentiates between teacher-centered teaching (TCT) and learner-centered learning (LCT) on the basis of the teaching and learning experience. While TCT prioritizes the experience of teachers or instructors, LCT emphasizes the experience of students. Widely regarded as the founder of LCT, Freire established the groundwork for a system of education that empowered impoverished and illiterate individuals within western countries as well as throughout the world. Freire regarded traditional, TCT as a means of perpetuating oppression and correspondingly advocated for a system of education that allowed students to express their voice through the creation of dialogue with the teacher and situated educational activity within the lived experience of participants (*Freire*, 2018). Based on Freire's concepts TCT and LCT can undergo differentiation through the extent of student involvement. Specifically, TCT involve the mass transmission of information from teachers to students through lectures; notes or handouts that require memorization; and summative assessments, such as standardized tests, which assess students on their ability to duplicate teacher-delivered material (Vavrus et al., 2011). Conversely, LCT challenge students to actively create their own knowledge through real-world experiences as well as provide activities and assessments of the students' choosing (Freire, 2018). In this type of learning, instructors teach students the skills required to discover their own knowledge (Froyd & Simpson, 2008). These abilities generally correspond to the real-world soft skills required by today's knowledge-based or creative economy, including problem-solving, critical thinking, collaboration, innovation, and creativity (Sawyer, 2008). Such skills, resulting from students' meaningful participation in their education, can provide freedom from poverty and oppression (Freire, 2018), which contains relevance in postcolonial societies and underdeveloped regions.

In some cases, teachers can employ a mixture of teacher-centered and leaner-centered pedagogical methods. According to *Wright (2011)*, pedagogical methods exist along a spectrum of five dimensions: power balance, course content function, teacher and student roles, responsibility for learning, and assessment purposes and processes. Based

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on the power balance dimension, TCT occurs when teachers control the delivery of knowledge, while LCT shifts the power to the students, who construct their own knowledge with teacher assistance (Fry, Ketteridge, & Marshall, 2009; Wright, 2011). The second dimension, course content function, concerns the process by which learning occurs. While TCT strives to cover all of the curriculum and requires that students memorize vast reams of material, LCT teach students the skills required to learn the material in a more meaningful way (Wright, 2011). Specifically, TCT involves lecturing and reading teacher-assigned materials, while LCT uses real-world materials, cooperative learning, and inquiry-based investigations to develop soft skills grounded in practical experience (Barron & Darling-Hammond, 2008; Freire, 2018; Sawyer, 2008; Vavrus et al., 2011). Wright's third dimension, the role of the teacher, contrasts the two instructional modes based on the instructor's place in student learning: TCT envisions the instructor as a sage on the stage, and LCT places the instructor as the guide on the side (Wright, 2011, p. 93). In TCT, teachers assume the role of knowledge provider while students function as passive recipients of information. In LCT, students function as co-designers of the curriculum and their learning environments by establishing learning goals, creating a reflective process, and taking learning outside of the classroom (Bray & McClaskey, 2015; Campbell & Robinson, Neelands, Hewston, & Mazzoli, 2007). The final dimension concerns assessment; while teacher-directed learning motivates students to focus on grades, student-centered learning promotes education as an end in itself (Wright, 2011). Specifically, TCT uses mainly summative assessment, which tests a student's acquisition of knowledge after a unit of study, while LCT includes formative assessment, which occurs throughout the duration of a unit (Stull, Varnum, Ducette, Schiller, & Bernacki, 2011). As more conversation and controversy is generated relating to teaching large classes, a more diverse student population, and changes in higher education, teaching appears to have become bifurcated. On the one side, TCT are often referred to as older teacher-centered while non-traditional teaching methods are categorized as LCT (Weimer, 2002). Such segregation is unfortunate as no one teaching strategy is the best for all students in all types of classes. In this context, an attempt has been made to differentiate between LCT and TCT.

Similarities in TCT and LCT

The first similarity between teacher-centered and pupils-centered methods of teaching is their purpose. According to Szybnski (2006), both teacher-centered and pupils-centered have the purpose to make the learners easier in comprehending the lesson/material. Different teachers apply different approaches, either teacher-centered or pupils-centered; both have the same purpose, which is to make the teaching learning process go smoothly. Szybnski notes that the application of both paradigms in one setting can yield an effective teaching learning process and give the maximal result for students Szybnski (2006). It means that, a teacher who is competent is needed to be able in using both these approach. If the teacher can apply both teacher-centered and pupil-centered which is having the same purpose, the teaching learning process would be more pleasant because the teacher not only concentrates on just one approach in every meeting.

The second similarity is, both methods of teaching use the same material. For example, in teacher-centered approach, when a teacher transmits the knowledge/information to the students, both teacher and student use a book which is same with the teacher and students in students-centered approach. Therefore, either teacher-centered or students centered approaches use the same material. This shows that the communication between pupils and teacher is necessary in preparing the material which will be used. As noted in Wolfgang (2001), it's impossible to use different material in teaching learning process because it will complicate the teaching learning process. In both these approaches, it would be better to use more than one material/book in the teaching learning process, but the teacher is still a person who gives the information about the material/book. If there is no information about the material/book, it will complicate the teaching learning process because of different material/book.

Thirdly, the similarity between teacher-centered and pupils-centered is presence of question and answer in the teaching learning process. For example, in teacher-centered approach, after the teacher transmits the knowledge/information, the teacher will allow the learners to ask a question if they don't understand. After which, the teacher will answer the question. As well as pupils-centered approach, pupils in group may ask a question to another group. And then the other student who knows the answer may answer the question. The teacher as an information resource would provide the correction about the question. Thus, the teacher still play an important role in both teacher-centered and student-centered method of teaching to make the teaching learning process going well (Weimer, 2013); this indicates that the teacher still occupies the position as an instructor and information resource for the students in both these approaches.

Major Difference between TCT and LCT

Despite TCT and LCT having such tremendous comparisons; of the two approaches, there are a number of ways in which they differ, each with its own strengths and weaknesses (*Weinstein, Tomlinson-Clarke, & Curran, 2003*). *First*, there is a difference in the two on how the learner works. Considering the TCT, the learner do their work alone where they do exercises related to the teacher's presentation during or after the lesson while on the other hand, in the LCT, the learner work together in groups or pairs as per the demand and purpose of the activity. This way, teaching and learning becomes an enjoyable and friendly active and rewarding activity hence making it easier for the pupils to understand the lesson since they are actively involved in the learning.

Secondly, the TCT portrays learner as basically passive while the teachers are active since teachers are the main focus in this approach which is considered sensible since the teachers are familiar with the subject which the students are not. In this case, the learners are less engaged during the learning process (Al-Zu'be Ahmad, 2013). However, with the LCT, the teacher and the learner are both active participants since they share the learning responsibility of the learner, helping to identify how the students should acquire the knowledge.

Thirdly, considerable difference of the two approaches is that of the classroom situation where in the TCT, there is little or no noise in the class. This is due to the fact that since it is the teacher who passes on the information, the students will automatically be quiet in order to grab the necessary knowledge of the subject from the teacher. On the contrary, in the LCT the class situation is busy and noisy since it is mainly in groups and discussions (*Jeanne*, 2009). In this approach, the teacher is compelled to be comfortable with the fact that the pupils are more likely to make mistakes that he/she may not hear and correct. The TCT focuses on desires and, where the teachers support them. Considering this, there is a difference on the beginning of analysis and emphasis in supporting learning. In the TCT, there is separation of the process of teaching from that of assessing or testing. In this approach, teaching occurs first then assessment comes later as a way of finding out whether the students grabbed the knowledge passed on to them by the teachers. Unlike the TCT, LCT has both the teaching and assessment being done together. As teaching continues, the students do exercises in pairs or groups (Al-Zu'be Ahmad, 2013). When it comes to assessments, the LCT uses assessments to monitor the pupil's learning (*Hayo*, 2007). This way, the teachers are able to discover the weaknesses of the students or areas they did not understand in the course of learning and are therefore able to find a way of bringing the point home. This is different from the LCT, where the assessments play the role of diagnosing and promoting learning among the students. The two approaches differ in the way they test the desired learning with the learners. In the TCT, the desired learning is tested indirectly by use of objectivity scored exams, while in the LCT; the desired learning is directly tested through portfolios, performances, papers, and projects (Good & Brophy, 2003).

And finally, when it comes to the two teaching approaches, the teacher has responsibilities to take into account in order to smoothly deliver and help the students benefit from the curriculum, whether TCT or LCT. In these teaching systems, the teacher's responsibilities differ (*Evertson & Weinstein, 2006; Wolfgang, 2001*). In the TCT, the teachers have more responsibilities than in the LCT (*Blumberg, 2009*). Some of these may include responsibilities such as imparting to the students the knowledge of their subject. This does not only involve passing on what they know but are required to gather more from different sources and deliver the information through different methods and strategies as per the needs of the students. With the LCT, the teacher's responsibility is less demanding since the teacher only gives the information when asked to by the students.

