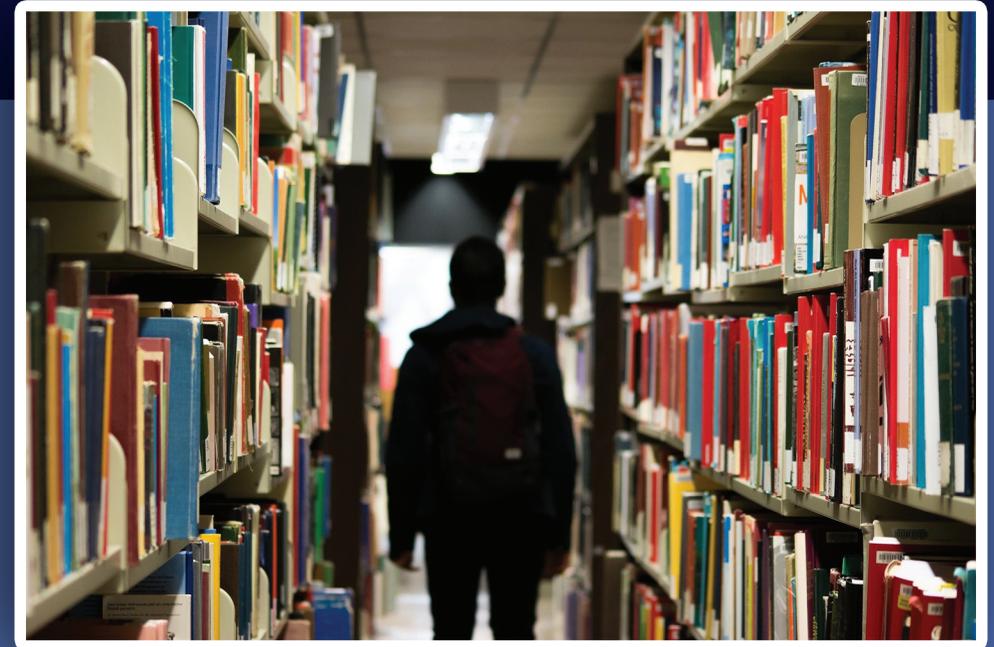


Innovative Insights For English Language Teaching Methodology: Lean



Editor

Prof. Dr. Filiz YALÇIN TILFARLIOĞLU

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To the eternity of innovation...

EDITORS' ACKNOWLEDGEMENTS

Lean method includes the state of affairs which cleans wastes and adds value to the processes that it serves. Lean is a culture that is based on continuous improvement and respect, and directs each individual to be a part of the solution. In this context, Lean is a concept that allows each individual to take responsibility for her/his own success and for the success of the community to which she/he belongs. Lean method refers to an organizational development program when it is adapted to the field of education, and it aims to improve individual performance and job satisfaction of people in the education system.

Lean interrogates and sifts the elements which do not favour, hinder and slow functioning of the process in educational contexts. Schools that aim to implement Lean development program allow each student to experience success and transform student potential into top of performance. I have a number of people to thank for supporting this publication. First of all I thank to all the contributors to this edited collection for agreeing to prepare the chapters; Vasıf, Jivan and Hunar... Special thanks to Huriye Yaşar...

Many thanks to all teachers who tested the techniques from this book in their own classrooms, and to my lovely family members; Semih, Aydın and Özgür for their unwavering support of my studies.

Prof. Dr. Filiz YALÇIN TILFARLIOĞLU
September 2021
Gaziantep

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CHAPTER ONE

EMPOWERING TEACHERS AND LEARNERS IN LEAN EDUCATIONAL MODEL

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Introduction

In today's world English has become the language of the globe and it is used in almost every country (Bailey, Gollach & Arbor, 1986; Trudgill, 2017). As a result, learning and the teaching of English have become the preoccupation of the stakeholders of the education. This situation has been discussed for more than a century and it is an accepted fact that it is a must to learn English in order to communicate, be contemporary and catch up with the globalized world. In the history of the teaching and the learning of the foreign languages, English has gained the role of key player, so educators have focused on how to teach English. In other words, the concept of methods has become the focal point in order to deliver English to the learners in a successful way. In the field of English Language Teaching (ELT) quite a number of methods have appeared at the stage such as; Direct Method, Series Method, Total Physical Response, Audio-Lingual Method, Communicative Language Teaching, Suggestopedia, Task-Based Language Teaching, Whole Language Education, Content-Based Instruction, Post-Method etc. Additionally, it has been observed that different methodological innovations have come into the existence in reaction to the fallacies in the earlier innovations in contenting the needs of different types of learners (Brown, 2007; Hall, 2011; Harmer, 1991; Pishghadam & Mirzaee, 2008; Richards & Rodgers, 2001; Ur, 2013). Unfortunately, it has been seen that almost none of these methodological innovations have been successful in the long run, because they were generally prescript by academicians and they contained fixed set of classroom procedures (Bell, 2003). Actually, the nature of language is not easy and simple like this overgeneralization, so most of these

methods failed. There is another reason behind the why the methods keep failing, that is the dichotomy between the theory and practice. In other words, methods are generally formulized by academicians and they are implemented in language classes by the teachers. This sad situation is quite similar to the reciprocal interest relationship between the producers and the customers (Hedcock, 2002).

The field of ELT actually requires a different connection between theorists and practitioners. In other words, in order to create a real methodological innovation, all of the participants of the educational processes, who are teachers, students, school administrators and parents, should take part. A new methodological innovation; Lean Educational Method (LEM) seems to include all of these stakeholders in its processes. Firstly, LEM is based on continuous improvement in educational services, and it can be defined as a value and culture system which aims to exclude all of the wastes in educational processes by adding value. Lean has been used in automotive, industry, manufacturing, law and health sectors quite a long time. The educational implementation of Lean is new, and in education, the aim of LEM is to balance the curriculum by erasing the wastes. As a result, a new and balanced curriculum can be helpful in developing competent educational processes and assuring the whole learning of the language by the students. In this study, LEM is believed to serve important benefits to students' achievement in English and effective teaching skills of the language teachers (Cleary & Duncan, 1997, 2008; Connell, 2005; Dennis, 2007; DuFour & Eaker, 2005; Eaker & DuFour, 2015; Ewy, 2009; Fitzgerald, 2006; George & George, 2003; Jenkins, 2003, 2013; Jenkins, Roettger & Roettger, 2007). In ELT, LEM is quite new and it proposes that added-value can be made real by keeping high level of awareness, minimizing the school costs, decreasing the time for preparation, continuously improving wastes and promoting the stream of the educational services in a planned way. LEM, which is an organized change and improvement program, aims to increase efficiency in language lessons and sees problems as opportunities for change. In addition, this study tries to give some clues about how to use LEM in English lessons.

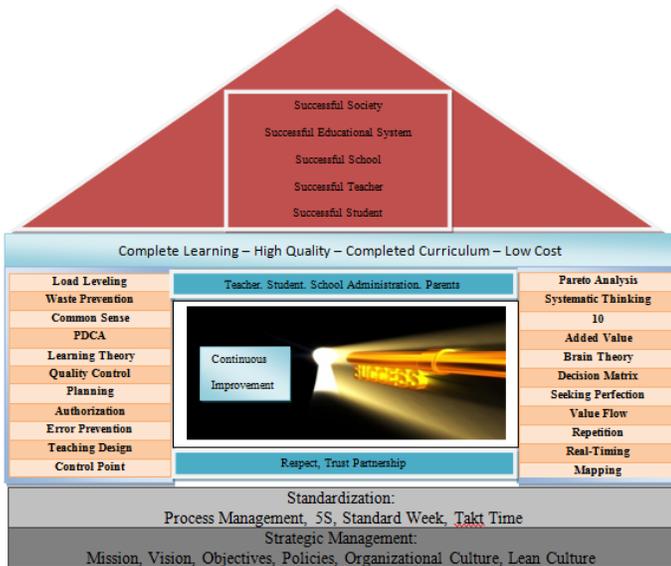
Method

Descriptive research methodology aims to gather information about an observable fact. Therefore, the main objective of descriptive research designs is to demonstrate the present situation as clearly as possible. Additionally, it can be concluded that descriptive research designs try to verify the hypothesis that refer to actual situation in order to explain the phenomenon (Gall, Borg, & Gall, 1996).

The method, which was used in a study, is one of the most important items of the related research. The method, which was chosen correctly to the nature and the purpose of the study will also increase the quality of the research (Arık & Türkmen, 2009). Thus, the present study was shaped according to the requirements of the descriptive research design, because the researchers of this study had a clear view of the subject matter (LEM). In other words, the main objective about agreeing on using the descriptive research design was to present logical and reliable suggestions about using LEM in English lessons for the future of the field.

Discussion

If Lean is investigated from an educational perspective, it can be seen that it is a systematic approach which tries to remove the wastes in educational processes, and it can add value to the related processes by continuously improving them (Ziskovsky & Ziskovsky, 2010). Lean targets excluding all of the factors that can create waste in any job, and the value-adding procedure of Lean can consolidate the educational processes. Lean adds value to the educational processes by diagnosing and excluding the steps which create redundancy, add no value, are not needed and even restrict the job being completed. If LEM is implemented at schools, a more competent institution can be created, students can increase their learning performance to the desired levels, teachers can boost their teaching skills to the highest, so an atmosphere of eternal achievement and satisfaction can be developed (Balzer, 2010).



In order to understand the benefits that LEM could bring to English classes, its innovative technique and tools should be examined. Load leveling is one of the innovative tools that LEM has brought to ELT, and it can be described as a Lean tool which tries to balance the language curriculum. It is a commonly known fact that due to miscellaneous reasons; the language curriculum cannot be completed or even if it is completed, it is generally in superficial level. As a result, the learners cannot use their language knowledge in the real life. In the load leveling process, the language learning activities should be re-ordered and if it is needed, extra learning materials should be created by the teacher in accordance with the learners' needs. In addition, in the process of creating load leveling plan, the operation should be executed step by step. The first phase is identification of the learners' current language knowledge, the second one is external environmental analysis in order to provide the language in a planned way, the next one is determining the objectives of the language education, and then the critical success factors for language teaching are determined. In the next step, a comparison between the institution's current language education strategy and the needs of innovative language education is made, and then some possible predictions of the language learning institution's future are provided. After that, new mission and vision plan is specified for language education, some language learning and teaching targets are decided in accordance with the new mission and vision. At the last step, a final language education and training plan is created (Ziskovsky & Ziskovsky, 2010). Actually, the phrase of developing the load leveling plan is a really demanding, but if it is created carefully, the changes that it can bring to the language classes can be seen from the very first days.

In the developing process of the load leveling plan for the language education, learning and brain theories hold a major role. According to brain theory, human brain acquires more knowledge, if it is given in manageable quantities continuously, so for each English lesson, learning materials should be specified beforehand according to learners' language aptitude (Jenkins, 2013). Additionally, according to learning theory, four different repetitions are required to store the knowledge in short term memory, and ten different repetitions of the newly learnt material are needed in order to process it into the long-term memory (Connell, 2005). In other words, language educators should differentiate their teaching materials according to their students' preferred learning styles, for example depending on the topic, they can use games, PPTs, songs, reading materials, vocabulary matching activities, reading comprehension questions, writing journals, etc. in their English lessons. In addition, the time for

ten different repetitions constitute the ideal learning time (takt time) and it is generally suitable to restrict this time period into a learning week.

Another important point that must be taken into consideration while preparing load leveling plan is the five basic principle of Lean (definition of value, value stream, continuous flow, pull system and perfection). Firstly, in the defining value principle of Lean, which activities can be suitable for language education are decided, when and how these learning activities can be used are specified with the help of decision matrixes. In the principle of value stream, the continuous learning of all school participants is tried to be created. In the next principle (continuous flow), language learning activities are ordered according to the requirements of load leveling plan. The principle of pull primarily deals with needs of language education. In other words, the activities in the language curriculum should be shaped according to students' learning characteristics and needs. In addition, according to LEM, students have a right in the development process of the curriculum, so naturally innovative ideas can be included by the curriculum with the help of the participation of the learners. In the last principle, which is perfection, the first four principles are tried to be made real in a harmony. In other words, the last principle deals with the continuous improvement in language teaching (Jenkins, 2003). The five basic principles of Lean also facilitate formulating same or similar language teaching procedures for the learners. These similar learning patters in language education are needed, because language learners prefer a specified framework for the foreign language (Fitzgerald, 2006). With the help of a competent teaching design, the learners can have almost no difficulty in newly learnt language material, and they can easily execute their responsibilities.

While preparing load leveling plans for the language lessons, LEM advises to carry out Kaizen events. Kaizen can be described as team workshops, where every school participant comes together and tries to find sustainable ways for continuous improvement activities for the language learning and teaching (Zimmerman, 1991). After kaizen activities, the innovative activities for the language learning are tested with another tool of LEM, which is PDCA (Plan, Do, Check, Act). Firstly, in the first step of PDCA, namely plan, which parts of the language curriculum needs to be changed is decided and the change process is planned in a manageable way. In the step of 'do' the details of the change in the language curriculum are specified. In the step of 'check' the change in language curriculum is implemented in a small scale, and it is continuously repeated until the desired outcome is seen. Finally, in the last step (act), the innovative change program, which has been proven, is applied in all of the

language learning atmospheres of the institution (Skecher, Kirby, Barney, Pearson, & Chow, 2004). In other words, PDCA can be helpful in deciding the effectiveness of the language learning and teaching innovations.

It has been mentioned before that LEM primarily deals with eliminating wastes in the educational processes. According to LEM the biggest waste in language education is using school participants' capacity below their ability. In other words, from the perspective of LEM, the most important wealth is human resources and there is a need for to use this precious wealth in an effective way. In order to deal with wastes in language education, LEM advises to use 5S tool of it (Sort, Set in order, Shine, Standardize, and Sustain). In the first step (sort), the needed language learning and teaching materials are separated from the unnecessary ones. In the next step (set in order), language learning materials and places are organized in a logical way. After that, in the step of 'shine' language learning materials are placed and improved in accordance with the work-flow. Next, in the step of 'standardize', language teaching standards are established. Finally, in the last step (sustain), the continuous flow of the first 4S is set up for all of the language lessons (Dahlgard & Østergaard, 2000).

Exams have been used in almost every educational context, because exam results provide the knowledge of how much the language teaching in an educational institution is proved to be successful. Weekly small exams (quizzes) are advised to be used together with long term achievement exams, according to LEM. With the information that weekly small exams provide, the language learning mistakes and errors can be found easily and they can be treated immediately before more problems occur in the learning of the language, and they also provide real-time performance information to the parents. After these related exams it is advisable to conduct a Pareto analysis in order to find out the most problematic parts of the language instruction. Pareto analysis proposes that 80% of the problems are brought about by 20% of the most wrongly answered test items, so after weekly small exams, Pareto analysis is needed to be carried out in order to find the language learning problems and heal them with PDCA tool of LEM, kaizen events and re-teaching of the related language topics (Akin, 2005). In other words, LEM also aims to reach perfection through exam results.

Results

In almost every business sector, the institutions are required to provide desired standards in order to meet the costumers' needs and desires appropriately, and if they execute this overwhelming job, it will be possible for them to create successful graphics, and also increase their share in the market. In addition,

the related situation is both valid for public and private institutions, so there is always a need to take required steps in order to adapt changing conditions in the globalized world. Whether they are business sectors or educational institutions, they have some wastes in their work flows. Some of these related wastes can be caused from the directors, and some of them arise from the employees or regularities. Additionally, it has been seen that adopting Lean approach in an institution-wide project can be helpful in identifying and eliminating the wastes in the processes, and also this innovative approach to “how to do things” can spark the continuous improvement movements in every sector, including educational contexts too (Arnheiter & Maleyeff, 2005).

Despite the fact that Lean arisen from the automotive sector, successful implementations of Lean is present in-service sector too. The implementation of Lean in educational contexts is really new and these implementations are explained in quite a number of studies (Eaker & Dufour, 2009; Dennis, 2007; Jenkins, 2003; Jenkins, Roettger, & Roettger, 2007). In other words, it has been seen that it is possible to use Lean’s innovative techniques and tools in every educational context, and if Lean is executed properly, continuous improvement movements can be put into practice, so the language learners may acquire the vital information in a more effective way (Emiliani, 2004). As it was mentioned before, LEM mainly targets actualizing the ideal situation in educational institutions, and the ideal situation for many them is to achieving the complete learning of the curriculum within an academic year. This overwhelming aim can be made real with developing Lean culture in educational institutions and implementing LEM in lessons (Antony, 2014; Carvalho, Lopes, Ramos, Ávila, Bastos, Fonseca, & Martens, 2013; Comm & Mathaisel, 2005; Gadre, Cudney, & Corns, 2011; Heinemeier, 2014; Ranky, Kalaba, & Zheng, 2012; Thirkell & Ashman, 2014; Van Til, Sengupta, Fliedner, Tracey, & Yamada, 2005). LEM also empowers every school participant in the educational processes to become a problem-solver, so every mistake and error in the learning and the teaching phases of the English language can be easily solved with creating mutual respect and involvement. Additionally, it has been observed that one of the biggest problems in educational institutions is blaming others, when the learners cannot reach to the required success. This sad and turbulent situation can be easily healed with adopting a Lean approach, because LEM requires mutual effort and unconditional respect (Flinchbaugh & Carlino, 2006).

LEM has been proved to provide unlimited continuous improvement movements and beneficial opportunities in English Language Teaching. LEM mainly plans to treat problems by examining the roots of them in the educational

contests. Thus, the implementation of LEM to English lessons could be extremely advantageous for the language learners who are suffering from ‘the best method craze’ and the problems in recent educational system. LEM is not a prescriptive method; instead, it is an organizational learning journey, which mainly targets to lead continuous improvement cycles to the field of language learning and teaching (Flumerfelt, 2008). With the help of the innovations that LEM could possibly bring to the field, the high failure rates and language learning and teaching problems can be clarified for the future of ELT. How to teach and learn English has been one of the leading discussion topics of the stakeholders of the educational processes. Therefore, countless methods have emerged in the field of English Language Teaching and related methods have encouraged to inquiry and develop education process and bring innovations to it. Lean can be recognized as one of the interdisciplinary innovations in the field of English Language Teaching. Lean first emerged in automotive industry and today it is used in the fields of manufacturing industry, health services, insurance, law and education. Lean’s basic objective in the related sectors can be summarized as “increasing productivity”. Lean is totally a new method in the context of education and within its foundation it includes Lean education, Lean culture, load leveling, wastes in education, common sense, ideal state, real timing in learning process, quality control in education, authorization, trust partnership, production line, the importance of number 10, takt time, repetition through end to the beginning components in the same method for the first time.

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CHAPTER TWO

THE APPLICABILITY OF LEAN EDUCATIONAL METHOD IN THE MIDDLE SCHOOL CONTEXTS

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1. INTRODUCTION

Languages are used as communication tools. In a society, people communicate with each other in the same language, but today, societies have to communicate with other nations because the world is rapidly changing and developing. In other words, there is a need to know at least one foreign language in order to exchange information, conduct economic relations, and express our thoughts to foreigners.

Today, as a result of economic and technological developments, English has become a “world language” which is used in almost all countries (Bailey, Gorlach, & Arbor, 1986; Trudgill, 2017). For this reason, teaching and learning of English has gained a great deal of importance. This is a matter that has been meticulously addressed for many years. In order to be able to catch up with globalization, to be contemporary, to communicate technologically, economically, and culturally with other countries, it is a necessary to learn English.

Throughout the history, teaching of the foreign languages has had special importance. In this context, educators have given utmost care to this issue in order to teach them properly and to help their students master the target language. Nowadays, with the requirements of the globalized world, English has become the dominant language of commerce, media, and education. In other words, English has been “by far the most widely used of all living languages”, and it has been taught as a foreign language at schools throughout the world (Broughton, Brumfit, Pincas, & Wilde, 2002; Crystal, 2012). As a result, the concept of methods

and techniques has gained the role of the key of successful delivery of English, and the quest for better methods and techniques has been the preoccupation of many teachers and professors for more than a century. Since the invention of grammar translation method, the field of ELT has witnessed quite a number of methods and techniques like Series Method, Direct Method, Audio-Lingual Method, Total Physical Response, Suggestopedia, Communicative Language Teaching, Task-Based Language Teaching, Content Based Instruction, Whole Language Education, Post-Method etc. In addition, it has been observed that different methods have come into existence in reaction to the inadequacies of the earlier methods in fulfilling the needs of the learners (Brown, 2007; Hall, 2011; Harmer, 1991; Pishghadam & Mirzaee, 2008; Richards & Rodgers, 2001; Ur, 2013). Following the evolution of different methods, different techniques have emerged in the field of ELT in line with the method that they have connection. Although some of these methods and techniques can be identified as successful ones, almost none of them could meet the different needs of different types of the learners. In other words, no method or technique has reached the promised lands of limitless success for everyone. One of the reasons behind this situation is methods are “fixed set of classroom practices that serve as a prescription” (Bell, 2003, p.326). In other words, the creators of methods acted like doctors and formulized some classroom activities for language lessons, and they hoped that if these set of rules are followed properly, there would be successful mastery of the target language by all learners, but complete learning of language is not as easy and simple as that thought, and most of the methods and techniques failed because of this overgeneralization. Secondly, another reason behind this problem is the dichotomy between theory and practice (Kumaravadivelu, 2006). Generally, the theories are created by academicians, and they are employed in the language classrooms by teachers. Unfortunately, the relationship between theorists and practitioners is quite similar to the relationship between producers and customers in most cases (Hedgcock, 2002). As a result, like in every reciprocal interest situation, most of the methods and techniques cannot become successful in the long run.

Teaching profession actually requires a different connection between theorists and practitioners unlike in the example of salesman and customer. In other words, it requires the cooperation of both teachers and professors. Fortunately, “action research” and “classroom-based research” were proposed to overcome this dilemma by some researchers (Bailey, 2001; Johnson, 1999; McKay, 2006; Murphy & Byrd, 2001). Additionally, it has been observed that with the help of these new research types, the problem was solved to some extent,

but it was not solved completely, because efforts to improve the effectiveness of language teaching often focused on changes in teaching methods and in the creation process of these methods and techniques. The attention point has always been the learners' needs, but there is almost no method which focuses on teaching process as a whole procedure which includes all of the school participants. Since the creation of a successful learning atmosphere requires the cooperation of all school participants, which are students, teachers, parents and school administrations, this chapter tries to reveal application of Lean Educational Method (LEM) in middle school English classes.

LEM, which is based on continuous improvement principle, can be defined as a culture and value system that aims to eliminate money and time wastes by adding value to the processes that it serves. Lean has been successfully applied by many manufacturing companies, especially, in industry for a long time. In education, the purpose of LEM is to balance the curriculum, which is not completed due to various reasons, by eliminating wastes. Therefore, a balanced curriculum facilitates developing an effective education process and performing complete learning of the students. Thus, in Lean philosophy, continuous improvement is aimed. LEM, which is developed with all of the school participants, believed to provide significant benefits to the students' achievement and effective teaching skills of teachers (Cleary & Duncan, 1997, 2008; Connell, 2005; Dennis, 2007; DuFour & Eaker, 2005; Eaker & DuFour, 2015; Ewy, 2009; Fitzgerald, 2006; George & George, 2003; Jenkins, 2003, 2013; Jenkins, Roettger, & Roettger, 2007). In this context, education domain is quite new, and LEM has showed that added-value can be achieved by maintaining high level of awareness, reducing school costs, decreasing preparation time in work, continuously improving wastes, and facilitating the flow of the educational processes in a planned way. In Lean education, which is an organizational improvement and change program, the main objective is to increase efficiency. The problems encountered in the process are not only considered just as problems, but also, they are perceived as opportunities which will facilitate changes. Additionally, this chapter gives some clues about how to form efficient classroom practices by providing some practical implications for English Language Teaching.

2. THE OVERVIEW OF ELT METHODOLOGY

The very first thing should be done in the issue of English Language Teaching (ELT) is to turn back the history of language teaching and investigate what has been discovered up to now. Throughout the history, language teaching has

subjected to a quite a number of approaches, methods and techniques. Although these terms are used interchangeably in the field of language teaching, actually they are quite different from each other.

According to Anthony (1963), an approach can be described as set of hypotheses concerning with the essence of language teaching and learning. A method can be described as a plan for the presentation of the language to the students in line with the approach that was chosen. Additionally, techniques are the classroom activities that are used for the presentation of the language, and they are in line with the chosen method and approach as well. As it can be seen from their definitions there is a coherent set of links between them, and teachers' acts and thoughts should be in line with these terms in the language classrooms (Larsen-Freeman & Anderson, 2013).

In fact, approach, method and technique are quite different from each other, and ELT has faced quite a number of approaches, methods, and techniques so far. Before investigating the details of them, it is advisable to have a look at those terms from the perspectives of other researchers, and even some researchers came up with new terms for methods and techniques. For example, Richards and Rodgers (1982) defined method as design and technique for procedure.

According to Richards and Rodgers (1982), an approach can be described as the collection of ideas, theories and knowledge about the essence of language teaching. A design is "an umbrella term for the specification and interrelation of theory and practice" (1982, p.154). Finally, procedures can be described as classroom activities stem from an approach and design. Actually, it is better to leave the terminological differences behind the scene and call these terms as "methodological innovations", since each of them has brought to a different perspective to language teaching and made teachers more effective in the field (Larsen-Freeman & Anderson, 2013).

Nowadays, it is accepted that methods are pre-packaged, and there is no single best method fits for all learners (Prabhu, 1990). In other words, currently, the trends have shifted from these prescriptive methods to curriculum and syllabus because in the development of curriculum or syllabus process, there is more freedom to make use of the fruits of ELT methodology, namely methodological innovations in this field. Additionally, this freedom opens the way for more successful classroom learning.

In short, in the past, language learning and teaching was considered as the unification of approaches, methods, and techniques but the recent developments in the field has showed that nothing fits for all types of learners, so in the field of language learning and teaching, researchers, teachers, and administrative

bodies are looking for innovations in the language classrooms, and it is accepted that these innovations, namely fresh ideas, will help construct more appropriate language learning for each student (Brown, 2007). All in all, in this part, the brief history of ELT methodology will be provided and, it will be more possible to understand how we came to this point in the field of ELT.

1. Grammar-Translation Method

It is all known that Grammar-Translation Method is an old method, and it has some different names such as Classical Method because it was first used to teach classical languages such as, Greek and Latin, and it was in the use for so many years (Larsen-Freeman & Anderson, 2013). Without doubt, the first thing comes into mind, when Grammar-Translation Method is mentioned, is the word of tradition. Throughout the history, people have needed to learn languages, because of various reasons. Some of these reasons are political, commercial, educational, and religious. Especially in the western world, the language teaching primarily dealt with Latin and Greek because these languages were the medium of education, commerce, religion, and governmental issues, and there was even the idea that if a person learns these languages, he will have a stronger mind, so it can be understood that learning of these languages considered as a work out for the people's minds (Kelly, 1969).

In its essence, Grammar-Translation method is a classical method because the main language learning activities are memorization of the grammar rules, vocabulary items, and the translation of literature. The most important aspect of the language learning was the ability to write and read in the target language (TL), and there was almost no importance given to speaking and listening. The main aim of the language learning was to read and understand the literature of the TL. The language of the literature was seen superior than the language of spoken interaction. Language was taught in a deductive way. In other words, grammar rules were investigated explicitly, and then, language learners tried to use these rules in their own writing. Another important activity in Grammar-Translation Method was memorizing native language equivalents of TL being studied (Stern, 1983).

In the characteristics of the teaching and the learning processes of the Grammar-Translation Method, there were some faults but it was used for more than a century. One of the major problematic issues in the Grammar-Translation Method is the “theorylessness” of it (Richars & Rodgers, 2001). In other words, there was no educational research in its nature. Additionally, the heavy reliance on drilling, memorization, and translation could not handle the needs

of the learners and more and more globalizing world, so Grammar-Translation Method left its throne to the new innovations in language learning and teaching. Grammar-Translation Method was not creating competent language learners in all of the skills, actually, it was creating language grammarians but if it can work in some teaching contexts or situations, it can be used to some extent even today.

2. *Direct Method*

Like the Grammar-Translation Method, the Direct Method is not new, and it was in use in the field of ELT such a long time. Although the Direct Method belongs to Charles Berlitz, it also gets its roots from François Gouin. Actually, Gouin was the very first person who discovered the power of children in the process of language learning. In other words, he thought that “the children must hold the secret to learning a language.” (Brown, 2007, p.20). Unfortunately, he could not overcome the popularity of Grammar-Translation Method in his time, and his method could not become a trend in language learning and teaching. In other words, like Richards and Rodgers mentioned (2001), he was really unlucky, and he was thinking ahead of his time.

When 20th century came, the idea of natural way and the miracles of children in language learning sparkled again, so the Direct Method finally gained power in language teaching. In the essence of the Direct Method, the learning and the teaching of the TL must be like the children’s first language learning. In other words, in Direct Method, there was almost no use of translation, grammar rules were thought inductively, the medium of instruction was the TL, and the first language was hardly used in classroom settings. The main aim of the Direct Method was to make students be natural in the TL but correct grammar was also emphasized. Classrooms were small with just a few numbers of students, and the format of the classroom interaction was the question-answer between the students and the teacher. In this context, Direct Method has a very simple rule: translation is not allowed in language classrooms. Meaning is tried to be conveyed directly with the help of demonstrations and visual aids (Diller, 1978).

For quite a long time, the Direct Method enjoyed the throne in language learning and teaching but it started to lose power because of some major problems in its nature. One of the major problems was the method was for the rich people. It was realized that this method cannot be applied in public school contexts due to budget problems and crowded classrooms of these schools. Additionally, the success of this method was heavily dependent on the teacher not the theory in its nature. The direct method can easily be applied to lower levels, but in higher levels of language teaching, it is almost impossible to teach everything just by

demonstrations and visual aids (Larsen-Freeman & Anderson, 2013). Moreover, the Direct Method didn't deal with reading skills of students in advance, and it totally restricted the translation in language classrooms. Since the language learning and teaching requires all of the language skills, the Direct Method slowly lost its popularity, as a result it left its place to new methodological innovations in language classrooms, but still it is considered as a revolution in the modern era of language teaching (Brown, 2007).

3. *Audio-Lingual Method*

When it was realized that the Direct Method is not applicable in most classroom settings, the trend in language teaching turned to the use of the Grammar-Translation Method, especially the reading activities in its roots made it alive again. Between the periods of 1930s and 1940s, the power of reading was discovered again, and most of the language learning and teaching activities were based on reading. After that, the world faced with a full-scale war, the World War II started. The nature of this war required quick and successful learning of languages which are both belonged to enemies and allies. As a result, language experts came up with a new method which quickly made learners use the TL orally.

As it can be seen from the atmosphere that it was evolved, Audio-Lingual Method was heavily constructed on oral activities, especially correct pronunciation of conversations, and there were no grammar and translation activities in the classrooms. Just like Direct Method, Audio-Lingual Method was based on an oral-based approach, but there is an important difference between them. Audio-Lingual Method constructed on a strong linguistic and psychological base (Larsen-Freeman & Anderson, 2013). Skinner's behavioral psychology was very influential in its essence, and the main activities of language learning were shaped according to the requirements of conditioning. In other words, correct use of the oral language was reinforced until the learners developed new habits in the TL (Skinner, 2014). In classrooms where the Audio-Lingual method was used, the teachers presented a role model of TL, learning was considered as a process of habit formation, the aim of the language learning was to communicate in TL correctly, learners were required the answer to the given stimuli without thinking, so memorization played a major role in this method. Additionally, the main aim of these activities was to make learners (actually the soldiers) cover their identities when they were in confidential duties. Because of these characteristics, the Audio-Lingual Method was also known as the Army Method (Brown, 2007).

Finally, as it can be guessed, Audio-Lingual Method started to lose its popularity in language learning and teaching because the benefits in the oral skills that Audio-Lingual Method brought were not long lasting, and it was realized that languages cannot be acquired just by habit formation and repetition. Errors happened even how hard was tried to avoid them. All in all, Audio-Lingual Method lost power, and it left its place to new methodological innovations, but it is still possible to see its implications in modern methods.

4. *Cognitive Code Learning*

Although Audio-Lingual Method was successful to some extent, the trend of behaviorism in language learning and teaching emphasized the surface forms in language learning. In other words, just one skill of language teaching was seen important, and this skill was taught without explicitly teaching of the language rules. In Audio-Lingual Method, the learners failed to transfer their classroom competency of oral skills both to other skills of the language and to outside the classroom (Larsen-Freeman & Anderson, 2013).

Soon after linguist Noam Chomsky has revealed his thoughts about language learning. He proposed that the language learning process cannot be shaped just through habit formation, since learners can produce and understand utterances which they never heard before. In other words, language learning can take place with the help of rule formation better compared to habit formation (Chomsky, 1986). The deductive learning of grammar rules gained popularity, and Chomsky (1986) proposed that children subconsciously acquire the rules of the languages with their Language Acquisition Device (LAD) in their brains, so the followers of the Cognitive Code Learning favored deductive rule learning in their classrooms, and actually the Cognitive Code Learning was invented against the behaviorist language practices, but at the end, it turned to be a counterpart of Grammar-Translation Method (Brown, 2007).

Sadly, the innovations that Cognitive Code Learning brought to the language classrooms did not last so long. This trend faded like the previous ones because cognitive attention given to the grammar rules brought overload for students. Luckily, it helped to the formation of new methodological innovations in language learning and teaching.

5. *Silent Way*

When the 1970s came, language learning and teaching started to be a separate field on its own. In other words, language learning and teaching freed from

the linguistics, and quite a number of empirical researches finally started to take place in language classrooms, and the data collected from these researches provided language teaching with more accurate methods, and these methods and fresh ideas led the way to more fruitful language learning. One of these new innovative methods is Silent Way. Silent Way was developed by a psychologist Caleb Gattegno, and it has a problem-solving learning procedure in its essence (Richards & Rodgers, 2001).

According to the principles of Silent Way, learning becomes more long-lasting, if the students discover the knowledge of the TL. Language learning can be fostered with the help of physical objects, and problem-solving is the main aim of every learning task (Gattegno, 2010). As it can be seen from its principles, Silent Way emphasizes inductive processes, discovery-learning techniques, learners' independence, responsibility, and autonomy (Chamot & McKeon, 1984). In a typical Silent Way classroom, the teacher is in a stimulator role and provides just a very little correction and knowledge, while the students are trying to discover the language. Silence is used as a tool, and it helps to create autonomy, and learners increase their autonomy by exploring and making choices in the language. In a classroom, it is very probable to see colorful charts about vocabulary items, grammar rules, and pronunciation models, and the students are encouraged to use those charts when they discover about the TL (Brown, 2007).

Although the discovery learning can promote the learning of the language, the over-induction that the Silent Way requires can be harmful for the learners. As it is all known, it is more appropriate to use both induction and deduction in language lessons. However, in the essence of the Silent Way, there is no deduction, and too much silence can hamper the learning process, so like other previous methods, it left its place to new methodological innovations in the field.

6. *Suggestopedia*

The next methodological innovation that came into existence in 1970s was Suggestopedia, and it was first developed by Georgi Lazanov. The basic idea in the roots of Suggestopedia was; learners can acquire more knowledge, if they are provided with a relaxing and comfortable classroom atmosphere (Lazanov, 1979). As it can be understood from its nature, Suggestopedia favors using of music, comfortable chairs, relaxing smells etc. in the classroom contests because feelings are important in language learning process, since everybody is preoccupied with emotions.

In a classroom environment where Suggestopedia is used, the students' anxiety level is decreased as much as possible, and decreased anxiety levels also have positive effects on the students' affective factors, so the learners can easily process the TL without any fear, and peripheral learning can take place. Additionally, the traditional classroom activities of Suggestopedia are role plays, vocabulary presentations, dialogues, readings, dramas etc. With the help of these activities, teachers are trying to overcome the psychological barriers of students towards to the TL, and if it is achieved, there will be more successful language learning in the classroom. Moreover, there are some critiques to Suggestopedia. For example, on one hand Suggestopedia seems to provide relaxed learning conditions, on the other hand it lacks practicality, and it is almost impossible to employ Suggestopedia in crowded public-school contexts (Scovel, 1979). It is also realized that too much relaxation can hinder the learning process, and an ideal level of anxiety is needed in most cases. Even if Suggestopedia did not succeed in the most of the language learning settings, it informed teachers about the use of music and fine arts in language classes. Finally, as many others, Suggestopedia followed the same track, and it left its place to new methodological innovations.

