

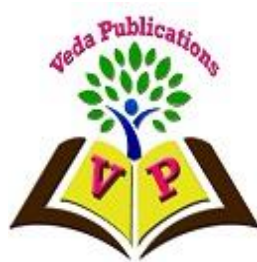
LITERATURE REVIEW OF THE LEARNER CENTRED TEACHING

Dr. Rajendra Kumar Shah

(Associate Professor, Sanathimi Campus, Tribhuvan University, Bhaktapur, Bagamaati Province 3, Nepal.)

Email: drrajendrakumarshah@gmail.com

Abstract



Article Info:

Article Received 01/10/2020

Accepted on: 29/11/2020

Published online: 18/12/2020

This literature review has been carried out in order to develop a clear understanding of LCT. In the present study, document review methods was adopted. This method is based on the secondary sources of the data. In-present depth Desk Review is basically involved in collecting data from existing resources. The major aim of the study is to explore meaning and defining of LCT in the form of opinions of the respondents and to find out the major findings of these study. Thus, this study asked two research questions: How do researchers define LCT; and What are the main findings of these studies. This review clearly indicates that a close look of the research literature indicates that a wide variety of definitions have been given to LCT. Every researcher had his/her own definition. It means to be conceptually different to different people. In addition to showing the differences in definitions, the literature also indicates that the extent to which students handled their own learning activities without teacher's direct involvement in the LCT also varied widely. There seems to be a continuum as to the extent that learners took responsibilities in their learning. With respect to its impact on learners' psychosocial behaviors and academic learning results, the majority of the studies showed positive effects on students' behavior, attitude, interest and self-confidence. A small number of the studies reported positive improvement in student learning outcomes. It seems that the majority of the studies focused their investigation of the LCT's impact on various psychosocial aspects rather than on academic learning of the students. The main findings of the studies seems to reveal that with those studies involving the use of multiple LCT activities, learners mainly showed changes in the non-academic areas, such as: behavior, attitudes, interests and self-confidence; in studies that used few LCT activities, and teacher played a relatively more active role in giving directions and teaching, students' improvements were mainly in the academic areas. Based on this finding, it seems fair to say that before we rely on using a highly LCT to generate high levels of learning in various academic subject areas (if that is our primary purpose of academic instruction), further study of the issue seems to be reasonably necessary.

Keywords: *Learner centred teaching; teacher centred teaching, students centred teaching; children centred teaching; teaching; learning.*

Background

For decades, the learner centered teaching (LCT) has been popular among many educators (*Confer, 2000; Cuban, 2006*). Teachers at various grade levels have been applying the LCT for a variety of reasons: to increase student participation (*Kelly, 1985*), to develop confidence in students (*Dandoulakis, 1986*), to foster the intellectual development of students (*Burke, 1983*), to enable students to build multiple historical perspectives (*Ogawa, 2001*), to improve students' understandings of historical ideas and concepts (*Stout, 2004*), to shift the learning responsibility to students (*Passman, 2000*) and so forth. However, little is known on how the LCT has been defined by various educators and researchers, on the impact of this teaching approach upon students' learning and other aspects of their behavior. A study of the research literature seems to be a reasonable way to develop a clear understanding of the LCT.

Furthermore, *Mtika and Gates (2010)* state that LCT echoes the idea of effectively equipping learners with competencies in creative intelligence, critical thinking and problem solving skills. LCT can be seen as a reaction to criticisms of methods of teaching that emphasise transmission of information from teacher to students. *Rogers (1983, p.25)* describes the shift in power as driven by a need for a change in the traditional educational atmosphere where "students become passive, apathetic and bored". Instead, LCT "gives learners, and demands from them, a relatively high level of active control over the contents and processes of learning. What is learnt, and how, are therefore shaped by learners' needs, capacities and interests" (*Schweisfurth, 2013a, p.2*). However, despite widespread use of the term, *Lea et al., (2003, p. 322)* note that *Biggs' (1999)* observation may still be relevant in that "many institutions or educators claim to be putting LCT into practice, but in reality they are not". The LCT has been known by a variety of terms including: child-centred pedagogy; child-centred education; child-centred teaching; child-centred learning; student-centred teaching; student-centred learning; learner-centred approach; learner-centredness; or student-centred. These terms have all been used interchangeably (*Harmelen, 1998; Lall, 2010; O'Neill & McMahon, 2005*). *Chung and Walsh (2000)* state that there have been more than 40 different meanings of the term in contemporary usage. Because these concepts are applied across all spectrums/levels of education, learner-centred and student-centred tend to be the preferred terms for older learners, whereas child-centred might be used in early-childhood or primary school contexts.

O'Neil and McMahon (2005), in their discussion of the term LCT, link the concept with other terms such as flexible learning, experiential learning and self-directed learning. They also emphasise that the term has been overused and can mean different things to different people. Similarly, *Tabulawa (2003)* states that LCT has often been used interchangeably with participatory, democratic, inquiry-based, and discovery methods... These strands differ from each other only in so far as they emphasise different degrees of learner autonomy (*p.9*). According to *Attard, Iorio, Geven and Santa (2010)* there is not a universally agreed definition about student-centred learning, even though the term is being used by a range of educational policy-makers. In the same vein, *Lea, Stephenson and Troy (2003)* state that there may be a variety of potential definitions of what LCT is and that different dimensions of the learning and teaching process are highlighted by different researchers and practitioners. While traditional ways of teaching and learning focus on teachers and teaching, LCT places a focus on students and their learning process. The latter emphasises the needs of the learners and their capacity to initiate their own learning by choosing activities that interest them and then working independently to discover their own potential. Furthermore, learners are allowed to work in ways that are compatible with their own learning styles and in a child-centred classroom, there will be

a lot of learning through play (*Lall, 2010*). In order to further understand the concept of LCT, it is important to consider how LCT was historically founded and the theories that have informed its development and implementation. This literature will be discussed in the following two subsections.

Research questions of the present study

This investigation asked two questions.

- How do the researchers define LCT in their respective studies?
- What are the main findings of these studies?

Methods and Materials

The major aim of the present article is to review the literature on LCT and its various components. Desk Review Method (DRM) has been used in the present study. DRM is another name for secondary research. Broadly speaking, there are two types of research activity: primary research and secondary research. DRM is not about collecting data. Instead, researcher's role as a user carrying out DRM is to review previous research findings to gain a broad understanding of the field. DRM is basically involved in collecting data from existing resources. It is very effective and most of the basic information could be easily fetched which can be used as benchmark in the research process. DRM activities include scanning the literature, grey literature, analyzing secondary data, and creating a reference list so that all documents are organized and easily accessible to all readers. In the present study, Online Desk Research (ODR) has been employed as a major research method. The Desk Review attempts to analyze concept as well as definition of *LCT*. It is also known as one of the major types of the External Desk Research. There is incredible amount of data available online on internet. It's important for organization to be information specific while fetching out this information as there are billions of pages available on internet.

There could be two approaches for digging out the relevant information from internet, one is directly browsing the specific information from various sites and extracting the information out of these sites. At the same time, common grey literature publication types include reports (annual, research, technical, project etc.), working papers, government documents, white papers, and evaluations were used in the present study. Organizations that produced grey literature include academic centres, departments, and government departments and agencies, civil society or non-governmental organizations or and private companies and consultants. Secondly, using the various search engines like www.google.com, www.yahoo.com, www.infoseek.go.com, www.altavista.com etc, for modulated searching. The important aspect here is to refine the searching techniques in such a way that results are promising and relevant. For this it is necessary that the researcher should know the importance of the research and follow the guideline intellectually to reduce the efforts made and time consumed in searching. Thus, the study was descriptive in nature. Library documents and online document were used as tools for collection of data. After reviewing these, literatures, a detailed description has been in review of the literature section.

Search strategy

This literature review builds on and references reports from previous and ongoing initiatives, original research and academic studies, meta-analyses, literature and policy reviews, and technical reports at the international, regional, and country levels. A literary search and selection of the related studies

focusing on the LCT generated mainly two types of studies: the qualitative and the quantitative type of studies.

Selection criteria

I searched scholarly and online databases (Google Scholar, JStor, Proquest etc.) that focus on the LCT and related policies, trends, and issues in various countries. I used search terms associated with the following various topics such as child centred education (CCE); child centered approach (CCA); child centred learning (CCL); child centred paradigm (CCP); child centred pedagogy (CCP); child centred method (CCM); child centred teaching (CCT); child centered curriculum (CCC); child oriented conceptions (COC); child centered theory of education (CCTE); child centred classroom methodologies (CCCM); child centred approach to education (CCAEE); child centred; and child centredness. Accordingly, other terms such as learner centered education (LCE); learner centered approach (LCA); learner centered curriculum (LCC); learner centred learning (LCL); learner centred method (LCM); learner centred paradigm (LCP); learner centred pedagogy (LCP); learner centred teaching (LCT); learning oriented conceptions (LOC); learner centered theory of education (LCTE); learner centred classroom methodologies (LCCM); and learner centred approach to education (LCAE) are also used during the literature search. At the same time, other terms include student centred approach (SCA); student centred curriculum (SCC); student centred education (SCE); student centred learning (SCL); student centered pedagogy (SCP); student centred teaching (SCT); student centred; and student centredness. I have also used teacher centred teaching (TCT) such as teacher centered approach (TCA); teacher centered curriculum (TCC); teacher centred education (TCE); teacher centred learning (TCL); teacher centred pedagogy (TCP); teacher centred paradigm (TCP); teacher centred method (TCM); teacher centred teaching (TCT); teacher oriented conceptions (TOC); content oriented conception (COC); teacher centered theory of education (TCTE); teacher centred classroom methodologies (TCCM); teacher centred approach to education (TCAE); traditional pedagogy (TP); teacher centred instruction (TCI); direct instruction (DI), conventional instructional approaches, content oriented conception, conventional learning, and traditional learning during the literature review process. I also conducted targeted searches of published and grey literature (including websites) for information on the LCT in the American, European, Australian and Asian potential countries.