Learning Theories: From Teacher-Centered to Learner-Centered

Whether it is the teacher or the student who serves as the center in the teaching learning process depends upon the particular learning theory that is being used. An empiricist model, Behaviorism, has dominated education (*Bloom*, 1976; Skinner, 1968; Thorndike, 1949; Watson, 1913). The use of such a teacher centered model is both convenient and economical and fits well with the authoritarian/autocratic view of the role of the classroom instructor. The teacher becomes the "purveyor of knowledge." The information is given to the students in a package (stimulus), and the student is to make a response to this stimulus by performing well on tests. Students are extrinsically reinforced by getting good grades (Bijou & Sturges, 1959). The teacher makes most decisions about teaching and evaluation. Application of the behaviorist theory can be seen in evidence throughout college campuses, as professors deliver lecture after lecture (transmission or direct instruction) (Cuban, 1993; Good & Brophy, 1997). Large amounts of material are delivered and updated easily. One behaviorist subtype model, Mastery Learning (Bloom, 1971; Guskey, 1997), with its attendant behavioral objectives, has resurfaced as outcome based learning or outcome based education and is being used in higher education (Stiehl & Lewchuk, 2002). It has found useful application in higher education as competency based education composed of cognitive, psychomotor, and affective domains of learning. These domains then create behavioral outcomes (Outcomes Based Learning) that are then used for evaluation purposes.

As originally conceived, Benjamin Bloom, outlined a specific instructional strategy...labeling it learning for mastery (Bloom, 1968; Guskey, 2005) and later Mastery Learning (Bloom, 1971). As an outgrowth of behaviorism, mastery learning was characterized by defined instructional units with objectives including feedback, correctives, enrichment, and alignment elements (Guskey, 2005). Using behavioral objectives, paramount in mastery learning, as an approach to education is more learner centered because it purports that all learners have the potential to learn. Using this technique, Levine (1985) concluded that a student's failures rest with the instruction. Using this type of instructional approach, it is the instruction (or the instructor) that can fail. Thus, mastery learning can represent another stressor for the professoriate with its emphasis on accountability, responsibility, and satisfactory performance in teaching. In outcome-based education, the desired outcome is selected first and the instruction is geared to support that outcome (Spady, 1988 & 1994). In essence, outcome-based education is not so much learner-centered as it is outcomescentered (Towers & Towers, 1996). Increasingly, outcome-based education is finding a place in vocational and professional education (Henson, Dews, Lotto, Tetzlaff, & Dannefer, 2005; Wayne, Butter, Siddall, Fudala, Wade,

Feinglass, & McGaghie, 2006; Webster, 1994) Medical schools especially are adopting the strategies found in outcome-based education and using its evaluation tools to determine students' ability to continue in the designated course of study. Content in these curricula are not subject to negotiation.

Many of these professional courses of study are conducted according to a masterly learning or outcome based learning paradigm. In mastery learning, course content is defined by the instructor. "Most excellent teachers probably use aspects of mastery learning already" (*Guskey*, 2005, p. 4). Its "multidimensional impact has been referred to as the 'multiplier effect' of mastery learning, and makes it an especially powerful tool in school improvement efforts" (*Guskey*, 2005, p. 9). There will also be curricula that require that the students learn all that is taught, particularly if the students are to take a state or national board examination. Mastery learning is one way to assure that competencies are learned. A questionable situation occurs when one attempts to connect teaching practices to student outcomes. There are consequential variables that intervene and influence those outcomes. Trying to compare and contrast individual teaching methods to student performance is most difficult. Questions arise around measurement of learning, lack of test standardization, uncontrollable variables, and effective methods for tracking student progress over time. The data are difficult to collect and thus the various data sets are not useful for program development and quality improvement.

Behaviorism stands in contrast to the other learning theories, which to one degree or another points out that the learner has to take on a more active role in the learning process. These theories belong to an overall grouping called cognitive learning theories. In the 1960s, the traditional approach to education using behaviorism transitioned to cognitive educational psychology, thus changing and advancing the investigation of thought, instruction, and teacher directed learning. This shift changed how motivation for teaching and learning was studied. This new way to look at motivation shifted the thinking about teaching and learning away from reward and punishments to self-efficacy, achievement, and the importance of school incentives and climates. This approach to educational psychology dramatically differed from the theories that supported teaching and learning in the 1950s and early 1960s (*Calfee & Berliner*, 1996).

One of these cognitive theories emphasizes the humanity of the learner, hence its name Humanistic. Advocates of this theory recognize that a learner is intrinsically motivated (Combs, 1965; Dewey, 1897; Dweck, 1986; Goldstein & Fernald, 2009; Maslow, 1970; Rogers, 1969). Another set of sub-theories in this genre is related to social learning (Bandura 1969, 1977; Bandura & Walters, 1963). Social learning takes place in a social or transactional environment whether this occurs in a primitive village or a college classroom. Gagne (1985) offered the Information Processing Model for learning, which postulates that conceptual knowledge was hierarchically arranged in the brain; much of this terminology resonates well with Bloom's (1956) taxonomy of conceptual learning, which is an outgrowth of Behaviorism. Indeed, Gagne offered the idea of task analysis in order to break down any operation into its component prerequisite skills to be mastered before achieving the top of the conceptual hierarchy, mastery being an aspect of Behaviorism. To some extent, Dewey also advocated this idea in his transactional analysis where learning builds on prior learning. Bruner (1966) also alluded to this type of learning through a process he called "successive approximations." Radical Constructivism (vonGlasersfeld, 1995), a branch of Constructivism, later emerged and contended to some degree that there is no commonly agreed upon reality outside each individual human brain.

However, today educational theorists are searching for more common ground among the models. One of the most influential learning theories, Social Historical or Cultural Historical Theory (Gallimore, Goldenberg & Weisner, 1992; Griffin & Cole, 1984; Newman, Griffin & Cole, 1989), uses independently derived pieces from Behaviorism, Mastery Learning, and Radical Constructivism. Established by *Vygotsky* (1986) in the mid-1930s, the work from this theory also contends that the development of the human brain is gradual in the child (student) (novice) however supported or scaffolded by the parent (teacher) (expert) in what is called a "zone of proximal development" (ZPD) (Vygotsky, 1986). In this zone, the expert holds portions of a task in store and allows the novice to grapple with the lower levels of the concept. After continued successful attempts of climbing the conceptual hierarchy, eventually the expert allows the novice to solve the entire task on his own and encourages the novice to go on and to create his own additions to the task. Here, the social interaction is not just to provide a humanizing and nurturing environment; it is required in the learner's development of the concept. In an effort to incorporate even more of the workable features of the various learning theories, *Tharp and Gallimore* (1988) proposed the Cultural Historical Activity Setting. There are five variables in any activity setting, e.g., the classroom, which apply to both the teacher and the learner. These are: task demands such as the ability to read at higher levels; scripts such as the ability to take notes and follow a lecture; personnel available to help in scaffolding; motives such as willingness to apply one's self to achieve the goal; and beliefs/values such as the teacher's belief that students can succeed and students' trust that the teacher respects them and their abilities.

Cultural Historical Learning Theory and Constructivism advocates address some of the same issues and merged together into Social Constructivist Theory (*Fogarty*, 1999; *Hatano*, 1993; *Hoagland*, 2000; *Howe*, 1996; *Pass*, 2003; *Ramos*, 1999; *Zady*, *Portes & Ochs*, 2002). Social Constructivism is a learning theory that encourages active student participation for the construction of knowledge. Involvement of the student and the ability to link old experiences

with new knowledge is the challenge of constructivism (Fox, 2001; Hein, 1991; Knowles, 1998; Oxford, 1997; Piaget, 1954; Prawat, 1992; Weimer, 2002). Although constructivist theory has achieved high popularity more recently, the idea of constructivism is not new. Aspects of constructivism can be found among the works of Socrates, Plato, and Aristotle as well as Augustine. These early philosophers spoke of the formation of knowledge. Locke and Kant taught that man's knowledge is related to his experiences and that these experiences generate new knowledge. However, constructivism is credited to Piaget, the Father of Constructivism, who views intelligence as two interrelated processes: organization and adaptation. Piaget addresses ways of thinking about information that then creates new ideas or experiences. Adaptation occurs through assimilation and accommodation. New information can be added to one's cognitive framework or cause change to adjust to a new idea.

Constructivist theory in education actually is rooted in Personal Constructivism (Cobern, 1993; Millar, 1989; Novak, 1977; Solomon, 1997; vonGlasersfeld, 1987). Integrating the personal domain into constructivist theory led to the development of Contextual Constructivism. Contextual Constructivism is defined by how the learner construes facts ad events and internalizes these constructs in terms of previous experiences and culture (Cobern, 1991). Fox (2001) summarized the claims, which define constructivist views of learning. These tenants are that learning is an active process, knowledge is socially constructed not discovered, and each learner has a personal domain and is idiosyncratic. Learning is a process of making sense of the world and to be effective requires meaningful, challenging problems to solve. The degree to which teachers conduct lectures, a learner-centered strategy or knowingly apply constructivist-learning theories in their instructional approaches is a matter of debate to many educational researchers (Austin & McDaniels, 2006; Hutchings & Shulman, 1999; Kreber, 2006a; Zevenbergen, 1996). In fact, the literature on effective teaching or excellence in teaching reinforces the need for more study of such applications (Bain, 2004; Gosling, 2006; Muijs, Campbell, Kyriakides & Robinson, 2005; Oxford, 1997; Sherman, Armistead, Fowler, Barksdale, & Reif, 1987). While many of these studies center on teacher characteristics, others examine the atmosphere or the environment of the teaching-learning event and the engagement.

