T. R.
GAZIANTEP UNIVERSITY
GRADUATE SCHOOL OF EDUCATIONAL SCIENCES
DEPARTMENT OF FOREIGN LANGUAGES TEACHING
ENGLISH LANGUAGE TEACHING PROGRAM

INTEGRATION OF LEAN METHOD IN ENGLISH LANGUAGE TEACHING AND LEARNING: A NEW PERSPECTIVE FOR ELT METHODOLOGY

Master of Arts Thesis

JIVAN K ANWER

Gaziantep
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July, 2017

APPROVAL OF THE JURY

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Thesis Date :

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Arts.

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This is to certify that I have read this thesis and that in my opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts.

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Assist. Prof. Dr. Fatma ÇIFÇI	…….

It is approved that this thesis has been written in compliance with the formatting rules laid down by the Graduate School Educational Sciences.

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Director

RESEARCH ETHICS DECLARATION

The information contained here is, to the best of my knowledge and belief, accurate. I have read the University's current research ethics guidelines, and accept responsibility for the conduct of the procedures set out in the attached application in accordance with these guidelines, the University's policy on conflict of interest and any other condition laid down by the Gaziantep University Research Ethics Committee or its Sub-Committees. I have attempted to identify all the risks related to this research that may arise in conducting this research, and acknowledge my obligations and the rights of the participants.

I have declared any affiliation or financial interest in this research or its outcomes or any other circumstances which might present a perceived, potential or actual conflict of interest, in accordance with Gaziantep University policy on Conflicts of Interest.

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Dedication

I dedicate my success to my husband who supported me all the time and help me whenever it need, and I also dedicate my success to my parents because without them I couldn’t reach this step. Finally I dedicate my success to all member of my family.

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ÖZET

İngilizce Öğretim ve Öğrenim Sürecinde Yalın Yönteminin Kullanımı: İngiliz Dili Öğretiminde Yeni Bir Bakış Açısı

Bir Vaka Çalışması

Jivan Kamal
Y.L. Tezi, İngiliz Dili Öğretim Programı
Danışman: Doç. Dr. Filiz Yalçın TILFAROĞLU
Temmuz-2017, 115 sayfa

Bu çalışmanın amacı, yalın öğrenme yöntemini tanımlamak, yöntemin İngilizce öğrenme ve öğretme süreçlerine ne kadar uyarlanabileceğini ve eğitsel süreçler üzerindeki etkilerini araştırmaktır. Öğretmenler yalın öğrenme yöntemini, öğrenme ve öğretme süreçlerine uygulayarak, eğitsel değeri olmayan ve zaman kaybetmeye yola açan işleri ortadan kaldırabilir ve çalışmalarını, öğrenim ve öğretim süreçlerinin geliştirilmesine odaklayabilirler. Eğitimciler, endüstri alanında geliştirilen yalın yöntem teknik ve ilkelerini uygulayarak, öğrencilerini istendik düzeye çıkarabilir ve söz konusu teknik ve ilkeleri, öğrencilerin bilgi ve becerilerinin arttırılmasına yardımcı derslerde kullandıkları içerik hazırlanması, pedagoji, örgüt işleyişi ve ölçme-değerlendirme yöntemlerine dâhil edebilirler. Yalın öğrenme yöntemi, birkaç yöntem ve araçla öğretilebilir. Örneğin; okuma metinleri, sınıf içi tartışma etkinlikleri, oyun ve benzetim temelli yöntemler, açık forum yöntemi v.s. Yalın yöntemde, okuma metinleri ve tartışma yöntemi, öğrencilere belirli konularda kendi düşüncelerini ifade etme imkânı-hatta bazen de zorunluluğu- sağlar; öğrencilerin konu üzerinde eleştirel düşünmesini, açık ve aktif katılımla, başkalarının içinde bulundukları durumu değerlendirmek için mantık zincirini etkin şekilde kullanabilmelerini sağlar. Bir öğrenme yöntemi olarak okuma metinleri ve tartışma yöntemlerini kullanmanın bazı yararları şunlardır: öğrencilerin çeşitli bakış açılarını araştırmalarına ve incelemelerine yardımcı olur, öğrencilerin zihinsel süreçlerini ve takım çalışması alışkanlıklarını arttırır, öğrencilerin bir araya getirme ve bütünleştirme becerilerini geliştirir ki ilgili yöntem onların dönüşüm yapabilmelerine imkan sağlar (Bonwell & Eison, 1991).Yalın öğretim yöntemi üretim sürecini, öğrenme alanına uygularken öncelikle süreci tespit edilmelidir, ardından da değer katan (yani öğrencilerde gelişimleri sağlayan), bu gelişimleri sürekli kılan Kaizen yöntemiyle faydalı olmayan süreçlerin ortadan kaldırılmasını sağlayan (farklı yöntemleri beyin fırtınasıyla çalışmak ve test etmek için bir hipotez belirlemek gibi), PUKÖ döngüsünü yürütebilen (deneysel bir plan hazırlamak, planı uygulamak, sonuçları kontrol edip, sonrasında gerekli ayarlamaları yapmak, karşılıklı destek ve paylaşımlara imkân veren takım çalışmaları gibi süreçlere dikkat edilmelidir. Yalın yöntemi düşünme sürecini uygulamak ve yalın