Roadmap for the Literature Review

In the literature review, the first section focuses on empirical evidence about LCT. This section comprises of two headings student outcomes and faculty experience. Likewise, section two presents studies on the implementation. Next, section third presents summaries of the categorization of literature. In this section, two headings such as summaries of positivist/quantitative studies and interpretive/qualitative studies displayed.

Presentation and Review of the Literature

In this section. I have reviewed the literatures related to LCT. Literatures reviewed on the six headings such as previous studies on the implementation of LCT; empirical Evidence about LCT: student outcomes; faculty experience; quantitative studies; and qualitative studies have been critically analyzed.

Empirical Evidence about LCT

The scope of empirical evidence on LCT focuses on describing and testing various teaching methods used in undergraduate programs. The studies used designs that include descriptive surveys (Avdal, 2012; Colley, 2012; Cooper & Caver, 2012; El-Gelany & Abusaad, 2012; Hoke & Robbins, 2005; Kaddoura, 2010; Klunklin et al., 2010; Kocaman, Dicle & Ugur, 2009; Ozbicakci, Bilik, & Interpeler, 2012; Phillips & Vinten, 2010; Schaefer & Zygmunt, 2003), mixed methods (Dearnley & Meddings, 2007; Diefenbeck et al., 2011; Jeffries, Rew & Cramer, 2002; Lau & Wang, 2013; Regan, 2003; Tiwari et al., 2006), program evaluation (Yang, et al., 2012), a systematic review (Yuan et al., 2008), qualitative approaches (Greer et al., 2010; Klunklin, Subpaiboongid, Keitlertnapha, Viseskul & Turale, 2011; Lekalakala-Mokgele, 2010; Lerret & Frenn, 2011; Moore, 2009), quasi-experimental (Baumberger-Henry, 2005; Choi et al., 2014; Clarke, 2010; Kalam-Salminen, Valkonen, Aro & Routasalo, 2013; Rideout et al., 2002; Shin, S., Ha, Shin, K. & Davis, 2006; Tseng et al., 2011; Zhang et al., 2012), and experimental projects (Brydges, Carnahan, Rose & Dubrowski, 2010; Lin et al., 2010). Two major themes emerged from a critical review of 34 studies pertaining to LCT. These themes were student outcomes of LCT and faculty experiences of implementing LCT.

Student outcomes. Most studies that examined the effects of LCT reported positive student learning outcomes. According to the reports of Avdal (2012), Brydges et al. (2010), Cheng, Lou, Tsai and Chang (2013), Diefenbeck et al. (2011) and Hoke and Robbins (2005), LCT methods such as student directed learning, co-operative learning techniques, and team-based learning were consistently reported as leading to enhanced problem-solving and analytical skills in students. Several other studies comparing various LCT methods with conventional methods reported enhanced critical thinking and clinical decision-making skills in nursing students. For example, Tseng et al. (2010) examined PBL and concept mapping in comparison with traditional methods in an undergraduate nursing program; they found that PBL and concept mapping promoted critical thinking skills, personal accountability and autonomy, and clinical reasoning among students. Yoo et al. (2010) also examined the effects of case based learning (CBL) on the problem-solving ability of nursing students. Ability to problem-solve was found to be higher among students who received CBL when compared to a control group. Furthermore, CBL was found to enhance decision-making and create curiosity in students. Consistently, researchers also identified student satisfaction (Rideout, 2002; Zhang et al., 2012) and motivation for self-directing leaning (Klunklin et al., 2010; Kocaman, Dicle, & Ugur, 2009) as positive outcomes of LCT.

Contrary to the positive trend reported in the above studies, some researchers claim there is no difference in the outcome of SCT when compared to student outcomes of traditional teaching. For instance, Jeffries et al. (2002) compared the effectiveness of an interactive LCT approach with traditional lectures and demonstrations between two groups of nursing students (70 sophomore and 50 junior baccalaureate students) in a baccalaureate program. Although more satisfaction with learning was indicated, the study reported no significant difference in the basic laboratory skills for both groups. Choi et al. (2013) examined LCT in connection with outcomes such as critical thinking, problem-solving, and self-directed learning of nursing students receiving PBL as compared to those receiving traditional lecture. No significant difference was found between the learning outcomes in the PBL group and those in the traditional lecture group. Moreover, according to Yuan et al. (2008), a systematic review of empirical literature on the effects of PBL could not identify any supportive evidence to indicate improved critical thinking ability in nursing students. The inconsistency

identified in research regarding the effects of LCT teaching on student learning is noteworthy. None of those studies that claimed positive outcomes, such as increased critical thinking and problem-solving skills, documented how LCT was implemented. Although *Yoo and Park (2014)* reported significant difference in outcomes; their report was only based on a 15 minutes analysis of video case scenario of students' performance. Moreover, most studies conducted among students were either cross-sectional studies of self-reported outcomes (*Avdal, 2012; Hoke & Robbins, 2005*) or quasi-experimental studies (*Brydges et al., 2010; Cheng et al., 2013; Clark et al., 2008*).

Faculty Experience. The majority of studies on faculty experience were conducted in the United States (*Colley, 2012; Dearnley & Meddings, 2007; Greer et al., 2010; Johnson-Farmer & Frenn, 2009; Lerret & Frenn, 2011; Moore, 2009; Phillips & Vinten, 2010; Regan, 2003; Schaefer & Zygmunt, 2003*). Most researchers describe a number of factors that influence the effective use of SCT methods. Among the key barriers identified are the lack of understanding of the basic principles of LCT and the need for more knowledge regarding the philosophical roots of the approaches. *Colley (2012)* explored faculty's perceptions of adopting a LCT philosophy. Understanding the philosophical concepts by faculty and students, administrative support, and peer sharing were identified as key facilitators for effective implementation and sustainability of LCT model.

Dearnley and Meddings (2007) and *Lekalakala-Mokgele (2010)* also describe faculty's experience and impact of LCT on learning. While these studies examined different aspects of LCT, their results consistently indicated inadequate understanding of LCT pedagogy, and the need for significant preparation of both students and faculty in order to achieve successful implementation of LCT. Similarly, *Greer et al. (2010)* examined the SCT characteristics among self-identified nurse educators who reported using LCT at least 50% of the time in their teaching. Factors such as administrative issues, student issues, and lack of understanding of SCT also emerged in Greer et al.'s study as key barriers to the implementation of LCT. Although *Johnson-Farmer and Frenn (2009)* and *Lerret and Frenn (2011)* conducted their studies on teaching excellence, both studies emphasized the need for knowledge and faculty preparation for sustaining teaching excellence. The four themes emerging from their study describe an excellent teacher as enthusiastic, knowledgeable, student-centered, and one who knows and honors students (*Lerret & Frenn, 2011*).

A common recommendation in all the studies was the need for faculty development in order to prepare faculty for the adoption of LCT. Studies also showed that faculty members face barriers in adapting to the change process and the need for organizational support (*Lerret & Frenn, 2011; Moore, 2009; Ozbicakci et al., 2012; Phillips & Vinten, 2010; Regan, 2003*). Although studies widely documented faculty's experiences of using LCT in the classroom and simulation laboratory settings in places like the United States and United Kingdom (*Arundell & Cioffi, 2005; Colley, 2012; Greer et al., 2010; Johnson-Farmer & Frenn, 2009*).

Studies on the implementation of LCT

The adoption of the LCT in both developing countries and a number of countries in the Far East has played an integral part in educational reforms and has been promoted by government policies (*Brodie et al., 2002; O'Sullivan, 2006*). The results from most previous studies suggest that: teachers have a positive attitude towards LCT teaching; the TCT is ingrained in most schools, while the implementation of the LCT is very limited (*Cuban, 1993; Orafi, 2008; Yilmaz, 2009*); factors influencing the recurrent failure to implement the LCT by in-service teachers seem to be teacher capacity, social and cultural factors, institutional cultures, the availability of resources, learner

background, the quality of teacher education programmes, along with education traditions (*Yilmaz, 2009; Schweisfurth, 2011*); the differences between Western and non-Western contexts leads researchers to question the appropriateness and merits of the LCT in developing countries (*Holliday, 1994; O'Donoghue, 1994; Tabulawa, 2003; O'Sullivan, 2004; 2006*); and teachers' beliefs, their 'apprenticeship of observation' (see Chapter 3) and their understanding of the LCT could be possible reasons for the non-implementation of this approach (*Cuban, 1993; O'Sullivan, 2004; Orafi and Borg, 2009*).