Teacher Centred Teaching (TCT)

The foundation of the TCT is derived from the behaviourist view of teaching. Psychologist such as Watson, Skinner, Pavlov and Thorndike popularized behaviorist theory and this theory supports TCT. This theory believes that all behaviour can be introduced, strengthened or eliminated by conditioning, stimuli and reinforcement. Learning is described in terms of some forms of conditioning (Williams and Burden, 1997). The view of teaching in this approach is defined as to instruct or to impart knowledge or skill (Rogers and Freiberg, 1994, p.151), and learning is the receiving of knowledge transmitted by either teachers or books (Malderez and Bodoczky, 1999). In this approach, education clearly means 'the process of pouring in' instead of 'drawing out'' (Dewey, 1956, p.36). 'Students are viewed as empty vessels and learning is viewed as an additive process' (Napoli, 2004, p.2). Consequently, the main focus of the teaching and learning process is on covering content. This makes this approach one that clearly focuses on teaching, not learning. Accordingly, teachers are viewed as the centre of knowledge since they determine what, how and when students will learn without the learners' participation (Harden and Crosby, 2000). Learning is controlled and delivered mainly by the teacher. This approach has a plethora of synonyms, such as didactic teaching, lockstep teaching, instructor-centred teaching, and the traditional approach. There is no doubt that in this approach, students have little opportunity to interact with each other or to make decisions, because they invariably do whatever the teacher tells them to do. The main drawback of this model is that the teacher apparently gives meagre attention to developing learners' ability to think, learn or solve problems independently. However, this approach has been hugely influential in how teachers teach globally. In Thailand it has been heavily criticised for failing to prepare Thai students for the competitive world of business and Thailand's growth (*Pillay*, 2002a; Wiriyachitra, 2002).

Peyton et al. (2010) defined learning as a change in an individual's explicit behaviors. He also stated behavior changes are an outcome of the student's responses to stimuli that occur in their environment. Skinner (1953) used the term operant conditioning to refer to the impact of a particular stimulus on the future occurrence of the behavior. One principle of Skinner's is that operant conditioning is positive reinforcement. Rewards and praise are examples of positive reinforcement and in terms of teacher-centered instruction and classroom management, such theories have a wide appeal in educational settings. Teachers who ignore inappropriate behavior and show approval for appropriate behavior (in combination) think this practice is very effective in achieving better classroom behaviors (Madsen, Becker, & Thomas, 1968). These principles (operant conditioning-positive reinforcement and negative reinforcement) to change human behavior within classroom settings developed into the science/discipline of applied behavior analysis (Alberto & Troutman, 2009). Any pleasant experience that causes students to make a desired connection between stimuli and response is considered a positive reinforcement. According to Sharon (2008), when learner receive positive feedback from teachers during teacher-centered styles of instruction, such as lecture, students can be academically successful. There are some teaching and learning styles that reflect the behaviorist theory. These are memorization and the positive reinforcement teachers provide when students show mastery. Teachers who have students participate actively in the lecture have more academically successful students.

As the emphasis of didactic teaching is on transmitting large quantities of knowledge, learners are neither involved in constructing knowledge nor trained to be responsible for their own learning. Hence, learners have limited roles to play in the learning environment. The lack of learner involvement makes what they have to learn seem irrelevant, less interesting and non-meaningful, which is one of the shortcomings of this approach. The main function of assessment is to monitor learners' academic progress, rather than to diagnose their learning problems and promote learning. Assessment emphasises low-level thinking (Anderson et al., 2001) using paper tests. The TCT has been deeply rooted in educational enterprise not only in Thailand (*Foley*, 2005) but also at all levels worldwide (*Cuban*, 1993). The discussion in this section has revealed that in the TCT, learners are viewed as empty vessels. The psychological theory underlying this approach viewed learning as a mechanistic process, while the aim of teaching is viewed as being to impart knowledge. These foundations have straightforward implications for educational practice. Its philosophical and psychological foundation makes the TCT distinctly different from the LCT. The TCT is based on behaviourism while the LCT is derived from constructivism and humanism. It is clear, then, that these two theories view learning differently. In the LCT the focus is on the learner, while in the TCT the focus is on a body of knowledge. This makes the characteristics of the teaching practices of these two approaches obviously distinct. The nexus between philosophical and psychological practices is vital, as it helps create teachers' understanding and appreciation, which may lead to the shift in their practices. This is the subject of the following section.

The Teacher Centred Teaching (TCT) has dominated classroom teaching in Nepalese schools for decades. *Harden* and Crosby (2000) describe TCT strategies as a focus on the teacher transmitting knowledge, i.e. from the expert to the novice. It is, therefore, a kind of classroom teaching whereby the teacher is primarily the giver of knowledge and wisdom to the learners. In this approach, the teacher operates as the centre of knowledge and directs the knowledge process by controlling the students' access to information (Di Napoli, 2004; Knowles, 1998). Under this learning approach where the teacher is the knowledge-giver, the role of the student remains that of passive learner (Mushi, 2004). Learning outcomes developed are often low order thinking skills such as recall and simple definitions, which rely on the ability to memorise (Arends et al., 2001; Di Napoli, 2004; Eggen & Kauchak, 2006; Hojlund, Mtana, & Mhando, 2001; Kauchak & Eggen, 2007). Teachers thus tend to prescribe learning goals and objectives based on their prior experiences, past practices, and mandated curriculum standards. Classroom instructional strategies are prescribed by a teacher mainly in a lecture (direct instruction) and supplementary readings. Mushi (2004) argues that the approach favours high achievers, and neglects the group of low achievers. In contrast, low achievers prefer more TCT as the studies by *Mankin*, *Boone*, *Flores*, and *Willyard*, (2004) and *Watts* & *Becker* (2008) have demonstrated. In this TCT, assessments mainly in form of paper-based and pencil examinations are used as a tool for sorting out students. The teacher's responsibility is to set performance criteria for the students, and students have to find out what the teacher wants. The classroom setting of such a scenario is one in which the teacher stands in front of the class, and students sitting in rows looking at the teacher (Kauchak & Eggen, 2007). In this model, the teacher is at the centre whereas students passively wait from the teacher to feed them with knowledge. The interaction between students-students and students-teacher in classroom teaching is limited. Classroom teaching under this model does not to a large exetent benefit from social interactions in classroom practices as explained by Vygotsky (Alton-Lee & Nuthall, 2007; Nuthall, 1997; Yilmaz, 2008).

The URT delineates in the curriculum the lecture, observation, demonstration, question-and-answers, presentations, story-telling and guest-speaker as TCT strategies. However, it is the lecture method that dominates classroom teaching in schools (Chediel, 2004; Msonde, 2006, 2009; Mtahabwa, 2007; Osaki, 2001). Although these outlined strategies differ in their capacity to involve students in what they are expected to learn from the lesson, they are all teacherdominated. Of all these strategies, only demonstration may lead to fair amount of student participation if well-arranged and conducted. The others-the lecture, guest-speaker, story-telling and presentations-have low rates of student participation in classroom teaching and learning practices. Theoretically, a lecture, observation and demonstration methods, which are TCT in nature, have been inspired by behaviourist, social learning and cognitive learning theorists (Arends et al., 2001; Eggen & Kauchak, 2006; Yilmaz, 2008, 2009). These theorists have made significant contributions to the lecture, observation and/or demonstration learning methods. For example, behaviourists maintain that humans learn to act in certain ways in response to positive and negative consequences. And, thus, a teacher who teaches in accordance with behavioural principles is goal-oriented, focused, and provides learning experiences in which student learning can be monitored and assessed (Arrends et al., 2001; Kauchak & Eggen, 2007; Marton & Booth, 1997). Social learning theories posit that much of what humans learn comes from the observation of others (Arends, 2004; Arends et al., 2001; Bandura, 1977); Huitt, 2009; Kauchak & Eggen, 2007). In observation learning, learners must first pay attention to behaviour of the teacher. Students then retain the behaviour and later reproduce it. Observing certain behaviours and demonstrating those behaviours later have pedagogical implications related to the observation strategy akin to the demonstration method. Kauchak and Eggen (2007, p. 223) explains:

Students imitate the behaviors of their teachers, and teachers take advantage of this tendency when they demonstrate positive attitudes, such as tolerance and respect to other people. Teachers also use modeling to demonstrate complex skills, such as writing and solving algebraic equations. Teacher modeling is one of the most powerful vehicles available for teaching both attitudes and skills.

This implies that students may learn from observing their teachers' modelling of what students are expected to learn in the classroom. Normally, a teacher would provide examples for students to observe and thereafter replicate the same demonstration and thus eventually learn from the lesson.

Characteristics of the TCT

In the teacher-centered approach to instruction, development of curriculum and control of the learning process is retained by the teacher and is closely related to the behaviorist tradition. The teacher's role is to create an environment which stimulates the desired behavior and discourages behaviors that are believed to be undesirable (*Liu, Qiao, & Liu, 2006*). In other words, teachers control the learning situation to obtain the desired outcome, guided by generalized characteristics of the learners (*Wagner & McCombs, 1995*). The major characteristics of the TCT are: the teacher is the center of knowledge and in charge of learning; students are usually passively receiving information; the instructor's role is to be primary information giver and primary evaluator; students are viewed as empty vessels who passively receive knowledge from their teachers; teachers and professors act as the sole supplier of knowledge, and under the direct instruction model, teachers often utilize systematic, scripted lesson plans; teacher centered instruction is fairly low-tech, often relying on the use of textbooks and workbooks instead of computers; and assessments are in many cases only carried out as summative and not formative evaluations and they rarely address qualitative issues of the learner's progress.