yöntem kültürüne sahip bir sınıf ortamı oluşturmak için, öncelikle sınıflar düzenlenmeli, daha sonra görsel çalışma kâğıtları hazırlanmalı, ön planlama mutlaka yapılmalı, **birim zamanı** mutlaka belirlenmeli, ders programı, çizelgeleri, ilgili materyallerle çalışma süreci mutlaka standartlaştırılmalıdır. Pareto tablosu, haftalık kalite değerlendirmeleri gibi diğer sınıf için araçlar da temin edilmelidir. Yalın Yöntem sınıfı demek, öğrencilerin gelişimlerini, üst düzey beklentilerini, sürekli geri bildirim ve iletişimlerini teşvik eden bir sınıf ortamı oluşturmaktır. Ayrıca, yalın yöntemle öğrencilere güvenli bir ortam sağlar; problemi öğrenme ve çözme, deney yapma süreçlerinin olması ve öğrencilerin yaptıkları hatalardan dolayı önlara olumsuz davranılmamısı gerektiği düşüncesıze dayanır (Zikovsky, 2012). Bu amaçla veri toplama aracı olarak 35 önermeden oluşan bir anket, Duhok şehrinde, İngilizce hazırlık sınıfında okuyan öğrencilere uygulandı ve Sabis Uluslararası Okulunda, farklı seviyelerde okuyan on iki öğrenci ile bireysel görüşmeler yapılmıştır. Çalışmanın ilk aşamasında, 35 önermeden oluşan yalın öğrenme stratejileri anketi, ölçme aracının geçerlik ve güvenirlik çalışmaları kapsamında 50 kişilik bir öğrenci grubuna uygulanmıştır. Anketin güvenirliğini test etmek amacıyla, Alpha güvenirliği kullanıldı. Güvenirlik katsayısı 0.80 olarak tespit edildi. Nicel veriler, ölçek maddelerine verilen her cevabın frekans ve yüzdelerini hesaplamasıyla elde edilmiştir. Daha sonra, veriler, frekans, yüzde, ortalama, korelasyon, lineer regresyon ve ANOVA yöntemleri kullanılarak analiz edilmiştir. Elde edilen bulgular, Duhok şehri Sabis Uluslararası Okulunda okuyan öğrencilerin, Yalın öğrenme stratejilerini kullanabildiklerini göstermiştir. Sonuç olarak bu bulgular, genel olarak öğrencilerin söz konusu stratejilerden yararlanma aralığının yüksek (3.5-5.0) ve orta düzey (2.5-3.4) frekansta olduğunu göstermiştir. Böylece, elde edilen sonuçlara göre adı geçen stratejilerin kullanımının düşük frekansta olmadığı görülmüştür (1.0-2.4). Ayrıca, genel ortalamalara göre, strateji kullanımı frekansı 3.2 olarak tespit edilmiştirYanı sıra, betimsel analiz sonucunda, erkek öğrencilerin (ortalama 3.3) dil öğrenme stratejilerini, kadın öğrencilerden(ortalama 3.2) daha sık kullandıkları görülmüştür. Bu bağlamda, erkek öğrencilerin yalın öğrenme stratejilerini kadın öğrencilerden daha fazla kullandıkları çıkarımı yapılabilir. (F) değeri,2.479 olarak bulunmuştur ki bu da anlamlılık düzeyine bağlılığı yansıtmaktadır (%1 değerinde >0.01). Bu modele göre, İngilizce dersi alma süresi (b = 1.534, p=.116 p > .01), yalın öğrenme yöntemi, öğrenmenin istatistiksel yönden anlamlı bir yordayıcısı değildir. T değeri (27.87> .01) ise cinsiyet faktörünün, yalın öğrenme yönteminin, öğrenme üzerinde istatistiksel yönden anlamlı bir yordayıcısı olduğunu göstermiştir. Ayrıca regresyon modelindeki bütün değerler, cinsiyet faktörünün, Yalın yöntemi öğrenme ve kullanımı üzerinde etkili olduğu görüşünü destekler niteliktedir. Ayrıca ANOVA analizi sonuçlarına göre, İngilizce dersi alma süresi de Yalın öğrenme yöntemlerini öğrenme ve kullanma üzerinde anlamlı etkilere sahip değildir. Fakat bu bulgu, cinsiyet faktörünün Yalın öğrenme stratejilerinin kullanımı üzerinde anlamlı etkilere sahip olduğunu gösteren t testi analiz sonuçlarıyla çelişmektedir.

Anahtar Kelimeler: Yalın, İngiliz Dili Öğretimi, Yalın Öğrenme Stratejileri, Yalın Öğrenme Yöntemleri, Akademik Başarı.

ABSTRACT

Integration of Lean method in English Language Teaching and Learning:

A New Perspective for ELT Methodology

(A CASE STUDY**)**

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The purpose of the study is to describe the lean 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 effect 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

Keywords: Lean, English Language Teaching, Lean Strategies, Lean Methods, Academic Achievement.

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CHAPTER I
INTRODUCTION

1.1. PRESENTATION

This chapter presents the problem, summaries the aim and implication of the study, and states the investigation questions. Explains the limitations of the research, addresses the assumptions of the study and defines relevant terms and abbreviations. In addition is presents detailed background information on the concepts of the modified output and corrective feedback and their role in English language teaching classes.

1.2. BACKGROUND OF THE STUDY

Learning usually involves two kinds of people, a teacher, and a student. Teachers cannot do the job of learning alone. Many language theories keep the importance of communicative competence in language learning. However, it should also be kept in mind that communicative competence is sufficient for students to learn or acquire language effectively. Furthermost of English language educators have been examining for new methods in order to be more effective and help their student to become talented students in learning a second language. Educators should to know what student do while learning a second language. Academics have analyzed language-learning strategies and found out that student's learning strategy choice is related to student's purpose and the assignment they are engaged in (oxford, 1990:8). Many researches in addition to gender, age, aptitude, motivation, attitude, personality, and cognitive style have researched the relationships among the use of the language learning strategies and success in dominant a second language. Another researcher, McNamara (1973:55 in Oller and Richards) defines language learning as an inductive process whereby contexts are presented and their implicit meaning is used as clues to crack the code of language. However, English language teaching has been introduced to a new strategy

which may help students as well as foreign language learner to learn language faster. That strategy and concept is called lean production.