7. *Community Language Learning*

When the innovative years of 1970s came, one of the methods that started to take place in language learning and teaching was Community Language Learning (CLL). In CLL, a student is considered as a whole person. In other words, teachers must not just consider the intellectual properties of the learners in the language learning process. They also need to understand students' feelings, psychological needs, and their desire to learn the TL (Curran, 1972).

According to CLL, social dynamics and a supportive environment in language classes can foster the acquisition of the foreign language (Brown, 2007). In a particular CLL classroom, teachers are considered as counselors, and everything is carried out with the help of all group members' cooperation. Teachers are the active members of the learning community, and the language is used for communication. Each learner is considered unique, and the teachers try to create a relaxing atmosphere that learners can feel themselves free and secure, so the experience of learning a language becomes less threatening, and the teachers always try to encourage students to communicate in TL. In other words, whole-person learning of the TL becomes possible, when trust, support, and cooperation take place in language classes (Larsen-Freeman & Anderson, 2013).

As any other method, there are some problems in CLL, and it faced with some critiques. For example, in order to create a successful CLL classroom, the teacher should be really proficient in both language and the counselor skills. In other words, CLL has brought too much work load for teachers, and in the situations of “all knowing teacher” students may develop over reliance on their teachers, and they cannot become autonomous learners (Brown, 2007). Finally, because of some major flaws in its nature, CLL could not survive very long, and it paved the way for new methodological innovations in the field of ELT.

8. *Total Physical Response*

Total Physical response (TPR) was created on the basis of Comprehension approach because it gives a great deal of importance to listening comprehension. TPR first discovered by James Asher, and according to the theory of it, the learning of the TL increased, if it is stimulated with motor activity (Asher, 1977). TPR was developed with the help of observations on children when they were learning their first language, and it was discovered that the children do lots of bodily movements, while they learn their mother language. These movements can be listed such as moving, grabbing, reaching etc.

Additionally, a language classroom usually contains too much anxiety for the children, so the major aim of teachers should be creating an atmosphere, which is stress-free (Brown, 2007). In other words, this aim can be accomplished with the help of activities which contains a great deal of acting and listening. In a typical TPR classroom, language is tried to be taught with fun activities, meaning is often conveyed with bodily movements, students learn TL through observing the actions, and then, they try to perform these actions by themselves (Larsen-Freeman & Anderson, 2013). In short, “the instructor is the director of a stage play in which the students are the actors” (Asher, 1977, p.43).

Even today, it is possible to find lots of teaching materials, especially course books, which are prepared at the perspective of TPR, but they are usually for young learners. In the essence of TPR, imperative mood is used frequently, but it is not enough to convey the entire grammatical feature just with this, so it can be said that TPR is more applicable with lower levels and for young learners. Additionally, TPR has some other limitations, too. For example, in the nature of TPR, there are mostly speaking and listening activities, and there are almost no reading or writing activities. Since a complete learning of the TL requires all of the language skills, TPR couldn't become successful in the long run. Naturally, the activities of TPR may become inconvenient for adult

learners, so TPR shared the same fate with the previous methods, and it left its place to new methodological innovations.

9. *Communicative Language Teaching*

Up to now, the major aim of the most of the methods is to make students communicate in the target language. Actually, in order to communicate in TL, linguistic competence is not enough, and there is a need for communicative competence as well (Hymes, 1971). This realization has brought a shift in the field from a linguistic-structure centered approach to a communicative approach (Savignon, 1997).

In order to understand Communicative Language Teaching (CLT) the characteristics of it should be understood. First, the major goal of CLT is to increase communicative competence of the learners in TL. Therefore, in language classrooms, all aspects of the language should be taken into consideration (grammatical, discourse, functional, sociolinguistic, and strategic). Authentic language should be used as much as possible because it shows the language in its real context. Both the cohesion and coherence are considered important because meaningful communication requires all of them. Teachers try to create situations for meaningful communication, and errors are tolerated in the classroom atmosphere, at the same time communication activities encourage cooperative relationship between the students. The teachers give opportunities to create autonomy for the students. They make students realize their own strengths and improve on their weak points in order to develop appropriate strategies for communication, so the learning process gets the main importance not the mastery of the language forms (Larsen-Freeman & Anderson, 2013).

As it can be seen from the characteristics of CLT, it is based on a well constructed theory, and it promises success for every learner, since it gives importance to real-world activities in the class. Moreover, in a CLT classroom, both fluency and accuracy have a focus, all of the language components are respected, student autonomy is aimed, teachers are in the role of guides, not in the role of all-knowing source of knowledge, cooperation among all classroom participants valued etc.

Although everything seems perfect in CLT, there are some problems in it. For example, some of the requirements of CLT may become overwhelming for a non-native teacher. In addition, developing a CLT classroom requires a great deal of time, effort, money, and other sources, so it is not that much easy to achieve CLT in public schools (Nunan, 1988). Because of these problems, researchers tried to come up with some other methods based on CLT approach

but these methods are not so different from each other, and ELT has faced some bandwagon methods, but none of them, as usual, were powerful enough to bring complete success to language classrooms (Kumaravadivelu, 2006).

10. Content-Based Instruction

Content-Based Instruction (CBI) is another example of methods which belongs to Communicative Approach. According to CBI, synchronical study of the subject matter and language is used together in the teaching of the TL (Brinton, Snow, & Wesche, 2003). In other words, teachers use content matter in order to accomplish the acquisition of the TL.

CBI has many advantages in language learning and teaching. For example, it can save time of the learners in the language learning process because students just learn the subject matter which is required for their professional development, not a hoard of useless language items. Additionally, CBI is effective in intrinsic motivation of the students, since students start with learning their core field from the beginning of the language instruction (Nunan, 1988). In a CBI classroom, targets are both content and the language. The learners are provided with meaningful, content related, authentic language materials and tasks. In the selection of the content, students' previous knowledge and interests are taken into account in order to create more meaningful language learning. Because of these advantages, it is quite possible to find course books which were prepared in the requirements of CBI. There are especially ELT materials for business or engineering students in the market, and these materials have been in use at the universities' preparatory intensive English teaching departments since 1990s (Stoller, 2004).

In addition, CBI has brought some obligations for language teachers. On one hand the teacher has to be proficient in the TL, on the other hand he/she has to be qualified in the content matter. Another problematic situation about CBI is its unsuitability in the beginner levels. In other words, CBI could become a heavy burden, since the learners have limited knowledge of both in the TL and the subject matter, so it is almost impossible for learners to maintain their all motivation to learn a new language in the first steps of language instruction. In short, because of some flaws in its roots, CBI couldn't achieve a worldwide popularity in the field of ELT.

11. Whole Language Education

Before the realization of the nature of the language acquisition, it was a temptation to break the language into parts and teach them separately (Brown, 2007). After

the research carried out on the children's first language acquisition, it was discovered that the children perceive the language with all of its components (sentences, intonation, emotion, patterns etc.) not like separate parts, so language teaching adopted a more unified approach which contains all of the language skills namely; reading, speaking, listening, and writing (Rigg, 1991).

In addition, before the first language acquisition research, the language teaching was in the form of bottom-up process in which the language was studied piece by piece, and then, the learners were trying to put the pieces into an order to create whole meaningful texts. Luckily, after the first language acquisition research, language teaching started to adopt a more unified top-down approach in which learners first try to understand the whole meaning of the text, and then, if it is needed, they explore the linguistic forms of the text (Larsen-Freeman & Anderson, 2013). Moreover, according to Whole Language Approach, foreign language education must include all the skills of the language, and each skill is equally important in the nature of language learning. Only if the language education covers all the components of the TL respectively, it is possible for learners to develop successful communicative abilities (Edelsky, 1993).

In short, it is quite evident to see that Whole Language Education has most of the characteristics of CLT. These are; cooperation among learners, student centered learning, meaningful authentic language, integration of four language skills etc. Because of this problem, Whole Language Education cannot be accepted as an independent method, and it is not competent enough to carry the language learners to success in TL just by itself.

12. Task-Based Language Teaching

In Task-Based Language Teaching (TBLT) analytic syllabus is used like in CBI, and it was created on the basis of Communicative Approach. In other words, it was considered as an extension of CLT (Ellis, 2009). In TBLT, there is a requirement of task completion in the language classes, and generally information, reasoning, opinion-gap tasks, focused and unfocused tasks, input providing and output prompting tasks are used (Larsen-Freeman & Anderson, 2013).

According to TBLT, language is being taught and learned with the help of meaningful, authentic tasks, and these tasks have usually communicative components in it. In addition, there is an obligation of completing the task in language classrooms in order to create meaningful, communicative language

learning. The teacher usually breaks the task into smaller pieces like pre-task, task, and post-task, and the teacher provides the good model of the TL, students are being closely monitored by the teacher, and they are provided with feedback when it is necessary, but the teacher never interrupts the learners when they are focused on the meaning of the task (Nunan, 2004). If the characteristics of a task are investigated, it is possible to see that most of the tasks proposed by TBLT have communicative focus, and they are in line with the real-world events, meaning and fluency comes first, so there is less focus on accuracy and grammar on these tasks.

Since a successful acquisition of the language requires all of the language proponents, (accuracy, fluency, meaning, grammar etc.). TBLT couldn't get rid of the shadow of the CLT (Brown, 2007). As a result, TBLT cannot reach a position of an independent method and shared the same fate with previous methods but it provided researchers with some useful ideas about language learning and teaching.

13. Other Methodological Innovations in ELT

In this part, some of the methodological innovations, which have brought fresh ideas to language learning and teaching, will be discussed, and these innovations are; learning strategy training, cooperative learning, multiple intelligences, and the use of technology in language learning and teaching. Although they cannot be considered as whole independent methods on their own, they have provided teachers with some useful ideas that can be used in language classrooms (Larsen-Freeman & Anderson, 2013). To start with, it is advisable to look at what learning strategy means. According to Rubin (1975), learning strategies can be described as the techniques that a learner uses in the acquisition of the TL process in order to achieve the acquisition of more knowledge. Good language learners are considered as effective users of learning strategies, and they share some common characteristics. For example, good language learners are always willing to communicate, they aren't afraid of making mistakes, and they closely monitor their own speech in communication process in order to correct mistaken areas of the speech. In addition, it was realized that these characteristics do not appear automatically, and the experiment of learning strategy training has sparkled. First, learning style strategies are allocated as metacognitive strategies, cognitive strategies, and social/affective strategies, and then language instruction is modified according to requirements of these strategies. In a typical learning strategy training lesson, students are taught to use certain learning strategies that

can be useful for their academic development, teachers teach both the language and the learning strategy at the same time, strategies must be learned by the students, and the best activity for this is hands on experience, the main aim is to make students independent, self regulated and autonomous learners (Hedge, 2001). In short, learning strategy training means creating autonomous learners, and if it is achieved, the learning and the teaching of the TL will be easier and more fruitful for both teachers and learners.

Cooperative Learning, Interactive Learning and Learner-Centered Teaching are all related terms, and they almost share the same characteristics. In other words, they have intertwined characteristics, and it is better to handle them together. In a Cooperative Learning classroom, the main aim of the language instruction is to create cooperation between the students in the completion of learning tasks, and this cooperation requirement is not only for learners, but also for the teachers. Both the students and the teachers work as a team in order to achieve learning goals.

It has been seen that Cooperative Learning is beneficial for students, since it promotes intrinsic motivation, self-esteem, and it creates respectful relationships between the students and the teachers (Johnson, 1999). In addition, cooperative learning has some beneficial effects on students' anxiety levels, since it restricts competition between learners (Oxford, 1997). In other words, in Cooperative Learning classrooms, the essence of the learning activities is to maintain exchange of information between the participants, so the learning becomes cooperative not competitive, communication skills of the learners can be developed, one learner's output can become other learner's input, and this positive atmosphere in the classroom can foster enriched learning for all (Krashen, 1985; Long, 1985). As it can be seen from its theoretical foundations, Cooperative Learning aims to increase learners' communicative abilities through cooperative, meaningful group and pair works. Looking at these properties, it can be concluded that Cooperative Learning was developed in the influence of CLL, so it cannot become an independent, sufficient method for ELT in the long run.

It has been known that all students have different strengths and weaknesses, and it is almost impossible to disregard Multiple Intelligences in the field of language learning and teaching. It has been discovered that all learners are different, and these differences result in different preferred ways in the learning of the TL. According to Gardner (2006), there are eight different intelligences. Those are; logical/mathematical, visual/spatial, body/kinaesthetic, musical/rhythmic, interpersonal, intrapersonal, verbal/linguistic and naturalistic. In

addition, these different intelligences of the learners require different activities to be used in language classrooms, and if the language instruction covers all of the intelligences, it is more possible to achieve equal and efficient acquisition of the TL in language classrooms. In other words, language teachers should prepare special lesson plans which contain activities in line with the learners' preferred intelligences. For example, a lesson plan should contain puzzles or games for logical/mathematical intelligence, videos or pictures for visual/spatial intelligence, hands-on activities or field trips for body/kinaesthetic intelligence, listening to music or singing a song for musical/rhythmic intelligence, pair work or project work for interpersonal intelligence, journal keeping or self-evaluation for intrapersonal intelligence, debates or storytelling for verbal/linguistic intelligence, and nature walks or camping for naturalist intelligence (Christison, 2006). In short, in order to strengthen the acquisition of the TL in language classrooms, teachers should take Multiple Intelligences into consideration.

The technology has brought lots of fresh ideas and materials to the field of language learning and teaching. For example, in language classrooms or outside the classroom, students can interact with the authentic TL via blogs, social networking sites, wikis, electronic text corpus etc. In addition, the technology has initiated the creation of new methodological innovations in the field of ELT like Computer-Assisted Language Learning (CALL). In a CALL classroom, online tasks can be used to increase learners' motivation, students can use technology to interact with each other, negotiation of meaning is done easily with the help of technological tools, student autonomy can be increased with self-access centers, most common words can be studied instead of a hoard of language items (corpus), time is saved, and it is easier for teachers to provide feedback and evaluate students' language development with the help of technology (Larsen-Freeman & Anderson, 2013). In short, technology use in language classroom has lots of benefits both for learners and teachers.

In conclusion, it has been seen that there are lots of approaches, methods and techniques that came to the stage in the field of ELT, but the most important time phrase is between 1970s and 1980s when there was a boom in the number of methodological innovations, especially developed for the teaching of English Language. In these times, there was a race between scholars in order to find the best method ever. Unfortunately, this craze did not long too much, and it was realized that there is no need to invent a new method (Kumaravadivelu, 2006). Instead, there is a need for unifying the useful parts of these innovations in order to create more meaningful classroom procedures (Nunan, 2003).

3. LEAN EDUCATIONAL METHOD

Businesses need to provide required standards and meet the customers' requests appropriately in order to survive, generate successful graphics, and increase their market share. In order to achieve this, whether it is a public or private institution, there is a need to take the necessary steps to be able to adapt to the existing conditions. Whether they are universities or secondary education institutions, educational systems also have wastes that they are not aware of. These wastes are generally caused by the transactions brought about by the traditional management. Some of the wastes arise from the directors, and some from the regularities or employees. Adopting a Lean management approach, contrary to the traditional management approach will enable to detect the wastes, and make improvements in the processes (Arnheiter & Maleyeff, 2005). Thus, institutions will reduce their costs to a minimum and increase their quality.

Although Lean thinking arises from the manufacturing sector, successful applications are also being achieved in service sector in accordance with the studies carried out. In order to create a Lean educational institution, directors and employees have to make not only strong strategies, but also more effective management of the classes, as well as practices to show them. Lean practices which can be performed in educational institutions are explained in many sources (Eaker & Dufour, 2009; Dennis, 2007; Jenkins, 2003; Jenkins, Roettger, & Roettger, 2007).

It has been realized that if educators use Lean techniques and tools in the learning process, there will be continuous improvements in the teaching and the learning processes, and students will acquire the required knowledge more effectively (Emiliani, 2004). In addition, there is a need for Lean education not only in higher education institutions, but also in primary, middle, and secondary school contexts. In brief, educational institutions should use Lean Educational Method in their service, which is based on the application of Lean thinking and Lean management tools, in order to keep up with the requirements of time and modern education.

From the educational perspective, Lean can be described as a systematic approach which removes the wastes from educational processes, and adds value to the educational processes (Ziskovsky & Ziskovsky, 2010). Lean aims to extract all of the factors which can be considered as waste in any job and purpose by adding value to the educational processes. In addition, Lean can be described as an organizational development program which strengthens the performance and job satisfaction of everybody in an educational institution starting from students to school administrators. Lean adds value to the processes

by identifying and eliminating the steps which create redundancy, which are not needed, which add no value, and which even prevent the work being completed (Ziskovsky & Ziskovsky, 2010). By applying LEM, schools can become more competent in their organizations; teachers can increase learning performance of all students to highest levels, as a result, an atmosphere which contains eternal achievement and satisfaction can be created (Balzer, 2010).

In order to understand LEM, the techniques and tools, which are used in educational processes, should be investigated closely, and the first tool of LEM is load leveling. Load leveling can be described as a Lean tool which balances the curriculum, and this curriculum needs to be delivered to the students in an educational year. Curriculum can be defined as a sum of the information that students need to acquire in a period of their learning journey. Due to various reasons, in each level, curriculum cannot be delivered to the students effectively, and through their educational life, these unfinished curriculums have devastating effects on students because students have difficulties in understanding the new information in the next steps of the curriculum (Ziskovsky & Ziskovsky, 2010). In this context, the main aim of LEM is to complete the curriculum effectively, and in this process some other Lean tools are also being used.

In a load leveling plan, the process is needed to be separated into steps. The first step is the identification of the current situation, and next an external environment analysis is done. After that, the purposes of the educational institution are determined, and next, critical success factors are specified. In the next step, the comparison between school's current educational strategy with the needs of today is being done. Next, some predictions of the school's future are provided. After that, school's new mission and vision is determined, and yearly targets are prepared in line with the new mission and vision. At the end, a final education and training plan is completed in line with the aims (Ziskovsky & Ziskovsky, 2010). The process of the load leveling plan is a demanding job, and all of the possible missing time should be taken into consideration; therefore, two weeks of capture-time for the delivery of the curriculum should be decided in case of any problems.

When preparing load leveling plan, brain and learning theories should be taken into consideration in order to ensure that the students have been fully trained in the given curriculum. Brain theory primarily deals with how the brain stores information in memory. According to brain theory studies, it has been found that brain absorbs more knowledge, if the information is provided in small quantities continuously. In other words, students should not be provided with a hoard of unknown information in a short time, and they also should be provided

with processing time, and these time periods are generally sleep periods (Jenkins, 2013). In addition, according to the studies which were conducted in advertising sector, it was realized that in order to hold information in the short-term memory, four different repetitions are needed, and in order to transfer the information from short term memory to long term memory, ten different repetitions are needed (Connell, 2005). In other words, in order to achieve full acquisition of the curriculum by students, educators should repeat the knowledge by taking students' learning styles into consideration, and by doing this, they can easily achieve ten differentiated repetitions of the knowledge. Moreover, the time which is required to provide ten impressions is named ideal learning time (takt time). In LEM, it is appropriate to restrict this time period in a week, so ten different repetitions of the newly learned knowledge should be done within a week.

Since LEM mainly aims to eliminate wastes in the educational institutions, there is a need to find out the wastes in schools. In Lean education, the biggest waste is using the school people's capacities below their ability. In the essence of Lean education, the most important wealth is human resources, so there is a need for effective use of human resources. There are lots of wastes in educational institutions, and they are listed as follows (Eaker & DuFour, 2015):

- 1- Students who cannot meet the required success and need to re-study the curriculum.
- 2- Students who do not have the perspective of life-long learning, and the students who are taking courses just for graduating from an educational institution.
- 3- Activities that do not add any value to education, and the activities which are not relevant to real life.
- 4- Unnecessary staff and material movements due to wrong organization of the work place, and the effort of the staff in order to solve these problems.
- 5- Mistakes in the delivery of the curriculum, and the decrease in the quality, and the increase in the costs due to mistakes in the delivery of the curriculum.
- 6- Taking more students than the optimum number, and giving education to them.
- 7- Teachers' inability to use their full potential when transferring knowledge.
- 8- Unused and unnecessary teaching materials which are waiting to be used in the schools.

As it was mentioned before, there are some wastes in schools, and these wastes should be avoided. In LEM, 5S tool (sort, set in order, shine, standardize, sustain)

can be used in order to remove wastes, and increase the quality of education. In the sort step of 5S tool, educational materials, which are needed in language learning and teaching process, are separated from unnecessary materials, and the removal of the useless materials from the educational institutions is carried out. Next, in the step of set in order, learning places and materials are organized with a logical order. In the step of shine, the educational materials are improved and placed appropriately in line with work-flow. In the step of standardize, standards which favor the activities in the shine step are established. In the last step of 5S; sustain, the discipline to flow the first 4S is set up for all times (Dahlgaard & Østergaard, 2000).

The five basic principles of Lean education have a main focus in the formation of load leveling plan too. There are five basic principles of Lean education, and these are; definition of value, value stream, continuous flow, pull system and perfection. First, in the principle of defining value, activities which can add value to teaching and learning of the foreign language are determined, and how and when these activities will be used specified in detail with the help of decision matrixes. Next, in the principle of value stream, continuous learning of all school components (students, teachers, directors, supportive staffs and parents etc.) is tried to be achieved. In other words, the curriculum is needed to be updated and developed in line with the needs of the students. Additionally, in the principle of continuous flow, the activities, which aim to maintain continuous learning, are ordered logically without any decrease in the quality of the language education. In the principle of pull, nothing is done, unless there is a need for it. In other words, since every student has individual learning characteristics, the activities in the curriculum are shaped according to students' needs. Students also have a voice in the development process of the curriculum, and they can make suggestions for it, so more innovative ideas can also be put to the curriculum. In the last principle of Lean education (perfection), the first four principles are tried to be maintained in harmony. In other words, perfection principle primarily deals with the improvement of the language learning and teaching process; therefore, it brings continuous research, development and excellence (Jenkins, 2003).

Kaizen, in LEM, is an innovative activity, which tries to find sustainable ways for continuous improvement activities (Zimmerman, 1991). Kaizen activities can be described as team workshops, in which every school component comes together in order to generate new ideas, and these innovations are tested with another tool of LEM, namely PDCA (plan, do, check, act) in order to foster continuous atmosphere of language lessons with innovations. In the first step of PDCA (plan), which parts of the curriculum and language instruction need

change are decided, and the probable results of this change in the curriculum are planned. In the second step (do), the details of the plan of the curriculum change are fixed, and in the third step, check is being applied. In check, the plan is being applied in a smaller scale, and it is repeated until the desired outcome (improvement in language learning) is achieved. Finally, in the step of act, the innovation, which has showed satisfactory results, is applied all of the school processes (Stecher, Kirby, Barney, Pearson, & Chow, 2004). In short, PDCA is a scientific method which helps in deciding the effectiveness of the innovations in language learning and teaching.

While preparing load leveling plans, there is a need for using the same teaching procedures, since students need patterns that they are used to. In other words, language lessons should be formed in a way that students are familiarized with because people generally need a specified framework for the acquisition of the foreign language (Fitzgerald, 2006). With the help of a specified teaching design, students will have less difficulty in newly taught material, and they will also easily do their homework and execute their other responsibilities, since every classroom routine is specified beforehand.

Exams are the indispensable component of all teaching processes, since exams provide the information about how much the language instruction in educational institutions is successful. In LEM, weekly small exams are advised together with long term achievement tests or public exams. With the help of weekly small exams, the errors and mistakes in the language learning and teaching process can be diagnosed on the spot, and they can be treated immediately, so the possibility of future learning problems can be prevented. In LEM, after the weekly small exams, it is advised to carry out Pareto analysis in order to find out the most problematic parts in the language learning process. According to the rules of Pareto analysis, 80% of the problems are brought by 20% of the most problematic parts (Akin, 2005). In other words, in the process of Pareto analysis, 20% of the most wrongly answered questions are determined in weekly small exams, and then these problems are treated with Kaizen events, PDCA tool, and if it is needed, re-teaching of the materials. Moreover, in order to prevent the mistakes in the language learning processes, rubrics, control schedules, and family signatures can also be used together with Pareto analysis of weekly small exams. All of these innovative ideas that LEM brings to the language education can facilitate instant intervention and resolution to the problems, and they can even provide real-time performance information to teachers, students, school administrations, and parents (Ziskovsky & Ziskovsky, 2010). In short, one of the main aims of LEM is to reach perfection through exams.

LEM targets achieving the ideal situation in schools, and for many educational institutions, the ideal situation means the complete learning of the language curriculum within an academic year. This ambitious aim can be made real with developing Lean culture and Lean thinking in all of the processes of an educational institution. With the help of Lean thinking, all of the wastes in the processes of the schools can be eliminated, and with the help of Lean culture, an atmosphere, which is respect-based, can be developed in schools. Lean culture encourages everybody in the school process to become a problem-solver, and all of the problems can be easily solved with the involvement of the people in the school processes. In addition, the biggest problem in educational institutions, which is blaming others for students' failure in public examinations, can be solved, since LEM requires mutual respect and effort (Flinchbaugh & Carlino, 2006).

4. THE SUITABILITY OF LEAN EDUCATIONAL METHOD IN THE MIDDLE SCHOOL CONTEXTS

Nowadays, large scale standardized tests (i.e., TOEFL, IELTS, PET, SAT, TEOG etc.) play a major role in educational contexts, especially in Turkey. In middle school contexts, when students reach the level of eighth grade Ministry of National Education (MoNE) wants students take TEOG examination in order to place them to high schools. TEOG examination has been administrated for six different courses. Those six core courses are Turkish, mathematics, English, science, religion and ethics, and social sciences. Additionally, TEOG exams are considered as one of the exams (usually the second) which need to be administrated by the teachers in an academic term. There are twenty questions for each of the core subjects. Within the scope of English examination, there are questions for assessing grammatical knowledge, vocabulary knowledge and reading comprehension skills and each question is in multiple choice formats and consists of four options.

The basic feature of the new examination system (TEOG) is not taking a picture of students' instant performance; it is assessing students' performance in a large period of time. Additionally, within the scope of TEOG exams, the results obtained from all lessons are multiplied by their weight coefficients and scoring is done on the scale of 700 (Elik, 2013). Unfortunately, students' average grade taken from TEOG English exam is quite low and it is necessary to implement an innovative method, which is LEM, in order to increase students' general achievement in TEOG English examination.

TEOG English examination is held twice in an academic year, and it is considered as the second written English exam in an educational term. Since students' English lessons are four hours per week, they have to take three written English exams. The English course book consists of ten units in total, and the students are responsible for the first three units in the first TEOG English exam, and they are responsible for the first eight units for the second TEOG English exam. In addition, MoNE has defined the units for other written English exams, and wants teachers to prepare and apply the exams in this framework. Moreover, in each educational term, one of the written English exams besides TEOG English examination, is required to include multiple choice test technique, and generally teachers who work in middle school institutions, come together and prepare the exams.

When it is looked at the contents of the units of the first and the third exam prepared by the teachers every semester, the following table appears. In the first written English exam of the first educational term, the first two units are included in the exam, and in the third written English exam of the first educational term, the first five units are included. In the second educational term, the first written English exam includes the first seven units, and the third written English exam includes the first nine units, so the tenth unit is excluded from the evaluation. To interpret this picture, it is seen that the learners are held responsible for more topics day by day both in terms of grammar and vocabulary, and this situation undoubtedly leads students to memorize the vocabulary and grammar structures without understanding them. In this context, while the students are preparing for TEOG English examination, they need creative and long-lasting language education rather than language instruction based on memorization. In other words, vocabulary items should be reconciled with the previous learning of the students. At this point, the techniques and tools of LEM could be used.

One of the most important parts of TEOG English examination is the reading comprehension questions, and this part is considered as the most difficult one by the teachers because students don't know sufficient vocabulary items, and they don't read texts in the target language, so they fail in reading comprehension questions. The most challenging question types in reading comprehension questions are paragraph and dialog sequencing questions because in these questions, the students must know both the required vocabulary items and conjunctions related to the topic, and have relevant knowledge of the subject. In this context, with the help of load leveling plan and kaizen events of LEM, the achievement problems in TEOG English examination can be solved. As it was mentioned before, the biggest obstacle in the delivery of the curriculum is the

time management because there are just four hours of English lessons in a week, and all of the required vocabulary items, reading texts and grammar structures should be completed within this time. In this context, the time management issue can be treated with a standard work plan, which is formed within the frame of LEM. Moreover, with the help of kaizen events and PDCA procedure, innovative reading activities can be developed with the active participation of the students, so low achievement rates in reading comprehension questions can be improved. In order to answer almost each question in TEOG English examination, students need substantial vocabulary knowledge since every question in the exam contains important vocabulary items from the course book, so the problems, which are encountered in the vocabulary teaching sessions, can be easily treated with ten different repetition technique and weekly short exams of LEM.

When the course book of 8th grade English lesson is examined, there is another issue to mention, which is, there is almost no activity that explains the grammatical structures. Because of this problem, English teachers need to prepare extra teaching materials; otherwise, the learners cannot acquire the meaning of these grammatical points. This problem can be solved with load leveling plan because load leveling plan uses decision matrixes in order to decide which teaching activity is the most crucial, and then these extra teaching materials can be both applied and developed with the help of PDCA tool of LEM, and these materials can be sorted and sequenced with 5S procedure too. To sum up, nuisances that are being experienced in TEOG English examination can be easily knocked down with LEM, which is shaped in the framework of Lean thinking, Lean management, and Lean culture.

5. CONCLUSION

LEM can offer unlimited opportunities for improvement in language learning and teaching. LEM aims to fix problems by investigating the roots of the problems in the processes. Therefore, LEM can be extremely helpful for students who are suffering from the problems in recent educational system. Actually, LEM is not a prescriptive method; instead, it is an organizational learning journey which aims to bring continuous improvements to language learning and teaching (Flumerfelt, 2008). Thanks to the innovations that LEM can possibly brings to the field of ELT, the language learning problems and high failure rates in public exams can be solved easily, since language education requires continuous improvement.

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CHAPTER THREE

THE IMPLEMENTATION OF LEAN EDUCATIONAL METHOD IN THE MIDDLE SCHOOL CONTEXTS

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1. INTRODUCTION

Science can be described as the activities for discovering the truth, and experimentation is the major activity in this process (Arıkan, 2004). The nature is generally reluctant to reveal its secrets but experimental studies can be used to find the reality of the nature because in experimental studies, the discovered knowledge is objective, and this situation never changes depending on the observer (Cohen, Manion, & Morrison, 2013). In fact, experimental research designs are one of the main ways in discovering the reality especially in physical sciences because variables can be manipulated easily and accurately in laboratory conditions (Çömlekçi, 2001). In educational studies it is really hard to carry out experimental studies because of the nature of the research process, unlike in the studies of science, where laboratory conditions can easily be applied in order to see the changes on dependent variables. In other words, good experimental designs cannot be achieved easily in educational sciences but a good experimentation and control can be succeeded through random sampling (Ekmekçi, 1999). Moreover, experimental studies can be used in order to find and explain the reality (Altunışık et al., 2007). In experimental studies, there is a need to create both control and experiment groups in order to reach a conclusion by comparing the results of the treatment between the experiment and the control groups. Generally, in experimental studies, there is a correlation between the variables, and this correlation shows the cause and effect relationship between the variables. Especially in educational sciences, it is really hard to both measure and manipulate the variables because the evaluation process of the variables is

usually dependent on the topic, so when conducting an experimental research in educational science, researchers should handle the research process with utmost care (Yazıcıoğlu & Erdoğan, 2007).

In this chapter the experimentation of LEM in Turkish middle school contexts was presented. First of all, experimental research designs are used in order to answer the questions of the experimental studies or test the hypothesis of these studies, so they are developed by the researchers for these aims. In addition, experimental research design is the field of research in which the data to be observed are generated to explore the casual relationships between the variables under the control of the investigators (Ural & Kılıç, 2006). Experimental research designs are often used in language studies because they provide high levels of control, if they are on a small scale and manageable conditions (Bechhofer & Paterson, 2012). In other words, experimental research designs are frequently used in order to find out the nature of the language learning and the benefits of the new methodological innovations in the field of ELT (Dörnyei, 2007).

Experimental studies are carried out by investigating the influence of independent variables on dependent variables, systematic changes are made in controlled conditions, and results are monitored (Lipsey, 1990). In this chapter, there are two independent variables; (1) how the implementation of LEM to 8th grade English curriculum affects students' general achievement in TEOG English examination, and (2) how using the standard curriculum affects the students' general achievement in TEOG English examination. In this study, two groups of students were chosen as experimental groups, and they were subjected to the treatment in line with the requirements of LEM depending on the independent variables of the study, and two groups of students were chosen as control groups in order to measure the effects of independent variables on the dependent variable. All of the groups were tested with the first TEOG English examination as pre-test, after that the treatment based on LEM was provided to the experimental groups of the study. When the treatment sessions were over, all of the groups were subjected to the second TEOG English examination as the post-test.

This study primarily tried to find out the effects of applying LEM on 8th grade English lessons and the results of the application of LEM in TEOG English examination. In this context, after the pre-test, there were nineteen weeks available for the application of LEM before the second TEOG English examination. Experimental groups were treated with load leveling plan of the curriculum and other innovations that LEM brought to the field of language teaching. This alteration in the experimental groups was analyzed and compared with the control groups.

2. EXPERIMENTATION

In the process of this chapter, the control groups were subjected to the standard curriculum and the activities in the course book (Upturn in English), and then they took the pre-test and the post-test. These two control groups were selected in order to determine if the independent variables of this study have an effect on dependent variables. Finally, the grades obtained from the pre-test and post-test for each of the above mentioned parts will be analyzed through one-way ANOVA to find out whether or not English instruction in line with LEM has a positive effect upon students' achievement in TEOG English examination. The design of this study is provided with this table:

Table 1. Research design of the study

| Step | The first experimental group (E1) | The first control group (C1) | The second experimental group (E2) | The second control group (C2) |
|------|---|---|---|---|
| 1. | Cluster Assignment | Cluster Assignment | Cluster Assignment | Cluster Assignment |
| 2. | The first TEOG English examination (pre-test) | The first TEOG English examination (pre-test) | The first TEOG English examination (pre-test) | The first TEOG English examination (pre-test) |
| 3. | Treatment | ----- | Treatment | ----- |
| 4. | The second TEOG English examination (post-test) | The second TEOG English examination (post-test) | The second TEOG English examination (post-test) | The second TEOG English examination (post-test) |

The participants who attended to this study were 8th grade students of Münire Kemal Kınıoğlu Middle School, Gaziantep, Turkey. When the available population for a study is too big, it is advisable to choose a sample (Ekmekçi, 1999). In this study, the researcher used cluster random sampling in the purpose of minimizing the population because there were nine 8th grade classrooms in Münire Kemal Kınıoğlu Middle School, and the total number of eighth grade students was 210. In addition, the students were placed to the classes heterogeneously. In other words, no placement tests were used in the formulation of the classes by the school administration, and students' English level differentiates in each class but it can be said that the general profile of each classroom is almost similar. This situation is the same in almost every public school because MoNE (Ministry

of National Education) strictly forbids the formulation of special classes due to reasons of equality in education.

In order to carry out this experimentation, two classes of 8th grade students were chosen as experimental groups, and two other 8th grade classes were selected as control groups randomly because the researcher was giving English lessons just for these four classes due to arrangement of the course load in this educational institution. Moreover, in each class, the learners took four hours of English lessons per week, and each lesson was 40 minutes. Other school subjects in this institution were given in the native language of the students, which is Turkish, so the learners had contact with English language in these lessons but there was also possibility of exposure to English via internet, TV, social media and reading materials outside the classroom.