Previous research on the implementation of the LCT has mainly focused on in-service teachers, and has neglected to what extent it is adopted by pre-service teachers. From the previous findings, one thing that has sparked our interest is why the implementation of this approach is still limited worldwide, even though most teachers have a positive attitude towards the approach. The appropriateness of this approach in non-Western educational contexts has triggered a debate. Teachers' failure to implement this approach may be caused not only by the factors discussed earlier, but also by their learning experience, their beliefs, and their understanding of this approach. It has been suggested by previous studies (*Cuban, 1993; O'Sullivan, 2004*) that teachers' beliefs are one factor that precludes teachers from adopting this approach, and they are recognised as being of primary importance in research on teaching. However, recent research has focused solely on what teachers actually did in their classrooms and has not attempted to understand the reasons that influenced and directed their teaching. Furthermore, studies of learner-centredness in regard to language teaching have so far lagged behind studies in mainstream education. In this study, therefore, attention has been drawn to a number of areas which previous researchers have overlooked. An explanation of the reasons why, although the LCT has been promoted, it is still rarely used by teachers, will be put forward and the findings will contribute to our understanding of how pre-service teachers conceptualise this approach. It is hoped that the results of this study will be utilised by teacher educators to train pre-service teachers to become more learner-centred.

Cuban (1983; 1993) conducted many studies to investigate how primary and secondary school teachers taught in several cities in the United States using a survey, classroom observations, together with documentary analysis. He found that TC instruction continued to be dominant in schools, and that the 'durability' of TCT practices was evident (*Cuban, 1993*). *O'Sullivan (2004)* explored the implementation of the LCT by 145 unqualified primary teachers in Namibia adopting an action research approach. The data were collected from interviews, observations and documentary analysis. Cuban, she reported that the dominant mode of instruction was the TCT. *Cuban's (1983; 1993)* and *O'Sullivan's (2004)* research helped to shape the focus of this study in four principal ways. Firstly, it provides evidence of the impact of teachers' apprenticeship of observation, together with knowledge, beliefs and attitudes on teachers' pedagogical practices. According to Cuban, 'more important, it suggests that teachers had some autonomy to make classroom choices derived from their belief systems' (p. 261). These two studies underlined the importance of teachers' beliefs in the study of the implementation of the LCT. Secondly, the understanding of LCT of the teachers in their study affected their implementation of the LCT. Thirdly, the teachers did not fully understand the meaning and key notions of learner-centredness. Fourthly, O'Sullivan also reported that the majority of teachers claimed that they had adopted the LCT. However, the classroom observation data indicated that their instructional practices were didactic. This showed that there was a mismatch between what the teachers said they did, and what they actually did. In agreement with *Chisholm et al. (2000)*, *Brodie et al. (2002)* reported that four teachers took up the forms and substance of learner-

centredness, three teachers did not take up forms or substance, and eleven teachers took up only the forms. Nonetheless, 'they tended to move between teacher- and LCT and developed hybrid teaching styles' (p. 546).

The synthesis of 72 empirical studies of LCT education in developing countries by *Schweisfurth (2011)* was concerned with both the issues and problems of the implementation of the LCT. The results showed that there were several reasons for the non-implementation of the LCT. Although extensive research has been carried out on the implementation of the LCT, no single study exists which adequately covers the adoption of this approach by pre-service teachers in this synthesis of research. So far, little is known about how pre-service teachers actually adopt this approach and what factors limit its implementation (*Mtika and Gates, 2010*). In Mtika and Gates' study, they did not explore how pre-service teachers understand LCT. One of the aims of my study is to fill this gap in the research.

The findings from earlier studies indicate that teachers' beliefs and their understanding of the LCT play an integral role in guiding their classroom practices. However, much research to date has been concerned with the teachers' use of LCT instructional practices and obstacles to the implementation of the LCT, without actually examining teachers' beliefs about the LCT. Additionally, queries addressing the beliefs of pre-service teachers concerning the LCT, their understanding of and their implementation of the LCT have received scant attention in the literature. Consequently, it is hoped that the findings of this study will help to improve the classroom practices of such teachers, enable teacher educators to shift pre-service teachers towards more LCT teaching practices, and provide a better understanding of the pre-service teachers' journey as they attempt to use this approach.

Positivist/quantitative Studies

During the review of the literature, a number of studies was found related to LCT. These studies are qualitative and quantitative in nature. Thus, I have analyzed some of the studies on the basis of nature of the studies. In this section two types of studies are reviewed. First of all, I have presented positivists or quantitative studies.

A number of positivist research methods have been used in research to explore LCT and its various aspects. In a study conducted by *Ciaburri's (1975)*, the LCT was applied to teaching drama as a literary form in the acquisition of cognitive information by college students. The researcher compared the traditional lecture-discussion form of teaching to one that combined lecture-discussion with individualized student projects, in which students set their own performance objectives. The instructor provided individualized instruction to help students in the experimental group with their own projects. Participants were pre- and post-tested to measure the cognitive achievement of students in the area of drama. No significant differences between the control and the experimental group were found in their cognitive information learning. Similarly, LCT was applied by *Delaney (1980)* to teaching college composition, which was compared to a teacher-centered rhetorical approach. The experimental group used a peer-oriented, peer-evaluated method; the control group used the teacher-evaluated method. Students' performance in sentences, paragraphing and attitude toward free writing, rhetorical modes, peer evaluation and teacher evaluation were examined. No significant pre-to post-test differences between the control and experimental group in the organization, style of writing and syntactic maturity were found. Developing a central figure, using correct and varied syntax, peer evaluation and free writing were measured higher for the student-centered group, which also showed higher maturational changes in writing attitude.

LCT took the form of group discussion and active reflections in *Katz's study (1981)*. In the study, the interactive effects of matching the occupational therapy students' learning style with teaching methods (lectures vs. group discussion) were examined. It was an attitude-treatment interaction study with a randomized-block design. Multiple regression analysis with a step-up procedure showed significant interactions for achievement and attitude with perceived benefit from lectures, and for problem-solving and amount of time with individual learning style. Students in the matched conditions (e.g., reflective style in lecture) scored higher on problem-solving and reported having less study time. Graduate students, regardless of teaching method, scored higher and studied for less time, and among them the reflective style in lecture scored the highest. Likewise, studying a younger age group, *Watford (1981)* compared the effects of a TCT and LCT thematic approach on the locus of control for achievement, the attitude toward language arts and the persistence of urban 8th-grade students. In her study, the TCT used teacher-directed, teacher talk, chalk and board activities, while the LCT involved a learning activity packet and a contract approach to learning. The study lasted for 4 weeks. It was found that neither the teacher-centered nor student-centered thematic approach were statistically better over the other on either achievement or on attitude. However, the teacher-centered approach was superior on persistence. Internal locus of control in the teacher-centered approach was the most persistent of all students. Significantly fewer class absences, tardiness, discipline problems, pay-attention reminders and requests to be excused from class occurred in the student-centered approach.

The effects of a cooperative small-group instructional approach on four categories of students' oral behaviors were investigated by *Kuehnle (1988)*. In the study, the participating students first received traditional, whole group TCT, which was then compared with the same students' using a cooperative small-group problem-solving strategy, in which the teacher served as a facilitator and resource person. This second approach constituted the LCT of the study. The findings were that the problem-solving approach was significantly associated with increased cooperative oral behaviors, and with decreased competitive oral behaviors. No significant change in competitive oral behaviors occurred. To investigate the effects of prediction and explanation activities, and the effects of student-centered discussions in junior high school science learning, To determine how student ratings on instructors and course were influenced by the two different instructional methods (LCT and LCT), students in 20 sections of a first semester calculus course were given a evaluation form to evaluate their instructors on 12 attributes of instruction and administration (*Keller, Russell & Thompson, 1999*). Ten sections formed the student centered teaching group; 10 sections formed the lecture-based group. The student centered activities included cooperative learning, technology, pair, group and class discussions and contextualized, project-based learning. On 8 of the 12 instruction-related attributes, students' ratings for the project group were significantly higher than those of the comparison group. On 4 of the 12 attributes related to administrative matters, no differences were found between the ratings of the 2 groups, which suggest that students in the first-semester engineering calculus course preferred learning in the student centered environment.

In a study by *Nicolo (1993)*, the effects of cooperative learning and the learning cycle on student sense of control were examined. According to Nicolo, three student centered teaching approaches (cooperative learning, learning cycle and the combined cooperative learning/learning cycle) were applied to the 10th-, 11th-, and 12th-grade students in 4 science classes. The researcher reported that, as compared to students receiving science course instruction through conventional expository methods, the cooperative learning and the combined method group gained significantly more in their

sense of control than did the learning cycle group. Relatively brief classroom exposure to a group learning approach could induce a shift in student control beliefs toward an internal orientation by enhancing self-esteem and perceived peer support. Accordingly, **Chang (1993)** utilized an applied constructivist approach: Students predicted and explained the outcomes of a given situation, conducted student-centered discussions, while students in conventional approach did not have such activities. Results of the post-test (which included multiple choice and open-ended explanation questions) showed that students in the prediction and explanation group provided higher explanation scores than did those in the conventional teaching approach, but did not perform significantly better on the multiple choice test. Students in the conventional treatment group performed significantly better in lower-level (recall) questions. Students in the student-centered approach did not produce higher scores in higher-level (non-recall) questions. A retention test revealed that regardless of the teaching approach used, no student performance differences persisted 2 weeks after instruction.