The idea of *lean* is most commonly related with the Japanese industry, mainly with the Toyota Production System (TPS). Lean creation was created in 1950 by a young engineer named Eigi from the Toyoda family; he created the perception after his first visit to the Ford factory (Monden, 1983; Ohon, 1988; Shingo, 1988). It converted a powerful tool because of the shortage of resources and concentrated local competition in the Japanese automobile market. Lean is based on Ford's mass production system that belongs to the United States with some improvements and lies in the improvement of the theory and data-driven analysis in the systematic method. Henry Ford started one of most substantial revolutions that has ever occurred in the industry, and his efforts are known as the Mass Production System, which was developed in 1908. Henry Ford authorized people to improve the processes they performed.

Above the next two decades, however, lean manufacturing became progressively widespread between Western companies and has been applied not just by different manufacturing establishments but, in some suitcases, by their service complements as well. Lean has now been applied through a wide series of industrial settings and "has moved away from a merely ‘shop floor-focus' on waste and cost reduction to an approach that contingently sought to enhance value (or perceived value) to customers by adding product or service features and/or removing wasteful activities" (Hines et al., 2004: 995). Lean supplies the most value from the student’s perception while overwhelming the least resources. The stable development of Toyota, from its start as a small company to becoming one of the world's largest automakers, has concentrated on how its success was attained. The enthusiasts of lean claim that lean manufacturing has significantly developed invention proficiency. Toyota distinguishes the effects and applies the collective intellect of these precursors to its small manufacturing action. It then improves and enlarges its process upgrading through waste elimination concentration to include the innovativeness wide procedures (Ziskovsky, 2007).

In the initial days of lean, its application was restricted to a tool-based manufacturing method which intended at providing high-quality produces with lower costs in isolated manufacturing processes. Lean’s associated successes have made it a standout in industries and have been the important and well-known improvement focus

throughout manufacturing for an extended period where the application is now up in all professional fields extending from healthcare to trade. The lean program is not proficient by forming more work for employment teams; reasonably, it is a saving program. It basically permits employees to practice their inventive intellect to carry out their occupations in an extra successfully. Lean has two fundamental elements, including continuous improvement and people's respect. It also has five principles, which are takes full advantage of value, understand all work as a process, respond to the pull, create a smooth flow, and aim for perfection. Additionally, lean has the seven wastes of transportation, inventory, motion, skills, waiting, overproduction, and over-processing. Lean offers all of the missing strategic sections, inclusive of the strategy, the tools, the methodologies, and the admiration for the unused capability of route whereby the proprietors can attain the strategy aims.

Every production system has its own principles, and such is the case with lean production. Lean principles in industrial can progress a functioning presentation by centering on the continuous flow of produces and tools through the value stream. To start with, the several forms of manufacturing waste must be recognized and removed. Waste can contain any action, step, or method that does not add value for the consumer. Lean has five principles: value (which is very important to the lean principles); value stream (all of the stages and courses requisite to convert a exact creation from raw supplies to a finished item in the hands of the client); flow (once value has been exactly stated, the value stream for a specific invention is fully charted by the innovativeness, and extravagant steps are eliminated); pull (The results of adapting from departments and groups to produce bands); and perfection (as the institute begins to exactly require value).

Lean higher education (LHE) is another alteration of lean thinking to higher education (HE) both in management and academic events. Many universities and colleges receive benefits from the lean project in areas such as admissions, the administration of research resources, and employment. The submission of lean running in higher education has become more widespread in organizational methods and in other occupation areas where in multi-step processes can be shortened and concentrated on the needs of an organization in order to assist manipulators. It has been pragmatic to academic developments such as course design and teaching,

enlightening degree programs, student reaction, and the management of projects in an growing number of positions.

As Comm and Mathaisel (2005) indicated, "Historically, the purpose of the higher education sector has been to teach and to conduct research, and for centuries this has held true. Higher education is also one of the most immutable of institutions" (p.227-240).They are of the opinion that the supreme significant influences for the change are upper community prospects over what universities should be transporting, growing maternal worry about the value of education, superior stress on college ratings, and demographic changes in the student inhabitants and higher budgets. The lean method saturates into ever wider rounds of processes; it concludes to be about best exercise and starts to become a part of the material of doing occupational (Corbett, 2007: 96).

There is a connection between a lean and learning organization. Framework and a clarification were added when they were suitable in order to allow readers to control the strength of the connection for themselves. Themes and discussions, which are obtainable with an investigation and with discussions of culture, were implicated for a lean organization methodology or for enhancing the learning organization.

The expression lean invention was first appointed by Womack, Jones, and Roos (1990) in their book, *The Machine That Changed the World*. Today, lean invention remains communal in industrial but has also developed from the functioning level to the planned level (Hines et al., 2004). It has extended experiential areas beyond manufacturing and submitted into ranges such as shoe producers (Gati, Wechsler, & Torres, 2008), the supply chain for personal computers (Ben, Naim, & Berry, 1999), the food and farming supply chain (Cox & Chicksand, 2005) and healthcare (Waring & Bishop, 2010). Today, the Toyota production system philosophy and methodology have become synonymous with excellence. In Lean, the emphasis of each method stage is adding value.

1.3. STATEMENT OF THE PROBLEM

Many philosophies have been planned for the best way to learn a second language in teaching space. Even more teaching methods and material have been established to instrument these philosophies (Patsy M. Lightbown, 2013). Nina Spada stated that first language learner is just like second language learners do not learn

language merely through imitation and exercise. They produce sentences that are not accurately like those they have overheard.