The first (E1) and the second (E2) experimental groups were consisted of 20 students, in total 40 students were chosen as the experimental group, and they were subjected to the treatment which is based on LEM. Before the treatment, the first TEOG English examination was used as the pre-test, and after the treatment the second TEOG English examination was used as the post-test. In addition, two 8th grade classes were chosen as control groups (C1 and C2). Each of them contains 20 students, in total 40 students were selected in order to measure the effects of independent variables over the dependent variables. Control groups were subjected to the English instruction in line with the defined curriculum and the course book, which were prepared by MoNE, and they were given the pre-test and the post-test.

In addition, all of the four groups of this study (2 experimental and 2 control groups) were given the pre-test, which was the first TEOG English examination. After that, the results of the pre-test were analyzed through independent samples t-test, then the treatment was started to be applied on two experimental groups, while the two control groups followed the standard 8th grade English curriculum prepared by MoNE. Moreover, according to the Levene's test result ($F = .013$; sig. = $.910 > .05$), the collected data is appropriate for experimental research design (Table 3).

In the treatment process, the first step was taking the approval of the school administration, and then load leveling plan of the 8th grade English curriculum was prepared in line with the requirements of LEM. Within the scope of load leveling plan, the activities in the course book were modified by omitting and re-ordering, and then a standard working week was developed in line with the load leveling plan (Some example activities of load leveling plan is provided in Appendix A). This plan was also strengthened with kaizen events and PDCA tool

of the LEM. The main purpose of LEM is to eliminate wastes (overproduction, talent, motion, time, processing, assets, capacity, knowledge and defects) in educational processes, and all of these related wastes were tried to be avoided with the application of innovative and continuous improvement based LEM to 8th grade English lessons. (Table 2)

Table 2. Summary of the load leveling plan

| Unit | Allocated Time | Communicative Functions | Procedure |
|------------------|----------------|--|--|
| 4- Communication | 4 weeks | -Expressing concern and sympathy -Handling Phone conversations -Making simple inquiries -Talking about plans | -Application of 5S. -Presentation of the subject (PPTs, videos, songs, worksheets, vocabulary games, extra reading materials, home works, rubrics were used depending on the topic). |
| 5- The Internet | 4 weeks | -Accepting and refusing -Giving explanations/reasons -Making excuses -Making simple requests -Making simple inquiries -Talking about plans -Telling the time, days and dates | -10 different repetition of the newly learnt material (notes, memos, messages, phone conversations, SMS, communicative tasks, guessing word meaning from the context, reading comprehension questions, real life tasks, role-play and simulations were used depending on the topic). |
| 6- Adventures | 4 weeks | -Expressing preferences -Giving explanations/reasons -Making simple comparisons -Making simple inquiries -Stating personal opinions -Talking about what people do regularly -Talking about past events | -Kaizen events and PDCA. -Weekly small exams and Pareto analysis. -Family visits (after lessons). |
| 7- Tourism | 4 weeks | -Describing places -Describing the weather -Expressing preferences -Giving explanations/reasons -Making simple comparisons -Stating personal opinions -Talking about past events | |
| 8- Chores | 3 weeks | -Expressing feelings -Expressing likes and dislikes -Expressing obligation -Giving explanations/reasons -Making simple inquiries -Making simple suggestions | |

Weekly small exams were administered to the students in order to treat the learning errors on the spot and provide real-time performance information to both students and parents. Especially, ten repetitions of the vocabulary items were tried to be achieved with the help of reading and speaking activities, different kinds of homework, video and listening activities. There were nineteen weeks between the pre-test and the post-test, and each week there were four 40-minute English lessons, so the treatment of LEM lasted 76 course hours.

After the treatment process, the post test (second TEOG English examination) was administered to both control and experiment groups. The results obtained from both pre-test and post-test were analyzed through one-way ANOVA in order to find out whether the application of LEM has a positive effect on grammar, vocabulary and reading performance of the eighth grade students. Finally, variance analyses of the three language skills and components in TEOG English examination; that is grammar, vocabulary and reading comprehension, were carried out in order to analyze the scores taken from this examination. The *f* values were analyzed at .05 sig. level (*p*) and the data analysis was carried out with the help of SPSS 20 for windows.

3. FINDINGS

In this study, the control groups and the experimental groups were needed to be at the same level of English language proficiency before the implementation of LEM in eighth grade English lessons in the purpose of reaching reliable conclusions. In fact, it is not an obligation for pre-test and post-test experimental research designs, because the statistical comparison of both groups is still possible even though experimental and control groups have different levels of English language proficiency. Nevertheless, the level of students' English language proficiency can become one of the factors, which can influence the results, so it was taken one of the variables. In fact, LEM can provide better results with more proficient learners or high school and university students than with middle school and primary school students and vice versa. The recent study is based on whether or not implementing LEM to eighth grade English lessons has a positive effect on English language learning, so it is a need to see that both the experimental groups and control groups have nearly the same level of proficiency.

Table 3. Pre-test mean scores, standard deviation, t and p values for the control group and the experimental group.

| Group Statistics | | | | | |
|------------------|-------------------------|----|---------|----------------|-----------------|
| | EXPERIMENTAL OR CONTROL | N | Mean | Std. Deviation | Std. Error Mean |
| PRE.TOTAL | CONTROL | 40 | 8,9000 | 3,80148 | ,60107 |
| | EXPERIMENTAL | 40 | 8,7750 | 4,29363 | ,67888 |
| POST.TOTAL | CONTROL | 40 | 8,4500 | 4,43731 | ,70160 |
| | EXPERIMENTAL | 40 | 13,3750 | 3,99800 | ,63214 |

From this table, it can be seen that the analyses of the data gathered from the pre-test showed that there was no statistically significant difference between the experimental group and the control group before the study ($t=.138$; $p>.05$). This result shows that both groups were almost at the same level of proficiency and the experimental group was suitable to treat with LEM.

Table 4. Levene’s test for mean grades

| | | Levene’s Test for Equality of Variances | |
|-------|-----------------------------|---|------|
| | | F | Sig. |
| PRE. | Equal variances assumed | 1,242 | ,269 |
| TOTAL | Equal variances not assumed | | |
| POST. | Equal variances assumed | ,013 | ,910 |
| TOTAL | Equal variances not assumed | | |

Whether the data was suitable for the experimental research design, Levene’s test was applied. Levene’s test for equality of variances showed that an F value .013 and significant value .910. This value is greater than .05. In other words, both of the groups showed similar variance, which means these two groups are independent from each other, that is independent samples t-test and one-way ANOVA are appropriate for the research design of the study.

Table 5. Pre-test and post-test mean scores and the standard deviation for the control group and the experimental group.

| t-test for Equality of Means | | | | | | |
|------------------------------|--------|--------------------|--------------------|--------------------------|--|----------|
| t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | Lower | Upper |
| ,138 | 78 | ,891 | ,12500 | ,90673 | -1,68017 | 1,93017 |
| ,138 | 76,872 | ,891 | ,12500 | ,90673 | -1,68058 | 1,93058 |
| -5,215 | 78 | ,000 | -4,92500 | ,94437 | -6,80510 | -3,04490 |
| -5,215 | 77,167 | ,000 | -4,92500 | ,94437 | -6,80542 | -3,04458 |

In Table 5, it can be clearly seen that the post-test mean score of the experimental group has relatively increased when it is compared to its pre-test mean score and it is relatively higher than the control group's post-test mean scores as a result of implementing LEM in English lessons.

In Table 6, it can be seen that there is a statistically significant difference between the post-test mean score of the experimental group and the control group. In other words, there is an increase in the experimental group's achievement level in TEOG English examination as a result of the implementation of LEM to eighth grade English curriculum.

Table 6. Variance analysis of pre-test and post-test mean scores of the control group and the experimental group.

| ANOVA | | | | | | |
|------------|----------------|----------------|----|-------------|--------|------|
| | | Sum of Squares | df | Mean Square | F | Sig. |
| PRE.TOTAL | Between Groups | ,313 | 1 | ,313 | ,019 | ,891 |
| | Within Groups | 1282,575 | 78 | 16,443 | | |
| | Total | 1282,887 | 79 | | | |
| POST.TOTAL | Between Groups | 485,113 | 1 | 485,113 | 27,197 | ,000 |
| | Within Groups | 1391,275 | 78 | 17,837 | | |
| | Total | 1876,387 | 79 | | | |

In table 6, variance analysis of the mean scores shows that there has been a statistically significant positive change in the dependent variable (English language learning) because the F value and the p value shows a difference between the mean scores ($F = 27.197$; $p < .05$). It has been verified that the implementation of LEM in eighth grade English lessons has a positive effect on TEOG English examination achievement.

Up to now, it has been demonstrated that implementing LEM on eighth grade English curriculum has a positive contribution upon English language learning in general. Additionally, this study aims to find out whether or not the application of LEM in English language lessons has a positive effect upon vocabulary, grammar and reading comprehension skills.

Table 7. Mean scores and standard deviation of pre-test and post-test scores for vocabulary, grammar and reading comprehension sections of the test.

| Group Statistics | | | | | |
|------------------|-------------------------|----|--------|----------------|-----------------|
| | EXPERIMENTAL OR CONTROL | N | Mean | Std. Deviation | Std. Error Mean |
| PRE.VOCAB | CONTROL | 40 | 2,2250 | 1,16548 | ,18428 |
| | EXPERIMENTAL | 40 | 1,7750 | 1,02501 | ,16207 |
| POST.VOCAB | CONTROL | 40 | 2,3250 | 1,09515 | ,17316 |
| | EXPERIMENTAL | 40 | 3,1000 | ,70892 | ,11209 |
| PRE.GRAM | CONTROL | 40 | 1,8250 | 1,10680 | ,17500 |
| | EXPERIMENTAL | 40 | 2,0250 | 1,09749 | ,17353 |
| POST.GRAM | CONTROL | 40 | 1,7000 | 1,34355 | ,21243 |
| | EXPERIMENTAL | 40 | 2,8250 | 1,03497 | ,16364 |
| PRE.READ | CONTROL | 40 | 4,8500 | 2,37022 | ,37476 |
| | EXPERIMENTAL | 40 | 4,9500 | 2,85505 | ,45142 |
| POST.READ | CONTROL | 40 | 4,5000 | 2,69853 | ,42667 |
| | EXPERIMENTAL | 40 | 7,4250 | 2,89905 | ,45838 |

It can be seen in the Table 7 that the treatment (application of LEM) has a positive effect on vocabulary, grammar and reading achievement. The experimental group's pre-test mean score was 1.775 in vocabulary, 2.025 in grammar, 4.950 in reading; whereas in the post-test the mean scores increased to 3.1 in vocabulary, 2.825 in grammar, 7.425 in reading. Therefore, this situation shows a positive change in vocabulary, grammar and reading achievement. Moreover, the mean scores and the standard deviation values are the highest in reading section, and it demonstrated that the application of LEM led to a greater increase in reading comprehension. This could be a result of load leveling plan and PDCA tool of LEM in English lessons.

Table 8. Variance analysis of the mean scores for the vocabulary part of the test.

| ANOVA | | | | | | |
|------------|----------------|----------------|----|-------------|--------|------|
| | | Sum of Squares | df | Mean Square | F | Sig. |
| PRE.VOCAB | Between Groups | 4,050 | 1 | 4,050 | 3,362 | ,071 |
| | Within Groups | 93,950 | 78 | 1,204 | | |
| | Total | 98,000 | 79 | | | |
| POST.VOCAB | Between Groups | 12,012 | 1 | 12,012 | 14,116 | ,000 |
| | Within Groups | 66,375 | 78 | ,851 | | |
| | Total | 78,388 | 79 | | | |

When Table 8 is investigated, it can be seen that in vocabulary acquisition there is a positive change on behalf of the experimental group. The values in the table shows that there is a statistically significant difference between the post-test and pre-test mean scores. ($F = 14.116$; $p < .05$). It can be concluded that the application of LEM in vocabulary sessions was successful.

Table 9. Variance analysis of the mean scores for the grammar part of the test.

| ANOVA | | | | | | |
|--------------|----------------|----------------|----|-------------|--------|------|
| | | Sum of Squares | df | Mean Square | F | Sig. |
| PRE.GRAM | Between Groups | ,800 | 1 | ,800 | ,659 | ,420 |
| | Within Groups | 94,750 | 78 | 1,215 | | |
| | Total | 95,550 | 79 | | | |
| POST.GRAM | Between Groups | 25,313 | 1 | 25,313 | 17,601 | ,000 |
| | Within Groups | 112,175 | 78 | 1,438 | | |
| | Total | 137,487 | 79 | | | |

Another aim of this study was to see whether there is a positive change in grammar achievement. When the experimental group's pre-test and post-test mean scores are compared, it can be easily observed that the students have increased their achievement in the post-test, and they gained better results in the post-test compared to pre-test. When Table 9 is investigated closely, it can be observed that the application of LEM in grammar sessions has positively contributed to learners' test scores in grammar questions ($F = 17.601$; $p < .05$). It means that the treatment caused a positive change in the independent variable. Additionally, the results related to the effect of LEM on learning grammar structures of the English language showed the characteristics, and there is a significant increase in the mean scores of the grammar part of the test, as well.

Table 10. Variance analysis of the mean scores for the reading comprehension part of the test.

| ANOVA | | | | | | |
|--------------|----------------|----------------|----|-------------|--------|------|
| | | Sum of Squares | df | Mean Square | F | Sig. |
| PRE.READ | Between Groups | ,200 | 1 | ,200 | ,029 | ,865 |
| | Within Groups | 537,000 | 78 | 6,885 | | |
| | Total | 537,200 | 79 | | | |
| POST.READ | Between Groups | 171,112 | 1 | 171,112 | 21,816 | ,000 |
| | Within Groups | 611,775 | 78 | 7,843 | | |
| | Total | 782,888 | 79 | | | |

When Table 10 is investigated, it can be observed that the application of LEM in eighth grade English lessons has a positive effect upon learning the reading comprehension skills ($F = 21.816$; $p < .05$). Additionally, the mean score of the post-test in this section is relatively higher than the pre-test, and this shows that the treatment has caused a positive change in reading comprehension skills of the learners.

4. DISCUSSION

When the mean grades of the post-test of the control group were closely investigated, it can be seen that there is almost no statistically significant improvement for the control group. Nevertheless, in some parts like vocabulary, there is a relatively slight difference between the pre-test and the post-test. It is obvious that vocabulary teaching through traditional methods has brought an increase in the related sections of the test, but the whole picture says the opposite. In the other parts of the test (grammar and reading comprehension) there is a slight decrease (Figure 1).

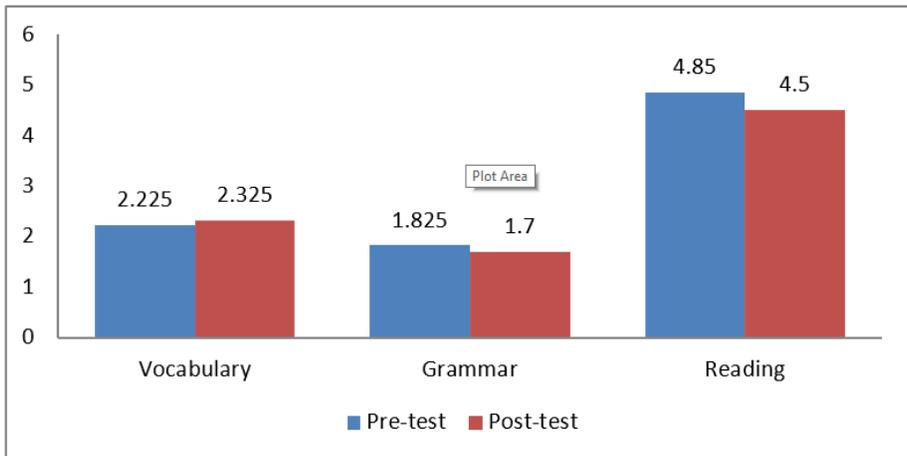


Figure 1 Pre-test / post-test mean scores of the control group for the main exam parts.

The data collected from the control group has showed promising results for language learning because in all parts of the post-test mean scored of the control group, there is a positive increase on learners' achievement. Therefore, it has been seen that LEM can increase the achievement in public exams through its tools and techniques (Flumerfelt, 2008). In other words, foreign language instruction

through LEM has a positive effect upon learning grammar, vocabulary, and reading comprehension skills (Figure 2).

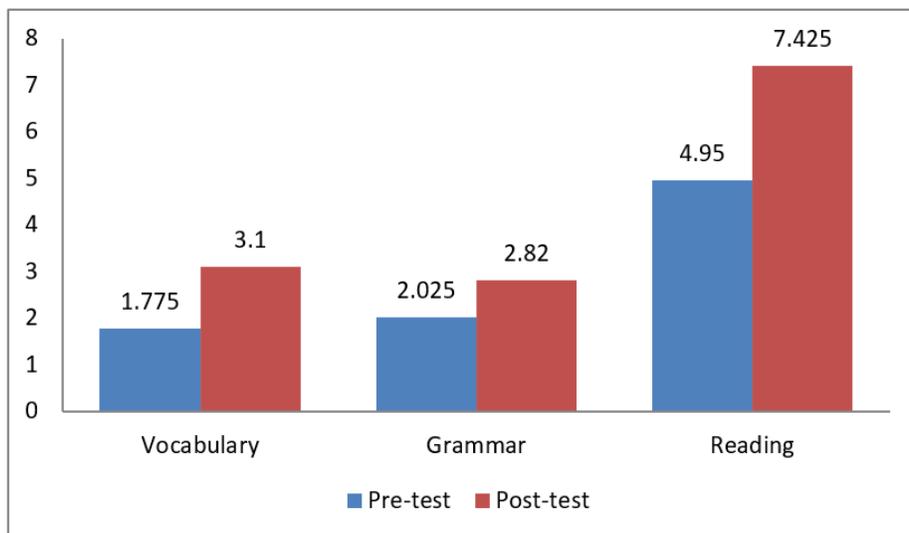


Figure 2 Pre-test / post-test mean grades of the experimental group for main exam parts.

Additionally, in Figure 3 the change that the treatment has brought in the experimental group is visualized. It can be seen that in vocabulary learning, there is the most significant improvement. This change can be attributed to ten different impressions and the load leveling plan of the LEM (Ziskovsky & Ziskovsky, 2007). The difference between the mean scores of the pre-test and the post-test is 4,6; in the vocabulary part of the test is 1,325; in reading comprehension part of the test is 2,475; lastly, the difference in the grammar part of the test is 0,8. In other words, all of the results have showed a statistically significant change. Especially, in reading comprehension part of the test, there is an apparent improvement, and this success can be associated with kaizen events and PDCA procedure because in the treatment process the learners were provided with kaizen events, and the results of these events were actualized with PDCA cycle, and perfection was obtained in reading sessions.

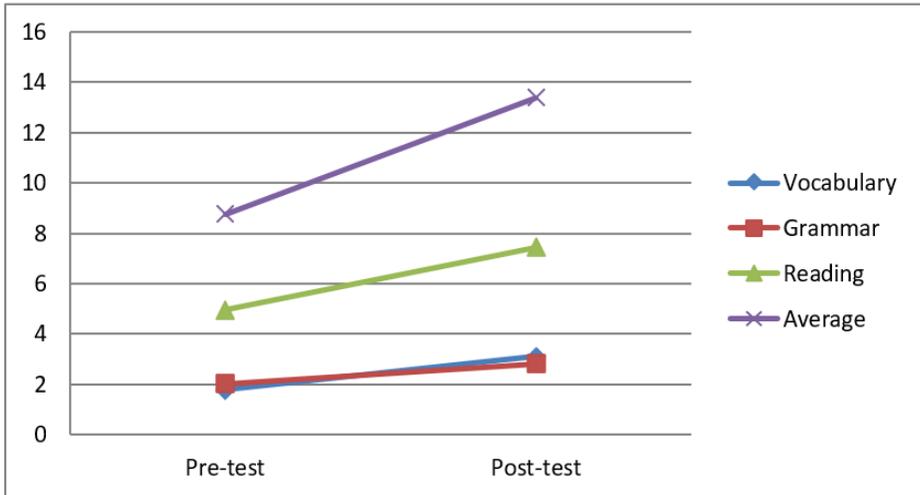


Figure 3 The change in the achievement level of the experimental group.

All of the analyses and the illustrations in this part have showed that LEM can be successful in middle school contexts. Even if Lean is famous especially in the business, with this study, it has been showed that Lean can provide better results in education too. In fact, there are many studies of Lean in higher education institutions, but there is almost no study in the context of middle school. With this study, it has been showed that LEM can be applied to middle school contexts, and satisfactory results can be obtained in this context like in other educational contexts and business sectors (Balzer 2010).

Lean primarily deals with the identification and the elimination of the wastes in the institutions, and there are lots of wastes in the processes of any school. Firstly, Lean gets rid of the wastes, cleans the learning environment (5S), modifies the curriculum (load leveling), and finally, sustains the innovation through perfecting it (kaizen events, PDCA procedure), and at the same time reducing the costs (Womack & Jones, 2010). From the findings of this study, it has been seen that LEM has achieved more fruitful language learning in middle school contexts and made the education system more successful in the institution.

5. CONCLUSION

Lean might be helpful for creating more fruitful learning atmospheres in educational institutions because modern education requires for better procedures, and Lean can be helpful in formulating new and efficient methodological innovations

in the field of ELT. In educational contexts, there are lots of problems like in many sectors, and these problems emerge from the wastes in the educational processes. In other words, with applying LEM in educational contexts, these wastes can be eliminated and a methodological innovation can be developed in the perspective of Lean in order to provide better learning opportunities to all of the school participants. Moreover, LEM can bring continuous change and improvement movement to educational institutions, which may lead to a more efficient learning for the students. Lean can be applied in all educational contexts in order to keep up with the requirements of the modern education. With the help of LEM all of the problems which are encountered in educational contexts can be solved, an environment, where mutual respect takes place, can be achieved, a learning process, in which everybody takes place as a problem solver, can be made real. In short, there is an immediate need for LEM in language classes, since language learning-teaching is a dynamic and fluid process.

Applying LEM in language classes can be considered as exploratory practice, since Lean promotes the idea of ongoing research rather than a short-term trial and error process, so the benefits of LEM are indefinitely sustainable, and at the same time, it minimizes the effort for the innovation in the language classrooms. In other words, Lean is just not appropriate for the business operations, it is also a good fit for the field of language education, and with this study, it has been proved. In fact, some applications of Lean can be seen in higher education institutions (Antony, 2014; Carvalho, Lopes, Ramos, Ávila, Bastos, Fonseca, & Martens, 2013; Comm & Mathaisel, 2005; Gadre, Cudney, & Corns, 2011; Heinemeier, 2014; Ranky, Kalaba, & Zheng, 2012; Thirkell & Ashman, 2014; Van Til, Sengupta, Fliedner, Tracey, & Yamada, 2005), but it has been also showed that successful application of Lean is also possible for middle school contexts (Tilfarlioglu & Karagucuk, 2019).

As Balzer (2010) states Lean means doing more with existing resources. Every year millions of Euros are spent for English course books and most of them are exported from foreign countries, so this situation leads to a serious loss of national wealth. If LEM was used in a country scale project, there would be a decrease in the cost of education, and this national wealth could be used for the next generations. In the example study, no extra-course books were forced to be bought by the teacher, the researcher himself created load leveling plan and additional language learning materials (PPTs, worksheets, vocabulary exercises, videos, weekly small exams etc.). In other words, it has been seen that with less money and existing resources, an increase can be achieved in public exams with the help of LEM. Last but not least, Lean can be extremely useful for

students, teachers, parents and schools' administrators who are suffering from the problems in the recent educational system. Moreover, by adopting LEM, educational institutions may allocate and utilize precious resources to main competencies. LEM may become widespread in middle school contexts, and it can create a ripple effect in other educational contexts as well.

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APPENDIX A SAMPLE ACTIVITIES FOR WEEK 19

1- Gap-filling activity for the week:

1. Work with your partner and complete the poem below with the words given.

windows math pants floors socks fishes dishes bath plants blocks

My Chores

My parents said to do my chores,
 to dust the shelves and mop the _____,
 and vacuum the carpets and clean the _____,
 and walk the dog and feed the _____,
 and wash and dry the dirty _____,
 and clean my room and take a _____,
 and read a book and do my _____,
 and pick up all my building _____,
 and put away my shoes and _____,
 and hang my shirts and fold my _____,
 and water all the potted _____.

She said I'll have some fun
 as soon as my chores are all done.
 That's great! Thanks dad and mom.
 Having responsibilities is really fun.



2- Listening and speaking activities for the week:

 Recording 27

My name is Diane. I'm fifteen years old. I always help my mom. I wash the dishes, tidy my room, and sometimes make cakes with her. I like cooking with her, but I don't like washing the dishes. I sometimes take care of my little brother.

My name is Curtis and I'm fourteen. I do many things to help my mom. First, I clean my room once a week. I vacuum my room and clean my desk. Second, I help mom to wash the dishes. Also I sometimes take out the garbage, but I don't like it. Finally, I water the plants. It's my responsibility, and I love it.

I'm Nina. I'm fourteen. I always clean my room and take care of my birds. I sometimes wash the dishes when my parents are tired or busy. I am responsible for tidying up my books and things. I sometimes help my mom to cook the dinner, too.

My name is Jeremy, and I'm fifteen. I help my mom with all the chores possible. My favorite chore is mopping the floor. It may seem hard but not to me because I enjoy it. But I really hate dusting the furniture.

1. Look at the photos below. How old are they? Share your guesses with your classmates.



2.  27 Diane, Curtis, Nina and Jeremy are talking about their chores. Listen and check (✓) the correct names for the chores.

| He/She... | Diane | Curtis | Nina | Jeremy |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| must take care of his/her bird. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| have to tidy up his/her books and things. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| is responsible for watering the plants. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| sometimes takes care of his/her brother. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| sometimes cooks with his/her mother. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| likes mopping the floor. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| doesn't like taking out the garbage. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| doesn't like dusting the furniture. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3. Why do you think we should share the chores at home? Share your ideas with your classmates. Use the structures below in your sentences.

I think...

In my opinion, ...

We should...

It's necessary...

We must...

3- Some sample pages from the general revision PPT:

UNIT-4: COMMUNICATION

- AVAILABLE: uygun, müsait
- CONNECT: bağlamak, bağlı olmak
- CONTACT: irtibat kurmak
- DIAL: çevirmek
- ENGAGED: meşgul (telefon)
- GET/KEEP IN TOUCH: iletişimde olmak
- GET BACK: dönmek, geri almak

UNIT-5: THE INTERNET

- ACCOUNT: hesap
- ATTACHMENT: ek
- BROWSE: göz atmak, taramak
- BROWSER: internet tarayıcısı
- COMMENT: yorum
- CONFIRM: doğrulamak
- CONNECTION: bağlantı
- DELETE: silmek

UNIT-6: ADVENTURES

- AMUSING: zevkli, eğlenceli
- CANOEING: kano
- CAVING: mağara yürüyüşü/gezisi
- CHALLENGING: zorlu, mücadelecı
- DISAPPOINTING: hayal kırıklığı yapan
- EMBARRASSING: utandırıcı
- ENTERTAINING: eğlendirici

UNIT-7: TOURISM

- ALL-INCLUSIVE: her şey dahil
- ANCIENT: eski, antik
- ARCHITECTURE: mimari
- ATTRACTION: cazibe, çekici
- BED AND BREAKFAST: yatak ve kahvaltı
- COUNTRYSIDE: kırsal kesim
- CULTURE: kültür

UNIT-8: CHORES

- ARRIVE ON TIME: zamanında gelmek/varmak
- CLEAN UP: temizlemek
- DOING CHORES: ev işleri yapmak
- IRON: ütölemek
- KEEP QUIET: sessiz olmak
- KEEP/BREAK PROMISES: sözünü tutmak/tutmamak
- LAUNDRY: çamaşır
- LOAD/EMPTY THE DISHWASHER: bulaşık makinesini doldurmak/boşaltmak

Activity 1

A. Complete the expressions with the words given.

do ~~empty~~ dust cook make
 take out wash set feed

empty the dishwasher make the bed set the table

dust the shelves Take out the garbage feed the dog

do the grocery shopping cook the meal wash the dishes

B. Match the photos with the appropriate expressions in part A. Write the expressions under the photos.



feed the dog



do the grocery shopping



Cook the meal



Set the table



Take out the garbage



Make the bed

Activity 2

A. Scan the paragraphs below. How many people are there in their families? Write the numbers on the lines.

There are 5 people in Bill's family. There are 4 people in Linda's family.

B. What are their responsibilities? Read the paragraphs and complete the charts.

Hi, my name is Bill. I live with my family in a big house. I have a sister and a brother. We share many chores with our parents. My brother and I take out the garbage. We are responsible for washing our father's car once a month. I weed the garden, and my brother waters the plants. We also make our beds every morning. My sister, Nancy, loads the dishwasher after dinner and vacuums the floor once a week. She also helps mom with the grocery shopping every Saturday. My mother cooks for us and does the laundry. My father is responsible for fixing anything broken at home.



Hi, my name is Linda. My family is small, my father, my mother, my sister Belinda and me. We live in a flat in a tall apartment block. I help my family with the chores. I make my own bed. I set the table for dinner while mom cooks. Every Wednesday afternoon my parents go shopping for food, and I must take care of my sister Belinda and help her homework. My mother cooks our meals, and sometimes my father helps her in the kitchen. I am responsible for emptying the dishwasher.

| Bill | Bill's father | Bill's mother | Bill's sister | Bill's brother |
|---|-----------------------------------|---|--|--|
| take out the garbage wash the car weed the garden | Fix anything broken at home | Do the grocery shopping, cook the meals,do the laundry | Load the dishwasher, vacuum the floor,help mom with the grocery shopping | Take out the garbage, wash the car, water the plants |

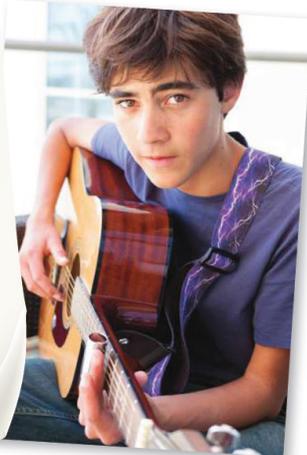
| Linda | Linda's father | Linda's mother | Linda's sister |
|--|--|--|----------------|
| Make the bed,set the table,take care of Belinda,empty the dishwasher | Go shopping for food, help mom in the kitchen | Go shopping for food , cook the meals | Do homework |

Hello! My name is Frankie, and this is my school day. I always get up at 7:30 on weekdays. I leave home at 8:15 and walk to school. The school is near my house, so I don't need to take the bus to school. I just walk for about ten minutes. The lessons start at 8:30. I have seven lessons a day. I have four lessons in the morning and three lessons in the afternoon. Lunch break is at 12:20. I usually have lunch at school canteen, but sometimes I take packed lunch from home. The lessons start at 1:30 and finish at 3 o'clock in the afternoon. I arrive home at about 3:30 on Monday, Tuesday and Thursday. On Wednesday and Friday I play soccer after school. We usually gather at about 4. I'm in the school team, so we often practice on Saturday afternoon, too. I'm also a member of the music club at school. We have a rock band. People call us "Rocky Teens". I play the guitar. We usually practice music at the lunch break between 1 - 1:30 and sometimes on Saturday morning. I usually do homework after dinner, but I sometimes get up early and do my homework before breakfast.

Activity 3

A. Read the text and complete the timetable.

| Timetable | |
|--------------|---|
| 7:30 | : get up |
| 8:15 | : leave home |
| 8:30 | : start lessons |
| 12:20 | : have lunch |
| 1:00 | : practice music |
| 3:00 | : finish lessons |
| 3:30 | : arrive home (on Monday, Tuesday and Thursday) |
| 4:00 | : play soccer (on Wednesday and Friday) |



B. Read the text again and answer the questions.

1. When does Frankie play soccer?

He plays soccer on Wednesday and Friday after school.

2. What does he usually do after dinner?

He usually does homework after dinner.

3. Is he interested in music? How do you understand?

Yes, he is. He is a member of the music club at school, and he plays the guitar.

Activity 4

A. There are seven mistakes in the sentences below. Find and correct them.

**Classroom Rules**

- ▶ Raise your hand ~~after~~ ^{before} speaking.
- ▶ Listen to others when they speak.
~~Focus~~
- ▶ Don't focus on your task.
- ▶ Do your homework.
~~Bring~~
- ▶ Don't bring your school materials.
- ▶ Listen to your teacher.
- ▶ Cooperate with your group.
- ▶ Keep your hands dirty. ~~clean~~
- ▶ Write on your desk. ~~Don't write~~
- ▶ Use computers with care.
- ▶ Clean your desk.
- ▶ Come to the class late. ~~on time~~
- ▶ Be disorganized. ~~organized~~
- ▶ Put your rubbish in the bin.

4- Some sample questions of the weekly small exam:

12. Aşağıdaki görsele göre konuşmada boş bırakılan yere uygun ifadeyi seçiniz.



Alice: Who in your family?

Matt: My mother.

- A) cooks the meal
B) does the laundry
C) loads the dishwasher
D) hangs out the washing

13. Aşağıdaki görsele göre boş bırakılan yere uygun ifadeyi seçiniz.



My father is responsible for

- A) taking out the garbage
B) washing and drying the dishes
C) vacuuming the floors
D) dusting the shelves

14. Verilen metinlere göre hangisi söylenemez?

Ann: I would rather visit Gaziantep. Because it has a rich cuisine and I like trying local dishes.

Bob: I prefer visiting Trabzon. I like nature. Sumela Monastery is there, too and I really want to see it.

Jess: My favourite one is İstanbul. I want to see the spectacular scenery of Bosphorus.

- A) Gaziantep has a rich cuisine.
B) Sumela Monastery is in Trabzon.
C) Jess is interested in the history of İstanbul.
D) Bosphorus has a spectacular scenery.

15. Aşağıdakilerden hangisi sınıf kurallarından biri değildir?

- A) Keep your desk tidy and neat.
B) Raise your hands to speak.
C) Wash your hands before the meals.
D) Be kind to your friends.

16. Branka:?

Lena: Great Mosque and Virgin Mary Church.

- A) What are some traditional dishes
B) What are some places to visit
C) Where is the city located
D) What is its climate like

- 17-18. soruları aşağıdaki metne göre cevaplayınız.

Hello, my name is George. I live with my family. I have a brother and a sister. We share household chores with our parents. I take out the garbage. I'm also responsible for helping my father wash the car. My brother, Tom, weeds the garden and water the flowers. My father is responsible for sweeping the floors and dusting the shelves. My sister, Julia, loads and empties the dishwasher. My mother cooks the meal and sets the table.

17. Metne göre hangisi söylenemez?

- A) They share the household chores.
B) Tom is responsible for weeding the garden.
C) Julia helps her mother set the table.
D) George takes out the garbage.

18. Julia is responsible for

- A) taking out the garbage and washing the car
B) cooking the meal and setting the table
C) weeding the garden and watering the flowers
D) loading and emptying the dishwasher

- 19-20. soruları aşağıdaki metne göre cevaplayınız.

My name is Kate. I'm fifteen years old. I do many things to help my mother. First of all, I tidy up my room twice a week. I sweep and mop the floors. I like cooking with my mother, but I don't like washing the dishes. However, I set the table because I enjoy it. My mother does the laundry, and I hang out the washing. It's my favorite chore. I also help my father wash the car and weed the garden.

19. Metne göre hangisi söylenemez?

- A) Kate helps both her mother and father.
B) Doing the laundry is Kate's favorite chore.
C) Kate likes setting the table.
D) Kate cleans her room.