Bayard (1994) investigated a problem-based learning, case-driven type of LCT in an effort to foster critical thinking, self-directed learning skills, and to enhance knowledge acquisition and retention. The college dietetic students' responses to this teaching approach were examined. Thirty-two undergraduate dietetic students and 52 dietetic interns participated in the study. Data from the problem-based learning (PBL) group and the lecture-based group indicated that the PBL students were more apt to use articles, books and professionals to study than lecture notes. In terms of knowledge gain, the undergraduate PBL group scored higher than did the lectured-based undergraduate group. Tenets that PBL enhances retention, self-directed learning skills and motivation level were not supported for the undergraduate dietetic students. Self-directed learning skills and confidence in problem-solving skills increased for the interns. This problem-based teaching and learning approach was basically an independent study approach.

In **Seidenstricker's (1999)** study, the student-centered teaching activities mainly included small group, peer-led discussions in which 7th-graders controlled topic selection, turn-taking and response evaluation on the strategic reading comprehension, and literary interpretation. The researcher also used teacher-led large group discussions with open ended questions, conversation-like interactions, contiguous discourse, and high-level evaluations in the instructional process. The effects of discussion structure and reading ability on reading comprehension, literary interpretation and engagement were examined. Main findings indicated that teacher-led large group readers comprehended at significantly higher levels than did the peer-led small group readers; interpretative readers comprehended better than did plot readers; peer-led small group readers reported more engagement; interpretative readers outscored plot readers on post-treatment measure. This study showed comprehension benefits for large group teacher-led discussions and engagement benefits for small group student-led learning activities. In teaching a writing course, **Semmar (2000)** compared the effects of student centered interactive feedback on students' achievement in writing English as a second language to the writings of those who received standard writing conference input. In the study, the student-teacher interactive conference approach was applied as the student centered teaching method. Semmar found significant differences between the 2 groups of students' writing texts in favor of the student-teacher interactive feedback approach. In contrast, the group receiving the teacher-centered input actually did worse in their rewrites. It seems that Semmar treated the student-teacher interactive feedback approach as a student-centered teaching approach.

Garret and Shortall (2002) conducted a survey among 103 college students in Brazil on their evaluations of their experiences participating in LCT in comparison with TCT. The survey method

involved a questionnaire comprising questions on their affective reactions (enjoyment, anxiety) and perceived learning value (learning outcome) using a 5-point scale rating. In addition to their rating, learners were also expected to write their reasons for the ratings they had given. Their findings indicated that the learners perceived the LCT activities as more enjoyable, fun and relaxing. However, in terms of perceived learning value, the learners perceived teacher-centred activities as better for learning than learner-centred activities. In fact, the findings suggest that although learners enjoy the learner-centred activities more, they are unsure of their benefits for their language development. Focusing on a different school subject, **Erwin (2004)** tested teaching 9th-grade physics with a LCT. Her study aimed at developing students' meaningful learning of motion and energy. The participating students constructed their knowledge based on what they already understood with LEGO Mindstorms and Texas Instruments TI-83 calculators/CBL sensors. The pre- and post-test results showed that students had large gains in their knowledge of motion and energy, and had higher achievement on performance-based as opposed to calculation-based activities. Students preferred the more LCT activities.

Crick & McCombs (2006) adapted a study that had been carried out in the USA in order to investigate the assessment of learner-centred practices (ALCP) among fifteen teachers in the UK and 851 learners in five schools. The ALCP survey used in this research was adapted from the American Psychological Principles. This study also revealed that teachers found the practice of evaluating themselves and looking at learners' evaluation about their practices had improved aspects of their practices particularly on the needs and nature of feedback given. However, despite being able to cover a larger number of respondents these quantitative approaches are limited in their research coverage of issues. For instance, **Garret and Shortall's** study explored LCT in terms of learners' perceived values of their experiences and activities that take place in the classroom. There was no observation of practice. As a result, using surveys is not adequate to my research interests to explore teachers' current practices and whether they implement learner-centred approaches as recommended by the ministry. Accordingly, **McCombs & Miller (2007)** found that the adapted learner-centred principles (LCP) used in the classroom significantly increased motivation. The studies found that learners had less anxiety about learning and were more willing to participate. Other data gathered by Crick through a survey method also found that teachers gained insightful feedback on their teaching from the learners' evaluations, and that over time these helped the teachers to improve aspects of their teaching.

Interpretive/qualitative studies

In an earlier study by **Rada (1975)**, the use of an add-on group dynamics to teaching as compared to teaching without the group dynamics activity was considered a LCT in a college health class. Data evaluations by the researcher indicated a 100% consensus among the participants that the student-centered class was more interesting than other classes they had taken. Ninety percent of them favored the group dynamic methodology; 93% said that they learned more in the course than they would have in a traditional course. Final grades reflected this higher achievement. Similarly, **Rahman (1987)** conducted a case study of the overall implementation of the LCT to explore the extent of its principles being practiced by primary teachers. The study found that after four years of implementation many of the conceptual understanding of LCT and their implementation for classrooms were far from happening in the four Malaysian schools explored. According to Rahman, the teachers observed still displayed the commonly used ELT formula of Present-Practice-Produce. The teachers interviewed explained that they still used the TCT to teaching but integrated some communicative activities that involve learners such as group work, class discussions or pair work. Rahman, however, argued that

these features may on the surface indicate learner participations but do not necessarily embrace the principles of LCT as the teachers' practices were still very much teacher-dominated with fewer opportunities for active learning by learners. She argued that, teachers were still struggling with the new change and proposed to address this by raising the level of training and professionalism of the teachers (ibid.). She found that there were clear tensions and confusions with the move from the TCT to the then new LCT. Rahman also concluded that, this was partly due to the lack of a clear definition of the nature of LCT which has inevitably left room for wide variations in interpretation and practice.

In an earlier study, **Wood (1990)** used the LCT to teach writing skills but for a therapeutic purpose. Wood's emphasis was on students' gaining power over themselves and gaining control of their own lives. Self-expression and self-discovery were regarded as important as writing skills; the teacher functioned as a facilitator by asking questions and providing an environment for students to learn by doing. According to Wood, by suggesting an equal status between the teacher and students and equality among students themselves, and by focusing on students' development of self-confidence as writers, this instructional approach gave the appearance of increasing the student personal power without affecting social power. Similarly, **Burns (1992)** used situated ethnographic investigation to study the relationship between teachers' beliefs and curriculum process in classrooms. Using observation and semi-structured interview data, she found a complex, interrelated network of beliefs that guided teachers' practices and approaches. The findings suggested that teachers' beliefs were informed by their previous learning experiences as learners.

Using technology as a form of constructivist, LCT was the focus of a large-scale study by **Means and Olson (1995)**. In their study, technology (mainly computers) was used to enhance a restructuring of the classroom around elementary school students' needs and project-based activities. The effects of technology use included enhanced student work, increase in student motivation and self-esteem, and changes in student and teacher roles. A study by **Rowe (1996)** involved students with learning disabilities. In this study, the student-centered teaching approach took the form of transactional teaching. The participants were 7th-grade language arts students with learning disabilities and 8th-grade social studies students with learning disabilities. The transactional approach was based on the teacher and active students. The researcher found that the intervention was associated with greater improvements in student attitudes and learning behaviors in the 8th-graders than in the 7th-graders. There was no change in the learning behavior of the 7th-graders.

In another study, **Burns, (1996)** investigated the nature of teachers' beliefs and its impact among adult learners using ethnographic and interpretative approaches. The study aimed to understand, interpret and explain the nature of teachers' beliefs. The researchers used collaborative case study design involving six teachers. In order to determine how high school students managed their learning while working within the guidelines of a LCT to teaching and learning, **Harper (1997)** conducted interviews, used questionnaires, participant observations with 7 teachers and 40 students. With Harper's LCT, students organized and transformed information, planned and set goals, sought peer help and teachers' help. It was found that less productive students were weak in two of the four learning strategies. Students weak in 'Fact Finding' and 'Follow-through' skills had the skills to learn. The same students talked about a fatigue factor involved in the student centered approach. All students shared the importance of knowing themselves as learners and how that was a process learned over time. They also talked about the importance of the TCT relationship and believed that the LCT curriculum provided more opportunities to develop skills necessary for self-regulation.

In a study conducted by **Deretchin (1997)**, the LCT and learning approach was applied to teaching a medical curriculum. In this study, the actual teaching practice took a small-group, self-directed learning format with a problem-based learning curriculum. Deretchin found that the hybrid curriculum class rated the conceptualization and reflection higher than did the traditional classes, but lower than did the traditional problem-based learning class. It rated memorization higher than did the traditional and the problem-based class. The hybrid curriculum class favored lectures over small-group sessions. Self-directed learning was rated most highly among the learning approaches by all classes studied. In another study, LCT was utilized to teaching physics to 11th-grade students (**Wilkinson, Treagust, Leggett & Glasson, 1988**). In the study, students took responsibilities for their own learning; activity sheets were used for students to relate new experiences to prior knowledge; activity sheets and note guides were used to engage students in activities constructing their own learning; syllabus and assessment structure were used to control the time that students spent on each topic. The researchers found that the learning environment promoted students' self-esteem.