Language learning is influenced by many issues. Among these are personal features and skills of the learner, the common and culture environment both inside and outside the classroom, the organization of the native and aimed language, chances for contact with speakers of the target language, and entree to educative comment and form-focused guidance, it is clear that teacher do not have regulator over all these features (Patsy M. Lightbown & Nina Spada, 2013). Teaching English as a foreign language is a challenge for every teacher whether beginner or skilled, yet remains a satisfying job choice. Everyday teachers face a multiplicity of classroom organization problems which they must learn to a continuous deal with, familiarize to student's needs, find clarifications to these problems and most significant to reach successful forthcoming language teaching. Therefore, integrating the necessary features of classroom management like organizing the classroom, planning, using effective materials, choosing suitable activities etc., would help teachers to create effective classroom administration system.

Nowadays, teachers and students face many challenges such as: the spread of behavioral and academic problems that threaten the educational system in universities because of the lack of the English language disability, which verses the limit number of teachers, the old way of teaching some of the teachers prefer to teach through the old methods of teaching without any regard to new methods and teacher's lack of motivation to improve themselves. Student's lack motivation, Time is also considered as one of the main problems. These problems have direct influence on the learning process. Helping learners comprehend good language learning approaches and training them to improve and practice such good language learning approaches can be measured, to be the valued characteristic of a good language lecturer (Lessard-Clouston, 1997:3). Education recently merged, which caused a considerable amount of organizational disruption and potential instability. The deep technical changes transported in by the manufacturing rebellion had a great influence on the invention process.

People are continuously searching because the environment changes all of the time, so education needs to be changed and improved because objects change over time. The educational system should be refashioned as well to avoid frustration, and

the changes should be simple and smooth. Otherwise, the process will not deliver the most professional and effective services that are possible. The education workforce (student and employees) desire for the education system to deliver content that is perfect. If it is not, that means the process is not a suitable one and the manpower of the education systems is effective as it could be (Mark Robinson, Standard YouTube License.2015).

1.4. STATEMENT OF THE RESEARCH QUESTIONS

1.4.1. Research Questions:

The following are the research questions that this study aimed to answer.

1. What is the frequency of using lean learning strategies?
2. Which lean learning strategy is most frequently used by Iraqi learners?
3. Is there a relationship between gender of the students and the use of lean learning strategies?
4. Is there a relationship between duration that students have taken English course and the use of lean learning strategies?

1.5. THE PURPOSE AND SIGNIFICANCE OF THE STUDY

The aim of the research is to present and reveal in what way the lean improvement process can support the education system’s development by focusing on teaching and research, by increasing a culture of incessant improvement and admiration towards individuals. The solution given by the lean process is to increase the capacity of the staff to develop, to improve the organization that seeks to enhance flexibility, and to reduce duplication in the administrative process while also eliciting staff involvement to progress the act of their roles and to produce the maximized value of waste.

Lean means fostering a culture of continuous improvement, maximizing value, and minimizing waste. Lean involves qualified people who are incessantly examining for the humblest and smoothest procedure in order to perfectly meet workers' needs. A lean program offers a great contribution to the education system. Lean empowers administrators and support staff, as well as teachers and students to involve in the lean method improvement in their work tasks. Doing so creates a new culture of improvement, increases morale, reduces behavioral problems with students, and has generated additional funding for performance. Teachers will learn to use their time more efficiently and will teach their curriculum more effectively. At the same time,

students will improve their learning while reducing the time and increasing the efficiency of their learning tasks. Operations staff will have more time to do other tasks, eliminating the need for and the cost of hiring additional employees.

1.6. ASSUMPTIONS OF THE STUDY

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.

1.7. LIMITATIONS OF THE STUDY

The possible limitation of the study is the participants included. In fact the sampling is not so limited; however, it is certainly not possible to generalize the results to each person represented. Choosing the participants, group sampling method was used as the students belong to different levels as A, B, C. Therefore, randomly adequate number of students in each group were chosen. That is, the learners chosen are heterogeneous. It would be beneficial if the research was repeated on a larger scale of group for instance containing a number of universities.

1.8. ABBREVIATIONS:

TPS: Toyota production system

HEI: Higher education institution

L1: First language

L2: Second language

CHAPTER II
LITERATURE REVIEW

2.1. PRESENTATION

This chapter provides an overview of lean production, lean strategy, lean principles, the methods and methodology, lean implementation and learning organizations. This chapter also presents information about English language teaching, such as its methods and how lean has been applied in the education system.

2.2. BRIEF HISTORY OF LEAN PRODUCTION

Lean is historically associated with the Japanese organization Toyota. Toyota known as a Japanese car producer based at Toyota found in Aichi, Japan. The company was started by Kiichiro Toyoda in the year 1937 as a spinoff from his father's organization, Toyota firms, to make vehicles. Three years prior, during 1934, while still part of Toyota companies, it manufactured its first product, the Type A car, and, in 1936, its first passage car, the Toyota AA. Toyota Motor Company produces automobiles under five brands, which includes the Toyota mark, Hino, Lexus, Ranz, and Scion. The Toyoda family visited the Ford factory in the United States for the first time in 1929 to gain some information about the mass production system. Thereafter, a Japanese engineer named Eiji visited the United States in 1950 and replicated the mass production system for the first time. He at that point understood that duplicating a similar framework to the Toyota manufacturing plant was unimaginable.

After World War II, there was a kind of competition occurring worldwide manufacturing, and the unfavorable economic situation in Japan made the government come to a decision that made it possible for the head of engineering at Toyota, Taiichi Ohno, to put his arrangement for the Toyota processing plant without hesitation. Toyota at that point noticed that two main problems existed in large scale manufacturing framework (Womack, Jones, & Roos, 1990). One confinement was that workers were withdrawn since they concentrated on exhausting, repetitive undertakings. The second constraint was that the procedure itself was loaded with a waste level that would be too high to be in any way worthy in Japanese assembling.

These were the initial steps for an idea that would later be alluded to as the Toyota creation framework (TPS). The TPS was not an exact of Ford's large scale manufacturing framework; rather, it depended on it with a few adjustments and change. The fundamental purpose of TPS was to take care of the issue of waste, for example, decreasing time and amplifying an incentive by disposing of and engaging representatives.