20. Which one does Kate like the most?

- A) cooking with her mother
B) washing the dishes
C) setting the table
D) hanging out the washing

CHAPTER FOUR

INNOVATIONS IN METHODS OF TEACHING ENGLISH

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Different methods of teaching have become a controversial topic in English language classrooms as the needs of the English Learners should be met. To exhilarate learning, teachers need to use effective methods of teaching to achieve what target they do want to reach. The process of teaching and learning English as a foreign language never stops in a certain point and it needs more promotion and changes to be more successful. The methods, which are used in English language teaching mostly, are traditional methods. The teachers usually have no choice to change them because of having copious subjects, which are needed to be studied according to their pre-designed curriculums. They use these traditional methods because they do not have the freedom of changing their curriculums. As students are not alike, so they need a very effective method to fulfill the needs of learning.

The field of teaching English cannot perform its best result with the same and old methods have been used for years. Flumerfelt (2008) states that once he had asked a school administrator from a top-performing school to explain the problems they face. He said the problem is not that the work is too hard or too much, the problem is that all the tricks which were used in the bag, they do not work efficiently now. He said data driven decision in this regard is misused. The old instructions of the same stuff are thrown to the initiatives at hand. School-based and district-based activities should be honed to produce better results. He also confirms that schools continuously engage the educational change. The schools need to do what are needed to be done. Ellis (2012) states that all the methods of teaching English should be reviewed more and more because they take a great role in different institutions. He said the methods are a very mixed branch. The different kinds of methods have been investigated and they are

changed from the different institutions. It is clear that the teachers have to give their best outcomes by using effective methods of teaching. Poulsen (as cited in Karnes & Bean, 2002) states teachers should take the role of leaders to help their students become self-directed learners. They must take learning as their primary function; they must learn how to learn and how to create a very efficient environment of learning. In an environment where the students are considered as unique learners, it helps to grow a positive self-concept naturally. It makes the students to learn responsibility and have an inner sense of control while sharing responsibility and self-evaluations are planned as a part of their day, Hunt and Seney (as cited in Karnes & Bean, 2002).

For Richards (1990), there are many literary works on second language teaching, the methods of teaching, and design of teaching. When it is assumed that learners do not learn properly, it is said the causes are materials, teaching methods, and teachers. In a successful education, there are many different levels such as planning, development, and implementation. Methodology is those activities, tasks, and learning experiences, which are chosen by the teacher so as to achieve learning, and how the teachers use them in the learning process. They are justified by the objectives, which the teacher has set out, or by the content, the teacher uses to teach.

The process of teaching and learning English language involves various elements and principles. On the other hand, because English language is taught to a group of students, their needs should be taken into consideration during constructing and applying syllabus, tasks and methodology (Laborda, 2011). One of the important aspects relates to the teachers is the teacher's guide. This guide could be in the shape of a handy guide or handbook and should include all vital program information so as the teachers refer to while having questions (Brown, 1995). For some teachers using specific English course books enable them to teach directly and effectively while for some others designing special courses are more preferable (Yalden, 1987). So, we realize that the different methods may not be successful if the only focus would be applying without organizing them well and taking all the parts into consideration.

Freeman (2000) states teachers are free to choose the methods they want with focusing on their context, because each context needs a kind of methods. What the teachers do to teach the learners is pedagogy. Methods are in form of integrate which consists of theory (the principles) and practices (techniques). Richards and Renandya (2002) state methods will fail if they just focus on a small part of a set of a complex element in the process of teaching and learning.

Ellis (2005) also thinks that written and spoken language which appears would happen automatically, they also need planning. Planning primarily solves the different problems in the activities. In different levels, planning takes place such as discourse, sentence, and constituent plans, Clark and Clark (as cited in Ellis, 2005).

Methods also have a great role in teachers' endeavor in teaching. Freeman (2000) states that when teachers meet methods and are asked to apply them on their principles with their techniques. Then they can give their messages more easily. The majority of the teachers in the high schools still follow grammar translation method in their teaching style, Malla, Awasthi, and Shrestha, (as cited in Bista, 2011).

When we choose a specific method to teach, we should keep in mind that the chosen method has to make the teaching process more interesting. Students should like the materials they study; it should be useful when the students are involved in interaction. The materials should give the students a high motivation in learning (Laborda J. 2011). De Geus (1997) states that planning is also important as learning.

Organizational learning

Learning organization does not exist until there are systems of management to record all the points of learning (Dennis 2007). What we understand about organizational learning leads us to talk about Lean. A good team has a 'social memory' while painting for success in learning organizations. As there are different methods of teaching English, Lean in education is somehow a new realm in English Language Teaching. Many techniques are used in each method to increase the achievement of the learners. Still the attempts are enhancing to utilize and find the best method of teaching and learning. The importance of organizational learning will lead us to talk about "Lean approach" Deming (as cited in Francis, 2014). To understand the core of the process, we have to explain what Lean thinking is.

Lean thinking

Lean thinking is shortened as Lean, and it is referred to as Lean manufacturing which is sometimes called Lean enterprise. It might be called Lean for health care or Lean for government. It depends on who is selling what (Davis & Bentley, 2010). Lean thinking is a management approach for creating a culture of a continuous improvement (Stenzel, 2007).

A process of five steps thought was proposed by Womack and Jones in 1996 to direct the manager, and the transformation of Lean. There are five principles of Lean. First, value is specified from the first step to the end user by product family. Second, all the steps are identified in the value stream, then remove all the steps that create no value. Third, facilitate the ways which add value flow so smoothly. Forth, the customers pull value from next activity. Fifth, after applying the above mentioned points, the process is reached a state of perfection and it goes on with no waste (Marchwinski, C., Shook, J., & Schroeder, 2008).

There are concerns that Lean application will make the schools standardized or the jobs more “efficient” or schools work like “factories”. These ideas do not match the application of Lean, still they refer to a non-thinking application of Lean (Dobbelaer, 2010). Demin’s approach “Lean Thinking” focuses on doing more with less. It eliminates the steps which are not necessary in the process. It is a dynamic program and it evaluates and asks how a process can be done in a better way with a better outcome. On the other hand, if a step is eliminated, does it affect the value of the customer (Ziskovsky & Ziskovsky, 2007)?

Applying Lean successfully relies on understanding the concepts and methods of production and knowing the distinction between pull and push system (El-Hak & Al Aomar, 2006). Different kinds of efficient workplace, value stream mapping, and Kaizen exercises are tools of Lean methodology Dennis, George, Rowlands, Price, and Maxey, (as cited in Francis, 2014). (Thirkell & Ashman, 2014) state that implementation of Lean can be viewed in the public sectors as a social and economic ideology, which enables new forms of employee subservience.

Experts reduce Lean thinking to five elements:

1. Specify value from the customer’s perspective (product and service)
2. Identify the value stream and remove waste.
3. Make flow across the value stream.
4. Base production upon the pull from the customer.
5. Strive for perfection by removing waste to Womack, et al., (Burton and Boeder 2003).

The objective of Lean thinking is to remove the latter activity which enhancing the first set (Marchwinski et al., 2008). The only focus should not be on eliminating the wastes, the process can not only be improved by removing wastes because similarly behind the wastes reducing variation still leaves (Arnhelter & Maleyeff, 2005).

Lean principles

Lean principles evolved systematically in industry. These principles could also be applied to health care quickly, as government and education are not too much behind because their waste is equaled by becoming more Lean and effective (Bell, 2006). First, leadership makes Lean more efficient and stronger. They should have clear and defined goals to achieve. They should articulate vision and goals to inspire others to embrace both. All school leaders must be committed to the program through their personal involvement in the process. Lean is a continuous improvement, but without the active participation of the leaders, it would be impossible. The second requirement of Lean development is culture, which is the way we do things. Lean cannot be applied in a traditional culture, because it is to challenge the status quo. Cultures are learned habits. They can be unlearned and new habits are formed (Ziskovsky & Ziskovsky, 2007). The employees who were recipients of Lean implementation acknowledged that while Lean raised personal respects and empowerment, also overlooked the prospective of broader people as it is concerned with processes, tools, and techniques, wastes and general savings (Thirkell & Ashman, 2014). To have a better understanding of Lean principles, we should digest the system, subsystem, and tools and technology:

A. System: Process

1. Customer defined value should be established to segregate waste from value.
2. Front-load the product development process to find solutions while maximum design “space” is there.
3. “Create a leveled product development process flow”.
4. To reduce variation, rigorous standardization is used.

B. Subsystem: Skilled People

1. To integrate development from start to finish, a chief engineer system is developed.
 1. In all engineers, towering technical competence is developed.
 3. “Organize to balance functional expertise and cross-functional integration”.
 4. “Suppliers are fully integrated into the product development system”.
 5. Continuous improvement and learning are built.
 6. Create a culture that helps improvement and excellence.

C. Tools and Technology

1. Technology is adopted to fit the people and the process.
2. Visual communication to align organization.
3. For standardization and organizational learning powerful tools are used (Locher, 2008).

There are some words which Lean development system is based on. In spite of these key words, there are some other principles that must be a root of Lean process. The concepts which Lean development is based on are;

1. Distinguishing between knowledge reuse and knowledge creation.
2. Performing development activities currently wherever possible.
3. Distinguishing between “good” iterations and “bad” iterations.
4. Maintaining a process focus throughout (Locher, 2008).

Principles of Lean consumption

Lean principle may not work in public sector service as they do in private sectors of manufacturing. Public organizations try to implement Lean which does not engage the version of Womack and et al. (1990). When a company thinks of applying Lean, they should consider all the steps of Lean as it is needed. Randor and Osborne (2013) argue that these are the reasons make the UK failure in implementing Lean in public sectors to achieve the desired outcomes. From what happened in UK, we could understand that the failure of Lean may refer to application of Lean, not the system itself.

Senge (1990) stated that systems thinking are a very important link between Lean and learning organization, and he declares systems thinking as a foundational key. In this model, he presented the four disciplines; continual mastery, mental models, shared vision, and team learning. Lean methodology is based on some concepts, which are in connections with systems, and system engineering so seeing it as a foundational key is not something very surprising.

Stages to implement Lean

Lean is not only one stage to implement, it is a journey with four stages of its implementation to fill the gap. They are explained here to show how to navigate Lean leadership learning (Brockberg, 2008).

Grand Zero: Searching, you are realizing and searching for answers to perplex dilemmas like increasing demands for public accountability, reducing resources, or new competition. In Lean thinking for School Introductory Seminar Participants complete Tier 1- participants learn.

Lean is not a set of tools, nor principles or value stream maps. It is not the satisfaction of the customer. It is how everything works together, also Lean is not implemented, but it is a journey, Flinchbaugh and Carlino (as cited in Brockberg, 2008). It would be a critical mistake if the institutions or companies apply Lean try to fulfil the needs of the customers only. It can be considered one of the reasons to fail Lean application.

At this stage, leaders make divisions with this background knowledge to become full partners with the institute. Then they are ready for the next three stages.

Stage One: Initiating, leaders begin to teach their personal distributing the Tier 1 Survey in a 360 manner to those with important responsibilities. The Tier gives a snapshot of the state of the organization. Flinchbaugh and Carlino (as cited in Brockberg, 2008) explain that even the decisions are made by the leader, but it does not have unilateral determination which area to tester incorporate with the Lean tools. The leader focuses on one or two primary needs emerging from the Tier 1 survey as a beginning accept, it is called ‘unlinked islands of Lean operation techniques.

Stage Two: Training, the enterprise moves forward with a strong appetite for Lean after the successful institution of one or two facets, Flinchbaugh and Carlino (as cited in Brockberg, 2008). Training arms the personal in the organization with local success at this stage, which links these successful areas with the sequence Lean tactics. Balle and Belle (as cited in Brockberg, 2008) state the communication strategies embrace the objectives of Lean performance, are in motion through the Tier 2, then employ Lean tools in the areas need improvement.

Stage Three: Sustaining, at this stage the organization is enough strong to bear any persons, processes or problems with trained personnel. The existence of waste cannot be seen easily. By strong goal orientation and observations, they are possible to be found and identified. It is also important that the most effective waste cannot be sorted out Robinson (as cited in Brockberg, 2008).

Levin and Redric (as cited in Brockberg, 2008) used the word ‘friction’ as a Japanese term for waste. Tier 3 survey pushed the organization to more success, suppliers, friends, customers, friends and others beyond the four walls of the organization for date that show the real state of the organization, waste and its performance.

Lean manufacturing

Womack et al. (as cited in Ward and shah, 2007) state when Toyota realized that mass production did not work very well, they developed a version of Lean.

There were two limitations in their mass productions. First, employees were disengaged since they focused on doing the repetitive tasks. Second, it was full of wastes and the level of waste was high.

There are four methods in Lean manufacturing. The methods are process mapping, 5S, Kanban, and Poka-Yoke. The first one, Seiro, means clearing the area of those items which are not used regularly. The needed items are separated from the clutter. Those items make the work easier, easier to move or improving utilization of space.

The second is Seiton, arranges and identifies the items in the area. In that area all the items should be labeled if the items were not very or enough important, there are not labeled in the area or stay in the area. Therefore, the recognition of suitable tooling, resources, materials, etc. will be clearly visible. The third one is Seiso, focusing on a clean and neat production area by sweeping and picking up regularly, for example daily, biweekly at the end of every shift. This using could be accomplished less than %2 (ten minutes) of the scheduled time. Seiketsu is the fourth one. If the activity remains standard, then the place stays cleaned. The employees will go back to the old ways and the area will not be cleaned if the activities do not become institutionalized during the process. Therefore, Seiketsu is about management discipline. The last one is Shitsuke, it is the responsibility of management to support and make the importance of housekeeping also to show leadership by follow-through and walking the talks (Feld, 2001).

In management process, Kanban is used. It is a Japanese word, which means signboard. It was developed by Ohno to control production between processes and to do Just-In-Time in production. To decrease wastes and utilization of machines, Kanban is used by Toyota originally. It is even used for a continuous improvement (Gross and McInnis, 2003).

Lean arranges the process effectively, and process mapping is a tool of Lean to lay out the steps of the process visually on the paper. There are some kinds of mapping. Process mapping is one to arrange the steps represented with the use of symbol labels. Value stream identifies where value is added. Spaghetti map shows the movement while the process is carried out (Ziskovsky & Ziskovsky, 2011).

Lean methodology

It is important to show the differences between Lean method and methodology by using social sciences (Francis, 2014). Creswell and Clark (2011) state that methodology is the philosophical assumptions which leads to the direction of

the collection and analysis, while focuses on doing the work. Lean methodology has been explained in many ways. One of them is the ‘house of Lean’, which is adopted from Dennis (as cited in Francis, 2014).

Lean is a liberate program, it is not accomplished by doing more work for school employees. It allows the workers to use their genius to improve the job more efficiently. It supports those who perform each process to remove wastes. There is growth for both workers and the students learn and improve. Lean is more proactive than reactive, and it seeks to prevent rather than to solve (Ziskovsky & Ziskovsky, 2007).

Lean; its function and production

Ziskovsky and Ziskovsky (2011) state that Lean is an approach to forward the task in a process by removing the steps where are not necessary. It improves continuously, and elimination is the heart of Lean “Muda”. It is a term used to describe an approach which is rather-added to process management of personal and work tasks. It deals with the expenditure of time, effort, money or the resources other than the creation of value, and elimination for the things which are considered wasteful by the customers or end users. Balzer and Langer (as cited in Francis, 2014) explain that different services like admissions, hiring, and administration research funds or any functional areas which have benefitted from Lean, or any multi-steps which can be simplified, also it focused on the needs of the users. Wilson (2010) outlined one of the popular definitions of Lean, he explains Lean as a comprehensive set of techniques to eliminate and reduce the seven different kinds of wastes, in the following sections we refer to the wastes in education. A company by using this system and only became Leaner, but even better and responsive by reducing the wastes. Another definition of Lean in Wikipedia which shows that Lean is the set of tools which helps in the identification and removing wastes (Muda), which is to improve quality and production time and cost production”. Shah and Word (2007) suggest that Lean can be defined in two different perspectives, first philosophical perspective and the second is practical perspectives. Philosophical perspective emphasizes on conceptualization while practical perspective emphasizes on integrated management system. The perspectives pivot eliminating the wastes. Wastes are divided into different kinds and they are systematically being reduced. It may be impossible to remove all the wastes but the process will be better and successful by eliminating the more. Francis (2014) stated that Lean needs a high level of organizational learning, also culture needs investment to make its success surer. It is clear that the application may not be successful without creating or having

a supportive culture. As the culture plays an important role in Lean program, McDonough et al. (2013) state that setting can be regarded as another aspect of context. Setting is generally referred to the whole teaching and learning environment. It includes the factors such as the role of English in the country, the role of English in the school, the teachers, management and administration, resource available, support personnel, number of students, time, physical and sociocultural environment, tests, and procedures.

In Lean, organizational learning as we mentioned its importance cannot be ignored, it is one of the most aspects of applying a successful Lean process. It is a system of organizational improvement that empowers the workers from the student to superintendent to increase personal performance and job satisfaction. Its focus is on the steps that add value in the process. Works people do every day have a defined beginning step and a defined end step, between the two there are multiple steps. The result is desired by someone. The “result” is the product, the “desire” is the value, and “someone” is the customer. The crucial relationship between them distinguishes the Lean philosophy. Lean sees process as a functional step to add value, which it is perceived by the customer, as the customer does not value what is done, why wasting time, money, and effort? The answer is “don’t” (Ziskovsky & Ziskovsky, 2007).

The results of four studies of Lean in education show its importance in the field. The first study shows that in a nine-month improvement project, it resulted in the recovery of 120 hours per teacher. Planning and scheduling were in a higher level. The students learned better and comprehensive exposures were in a good level. The result of the second study was the average of % 116 of student performance scores, and the individual improvement was %343. In the third study, reduction in the results, turn-around time and common understating were improved on the remediation in terms of limitation. In addition, it enabled the teachers to identify the weakness of the students. The last study, the students passed the state language arts assessment test, and teaching and learning achieved a % 65 increase). In 2006, Peters, Potter & Min ran a pilot study focusing on the feasibility and logistics of students who participated in a kaizen event at an industrial partner’s facility Ziskovsky and Ziskovsky (2007). while applying Lean, the role of language teachers is very important, the teachers should be skillful enough to master and monitor student performance and expert, in instructional designs Lean respects the individual’s knowledge and contribution, it is a respect-based program Met (as cited in Ayşe Kizildağ, 2009).

Lean, despite its original methodology, it has been used with different missions in different organizations such as healthcare and government. It has

been used in government and healthcare before higher education institutions. Business schools and universities were first in using Lean (Randor & Bucci 2011). Blank (2013) also explains that Lean starts up is not just an approach but it is applied more and more world-widely.

Randor and Bucci (2011) produced a research report. It focused on five case studies to synthesize how Lean was used in higher educations. They reported three advantages are experienced by undertaking Lean, it creates understanding the needs to change, revise processes, and practices, which had remained untouchable for years. They stated that Lean in higher education is in a nascent stage. There are many stories about Lean. Some of them may not give a positive idea of it because Lean inadequately has been used as it is a contrast view about Lean. It brings endless possibilities in education for improvement. Lean never ends once it starts. It is a recurrent cycle of Plan-Do-Check-Act. It is a scientific method that can be applied to every facet of operation in schools. People do their jobs and they try a new theory. They test to know its appropriateness. If it is good, they apply it and search for a new and better theory to implement. On the contrary, if it does not work as it is expected, they change it and test another theory. Therefore, Lean is not an end quest for perfection (Ziskovsky & Ziskovsky, 2007). Organizations will be more successful where they adapt to a continuous improvement strategy, within the improvement some progress is made in the chosen strategic direction (Comm & Mathaisel, 2005). It appears that the schools try to implement Lean methodology in different levels. In their study, Comm and Mathaisel (2005) stated that all schools have initiatives, which appear to be Lean, some of them with very small aims but still want to do more with less. They concluded that Lean practices want to eliminate duplicate efforts. It provides success in different projects and levels. Moreover, there are projects wanted to be Lean but they could not manage the process appropriately as Lean guides or implemented. It is also important to know about the tools of Lean and to know how to apply the tools.

We cannot name an organizational work to be Lean until it would be tested properly. Lean is an adoptive system but it should be applied very carefully, Womack and et al. (1990) also state that Lean has been changed in a way that the tools are no longer recognizable and Holweg (2007) concluded that it creates confusion between the scholars and the practitioners. It is very important to know how to apply the tools of Lean, it is necessary to explore Lean as “fitness to purpose” in the public sectors (Randor & Osborne, 2013). The process can be tested if is Lean or not by reviewing the end statement of a project. Thirkell and

Ashman (2014) explain that a senior manager at New University expressed the need a framework for Lean and Lean leadership that go with it. People should be trained; it is operated for people to get used to it and to see the benefits. An academy at the same university had understood that Lean measures everything to improve the process.

Francis (2014) concluded that the prospect of doing more research concerning Lean education is strong because in spite of the business continuity in the sectors of higher education, it also creates new linkage with worldwide institutions in education and industry. For Scott (2008) the purpose of schools is not redefined clearly, it will be expected to have students who are unable to look at the problems with different perspectives that need high levels of thinking, and then it will be the damage of education and society. It would be a damage and waste of time if the problems were not removed. Lean wants to eliminate the wastes in a process so the problems, which are clear, will be addressed by Lean strategy, such as excessive inventory and excessive motions, etc., and it addresses the data, which are not important. Lean methodology is effective for improving floor space usage and clearness. It reduces cycle time of processes and creates a healthy environment (Antony, 2014).

Lean in education is a program of organizational improvement, which gives power to every worker in a school system to increase personal performance and satisfaction through process improvement. It eliminates the steps which are wasteful, unnecessary or do not contribute value to the work (Ziskovsky & Ziskovsky, 2011). So how the schools can control the problems and unnecessary steps, is one of the important reasons. Scott (2008) explained that the fundamental issue of the schools should be examined and it is important to make Lean more successful because Lean tries to increase congruence between actions and mission. (Womack et al., as cited in Brockberg, 2008) state that Lean is a superior way to make things by humans, with lower cost, which provides better products. Other institutions of higher education can learn from the successful implementation of Lean. To Comm and Mathaisel (2005), the changes of higher education happen because of five primary factors:

1. Higher public expectations of what the universities deliver.
2. Parental concerns increase about the quality of education.
3. The emphasis on college ratings.
4. Higher expenses.
5. Student population concerning demographic changes.

Wastes in education

Education is a hot topic in the light of current economic crisis and the needs for a successful and production citizenry (Ming, 2008). Many organizations have challenged to do more with less. They are always working to increase their achievements. Ziskovsky and Ziskovsky (2007) state that the successful organizations became successful focused on a continuous improvement. This process of doing more with the minimum resources has been nicknamed which has been named as “Lean” by the researchers at Massachusetts Institute of Technology is a good direction to take. Lean does more with less existed resources. There are nine wastes in education. Waste is anything that does not add value to the process. Ziskovsky and Ziskovsky (2011) state that the wastes in education are:

1. **Overproduction/effort:** the generation of more information than it is needed at the time, doing it again is not needed or it can be unwarranted changes that are not a part of the process improvement. It also can be doing something, which it is not needed; just wasting time for another needed activity.
2. **Talent:** the failure to recognize or develop in placing a person where they use their skill, ability or knowledge to their fullest to benefit the organization. It can be underutilization or overutilization of the people’s skills.
3. **Motion:** any movement that does not add any value. Physical or electronic movement and transporting people and items which don’t add any value.
4. **Time:** actions, people and information create idleness when time is used unwisely, such as doing work versus playing games.
5. **Processing/handling:** doing activities which are needed for the end result to be accomplished, unnecessary steps, requirements, reviews and approvals which are mandates but are not necessary.
6. **Assets:** using more resources, books, people, money, inventory, facilities or information than is needed.
7. **Capacity:** “the failure to realize full potential and experience its benefits.” Capacity is measured at both individually or at organization level. In education, the waste of capacity means not using the full abilities of the students, teachers and other staff to achieve the best educational outcomes.
8. **Knowledge:** “the re-creation of already existing knowledge.” This affects students, teachers and other staff. Waste of knowledge can be poor planning, organization, and communication of information. It could be incomplete

mastery of curriculum, redundant or omitted courses or „restricted possession or needed information by certain groups”.

9. **Defects:** “human errors, honest mistakes, or any number of things that led to work that contains inaccuracies, omissions or requires that it be done again”.

Researches have shown that %80 percent of the steps are unnecessary which are done to achieve the desired output. It means the time and resources which are wasted, can be saved and used in other processes. The view of end-user is very important, it identifies, reduces, and eliminates what does not add value. The remains are value, so Lean method seeks to continuous improvement. Waste is never planned but it happens. People say no one is perfect but they hardly could improve. The reality is no one is perfect but everyone can improve. There will be never a time that wastes do not exist (Ziskovsky & Ziskovsky, 2007).

Lean and education

Schools and school systems are organizations which the workers depend on complex processes to accomplish their tasks and give value to the customer. Students are struggling with the systems that do not fit or give their needs. The Rand Corporation (2004) concluded that “Lean Process Improvement offers educators the most powerful improvement and accountability model available to meet the challenges of the 21st century.” The RAND study called for to adopt Lean Process Improvement Principles and get the benefits and results as the other educational industries have realized. LEE responding with creating Le2™, it has been designed by “practicing licensed k-12 educator and a Certified Lean Master” to meet the needs of education (as cited in Ziskovsky & Ziskovsky, 2007). The students improve properly as Ranky, Kalaba, and Zheng (2012) state that the students who participate in their own learning became more self-critical.

Lean is not the only system to solve the problems of education but its tools and philosophy are useful in education (Flumerfelt, 2008). Teachers negotiate those tests like high-stakes-tests narrow the curriculum content in a way the teachers focus on the subjects included in the tests, this resulted in the fragmentations of the knowledge. The teachers cannot use the teacher-centered pedagogies (Sarra Dobbelaer, 2010). Different tools are used to analyze systems, such as CX Lean which is used for analyzing any new system. ‘C’ stands for congruence ‘ or ‘ equal state’ and X refers to the ways congruence can be developed in the system. It employs the Plan-Do-Check-Adjust. It is a foundational concept of Lean, and CX identifies two areas, organizational

intelligence and performance management (ibid). Francis (2014) states that there is no success for Lean implementation without an accommodation and understanding of culture and subculture which they serve. A main key to make methodology and methods of Lean at Toyota possible is a culture of innovation. Lean is overlaid into the present culture by providing thinking, planning and developing of organizational learning.

Educational leaders would say that Lean as a manufacturing system is not possible for education, they would be right if they do not consider students, and schools are not manufacturing facilities (Flumerfelt, 2008). As Bill Gates says “Training the work force of tomorrow with the high schools of today is like trying to teach kids about today’s computers on a 50-year-old main frame. It’s the wrong tool for the times.” Educators agree that the students who leave the school because they think that the system is boring, it does not touch the real world, or just wastes their time.

Houston (2008) states that now higher education concentrates more on improvement rather than accountability, and Lean methodology is a central strategy for improvement. Balzer (2010) published Lean higher education; increasing the value and performance of university process. He showed where the process breaks down when wasted material or time exists. He insists that Lean is suitable for improvement. Ziskovsky and Ziskovsky (2007) state Lean allows the educators to perform better. To get an idea of what it means, ask these questions regarding your job;

- What things keep you from doing your work?
- What is something you should not have to do?
- What would make your work easier?
- What would make your work more satisfying?
- What would improve the skills and capabilities of those who work for you?
- What would improve your work environment?
- What would make you more successful in your job?

Comm and Mathaisel (2003) in their paper showed that universities compete for a global region rather than regional by increasing the response of Lean. Just like Balzer, they refer to value stream mapping to analyze the areas, which are improved via Lean methodology. Comm and Mathaisel (ibid) explained a Lean enterprise sustainable framework adopted from Nightingale (1999), they are based on operating principles, ‘degree of Leanness; specific Lean improvement, initiatives, and best practices (including collaboration and outsourcing); factors

that encourage or discourage Lean operations; communication of best practices; and the application of overarching principles'. They include that the use of metrics and analyses of students are essential to direct a successful learning organization since public expectation have been changed from accountability to improvement. Comm and Mathaisel (2005) have published two articles. In the first one, which conducted at some universities in England, they argued there were no measurement techniques in post-secondary education. They surveyed to obtain opinions about Lean implementation from administrators. They realized that at some schools, the improvement projects are not referred to Lean initiatives but technology has significant impact on the improvement.

Finn and Geraci (2012) published research of four universities in England. Lean initiative was to reduce financial affairs the executive-leaders were concerned about. The result was really good. It enabled them to save time and resources, dependent employee relations and satisfaction level, and the accuracy of process increased. Emiliani (1998) stated that if Lean is applied correctly, it results an organization to learn. Bowen and Spear (1990) explain that TPS is a kind of system, which helps the workers and managers. It puts them in experimentation, which is the cornerstone of a learning organization. They conclude that is why this company is different from the other companies they have studied.

Flumerfelt (2008) states it is a mistake for educators to dismiss Lean without understanding it, Lean may be a base for the school business partnership, rather than the one way of business, the schools suffered in the past. Problems in schools, inadequate funding, lacking organizational learning, and ineffective remediation provides a good opportunity for Lean thinking and applications. Response for those culturally diverse students who are at risk in education has been the mindset of remediation, "let's fix these students" learn opposes to rededication and "supports in its place intervention of process". What is proposed in Lean is not to fix the people but the root of the problems. Lean problem solving focuses on improvement and the people involved in the system of improvement "let's fix the processes that do not work for these students!" Lean is very helpful for those students who are in shortcomings of education. Therefore, there is an answer for the question: "Yes, but Lean has to be understood as a system and implemented with clarity!"

Lean as an innovative method offers an effective language learning method to cater for learning but if it isn't conducted well it may lead to a poor result. Flumerfelt (2008) explains that there are many poor institutions of Lean because they do not provide an appropriate culture of learning. Lean needs a good environment to be highly successful. Every factory or school can be

successful in the application of Lean and it is not difficult if they start with a blank slate. Lean cannot be successful if it is considered as an application only, this is because Lean is not a set of tools or an application only. Lean is “a system of an organizational learning journey” (Flumerfelt, 2008). Most of the studies and articles, which have been conducted before, do not deal with the application of Lean thinking in teaching and learning. The studies focus on administrative activities. Lean is a process of continuous improvement, every school needs Lean to increase its achievement. Ziskovsky and Ziskovsky (2011), in their book *Optimizing Student Learning*, state that application of Lean in education led a very successful year in terms of learning and teaching. The students learned better and the program finished successfully as it was planned.

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CHAPTER FIVE

LEAN IN ELT AS A NEW INNOVATIVE METHOD

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A new study in the field of education in Lean is introduced. The aim of the research was to prove the effects of Lean implementation in education as an effective method in English language teaching, in terms of teaching and learning and to show its effectiveness in increasing learner's achievement in learning English as a second language. It aimed to find out if students' achievement where Lean is used can increase their success in standardized writing and reading tests. The results of the research were important to make practical changes in English language teaching, especially at high school levels, by implementing Lean method to teach English. Further, the results can help teachers and educators better understand Lean education and how the present curriculum can be adapted to see the needs of learning and teaching by eliminating the steps which are wasteful and do not add value to the process of English language teaching. This study is also new and conducted for the first time in English language teaching field to test the effectiveness of Lean in reading and writing achievements. We may ask the questions as to which extent, applying Lean as an innovative method increases students' achievement in language learning? Or do learners who are instructed with Lean as a new method perform better on a standardized reading and writing test than those who are not? In the study, the Key English Test (Ket) was used as a basic instrument to measure the ability and achievement of the learners. The test was put in the reliability coefficients and it was found that the instrument was used in this research has the criteria of validity and reliability.

The research was conducted using a quasi-experimental study. This method has been chosen for this study because of many reasons. Campbell and Cook (cited in Barker et al., 2002) stated two different kinds of design,

the first is classification of different kinds of validity. The second is about the analysis of quasi-experimental designs. An experimental design is a plan to assign participants to conditions, which are experimental, and the statistical analysis is connected with the plan (Kirk, 1995). Experimental design can make the researchers to achieve high levels of control, especially on a small scale and manipulate conditions, at the cost of complexity and a level artificiality (Bechhofer & Paterson, 2000). The design of researches is classified into two different kinds, experimental and non-experimental study. In the experimental study, the researcher has an active intervention or manipulates the study. In experimental investigation, the control group is employed in the study design to control the variables other than the variable which is under investigation, and it may cause changes in the participants, Behar and Borkovec, (as cited in Schinka, 2003). The words “experience and experiment” has the same root, as they are derived from Latin for test or try (Barker, Pistrang & Elliott, 2002).

In experimental and quasi-experimental study, the learning environment consists of independent features that the researcher can manipulate and control it very easily, Cobb and Gravemeijr (edited by Kelly, A., Lesh, R., & Baek, 2008). The independent variable of the study was the exposure of the students to the lessons as they were designed according to Lean as an innovative method to increase learners’ achievement. The selection of the control and experimental groups was not in a random. To test the impact of the study, this research uses assembled classes. The participants were given pre- and post-tests to find out and examine the use of Lean as an innovative method in education to increase the achievement of the students, and finish the curriculum on time.

The experimental study was conducted at a high school level in Northern Iraq. The test was used as a pre-posttest, it was Cambridge’s Key English Test (KET), which is a proper test and is an appropriate level to A2 level according to the Common European framework of Reference (CEFR) Cambridge English Preliminary, 2012). In the research, the participants include two groups of students i.e., one experimental group and one control group were taught using Lean as an effective innovative method with the focus of eliminating the nine wastes in education, as Ziskovsky and Ziskovsky (2011) refer to these wastes as overproduction, talent, motion, time, processing, assets, capacity, knowledge and, defects.

Sunrise books were used. Sunrise is an English course, which has been written specifically for primary and secondary school students in Northern Iraq. The course has a communicative approach of teaching, integrating listening, speaking, reading and writing, with an apparent emphasis on grammar

structures. It helps learners to develop and improve their English through a fun method to learning, having motivational topic-based units, adventure stories in the books that introduce new language, different activities including role-plays and guided writing tasks. As the study was conducted in a preparatory school, all the participants were from a coeducational school. In Iraq, public education is divided into two different levels, basic and preparatory education. The students must study and finish basic education because it is compulsory for every individual in the country to study this level of education. It starts from 1st and proceeds to 9th level, and preparatory education for learners includes from 10th to 12th. English as a subject is taught and studied in the all levels of primary, secondary and preparatory educations. In the preparatory level, Students attend schools all the weekdays except for Friday, so according to the context and schedule of the school, English is studied all days of the week except the weekends. Learners have five lessons every week and each lesson is 40 minutes. Another language the students study in schools is Arabic. All other subjects are taught in the native language of the learners. Therefore, the English lesson is the only opportunity and chance for the students to have contact with English language and communication in an effective way. However, the possibility of interacting English and the exposure of the students cannot be overlooked as internet such as social media plays an important role in the life of every student.

The participants of this study were 11th graders at high school level, studying at a coeducational preparatory school in the Sulaimaniyah province in Northern Iraq. The participants were from two classes in a coeducational high school in Darbandikhan. There were some important reasons for choosing and conducting this research site. First, this school had regular number of students in their classes and was not overcrowded like other schools in the same city. Second, the school's principal provided facilities to conduct the research, which gave easy access to both the students and their parents for consent purposes. In this study cluster sampling was used. In cluster sampling, the researcher needs to visit schools within the selected area. The researcher also has to choose the clusters carefully (Dawson, 2002). Dörnyei (2007) states Cluster Sampling is a way to make the random sampling more practical when the population is dispersed, to select larger groupings of the participants. It is possible, for example, in schools to examine all the learners in the selected area. Cluster sampling is appropriate when the population of interest is boundless, and the distribution of the individuals geographically dispersed. It involves groups rather than choosing the individuals in the population. The clusters are naturally based on groupings such as specific institutions or geographical areas.

There were 28 students in the experimental group and 28 students in the control group. In a pilot study the students scored different marks, students with different such as low and high marks were present in the scores, it can be proven that the findings of this study are more suitable to the all participants of the study. Since the research was experimental, the steps of applying Lean as an innovative method previously developed and arranged appropriately. Details of this process were described in the section “materials”. Lean methods and steps used in this study were applied on Sunrise Student and activity book, 11th grade. The steps mostly were taken according to the book of Ziskovsky and Ziskovsky (2011), and applying Lean as an innovative method with extra techniques and procedures of the same method by other writers and institutions. Lean as an innovative method and techniques were only used with the experimental groups as the study was experimental. The control group was taught without getting any guides from Lean or making any changes.