Teacher-Centered Classrooms

The traditional teacher centred teaching model of instruction has been the pervasive method of instruction in schools. Teachers who use this approach usually plan a lesson based on the specific objective and deliver instruction through lecture format. Then, the teacher usually provides time for drill and practice or seatwork and possibly assigns homework that reinforces the day's specific objective. The textbook is often the foundation for the lesson and is usually the center of activity. The teacher-centered model allows the teacher complete control over the learning process by placing the teacher as the main source of information and students as passive recipients of the material (*Peyton, More, & Young, 2010*). According to *Jarvis (2002)*, classroom instruction is generally guided by the teacher, and the teacher determines the procedure for the learning objectives. When teachers become productive lecturers, the students tend to value the personal qualities of the teacher and retain more information. *Peyton et al. (2010)* also stated that:

In a typical teacher-centered classroom, the teacher spends most of the time presenting the day's content to the class from the white board/Promethean board or overhead projector. The students should be taking notes and asking questions during the lecture. This process should be completed with ease and not troublesome for students. (p. 21)

In a teacher-centered classroom, students work independently, usually in rows, listening and taking notes as the teacher lectures (*Woodford*, 2005). *Woodford* (2005) found that the steps of lecture are simple. If teachers follow these simple steps, their students can be academically successful. He suggests that teachers should master the content prior to delivering instruction, present the content in a lecture with a pleasant format and allow students to take notes and ask questions which the teacher will answer accordingly. Finally, the teacher should assess the student's understanding of the material in a paper-pencil format with feedback.

Babcock and Marks (2010) found that teachers who prefer teacher-centered instruction believe that it is important to be the authority of the content they present in a classroom. Such teachers should have experience with and knowledge of the content they convey to students. A teacher's reputation will depend on how well he/she knows the content and how well it is taught. This personal relationship teachers have with the content enables them to provide students with a more meaningful learning experience. In addition, Condelli and Wrigley (2009) found that in order to maintain students' attention spans during a teacher centered lesson, many teachers use the lecture time as a quick overview of the content in order to stimulate discussion, activate prior knowledge, or motivate students to begin or continue further reading and research. Having students ask questions, make comments, and participate in the discussion are goals in effective lecturing. A comfortable environment must be created in order for students to actively participate in the lecture (Condelli & Wrigley, 2009). Espenshade, T. J. & Radford, A. W. (2009), believe the teacher-centered classroom's advantage is that the material can be presented in a way the students can learn in short steps. Khajavi and Abbasian (2011) stated that: If a lecture is presented in a way that is connected to the students' individual experiences, the student will truly benefit from the lesson. They believed that a majority of teachers use teacher-centered instruction because it is an effective style of teaching. (p. 183)

Lynch (2010) conducted research to determine if teacher-centered instruction was interesting to students in a lecture format and if they learned from the lecture style of instruction. He found that students were interested and actually learned from the lectures, provided the lectures were stimulating and the presenter was knowledgeable in the content. Therefore, he determined that a students' ability to learn from teaching styles, such as lecture, was indeed effective.

Lynch (2010) found that the more interested the students were in the lessons and the more content knowledgeable the presenter was, the more likely the students would become academically successful.

Another study by *Lynch* (2010), was on how students felt about student-centered or teacher-centered instruction. The results indicated that the students preferred teacher centered instruction. Many students suggested in the study that they were more comfortable in a classroom setting that was teacher-centered because it was more structured. He also found that students, at times, felt uncomfortable working in groups when sharing the responsibilities of the learning (*Lynch*, 2010).

Teacher-Centered Pedagogy

Traditional teacher-centered pedagogy is generally known as a style in which the teacher assumes primary responsibility for the communication of knowledge to students. From this outlook, because teachers through their greater expertise about the subject matter, they are in the best position to decide the structure and content of any given classroom experience. Teacher-centered pedagogy is usually understood to necessitate the use of the lecture as a principal means of communication in the classroom. The goal of this classroom requires the dissemination of a relatively fixed body of knowledge that is determined by the teacher. The lecture format is normally assumed to proceed in a unilateral fashion; the teacher lectures upon a given body of knowledge from his/her domain of expertise rather than structuring the content of the classroom around questions these students might have. *Hancock, Bray and Nason (2003)* define teacher-centered instruction as follows:

The teacher-is the dominant leader who establishes and enforces rules in the classroom; structures learning tasks and establishes the time and method for task completion; states, explains and models the lesson objectives and actively maintains student on-task involvement; responds to students through direct, right/wrong feedback, uses prompts and cues, and, if necessary, provides correct answers; asks primarily direct, recall-recognition questions and few inferential questions; summarizes frequently during and at the conclusion of a lesson; and signals transitions between lesson points and topic areas. (p. 366).

Learner Centred Teaching (LCT)

The term LCT is widely used in the teaching and learning literature. Cannon and Newble (2000) pointed out that student-centred learning describes ways of thinking about learning and teaching that emphasise student responsibility. Jeffrey, White and Harbaugh (2009) define learner-centred instruction as an approach to teaching and learning that prioritises facilitative relationships, the uniqueness of every learner, and the best evidence on learning processes to promote comprehensive student success through engaged achievement. Terms such as flexible learning, experiential learning, self-directed learning, and independent learning have been linked with LCT (Jeffrey et al., 2009; O'Neill & McMahon, 2005). Consequently, student-centred learning is conceived and practiced differently across the world due to such varying terminology, according to O'Neill, Moore, and McMullin (2005).

LCT evolved from pedagogical research in Western countries since 17th century that brought considerable reforms in education formal teaching and learning process (*Lunenberg*, 2002). Educationalists such as Rouseau, Froebel, Dalton, Montessori, and Piaget succeeded in developing the concept of LCT as movement for a participatory and democratic communication in learning. *Khursheed* (2002) asserts that this process implies that teachers should be trained in facilitating learning for students, in being democratic to the learners, activating the learners' active participation in learning activities, designing teaching and learning materials, and in employing techniques that stimulate participatory learning.

Harden and Crosby (2000) describe LCT as focusing on student learning and what students do to achieve this rather than what the teacher does. This definition stresses the doing and learning of students by themselves. The LCT involves learners in programme development, deployment of high student involvement methods in the teaching and learning processes, use of learning materials and assessment practices that develop inquiry learning (Alexander et al., 2010; Mushi, 2004; O'Neill et al., 2005; Yilmaz, 2009). LCT also extends to the student's choice of what is to be learnt and how it is to be assessed (Alexander et al., 2010; Burnard, 1999; Gibbs, 1995; Lea et al., 2003). In the same vein, Mushi (2004, p.35) argues:

Teachers need to employ participatory modes of teaching to enhance students' capacities as individuals and groups. To this end, students need to be engaged actively in educational needs analysis, formulation of learning objectives, course development, teaching and learning process, as well as in assessment of learning outcome, the processes, which are peripheral to traditional didactic approaches.

Lea and Colleagues (2003), Le Francois (1999), Osaki (2000), Khursheed (2002) and Mushi (2004) list the LCT characteristics as: reliance on active rather than passive learning; emphasis on deep learning and understanding; increased responsibility and accountability on the part of the student; an increased sense of autonomy in the learner; an interdependence between the teacher and learner; mutual respect in the learner-teacher relationship and; a reflexive approach to the teaching and learning process on the part of both the teacher and the learner. Similarly, Gibbs (1995),

Kauchak and Eggen (2007) and Mushi (2004) outlined four core considerations in the implemention of LCA. These are: learner activity rather than passivity; students' experience of what is taught in relation to his/her context; process and competence rather than content and; key decisions about learning must be made by the student in liaison with the teacher.

According to *Gibbs* (1995), students should decide on the following: what is to be learnt, how and when it is to be learnt, with what outcome, what criteria and standards are to be used, how judgments are made and by whom. *Brandes and Ginnis* (1996) as well as *O'Neill and McMahon* (2005) delineate five LCA principles: learner must have full responsibility for his/her learning; involvement and participation are necessary for learning; there should be high learner-learner and learner-teacher relationships; the teacher should serve as a facilitator and resource person; and the learner experiences (prior knowledge) are an integral part of learning. These relationships and characteristics are thus considered as imperative in the implementation of LCA in a meaningful manner. The literature discussed above shows that the genesis of LCT is intertwined with pragmatic theories of constructivism, transformative and humanism. In fact, *Mushi* (2004) concluded that LCT is implicated in a multiplicity of theories, rather than a single theory. Thus, it is misleading to claim that LCT has been influenced by a single learning theory. After all, learning theories in the pragmatic paradigm tend to emphasise the participatory teaching methods in a bid to improve student learning.

Generally, however, LCT appears to relate primarily with the social constructivists' views on learning due to their emphasis on the importance of activity, discovery, independent learning, and social interactions (*Carlile & Jordan*, 2005; *Kauchak & Eggen*, 2007; *Nuthall*, 1997; *Yilmaz*, 2008). In particular, LCT appears to be based on Vygostky's Social Cultural Theory, which emphasizes learners' interactions as the basis for meaningful learning (*Arends et al.*, 2001). As such, participatory teaching methods in classroom practices are central in enhancing students' interactions geared towards their learning.