Toyota is nowadays very serious about-long term production. The concentration from the exceptionally top of the organization is to increase the value of clients and society. This drives a long haul way to deal with building a learning association, one that can adjust to changes in the earth and make due as a profitable association. Without this establishment, none of the theories Toyota makes in ceaseless change and learning would be possible.

Toyota is a procedure situated organization. They have learned through experience what forms work, starting with the perfect of one-piece flow. Flow is the way to accomplishing best quality at the most minimal cost with high security and resolve. At Toyota this procedure center is incorporated with the organization's DNA, and leaders trust in their souls that utilizing the correct procedure will prompt the outcomes them crave. The Toyota Way incorporates an arrangement of apparatuses that are intended to bolster individuals ceaselessly enhancing and persistently creating. For instance, one-piece stream is an exceptionally requesting process that rapidly surfaces issues that request quick arrangements or creation will stop. This suits Toyota's representative improvement objectives flawlessly on the grounds that it gives individuals the feeling of criticalness expected to face business issues. The perspective of administration at Toyota is that they create individuals, not only autos. The most abnormal amount of the Toyota Way is hierarchical learning. Distinguishing root causes of issues and keeping them from happening is the concentration of Toyota's ceaseless learning framework. Intense examination, reflection, and correspondence of lessons educated are fundamental to change similar to the teach, to institutionalize the best-known practice (Liker, 2004).

The TPS is regularly utilized together with the terms for the *lean manufacturing* and *lean generation*. The Toyota production framework is called "lean" since it produces items by utilizing less material, less speculation, less stock, less space, and less individuals (Wilson, 2010).

In his book, *The Toyota Production System: Beyond Large-Scale Production*, Ohno puts three key expressions, which, when considered jointly, characterize his TPS: “The basis of the Toyota Production system is the absolute elimination of waste” (p. 4); “Cost reduction is the goal” (p. 8); “After World War II, our main concern was how to produce high-quality goods. After 1955, however, the question became how to make the exact quantity needed” (p. 33).

The TPS is a manufacturing framework which is an amount control framework, in light of an establishment of value, whose objective is cost admonishments, and the way to lessen cost is the total elimination of waste. The Japanese created shelter modify their economy after World War II. Numerous analysts would rather allude to lean as Japan's mystery weapon that altered the Western business. With expanding development in the business, administrations started to increase higher significance, prompting ventures with increasingly or less administration parts (Levitt, 1972).

Lean is viewed as an orderly way to deal with amplifying an incentive by limiting waste, and by streaming the item or administration at the draw of the client request. These key ideas of “value,” “flow,” and “pull,” line up with a definitive lean objectiv: “perfection,” or a persistent taking a stab at change in the execution of the association. The run of the mill advantages of the effective utilization of lean incorporate extraordinarily lessened lead times of 40% to 90%, diminished process times of 30% to half, and enhanced quality execution of 30% to 70% (Locher, 2008).

Lean is likewise seen just like an arrangement of instruments or methods that take into account the diminishment of waste. There are five principles to manage the execution of lean procedures. In addition, lean comprises of 25 tools: 5S "diminish sat around idly and movement at the smaller scale level", autonomation (enables mechanized hardware to work without human mediation or checking); cell fabricating (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. lean bookkeeping intends to appropriately represent lean exercises and bolster the lean activity; lean office is mean to convey lean standards to exercises regularly done in an office situation; lean providers for the most part push changes upstream in the inventory network; fabricating methodology is to guarantee a match, or harmoniousness, between the organization's business sectors and generation framework ability; blended model creation is a steadies the request on creation forms upstream from a last sequential construction system; one-piece stream intends to decreases stock interior to a work cell and powers enhancements and work adjust; purpose of-utilization stockpiling is to diminishes material development; prepare mapping is to envision and comprehend the succession and nature of occasions in a procedure at the large scale and smaller scale levels; creation leveling is steadies request fluctuation on procedures; Pull and synchronous planning intends to nearly connect and synchronize forms and avert surges of WIP stock or potentially deficiencies; brisk and simple Kaizen work is to formalize, spread, and keep up nonstop change exercises; and setup lessening intends to limit setup time and cost, consequently liberating limit and empowering the creation of little lots.

Lean incorporates *Kaizen* (Japanese for "change" or "change", the English interpretation is "nonstop change", or "constant improvement."), a fomat where representatives at all levels of a firm cooperate proactively to meet general, incremental improvements to the assembling procedure. It might be said, it joins the aggregate gifts inside an organization to make an intense motor for development—it is part activity plan and part rationality. Kaizen is a day by day activity whose aims go past change. It is likewise a procedure that, when done accurately, adapts the work environment, kills diligent work (both mental and physical), and shows individuals how to do fast tests utilizing the logical technique and how to figure out how to see

and take out waste in business forms. As an activity arrange, Kaizen is about sorting out occasions concentrated on enhancing particular zones inside the organization. These occasions include groups of workers at all levels, with a particularly solid accentuation on including plant floor representatives. As a reasoning, Kaizen is about building a culture where all workers are effectively occupied with recommending and actualizing changes to the organization. In genuinely lean organizations, it turns into a characteristic mindset for both administrators and plant floor representatives.

Apparatuses, strategies, and measurements aside, Toyota's most prominent accentuation is thoroughly considering issues and arrangements. At Toyota, it is said that critical thinking is 20% devices and 80% considering. Lamentably, the analyst gained from numerous Six Sigma programs that a few organizations become involved with utilizing all the considerable and new complex investigation apparatuses, where critical thinking is by all accounts 80% devices and 20% considering. (Liker, 2004).

There are ten Basic Rules to Kaizen.