The next step was to tell the students of the experimental group that they study four English lessons every week based on Lean methodology. It was explained that it is being applied on Sunrise Student Book and Sunrise Activity Book 11th grade, also emphasizing on the time as this study lasted for three consecutive months, and every week they took four lessons. Each lesson was 40 minutes. Then for conducting the research, reading and writing test had to be applied, to all groups, the experimental and the control groups to obtain data for the pre-test. All the candidates or students with the examiner required for taking the reading and writing test. As the researcher, I acted as a proctor and verifier to verify the test papers and assess them. I was the English teacher in the field who took no part in the exam except monitoring but giving instructions. These wastes were introduced to the participants of the experimental groups in order to give the same chance to all individuals to understand Lean. Prior to starting the process, all the lesson plans and materials had to be covered, were prepared by according to Lean method. The lesson plans showed what had to be done in the three months of the study. The final step of the study was including the post-test for all the groups, it was taken as the pre-test after finishing the period of the treatment, using Lean as an innovative method. The collected data were put into the computer program Statistical Package for Social Science (SPSS) and analyzed.

The courses were used to teach the experimental group with Lean implementation as an innovative method. Salli (2005) states the adaptation strategies, need omitting, modifying and recording, then sunrise were taught, as there were omitting and re-ordering. Those strategies were needed to make the process to make the process of applying Lean more effective. To apply Lean on

the books, adding, omitting, modifying and re-ordering as adaptation strategies were used. All the applications and the activity changes were carried out according to the Lean System and Methodology. The reason for choosing and using KET instrument was that the level proficiency of the test was very suitable for the students in the region. Therefore, it consisted of two main parts and there were overall 56 items. The items were divided differently for each section. The participants were supposed to choose from matching, multiple choice, multiple-choice cloze, word completion, open cloze, information transfer, and the last section which was a guided writing part.

Therefore, the material used for collecting data in the pre- and post-tests were the KET's reading and writing sections. The test was administered to both the experimental and control groups. It was taken on the same day for each group. The KET reading and writing sections consisted of nine parts. In the first part, each student matches each sentence to the right sign or notice. In the second part, each sentence has a missing word and students have to choose the best word (A, B or C) to complete each of the sentence. The third section consists of two parts. In the first part, test takers have to choose what the other person says next (A, B or C). While in the second part, students find the right sentence for each space from a list of (A–H). In the fourth part, students read a text(s) and seven sentences. They have to decide if each sentence is “Right, Wrong, or Doesn't say”, or choose the right answer (A, B or C) to the questions. In the fifth part of the test, there is a missing word and students have to choose the right answer (A, B or C) for each. In the sixth part, students are given the first letter of the word and the number of letters, and they have to complete the word. In the seventh part, students have to think of the right word to complete each space. In the eighth part, students have to use the information in the texts to fill in a note, form, diary, or other document correctly. The last section, the students have to write a guided-writing paragraph. The test was divided into two main different parts. The first part, each student answered the different sections of the reading. The second part, the students answered the writing parts of the test. The students had to answer individually without getting help from each other. In the test some pictures were given on the test papers to make the students to respond the questions better. The student's grade was out of 60 and the outcome was put into SPSS. To analyze the tests paired samples t-test and independent sample t-test were used to compare the experimental groups and the control groups' performance in the pre-and post-tests to find out if there is any significant difference in their reading and writing skills. Descriptive statistics was used to analyze the data.

Learner's performance before and after applying Lean

Different analyses were used to find out if there is difference between the pre-test and the post-test results of the groups, paired sample t-test was used. The analysis indicates that the mean score for this group was 29.55 in the pre-test, which has increased to 33.25 in the post-test. Therefore, it appears to be a high improvement in the reading and writing performances of the participants in the post-test. The mean score of the students in the test increased remarkably, in the pre-test it was 29.50 but, in the post-test, increased to 33.25. The results of this test explain the difference between the pre-test and post-test to be statistically significant ($p < .05$). Therefore, it can be concluded that the participants of the study in the experimental group have significantly improved their performances in the standardized reading and writing test, following the treatment the learners received during the use of Lean as an innovative method. As paired sample t-test was used, the score is considered significant ($p < .05$), which means that the participants have improved their achievement. The outcomes of this analysis show that the t value is $t -6.901$ (27), the participants achieved a high level of increase after taking the treatment in the study.

The control group's pre-test and post-tests were analyzed. The results showed that the mean score of the participants' pre-test results was 30.86 and this score has increased to 32.71 in the post-test, which the learners of the control group achieved this result without providing any treatments from Lean. The results of this paired samples t-test showed the difference between the pre-test and post-test to be significant but not in the range of the participants of the experimental group which was highly significant. The paired samples t-tests of the two groups showed that learners in both the control and the experimental groups have significantly improved their reading and writing skills in the post-test when compared to their scores in the pre-test. However, a comparison of the mean differences for each group's pre and post-test results indicate that the learners in the experimental group increased their mean scores highly more than the participants in the control group. To know whether this difference is statistically significant, an independent samples t-test was run. Results of the t-test analysis suggest that the result is statistically significant between the two groups in terms of their performances in the reading and writing sections of the test. However, if the mean scores of the pre-tests are closely looked at for the two groups, a meaningful and remarkable difference can be noticed. The experimental group's mean score for pre-test was 29.57 and the control group's mean score was 30.36. These two scores were initially close to each

other, whereas this difference appears to have expanded in the post-test, these increases have been explained in the following sections.

There were two different skills, reading and writing skills, it was found that the participants have increased their scores in the sections and also in the different parts of the test but in various levels of increase. The participants increased their achievement in reading section highly. To determine whether these noticeable increases in the performances of the participants in the experimental group are significant, paired sample t-tests were run for each section and different parts of the test. The analysis indicates that the mean score of the pre-test was 18.39, which increased to 20.43 in the post-test. The mean scores of the pre-test for the participants' reading section were 18.39 and these increases to 20.43 in the post-test.

The participants increased their achievement in writing skills highly and effectively. The analysis indicates that the mean score of the pre-test is 11.11, which increases to 12.82 in the post-test. The students in the experimental group have improved their scores in the writing skill of the test after the treatment. For the mean scores of the pre-post-test performances of the participants in the control group for reading achievement, the analysis indicates that the mean scores of the pre-test was 18.25, which increases to 19.32 in the post-test. It can be considered as a remarkable increase in the scores of the participants in the control group without getting the treatment, but the analysis shows that the achievement of the participants in the experimental was more effective. The mean scores of the participants' reading in the pre-test was 18.25 and this increased to 19.32 in the post-test. The participants in the control group seem to have increased in writing skill. The analysis indicates that the mean scores of the pre-test are 12.61 which increased to 13.39 in the post-test.

The experimental group's mean score was 29.19 in the pre-test (3.75 points increase) as the group's mean scores in the post-test was 33.25. The control group's mean score was 30.86 in the pre-test (1.85 points increase) while it was 32.71 in the post-test. According to the results of the analysis, the t value is $t = 2.923$ (27). The score is highly significant ($p < .05$), which means that the participants have improved significantly in the language areas where the students received treatment during the teaching weeks from Lean as an innovative method.

The test which has been used for the control and experimental group consisted of nine parts. Pre-post-test results for the participants in the control group according to the nine different parts have been in shown in Table 1.

Table 1.

| Parts | Tests | Mean | N | Std. Deviation |
|------------|-------|------|----|----------------|
| Part one | Pre- | 2.68 | 28 | 1.090 |
| | Post- | 3.07 | 28 | 1.215 |
| Part two | Pre- | 2.79 | 28 | .995 |
| | Post- | 2.75 | 28 | .887 |
| Part three | Pre- | 4.89 | 28 | 1.969 |
| | Post- | 4.96 | 28 | 2.516 |
| Part four | Pre- | 3.11 | 28 | 1.286 |
| | Post- | 3.50 | 28 | 1.732 |
| Part five | Pre- | 4.79 | 28 | 1.988 |
| | Post- | 5.04 | 28 | 1.795 |
| Part six | Pre- | 2.89 | 28 | 1.100 |
| | Post- | 3.32 | 28 | 1.156 |
| Part seven | Pre- | 4.89 | 28 | 1.641 |
| | Post- | 4.89 | 28 | 1.931 |
| Part eight | Pre- | 2.79 | 28 | 1.475 |
| | Post- | 2.79 | 28 | 1.500 |
| Part nine | Pre- | 2.04 | 28 | 1.261 |
| | Post- | 2.39 | 28 | 1.423 |

The descriptive analysis of the control group's pre-test and post-test reveal that the control group participants have improved their scores in different parts of the tests in different ranges, and improvements in some parts turns to be statistically significant. Participants in the control group have increased their mean scores in the post-test. In the first part of the test, signs and texts, the participants' mean score was 2.68 while in the post-test the participants' mean score have increased to 3.07. In the second part of the test, gapped sentences, the participants' mean score has not increased. The participants' mean score decreased from 2.79 to 2.75. It shows that the learners' achievements of the study were not statistically significant. The participants' mean score increased in the third part of the test, conversations with multiple choices. The mean score of the participants in the pre-test was 4.89, but their mean score increased to 4.96 in the post test in the third part of the test. In the fourth part, long texts with multiple choice questions, the participants mean score increased from 3.11 to 3.50. The mean of the participants in the fifth part of the test increased, texts with choice gaps, it shows improvement in the achievement of the learners that the mean score

increased from 4.79 to 5.04. In the sixth part of the test, word completion the students' achievement improved as the mean score of the participants increased from 2.89 to 3.32. It shows that there was no increase in the achievement of the participants in the seventh part of the test, text with gaps and eighth part, fill in a form of the test as the students were not improved. In the ninth part of the test, guided writing as it was a writing section. The participants' score increased from 2.04 to 2.39.

Pre-post-test results for the participants in the experimental group according to the nine different parts are shown in Table 2.

Table 2

| Parts | Tests | Mean | N | Std. Deviation |
|------------|-------|------|----|----------------|
| Part one | Pre- | 2.64 | 28 | 1.393 |
| | Post- | 2.89 | 28 | 1.286 |
| Part two | Pre- | 2.79 | 28 | .995 |
| | Post- | 3.18 | 28 | .905 |
| Part three | Pre- | 4.96 | 28 | 2.236 |
| | Post- | 5.25 | 28 | 2.648 |
| Part four | Pre- | 3.71 | 28 | 1.697 |
| | Post- | 4.04 | 28 | 1.688 |
| Part five | Pre- | 4.29 | 28 | 1.740 |
| | Post- | 5.27 | 28 | 1.844 |
| Part six | Pre- | 1.75 | 28 | .967 |
| | Post- | 2.39 | 28 | 1.370 |
| Part seven | Pre- | 5.14 | 28 | 2.445 |
| | Post- | 5.50 | 28 | 1.732 |
| Part eight | Pre- | 2.29 | 28 | 1.675 |
| | Post- | 2.46 | 28 | 1.598 |
| Part nine | Pre- | 1.93 | 28 | 1.359 |
| | Post- | 2.46 | 28 | 1.427 |

In the first part of the test, the participants' mean score was 2.64 while in the post-test the participants' mean score has increased to 2.89. The result shows that the participants in control group improved their performances in the first part of the test slightly more than the participants in the experimental group. In the second part of the test, the participants' mean score has increased. The participants' mean score increased from 2.39 to 3.18. It shows that the learners' achievements of the study were increased while the learners in the control group have not

increased their performances. The participants' mean score increased in the third part of the test. The mean score of the participants in the pre-test was 4.96, but their mean score increased to 5.25 in the post test in the third part of the test. In the fourth part of the test, the participants' mean score increased from 3.71 to 4.04. The mean of the participants in the fifth part of the test increased, it shows improvement in the achievement of the learners. The mean score increased from 4.29 to 5.07. In the sixth part of the test, the students' achievement improved as the mean score of the participants increased from 1.75 to 2.39. There were no increases in the achievement of the participants in the seventh and eighth part of the test in the control group, but the participants increased their performances in the eighth and ninth part of the study. In the seventh part of the test, the mean score was increased from 5.14 to 5.50, and in the eighth part, it increased from 2.29 to 2.46. In the ninth part of the test, the participants' score increased from 1.93 to 2.46.

The descriptive analysis of the experimental group's pre-test and post-test explains that the experimental groups participants have improved their scores in all the different parts of the study were increased. However, participants in the control group have increased their mean scores in the post-test the participants' improvements were increased highly. According to the analyses of the data explained in a descriptive way, in the first part of the test the learners in the experimental study had an increase of 0.25 while the learners in the control group had an increase of 0.39. In the second part of the test, the participants in the experimental study had an increase of 0.39, but the learners in the control group did not increase their achievement. In the third part of the test, the learners in the experimental group improved their achievement and had an increase of 0.29 while in control group the participants had an increase of 0.17. In the fourth part of the test, 0.41 increases were achieved by the learners of the control group but in the experimental group the learners did not increase their achievement effectively. In the fifth part, the participants of the experimental group had better results as they had an increase of 0.78, but the learners in the control group had an increase of 0.25. In the sixth part of the test, the control group recorded better and also the experimental group increased their achievement. The participants of the control group did not improve their achievement in the seventh and eighth parts of the test, but in the experimental group the learners improved their end-result effectively. In the last part of the test, the learners in the experimental group had an increase of 0.53 while the participants in the control group recorded 0.35.

The results of the reading proficiency indicated that the achievement of the participants increased highly in the experimental group after the treatment. Alagaraja and Egan (2013) state intervening the strategies of Lean are to focus on the overall improvement in the organizations. It demands a systemic focus to develop the organization in a variety of different contexts, and similar finding has been reported. Similar findings appear in (Flumerfelt, 2008, online) that states a good model of Lean is provided by the Lean system for education. It integrates well with the learning communities to which bring educators and school leaders for identifying problems and problem solving.

“Lean approaches” have effects on the way people think and work throughout organizations. Interestingly, it was found that applying Lean as an innovative method and principles had a strong positive impact on the participants of the current study. Applying the elimination of nine wastes of Lean and all the steps in the methodology of Lean which can be applied in the process of education, teaching, and learning might imply that better results would have been obtained. The achievement of the students improved noticeably amongst the participants in both groups but highly in the experimental group after the treatment and this is an approval with the fact that Lean as an innovative method is believed to increase the production exceedingly. The possible explanation to this could be the fact that after removing the wastes in Lean which were nine wastes, made the end production better in the experimental group. The wastes are overproduction / effort, talent, motion, time, processing / handling, assets, capacity, knowledge, and defects which were eliminated during the teaching period.

According to another study conducted by Balzer (2010, p. 16) presents over the past years, the Lean practitioners have amassed more techniques which may be pertinent in higher education for use. Lean thinking is also a help for the universities to improve their processes in a way to achieve what they expect to have as an outcome. Womack and Jones (2003, p. 19) state in *Lean Thinking for Schools* that thought leaders for Lean address the values, it concentrates on specifying the value accurately which is a critical step in Lean Thinking. This result partially conforms to what Doman, (2011) in a study that shows that Lean principles can be applied in industry successfully, it also can be applied in high education through engaging learning experience involving undergraduate students. He states that the universities can give opportunity to their students by involving them to improve the administrative universities. The students can play a major role to improve the process of the universities.

However, Lean was one of the most effective methods to operate an organization, with the main focus on the identification and elimination of wastes throughout its processes. Lean is a famed best practice in business in the world. Lean as an innovative method has been applied to a wide variety of settings, although its origins are in manufacturing, including higher education, with noticeable success (Balzer, 2010). Participants of the current study might have bearings on their performances. It was carried out to set a more extensive scope of Lean as an innovative method during the treatment. Hence, it seemed that the application of the principles of Lean strongly has affected the participants' performances in both reading and writing skills as taking the proficiency test, the changes in teaching process which were aligned with the philosophical aspects of Lean triggered more production of learning. As it has been presented in the results earlier, the end-result of each participant differed in their productions in reading and writing skills, which were the main parts that related to the focus of this study the most. The wastes which were prevented in the study appeared to have a strong positive correlation with the achievement of the students. This conforms to the other findings of this study, which indicate that learners with applying Lean methodology as an innovative method has moderately increased their mean scores in the post-test, but the studies have been carried out in the other fields, not in language learning. In other words, strong improvement appeared to have contributed to the improvement of the participants' reading and writing skills adequately, especially in the production of the group after the treatment.

The achievements of the participants in experimental group improved the effectiveness of Lean. The participants' achievement in the control group was also statistically significant, but the achievement of the participants in the treatment group was higher than the control group. The reading skill was increased highly in the experimental group highly after applying Lean in the teaching performance. The improvement in the reading skill in the treatment group was higher. The pre and post-test results of the participants in the treatment group in the writing skill indicate that participants achieved apparent increases in the performances in the experimental group which were statistically significant. The results shows that the participants after receiving the treatment, the difference was different between the pre-test and post-test scores.

Another important finding of the current study points to the effectiveness of applying Lean activities in improving EFL learners' performances on writing

tests. The comparison of the experimental group's pre-post-tests shows the students' achievement was highly significant in the reading skill more than the writing skill. There were big increases in the reading performances more than the writing skill. The comparison of the two groups' pre-post-tests was statistically significant, though learners in the experimental group have improved their mean scores more than the control group.

In line with this, in a study, Castro, Putnik, and Shah (2012) present that Lean approach is considered as a good method to ascertain waste and increase efficiency which is applicable to supply chain, according to research action "Integrative logistics tools for supply chain improvement," from the research topic "Technologies for sustainability." Comm and Mathaisel (2005) state that concepts of Lean sustainability will make the schools to provide better services with lower costs, they are two concepts which are attractive to any school. In this sense, the sustainability of Lean is a good fit for higher education.

According to Alves, Dinis-Carvalho and Sousa (2012), Lean method changes the way the operators work and continuously improves the operations and the processes. In Lean, responsibility applies in all levels as each worker has freedom to control its own work, which explored the effectiveness of using Lean-based teaching in improving the skills. (Spear and Bowen, 1999) stated Key Lean principles, which were focused on, deployed from the HBR article "Decoding the DNA of the Toyota production system". The first three rules of the Toyota system were the most critical to the kaizen team's analysis are:

- (1) How people work.
- (2) How people connect.
- (3) How the production line (or process) is constructed.

The results showed the fact that, as it was the case with learner performance in the general reading and writing tests, learners' achievement was better in the post-test in the various sections of the test except the control group participants who could not improve in the second, seventh, and eighth parts of the tests. Similar to the results of the reading and writing tests, these improvements from the pre-test to the post-test proved to be significant in the groups. Interestingly enough, these findings are in line with Emiliani (2008) describes real Lean as respect for people are the leading strategy, and continuous process improvement is followed by.

Bicheno (2008) said that Toyota Production System is not only about tools and techniques, but it is all about the system. Lean is not a technical system, but it is a learning system. Doman (2011) found that in a university administrative process, a small group of undergraduate students learned the basics of Lean principles, tools, and practices and applied them to improve the university administrative process. The current study had similar findings; learners in the experimental group outperformed the learners in the control group in the post-test. However, the results were statistically significant. This could be due to the fact that this study used Lean as an innovative method to teach the learners effectively to cater for improving writing and reading performances in general; specific activities to improve learner's reading and writing skills were not designed as the techniques were applied during the teaching period.

Alagaraja and Egan (2013) think that some organizations adopt Lean to improve their performances in business as a strategy, especially to improve structural factors such as operational process and cultural factors, which shared vision is an example. It can be concluded that the possibility that Lean as an innovative method contributes more to different aspects of learning. As the findings of this research have revealed, that applying Lean method do not have similar effects on learners' reading and writing performances and also the participants have increased their achievement differently to the improvement of that performances. The analysis of participants with the elimination of the wastes in the teaching lessons increased their scores and performed better in the reading and writing test other than the learners of the control group. Alagaraja and Egan (2013) focus on continuous improvement in the process of the different organizations and it works to create a "perfect value" for the customers.

Hence, the findings of this study together with the current study strengthen the argument in favor of using Lean as an innovative method to increase the achievement of the students, especially focusing on the elimination of the wastes and creating the culture of Lean, with high school EFL learners. In addition to that, the results showed that using Lean as an innovative method was effective and contributed the most to the improvement of the participants' reading and writing performances. Therefore, the activities which, were designed to be applied with the usage of Lean as an innovative method were successful.

In the principles and practice syllabus of Lean, three changes should be made. First, Lean should be introduced in the schedule. Second, it is initially concentrating on a few key Lean principles. The third one is to design the team

Lean Workout Schedule. Flumerfelt, Siriban-Manalang, and Kahlen (2012) state that management by design, but not default, shows wonderful opportunities for the future. Thus, the findings of the current study are on the side of those studies and works that prefer using Lean to provide and make the system of education more successful and this study offers using Lean with learners in foreign language learning.

Conclusion of the study

This chapter presented the findings that have been obtained by analyzing the data collected from the previous researches and the participants through the reading and writing tests and using Lean as an innovative method in a study. The results have been analyzed and discussed in accordance with the relevant literature in the field. It was found that Lean was effective and could improve the performance of the learners in the experimental group more than the participants in the control group could. The test was two sections, reading and writing, the learners increased their achievement in the reading more than the writing section. Reading performance had contributed the most to the improvement of the participants' skills. The use of Lean as an innovative method had improved the participants' reading skills, it was found to be statistically significant in the pre-post-test scores in each group, but it was highly significant in the experimental group after the treatment. The research found that learners, who were taught with the different steps of Lean, performed better in reading and writing skills, though some achievements were not in the same level among the participants of each group. It was also found that, the participants increased their performance in the reading section more than the writing section. The elimination of the steps which do not help the students to increase their end-result makes the students perform better. These findings are in line with the other findings, which indicated that learners with the application of Lean as an innovative method to increase the results is very effective and it improves the whole process, as the application of Lean has moderately increased the participants' reading and writing test scores. Other steps of Lean, for instance planning before doing the project, and checking every step "poka-yokes" to remove the unnecessary actions had a strong effect to make the process more labour saving. Applying Lean as an innovative method has different roles in improving the end-result as the learners' achievement were contrasting in the end-result, but it improves the whole process. There were no negative effects of the application of Lean, it was positive in different sections of the test which have been covered. Learners have shown improvement in their reading and writing skills in all language areas after

being instructed with the steps of Lean. Learners in the control group have also increased their reading and writing skills, however their improvement was not as much as the group who studied with the application of Lean as a method in English language teaching.

The study also found out those learners with the application of Lean as a treatment improved their reading and writing skills nearly twice more than the participants in the control group. Therefore, it is most likely that using Lean in teaching English as an innovative method in a foreign language had been successful. During the experimental study, it was also found that after eliminating the steps that did not add value to the process, less time needed to finish the pre-planned course book to study, or the remained time can be used to make sure that a level has finished successfully before jumping to the next one.

Lean into practice

Applying Lean as a method of teaching for EFL learners should be taken into careful consideration when improving learners' reading, writing and other skills are targeted. The findings demonstrate that applying Lean, not only improves student's reading and writing skills but also gives more respect to the learners, and finish the pre-scheduled teaching period on time. Identifying each step before starting the process also helps teachers understand to focus and work for what adds value and important for the learners.

Lean implications for teaching and learning suggest that teachers can constantly adapt and reformulate their teaching materials in order to lead the learners to higher achievements. Dennis (2002) describes the system of Lean as a house, with some elements. The Lean house has an input and a foundation, two exterior walls and an interior. The input and foundation as data and facts, the two exterior walls are delight customers and improve the processes, and interior is the teamwork. This house helps to understand Lean better. The study suggests that it is better to teach students with using Lean as a method in language teaching.

The focus of the study was methodological and to use Lean as an effective method to teach the learners with better results. Therefore, it is clear in advance, if the teachers and Lean administrators can adapt their own textbooks which is specially designed or developed activities accordingly and this might lead to better results. It is common that teachers have their own preferred teaching styles and methods or sometimes textbook activities direct their way of teaching. However, as the results of this study demonstrate, learners have different ability

to improve their skills in a different range by using various techniques and different methods. Therefore, having this diversity demands teachers to use varied teaching styles and applying Lean as an innovative method can be a good choice.

Model analysis

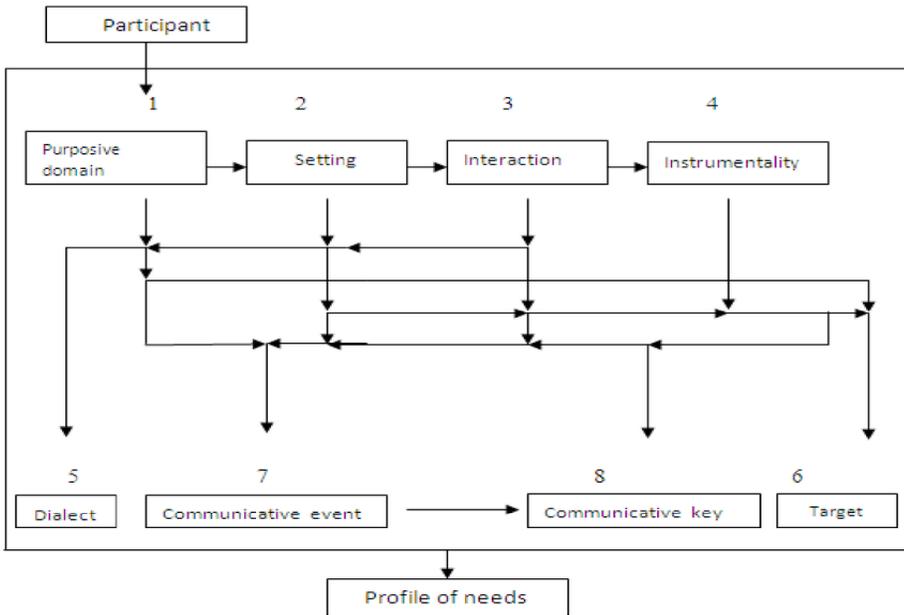
As English language is one of the important factors and keys to combine the whole speakers of the world, different methods and ways have been used to teach English. Teaching English for specific purposes is crucial and noticeable in English language teaching field. After developing the importance of teaching languages, the term needs analysis appeared in the field. Some needs analysis models investigated in the field.

In the field of ESP, there are different numbers in models of needs analysis such as Munby (1978), McDonough (1984), Hutchinson & Waters (1987), Robinson (1991), West (1994), Jordan (1997) and Dudley-Evans & St. John (1998). These models aimed to find the needs of the learners. The achievement of the learners in the model was developed in the study depending on the needs of the students in reading and writing. The application was closely related to what the teachers want to provide during the teaching period, as in this study the participants were from a high school and, then the accomplishment of the specific curriculum was taken into account. Widdowson (1983) has written about the difference between English for specific purposes and English for general purposes. He states that English for specific purposes intends to develop competence, which has been restricted. English for general purpose is aiming to develop general capacity. Hutchinson and Waters (1987) explain that English for specific purpose is constructed on the needs of the learners and it is a language approach. According to their definition, it includes the learners, the required language, and the context of learning.

Language needs analysis has different components. The most important components are Target Situation Analysis, Learning Situation Analysis, and Present Situation Analysis. West (1994) explains that Target Situation Analysis focuses on finding what the students require in an occupational or academic setting. Dudley-Evans and St. John (1998) state that Learning Situation Analysis shows "why the Learners" want to learn the language. Robinson (1991) argues that Present Situation Analysis shows the strength and weakness of the learners.

In the field, some writers have designed models to identify the needs of language learners. Munby's "Communicative Syllabus Design (1978) is one of the oldest models in the field.

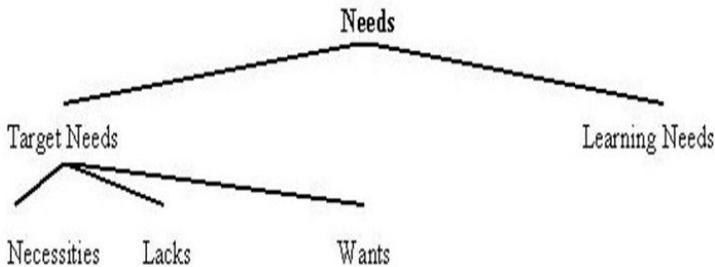
Figure 1. Communication Needs Processor



Source Munby: 1978

Another model of ESP needs analysis that was designed by Hutchinson and Waters (1987) which is known as ESP Needs Analysis Model it is also shown in Figure 2.

ESP Needs Analysis Model, Source: McDonough 1984



To Hutchinson and Waters (1987) the necessities are what the Learners want to achieve or what their necessities are. “Lacks” are what the practitioners want to find that the students are weak in and they do not have it. “Wants” are what the students want to learn. The needs analysis models concentrate on

what the students need. To Iwai et al. (1999), needs analysis commonly means collecting needed information to develop a curriculum to achieve the needs of a specified group of students. John (1991) states that one of the first steps is “needs analysis” in course design. As Munby’s *Communicative Syllabus Design* in 1978 published, it had been experienced in different situations. Munby (1978) provided the terms of participants, communication needs processor, profile of needs, meaning processor, the language skills selector, the linguistic encoder, and the communicative competence specification. A framework was proposed by Hutchinson and Waters (1987) as an analysis of learning needs, they are the followings:

1. “Why are the learners taking the course?”
2. “How do the learners learn?”
3. “What sources are available?”
4. “Who are the learners?”

Hutchinson and Waters (1987) also state discourse analysis. Before this, they think that pedagogic is the primary factor behind register analysis. Then, they found how the sentences were combined into discourse analysis. The models of Dudley-Evans and St John 1998, *English for Specific Purposes, Needs as Necessities*.

The following model of Lean, which will be proposed in the next section, is closely paid attention to the components of the needs analysis.

The model

Mager (1975) states that in the curriculum the teachers should know where are they going, if they do not know what to do, then how do they know about the time and ending up the syllabus. To apply Lean as an innovative method for preparatory classes to increase learners’ achievements, a syllabus model depending on the analysis of the result and steps of the study is designed in this part. The data collected through applying Lean as an innovative method in an experimental study for three months in Iraq. The suggested model was based on the system that Lean works on as can be seen in figure 1. The model begins with defining the program of the institution which wants to meet the goals and needs of the program. Lean program is specified to be applied in the program to achieve the needs. The accessibility of Lean as an innovative method is the following phase which is being prepared to be applied. The accessibility

of Lean shows how it is possible to apply Lean in a specific field as this study focuses on Lean implementation in English language teaching as an innovative method. It is followed by outlining the program as it clarifies the major goals and identifying the goals in the program. Lean is a very consistent method of different steps. Identifying the goals from the very beginning is the base of the process. The goal is evaluated after it is identified according to the Lean process and program as an innovative method.

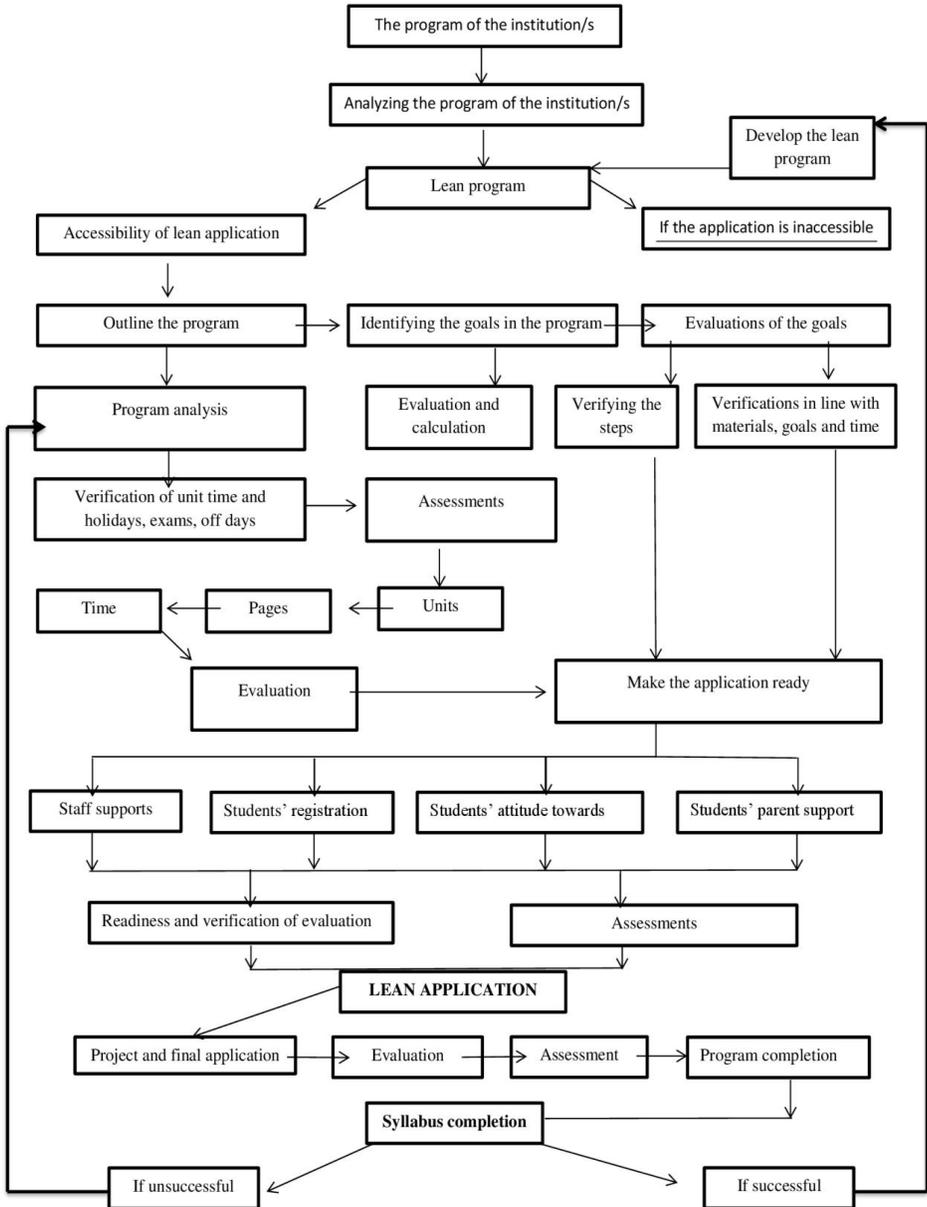
Another major component of the model is a “needs analysis” process of the program to identify and verify the duration of time which is needed to figure out the holidays, including the exams and off days. Assessment of the unit time periods and different sections of the program enable the researcher to define the objectives and goals. Specifying the goals in the program is strongly related to the program according to the Lean practices, sections of the materials with verifying the steps and creating pull connection between them make Lean application ready.

When the application of Lean as an innovative method is ready, the students’ information, registration, expectations, their attitudes toward Lean, individual characteristics and students’ parent supports have to be considered as a great respect to the stakeholders. To start the application, verification and assessment will play an important role to make it completed. The projects and needed steps of application are evaluated and assessed to make the Lean method more effective. In the practices, it involves in completing the program before completing the syllabus but in consistent and together.

If the application of the Lean-centered model would be successful, the process continues but differently in the next program. It would be different as Lean never stops in a level. It tries to make the process effective with better achievement. If the use of the Lean-centered model could not achieve the pre-designed meets and goals, then it starts again from the analysis of the program. The program is ready to be applied but verification of the steps again is needed to make the project more effective. It is assessed and evaluated again to make the phases ready to product the achievement. Three stages will be evaluated in the program, they are time, pages, and the units of the program.

The suggested Lean-centered model is expected to increase the end result of the program as it provides guidelines to make each program more efficient and successful. The Lean-centered model design is based upon the Lean techniques, principles, and practices as were explained in the previous chapters, and also the study was the main guideline to derive this model.