The LCT was adopted by **Njoroge (1998)** to teach college level basic writing in order to understand how to relate basic writing to students who were under-prepared for college writing. Specifically in the study, problem-posing by the instructor was used, in which the instructor led a critical dialogue in class and the students selected their own writing topics. The researcher also attempted to create a supportive classroom climate. The students were found to participate more and take writing more seriously. Through this writing process, the students learned much about themselves and others. The author also reported that this method of teaching writing was more challenging and enlightening. LCT were even integrated into an institution-wide first year college curriculum (**Haruta & Stevenson, 1999**). The main focus of the project was to improve teaching and learning in the science, math, engineering and technology discipline for freshmen. In this project, problem-solving, collaboration, multiple intelligence, real world applications and technology use were applied as the student-centered teaching methods. Findings of the project indicated that faculty had reported significant changes in student enrollment patterns and increases in student retention rates as well as a general favorable impression among students on innovative materials and methods. According to the authors, the particular student-centered teaching methods applied in the institution led to increased freshmen enrollment and retention rates in science, math, engineering and technology disciplines.

Anton (1999), in her study on the discourse in a university classroom chose an observation method to investigate interactions in the so-called LCT and TCT classrooms. She recorded the discourse in both classrooms and conducted a discourse analysis of the transcriptions. Anton found that learners in the LCT classroom interacted in the target language and participated in learning activities more than in the TCT Italian language classroom. In the LCT classroom teachers used controlled practice of grammar structures and communicative-oriented paired or group activities. In contrast, the TCT classroom discourse provided very rare opportunities for learners to interact and practice language structures. This was because the class mostly involved the teacher talking from the front and the learners repeating certain expressions when asked to do so by the teachers. Accordingly, the LCT was implemented by **Akers (1999)** to teach 2 high school biology classes. The student-centered activities involved in this study included hands-on team projects, the teacher assuming a facilitator role, and the participating students taking ownership and responsibility for their own learning. Research methods used in the study included interviews, classroom observations and teacher's written reports. The researcher reported that various factors (e.g.: disciplinary problems, state standards of learning,

multiple repeaters, scheduling and administrative pressure) stopped the student-centered teaching project.

Passman (2000) applied the LCT social studies to 5th-graders in one classroom. With this teaching approach, students worked in small groups; the teacher covered the curriculum first; the students then chose a question, did research and discovered the answer, prepared a report and gave presentations in class; they searched school library, internet and classroom resources for information. It was found that 2 student groups gave very impressive and sophisticated presentations on the topics they chose. However, LCT was stopped by the school principal because the regular school curriculum was not covered at the same time. Among the qualitative studies, three examined the psychological impact of the application of the LCT upon students. In a survey by **Spurlock (2001)**, the impact of student-centered instructional approach on high school students' motivation to cheat, testing performance, perceived feelings of academic competence, autonomy, and relatedness in school was studied. The participating teachers used student-led discussions and students working in small groups in this teaching approach. The findings indicated that students who felt a sense of autonomy were not likely to cheat on tests and had high test scores, which suggests that the LCT helped students to develop positive school experiences, such as: being motivated in school, feeling competent in their abilities, and feeling connected to teachers and peers. However, Spurlock also noted that the experience of autonomy and positive school experiences were ultimately connected to the students' socioeconomic background.

In a study involving middle school students, LCT was applied to teaching a history class in order to investigate how the teaching approach influenced the perspective-taking skills of the participating students during a 3-week unit of instruction on World War II (**Ogawa, 2001**). The LCT activities included: The students learned about the war with the teacher, analyzed the US textual passages of the atomic bombing of Hiroshima and Nagasaki and the Japanese textbooks, interviewed veterans, conducted classroom observations and writing tasks, had discussion sessions; they also analyzed, synthesized and evaluated the information. It was found that the historical-perspective taking skill could be developed through various activities; most students cited their teacher as a main information source, and they learned better and more in-depth when they had to "do history" themselves. With the teacher acting as a facilitator, students could better develop and reveal their perspectives. A more recent finding by **Ali (2003)** in his case studies among three primary school teachers on the east coast of Malaysia also found that teachers interviewed explained their difficulties to implementing communicative, LCT in their classroom. The findings revealed that teachers struggled to fulfil the curriculum needs to be more LCT in their teaching approaches with the need to teach for the examination in the examination-oriented culture in Malaysia. The study also found that these teachers displayed and admitted having a lack of confidence in teaching English due to limited qualifications and training. In this group of studies, the student-centered teaching approach was applied to teaching various school subjects at multiple school levels. The psychological impact of the use of the teaching approach on students was also studied.

Pursuing an inquiry-based form of learning, **Luke (2004)** used the student centered teaching approach in college level, 4th semester Spanish instruction. In Luke's study, the teaching and learning activities included: Students explored authentic inquiries, self-selected inquiry topics, generated their own research questions, researched their own topics through various online and office sources, created multimedia presentations to share with peers; they also used computers as supplementary individual, small-group and whole class activities, which fostered their reading, writing, speaking and listening

skills. Focusing on a similar subject, **Stout (2004)** used the student-centered teaching method to teach 8th-grade US history, which included students analyzing and interpreting the historical documents, working in collaborative teams, presenting their interpretations, and making comparisons. Key findings showed that with an increased sense of confidence in the students and the class being shaped into a community of learners, the students were able to work collaboratively to develop deep understandings of historical content and to negotiate difficult primary source text.

In addition to the studies involving school students, the literature also provides a number of studies on applying the student-centered teaching approach to teaching college students in various subject areas. In a study by **Wallhead (2004)**, LCT mainly involved using the peer-assisted method to learn the tasks of a curriculum unit of sport education. The researcher studied the evolution of the content knowledge of 6 students. The participants were found to have demonstrated a high level of engagement and compliance with the intended content of the peer-assisted learning tasks. The peer teaching approach was effective in developing the participants' knowledge of lower complexity content, but was not effective in developing their higher order content knowledge due to deficiencies in their ability to elaborate content through appropriate demonstration, error diagnosis, and task modification.

In Vietnam, **Van Dang (2006)** used observation as the primary method and also conducted interviews to investigate how LCT was employed in an EFL teacher's training college. The study found that the LCT has significantly increased classroom interaction. Some of the activities observed were publishing bulletins and conducting mini conferences. The teachers in the study were very proficient and highly motivated. **Van Dang (2006)**, however, observed that the success of the approach relied heavily on class structure, physical environment and classroom culture, all of which may prove less easy to control in large classrooms. All the above studies were conducted either in secondary school settings or mostly in adult language teaching contexts. None were conducted in primary schools. Although there have been studies to explore teachers' practices, there is little evidence that any have specifically explored teachers' English language practices and beliefs with regard to LCT.

Findings

In the present study, main results and finding have been presented. The LCT in the literature took the following forms and each form was defined as the LCT. Main findings of the studies are also provided in this section. A brief summary of the main forms follows.

Forms of the LCT

- Teacher covered the curriculum first; students worked in small groups, chose a question, did research and discovered the answer, prepared a report and gave presentations in class; they also searched school library, internet and classroom resources.
- Teacher used teacher-directed instruction and small group problem-solving activities, served as a facilitator and resource person.
- Teacher used a learning activity packet and a contract approach to teach a language arts course.
- Teacher used a combined lecture-discussion with individualized student projects, provided individualized instruction to help students with their projects; students set their own performance objectives.
- Teacher used student-teacher interactive conference approach to teach English as a second language.
- Teacher used a problem-based learning, case-driven type of student-centered teaching approach.

- Cooperative learning, learning cycle and the combined cooperative learning/learning cycle represented three student-centered teaching approaches.
- The student-centered teaching approach took the form of group-discussion and active reflection.
- Teacher used peer-oriented, peer-evaluated method as the learner-centered teaching approach.
- Teacher used cooperative learning; technology; pair, group and class discussions; contextualized and project-based learning.
- Teacher used transactional teaching.
- Teacher used the peer-assisted method.
- Teacher used an add-on group dynamics activity.
- Teacher posed problems to students, led a critical dialogue in class; students selected their own writing topics; teacher attempted to create a supportive classroom climate.
- Teachers used problem-solving, collaboration, multiple intelligence, real world applications and technology to teach science, math, engineering and technology.
- Learners used prediction and explanation to given situations, and conducted student-centered discussions.
- Learners used computers and had project-based activities.
- Learners learned the material with the teacher, analyzed the material provided by the teacher; conducted interviews, classroom observations and writing tasks; had discussions; analyzed, synthesized, and evaluated related information.
- Learners analyzed and interpreted historical documents, worked in teams, and presented their interpretations and made comparisons.
- Students worked on hands-on team projects, were responsible for their own learning; teacher assumed a facilitator role.
- Learners were responsible for their learning; they used activity sheets, note guides, the syllabus and the assessment structure.
- Learners engaged in small-group, self-directed learning format with a problem-based learning curriculum.
- Learners explored authentic issues, self-selected inquiry topics, generated and researched their own topics through various online and office sources, created multimedia presentations; they also used computers for individual, group and whole class activities.
- Learners used self-expression and self-discovery in writing activities; teacher functioned as a facilitator by asking questions, provided an environment for students to learn by doing.
- Learners led discussions and worked in small groups.
- Students organized and transformed information, planned and set goals, and sought peer help.
- Learners controlled their own topic selection, turn taking, response evaluation on reading comprehension and literary interpretation; teacher used teacher-led large group discussions with open-ended questions, conversation-like interactions, contiguous discourse and high level evaluations.