- Discard conventional rigid thinking about production.
- Think of how to do it, not why it cannot be done.
- To avoid making excuses and Start by questioning current practices.
- Do not seek perfection and Do it right away even if for only 50 percent of target.
- Correct mistakes once and for all.
- Do not spend money for kaizen.
- Wisdom is brought out when faced with hardship.
- Ask "Why?" 5 times and seek the root cause.
- Seek the wisdom of ten people rather than the knowledge of one.
- Remember the opportunities for kaizen are infinite. (Masaaki Imai, 1997

Lean additionally incorporates *Poka-Yoke* which refers to mistake sealing (or blunder proofing or trick-proofing). These are inventive gadgets that make it almost inconceivable for an administrator to make an errors. (Liker, 2004). Poka-yoke have five ways of problem-proofing that was created by Shigeo Shingo from Toyota Motors as an apparatus to ensure Zero Defects. The procedure of Zero Defects (ZD) is alternatively called "problem sealing" or "safeguard." 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.

Lean generation has five principle and seven wastes of concern and with the assistance of these instruments concern can be decreased and disposed off. Lean generation implies making more of an incentive for clients with less assets, which implies misusing clients' esteems while lessening waste. Lean is contained of qualified individuals who constantly scan for the most straightforward and smoothest handle keeping in mind of the end goal to completely address clients' issues. To be "lean" is to receive a philosophical technique that is constant in its push to make an incentive for the client through the disposal and anticipation of waste, for example, overabundance stock, unnecessary movement, and other time-and asset expending exercises. Basically, lean intends to make an esteem stream that is included just the procedures that include saw client esteem; everything else is pointless and ought to be dismissed. As more esteem is made with less assets, lean operations can progressively concentrate on permitting client request to force items and administrations through generation and the store network. Be that as it may, unless dependability and ideal stream exist, the lean esteem stream can't take care of the demand that is pulled through

the framework without utilizing an extensive cradle stock (Glovia International, Inc., 2008).

Womack et al. (1990) defined lean as “a dynamic process of change driven by a systematic set of principles and best practices aimed at continuous improvement”. ". The essential execution of lean in administrations has happened in the wellbeing part, and there are likewise some announced cases in light of money related and government organizations (Wei, 2009). In the most recent decade, the training segment embraced lean generation, especially in the usage of advanced education establishments and with an emphasis on the work area. Lean is a program of hierarchical change that enables every last specialist in a training framework to build their own execution and occupation fulfillment through process change. Thoughtfully, lean concentrates on waste diminishment and regard for the workforce (Ohno, 1988; Jones, 1996). Womack et al. reasoned that Lean generation is a better route for people than make things. It gives better items in more extensive assortment at lower cost. Similarly vital, it gives all the more difficult and satisfying work for representatives at each level, from the production line to the base camp. It takes after that the entire world ought to embrace lean creation, and as fast as could be allowed' (Womack et al., 1990: 225).

Womack and Jones (1996) distinguish the accompanying five parts of Lean: the first is categorized Value. The second is distinguishing the Value Stream. The third is Make Value stream without interferences. The fourth is given the client A chance to draw Value. The fifth is Pursue Perfection. Perfection is looked for using norms, kaizen/kaikaku, 5 Why's, 5S's, 5M's, and different techniques for constant change.

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 Kingdome, 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 (www.st-andrews.ac.uk).

Lean requires a powerful administration. In the first place pioneers must have a wide visualization for the future and must elucidate their objectives they try to be accomplished. Second they ought to likewise be able to understandable objectives with vision in a way that can motivate others to have objectives and vision. In aggregate Lean is another approach to consider how to sort out human exercises to convey more advantages and incentive to clients while wiping out squanders.

The purpose of lean is to stand development by adjusting consumer loyalty to representative fulfillment. It additionally looks to offer innovative items and administrations gainfully while limiting useless over-expenses to clients, providers, and nature. The essential knowledge of lean intuition is that if each representative is prepared to distinguish dawdled and exertion in their own occupation, they can cooperate all the more successfully to enhance forms by taking out such waste. Lean's approach is to participate with the client; it concentrates on clients' needs as a ultimate objective. Today, the TPS logic and philosophy that are known as the lean and critical thinking approach has turned out to be synonymous with greatness. (Ziskovisky, 2007). From an asset based point of view (Wernerfelt 1984), Lean can be translated as a reasonable and constantly developing administration framework that gives the association the "capacity to coordinate, form and reconfigure inside and outside skills to address quickly evolving situations" (Teece et al. 1997). This has critical ramifications for the dissemination and adjustment of Lean considering and permits refining the sketched out possibility point of view. To start with, capacities that lay on

complex blend of unsaid and eccentric authoritative schedules are typically worked over years, very way reliant and hard to interpret and repeat (Nelson and Winter 1982). This clarifies the nonattendance of a solitary far reaching meaning of Lean and in addition "the across the board failure of associations to embrace and apply the thoughts with anything like the accomplishment of Toyota" (New 2007: 3546). Second, associations that need to execute Lean need to make an interpretation of and adjust it to suit their own particular hierarchical schedules and particular natural setting, which can prompt noteworthy changes (Lee and Jo 2007).