From a humanistic perspective, LCT is based on the learner's needs and interests, active participation in classroom learning and self-evaluation (Huitt, 2001, 2009; Rogers & Freiberg, 1993). Similarly, Burnard (1999) cited in O'Neill and McMahon (2005) associated the origins of the term LCT with Carl Rogers, the father of client-centred counselling. In his various works, Carl Rogers argued that focus on the learners' needs and interests in teaching and learning is vital. In line with Alexander and Colleagues (2010), Mushi (2004), O'Sullivan (2004), O'Neill and McMahon (2005), and Yilmaz (2008), he believed that in traditional teaching environments, students tend to become passive, apathetic and bored. Thus, curriculum development should be student needs-oriented, with students involved in its designing as well as in setting evaluation criteria. Mezirow, a proprietor of transformative theories, contends that participatory methods are vital for learners' acquisition of technical, practical and emancipatory knowledge (Mezirow, 1997). In this regard, the shifting of power, autonomy, and responsibility from the teacher to students in LCT classroom practices is a core tenet in transformative learning (Mushi, 2004). From the above literature, it is evident that the methodological, curriculum, and power/autonomy orientations have been crucial in the understanding and implementing of LCT. But none of this literature, in my view, describes how student actually develops capabilities of what is being taught. In order to explain how students learn during instruction, one needs to answer the intentional questions:

What to learn? How to learn? Why to learn? Answers to these questions, according to Di Napoli (2004), may explain better how students learn in a LCT lesson. The implication is that simply relying on simple rhetorical labels such as adopting a certain method, needy curriculum, and/or empowered students is rather inadequate.

This is because "learning is always about learning of something" (*Pong & Morris*, 2002, p.16). In classroom practice, there is a teacher, students, and what students are expected to learn (object of learning). It is also impossible to have any learning without there being something to be learnt. To enable students to learn, a teacher should be aware of what the students are expected to learn (object of learning) first, and then accordingly think of how the students will experience it appropriately. And in strengthening student capabilities, a teacher needs to make the case of why it is important for students to learn the object of learning in question. A number of studies such as that of *Marton and Morris* (2002), *Lo and Colleagues* (2005), *Pang and Marton* (2007) and *Marton and Pang* (2008) have shown that differences in students' achievement depend much on how the students experienced the object of learning. Thus neither the methods used nor does the question of who had power in the process of instruction make these differences. Thus, to make LCT produce the desired results of enhancing student capabilities, much attention should be focused on how teachers understand and students appropriate the object of learning during instruction. As explained in the next sections, the need to have a new understanding of LCT is vital if we want to develop student potentialities in classroom practices.

Characteristics of LCT

LCT evolved from pedagogical research in Western countries since 17th century that brought considerable reforms in education formal teaching and learning process (*Lunenberg*, 2002). Educationalists such as Rouseau, Froebel, Dalton, Montessori, and Piaget succeeded in developing the concept of LCT as movement for a participatory and democratic

communication in learning. Now, the term Learner-Centred Approach (LCT) is widely used in the teaching and learning literature. *Jeffrey, White and Harbaugh (2009)* define LCT as an approach to teaching and learning that prioritises facilitative relationships, the uniqueness of every learner, and the best evidence on learning processes to promote comprehensive student success through engaged achievement. Terms such as flexible learning, experiential learning, self-directed learning, and independent learning have been linked with LCT (*Jeffrey et al., 2009; O'Neill & McMahon, 2005*). Consequently, LCT is conceived and practiced differently across the world due to such varying terminology, according to *O'Neill, Moore, and McMullin (2005)*. *Khursheed (2002)* asserts that LCT implies that teachers should be trained in facilitating learning for students, in being democratic to the learners, activating the learners' active participation in learning activities, designing teaching and learning materials, and in employing techniques that stimulate participatory learning. *Cannon and Newble (2000)* pointed out that LCT describes ways of thinking about learning and teaching that emphasise learner responsibility.

Harden and Crosby (2000) describe LCT as focusing on student learning and what students do to achieve this rather than what the teacher does. This definition stresses the doing and learning of students by themselves. The LCT involves learners in programme development, deployment of high student involvement methods in the teaching and learning processes, use of learning materials and assessment practices that develop inquiry learning (Alexander et al., 2010; Mushi, 2004; O'Neill et al., 2005; Yilmaz, 2009). LCT also extends to the student's choice of what is to be learnt and how it is to be assessed (Alexander et al., 2010; Burnard, 1999; Gibbs, 1995; Lea et al., 2003). In the same vein, Mushi (2004, p.35) argues:

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Research supports student-centered instruction as a problem-solving approach that can increase a student's self-esteem related to academic achievement (*Lynch*, 2010). However, *Condelli and Wrigley* (2009) purported the constructivist theory as subjective. They stated, 'The outcomes are unclear and learning may be incidental. Student choice instruction is a set of techniques for enhancing the value of student-to-student interaction' (*p. 15*). Student-centered instruction focuses on students helping one another to achieve a common goal in order to be more successful academically. This is the opposite of a teacher-centered classroom in which students compete for grades and rewards.

Cooperative learning, which is a type of student-centered instruction, involves small groups of learners who work together as a team to solve problems, complete tasks, or accomplish a common goal (*Carrell & West, 2010*). The purpose of cooperative learning is to give authority to the students in the learning process, a form of student empowerment that is more difficult in a lecture format (*Pace & Hemmings, 2011*). Students working in groups of two or more mutually search for understanding, and solutions can make learning more meaningful. Studies by Johnson and Johnson (1999) found students who participate in cooperative learning have higher achievement, greater productivity, longer retention, and increased intrinsic motivation, more motivation to learn, more time on task, and higher-levels of reasoning and critical thinking than students who are taught through other formats. The use of cooperative learning has changed how students perform in class and has transformed the traditional style of teaching, teachers talk, and students listen pattern of instruction (*Carrell & West, 2010*).

According to *Brown* (2008), students who participate in cooperative learning attain group goals that cannot be obtained by working alone. *Duckworth* (2009) studied the effects of cooperative learning on reading comprehension in seven high-risk elementary schools. The findings indicated there was a significant difference in reading comprehension among students involved in cooperative learning as compared with students that were not involved in cooperative learning. Students that participated in student-choice activities, such as cooperative learning, showed higher academic gains than other students (*Duckworth*, 2009).

Carrell and West (2010) reported that 21 out of 36 studies found significantly greater achievement levels in cooperative learning groups than in control groups of traditional style teaching. Ten studies found no difference, and one found a slight advantage for the control group. The same researchers also found that individual accountability in cooperative learning was more successful if students were graded individually or if the sums of each team members' scores were combined for a total score. They also noted that cooperative learning activities with the least individual accountability had the lowest success rate. A study completed by Carrell and West (2010) was conducted whereby students were divided into three equal groups. The cooperative learning group demonstrated the most oral interaction, the most active search for organization and ideas, and the highest self-esteem. Students learned that they could disagree and that conflict could be turned into a positive experience (Carrell & West, 2010). Espenshade, & Radford, (2009) determined that students spend more time on task while engaged in cooperative learning activities. They also found that teachers favored the cooperative learning activities because it decreased the time they spent getting students' attention and keeping it. They found that the student choice styles of instruction, such as cooperative learning, included a wide variety of activities that may be implemented in several different ways in an elementary classroom. Cooperative learning changes students' and teachers' roles in classrooms. The ownership of teaching and learning is shared by groups of students, and is no longer the sole responsibility of the teacher. The authority of setting goals, assessing learning, and facilitating learning is shared by all. Students have more opportunities to actively participate in their learning, question and challenge each other, share and discuss their ideas, and internalize their learning. Along with improving academic learning, cooperative learning helps students engage in thoughtful discourse and examine different perspectives, and it has been proven to increase students' self-esteem, motivation, and empathy (Marzano, Pickering, & Pollock, 2001).

From the above literature, it is evident that the methodological, curriculum, and power/autonomy orientations have been crucial in the understanding and implementing of LCT. But none of this literature, in my view, describes how student actually develops capabilities of what is being taught. In order to explain how students learn during instruction, one needs to answer the intentional questions: What to learn? How to learn? Why to learn? Answers to these questions, according to *Di Napoli (2004)*, may explain better how students learn in a LCT lesson. The implication is that simply relying on simple rhetorical labels such as adopting a certain method, needy curriculum, and/or empowered students is rather inadequate. This is because "learning is always about learning of something" (*Pong & Morris, 2002, p.16*). In classroom practice, there is a teacher, students, and what students are expected to learn (object of learning). It is also impossible to have any learning without there being something to be learnt. To enable students to learn, a teacher should be aware of what the students are expected to learn (object of learning) first, and then accordingly think of how the students will experience it appropriately. And in strengthening student capabilities, a teacher needs to make the case of why it is important for students to learn the object of learning in question.

Learner-Centered Classrooms

The learner-centered classroom supports active collaboration by students in the classroom. Dewey, the theorist most associated with the ideals of the democratic classroom, also known as student-centered, is perhaps the most inclusive and perceptive thinker to emerge in the Americas (Simpson, Jackson, & Aycock, 2005). Dewey was an educational philosopher who attempted to change rigid, traditionalist institutions into progressive schools that emulated the ideals of democracy. Dewey (1916, 1997) explained democracy as more than a particular type of government, but instead as a "mode of associated living, of conjoint communicated experience" (p. 87). He further emphasized that education varies with the quality of life prevalent in a particular group. A society that willingly implements change as a means of improvement will have more distinct values and approaches to educational methods than a society that simply continues its own cultural traditions. Dewey proposed that the democratic society, or one interested in continuous progress, is more likely than other types of communities to be interested in a deliberate and systematic education (Dewey, 1916, 1997). Mullins (1997) maintains that schools offering a democratic environment make the community. Goodlad (2004) emphasizes that "teachers who practice democratic education promote active learning within their classrooms" (p. 109).