Findings of the Quantitative Studies

Main findings of the quantitative studies are also provided in this section.

- Teacher-led large group readers comprehended at significantly higher levels than did the peer-led small group readers; peer-led small group readers reported more engagement.
- Learner in the learner-centered group gave significantly higher ratings to their instructors than did those in the comparison group.

- Learner had larger gains in knowledge of motion and energy, had higher achievement on performance-based as opposed to calculation-based activities, preferred the more student-centered activities.
- Learners in the prediction and explanation group provided higher explanation scores than did those in the conventional teaching approach, but did not perform significantly better on the multiple choice test. Students in the conventional teaching group performed better in recall questions; those in the student-centered approach did not produce higher scores in higher level (non-recall) questions.
- Learners involved in reflective style in lecture scored higher on problem solving and reported having less study time. Graduate students regardless of teaching method scored higher and studied for less time; and among them, the reflective style in lecture scored the highest.
- The problem-based learning (PBL) students were more apt to use articles, books and professionals to study than lecture notes; only the undergraduate PBL group scored higher than did the lecture-based undergraduate group; Tenets that PBL enhances retention, self-directed learning skills and motivation level were not supported for the undergraduate students; self-directed learning skills and confidence in problem-solving skills increased for the interns.
- The problem-solving approach was significantly associated with increase cooperative oral behaviors, with decreased competitive oral behaviors during the treatment.
- The cooperative learning and cooperative learning/learning cycle group gained significantly more in sense of control.
- Significant differences were found between the 2 groups' writing texts in favor of the student-centered interactive feedback approach.
- Neither the teacher-centered nor the student-centered thematic approach was statistically better on achievement or on attitude. The teacher-centered approach was superior on persistence. Internal locus of control in the teacher centered approach was the most persistent of all students. Significantly fewer class absences, tardiness, discipline problems, pay-attention reminders and requests to be excused from class occurred in the student-centered approach.
- No significant differences between the control and the experimental group were found in their cognitive information learning; the researcher noted greater depth of knowledge and greater effort self-imposed by the experimental group through self-designed projects.
- No significant pre- and post-test differences between the control and experimental group in the organization and style of writing and syntactic maturity were found. Developing a central figure, using correct and varied syntax, peer evaluation and free writing were measured higher for the student centered group, which also showed higher maturational changes in writing attitude.

Findings of the Qualitative Studies

Main findings of the qualitative studies are also provided in this section.

- Learners gave very impressive and sophisticated presentations on topics they chose.
- Learners were able to work collaboratively to develop deep understandings of historical content, to negotiate difficult primary source text and direct connection to the learning objectives.
- Learners could learn to take historical perspectives through participating in various activities; most students considered their teacher as a main information source; students learned better and more in-depth when they "did history" themselves.

- Learners demonstrated high levels of engagement and compliance with the intended content; the peer teaching approach was effective in developing participants' knowledge of lower complexity content, not effective in developing their higher order content knowledge.
- Student-centered teaching approach fostered reading, writing, speaking and listening skills.
- Learners thought that the learner-centered class was more interesting than other classes that they had taken; they favored the group dynamics method; they believed that they had learned more than they would have in a traditional course. Their final grades reflected a higher achievement.
- Learners participated more and took writing more seriously, learned much about themselves and others.
- Learners who felt a sense of autonomy were not likely to cheat on tests and had high test scores.
- Learner-centered writing instruction approach gave the appearance of increasing the students' personal power without affecting social power.
- LCT led to increased freshmen enrollment and retention rate in science, math, engineering and technology disciplines.
- The teaching approach enhanced student work, increased student motivation and self-esteem.
- The learning environment promoted the students' self-esteem.
- Greater improvements were found in attitudes and learning behaviors of 8thgraders and no change was found in learning behaviors of 7th-graders.
- Less productive students were weak in two learning strategies; they talked about a fatigue factor involved in the student-centered approach; all students agreed on the importance of knowing themselves as learners, and they believed that the teaching approach provided more opportunities to develop skills necessary for self-regulation.
- The hybrid curriculum class rated the conceptualization and reflection higher than did the traditional classes, but lower than did the traditional problem based learning class; it rated memorization higher than did the traditional and the problem-based class, favored lectures over small-group sessions; self-directed learning was rated most highly among the learning approaches by all classes studied.

Discussion and Conclusion

Review of the literature shows that LCT has been applied to teaching learning for over several decades (*Massey, 1978*). This review clearly indicates that a close look of the research literature indicates that a wide variety of definitions have been given to LCT. Individual researchers created his/her own version of the teaching method, or every researcher had his/her own definition. It seems safe to say that when it comes to the definition for the LCT, there is no consensus. It means to be conceptually different to different people (*Hodson, 2002*). It seems advisable that educators keep this phenomenon in mind. In addition to showing the differences in definitions, the literature also indicates that the extent to which students handled their own learning activities without teacher's direct involvement in the learner-centered learning process also varied widely. There seems to be a continuum as to the extent that learners took responsibilities in their learning. On the low end of the continuum, learners generally took limited responsibility or had few activities (*Chang, 1993; Ciaburri, 1975; Katz, 1981; Kuehnle, 1988; Rada, 1975; Semmar, 2000*); on the high end of the continuum, students had engaged in multiple self-managed activities, and were largely on their own in their learning process (*Deretchin, 1997; Luke, 2004; Ogawa, 2001; Passman, 2000; Seidenstricker, 1999; Stout, 2004; Watford, 1981; Wilkinson, Treagust, Leggett & Glasson, 1988*). With respect to its impact on learners' psychosocial behaviors and academic learning results, the majority of the

studies showed positive effects on students' behavior, attitude, interest and self-confidence (Deretchin, 1997; Harper, 1997; Haruta & Stevenson, 1999; Means & Olson, 1995; Nicolo, 1993; Njoroge, 1998; Rada, 1975; Rowe, 1996; Spurlock, 2001; Stout, 2004; Wallhead, 2004; Wilkinson, Treagust, Leggett & Glasson, 1988; Wood, 1990). A small number of the studies reported positive improvement in student learning outcomes (Chang, 1993; Katz, 1981; Rada, 1975; Semmar, 2000). It seems that the majority of the studies focused their investigation of the LCT's impact on various psychosocial aspects rather than on academic learning of the students. The main findings of the studies seems to reveal that with those studies involving the use of multiple LCT activities, learners mainly showed changes in the non-academic areas, such as: behavior, attitudes, interests and self-confidence; in studies that used few LCT activities, and teacher played a relatively more active role in giving directions and teaching, students' improvements were mainly in the academic areas. Based on this finding, it seems fair to say that before we rely on using a highly LCT to generate high levels of learning in various academic subject areas (if that is our primary purpose of academic instruction), further study of the issue seems to be reasonably necessary.

References

- Akers, J. B. (1999). Confronting the realities of implementing contextual learning ideas in a biology classroom. Doctoral dissertation, Virginia Polytechnic Institute and State University, 1999. *Dissertation Abstracts International*, 65, 09A, 3260.
- Ali, M. S. (2003). English language teaching in primary schools: policy and implementation concerns. *IPBA E-Journals*, 1(1), 1-14.
- Anton, M. (1999). The discourse of a learner-centred classroom: Sociocultural perspectives on teacher-learner interaction in the second-language classroom. *The Modern Language Journal*, 83(2), 303-318.
- Arundell, F., & Cioffi, J. (2005). Using a simulation strategy: An educator's experience. *Nurse Education in Practice* 5, 296-301.
- Attard, A., Iorio, D. E., Geven, K., & Santa, R. (2010). Student centred learning: An insight into theory and practice. In A. Attard (Ed.), *Time for a new paradigm in education: Student centered learning*. Bucharest: Partos Timisoara.
- Avdal, E. U. (2012). The effect of self-directed learning abilities of student nurses on success in turkey. *Nurse Education Today*, 33(8), 838-41.
- Baumberger-Henry, M. (2005). Cooperative learning and case study: Does the combination improve students' perception of problem-solving and decision making skills? *Nurse Education Today*, 25(3), 238-246.
- Bayard, B. L. (1994). Problem-based learning in dietetic education: A descriptive and evaluative case study and analytical comparison with a lecture-based method. (Doctoral dissertation, The University of Wisconsin-Madison, 1994). *Dissertation Abstracts International*, 55, 07A, 1874.
- Biggs, J. (1999). *Teaching for quality learning at university*. Buckingham: The Society for Research into Higher Education & Open University Press.
- Brodie, K., Lelliott, A. and Davis, H. (2002). Forms and substance in learner-centred teaching: Teachers' take-up from an in-service programme in South Africa. *Teaching and Teacher Education*, 18(5), pp. 541-559.
- Brydges, R., Carnahan, H., Rose, D., & Dubrowski, A. (2010). Comparing self-guided learning and educator-guided learning formats for simulation-based clinical training. *Journal of Advanced Nursing*, 66(8), 1832-1844.
- Burke, J. D. (1983). Teaching styles in college geography. *Journal of Geography*, 82(6), 255-256.
- Burns, A. (1992/1993). Spoken discourse and power. *Prospect*. 8.1/2.61-76.