Lean is a way to deal with process change in the working environment that started in assembling, and is currently found all through the administration and open parts, including Higher Education. Truth be told, lean is about persistent upgrades to work. Consistent change while it can incorporate RIEs ('Rapid Improvement Events), implies continually searching for better approaches for getting things done to assess changes in the interior and outside conditions in the setting in which a Higher Education Institution (HEI) works. At the point when effectively connected lean turns out to be a piece of a foundation's way of life. Lean is in this way more appropriately viewed as a connected reasoning of work. The lean logic recommends that with a specific end goal to make persistent enhancements to work there must be a key regard for individuals. Regardless of the name, lean is not about diminishing assets required in the conveyance of process results. It is about distinguishing the perfect measure of assets required to finish a movement in a way that addresses client issues. In working towards this point it is normally discovered that processes are over-resourced (Robinson, Yorkstone, 2014

2.2.1. Lean Strategy

The lean methodology is an abnormal state plan to accomplish at least one objectives under states of vulnerability. Every industry, regardless of whether it is an assembling administration, business benefit, human services administration or instruction framework, has a particular procedure which characterizes how to prevail upon a client contenders. The procedure is an essential one on the grounds that the assets accessible to accomplish these objectives are generally restricted. Procedure by and large includes defining objectives, deciding activities to accomplish the objectives, and assembling assets to execute the activities. A system portrays how the objectives will be accomplished through the utilization of the assets. Lean, as an item, has a

particular procedure to accomplish its objectives too. Lean's objectives, for example, wiping out squanders, expanding stream, accomplishing an upper hand through cost decrease, and proficient administration of client request, enhance consumer loyalty and include esteem. Wilson (2010) expressed, "Lean is a complete arrangement of procedures that, when joined and developed, will enable you to lessen and afterward dispose of the seven squanders. This framework will make your organization more slender as well as thusly more adaptable and more responsive by decreasing waste" (p. 9).

Lean has four strategies to achieve its goal:

1. Synchronize the supply to the customer externally (to supply the item to clients at their required demand rate, standardized to the generation plan). Synchronization alludes to adjusting take-times of interconnected procedures with the end goal that appropriate planning is set up, in this way empowering stream and taking into consideration draw to be effective. To synchronize remotely is to supply the item to our client at their required request rate, standardized to our generation plan. We need to supply the greater part of the client needs however we would prefer not to overproduce and make abundance stock. These devices enable this adjusts to be accomplished. With a specific end goal to appropriately synchronize to the client we have to take care of the legally binding volume demand and, what's more, we should deal with the ordinary varieties in both free market activity. In a develop make-to-stock creation framework, with great crude materials supply, solid generation hardware, stable process durations, and astounding yields, our supply variety ought to be low. Notwithstanding, we will at present have supply varieties, accordingly we will require a security stock to adjust for these varieties. Moreover, there will be request varieties to battle with in the event that we wish to be synchronized to the client. This variety will require cushion stock (Lonnie, 2010, p.112) .

2. Synchronize production internally (to partition the essential work into preparing steps with the end goal that each handling venture takes the same time).To synchronize generation inside is to separate the fundamental work in preparing steps to such an extent that each preparing venture takes a similar time. The perfect is that all preparing strides perform at a process duration equivalent to takt (Lonnie, 2010, p.113).

3. Create flow (so that the creation units don't stop, aside from esteem included work). The idea of flow is with the end goal that we don't need the creation units to stop, aside from esteem included work. The flow idea has both general measures and neighborhood measures. The nearby measure would be process duration. That is the augmentation of time between sequential creation units. On the off chance that work is done, one piece at any given moment, it is additionally the handling time at the work station. The general measure of stream is creation lead time. It is the general time it takes for a unit to finish the whole creation handle. For each situation, on the off chance that we can diminish process duration or on the off chance that we can decrease lead time, we will make handle enhancements.

Obstacles to flow include:

- Inventory
- Batches and batch processes
- Distance
- Any defect-creating process
- Variation
- Process steps with mismatched cycle times
- Changeovers
- Non-valued-added work steps

Creating flow is “the basic condition” and this strategy has some strategies of its own, including:

- Rate balancing of all steps in the value stream from the customer all the way through the raw materials supply
- Removal of inventory
- Reduction of distances between stations
- Elimination of defects, which we call *jidoka*
- Elimination of non-value-added work (Lonnie, 2010, p.114-115).

4. Establish pull-demand systems (Pull systems have two features. First, they have a static inventory, so the set stock plus the barrier and protection stocks need to be strongminded. Second, they are initiated when the produce is removed, and this signals the upstream process to produce—if there is no signal, there is no invention) (Lonnie, 2010, p. 111).

Pull frameworks have two attributes. First, they have a fixed stock, so the cycle stock, in addition to the cradle and security stocks should be resolved. Second, they are enacted when item is expelled and this flags the upstream procedure to create—no flag, no generation. All Kanban frameworks give this capacity. Be that as it may, for some basic frameworks, for example, pull frameworks inside a nearby coupled cell, for instance, the best draw flag frequently is the "Kanban space." With a Kanban space, when the client expels the upstream generation, the client has "opened" the Kanban space—this is the force flag. A short time later, the upstream procedure creates more item, however not some time recently. It is the ideal "take one make one" framework. Operationally in unadulterated force frameworks, it implies you don't send anything anyplace. In the event that it leaves, somebody came to lift it up. Be that as it may, it is impractical to have an immaculate force framework in all cases. Wherever there is stock, this stock will defer the force motion from the client. This is the premise utilized as a part of Kanban outline. In kanban, the kanban card, for instance, is expelled from the item as item is devoured. The card is then set in a kanban post and the kanban card is then transported back to the heijunka board to flag recharging. Second, since we can't generally utilize immaculate draw flags, the force signals should be time receptive to the requirements of the client. The time it takes—from the receipt of the flag by the client (item is expelled and the kanban card is set in kanban post) until the substitution item lands at the storage facility—is known as the recharging time. This is adequately "pull flag delay." We endeavor to limit pull flag delays. Essentially expressed, we work to limit renewal time. The ideal draw framework is "take one, make one". In a push framework, item is made at an upstream station and afterward "pushed" to the downstream station autonomous of the need of the downstream station. Push framework permits neighborhood machine improvement to the detriment of general framework enhancement. They overproduce and make overabundance completed merchandise stock as well as (Lonnie, 2010, p.116-117).