Dewey (1938) put forward that the long-established cultural scheme of schooling imposed adult standards, methods and subject matter upon students. Thusly, these standards are beyond the reach of the experiences of some students. In Dewey's analysis, progressive education is more complicated for teachers to implement than the conventional classroom environment (**Kohn, 1999**). Kohn gives details by explaining that teachers have to use open-ended questions that should promote a classroom climate that allows students to create their own understandings. Furthermore, a comprehension of the subject matter is required because any curriculum that is more demanding of the students requires more rigorous preparation by the teachers. As is reiterated by **Mullins (1997)**, "It is the personal and moral commitments of the educator that allow democratic pedagogy to take place" (p. 3).

According to *Mullins* (1997), when traditional school practices are abandoned for student-centered or democratic practices, the classroom becomes a rushing maelstrom that increases educational activity. Furthering that idea are *Apple and Beane* (2007) whose confidence and conviction of the boring work of teachers and students in the United States believe that democracy comes to life in such student-centered classrooms. When democracy is implemented students can spend their hours as learners and teachers, through extended trust, allow the students to collaborate about learning practices. The teacher is willing to learn along with the students by allowing them to venture outside traditional teacher-centered classrooms. When teachers allow students the freedom of control within the classroom, the message being sent is one of trust. *Apple and Beane* (2007), authors of *Democratic Schools*, trust that students take the responsibility for their learning and believe in what Dewey called the democratic faith. To serve the common good, teachers, nevertheless, must clearly convey their expectations if they wish the results to be successful.

Sizer (1999) speaks out that education should be personalized, thereby luring each child to his or her most advantageous abilities:

It is the insistent coaxing out of each child, on his or her best terms, of profoundly important intellectual habits and tools for enriching a democratic society, habits and tools that provide each individual with the substance and skills to survive well in a rapidly changing culture and economy. (p. 11).

Kubow and Kinney (2000) identified eight characteristics consistent with a democratic classroom. The eight criteria include:

(a) students must be active participants in their learning, (b) teachers must avoid textbook dominated instruction, (c) teachers must foster reflective thinking practices by students, (d) teachers must offer students the opportunities for decision-making and choices for problem solving, (e) the classroom must focus on controversial issues for discussion so students can focus on multiple perspectives, (f) teachers must encourage the development of individual responsibility by members of the class, (g) students must recognize the dignity of every person, and (h) teachers must incorporate principles and establish their relevance to students. (p. 16)

While there are classrooms that encompass these essential aspects of a democratic education, some teachers prefer a semblance of democracy by allowing students to vote on minor issues within the classroom. A genuinely democratic classroom is permeated with democratic principles and gives the students the chance to take greater control of their education. This means that teachers have consciously decided to let students take responsibility for their own learning, while at the same time have taken on the responsibility of creating a supportive learning space.

The freedom and responsibility given and received in the democratic classroom is an example of a living democracy which gives people the space to connect deeply, to analyze critically, and to look for individual meanings. *Arnstine*

(1995) reflected that educating students democratically is to regard the aim of education in terms of student character or disposition. Dispositional change is attainable, perceptible and fairly constant. Furthermore, a large number of educators are in agreement that dispositional traits should be acquired by students, even though they may disagree about what knowledge should be disseminated. Arnstine finished by saying, "The sort of dispositions worth cultivating in schools will render people more cognizant of the world, more receptive to it, and more able to deal effectively with the challenges it keeps presenting" (p. 65).

According to *Schutz* (2001), although Dewey's idea of a democratic education has continued to be of importance for more than a century, he himself grew increasingly disenchanted with the thought that schools alone would generate a more democratic society and said as such:

Dewey's educational approach failed to equip students to act effectively in the world as it was [and still is], and...Dewey's model of democracy, while extremely useful, is nonetheless inadequate to serve the varied needs of a diverse and contentious society. (p. 267)

Obviously, there are varying principles of democratic education that present important tools and direction for classroom teachers. One such idea is adopting a wholly democratic viewpoint, however, this may not be the only answer to contemporary classroom improvement.

Learner-Centered Pedagogy

Student-centered practices require teachers who are cognizant that students construct their own meaning (*Narum*, 2004). How People Learn (*National Research Council* (2000) reported that learning in these classrooms is viewed as the construction of a bridge between the learner and the subject matter, and the teacher in a student-centered classroom watches both ends of that bridge. *Narum* (2004) stated, 'A learning environment that is developed from such insights is distinctly different from one that sees the student as a passive recipient of information transmitted from a teacher' (p.5). *McCombs* (2003) recommended that teaching paradigms be flexible. Students are partners in the student-centered experience, and as such, they provide worthy information. Teacher questions should inquire about knowledge, advance understanding and invite reflection about how each student learns (*Harris*, 2000).

The philosophy of a student-centered school is that of a learning collaboration whereby everyone remains a practical learner, including teachers. This philosophy will expand teaching abilities and assist instructors in learning through interactions with their students. This type of school environment adds to the dominant culture of investigation (*Rallis*, 1996). *Allsup* (2003) referred to this as "democratic action." This practice allows the students the freedom to explore and work democratically, so that they can create their own framework from areas that intrigue them. Thus, the intent of this type of education is to provide an environment in which students can pursue their self-initiated interests unimpeded by unnecessary barriers, and whereby they can participate as empowered citizens in the governance of that environment (*Sadofsky & Greenberg*, 1999). This practice should aid students in reclaiming their "authorship" of the world (*Woodford*, 2005).

The teaching practices of these instructors included peer evaluation, cooperative group practices, and the establishment of a community of inquiry. Peer evaluation included the completion of an assignment followed by a discussion with a peer about the assignment. This technique relied upon the communication between students and promoted more classroom relationships among students. The group learning practices involved assignments completed by a group of students, with each student taking a distinguishing role within the group. A study by *Scruggs* (2009) determined small group learning practices assist students in critical thinking, self-reflection, peer-tutoring, problem solving, and group process skills. To implement a student-centered philosophy, educators must have a clear perception of the methodology that guides the concept (*Delaney*, 1999). This adaptation requires an alternate viewpoint and the acceptance of a fresh set of beliefs about the ideology of schooling. The viewpoints that once fashioned the teachers' core beliefs are often opposite of what the student-centered education requires. Student-centered education is not currently practiced in many schools because of time constraints, the disinclination of students to participate because of the disruption to their familiar structure, and the inability of the students and teacher to function in a system of shared control (*Vega & Tayler*, 2005). Additionally, *Dewey* (1959) warned against students being asked to create their own education without the resources to do so. Students must be directed through this approach, and not released without guidance. As *Dewey* (1959) contended:

Nothing can be developed from nothing; nothing but the crude can be developed out of the crude and this is what surely happens when we throw the child back upon his achieved self as finality, and invite him to spin new truths of nature or of conduct out of that... Development does not mean just getting something out of the mind. It is a development of experience and into experience that is really wanted. (pp. 103-104).

Goodlad (1984, 2004) explained that although schools cry out for diverse instructional techniques, society offers no demands to change long-established classroom models because people believe that classes should be conducted using

conventional practices. Students who learn the rules, listen quietly, sit down and function as robots, are often valued over those who question authority. Communities will easily support schools that follow traditional classroom guidelines, but will interfere with schools that encourage students to act as individuals (Rallis, 1996). The cycle continues because teachers were taught in a traditional way, and although they may be exposed to professional development and alternative practices in teacher education programs, their contact with these methods may be limited to only professional development that targets that very behavior for short periods of time It will take time with a student-centered environment to level out the difficult areas. Although students may be unwilling to change the familiar routines of allowing the teacher to be in complete control, the feeling of student empowerment that will ensue may help them change their attitudes about the transformation. McCombs (2003) elaborates that the most effective student-centered environments show that, 'teachers can flexibly shift their role from teacher to expert learner and share the ownership of learning with their students as appropriate' (p. 96). Schuh (2004) cautioned about overgeneralizations often made in regard to traditional versus contemporary teaching strategies. Classrooms do not necessarily use one style or another, but degrees of both. Schuh (2003) also contended that student centered practices can be effectively enmeshed with teacher-centered practices. Although there are classrooms that incorporate studentcentered concepts to varying degrees, the student-centered classroom environment deserves further examination by teachers, building administrators, and area supervisors (Delaney, 1999).

Comparison and Contrast between TCT and LCT

The concepts of LCT and TCT have been discussed for years in the field of education, especially in term of instruction. Theorists and researchers in education intended to replace the LCT with TCT Kain, 2002). Even though there is such a tendency, the two approaches still align together in the work of teaching. For instance, Ahmed (2013) conducted a study on LCT versus TCT style to examine and identify the type of teaching styles. The result showed that the graduate education instructors adhered to TCT and LCT. Moreover, sometimes, teachers subconsciously presumed that concept of TCT as that of LCT. Nith et al. (2010) carried out a study on the promotion of active-learning pedagogies and LCT in an effort to reform the national education, which intended to give all students an equitable education and effective teaching and learning. The result indicated that teachers considered the implementation of five-step lesson plan designed with teacher-centered tendency as the implementation of the learner-centered approach. To sum up, even though there were a number of scholars describing the different characteristics of both the learner-centeredness and teacher-centeredness in theory and instructional practices, teachers seemed not to be clear with the approaches. To make the underlying concept of the TCT and LCT clearer, it is necessary to identify the differences between this learner-centered and the teacher-centered approach. The comparison between the TCT and LCT paradigms and instructions were made by several scholars. As more conversation and controversy is generated relating to teaching large classes, a more diverse learner population, and changes education, teaching appears to have become bifurcated.

Education has been transforming itself from the Industrial age to the Information age. *Dolence and Norris* (1995) report that the traditional classroom, seat time-based education, has been changed to a network learning environment where knowledge navigation, distance-free learning, fusion of learning and work, and achievement-based outcomes are some of the key elements of an education in the Information age. The comparison between these two teaching paradigms is given the table 1.