- Burns, A. (1996). Collaborative Research and Curriculum Change in the Australian Adult Migrant English Program. *TESOL Quarterly*, 30(3), 591-98.
- Chang, M. M. (1993). Role of explanations and student-centered interaction in science learning: An applied constructivist approach to instructional design. (Doctoral dissertation, Syracuse University. *Dissertation Abstracts International*, 54, 10A, 3661.
- Cheng, C., Liou, S., Tsai, H. & Chang, C. (2013). The effects of team-based learning on learning behaviors in the maternal-child nursing course. *Nurse Education Today*, 34(1), 25-30.
- Chisholm, L., Volmink, J., Ndhlovu, T., Potenza, E., Mahomed, H., Muller, J., Lubisi, C., Vinjevold, P., Ngozi, L., Malan, B. and Mphahlele, L. (2000). *A South African curriculum for the twenty first century*. Pretoria.
- Choi, E., Lindquist, R., & Song, Y. (2014). Effects of problem-based learning vs. traditional lecture on Korean nursing students' critical thinking, problem-solving, and self-directed learning. *Nurse Education Today*, 34 (1), 52-56.
- Chung, S., & Walsh, D. J. (2000). Unpacking child centredness: A history of meanings. *Journal of Curriculum Studies*, 32(2), 215-234.
- Ciaburri, D. F. Sr. (1975). *The effect of a student-centered teaching method of teaching drama versus a traditional method of teaching drama as a literary form in the acquisition of cognitive information by community college students*. (ERIC Document Reproduction Service No. ED132998).
- Clarke, J. (2010). Student-centered teaching methods in a Chinese setting. *Nurse Education Today*, 30(1), 15-19.
- Clark, M. C., Nguyen, H. T., Bray, C., & Levine, R. E. (2008). Team-based learning in an undergraduate nursing course. *Journal of Nursing Education*, 47(3), 111-117.
- Colley, S. L. (2012). Implementing a change to a learner-centered philosophy in a school of nursing: Faculty perceptions. *Nursing Education Perspectives*, 33(4), 229-233.
- Cooper, C., & Carver, N. (2012). Problem based learning in mental health nursing: The students' experience. *International Journal of Mental Health Nursing*, 21(2), 175-183.
- Confer, C. S. (2000). Student participation in a process of teacher change: Toward student-centered teaching and learning. (Doctoral dissertation, State University of New York at Albany, 2000). *Dissertation Abstracts International*, 61, 07A, 2573.
- Crick, R. D. & McCombs, B. L. (2006). The assessment of learner-centered practices surveys: An English case study. *Educational Research and Evaluation*, 12(5), 423-444.
- Cuban, L. (1983). How did teachers teach, 1890-1980. *Theory into Practice*, 22(3), 159-165.
- Cuban, L. (1993). *How Teachers Taught: Constancy and Change in American Classroom 1880-1990*. (2nd ed). New York: Teacher College Press.
- Cuban, L. (2006). Getting past futile pedagogical wars. *Phi Delta Kappan*, 87(10), 793-795.
- Dandoulakis, G. (1986). *Towards a student-centered teaching of English literature*. (ERIC Document Reproduction Service No. ED274200).
- Dearnley, C. A., & Meddings, F. S. (2007). Student self-assessment and its impact on learning-A pilot study. *Nurse Education Today*, 27(4), 333-340.
- Delaney, M. C. (1980). A comparison of a student-centered, free writing program with a teacher-centered rhetorical approach to teaching college composition. (Doctoral dissertation, Temple University, 1980). *Dissertation Abstracts International*, 41, 05A, 1985.
- Deretchin, L. F. (1997). Changing the curriculum, changing the culture: Are there differences between products of a traditional and a hybrid medical school curriculum? (Cognitive behaviors, problem based learning) (Doctoral dissertation, University of Houston, 1997). *Dissertation Abstracts International*, 58, 08A, 2983.
- Diefenbeck, C. A., Hayes, E. R., Wade, G. H., & Herrman, J. W. (2011). Student-centered outcomes evaluation of the clinical immersion program: Five years later. *Journal of Nursing Education*, 50(11), 628-635.

- El-Gelany, A. & Abusaad, F. E. (2012). Self-directed readiness and learning styles among Saudi undergraduate nursing students. *Nurse Education Today*, 33(9), 1040-1044.
- Erwin, S. L. (2004). Improving instruction of motion and energy through a constructivist approach and technology integration. (Master's thesis, Michigan State University, 2004). *Master's Abstracts International*, 43, 02, 386.
- Garrett, Peter and Shortall, Terry (2002). Learners' Evaluations of Teacher Fronted and Student-Centred Classroom Activities. *Language Teaching Research* 6(1), 25-57.
- Greer, A. G., Pokorny, M., Clay, M. C., Brown, S., & Steele, L. (2010). Learner-centered characteristics of nurse educators. *International Journal of Nursing Education Scholarship*, 7(1), 1-15.
- Harmelen, U. (1998). Is learner centred education, child centered? *Journal for Educational Reform in Namibia*, 8(1), 1-10.
- Harper, J. O. L. (1997). On wings of eagles: A look at self-regulation of how high school students manage their learning with a student-centered curriculum. (Doctoral dissertation, Oregon State University, 1997). *Dissertation Abstracts International*, 58, 08A, 2999.
- Haruta, M. E., & Stevenson, C. B. (1999). *Integrating student-centered teaching methods into the First Year SMET Curriculum: The University of Hartford model for institution-wide reform*. (ERIC Document Reproduction Service No. ED440977).
- Hodson, K. K. (2002). *Student-centered teaching: Refiguring the center*. (ERIC Document Reproduction Service No. ED465167).
- Hoke, M. M., & Robbins, L. K. (2005). The impact of active learning on nursing students' clinical success. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association*, 23(3), 348-355.
- Jeffries, P. R., Rew, S., & Cramer, J. M. (2002). A comparison of student-centered versus traditional methods of teaching basic nursing skills in a learning laboratory. *Nursing and Health Care Perspectives*, 23(1), 14-X.
- Johnson-Farmer, B., & Frenn, M. (2009). Teaching excellence: What great teachers teach us. *Journal of Professional Nursing*, 25(5), 267-272.
- Kaddoura, M. A. (2010). New graduate nurses' perceptions of the effects of clinical simulation on their critical thinking, learning, and confidence. *Journal of Continuing Education in Nursing*, 41(11), 506-516.
- Kalam-Salminen, L., Valkonen, M., Aro, I., & Routasalo, P. (2013). Client-centeredness of Finnish and Estonian nursing students and the support from nursing education to develop it, students' self-evaluation. *Nurse Education Today*, 33(10), 1112-1118.
- Katz, N. (1981). The interactive effects of occupational therapy students' learning style with teaching methods (lecture vs. group-discussion), on their problem-solving skills, achievement, study time and attitude: An aptitude-treatment interaction (ATI) study. (Doctoral dissertation, University of Southern California, 1981). *Dissertation Abstracts International*, 42, 06A, 2526.
- Keller, B., Russel, C., & Thompson, H. (1999). Effects of student-centered teaching on student evaluation in calculus. *Educational Research Quarterly* 23(1), 59-73.
- Kelly, J. (1985). *Student-centered teaching for increased participation*. (ERIC Document Reproduction Service No. ED260033).
- Klunklin, A., Subpaibongid, P., Keitlertnapha, P., Viseskul, N., & Turale, S. (2011). Thai nursing students' adaptation to problem-based learning: A qualitative study. *Nurse Education in Practice*, 11(6), 370-374.
- Klunklin, A., Viseskul, N., Sripusanapan, A., & Turale, S. (2010). Readiness for self-directed learning among nursing students in Thailand. *Nursing and Health Sciences*, 12(2), 177-181.
- Kocaman, G., Dicle, A., & Ugur, A. (2009). A longitudinal analysis of the self-directed learning readiness level of nursing students enrolled in a problem-based curriculum. *Journal of Nursing Education*, 48(5), 286-290.