Figure.3. A Lean-centered Model



The shape of the model

The syllabus based on the practices and principles of Lean as earlier. Lean as an innovative method helped to recognize the needs of the learners at co-educational

high school students. After having applied Lean to increase the achievement of the learners and analyzing the results, it has been understood that Lean as an innovative method or syllabus design is effective when it includes all the practices and steps of Lean in terms of system and principles. Introducing Lean as an innovative method was the starting point of the study because making Lean ready to apply is considered as the most important part of the study “research” which the experimental study was based on. In order to motivate the learners, the method with its steps, goals, and components were introduced.

Yalden (1984) replaces the word of syllabus to method. Syllabus is now considered as a tool, with getting help from the syllabus designer, the teachers use to meet the needs of the learners. It also helps to carry out all the activities, which are taken place in classrooms. Learners of English language want to increase all the skills to make their production better and improve their language. The researcher was allowed to combine the skills of reading and writing to reach the aim of the learners. While reading and writing is considered very important, the syllabus in Lean method gives a great and effective respect to the learners to make decisions and preferences to accomplish every step of learning before starting the next, in this respect Lean as an innovative method is learner-centered. So as to include all the qualities in the method, a Lean-centered model was developed to meet the needs of the students and schools. Considering the goals, the proposed syllabus designed mainly upon a process of increasing end-results.

Course description

The experimental study as a course focuses on increasing and developing reading and writing skills in English language teaching at a high school. The students who study at high schools take different subjects to study in a year. The students take four lessons a week, each lesson is 40 minutes. The hours of studying English are divided to be studied in four days. The course primarily focuses on completing the program on time with a better production. Dubin and Olshtain (1986) explain that in order to teach successfully in a school, it is important to know all about the subjects which are taught and the students have to study. In addition, the teachers should know their levels of English to teach the learners if they were not native speakers.

Within the course, the principles of Lean were used with the elimination of the nine wastes in education as they are nine wastes in order to practice Lean vigorously. The wastes are overproduction, talent, motion, time, processing, assets, capacity, knowledge and, defects. Finocchiaro and Brumfit (1983) state

how the curriculum can be affected. For example, they mention functional-nationalism, which has a great impact on the learners and their communicative targets in the curriculum. The teachers should know what they concentrate to teach. Considerable focus was mainly focused on practicing Lean to raise students' achievements. This model concentrates on the need of the students to be equipped with the skills of reading and writing and increasing language learning achievement. To lead the students towards success at high schools or any other departments or institutions, Lean enables the students to encounter and participate in how the end-result develops by providing them needed construction and information about Lean before applying it.

Rationale

Learners begin learning English in this course at level A2, usually have a low level of reading and writing. Students in English language schools and department, or learners of English must build a strong base in reading and writing as they are basic academic parts of any languages. Reading and writing are fundamental skills to put thoughts and studies in academic researches, furthermore, reading and writing skills are good foundations of having books and keep data in existence forever. The practices allow the learners of English to develop their skills during the program. At the global level, English language is the base of business and technology. In a wider sense, English is the language of science. Teaching and learning English is a process which must be developed and tested to meet the needs of the students. The syllabus is based on the needs of the learners and processing Lean principles as a method in the experimental study by conducting it in a high school.

Goals and objectives based on the model

Locke (2013) states that with complex tasks, learning goals is very crucial for improving performances. Drucker (1996) stated “objectives are needed in every area where performance and results directly and vitally affect the survival and the personality of the business”. So, it lets every team member to have an important role in the program and managing the process successfully. Richards and Rodgers (1986) argued that learning a language needs to know the different blocks and rules of the language. By continuing the process, these elements will be combined, it forms phoneme, then to morpheme and followed by words and sentences. So, the learners can evolve their skills systematically.

Goals of the program

The program is designed to:

- i. Prepare the students of high schools to increase their achievements and meet their needs, and to comprehend the materials and the course.
- ii. Develop learner's reading and writing skills, to allow students to be an effective participant of the whole process.
- iii. To eliminate all the wastes in the program that adds no value to the end result.

Objective of the program

- i. To finish the program on time and resulting a better achievement.
- ii. Developing and increasing the end-result.
- iii. Completing the whole program.
- iv. Completing a step before starting the next.

Evaluation

The test used in the research consists of reading and writing parts. The learners will be graded with 60 points for answering the different parts of reading. Each item costs one mark as the reading test was 5 parts. The writing test consists of 4 parts, at the end, the total mark of the test is 60 points. In a process, to know the ability of the students, they should be tested to know what they need to be improved in designed curriculum.

Required test

The required test for reading and writing skill is Cambridge Key English Test (KET) reading and writing sections to find out the level of learner's performances in reading and writing sections. The test is considered as a reliable and authentic test to assess student's achievements according to (CEFR). It is a test that has been used in ESL/EFL for putting the students on the test to ensure and assess their ability. Cambridge has different tests to be used according to the ability of the students.

Instructional procedures

- i. The teacher will teach authentic materials with its practices and exercises.
- ii. All parts of the program are taught following the instructions and practices of Lean.

- iii. The Learners have great roles from the very beginning of the course and in class activities.
- iv. Students need to develop their reading and writing skills, as the four skills are the basic parts of each program.
- v. To increase the students' skills, the teacher uses the formal language of the authentic program, which is being taught.
- vi. The students during the teaching process collect the ways to improve their skills.
- vii. The students' plans and intentions are important parts of the lessons as they are major parts of the program.
- viii. Expose the students to all the reading and writing parts in the program.

General course requirements

- i. Students' registration.
- ii. Students take pre-tests to find what the next step is like in the process and to find their weak points to be worked on, and to assess their goals in accordance with the program.
- iii. Attendance, learners must attend the lessons.
- iv. Materials, the students are given what is needed to accomplish the program, they must attend and bring them into classes.
- v. Follow the instructions of the school staff and objective management.
- vi. The students and teachers must work according to the plan to complete the program such as exam dates and assignment submission.
- vi. Applying "post-test" to explore to which extent the needs of students have been met and to assess the end-result increase.

This research has found out that using Lean as an innovative method of teaching in English Language can improve learners' reading and writing skills and is also effective. It makes the end production better in general but some elements of the writing and reading tests do require further research. It seems that learners studying with Lean as an innovative method had improved their reading more than their writing skills.

This indicates that teaching with the implementation of Lean could have been a reason or factor behind this improvement in learners' reading achievement more than the writing section. In the scientific pedagogic knowledge, innovation theory is new in education. Innovation theory can be considered as the integration of three subjects of mastering, development, and novelties. Innovation theory is defined in educational systems and in an innovative environmental as an

innovative process, following by taking place the innovation (Stukalenko, N., Zhakhinaa, B., Kukubaeva, A., Smagulova, N., & Kazhibaeva, G. ,2016).

Yet, this is not enough clear from the findings of the current study since the assessment of the study was reading and writing in general not writing or reading alone. Therefore, experimental studies focusing on reading alone should be conducted in order to find out whether Lean better improves learners' reading or not. Hence, it should be studied whether this is the case with the students in the North of Iraq or not. More experimental studies focusing on speaking also should be conducted in order to find out whether Lean as an innovative method better improves learners' speaking or not. How listening should be dealt with, and what stimulates the learners should be dealt with, (Anderson and Lynch (1988); Wright (1987). an experimental study to improve learners' listening also can be conducted.

Future research studies should focus on the impact of applying Lean as an innovative method on finishing the pre-scheduled syllabus and find the differences between the achievement of the learners between male and female participants since the findings of the current study show that the learners have improved their performances differently. In 1970, two studies conducted in second language acquisition by Duly and Burt in 1973 and Bailey, Madden, and Krashen in 1974. The studies focused on how the students learned in a particular order focusing on grammar items. The order was the same for all the ages. So, orders are important to apply the program. Innovation plays an important role in solving the problems. Noonan (2003) when having a problem or a crisis, which have ripple effects on other parts of the development, innovation and renewal can be considered as a productive response. Innovations and renewals can be considered as two useful weapons to combat the bad effects of a crisis.

Borbye (2010) explains that innovation can be an effective way for the students to stretch themselves intellectually. When the students are allowed to make something, they will be very happy to see that they can make a change on society and have a positive effect on it. This is a very important aspect of making the products better in the companies and it is critical that the companies allow the students to have their roles in developing the process. To go to the top grade, the students should be asked to invent or make a new product. Broten and Yule (1983) state that it is difficult to find a principle that the world agrees on it. The emphasis should be changed from focusing on providing interesting materials to carry out and do the materials interestingly, not to think about their interests. The materials should meet the achievements for what they have been designed to.

In practicing Lean, Comm and Mathaisel (2005) state that colleges or universities are good candidates for Lean or sustainable practices. It happens more on the operations of the enterprise rather than the teaching or research side. The reason behind this is because there have been important changes in the way that higher education has been regarded by the public. Therefore, experimental studies are recommended to compare other methods of teaching English with Lean application and instructions as an innovative method.

Conclusion

The present chapter shed light on the effectiveness of applying Lean as an innovative method in the field of English language teaching. The findings point to the importance of implementing this method and its effects on improving writing and reading skills performances. It is hoped that the findings would encourage teachers to use different methods of teaching to meet learners' needs and be flexible in applying different methodologies and techniques in their classrooms.

It is not possible or to happen to teach languages thoroughly. Course designers or teachers should be selective. By selection, the teachers know what the language is and in language learning what is important (Basturkman, 2014). The study applied Lean as an innovative method with its evaluation as Dickens and Germaini (1998) think that evaluation is about creating judgment and giving evidence and clue to show why is a process worth something. In addition, evaluation is to address the needs of the stakeholders. Edge and Mann (2013) define innovation as a process which needs concentration. A new idea is not considered as innovation but it needs strong attention to the ways we train or teach as the topic is being completed. It can be considered as the link between Lean and innovation as Lean analyzes every step before applying it. Innovations will be affected by some factors to Dickens and Germaini (1998). The factors are “(1) teachers’ attitude, (2) clarity of the innovation proposal, (3) teachers’ training, (4) communication and support during implementation, (5) compatibility of the innovation with the contingences of the classroom and the wide educational system.” p. 11. Doman, (2011) explains after learning the principles, practices, and tools of Lean, and then the students applied them to the processes of their universities and engaging them to the learning processes.

It aimed to investigate the possible impact of applying Lean as an innovative method (in improving reading and writing skills of learners of English as a foreign language). Stukalenko et al. (2016) state that on a defined level of education, innovative activity is a system of measures to provide innovation.

Innovative phenomena consist of two different theories, they are the theory of pedagogical innovation and innovative learning. The theory of pedagogical learning means having innovations in the system of education or to reconstruct and modify, improve the system of education with the different parts and aspects of educations. The theory of pedagogical innovations can be creating models, new structures, new acts, and learning paradigms. In the process of education, innovation learning is seen as a specific type of managing the knowledge and goal-oriented founded activity. As the society moves to a new high stage of development, innovative learning is the reaction to meet the goals of education. It also supports learning and makes changes in the different cultures and social environments. It tries to solve the problems, which faces an individual or public.

In the recent years, the teachers expected to make their own curriculum. They are expected to design, apply, and evaluate what they use as a curriculum. The teachers see it as they have the primary responsibility to all the tasks in the process. Some teachers feel very comfortable as their roles are expanded, and this is in line with what Lean as an innovative approach gives the participants and staff a strong respect. Some teachers are asked to develop the syllabus by expertise, these parts of the teachers think that they are asked to do something that they are not trained for. EFL learners could better improve their reading and writing skills when their classes were presented through Lean as an innovative method of teaching that caused diverse areas of interest and learning. Lean is a method to language learning and considers what adds value to the process of learning and teaching, and eliminates what does not add value to the result. Learners tend to feel more comfortable and accessible to read, write and participate when they are addressed that what they study is what they want to achieve, i.e., their goals were focused on and the knowledge they wanted or important for them has been covered.

Following Lean as an innovative method of teaching in English as a foreign language, which derived from the Toyota Production System, will open a window for teachers to realize various techniques and principles in teaching and learning amongst the learners that have been used for the first time in English language teaching to increase their achievement, reading and writing. It is possible to announce that Lean as an innovative method will be more likely to cause more achievement and produce better results. Borbye (2010) states that teachers develop innovation that is endless seemingly. In classrooms or schools, teachers can use individualism or collectivism if it seems comfortable for them. It should be known that not all innovations could be successful or valuable. One of the important parts of the success is the support from the school administrators.

When the teachers create this effort and having coworkers, practice or principles, they should be supported but not stopping them by different obstacles.

The Lean-centered model was designed to finish any program institutions with a better achievement. Lean-centered model concentrates on meeting the needs of the whole program, to finish the program on time and result a better achievement, developing and increasing the end-result, completing the whole program, and completing every step before starting the next. The designed program in the Lean-centered model focuses on preparing the students of any institutions or stakeholders to increase their achievements and meet their needs, to comprehend the materials and the course. In this model, specifically developing learner's reading and writing skills were studied and paid strong attention, and to allow students to be an effective participant of the whole process. In addition, the model has been designed to eliminate all the wastes in the program that add no value to the result. Finally, the model works on prepare the students of high schools to increase their achievements and meet their needs with completing the materials and the courses effectively. Pienemann and Johnston (1987) state that application and learning should be ordered in language learning. They refer to learning grammar as they divide them in different steps which the Leaners meet their needs. The model arranges the syllabus in a way to finish the program on time. Lean as an innovative method gives respect to the stakeholders, it is also applied in the model that the students and students' parents play an important role in developing the program. To make the production and achievement of the learners, Lean never stops. If the end achievement was successful, it tries to improve the application of the program for the next time. If it fails, it seeks to find the solution to the problems. To improve a process, innovation must be focused on by measuring the steps and verifying them to make the application more effective.

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CHAPTER SIX

INTEGRATION OF LEAN IN ENGLISH LANGUAGE TEACHING AND LEARNING

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Introduction

Learning usually contain two kinds of people, teacher and student, without them teaching cannot be done alone. Languages are perceived as the prime methodology of human communication; consisting of words and expressions that are systematically phrased in structured or conventional manner and conveyed through speech, writing or gesture. People within specific societies usually use same languages to communicate and express their ideas with each other; however, with the rapid increase in globalization and development of global strategies, international communication has become extremely significant in order to smooth the process of information sharing, expression of ideas and strengthening of the economic ties at global level. In other words, people living in different regions of the world need to learn at least one foreign language other than that of their national language so as to be an active participant of the global village.

In our day, underlying the significant increase in economic and technological development of the region, English has gain international recognition and become the “world language” as it has been used by almost all countries (Bailey, Gorlach, & Arbor, 1986; Trudgill, 2017). Considering the global recognition of English language, teaching and learning methodologies of English has gained an exceptional level of implication. The issue has been addressed pedantically for many years at global level; concluding that the learning of English language has become intrinsic for every nation of the world irrespective of their native language in order to be able to go hand in hand with globalization, to be an active

part of contemporary world, technological communication, and strengthening of economic and cultural relationship with other countries of the world.

Research specifies that it has been through the course of history that teaching and learning of foreign languages have gained special apprehension by the educators and linguist researchers since the process is relatively unnatural and rational. Among different language, English has been recognized, “by far the most widely used of all the living languages” henceforth, it has been learnt and taught as foreign language at different school throughout the world (Broughton, Brumfit, Pincas, & Wilde, 2002; Crystal, 2012). Consequently, the development of conceptual teaching and learning strategies to learn English language has become the key significant tool for the successful delivery of language; thus, the educators and researchers have been continuously striving to establish different strategies to facilitate students in the process of learning foreign languages more appropriately and in systematic manner over the centuries. As a result of continuous efforts inclined by the researchers, a number of different teaching and learning methodologies have been developed including grammar translation method, series method, direct method, audio-lingual method, Suggestopedia, Audio-Lingual method, Communicative Language Teaching, Content Based Instruction, Task-Based Language Teaching, Whole Language Education, Post-Method etc. Later, in order to overcome the limitations and inadequacies pertaining previous methodologies so as to facilitate the learners with bet of the technique and to ease the process of learning second language (Brown, 2007; Hall, 2011; Harmer, 1991; Pishghadam & Mirzaee, 2008; Richards & Rodgers, 2001; Ur, 2013). In subsequent to the development of various ELT methodologies, educationist has come up with various techniques to help support the students and improve their experience of learning foreign languages. Despite, inductive approach, none of the technique developed is efficient enough to cater the need of students from different region of the world seeking their utmost efforts to learn foreign language. In other words, no method or technique proved to be the complete code of teaching and learning foreign languages specifically English that promises ultimate success for everyone irrespective of their geographical region, rituals, conduct and practices that they usually undergo as a part of learning and development. The key reason for this has been identified are the overgeneralized and predetermined practices for a classroom; for instance, most of the educationists or methodology designers fixed certain set of activities and rules without considering the specific needs of students i.e., in much generalized context for language lessons that mostly discourage the idea of contextual learning methodologies. In addition to that, the contradiction between theorist and practical approach proved to be another reason that depreciates the efficiency

of different methodologies of language learning (Kumaravadivelu, 2006). In most of the cases, the theories and learning methodologies are designed by academicians and educationist researchers; however, the implementation is mostly followed by teachers during language classrooms. This portrays that the bond between theorist and practitioners is more likely to that of a manufacturer and consumer which without communication and research can only result declined efficiency of the product (Hedgcock, 2002). This eventually results in the failure of most of the teaching and learning methodologies when they have been chosen to be applied in the long run.

The process of learning mainly constitutes of the two elements that are the student and instructor. Instructors are usually assigned to plan different activities and interactive sessions whereas, students are supposed to play their active part by grasping on to the lectures and completing activities within the time as prescribed by the instructors during language classrooms. There exist a range of language theories that identifies the significance of communicative competence specifically in context of language learning. However, it has been concluded through various references including experimentation that communicative competence plays significant role in acquiring the key rules of language in more effective manner. In addition to that, educationist and researchers have continuously been working to formulate new and more effective methodologies in order to smooth the process of learning second language for their students. Educators should have detailed planning for what student should have to do including class and home activities that help in enhancing their abilities of learning second language. According to analytics pertaining language learning strategies conducted by academics, teacher should opt for the language- learning strategies that are best suitable for the students' purpose and must relate to their assignments (Oxford, 1990:8). In addition to gender, age, aptitude, motivation, attitude, personality, and cognitive style; a number of researches have been conducted to study the relationship between the role of language learning strategies and ratio of success in dominating a second language. McNamara (1973:55 in Oller and Richards) in his research addressed the process of language learning as an inductive process that is defined by the presentation of their contexts; however, their implicit meaning is used as clue that crack the code of language. Consequently, a new strategy called as 'Lean production' has been evolved to facilitate the process of teaching and learning of English language with the aim of enhancing the overall efficiency of the process and help learners learn the language with enhanced pace.

The basic idea of *Lean* strategy has its roots from the automobile industry of Japan specifically from the Toyota Production System (TPS). It was first

introduced in 1950 by the one of the enthusiast engineers Eigi who belonged to the Toyota family after his visit to the Ford Factory (Monden, 1983; Ohon, 1988; Shingo, 1988). The concept of Lean is basically about converting a powerful tool considering the shortage of resources and increased level of competition within the Japanese automobile industry. More specifically, the system constitutes the Ford's mechanism of mass production that primarily belonged to United States with improved technology including the data-driven approach within systematic review. It has been reported as one of the most substantial revolution ever witnessed by the automobile industry in Japan. Henry Ford through his concept of Lean production has authorized people to enhance the productivity of processes they performed.

Later, within the period of next two decades, Lean manufacturing has gained widespread popularity within the western industrial network and it has not only employed by manufacturing establishment but also in most of the suitcases by their service complements. At present, a wide series of industrial networks have been applying the strategy of Lean process management since its evolution from a 'shop floor-focus' that constitute of waste and cost reduction to an optimistic approach that vouch for the enhancement or encashment of perceived value of the product through the addition of more effective product or service features and elimination of wasteful activities (Hines et al., 2004: 995). In context of language-learning methodology, Lean provides for the major share of value underlying student's perception with in the least possible resources. The visionary development of Toyota; that has been started as a small company into a world's largest automobile company has also been characterized by the implementation of Lean strategy of production. It has also been claimed by the Lean strategist that invention proficiency has also been evolved as the by-product of Lean project implementation. Detailed review of Toyota's success story concluded that how efficiently Toyota has distinguished the imminent impacts by applying intellect of Lean precursors on setting up and enhancement of small cake manufacturing actions. Later on, it has improved and enlarged upgrading of different processes by elimination of waste concentration so as to achieve process wide innovation (Ziskovsky, 2007). Initially, Lean process implementation was limited to tool- based manufacturing processes that was mainly designed to produce high-quality products within limited cost and isolated manufacturing processes. Subsequently, with time the industry-wide popularity of Lean has made it a significant approach that focuses on improvement throughout the manufacturing field however, extending its efficiency in multiple fields including healthcare, trade and even education. The key strategies of Lean management primarily do not focus on stressing more work on employment teams. Instead,

it focuses on identifying specific intellect of employees in order to utilize it for the maximization of their efficiency regarding their occupations. Lean process management is based on two fundamental elements which includes continuous improvement and employee's self-esteem. Furthermore, the overall system of Lean has been designed on five key principles which in most favorable process ascertains the maximum return of the face value, viewed different component of manufacturing as individual process, generate an overall smooth flow, create efficient responses to the pull and eventually achieve perfection in overall processing.

In addition to that, there exist seven different elements of wastes within the Lean process management system including transportation, inventory, skills, motion, overproduction, waiting and over-processing. Lean is overall a complete package that combines various strategic sections including the methodologies, tools and approbation for the capability of route whereby the strategic aims would be achieved by the proprietors. Each of the production system designed has certain aims and principles so as the case with Lean production mechanism. In context of industry, Lean presentation primarily focuses on the continuous flow of products and tools through value streaming.

As the foremost step towards Lean manufacturing mechanism, recognition and elimination of waste is one of the fundamental steps that leads towards the attainment of ultimate success strategy of Lean. In context of Lean, waste can be defined as any action, particular role or methodology that descent the face value of product for the consumers. Lean is based on five principles including value (one of the key significant among Lean principles), values stream (the initial to intermediate and final stages of processing a product from raw stream to finished goods), flow (after the exact statement of value release, implementation of innovation throughout the value stream and elimination of extravagant processes); pull (the outcome of adaptation from groups and departments in order to produce bands) and finally perfection (attainment of the exact value as required or expected by the process).

Underlying widespread benefits of Lean, the system has also been employed to enhance the productivity of higher education including both academic and management events. A number of educational institutions including national and international universities, colleges and schools have employed Lean system of management in order to improve productivity in different areas of management such as resource management, administration, employment, admissions, research etc. Consequently, the implementation of Lean running within higher education system specifically in areas of organizational methods and other occupational functionalities constitute of the multistep processing. Implementation of Lean

helps in shortening the overall process by eliminating the waste based on the needs and requirements of the particular organization so as to assist manipulators. In addition to that, the Lean system of management, proved to be extremely pragmatic in context of academic developments such as curriculum design strategies, enlightening of academic programs, recording student's feedback and smooth management of projects in line with the increasing number of human resources. Since, educational institutions over the centuries have been assigned for teaching and research and are considered as the most indisputable organization (Comm and Mathaisel 2005). However, with the advancement of technology and incorporation of contemporary theories, educational institutions have also been employing various management strategies; thus, resulting in the procession of intermingled steps. This has led to the direct connection between Lean and learning organization. Furthermore, certain frameworks and clarification unit have also been incorporated so as to facilitate readers with the choice of controlling the strength of connection based on their personal choice. Themes and discussions that have been identified through investigation and mature discussion pertaining culture and other significant aspects have been implemented for setting up of a Lean organization so as to enhance the productivity of learning organization.

As the foremost inclusion, Lean invention was first addressed and explained in the book '*the machine that change the world*' by Womack, Jones, and Roos (1990). Later on, the concept of Lean invention has been evolved from functioning level to the planned level without losing its communal characteristics (Hines et al., 2004). The Lean concept due to its widespread functionality and flexibility can be applicable on certain experiential areas beyond manufacturing; for instance, the supply chain network for personal computers, food and farming industry (Ben, Naim, & Berry, 1999), shoe manufacturers (Gati, Wechsler, & Torres, 2008), as well as the healthcare sector (Waring & Bishop, 2010). At present, the philosophy and methodology of Toyota production system has reached its level of excellence since each of the stage designed in Lean management system is there to add value.

LEM (Lean Education Management) mainly constitutes of the culture and value system that intends to eliminate the wastes such as money and time so as to add value to the processes while setting the basis for continuous improvement. Lean has been the part of various manufacturing firms for efficient handling and management of process for several decades. However, in context of education, the key role of LEM is associated with the management of curriculum which seems not to be completed underlying various reasons through the elimination of wastes. Since, a comprehensive and balanced curriculum is extremely

significant for the development of education process that is effective as well as facilitates the complete learning of students. Therefore, implementation of Lean philosophy proved to be an extremely beneficial solution for effective management of educational sector undermines its priority to achieve continuous improvement. LEM strategy that is designed to cater the combined interest of all the members of academic institution including both students and teachers provide range of benefits such as enhanced level of student's achievements and effectiveness in skills of teachers (Cleary & Duncan, 1997, 2008; Connell, 2005; Dennis, 2007; DuFour & Eaker, 2005; Eaker & DuFour, 2015; Ewy, 2009; Fitzgerald, 2006; George & George, 2003; Jenkins, 2003, 2013; Jenkins, Roettger, & Roettger, 2007).

Considering the widespread applications and history of Lean, its implementation in education sector is comparatively new and innovative. However, it has been concluded that implementation of LEM helps in adding value by underpinning high level of awareness, decreased preparation time, reduction in school cost, improving wastes on continuous basis and providing facilitation for the flow of educational processing in more planned and effective manner. The key objective behind the implementation of Lean management in educational sector is to enhance the overall efficiency of the process so as to achieve more enhanced level of student's performance and highly effective teaching strategies. The program has been built on such narrative that the problems in context of this process are not only assessed as problems; instead, they have been perceived as opportunities that act as the basis for implementation of changes.

The book is specifically designed to discuss in detail the implementation of Lean methodology to facilitate students in teaching and learning of English language considering the significance of English as an international language and difficulties faced by students in learning of second language all over the world. The book begins with the detailed discussion on history of Lean production followed by the strategies of implementing Lean methodology and presentation of the key concept pertaining Lean methodology. Section II of the book will cover comprehensive details on different styles and methods of English language teaching so as to build background knowledge of the reader before implementation of the Lean methodology. Finally, the book implicates different practices on how to implement Lean methodology in order to develop smooth process of learning for students and effective teaching strategies.

Literature review

The concept of Lean has its historical linkage with one of the world-renowned automobile companies of Japan i.e., Toyota. The company has its headquarters

and founding body in the geographical boundaries of Aichi, Japan. The company was initially set up by a Japanese businessman as an incidental of his father's organization Toyota firm that works for production of vehicles. The company had its first product i.e., the Type A car launch occurred in 1934 which is after three years of its inauguration. Later, in 1936 the company has launched its first passenger car, the Toyota AA. The company then extended tremendously over a short period of time and witnesses a huge amount of success and now it has been producing cars five different brands including Mark, Hino, Ranz, Lexus and Scion. Underlying huge response and rapid increase in business, Toyota Family had paid visit to the Ford factory which is located in the United States in order to explore the system of mass production. After detailed review of the mass production system by Engineer Eiji in 1950, the company management has sought out to replicate the mass production system of Ford at Toyota; however, it was very clear that the creation of exact duplicate framework of the Ford's mass production system at Toyota manufacturing plant was unimaginable.

Later, with the commencement of World War II, industrial sector all over the world has gone through the fierce competition which resulted in unfavorable economic conditions in Japan. However, Toyota had turned this problematic situation into an opportunity by inducting the mass product system at Toyota processing plant under the supervision of the head of engineering department Taiichi Ohno. As the initial phase of the large-scale manufacturing framework begins, Toyota came across two of the major problems. Firstly, Toyota had experienced mass withdrawal from the workers since they got traumatized and concentrated on increased exhaustion on the plant and repetitive undertakings. Secondly, the overall procedure was subjected to high level of waste to be profitable in Japanese setting of assembling and manufacturing (Womack, Jones, & Roos, 1990). This identification of problem proved to be the formidable blocks for the enunciation of Toyota creation framework (TPS). TPS in its actual shape was not designed to be the exact replica of the Ford's large scale manufacturing framework for mass production; however, it was designed with certain adjustments and change. The key idea that governs the creation of TPS was to handle waste primarily by reduction of overall time and amplification of the incentives through disposition and engagement of representatives.

The next procedural focus for Toyota was to ensure their productivity in long run by acquiring systems for long-term production along with their central focus that is to enhance the value of clients by creating an impact on society. The idea has helped Toyota to derive a haul way for even longer period of time that was fanatically stable to deal with the establishment of learning association.

This theory proved to be the basis of Toyota's efforts to implicate ceaseless change and tremendous learning.

The concept of Toyota had been built on procedural setting i.e., the organization have learned through trial-and-error methodology by experimenting on to different scenarios after being started from the perfection of one-piece flow. In context of Toyota creation framework, flow can be defined as the way to achieve optimistic solution i.e., to produce a best quality product within minimum possible cost that also implicate high level of security and determination. These procedure center runs with the heart of Toyota as if they have been attached to organization' DNA and the leader have religious belief on the use of certain procedures for achieving targeted level of success. TPS incorporates a periodical arrangement of useful apparatuses that are designed with the intention to strengthen employees at individual level and on continuous basis with high level of persistence and improvement. For instance, one-piece process is one that receives exceptional request since it had been designed to surface issues are demand for quick arrangements. The process is extremely in line with the improvement objectives of Toyota since its implementation spawns the level of criticalness that is required to deal with the business issue in contemporary world. Thus, it can be concluded that the organizational perspective at Toyota is to be known as the creator of individual and not only automobiles. The overall strategy of Toyota's interminable learning framework is mainly based on characterizing the root cause of underlying issues so as to nip them in the bud.

Toyota's framework of learning i.e., commonly known as the TPS has been used interchangeably with Lean manufacturing and Lean generation. Henceforth, the production framework of Toyota is based on the concept of Lean production methodology since it urges on the use of production methodology that best manages the wastes by reduction of materials, speculation, pace and human resource (Wilson, 2010). Ohno- the head of engineering department and the pioneer of the Toyota's production strategy (TPS) in his book; *The Toyota Production System: Beyond Large-Scale Production* had quoted the three key expressions which when amalgamated to draw combined expression laid down the main features of his TPS i.e. "the key objective of the Toyota's production system is the absolute elimination of waste" (p. 4); " the ultimate goal is to reduce the cost" (p. 8); which then evolved in to " enhance the quality of our goods" after world war II and finally transformed in to " calculate the exact quantity of products to be produced based on the exact demand" after the year of 1955. (p. 33).

In context of manufacturing industry, TPS can be referred to as the framework that works for controlling the amount of different factors in view of the establishment of value since its prior objective is to admonish the cost by implicating the rule of eliminating the waste to its maximum value. Lean system of production proved to be the transforming point for Japan's economy that ah beneficially covered the damages of World War II. Underlying the alluring performance of Lean application in Japan, world renowned analysts have alluded to Lean as the mystery weapon for Japan's economy that has entirely transformed the overall dynamics of the western business. However, with the advancement and expansion of business, administrations have started to increase the level of significance by prompting ventures and little inclusion of administrative tools (Levitt, 1972).

Lean has been viewed as methodical and the most optimistic way of enhancing the level of incentives by eliminating the wastes of the procedure to its maximum limit or by executing stream for the product or administrative tool in response to the client request. Thus, the key ideas of "value", "flow" and "pull" has to be lined up with the definitive objective of Lean which eventually lead to perfection. In the long run, the mill advantages associated with the implication of Lean methodology of production incorporates extremely reduced value of lead times i.e., at max from 40% to 90%, process time reduction of around 30% and enhanced level of quality execution time in between 30% to & 70% (Locher, 2008). Furthermore, Lean can also be viewed as an arrangement of instruments or methodologies that mainly focuses on the reduction of waste levels based on the requirement of method. There exist five principles that fairly manages the incorporation and execution of Lean procedures including the presence of 25 different tools including " , automation (that enables mechanical hardware to work without human mediation or checking); cell fabrication (rearranges the work process and focuses on a solitary item or limited family; enhances quality, stock, and numerous different parameters), ceaseless stream (arranges generation by guaranteeing synchronized, persistent stream all through the esteem stream), constant change (to regulate the act of making numerous little upgrades each day and enhance general productivity, for example, with accruing funds); Design for Six Sigma (DFSS) (to guarantee that an item's outline is anything but difficult to make without deformities and addresses client issues.), disposal of waste (enhance proficiency and viability.), centered manufacturing plants (adjust handle abilities with promoting methodology and think mastery); in-station quality control (keeps surrenders from going to downstream procedures and guarantees prompt input for amendment of value issues); Jidoka (averts issues on one station of a generation line from building

stock and furthermore makes criticalness to discover perpetual arrangements); Six Sigma (enhances quality, operational execution, practices, and frameworks.), Kaizen Blitz (enhances confined creation regions rapidly and significantly beats inactivity basic to numerous associations); Kanban plan generation and limit work-in-process while empowering change in numerous territories.

In addition to that Lean incorporates *Kaizen* (Japanese for “change” or “change”, the English interpretation is “nonstop change”, or “constant improvement.”) which is designed on a format in which all representatives of the firm irrespective of their designation in the firm worked collectively in order to achieve general improvements that are incremental to the assembling procedure. It can be viewed as the system is based on averaging the incentives within an organization so as to achieve more intensive motor for development. In other words, it I partly based on activity and partly on rationality. Kaizen can also be referred to as the incorporation of day-to-day activities which has been designed to go past change. Hence, it is mainly a procedural activity which when implemented in its truest way and with actual dynamics, intrusively set to adapt various type of changes in working environment, helps in the reduction of diligent work including both physical and mental activities and demonstrate different methodologies to fasten up the process of testing by employing logical techniques. Moreover, it also helps in identification of waste in different business forms to achieve the higher level of efficiency in different processes.

In context of activities, kaizen helps in sorting out different occasions that has to be determined for the enhancement of particular departments, working zone and functionalities within an organization. The occasions may include group of workers that are working at different levels within the organization and the representatives from different floors of plant. Based on cognitive approach, kaizen is mainly about development of such an organizational culture where workers at each level coordinate and collaborate with each other to initiate, implement and recommend change within an organization underlying its procedural benefits. Later, with the advancement of technology, Lean production mechanism has extended its functionalities which also include the incorporation of *Poka-Yoke*. *Poka-Yoke* in its contextual meaning refers to as the technique of mistake sealing (or blunder proofing or trick-proofing). It proved to be an innovative gadget that helps in reducing the very chances of staff or administrators to encounter a mistake or errors in the production program (Liker, 2004). *Poka-Yoke* mainly constitute of the five different conducts that can be applied to achieve higher levels of problem-proofing. The apparatus was created and inaugurated by Shigeo Shingo- an engineer from Toyota and it claimed to be an apparatus that ensure Zero Defects (ZD).

By assuming control dreary undertakings or activities that rely on upon carefulness or memory, Poka-yoke can free from laborers' chance and their psyches to seek after more esteem included exercises. For instance, they didn't have a Poka-Yoke to check if the cotter stick was set up, they had a light blind over the plate of cotter pins. On the event that the light blind was not broken by the administrator coming to through it to get a cotter stick, the moving mechanical production system would stop, and Andon light would go ahead, and a caution would sound. Another Poka-Yoke gadget required that I supplant a device (to some degree like a record, used to extend the cotter stick) back in its holder after each time I utilized it or the line would stop and an alert would sound. It sounds somewhat strange—one stage expelled from getting electric stuns for any slip. Be that as it may, it is viable. Obviously, there are routes around the framework, and the specialists hanging in the balance discover them all. In any case, at Toyota there is a train about after the standard undertakings that laborers have a tendency to cling to. (Liker, 2004). Poka-yoke is vital in light of the fact that Lean practice does not enable additional stock to make up for scrap. Lean is the most effective strategy, and it is a method for presenting a client centered, productivity-based culture. It likewise gives bleeding edge staff new aptitudes, enables them to decide, and gives them another group-based method for working. Lean can be connected to assembling and exchange; however, it can be additionally connected on account of instructive organizations. Lean is connected today in every profitable division and in administrations also.