Table 1 Education: A vision for learning in the 21st century

Information Age
Network
Learning
Achievement-based learning
Knowledge navigation
Distance-free learning
Perpetual learning
Fusion of learning and work
Fusion of learning systems

Sources: Dolence, M. G. and Norris, D. M. (1995).

Similarly, *Bell (1981)* and *Bennett (1976:38)* illustrates the main characteristics of the progressive (LCT) versus the traditional (TCT) approaches to education. The progressive features represent the fullest expression of learner centered practices promoted in England during the 1960s and 70s. On the other hand, traditional teaching is existed from the ancient period. The difference between these two paradigms is given in the table 2

Table 2
Features of progressive (LCT) centered teaching and traditional (teacher) centred teaching

Traditional (TCT)	Progressive (LCT)
Emphasises knowledge and work	Emphasises interest and play
Emphasises direct teaching	Emphasises learning by discovery
Accept pupil passive roles	Emphasises pupil active roles
Emphasises factual learning	Emphasises creative expressions
Separate subject matter	Integrated subject matter
Emphasises overt control	Rejects rigid forms of control
Depends much on external rewards	Emphasises intrinsic motivation more than external rewards
Decision-making is firmly in the teacher's	Pupils participate in decision-making in the process of
	learning hands.
Pupils work in competition with each other	Pupils work cooperatively
Regular testing is used	There is little testing used
Favours only the able children and believes in strict	Emphasises that all children are equal and teacher respects
streaming	each individual
Uses separate, enclosed rooms for each class and	Uses open plan classrooms with no rigid physical boundaries
teacher	dividing one learning group from another
Teacher as distributor of knowledge	Teacher as guide to educational experiences of the children

Source: Bell (1981:17) and Bennett (1976: 38)

TCT and the LCT approaches can be seen to represent the opposite poles of teaching and learning approaches to education. There seems to be insufficient information on the theoretical background of the TCT and the LCT in the literature. This background is vital, as it helps guide teaching practices. One of the aims of this study is to broaden our knowledge of these two approaches. The philosophical and psychological foundations underlying the TCT are obviously different from those of the LCT. This means the approach to teaching and learning in a TCT stands in stark contrast to that in a LCT. Moreover, in the LCT, what happens in the classroom is more closely related to psychological perspectives. A comparison between behaviourism (TCT) and constructivism (LCT), which are the theories on which these two approaches are based, appears in Table 3.

Table 3
Difference between behaviourism and constructivism is presented in the table 3.

Difference between behaviourism and constructivism is presented in the table 3.			
Aspects	Behaviourism (TCT)	Constructivism (LCT)	
Focus of	How much is learned.	How the learner structures and processes	
learning		knowledge.	
Learning	 Learning as response acquisition. 	Learning as knowledge construction	
	• A mechanistic process in which		
	successful responses are strengthened and		
	unsuccessful responses are weakened.		
Learning	The amount of behaviour change	The cognition of learners	
outcomes			
Goal of	To increase correct behaviour in the	To help learners develop expertise in how to learn	
instruction	learners' repertoire.	and to utilise that expertise to construct new	
		knowledge.	
Teacher' s	The active dispenser of feedback	A participant with the learner in the process of	
role		constructing meaning	
		A facilitator who helps learners develop learning	
		and thinking	
Learner's role	A passive recipient	An active processor of information	
		A constructor of knowledge	

Source: Mayer, 1997; Wood, 1998; Nunan, 1999; Eggen and Kauchak, 2013

As can be seen from the table 3 above, the key concepts of behaviourism and constructivism are diametrically opposed. It is important to point out that the psychological perspectives illustrate how children learn and how teaching should unfold. Evidence from psychological perspectives bears out the idea that if teachers become 'active and central to instruction, students are a passive audience for teachers' (*Cuban*, 1993, p. 248). These foundations underpin the practices of these two approaches. It is therefore evident that to make the transition from TCT to LCT teaching practices is not an easy task. In the same context, *Rogers and Freiberg* (1999) mentioned that such a shift requires

teachers to adopt a person-centered, rather than a teacher-centered, orientation toward classroom management, which features shared leadership, community building, and a balance between the needs of teachers and students.

Table 4
Discipline comparison in teacher–centered and Person–centered classrooms teaching

Teacher–Centered	Person-Centered
Teacher is the sole leader	Leadership is shared
Management is a form of oversight	Management is a form of guidance
Teacher takes responsibility for all the paperwork	Students are facilitators for the operations of the classroom
and organization	
Discipline comes from the teacher	Discipline comes from the self
A few students are the teacher's helpers	All students have the opportunity to become an integral part
	of the management of the classroom
Teacher makes the rules and posts them for all	Rules are developed by the teacher and students in the form
students	of a constitution or compact
Consequences are fixed for all students	Consequences reflect individual differences
Rewards are mostly extrinsic	Rewards are mostly intrinsic
Students are allowed limited responsibilities	Students share in classroom responsibilities
Few members of the community enter the	Partnerships are formed with business and community groups
classroom	to enrich and broaden the learning opportunities for students

Source: Rogers and Frieberg, 1994. (p. 240).

A number of scholars reported difference between TCT and LCT. *Huba and Freed (2000)* also differentiate between LCT and TCT. Their difference between these two teaching strategies given in the table 5.

Table 5
Teacher-centeredness paradigms versus learner-centeredness paradigms

Teacher-Centered Paradigm	Learner Centered Paradigm
Knowledge is transmitted from teachers to students	Students construct knowledge through gathering and
	synthesizing information and integrating it with the general
	skills of inquiry, communication, critical thinking, problem
	solving, etc.
Emphasis is on acquisition of knowledge outside the	Emphasis is on using and communicating knowledge
context in which it will be used	effectively to address enduring and emerging issues and
	problems in real-life contexts.
Emphasis is on right answers	Emphasis is on generating better questions and learning
	from errors
Focus is on a single discipline	Approach is compatible with interdisciplinary investigation
Teaching and assessing are separate	Teaching and assessing are intertwined
Desired learning is assessed indirectly through the	
Desired learning is assessed indirectly through the	Desired learning is assessed directly through papers,
use of objectively scored tests	projects, performances, portfolios, etc
use of objectively scored tests	projects, performances, portfolios, etc
use of objectively scored tests Teacher's role is to be primary information giver and	projects, performances, portfolios, etc Teacher's role is to coach and facilitate. Professor and
use of objectively scored tests Teacher's role is to be primary information giver and primary evaluator	projects, performances, portfolios, etc Teacher's role is to coach and facilitate. Professor and student evaluate learning together.
use of objectively scored tests Teacher's role is to be primary information giver and primary evaluator Students passively receive information	projects, performances, portfolios, etc Teacher's role is to coach and facilitate. Professor and student evaluate learning together. Students are actively involved

Sources: Huba & Freed, (2000, p.5)

Another scholar *Mushi* (2004) also delineated differences between LCA and TCA as summarized in Table 6. He used components such as the learning climate, motivation, students' participation, teaching and learning process, teacher's autonomy, identification of needs, and the evaluation process to compare the two approaches. In the view of *Msonde* (2009), however, this comparison is a traditional way of looking at LCA and TCA.

Table 6
The difference between LCT and TCT

Components	Teacher-centred Teaching (Didactic)	Learner-centred Teaching (Facilitative)
Learning climate	Tense, low trust, formal, cold,	Relaxed, trusting, warm, informal, collaborative,
	authority oriented	and supportive
Motivation	By external rewards and punishment	By internal incentives and curiosity
Students participation	Low, passive recipients	Active participants

Learning tasks	Subject-centered	Problem centered
Teaching-Learning	Non-participatory, transmittal	Participatory, use experiential
Process	methods, teacher-centered	methods, student-centered
Teachers autonomy	Authoritative, expert, director	Facilitator/ partner/ guider/leader
Identification of needs	By lecturer and experts	By negotiation with inputs from
		learners, job-market and faculty
Understanding	Superficial	Permanent
Evaluation	By teachers and experts	Jointly by teachers and learners

Source: Adapted from Mushi (2004, p.35)

To be more practical, *Bradley-Bennett*, *Davis*, *and Weddel* (2010) introduced the differences in the various aspects of TCT and LCT. The table 7 shows the major difference between TCT and LCT.

Table 7
Teacher-centered instruction versus learner-centered instruction

Teacher-centered instruction	Learner-centered instruction	
Focus is on instructor	Focus is on both students and instructor	
Classroom is quiet	Classroom is often noisy and busy	
Instructor chooses topics	Students have some choice of topics	
Instructor talks; students listen (or take a nap)	Instructor models; students interact with instructor and one	
	another	
Instructor monitors and corrects every student	Students talk without constant instructor monitoring;	
utterance	instructor provides feedback/correction when questions arise	
Instructor answers students' questions	Students answer each other's questions, using instructor as an	
	information resource	
Instructor evaluates student learning	Students evaluate their own learning; instructor also evaluates	
Students work alone	Students work in pairs, in groups, or alone depending on the	
	purpose of the activity	
Focus is on contents forms and structures (what the	Focus is on contents use in typical situations (how students	
instructor knows about the contents)	will use the contents)	

Source: Bradley-Bennett, Davis, and Weddel (2010)

Table 8 below presents a synthesis of the literature in the field with the intention of illustrating how to put the LCT into practice in terms of practical classroom concepts, and also in order to show the dichotomy between these two teaching traditions. It is important to make this distinction, because it will help us to understand more clearly whether or not the LCT is being practised and to uncover dominant forms of classroom practice.