- Kuehnle, D. S. (1988). Problem approach effects on student oral behaviors. (Doctoral dissertation, University of Maryland College Park, 1988). *Dissertation Abstracts International*, 49, 07A, 1686.
- Lall, M. (2010). *Child centred learning and teaching approaches in Myanmar*. http://marielall.com/wp/wp-content/uploads/CCA_research_report_by_Marie_Lall.pdf Retrieved from http://marielall.com/wp/wpcontent/uploads/CCA_research_report_by_Marie_Lall.pdf.
- Lau, Y., & Wang, W. (2013). Development and evaluation of a learner-centered training course on communication skills for baccalaureate nursing students. *Nurse Education Today*, 33(12), 1617-1623.
- Lea, S. J., Stephenson, D., & Troy, J. (2003). Higher education students' attitudes to student centred learning: Beyond educational bulimia. *Studies in Higher Education*, 28(3), 321-334.
- Lekalakala-Mokgele, E. (2010). Facilitation in problem-based learning: Experiencing the locus of control. *Nurse Education Today*, 30(7), 638-642.
- Lerret, S. M., & Frenn, M. (2011). Challenge with care: Reflections on teaching excellence. *Journal of Professional Nursing*, 27(6), 378-384.
- Lin, Chiou-Fen, Meei-Shiow Lu, Chun-Chih Chung, and Che-Ming Yang. (2010). A comparison of problembased learning and conventional teaching in nursing ethics education. *Nursing Ethics* 17(3): 373-382.
- Luke, C. L. (2004). Inquiry-based learning in a university Spanish class: An evaluative case study of curricular implementation. (Doctoral dissertation, The University of Texas at Austin, 2004). *Dissertation Abstracts International*, 65, 03A, 817.
- Massey, T. B. (1978). *Strategies for improving teaching: An opening address on the state of the art*. (ERIC Document Reproduction Service No. ED164028).
- McCombs, B. L., & Miller, L. (2007). *Learner-centered classroom practices and assessments: Maximizing student motivation, learning, and achievement*. Thousand Oaks, CA: Corwin Press.
- Means, B., & Olson, K. (1995). *Technology's role within constructivist classrooms*. (ERIC Document Reproduction Service No. ED383283).
- Moore, J. (2009). An exploration of lecturer as facilitator within the context of problem-based learning. *Nurse Education Today*, 29(2), 150-156.
- Mtika, P., & Gates, P. (2010). Developing learner-centred education among secondary trainee teachers in Malawi: The dilemma of appropriation and application. *International Journal of Educational Development*, 30: 396-404.
- Nicolo, E. (1993). The effects of cooperative learning and the learning cycle on students' locus of control. (Doctoral dissertation, Temple University, 1993). *Dissertation Abstracts International*, 54, 07A, 2527.
- Njoroge, F. K. R. (1998). Using student-centered theory and pedagogy to teach basic writing at a community college. (Doctoral dissertation, Washington University, 1998). *Dissertation Abstracts International*, 60, 02A, 0318.
- O'Donoghue, T. A. (1994). The need for educational reform and the role of teacher training: An alternative perspective, *International Journal of Educational Development*, 14(2), 207-210.
- Ogawa, M. (2001). Building multiple historical perspectives: An investigation of how middle school students are influenced by different perspectives. (Doctoral dissertation, University of Georgia, 2001). *Dissertation Abstracts International*, 62, 09A, 3010.
- O'Neill, G., & McMahon, T. (2005). Student centred learning: What does it mean for students and lecturers? In G. O'Neill, S. Moore, & B. McMullin (Eds.), *Emerging issues in the practice of University learning and teaching* (pp. 27-36). Dublin: AISHE.
- Orafi, S. M. S. (2008). *Investigating Teachers' Practices and Beliefs in Relation to Curriculum Innovation in English Language Teaching in Libya*. PhD thesis. University of Leeds.
- Orafi, S.M.S. and Borg, S. (2009). Intentions and realities in implementing communicative curriculum reform. *System*, 37(2), 243-253.

- O'Sullivan, M. (2004). The reconceptualisation of learner-centred approaches: A Namibian case study. *International Journal of Educational Development*, 24(6), pp. 585-602.
- O'Sullivan, M. (2006). Lesson observation and quality in primary education as contextual teaching and learning processes. *International Journal of Educational Development*, 26(3), 246-260.
- Ozbicakci, S., Bilik, O. & Interpeler, S. S. (2012). Assessment of goals in problem based learning. *Nurse Education Today*, 3(2012), e79-e82.
- Passman, R. (2000). *Pressure cooker: Experiences with student-centered teaching and learning in high-stakes assessment environments*. (ERIC Document Reproduction Service No. ED440116).
- Phillips, J. M., & Vinten, S. A. (2010). Why clinical nurse educators adopt innovative teaching strategies: A pilot study. *Nursing Education Perspectives*, 31(4), 226-229.
- Rada, R. B. (1975). *Utilizing the group process in community college health instruction*. (ERIC Document Reproduction Service No. ED124267).
- Rahman, Nor H. A. (1987). *From curriculum reform to classroom practice: An evaluation of the English primary curriculum in Malaysia*. An unpublished Ph. D. dissertation, University of York, Department of educational studies.
- Regan, J. A. (2003). Motivating students towards self-directed learning. *Nurse Education Today*, 23(8), 593-599.
- Rideout, E., England-Oxford, V., Brown, B., Fothergill-Bourbonnais, F., Ingram, C., Benson, G. & Coates, A. (2002). A comparison of problem-based and conventional curricula in nursing education. *Advances in Health Sciences Education*, 7(1), 3-17.
- Rogers, C. R. (1983). *Freedom to learn for the 80's*. Columbus, Ohio, USA: Charles, E. Merrill Publishing Company.
- Rowe, V. A. (1996). Transactional learning for learning-disabled (LD) adolescents: Facilitating teacher change and curriculum development. (Doctoral dissertation, Fordham University, 1996). *Dissertation Abstracts International*, 57, 05A, 1952.
- Schaefer, K. M., & Zygmunt, D. (2003). Analyzing the teaching style of nursing faculty: Does it promote a student-centered or teacher-centered learning environment? *Nursing Education Perspectives*, 24(5), 238-245.
- Schweisfurth, M. (2011). Learner-centred education in developing country contexts: From solution to problem?, *International Journal of Educational Development*, 31(5), pp. 425-432.
- Schweisfurth, M. (2013a). Learner centred education in international perspective. *Journal of International and Comparative Education*, 2(1), 1-8.
- Seidenstricker, L. S. (1999). The comparative effects of small group peer-led discussion and large group teacher-led discussion on the strategic reading comprehension, literary interpretation, and engagement of seventh-grade readers. (Doctoral dissertation, University of Maryland College Park, 1999). *Dissertation Abstracts International*, 60, 12A, 4367.
- Semmar, Y. (2000). Teachers' response to second language writing: A humanistic, student-centered approach to the ESL conference. (Master's thesis, California State University, Long Beach, 2000). *Masters Abstracts International*, 39(01), 37.
- Shin, S., Ha, J., Shin, K., & Davis, M. K. (2006). Critical thinking ability of associate, baccalaureate and RN-BSN senior students in Korea. *Nursing Outlook*, 54(6), 328-333.
- Spurlock, H. L. (2001). The impact of student-centered pedagogy and students' feelings of autonomy, competence, and relatedness on motivation: Implications for test motivation and test performance. (Doctoral dissertation, Howard University, 2001). *Dissertation Abstracts International*, 63, 01A, 88.
- Stout, M. J. (2004). Students as historical detectives: The effects of an inquiry teaching approach on middle school students' understanding of historical ideas and concepts. (Doctoral dissertation, University of Maryland College Park, 2004). *Dissertation Abstracts International*, 65, 11A, 4095.

- Tabulawa, R. (2003). International aid agencies, learner centred pedagogy and political democratisation: A critique. *Comparative Education*, 39(1), 7-26.
- Tiwari, A., Lai, P., So, M., & Yuen, K. (2006). A comparison of the effects of problem-based learning and lecturing on the development of students' critical thinking. *Medical Education*, 40(6), 547-554.
- Tseng, H., Chou, F., Wang, H., Ko, H., Jian, S. & Weng, W. (2011). The effectiveness of problem-based learning and concept mapping among Taiwanese registered nursing students. *Nurse Education Today*, 31(8), e41-e46.
- Van Dang, Hung. (2006). Learner-centredness and EFL instruction in Vietnam: A case study. *International Education Journal*, 7(4), 598-610.
- Wallhead, T. L. (2004). A didactic analysis of student content development during the peer-assisted learning tasks of a unit of sport education. (Doctoral dissertation, The Ohio State University, 2004). *Dissertation Abstracts International*, 65, 07A, 2540.
- Watford, J. (1981). An exploration of teacher-centered versus student-centered thematic curricula in an urban junior high school. (Volumes I and II.) (Doctoral dissertation, Temple University, 1981). *Dissertation Abstracts International*, 42, 05A, 2062.
- Wilkinson, W. J., Treagust, D. F., Leggett, M., & Glasson, P. (1988). *The teaching learning in a student-centered physics classroom*. (ERIC Document Reproduction Service No. ED292619).
- Wood, S. B. (1990). The therapeutic element in student-centered writing instruction (Rogers). (Doctoral dissertation, The University of Alabama, 1990). *Dissertation Abstracts International*, 51, 09A, 3005.
- Yang, K., Woomer, G. R., & Matthews, J. T. (2012). Collaborative learning among undergraduate students in community health nursing. *Nurse Education in Practice*, 12(2), 72-76.
- Yilmaz, K. (2009). Democracy through learner-centred education: A Turkish perspective. *International Review of Education*, 55(1), 21-37.
- Yoo, M. & Park, J. (2014). Effect of case-based learning on the development of graduate nurses' problem-solving ability. *Nurse Education Today*, 34(1), 47-51.
- Yoo, M., Park, J., & Lee, S. (2010). The effects of case-based learning using video on clinical decision making and learning motivation in undergraduate nursing students. *Journal of Korean Academy of Nursing*, 40(6), 863-871.
- Yuan, H., Williams, B. A., & Fan, L. (2008). A systematic review of selected evidence on developing nursing students' critical thinking through problem-based learning. *Nurse Education Today*, 28(6), 657-663.
- Zhang, Q., Zeng, T., Chen, Y., & Li, X. (2012). Assisting undergraduate nursing students to learn evidence-based practice through self-directed learning and workshop strategies during clinical practicum. *Nurse Education Today*, 32(5), 570-575.