Until the 1990s, Toyota was truly the main car industry that had received Lean production charter. Later it turned out to be more across the board and considered into general assembling, purchaser hardware, social insurance, development, and, all the more as of late, to nourishment assembling and meat preparing. Notwithstanding Lean's cause in assembling, it has been utilized as a part of an assortment of different associations with various assignments, for example, government, human services, and advanced education. Randor and Bucci (2011) expressed that Lean was connected in human services and the legislature before advanced education establishments and business colleges inside colleges who claim to have received Lean sooner than different foundations. In 2008, Cardiff University facilitated the main Lean Thinking in Universities occasion. In 2009, Miami University received MU-Lean as a business procedure, which is an orderly technique for the dispensing with of waste inside procedures. This approach is focused on the client and profoundly includes the people who take an interest in rolling out a collective improvement. Miami University is focused on spreading the Lean philosophies and implanting an oblivious propensity for

persistent change. In November 2010, University of St. Andrews facilitated the second occasion in the arrangement; with more than 50 Lean scholars from over the advanced education of joined Kingdom, the quantity of change projects is developing in advanced education in the United Kingdom. A few organizations now have particular Lean activities, and numerous more are exploiting change activities. This occasion gave a reasonable, open, and community-oriented space for colleges undertaking change projects to learn through sharing encounters and to address the difficulties confronting the area.

Over a period, Lean technique stays a solid way of examining and does a few exercises. The technique is a term that has been utilizing to allude to the rules framework that is utilized to play out an action. The objective of the Lean start up is to decide to foster a decent plan of action. Numerous enterprises have carried out incline with the goal that their item quality will get improved. Lean is a strategy that is utilized to work on the nature of the item. Lean is needed for establishing a solid climate for the business. The strength of the Lean techniques has disliked any remaining strategies. Customary assessment of the business has permitted other business areas.

Lean strategies are an efficient method of decreasing the loss in business. The Lean strategy targets diminishing the waste creation basically by decreasing the pointless cycles that may be adding to the waste creation and doesn't have impacts on the nature of the item (Womack and Jones, 1996). Lean techniques include the utilization of the instruments, for example, changing the worth, Kaizen practices and different apparatuses that can be utilized in the working environment (George, Rowlands, Price and Maxey, 2005). Albeit the Lean technique is proficient, there are some adverse consequences on the climate. These effects incorporate when JIT is utilized then the money out won't be restricted in norm, however all things being equal, little amounts are consistently conveyed. For this situation, there will be an expansion in bundling. Be that as it may, bundling now and again is useful since it lessens the unused or the harms of the created products.

Since Lean is a procedure, it includes five stages which incorporate the accompanying, investigating the worth of the clients which includes the comprehension of the client's prerequisite. Also comprehends the cycles that the item will pass and the worth molding for every item, by which item and the cycles should stream. Guaranteeing item or cycle stream, normalizing the significant practices. Presenting "pull" among all techniques to guarantee great stream (this is on the grounds that the item is delivered by the interest of the shoppers). Furthermore, guaranteeing that an ideal exhibition has been enrolled for a quality item to be created (Womack and Jones, 1996).

There are three types of Lean methods:

1. **Build Methods**

- Kanban 3,
- Minimum Viable Product (MVP) 4,
- Small Batch5

2. **Measure Methods**

- Cohort Analysis6
- Innovation
- Accounting7
- Split (A/B) Testing8

3. **Learn Methods**

- Analogs and Antilogs9
- Customer Architeype10
- Engines of Growth11
- Five whys12
- Genchi Gembutsu13
- Get out of the Building14
- Pivot1
- Pull (Hypothesis)16
- Validated Learning17
- Waste/Value18 (Parantap.com/Lean-startup-methodology).

Lean creation approach can work best in any condition including the perilous conditions. Despite the fact that while working in an outrageous vulnerability there are a few difficulties, it opens up methods of learning the better approaches for working on the nature of the delivered merchandise. Lean creation strategies include organized methods that can empower the item to go through it for it to work on its quality. Through these procedures, there won't be any an ideal opportunity to be squandered since the item is delivered when each fundamental cycle has been finished.

Plano Clark with Creswell (2011) notice that “approach conveyed a philosophical supposition that shows the way at which assortment and examination will be involved as a decent exploration is finished by doing a specific field of study” (p. 5). Regarding the discoveries of the scientists, Lean creation is a free approach that includes Lean strategies and Lean philosophy. The two consolidate strategies are utilized to work on the nature of the item created by an association.

The Toyota Production System (TPS) was not that created to undeniable from the huge expanse of progress strategies that lead Toyota to worldwide accomplishment. Yet, it was worked through a movement of little changes over various years. At a beginning phase, Toyota pioneers didn't have and believed that they couldn't accomplish their economies of scale that of Ford or, in all likelihood General Motors in this manner they endeavored to develop a system which Henry Ford might have used as a piece of their situation.

During ahead of schedule of the 1980s, Toyota and other Japanese makers had made a few advances in overall business sectors; the call sounded to focus on these associations all around. This incited books on TPS by its creators and furthermore the dispatch of undertakings to concentrate on Lean norms at various universities. While attempting to summarize crafted by Toyota for other gathering settings, Krafcik of 1988 initiated the term of Lean, it has featured the guidelines of compelling stock, wealth subject matter experts, or "waste," rather than other vehicle makers' "padded" procedures. (Hopp and Spearman 2004).

Two introductory goes after Lean norms were Taiichi Ohno's 1988 Toyota Production System: Beyond Large-Scale Production and Womack and Jones' Lean Thinking. Taiichi Ohno, one of the creators of TPS, states that there are two standards for Lean creation: just under the wire (JIT) and mechanization. JIT is a drawing structure by which age at every movement doesn't begin until it is motioned for by the customer in the downstream step. To support JIT, Ohno developed the possibility of a Kanban, with six going with norms. Computerization alludes to independent motorization. The goal isn't to discard individuals from age, yet rather to focus them on the most surprising quality pieces of the training.

The Lean standards of gathering can upgrade working execution by zeroing in on the progression of products and materials through the regard stream. In any case, the various sorts of collecting waste should be perceived and discarded. Waste can join any activity, step or interaction that does exclude a motivation for the end customer. Lean guidelines portray the hypothesis of Lean; there are five essential standards of Lean instinct featured by Womack and Jone in the year 2003. Of which they suggest that if administrators apply these Lean guidelines as thoughts, they can get the upsides of the Lean framework and as it normally works on the upper hand.

There are a couple of key thoughts after that each Lean progression system is based. Likewise, there is the specific principle that should be a piece of each Lean improvement get ready. A Lean improvement rule relies upon perceiving data reuse and learning creation; performing headway practices all the while any

place possible; perceiving “amazing” accentuations and “dreadful” cycles, and keeping up a method community all through (Locher, 2008: p45).

The Lean advancement standards are as per the following:

Value

Value is generally characterized as a capacity that is given to the customer at the right time at a reasonable expense, as portrayed for every circumstance by the client. Worth is vital for the Lean norms. Worth is likewise portrayed by the customer and is simply significant when imparted similarly as a specific thing that tends to the customers’ issues at a specific expense and at a specific time. The misstep that has been made by most makers is inside portraying regard: if customers don’t respond, they incorporate more extreme extras or alter the expense. By then, if that doesn’t work, they endeavor another elevating procedure to exhibit a thing that customers needn’t bother with.

Value Stream

The regard stream is incorporated most of the means and methods needed to bring a specific thing from unrefined components to the finished thing in the possession of the customer. Separating the entire stream of a thing will regularly reveal massive proportions of waste and non-regard included plans (Womack and Jones, 1996).

Value stream is the course of action of the multitude of specific exercises needed to bring a specific thing through the three essential administration exercises of any business: the decisive reasoning task running from thought through an itemized plan that is laid out and work to make dispatch, the information organization undertaking running from demand taking through point by direct arranging toward movement, and the actual change undertaking proceeding from unrefined materials to a finished thing in the possession of the client (Womack and Jones, 1996).

Flow

The portrayal of the stream is “the unique achievement of tasks along the regard stream so a thing proceeds from design to dispatch, solicitation to the movement, and unrefined materials heavily influenced by the customer with no stoppages, scrap or the inverts.” (Womack, p.306). In like manner, it is judgment

abilities to perform practices in bunch where things course through different plans and tasks in groups. This makes hold up occasions the bottlenecks while the subject holds on for the accompanying activity or gathering, or divisions change over to the sort of development the thing needs straightaway. The flow is the core of the Lean message that shortening the sneaked past time from unrefined components to finished items (or organization that brief the best quality at the insignificant expense and briefest movement time. One can't see Toyota basically by assembling machines and suppliers and compelling one-piece stream where it doesn't fit (Liker, 2004). Benefits of One-Piece Flow are Builds in Quality, Creates Higher Productivity, Frees up Floor Space, Improves Morale, makes genuine adaptability and Reduces Cost of Inventory.

Pull

It very well may be said Pull as the “ a process for falling creation and conveyance directions from downstream to upstream exercises in which nothing is delivered by the upstream provider until the downstream client flags a need’ (Womack, 1996). The required numerous days to process are done inside the space of hours too. The actual item that includes many months is additionally completed inside the space of days and minutes. Genuinely talking by the utilization of the Lean framework, any item that is delivered in any mix likes that of moving the requests is generally obliged quick. It is likewise prudent for the organization to allow the clients to depict the things the manner in which they need it to be since will be alright with it as they are the clients. The client request raises and becomes steady too once the customer is in the situation of realizing that they can get what they need and at the perfect opportunity. When the makers stop the valuing time of giving out the limits through the mission, which is for selling the items that are not required by the clients.

Perfection

This is the constant change part of Lean. By understanding the cycle today is normally defective and there is a prerequisite for incessant re-examination of the strategy, or the items are imperative to keep on track and Lean. When the whole association begins to determine the worth precisely, distinguishing proof of the entire stream, making esteem onto the means of the items to stream constantly, allowing the clients to pull worth of the ventures then something incredible may occur.

Today, these five Lean center principles have turned out to be broadly acknowledged regular information of operations administration and appear

to be uncontroversial for new era's researchers. Be that as it may, at the time of their presentation they were viewed as progressive and nonsensical as they tested profoundly enrooted customary convictions of operations hypothesis and practice. Presumably most vital, the perfect of the one-piece stream with its prerequisites to cancel inventories and abbreviate setup times tested conventional "group and line" considering and the confidence in capital-serious completely mechanized creation (Slack et al. 2007). Economies of scales were supplanted by economies of a stream. Stock, generally observed as an advantage, was reclassified to be squandered.

Lean implementation and learning organization in higher education

There exist a range of explanations that interestingly defines the term learning association. The term learning association was first introduced by De Geus in 1988. In his explanations, De Geus depicts learning association as the living elements that have been designed with certain attributes of learning. In 1997, Geus discerned that, in context of association; the price of arrangement has to be perceived as learning. Senge (2008) explained the term learning association as the group arrangement of certain individuals that works in collaboration with each other in order to enhance the level of their abilities and to achieve the ultimate goal of their expectations. Considering an overall scenario, framework of exercise proved to be the basic methodology to carry out the process of understudy in order to make improvements in certain subjects and courses in which students have weak grip or insufficient learning opportunities. Despite optimal efficiency, the framework might have certain weaknesses. The inadequacies at times revealed when the framework has been inspective under instructive foundation; however, the understudies are not completely aware of the weaknesses that they might have regarding different subjects. The key reason being the educators that have insufficient knowledge or time to think about the subject or courses in which the understudies are not performing to the required level or have inadequate learning methodologies (Memika, Polat, 2015). At certain levels, when the related inadequacies within the framework of exercise are perceived as the foreordained waste; it has been suggested to employ "the Etude assurance process" as an alternative strategy:

- **Waste of Time:** This term "waste of time" refers to as scenario in which the learner who is certainly aware of the subject tune has been asked to re-inquire similar issue amid the pieces actualized. This is supposed to be an

exercise that is portrayed to be in ineffectuality for both the instructor and the understudies.

- **Waste of Documents and Materials:** Since particular framework has not been followed to deliver the test and books assigned in accordance with the exercise; the materials and archives that have been given to the learner are considered a wasted unless the learner has shown required concern.
- **Waste of Energy:** waste of energy refers to as an act of listening to certain topics or participating in discussion about which the learner have no background or might possess inadequate information; instead managing to tackle the inquiries concerning the related subject proves to be the misuse of vitality specifically for the understudies Memika and Polat (2015) has quoted in their research study that teaching the topic to understudies who already have adequate knowledge of the subject and assigning to them the test questions related to these topics are inane activities and superfluous transportation. Thus, it has been identified as the misuse of vitality for understudies.

At point in times, when certain procedures seemed to be steady including the wasteful aspects that turns out to be more manipulative, there lays an extended probability to gain persistence through enhancements. In order to develop a learning association that resulted in establishment of successful process of learning, it is of utmost significance to have enough dependence on the faculty, incorporation of the moderate level of advancement and installation of highly observant frameworks so as to provide certain level of security to the information base. Liker (2004) perceived the act of “learning” as the suggestion or ability of a person to extend knowledge on the past and move forward in an incremental manner which is opposite to that of the starting or beginning in an entire new way once again or the reexamination of the same wheel new instructors or procedures of teaching. In context of the above mentioned issue, a number of educational institutions including schools and colleges have undergone endless battle about conveying instructive administrations that are significant for enhancing the process of learning while also maintaining their position regarding financial attributes and profits. In addition to that, confronting advanced associations is another obstacle; for instance, unavailability of the framework or learning environment that offers continuous improvements. Instead, the existence of diminished subsidizing, interest in acquiring of responsibilities with increased net worth and general perception of training being costly and wasteful. The test has been designed specifically for the directors, personnel and staff of the higher

education commission in order to acknowledge the requirements and advantage of conducting process change, any school or college that confronts impediments concerning the betterment of another program; for instance, constrained modules for education and obstacles in accreditation.

Lean projects on the other hand, are designed in such a way that confronts the controlled access of educating material that is up to the mark. In addition to that, a number of educators feel to transfer the shelter understudies; however, they due to uncertainty, they eventually become hesitant to do it without employing bolster that is provide classroom material in more methodological manner. Lean methodology can also be linked to colleges in context of the most authoritative expenses that are perceived as regulatory. This has helped in quick completion of work in more precise and efficient manner; thus, resulting in quick progression of learning and educating. Lean generation has also been implemented and objectified by large number of enterprises and field of frameworks including advanced and technological education. Employment of Lean deduction has revolutionized the methods of assembling. Moreover, this approach has been designed with certain feature that enhances the overall dynamics of association. One of such association is the instructive framework that tends to employ certain standards of Lean in order to enhance the present framework (Alp, 2001).

Integration of Lean methodology to enhance the outcome of higher education system is yet a fairly new idea to work on. In consideration with the progress of last 5 to 8 years in various educational institutions including schools, colleges and universities have explored various different avenues pertaining Lean standards and their implementation. However, the major portion of the cases that have been canvased related to writing have their roots found in the US where the key proportion of the HEI (higher education institutions) are depended on engrossed and concentrated market condition which assist them in becoming more open toward the private segmentation of the management rehearsal (Owlia & Aspinwall 1997). Furthermore, a greater portion of it has been identified in the category of dark writing; for instance, a certain number of writing papers with moderately episodic confirmation (Moore et al. n.d.; Alp n.d.; Kusler n.d., see also Jin & Kachroo 2010). Lean creations and standards have been employed by various educational institutions including national level colleges and universities around different geographical boundaries of the world which has resulted in enhanced level of fitness, decreasing cost and distributed misfortunes which also are the key objectives of Lean.

Table 1: provides the detailed review of the Lean intuition enhancements that have been acknowledged by numeral educational institutions (without depletion of staff).

| Educational Institution | Lean Intuition |
|-----------------------------------|--|
| University of Wisconsin | Reduced time allotment of a few research forms by over 80%. |
| University of Iowa | Saved \$500,000 in the main year of the activity incorporating a diminishment in yearly mailing costs of \$100,000. |
| University of Washington | Reduced process time allotment for stipends and decreases by 90%. |
| University of Notre Dame | Reduced contracting process by 66%. |
| University of New Orleans | Reduced the normal process duration for work force forms by 99% (Business and Finance Leadership Academy Action Learning Team, 2010). |
| University of Hungary | Increased proficiency by 94% and diminished expenses by 65%. |
| Berea College, Berea, KY | In short of what one year of Sodexo actualizing the Lean nourishment squander counteractive action framework, Berea College decreased its pre-buyer sustenance squander by 49% year-over-year and it's brought down plate cost fundamentally. They have reinvested the reserve funds to give Berea understudies a 4% expansion in privately developed sustenance without raising costs for understudies or expanding general nourishment costs. |
| St. Norbert College | Reduced pre-buyer sustenance squander by 32% looked at against their benchmark set up in the initial four weeks in the wake of utilizing a Lean framework. |
| Michigan Technological University | Michigan Tech has sliced its waste down the middle and is sparing about \$1,000/week. They saw the total rate of profitability in less than one year and they keep on experiencing continuous investment funds utilizing the Lean framework. |
| University of Massachusetts | In only four months in the wake of executing the Lean System, UMass had diminished their nourishment squander by almost 25%, sparing more than \$70,000 because of sustenance waste counteractive action over the two feasting lodge. They have likewise observed a checked diminishment in sustenance cost—lessening 1% year-over-year. They keep on experiencing continuous investment funds (www.Leanpath.com). |

Overall, it can be inferred that the Lean has proved to be a significant tool for successful management of wasteful resources and enhancing the overall efficiency of the process. Moreover, implementation of Lean approach to enhance advanced education system for instance, upgrading the outcome of cross- departmental efforts, expansion of information sharing and enhanced level of effectiveness. Incorporation of Lean strategies has also resulted in strengthening of representatives since, it has been designed with the key objective of strengthening which is also multidimensional. Therefore, it can be presumed that the implementation of Lean creation on higher education system has inferred magnificent impacts such as the increased quality of framework, incorporation of best practices within the classrooms and introduction of new and advanced strategies of learning and teaching and enhancement of the entire framework in order to support learning for all understudies.

English language teaching

There are many benefits that a person will enjoy when he or she learn another language apart from his or her mother tongue. These benefits include, knowing other peoples; trade, culture, travelling and even their religion. The emergence of the political changes in countries within Europe in the sixteenth century led to the importance of the other languages such as the French, Italians and the English. The emergence of other languages led to the displacement of the Latin language and was rarely used as the spoken language of written communication. The rare use of the Latin language as it was a diminishing language led to the changes of the school curriculum so that other languages were to be thought. Latin language therefore became an occasional subject which was taught as a foreign subject. Classical Latin works such as the Cicero, Virgil and the Ovid was written while being studied. From the sixteen to the nineteen century, Latin language became a subject of the foreign language where its grammar and the rhetoric analysis of the language were being done. Rhetoric here is used to mean how the language is spoken and written (Richards & Rodger, 1986). At the onset of twentieth century English language encounter greater changes and teaching the subject has gone wider in the whole world.

The tradition of teaching the subject of English in the whole world in every classroom has change. The need to each the foreign language to the people of different parts of the world as inspire the introduction of the modern techniques that will be used for easy learning. The changes that have been introduced in the effort of teaching the foreign language effectively has led to the understanding of the learners needs. It has involved the changes in the proficiency of the Learner's

needs from the oral to even while understanding the comprehension. Such a change from the oral to the effective understanding of a written comprehension is what is referred to as learning the language goal. The changes also illustrate the theories of the language as well as the language learning tradition. Howatt and Kelly in 1984 and 1969 respectively stated that the current issues on learning the language are the one which was used initially. The rise in the disagreement among the world population is as a result of the common questions that are being asked in the language teaching process. It's estimated that 60% of the world population knows more than a single language (Richards & Rodgers, 1986).

The teaching of the language rises to be a profession language in the early twentieth century by itself. The teaching methods of the language such as the linguistics were developed before the twentieth century; different principles and procedures were applied in an aim to design a better way of teaching the languages. The system was copied from the field of the linguistic and the existing psychological knowledge in order to develop an effective method of teaching as well as acquiring the necessary material for teaching the language. We can characterize the language teaching in the twentieth century by the sudden changes in the degree of innovation as well as the rise of different ideologies among the different communities. Changes in the teaching methods were common preferred practices that were accepted to be motivating the learners to have interest in learning the language. In the modern societies English is widely used as compared to the Latin language which was commonly used 500 years ago. Language is commonly used in the government, religion, education and other fields (Richards & Rodgers, 1986).

Teaching is a process where the teacher will select the appropriate learning practices that can help the learner easily understand the language. Language teaching is of much importance to the researchers as it is the key tool for conducting their research. Language will provide a rich and a good overview of the research, it is therefore necessary for the researchers to be language professionals. Teaching and learning of the language are much importance to the researchers as it will help them easily conduct their research.

Teachers who are teaching the English language face a number of the challenges. Teaching the language of English requires an experience in the same field. Teaching refers to where a teacher work with an aim of assisting the student obtains knowledge. Teaching and the learning are the two key common processes that helps achieve the goal of the education. In this case the work of the teacher will involve the trial to satisfy the objectives or the aims of the education. A teacher is required to completely bring out the desired changes among the

students so that the goal of the education is effectively met. Teaching process will involve the use of a number of the terms such as timing, exams, teacher, learner, material, class activities and many others. These curriculum components are organized in such a way that the goal of the education will generally be met without the strain of the learners. Teaching the English language to a Learner that has a different origin language is both difficult for the learner and the teacher himself or herself; this is because English language is not their native language. These difficulties will rise when following the instructions, however, obstacles can be eliminated by involving the teachers in the orientation or getting them does the curriculum activities. Other methods that can be employed in order to improve the teaching process are the provision of the information to the teachers as well as revitalizing the teacher's strategies which may turn out to be helpful. Teachers can also be supported where necessary.

Lean and English language teaching

Teaching has been considered as one of the most standout and vital job amongst various different jobs on the planet. In consideration with the extremely viable role of teachers; their classrooms are supposed to reflect highly immersive guidelines and provide exemplification of their vision i.e., protection, all around carried on and preservice of the condition. In past few decades, advanced education has been through certain modifications in terms of cost and rivalry; however, the wining norm would have always in regard with the mode of instruction. The instructional methodologies that have been utilized since few decades have lost their attraction or popularity among understudies, managers as well as payers. Therefore, it has become extremely significant to develop certain methodologies underlying current needs that are also based on merit.

Incorporation of time and exertion in instructional methodologies has resulted in production of squanders which resulted in declining attitude of understudies in regard to learning or aptitude. Different cases of wastes have identified certain subjects that have been instructed in different courses; it includes the top-level survey conducted for the identification of essential course materials, presentation records that are redundant and inconsistent, spoon-encouraging, teaching of outdated and obsolete themes and incorporating inflexible schedules for the understudies that are not functioning appropriately in order to enhance the overall speed of the learning process. Steve Albrecht and Robert Sack (2000) stated that the key emphasis which is included in bookkeeping instruction has not been based on appreciation including the exercises (Tatikonda, spring 2007, vol. 8, no. 3).

Lean methodology of teaching and learning is based on common guidelines for the educators of schools, college and universities who have been struggling to end up being better and more effective instructors. Lean strategy in context of higher education system is primarily constitute of the learning regard specifically at individual level; since it believes on the fact that elimination of the engagement factor has resulted in negligible learning and ceaseless change that in most fundamental way include learning. Moreover, it also eradicates movements specifically in regard with feeling that has resulted in the sense of empowerment so that helps in perceiving different things in an unexpected manner. However, a composed and more settle domain always have the potential to encourage the young trainers and educators to acquire more of autonomy and avoid dependency a well a enable them to invest more time and energy in dealing with their understudies in contradiction with the practice of investing time in seeking to discover what is being required by the understudies. According to the report of recent survey, a certain number of business organizations have failed since they have invested an excessive amount of time and cost that is squandered in development and manufacturing of the erroneous product without acknowledging pat the point of zero profitability and conducting optimal research on what features or functionality should be added in the product. Similarly, instructors or educators in first hand should have informed the understudies with the likelihood of integrating Lean startup which has been recognized globally as an approach that has shown long-established effectiveness for some youthful cutting-edge organizations (Eisenmann, 2011).

The concept of Lean theory is based on conducting determinant rearrangement of forms and elimination of wasteful resources. It has been used in straightforward manner and offers certain devices that can be interconnected in different autoreactive settings. Illustration of the inventive techniques underlying workers, Lean standards can be applicable on associations without investing immense capital uses. Association that has been integrated with Lean strategies and standards have experienced high level of outcomes; for instance, increased level of profitability has resulted in elimination of deformities, stock reduction as well as enhanced conveyance of time and money streams (Tatikonda, 2007).

Incorporation of confounded ideas which may include introducing Lean reasoning to understudies or representatives who do not have any prior knowledge and background about Lean proved to be a difficult undertaking. The Lean testing strategy is based on demonstrating to understudies a methodology that has been designed with the goal of making them feel envisioned and comprehending the commanding nature of Lean rationality and explanation of

its functionality. Moreover, the test is based on making involvement with the majority of significant specialized and social ideas such as pull generation, work-in-advance, adjustments, process duration, correspondence and cooperation (Dukovska-Popovska, 2014).

Lean methodology can be instructed and learned by using few strategies and apparatuses which include reading and class discourse, implementing techniques based on amusement and recreation and by employing the strategy of open discussion. The readings and discourse technique are based on the idea of presenting understudies with open ended discussions and the commitment to express their viewpoint on different issues. Moreover, it also stresses upon the understudies to critically review and think on the subject under discussion and make use of rationale to assess each other's positions by demonstrating open and dynamic cooperation.

The methodology of open classroom discussion can be assessed as the dynamic showing technique that allow understudies to intelligently share various considerations and expand in their knowledge through class discourses regarding contextual analysis and required readings. The key reason behind the setup for an open classroom discussion is based on setting up another instructional methodology for the demonstration of Lean (Hamzeh, 2013).

This strategy is connected to the Construction Management Department of Colorado State University, and the speakers are relied upon to encourage the comprehension of Lean standards while “get ready understudies to enter the workforce with a strong hypothetical comprehension of Lean and its transferability to the development working stage” (Hamzeh, 2013). As an advancement of the open classroom gathering technique, the online discourses discussions strategy seems to be the most favored by understudies. Tsao et al. present inquiries on an exchange that mesh a few strands of discussion into a synopsis that may incite individuals to seek after the theme further or even look for help when essential. The course that is related to the learning and teaching of Lean is based on the blended strategies in regard for the dynamic and team-up strategies, with an objective to overcome the restrictions of the already established techniques. Implementation of this technique would result in the transformation of understudies into heroes of their learning and instructors are only required to play the part of consultants and the management of learning procedure as they enhance in their expertise (Blank, 1997; Harwell, 1997). In addition to that, the supplementary contextual investigations demonstrate how Lean can be customarily implemented in assembling business.

STUDY #1

Facility: Small private center school in a rural, metropolitan territory.

Project: Instructional time misfortune investigation and recuperation arrange improvement

Summary: This was a nine-month time-administration change venture to decide the present state and reasons for instructional time intrusion in light of staff perceptions of every year decreasing capacity to meet educational modules objectives. The venture included staff meetings and information accumulation to assemble the required data, the arrangement and prioritization of the wellsprings of intrusion, and the advancement of both a vital arrangement and a strategic arrangement for overseeing future attacks of instructional time.

Results: The venture brought about the recuperation of a normal of 120 hours of instructional time per educator, larger amounts of staff participation in arranging and planning at both the group and school level, and more far-reaching introduction and learning at the understudy level.

STUDY #2

Facility: Large internal city open grade school in a noteworthy metropolitan range.

Project: Determination of best instructional way to deal with enhances math scores in a Title I school.

Summary: This was a ten-month venture to decide the instructional approach and instructing logic that would deliver an ideal understudy execution enhancement in a school with a poor general score on required state accomplishment tests in math. The venture utilized staff meetings and educator center gathering exchanges to decide practical ways to deal with be tried. It likewise incorporated the outline and production of an appraisal device that would be utilized to quantify understudy change inside the understudy test gatherings, information accumulation, and a similar examination of the understudy execution information.

Results: The venture brought about the recognizable proof of the approach that yielded essentially higher understudy execution scores (test normally assemble: 116% change; most astounding individual change: 343%) and was suggested for reception all inclusive.

Each of the above cases of Lean connected to training focused on a particular procedure for development. Each procedure was distinctive, yet all

brought about cutting-edge understudy accomplishment. As indicated by these reviews, the Lean Program for School Success bolsters a current ceaseless change program and can be utilized as a remain solitary program for school change. Lean enables schools to refresh their procedures, decrease waste, and spare expenses while enhancing school execution (Zikovisky, 2007).

The usage of Lean in schools and colleges has two fundamental objectives which include the increment in learning yield for the students which resulted in the provision of various opportunities of learning students, educators with more opportunities to enhance their way of teaching and enhancement in overall nature of the education process. Secondly, it intends to improve the environment of workplace and transforming the workspace into more alluring and effective organization including the evacuation of “time hoodlums” in arrangement and management of classes (T. Netland, 2005).

Applying Lean Thinking in the Classroom

Learning institutions have come up with ways to advance by examining instructional practice and continuous usage of instructional technology. In the past two decades, a fragment of restructuring has transpired under programs such as Comprehensive School Run (Borman, Hewes, Overman & Brown, 2003). Schools have understood what consequential significance meant and ways to convert educational systems to such a state. Restructuring of schools is widely acknowledged and practiced, but with no doubt, the creation and sustenance of the alteration is a tussle that schools experience although there is a pooled concern in the learning community. The knack for understanding how to instrument and sustain change is stiff. Educational alteration has small proportions of success for permanency according to Horsley and Kaser (1999).

According to (Robson, 1991; Slater, 2007), Lean commonly known as the body of knowledge and practice is the best methodology for unremitting improvement in quite a variety of sectors. In the educational sector, it is attaining a lot of interest as a useful philosophy and also a clerical toolkit package (Stecher & Kirby, 2004; et al.). This practice refers to a methodology which obliges technical commitment, an organization’s social and human capital to endless enhancement in identifying discrete ways to generate worth as determined by the customer and to eradicate Waste based on thoughtful examinations of root causes (Womack, Jones & Roos, 1990). Making Lean practice more successful, Bhasin and Burcher (2005) explained that first and foremost it needed a cultural and philosophical frame and after that operationalized. Even though Lean is concerned with the reduction of waste, changing of corporate

culture is expected (p.58), and stipulating continuous improvement as one of the twelve practices for its organization and manufacturing. The Lean methodology improved the learning process in schools by putting up an undeviating vision and commitment, respect for the learners, waste elimination focus and solving problems systematically.

The practice has sanctioned students towards improving their work in the learning process. Nine wastes in education are namely, motion, time, overproduction, knowledge, talent, assets, knowledge, capacity and over-processing. Lean is an important practice taught with the incorporation of detailed approaches and terms. According to (Pellicer and Ponz-Tienda, 2014), a professional approach is, necessary. As a result of temporal, semantic and spatial relationships established between contents, the probability in the memorization of information increases. (Donovan, 2007) argues that existing knowledge and emotions have a tremendous influence.

Teaching methods deemed promising are those that inspire students to practice and reflect on content independently. According to (Bransford, Brown and Cocking, 2003), learners can hasten the process of learning meaningfully with the help of professional connection and the learner's personal state. Person-oriented teaching and action is necessary convey action proficiency. The ability to deal unconventionally with situations is referred to as action competence. Accretion of obstacles that hinder fulfillment of goals are characteristics of situations. The general solution is taken into reason and the obstacles should be taken care of. (Ott, 2000) says that action proficiency can be distinguished further by classification. Before applying Lean production to educational system, the first thing to do is to focus on that which adds value to students, what brings continuous enhancement to students, determines that which does not add value through brainstorming, developing plans and checking for its results and support each other through team work.

When applying Lean production to learning, we should first identify the process and then maintain focus on what adds value (i.e., student improvements), empower students to do CI (continuous improvement), eliminate what does not add value through Kaizen (brainstorm alternatives and identify a hypothesis to test), conduct PDCA (develop an experimental plan, carry out the plan or do it and then check for results and adjust accordingly), and make a team work to support and share with each other. To apply Lean thinking and to create a Lean culture classroom, the classroom should first be organized; thereafter, visual sheets should be managed, pre-planning must be done, takt-time should be established, and work should be standardized by creating syllabi and schedules

and associated materials. Other classroom tools must be available as well, such as Pareto charts, root cause, and weekly quality assessments. A Lean classroom means respect for individuals to empower students for CI, high expectations, and continuous feedback and communication. It also provides them with a safe environment, which means learning and solving the problem, experimentation, and no blaming (Zikovisly, 2012).

- a) The identification process refers to the creation of a map for the learning process to reveal what should be done in learning, such as an activity, its frequency, and its duration in addition to identifying a unique process for each individual student. CI must be done individually.
- b) To add value, there should be a respect-based environment because each student is different and learns via a unique process. The value for each individual is different, which means what will add value for a student may not add value for another student. Finally, wastes must be eliminated because they do not add value to students.
- c) Student must be empowered to do CI throughout active involvement, own the process which means to know what will work for students and what will not work for them. They have the capability to judge effective process adjustments. Students should be given the authority to improve the process in order to define what they personally do and what they need.
- d) Eliminate what does not add value to efficiency (i.e., assess what does not eliminate time and effort), discover what works (document data, Kaizen, or PDCA), and implement only what works.
- e) The team should support and share knowledge with each other to create a culture of continuous improvement. Team approaches include sharing strategies, sharing results, and mutual support and encouragement in order to apply CI to a learning environment, to teaching methods, and for self-advocacy.

The outcomes from Lean learning are substantial and useful. Students benefit from the production and their attitude towards learning changes for the better. Students develop the means to succeed, and they like to do what they are good at doing. They facilitate enthusiasm for learning, and they become more confident and improve their self-esteem. Moreover, discipline problems result from the failure to succeed which means they promote good behavior, and they enhance problem-solving skills. Lean learning has proven to be a methodology for success, as it has improved learning performance, restored enthusiasm for

learning, and promoted long-term improvements in regard to self-assurance, self-awareness, and personal accomplishment (Zikovisky, 2012).

Schools use Lean practice to determine improvement starting from the essential technology delivery. According to (Keyte & Locher, 2004), value stream mapping is a material used to petition the views of the primary stakeholders who are teachers, students, policymakers, parents administrators and boards concerning that which is of value in the educational delivery process. A student's day at school can be described using time allocation and resources for different activities. Depending on the stake holder's opinions, decision-making is according to what is worth and what is not during that educational day. Whatever is of value is reserved and that which isn't is upgraded or rather eradicated (Flumerfelt, S., & Green, G., 2013).