Table 8
Characteristics of teacher- and learner-centred teaching practices

practices
Learner centered teaching practices
Focus on the learners and learning.
Focus on developing higher order thinking skills.
Knowledge is constructed by learners.
Learners are involved in deciding what and how to learn.
Students talk most of the time.
Students are trained to take responsibility for, as well as
control of their own learning; empowerment.
Students have ample opportunity to work together, as
instruction is more in pairs, groups or individuals
depending on the purpose of the activity.
The learning process is collaboration between teachers and
learners.
The main role of the teacher is that of a facilitator who
creates environments for learning.
Students have a more or equal opportunity to pose
questions.
Students are actively involved in the learning process
(mentally, physically, emotionally)
Students are motivated to learn intrinsically.
Students have some choices about their learning.

All content and activities are initiated by the teacher.	Some content and activities are initiated by learners.
Rely on textbooks and deploy the same instructional	Utilise various kinds of resources and provide different
materials at the same time.	instructional materials for individuals.
Emphasise memory, rote, drill and practice.	Use different styles of teaching and underline discovery
	techniques.
Teaching and assessing are separate (Huba and	Testing is an integral part of the teaching process. Employ
Freed, 2000). Employ solely summative assessment.	formative and summative assessment. Skills are developed
	through self- and peer assessment activities.
The purpose of evaluation is for grading and	Evaluation is an ongoing process which aims to promote
monitoring learning. Students are excluded from the	and diagnose learning. The teacher and students evaluate
evaluation process.	learning together.
Learning environment is competitive and individual.	Learning environment is cooperative, collaborative and
	supportive.

Mtitu (2014) also described various aspects of TCT and LCT in his thesis. Table 9 hereunder presents the major differences between LCT and TCT practices.

Table 9 The difference between Learner centered and Teacher centered teaching practices

Component	Learner centered tea	Teacher centered
Pedagogical	• Learners become the foci and are actively	• The teacher himself /herself plans the lesson
reasoning and	engaged in the planning process of	(s) under the influence of teacher-dominated
decision	classroom instruction	curricula materials including the subject
making during	Classicon instruction	syllabus.
planning		syndous.
process		
	• Both a teacher and students negotiate	• Teachers use readymade instructional needs
instructional	instructional needs according to the topic,	identified by curriculum developers and
needs	learner's context and background	teachers during classroom process.
	knowledge, resources availability, job-	
	market, and the country's educational	
	philosophy	
Motivation	• Value driven and enhancement of learners'	• By teacher-centred lesson objectives and
	curiosity, creativity, and integration of their	provision of external rewards and punishment.
	prior knowledge on the subject.	
Teaching and	• Live classroom instruction, mostly activity-	• Passive and teacher dominated classroom.
learning process	based using well organized participatory	Students sit quietly listening and jotting down
	approaches such as small group discussion,	notes from the teacher's lecture. Classroom
	think-pair share, project, and fieldtrips.	interaction is minimal.
	• Fluid relationship such that both a teacher	• Authoritative kind of relationship where the
students'	and the learner are teacher and learner at the	teacher is not only the source of knowledge
relationships	same time whereas they democratically learn	but also the master of classroom instruction.
	from one another. Teachers become	
	facilitators, co-constructors and or partners	
	of classroom processes.	
Classroom	• Democratic, trusting, warm, informal,	• Authoritative, tense, low trust, fear, and
atmosphere	collaborative, and supportive	predominantly formal.
Understanding	• High possibility for deep and long term	High possibility for surface learning and short
	learning of social studies phenomena	term conception of geographical phenomena.
	Mainly formative assessment where teachers	Classroom evaluation is done by teachers and
instruction	and learners jointly assess their instruction	experts and mostly at the end of instruction;
	and evaluation is interwoven in the	• Teachers use evaluation for grading, which
	instruction. Teachers use evaluation results	subsequently are used to motivate students as
	to inform their classroom practices.	well as to provide parents with information
	• Evaluation techniques that are designed to	about their children's academic progress.
	involve students in examining their own learning, focusing their attention on their	
	learning needs and changing understanding	
	rather than on a grade.	
	rather than on a grade.	Source: Mtitu (2014)

Source: Mtitu (2014)

Another scholars *Allen* (2004) also differentiate LCT from TCT. His difference between these two paradigms has been presented in the table 10.

Table 10
Teaching-Centered versus Learning-Centered instruction

Concept	Teacher-Centered	Learner-Centered
Teaching goals	Cover the discipline	Students learn:
	1	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	Courses in catalog	• Cohesive program with systematically created
curriculum		opportunities to synthesize, practice, and develop
		increasingly complex ideas, skills, and values
Organization of the	Courses in catalog	• Cohesive program with systematically created
curriculum		opportunities to synthesize, practice, and develop
		increasingly complex ideas, skills, and values Course
		structure
		Faculty cover topics
		Students master learning objectives
How students learn	• Listening	• Students construct knowledge by integrating new
	Reading	learning into what they already know
	• Independent learning, often	Learning is viewed as a cognitive and social act
	in competition for grades	
Pedagogy	• Based on delivery of	Based on engagement of students
	information	
Course delivery	• Lecture	Active learning
	• Assignments and exams for	Assignments for formative purposes
	summati <mark>ve purpo</mark> ses	Collaborative learning
		Community service learning
		Cooperative learning
		Online, asynchronous, self-directed learning
G 11	P 1	Problem-based learning
Course grading	• Faculty as gatekeepers	Grades indicate mastery of learning objectives
T 1, 1	Normal distribution expected	D : 61
Faculty role	• Sage on the stage	Designer of learning environments
Effective teaching	• Teach (present information)	• Engage students in their learning
	well and those who can will	Help all students master learning objectives
	learn	Use classroom assessment to improve courses
		Use program assessment to improve programs

Source: Allen (2004)

Johnson et al. (1991) summarizes the differences between the old (TCT) and new paradigm (LCT) (Table 11). A comparison of the old and new paradigms of teaching indicates that the shift occurs at multiple levels by altering the concepts of knowledge, students, faculty purpose, relationships, teaching, and assumption about who can teach and how teaching can be effective. In the old paradigm, knowledge has been transferred from faculty to students. The new paradigm of teaching requires educators to consider new meanings and methods of learning and teaching models that are suitable for a society of the Information age. In the new paradigm, knowledge is constructed jointly by students and faculty. Rather than being passive vessels to be filled by faculty knowledge, students in the new paradigm become active constructors and discoverers of knowledge. The purpose of the faculty in the new paradigm is to develop student competencies. Relationship building among students and faculty is a key component in fostering cooperative learning and teamwork in the Information age.

Table 11 Comparison of Old and New Paradigms of Teaching

Aspects	Old Paradigm	New Paradigm
Knowledge	Transferred from Faculty to Students	Jointly constructed by Students and Faculty
Students	Passive vessel to be filled by Faculty	Active constructor, discoverer, transformer of own
	knowledge	knowledge
Faculty Purpose	Classify and sort Students	Develop Students' competencies and talents

Relationships	Impersonal relationships among	Personal transaction among students and between	
	Students and between Faculty and	faculty and students	
	Students		
Context	Competitive and individualistic	Cooperative learning in classroom and cooperative	
		teams among faculty	
Assumption	Any expert can teach	Teaching is complex and requires considerable	
		training	

Source: Johnson, D.W., Johnson, R. T. and Smith K.A. (1991).

Table 12 summarizes the differences between teacher-directed and learner-centered, technological instructional strategies.

Table 12
Teacher-Directed and Learner Centered Instructional Strategies

Teacher Directed	Learner Centered	Technological
Didactic teaching	Student exploration	Online instruction
Short blocks of instruction	Extended blocks of multi-	Online application
	disciplinary instruction	
Passive or one-way modes	Active and interactive modes	Web-based learning
Individual effort	Collaborative/Cooperative	Individual/Collaborative/
		Cooperative
Teacher as knowledge provider	Teacher as facilitator/guide	Teacher and online resources as
		facilitator/guide
Ability groups	Heterogeneous groups	Heterogeneous groups
Knowledge/Skill Assessment	Knowledge/Skill and Cognitive	Knowledge/ Skill and Cognitive
	Performance Assessment	Performance Interactive Assessment

According to Table 12, the learner-centered instruction considers students as active, collaborative contributors and the role of the teacher is more of a facilitator rather than a knowledge provider. Knowledge/skill and cognitive performance needs to be augmented by interactive online assessment techniques.

Conclusion

What is clear from the above analysis is that although there are some general similarities between LCT and TCT, there are many differences between these two pedagogical practices. Teaching is either TCT or LCT breaks an inseparable bond and does so to the detriment of the learner and teachers. It is often said that there are two basic approaches to teaching: teacher centred and student centred approaches. TCT approaches are more traditional in nature, focusing on the teacher as instructor. They are sometimes referred to as direct instruction, deductive teaching or expository teaching, and are typified by the lecture type presentation. In these methods of teaching, the teacher controls what is to be taught and how students are presented with the information that they are to lean. Meanwhile, LCT (sometimes referred to as discovery learning, inductive learning, or inquiry learning) place a much stronger emphasis on the learner's role in the learning process. When you are using LCT to teaching, you still set the learning agenda but you have much less direct control over what and how students learn. In nutshell, it is clear that there are many differences between the two teaching paradigms in terms of teaching methods, classroom learning environment, teaching-learning materials, role of teachers and students, evaluation of students.

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