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CHAPTER SEVEN

A NEW PERSPECTIVE FOR ELT METHODOLOGY

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This chapter is about the results of a study to use Lean as a method and to discover the extent to which it can be integrated into English language teaching and learning processes or not and regarding its effects. Through applying a Lean methodology to the teaching processes, additionally the teachers can eliminate reasons that do not add value and are thus wasteful, and they can focus their efforts on the advancement of teaching and learning. By applying the Lean principles and techniques developed in the industry, educators can refine the content, pedagogy, organization, and assessment methods employed in their accounting courses to help and ensure that students gain the knowledge and skills that will make them most desirable to students. Lean can be taught throughout several methods and tools, such as readings and class discussion, game- and simulation-based methods, and the open forum method. The readings and discussion method present students with the opportunity, and even the obligation, to express their Point of view on certain issues, requiring the students to think critically on the subject and use logic to evaluate others' positions through open and active participation. Some of the benefits of using readings and discussion as a learning method are that it helps students to explore and analyze a variety of perspectives, it increases their intellectual quickness and teamwork habits; it develops students' combination and integration skills, and it leads to transformation (Bonwell & Eison, 1991). When applying Lean production to learning, we should first identify the process and then maintain focus on what adds value (i.e., student improvements), empower students to do CI (continuous improvement), eliminate what does not add value through Kaizen (brainstorm alternatives and identify a hypothesis to test), conduct PDCA (develop an experimental plan, carry out the plan or do it and then check for

results and adjust accordingly), and make a team work to support and share with each other. To apply Lean thinking and to create a Lean culture classroom, the classroom should first be organized; thereafter, visual sheets should be managed, pre-planning must be done, takt-time should be established, and work should be standardized by creating syllabi and schedules and associated materials. Other classroom tools must be available as well, such as Pareto charts, and weekly quality assessments. A Lean classroom means respect for individuals to empower students for CI, high expectations, and continuous feedback and communication. It also provides them with a safe environment, which means learning and solving the problem, experimentation, and no blaming (Ziskovsky, 2012). To fulfill this objective, a research question has been approved as a data collection instrument in this descriptive study, a 35-item questionnaire was administered to English preparatory school student at Duhok city and an interview was conducted with twelves students with different levels in Sabis International School. In the first phase of the study Lean learning strategies Questionnaire consisting of 35 items was piloted to 50 students from one level of the students to test the validity and reliability of the questionnaire as a preliminary study. The split-half and Alpha reliability were used to measure the reliability of the questionnaire. The split-half reliability coefficient was calculated to be 0,80 which was defined to be reliable for Likert-type attitude scales Quantitative data was analyzed by calculating the frequencies and percentages of each item of the questionnaire response. The data was analyzed by using frequencies, percentages, mean, correlation, linear regression, and ANOVA. The frequency and the percentage of the male participant in the data is (340), (54.7) while the frequency and the percentage of female participant is (282), (45.3). Besides, the frequency and percentage of the participant who take (1-5) years is (182), (29.2), (5-10) years is (219), (35.2), (10-15) years is (221), (35.5). The data showed that the student of Sbis International School in Duhok city can use Lean learning strategies, in sum the results indicated that the use of the strategies by overall students stays within the scope of high frequency (3.5-5.0) and moderate use (2.5-3.4). So, according to the results, there was not low frequent use of any of the strategies (1.0-2.4). In addition, the overall average reported frequency of strategy use was 3.2. Moreover, the descriptive statistics indicated that the male learners employed language learning strategies more frequently (average=3.3) than the female learners (average=3.2) One can conclude that male students use Lean learning strategies more than female student do. The value of (F) is 2.479, which reflects the dependency to be at significant levels (>0.01 at the level of 1%). Rendering to this model, duration of taking English ($b = 1.534$, $p = .116$ $p >$

.01) is statistically not significant predictor of learning Lean method. Value of T which is (27.87 > .01) and the Value of P (.000) reveals the descriptive factor of gender effect on learning Lean method as statistically significant. Besides, all the values in the regression model come out to support the view that gender is effective in the use of learning the Lean method. The result also indicates that the duration of taking English does not significantly affect on learning and using Lean learning strategies as it reveals in ANOVA analysis. In conclude, the result showed that when student get older and takes more English course, the more learning Lean methods they apply in learning language.

The study has been designed to demonstrate the positive impacts of Lean improvement process specifically when implemented for the development of higher education system. The key aspects that have been focused in this research study include enhanced research methodologies, improved teaching strategies, development of a culture that leads towards continuous improvement, enlargement and respect towards people. This chapter of the book constitutes of key methodological aspects that have been followed by the researchers in order to conduct this research study including details research design methodology, data collection tools and techniques and methods employed for analysis of data to produce formal results of the research.

Research design refers to as the overall strategy or outline that researchers have to follow in order to integrate different aspects and components of research study in well-defined and systematic manner so as to address the research problem in more effective manner. More specifically, the research design is an outline document that constitute of the blueprints for the collection, measurement and analysis of data. In context of the key aims and objectives of this research study i.e., the integration of the Lean production methodology in teaching processes, descriptive research design has been employed. Since, the research is based on identification of various benefits of employing Lean production methodology to enhance the overall process of teaching and higher education system. In descriptive research methodology, researchers have to collect the evidences by working within the same atmosphere. Descriptive studies which are based on the active coordination of researchers and the research participants include different type of interviews and investigative studies in order to collect data that is necessary for the deducing the required results. In otherwise case, the investigator does not have to interrelate with the participants and have to work with observational studies of people experiencing various situations or studies that are based on data collection using existing records. Descriptive methods have been considered among few of the best techniques for conducting data

collection that are based on proving for relationships and demonstrate the world and matters in its truest form. Such studies are usually conducted prior to experimentation in order to deduce the specifications that are to be used during experimentation. Bickman and Rog (1998) suggest that “descriptive studies can solution questions including “what’s” or “what become.” Experiments can generally solution “why” or “how.” Descriptive research is geared toward locating out “what’s,” so observational and survey techniques are often used to gather descriptive information” (Borg & Gall, 1989).

Descriptive investigation may be both quantitative and qualitative. It can comprise gatherings of quantitative data that may be prepared alongside a selection in statistical form, including scores on a check or the range of instances a person chooses to apply a-positive characteristic of a hypermedia program, or it is able to describe businesses of records including gender or patterns of interaction whilst the usage of technology in a group situation. Descriptive take a look at consists of accumulating data that describe court cases after which organizes, arranges, illustrates, and describes the records collection (Glass & Hopkins, 1984). Most quantitative research falls into elements: research that describes moves, and studies geared toward coming across implications or causal relationships. According to Dr. Y.P. Aggarwal (2008) “descriptive studies is dedicated to the gathering of statistics about winning situations or conditions for the purpose of description and interpretation. This kind of studies method isn’t always surely accumulating and tabulating records but consists of right analyses, interpretation, comparisons, identity of tendencies and relationships”.

Descriptive research is “aimed toward casting light on contemporary issues or troubles via a manner of statistics collection that allows them to describe the scenario more absolutely than was possible without employing this method” (Fox, W. & Bayat, M.S. (2007)). According to Burns and Grove (2003:201), descriptive studies “are designed to offer twin copy of a situation as it evidently takes place”. It can be used to explain contemporary workout and make selection and also to enhance thoughts. Descriptive studies research are those research which might be worried with re-counting the capabilities of a specific individual, or of a collection, while investigative studies research outline the frequency with which something takes place or its proposal with something else. (C.R. Kothari, 2004).

In consideration with the data collection methods and overall research design of the study, researchers are mainly interested in deducing the validity of their statement in order to decrease the probability of misunderstanding. The

researchers in this study have acquired innumerable methodologies including idleness of data collection and technical challenges for more clarified results.

Interview is a method of facts amassing, fabric or outlook accumulating that exactly carries soliciting for a set of questions. Characteristically, an interview exemplifies an assembly or conversation among humans wherein non-public and communal conversation stand up. Interviews are in particular beneficial for receiving the story behind a participant's statistics. The interviewer can pursue in-intensity information across the subject. Interviews may be significant as follow-up to a number of respondents through questionnaires (McNamara, 1999). Kvale (1996) stated that; "The qualitative studies interview seeks to describe and the meanings of valuable topics inside the existence world of the topics, the primary task in interviewing is to apprehend, which means of what the interviewees say's". An interview has been utilized by the researchers as the data collection technique which can be characterized as the structured or standardized and researcher-administered survey. It has also been known as the quantitative technique of investigation that has been frequently used in studies that are based on investigations. The method is primarily based on the fact that each of the interview respondents is being asked with same questions and even within the same dispose. Use of this methodology has increased the probability of answers being reliably combined and that the evaluations are based on acquiring assurance between sample subgroups or between different periods of survey. Structured interviews on the other hand refer to as the funds of gathering data in in order to conduct statistical survey. In consideration with the aims and objectives of this research study, data have been collected by the interviewer through conducting one-to-one interviews of the respondents rather than distributing a questionnaire among respondents to conduct self-administered interview. In case of such interviews, interviewers have to read the questions in an exact manner as they appear on the survey questionnaire however, the choice of answer is often fixed i.e., closed end questions or sometimes include the open-ended questions where respondents are at liberty to choose the way they can answer the given questions within structures interview. The set of questions that researchers have included in the subjective study in order to study the impacts of integrating Lean production system to enhance the overall outcome of the higher education system specifically by enhancements of teaching are given as follows:

- 1- How do you learn English?
- 2- What do you do to practice English outside the class?

- 3- How do you organize your learning?
- 4- Are your materials always in the right places when you study English?
- 5- How do you solve your problems when you study English?
- 6- Do you highlight the right and important subjects?

A questionnaire is a study tool containing of a set of statement for the purpose of collecting info from respondents. Although they are often designed for statistical analysis of the responses. The questionnaire was designed by the Statistical Society of London in 1838(Gault, RH.1907). A 35-item questionnaire about Lean production has been conducted to 622 participants out of 622 at Sabis International School in Duhok city. A 5 choice Likert type of questionnaire was established in order to evaluate the subject levels of agreement or disagreement in an assessable manner such as:

Never =1

Seldom =2

Sometimes =3

Usually =4

Always =5sss

Students were required to answer 35 statements. The total time allowed to fill the questionnaire was 24 hours. The item in the questionnaire was in statement form, English and Kurdish. The point for the responses was summed up for each column and average for each question and the overall average were calculated. These should be within the range of 1.0 to 5.0. The overall average showed how frequently student use Lean production strategies in English language teaching.

In the first stage of the study, Lean learning methods questionnaire consist of 35 items was directed to 50 students from different levels of students to test reliability of the questionnaire as initial study. After the collection of the data s via Lean getting to know strategies questionnaire and achievement grade of the scholars, they have been taken care of and evaluated inside the computer surroundings using SPSS statistical analysis software. While assessing the frequencies and the percentage of the usage of Lean learning strategies, the frequency and percentages which can be on the column of ‘someday’, ‘normally’, and ‘usually’ had been summed in an effort to locate the entire usage of Lean gaining knowledge of techniques in the table of frequency and chances.

Reliability of the questionnaire

The Split-half technique was used to scale the reliability of the questionnaire. The Split-half reliability coefficient was calculated to be 0.80 which were showed to be reliable for Likert-type attitude scales Ekmekci (1999:33-35). Field, 2009, p. 647 stated; “A factor with four or more loadings greater than 0.6 is reliable regardless of sample size, Values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and values above 0.9 are superb.”

Research population

There were (622) participants from total (622) in the study from all levels in the (Sabis International School) in the academic year of 2016-2017. The sampling is the whole research population, the student were between (5-15) years old and their background of English language were concerted between three groups (0-5, 5-10, 10-15) years of learning English.

The participants in this research are from all levels in the Sabis International School in Duhok city. In this case, it was presumed that the material that were used in data gathering were valid and reliable, the participants provided accurate information in the surveys. The learners responded the questions, which were used in the questionnaire, eagerly and obviously. Each of the intended recipients responded to the survey only once.

Data analysis

The data, which were gathered via the tools, were analyzed in two stages. In the first stage, the quantitative data were analyzed through the statistical processes. Then, in the second stage, the logical analysis was done to analyze the qualitative data.

Data Analysis of the Quantitative Phase

Reported Frequency of Language Learning Strategy Use

Previously organizing the descriptive statistics to gain results for the first research question, the alpha co-efficient for the reliability of the tool across all students was calculated, which was .80.

Table 1: Average reported frequency of using Lean learning strategies.

| Score of using strategies | Average frequency of strategies |
|---------------------------|---------------------------------|
| High*** | 3.5-5.0 |
| Moderate** | 2.5-3.4 |
| Low* | 1.0-2.4 |

The results in the above table showed that the use of the strategies by overall students stays within the range of high frequency (3.5-5.0) and moderate use (2.5-3.4). So, according to the results, there was not low frequent use of any of the strategies (1.0-2.4). In addition, the overall average testified frequency of strategy use was 3.2 as it is demonstrated in the bottom of the table (2.)

Table 2: Average reported frequency of Lean learning strategies use, with standard deviations (SD) and mean of using Lean.

| Sub-group | N | Statement | Average | SD | Mean |
|--|---|--|---------|------|------|
| Pull-demand | | I use English language in my daily life. | 3.9* | 0.94 | 3.91 |
| Pull-demand | | I feel bored in English language lesson. | 1.8*** | 1.39 | 3.47 |
| Synchronize the supply to the student externally | | Our teacher explains English language lessons clearly. | 4.6* | 1.34 | 3.27 |
| Synchronize Internally | | We use technological materials in a lesson to make it more understandable. | 2.2*** | 1.87 | 2.96 |
| Create flow | | Our teacher uses map in the lesson. | 2.0*** | 1.06 | 4.13 |
| Create flow | | I write notes in English for improving my language. | 3.0** | 1.22 | 3.44 |
| Synchronize Internally | | I write reports in English for improving my language. | 2.5** | 1.40 | 2.69 |
| Create flow | | Lesson material in our school is put in a specific order. | 4.0* | 1.28 | 3.70 |
| Synchronize the supply to the student externally | | I understand and participate the lesson. | 4.5* | 1.35 | 3.55 |
| Synchronize the supply to the student externally | | Charts help me understand what teacher says. | 3.5* | 1.45 | 3.59 |
| Synchronize the supply to the student externally | | Diagrams help me understand what teacher says. | 3.3** | 1.40 | 3.22 |

| | | | | |
|---|---|-------|------|------|
| Synchronize the supply to the student externally | There is a show-board in our class | 2.9** | 1.10 | 1.83 |
| Synchronize Internally | Our teacher checks our homework in the lesson one by one. | 4.1* | 1.35 | 3.39 |
| Create flow | I remember structures I have heard in class better than structures I have read. | 3.4** | 1.24 | 4.13 |
| Create flow | In my classroom, I have a group participation to make a suggestion on problem resolution. | 2.6** | 1.32 | 3.81 |
| Create flow | I take all the suggestion made by our teacher to improve my English language. | 3.7* | 1.36 | 2.63 |
| Create flow | I usually make a revision on new structures. | 3.5* | 1.52 | 2.91 |
| Pull-demand | I arrange my schedule to study and practice English regularly, not just for the exam. | 3.5* | 1.41 | 3.25 |
| Pull-demand | I prefer group work to individual work. | 3.2** | 1.36 | 3.63 |
| Pull-demand | I try to take part in class activities in order to apply the new structure of English language. | 3.3** | 1.40 | 3.41 |
| Synchronize the supply to the student externally | Our teacher encourages us continuously to improve my language. | 4.1* | 1.58 | 2.99 |
| Synchronize the supply to the student externally | I use new English words in a sentence so I can remember them. | 3.7* | 1.36 | 3.69 |
| Create flow | Our teacher uses projection in the lesson | 2.6** | 0.84 | 4.59 |
| Create flow | I pay attention to my friend's mistakes. | 2.9** | 1.47 | 3.10 |
| Synchronize the supply to the student externally | I write new English words several times. | 3.2** | 1.45 | 3.64 |
| Synchronize the supply to the student externally | Our teacher makes us take notes in the lesson. | 3.6* | 1.57 | 2.80 |

| | | | | |
|---|---|------------|-------------|-------------|
| Synchronize the supply to the student externally | I try to find as many ways of using new structure I've learned. | 3.3** | 1.32 | 2.79 |
| Create flow | I would like to use internet-based material and activities in my classroom as much as possible. | 3.0** | 1.53 | 3.50 |
| Create flow | I highlight the text in different colors when I study English. | 3.7* | 1.39 | 2.73 |
| Create flow | I participate in debate discussions. | 3.1** | 1.33 | 2.20 |
| Synchronize Internally | At the beginning of the class, I receive the daily homework schedule of English language lesson. | 3.6* | 1.07 | 2.01 |
| Synchronize Internally | At the beginning of the class, I receive the weekly homework schedule of English language lesson. | 2.7** | 1.39 | 3.05 |
| Create flow | I share the outcome of the new subject with my group through class debate. | 2.7** | 1.46 | 2.52 |
| Create flow | I use color coding (e.g., highlighter pen) to help me as I learn. | 3.5* | 1.27 | 4.01 |
| Synchronize the supply to the student externally | Our teacher gives us library research in the lesson. | 2.7** | 0.83 | 4.51 |
| Overall average reported frequency of strategy use | | 3.2 | 1.33 | 3.28 |

Note. * = high frequent use of LLS

** = moderate use of LLS

*** = low frequent use of LLS

The applicants of the current study (N=622) stated a rate frequency of strategy utilize general items 3.2 stretching from 1.8 to 4.6. According to Oxford (1990), the average of 3.5 or overhead is considered as a high frequent use of the strategies. Consequently, in this research 4 strategies were testified extremely frequently. Amid these strategies, the strategy 'Our teacher explains English language lessons clearly.' (Item 3) was the most frequently used strategy with an average of 4.6. On the contrary, the strategy 'I feel bored in English language lesson' (Item 2) was the least frequently used strategy with an average of 1.8.

In sum, the strategy ‘diagram help me understand what teacher says.’ (Item 11) the strategy ‘I use English word in a sentence so I can remember It.’ (Item 20) besides, the strategy ‘I try to find as many ways of using new structure I’ve learned.’ (Item 27) was moderate frequently used strategy. These results reported that the student use all Lean learning strategies with scope of frequently (3.2) which is observed to be moderate frequent use of strategies.

In addition, the table blew shows the recounted frequencies of Lean learning strategy utilize for the learner with high, moderate and low scope.

Table 3: Average reported frequency of Lean learning strategy use for the learner with high, moderate and low score.

| Strategy Score | Strategy | Question Number | Average | SD | Mean |
|----------------|--|--------------------------|--------------------------|--------------------------|--------------------------|
| High | 1.Synchronize internally | Q13, | 4.1* | 1.35 | 3.39 |
| | | Q31 | 3.6* | 1.7 | 2.01 |
| | 2.Synchronize the supply to the student externally | Q3,Q9, | 4.6*, 4.5* | 1.34, 1.35 | 3.27, 3.55 |
| | | Q10,Q21, Q22,Q26 | 3.5*, 4.1* 3.7*, 3.6* | 1.45, 1.58 1.36, 1.57 | 3.59, 2.99 3.69, 2.80 |
| 3.Create flow | Q16,Q17, | 3.7*, 3.5* | 1.36, 1.52 | 2.63, 2.91 | |
| | Q29,Q34 | 3.7*, 3.5* | 1.39, 1.27 | 2.73, 4.01 | |
| Moderate | 4.Pull-demand | Q1,Q18 | 3.9*, 3.5* | 0.49, 1.41 | 3.91, 2.91 |
| | | 1.Synchronize internally | Q32, | 2.7** | 1.39 |
| | 2.Synchronize the supply to the student externally | Q11,Q12 | 3.3**,2.9** | 1.40, 1.10 | 3.22, 1.83 |
| | | Q25, Q27 Q35 | 3.2**,3.3** 2.7** | 1.45, 1.32 0.83 | 3.64, 2.79 4.51 |
| 3.Create flow | Q15, Q6 | 2.6**,3.0** | 1.32, 1.22 | 3.81, 3.44 | |
| | Q24, Q28 | 2.9**,3.0** | 1.47, 1.53 | 3.10, 3.50 | |
| | Q30,Q33 | 3.1**,2.7** | 1.33, 1.46 | 2.2, 2.52 | |
| 4.Pull-demand | Q19, | 3.3** | 1.40, | 3.41 | |
| | Q20 | 3.2** | 1.36 | 3.63 | |
| Low | 1.Synchronize internally | Q2 | 1.8*** | 1.39 | 3.47 |
| | | 3.Create flow | Q4 | 2.0*** | 1.06 |
| | 4.Pull-demand | Q5 | 2.2*** | 1.87 | 2.96 |

Findings of the results of the question 2: which Lean learning strategy is most frequently used by the learner?

Consequently, to answer the present question, descriptive statistics were performed in order to find out the frequency of the strategies used by the learners with high, moderate and low frequency.

Table 4: Average reported frequency Lean learning strategies mean, S.D, Significant differences, minimum and maximum score.

| Lean learning strategies | Mean | Frequency | S.D | Sig | Min | Max |
|---|------|-----------|-------|------|-----|-----|
| Synchronize Internally | 2.6 | 27.60% | 39.39 | ,000 | 1 | 5 |
| Synchronize the supply to the student externally | 2.4 | 25.30% | 39.12 | ,000 | 1 | 5 |
| Pull-demand | 1.9 | 18.76% | 26.76 | ,000 | 1 | 5 |
| Create flow | 2.7* | 28.20%* | 40.25 | ,000 | 1 | 5 |
| Total | 9.8 | 100% | 142.5 | ,000 | 1 | 1.5 |

Note. *= most frequent use of strategy

According to the Table 4, the learner reported using create flow strategy with an average (28.20%), which was the highest frequent use. This means that the student tries to use this strategy more because the ideologies of Lean create flow emphasize that the greatest way to run a procedure is to use the lowest resources and time as probable, from beginning to end, therefore looking for to connect as much value-added stages together, disregard waste of effort, resolve problem that they face during learning. This leads them to improve their learning via unique processes, keep focus on what add value. Besides, Learners were reported using the two strategies synchronize internally and synchronize the supply to the student externally with an average (27.60%), (25.30%) which was the moderate frequent. It means the learners effort to own the process of learning. However, using synchronization strategy by learners means that they intend at dealing the tasks method in such a manner that it attains exactly what student are seeking from the process. Using Lean synchronization by students implies that they aim to smooth, endless flow without any kind of postponement, waste and imperfection. Also, their performances increase, while learner reported using Pull-demand strategies with the average (18.76%) was the lowest frequent used by learner. This strategy motivate student to actively seek out a specific creation

and it best for learning English language. However, in the teaching-learning process, the learners try to organize their learning process such as timing, planning, material, exam, class activities, and other variables in order to achieve some pre-determined goal.

Findings of the result of the relationship between educational background of the student and the use of Lean learning strategies

In order to discovery whether there is an important relationship between Lean learning strategy use, and gender and the duration of taking English course, correlation, co-efficient and linear regression were calculated.

Table 5: Correlations between Lean learning strategies and the duration of taking English course.

| Correlations | | Gender | Duration of taking English |
|--|----------------------------|---------------|-----------------------------------|
| GENDER | Pearson Correlation | 1 | -.063- |
| | Sig. (2-tailed) | | .116 |
| | N | 622 | 622 |
| DURATION OF TAKING ENGLISH COURSE | Pearson Correlation | -.063- | 1 |
| | Sig. (2-tailed) | .116 | |
| | N | 622 | 622 |

Note: $P=116$

The outcomes, as showed in Table 2.1, specified that there was a significant negative correlation between testified frequency of Lean learning strategy use and gender, duration of taking English ($r = -.063$, $p = 116$, $p > 0.01$, $n = 622$) which is good. Regarding to the table there is no relationship between duration of taking English course and Lean learning strategies because sig. (2-tailed) = 0.116 which is greater than 0.01, which mean that there is a negative relationship between Lean learning strategies and the duration of taking English course. Thus, there is not sufficient evidence to state that this correlation exists in the population.

Linear regression is a method for demonstrating the relationship between a scalar dependent variable y and one or more explanatory variables (or independent variables) denoted X . The example of one descriptive variable is called *simple linear regression*. For more than one informative variable, the procedure is called *multiple linear regression* (David A. Freedman 2009). Then,

in this research regression was done so as to lie out the relationship between gender and Lean learning strategies, beside duration of taking English course and Lean learning strategies. The outcomes are displayed in table 6.

Table 6: the regression finds of the relationship between a gender and the use of Lean learning strategies

| Linear regression | | | | | | |
|--|---------------------------|----------------|-------------------|-------------------|----------|-------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the | Estimate | |
| 1 | .063 ^a | .004 | .002 | .498 | | |
| a. Predictors: (Constant), learning_English_language | | | | | | |
| ANOVA | | | | | | |
| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
| 1 | Regression | .614 | 1 | .614 | 2.479 | .116 ^b |
| | Residual | 153.534 | 620 | .248 | | |
| | Total | 154.148 | 621 | | | |
| a. Dependent Variable: gender | | | | | | |
| b. Predictors: (Constant), learning_English_language | | | | | | |
| Co-efficient ^a | | | | | | |
| Model | B | Unstandardized | | Standardized | | |
| | | Std. Error | Beta | T | Sig. | |
| 1 | (Constant) | 1.534 | .055 | 27.877 | .000a | |
| | Learning English language | -.039 | .025 | -.063 | -1.575 | |
| a. Dependent Variable (constant) : gender | | | | | | |

$P=.000$

In order to observe if the regression model is meaningful or not, ANOVA was conducted. According to ANOVA, duration of taking English ($r = -.063$, $p = .116$, $p > .01$), the value of ($F = 2.479$), is statistically not significant predictor of learning Lean method. While, the Value of T which is (27.87.01) and the value of p is (.000) reveals the descriptive factor of gender effect on learning Lean method as statistically significant predictor. In addition, all the values in the regression model come out to support the view that gender is effective in the use of learning the Lean method and strategy. Among other factors, such as gender, age, duration of taking English course also explains the difference at approving learning Lean method and strategy. It means that the gender effect on choosing learning Lean methods and then applying it in language learning

while the duration of taking English course does not affect on Lean learning strategy.

Data Analysis of the Qualitative Phase

Afterward examining quantitative data, logical analysis was used to evaluate the qualitative data, which was collected over managing semi-structured interview. During the interview 12 students were chosen to be part of the interview and they were asked orally and they were handed out at three levels (high, medium and low), each level contains 4 participants. High level applicants (P1, P2, P3, P4), moderate level applicants (P5, P6, P7, P8) and low-level applicants (P9, P10, P11, P12).

In the below table the frequency of the most strategy have been used by learner during the interview was reported.

Table 7. Reported frequency of using interview questions by learner.

| Strategy Score | Sub-Group | Interview Question | N. Learner (L) |
|----------------|--|---|-----------------|
| High | create flow* | How do you solve your problems when you study English? | L1,2,5,10,11,12 |
| | | How do you learn English? | L1,2,3,4, 5 |
| Moderate | Synchronize Lean Internally Strategies | Do you highlight the right and important subjects? | |
| | | What do you do to practice English outside the class? | L7, 11,2, |
| Low | Synchronize Lean Externally Strategies | How do you organize your learning? | |
| | | Are your materials always in the right places when you study English? | |

High=*

4.2.2.1 Create Flow Strategies

Create flow means that the manufacture parts do not stop, but for value-added work. Throughout the interview the applicants presented their progressive

attitude create flow strategies and they confirmed that they use such strategies. P1 stated that he always tried to solve his problem by saying “English like any other language has obstacles and in order to get rid of an obstacle or gap you have to practice and work on your problem instead of ignoring it”. While P2 assured that he tried to solve his learning problem by communication, reading, listening and by this way he does not need to take too much time to solve his problem and in the same time he learns better.

P5, P10, P11, P12 they reveal that they solve their problems during learning English by searching online or by asking their teacher in order to minimize the wastes like solving problem, non-value-add things and time as possible by saying P5 “when I study English language I solve my problem by asking influenced people and searching online” while P10 said “ I solve my problem during the study by searching online and ask my teacher”, P11 and P12 their answer was the same answer by saying “whenever I face problem during my study I directly search online for resolves”. However according to the participant’s response to the interview its reveals that they try to eliminate waste of time, disregard waste of effort, remove what does not add value, resolve problem that they face during learning and this leads them to improve their learning via unique process, keep focus on what add value. Add value means to classify development chances and appliance activities to decrease the cycle time.

Synchronize Lean Externally Strategies

Synchronize Lean externally means to stream the produce to learners at their wanted request amount, normalized to the invention schedule. P7 said that she organizes the procedure according to the priorities by saying “I organize my learning from many different levels such as how to learn to read better, write correctly and how to talk beside learning a new word everyday helps a lot.”, P11 described how she encourages herself to improve her English skills by reading and updating his vocabulary “I read at least ten pages every day so my English will be better.”, P2 She said that she practices several tools to improve her information such as watching movies, listening to podcasts, and reading for desire “I organize my learning by certain order such as watching movies without subtitle, listening to English music, and reading English novel, these thing help me to learn English better”. In sum, student approve through their responses that this strategy makes them to own the process of learning, which mean that they know what will work and what they will not, they can judge effective process adjustment, they give authority to improve the process of learning by what they personally do and what they need, they organize their learning according to their

needs in a proper time. Synchronize Lean externally strategies enabling student to stream and letting for pull to be successful.

Synchronize Lean Internally Strategies

Synchronize manufacture internally means to split the important work into processing stages such that each dispensation step takes the same time. All participants indicate that they use the synchronize Lean internally strategies by showing that they tried to learn English in several different ways, namely using internet, useful activities, and practice, in addition they divide their time according to their necessity of learning in order to minimizing the wastes such as timing and overproduction by saying, P1 “I learn English by practice and reading books.”, P2 “I learn English through every day activities.”, P3 “I learn English through the internet.”, P4 “I learn English by practicing every day, I engaging with my friends in conversations.”, P5 “I learn English by reading books, online articles and school.”. In conclusion, this strategy help student to divide their time into parcels, matching work sections to time parcels which make it achievable and motivational, reduced wastes, beside their performances increase. However, when student use Lean strategies their means develop to succeed, facilitate enthusiasm for learning which mean student like to do what they are good at doing, improve self-esteem as well confidence, promote good behavior which repair to discipline problems result from failure to succeed beside build problem solving skills.

4.3 SUMMARY

In this chapter research questions about using Lean learning strategies have been analyzed. Finding reveled that male student use Lean learning strategies more frequently that female. In addition, the t-test value result that the differences among gender and strategies are statistically highly significant in contrast with the duration of taking English course which showed that statistically not significant predictor of learning Lean method. Regarding correlation between Lean learning strategy use and gender, duration of taking English, result showed that there is no significant correlation between them. In conclude, the result showed that when student get older and takes more English course, the more learning Lean methods they apply in learning language.

Discussions and conclusion

Lean control is new for training however it is based on a classical concept. There are obvious differences between the products from the schooling provider

and those from a production meeting line. That stated there are still some big similarities in both delivery systems of the training provider and the producing assembly strains. This is due to the various complicated processes that each transport systems are composed of. As such, many elements of Toyota's system improvement methodologies and other Lean tools can and do follow to enhancing the approaches of delivering schooling. (Ziskovsky, 2007)

Although the Lean Concept principles embraces the entire commercial enterprise the general public tend to partner it concepts especially with production and manufacturing methods. The idea desires to be visible as in no way finishing journey that requires a strong beginning. The Lean concept is largely industrial idea. From the literature you can actually gathers that the Lean Concept refines the general organization performance hence assisting the group efficient operations. All employer reason on enforcing the idea should be inclined to study it as rising continually developing and energetic concept. In spite of some misgivings from some quarters, it is miles secure to consist of other procedures without necessarily confronting the middle beliefs of Lean. Perfect examples encompass the general gadget effectiveness (OEE) and the general deliver chain effectiveness (OSCE). The writing shows that a chief confusion is evident whereby critics are of the opinion that Lean's number one cognizance is only manufacturing. The Lean concept and idea but in the main works fine whilst implemented at the entire corporation and not sections. Its ideology is unrestricted and consequently it's capable of accommodate different gadgets and strategies that consist of TQM and Six Sigma.

In as much because the strategic additives of the Lean Concept are multifaceted, the empirical proof to be had these days proves that when the concept is nicely managed and properly accomplished as a complete ideology, any corporation the usage of its miles positive to reap main economic blessings. Lean has strategic importance; it makes proper enterprise experience. Nonetheless, Lean can't be carried out in a haphazard style as all the relevant components within the value chain need to be controlled which include the logistics, accounting, HRM, and providers even as growing a conducive way of life for Lean to flourish. (Springer, 2015).

These studies became aimed toward describing the Lean strategy and to focus on the extent to which it may be inculcated inside the coaching and learning of English as a language even as analyzing the outcomes of the method as an entire. Teachers are able to put off wasteful and vain undertaking after they follow the tilt concept of their coaching manner. This permits them to position more in their power on advancing the coaching and mastering manner.

When players inside the training enterprise practice the Lean idea, they're able to refine the content material, pedagogy, enterprise, and evaluation strategies used in their accounting courses. This helps via making sure that student's advantage task ready knowledge and capabilities on the way to provide them an added advantage over different applicants making use of for comparable jobs consequently extra desirable to using firms.

This thesis established mainly that there is little difference between the duration taken studying English language and using the Lean learning strategies and that there is a great statistical association between gender and using the Lean learning strategies. The findings revealed that students of Sbis International School in Duhok city can use the Lean learning strategies. Overall, the findings showed that the use of the Lean learning strategies by students is maintained within the scope of a high frequency of (3.5-5.0) and moderate use of the Lean learning strategies is at (2.5-3.4). The results demonstrate no low frequent use of any of the Lean learning strategies (1.0-2.4). Additionally, the overall average reported frequency of the Lean learning strategies use is 3.2. Furthermore, the descriptive statistics showed that the male students employed language learning strategies more frequently (average=3.3) than the female students (average=3.2). One can conclude that male students use Lean learning strategies more than female student do. The value of (F) is 2.479, which reflects the dependency to be at significant levels (>0.01 at the level of 1%). According to this model, duration of taking English ($b = 1.534$ $p > .01$) is statistically not significant predictor of learning Lean method. Value of T which is ($27.87 > .01$) reveals the descriptive factor of gender effect on learning Lean method as statistically significant. The values in the regression model support the notion that the effect of gender varies greatly when using the Lean learning method. The findings also reveal that the duration of taking English has no major effect on learning or even on using Lean learning strategies. The ANOVA analysis in the contrast This study proves that there is a negative correlation of the data which means that there is little difference between the period that a student takes on an English course and, in the time, taken while applying the Lean strategies by a (mean of 9.84). As stated earlier the sole purpose of this study is to reveal the extent to which the Lean concept can be incorporated into the teaching of the English language while at the same time examining its effects on the process. From the results of the data one can deduce that the Lean concept can be incorporated in English learning. The results show 50% success which is a positive result that indicates the likelihood that the Lean concept is a great idea for future education systems to succeed.

Who turns into a hit of their second language are careful on the approach they use. They have the ability to apply this approach for a certain challenge and their requests as inexperienced persons at the same time as learning the second language. Since the end result of this take a look at is glad with quite good wide variety of contributors, it recommended that these studies must be carried out in a bigger scale with exceptional universities in various cities or wonderful businesses of contributors seeing that what is required is so that it will make more extensive generalizations and beneficial confirmations at the effects.

Also, the examine might be repeated by means of exceptional institution of individuals; with older students for example as to peer if the equal effects are proper for them or a different skill ability degree will be selected as respondents. Furthermore, the exam can be repeated focusing at the achievement of each talent; analyzing, writing, talking and listening. Gender and level differences might moreover be researched in different studies.

As to acquire green mastering and coaching Lean, schooling system has to hold required features that attraction to college students and instructor's desires. However, the schooling system we're familiar with be instructor-orientated and traditional one the efficiency of that is wondered through the researchers all of the time. Change is needed on the middle of the coaching device; both for the teachers and curriculum. As its miles mentioned by using Little (2005) if teachers aren't well qualified to match with the modern-day schooling approaches and no longer self-sustaining, it is not feasible for them to convey up self-green, independent beginners. Therefore, educators are to undertake one-of-a-kind strategies and outputs of the research to their coaching content material. Lean technique within the better schooling is of first-rate importance; it could assist both the practitioners and him researchers. Lean manufacturing also can be used in better education to improve the overall performance of the pupil. A published studies challenge on the Lean production in higher schooling will help the gaining knowledge of the future students. The drawback of using different methods of approaching the projects in preference to the usage of the Lean technique is that it becomes difficult to generalize on final touch. The Lean software will base its studies on what's occurring proper now; it, therefore, clear up the problems that exist in time. The fact that must be acquired from the Lean manufacturing is beneficial on the practitioner in addition to the researchers. (David E. Francis, 2014).

The impact that wills consequences after the Lean application is brought within the higher schooling will be a development of sharing the vital ideas with distinctive college students. The improvement of the pupil after the tilt method

can be an aggregate of the opinions contributed with the aid of many students. Through this the statistics of the studies from each the student and the academics could be acquired, the instructor can be evaluated the usage of this information. In this example, the pointless use of a few documents can be easily eliminated and in this case the exceptional and his overall performance of the scholar might be stepped forward.

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