To apply the four strategies, there are five basic analytical tools that need to be used in evaluating goals:

1. The takt calculation
2. The basic time study
3. Balancing analysis
4. A spaghetti diagram

5. The present state value stream map and the future state value stream map

2.2.2. Lean Methods and Lean Methodology

Over a period, methodology remains a reliable way to analyze and does some activities. The methodology is a term that has been using to refer to the guidelines system that is used to perform an activity. The goal of the lean startup is to determine to develop a good business model. Many industries have implemented lean so that their product quality will get improved. Lean is a method that is used to improve the quality of the product. Lean is required for creating a strong environment for the business. The strength of the lean methods has disapproved all other methods. Regular evaluation of the business has allowed other business sectors.

Lean methods are an economical way of reducing the waste in business. The lean methodology aims at reducing the waste production simply by reducing the unnecessary processes that might be contributing to the waste production and does not have effects on the quality of the product (Womack & Jones, 1996). Lean methods involve the use of the tools such as changing the value, Kaizen exercises and other tools that can be used in the workplace (George, Rowlands, Price & Maxey, 2005). Although the lean method is efficient, there are some negative impacts on the environment. These impacts include when JIT is used then the cash out will not be tied up in standard, but instead, small quantities are regularly delivered. In this case, there will be an increase in packaging. However, packaging in some cases is beneficial since it reduces the unused or the damages of the produced goods.

Since Lean is a methodology, it involves five steps which include the following, analyzing the value of the customers which involves the understanding of the customer's requirement. Secondly understands the processes that the product will pass and the value shaping for each product, whereby product and the processes must flow. Ensuring product or process flow, normalizing the important practices. Introducing “pull” among all procedures to ensure good flow (this is because the product is produced according to the demand of the consumers) .Furthermore, ensuring that a perfect performance has been registered for a quality product to be produced (Womack & Jones, 1996).

There are three types of lean methods:

1. Build methods :
    a) Kanban 3,

b) Minimum Viable Product (MVP) 4,
c) Small Batch5

2. Measure methods:

a) Cohort Analysis6,
b) Innovation
c) Accounting7,
d) Split (A/B) Testing8

3. Learn methods:

a) Analogs and Antilogs9
b) Customer Architeype10
c) Engines of Growth11
d) Five whys12
e) Genchi Gembutsu13
f) Get out of the Building14
g) Pivot15
h) Pull (Hypothesis)16
i) Validated Learning17
j) Waste/Value18 (Parantap.com/lean-startup-methodology).

Apart from the methods discussed above, there are other two methods that contribute to the definition of the lean methodology. These two methods are discussed as follows; they are the key lean procedures (Dahlgaard & Qstergaard, 2000).

Method 1. *Identify and solve a problem's root cause*. Scientific analysis methods are used to discover where the problem started then a permanent solution is implemented to curb the subsequence occurrence. This will be a permanent solution to the other arising similar problem (Spear & Bowen 1999). The process of finding the root of the problem is sometimes termed as "learning to see" in this case one will fully understand the cause of the problem (Rother& Shook 2003). Furthermore, this term is similar to the term "go and see," a term that is used by the Japanese as the "Gemba" (Bicheno&Holweg 2009): the managers of the organization should concentrate on him most sensitive activities.

Method 2 – *Empower staff to take ownership for their work*. His will help at stopping the occurrence of a problem at early stages before they get worst. This method will ensure that the quality of the work of each employee will improve the entire response has been granted on everyone. In this case, the entire production works will

result in an improvement in the quality of the product. Lean methods promote learning as well as teamwork (Liker 2004). Womack & Jones, 2003 p.268 Summarizes the Lean thinking as “superior antihierarchical and will be democratic. Each of the employees will check his work, becomes multi-skilled, and participates in regular work rearranged through kaizen activities. Layers of supervision are completely cut for all time. The clear interpretation of the business will build confidence in everyone.”

Lean production methodology can work best in any condition including the dangerous conditions. Although while operating in an extreme uncertainty there are some challenges, it opens up ways of learning the new ways of improving the quality of the produced goods. Lean production methodologies involve arranged techniques that can enable the product to go through it for it to improve its quality. Through these techniques, there will not be any time to be wasted since the product is produced when every necessary process has been completed.

Plano Clark with Creswell (2011) mention that “methodology carried a philosophical assumption that indicates the way at which collection and analysis will be involved as a good research is done by doing a particular field of study” (p. 5). About the findings of the researchers, lean production is an independent methodology that involves lean methods and lean methodology. The two combine techniques are used to improve the quality of the product produced by an organization.

2.2.3. Lean Principle

The Toyota Production System (TPS) was not that developed to full-fledged from the vast ocean of improvement techniques that lead Toyota to global achievement. But it was worked through a progression of little changes over numerous years. At an early stage, Toyota pioneers did not have and trusted that they couldn't achieve their economies of scale that of Ford or else General Motors thus they attempted to build up a framework which Henry Ford may have utilized as a part of their circumstance.

During early of the 1980s, Toyota and other Japanese producers had made some advances in worldwide markets; the call sounded to concentrate on these organizations inside and out. This prompted books on TPS by its makers and also the dispatch of projects to study lean standards at numerous colleges. While trying to sum up the work of Toyota for other assembling settings, Krafcik of 1988 instituted the term lean. Lean has highlighted the standards of constraining stock, abundance

specialists, or "waste," rather than other car producers' "cushioned" methodologies. (Hopp and Spearman 2004).

Two initial takes a shot at lean standards were Taiichi Ohno's 1988 Toyota Production System: Beyond Large-Scale Production and Womack and Jones' Lean Thinking. Taiichi Ohno, one of the makers of TPS, states that there are two criteria for lean creation: in the nick of time (JIT) and automation. JIT is a drawing framework whereby generation at each progression does not start until it is motioned for by the client in the downstream stride. To bolster JIT, Ohno built up the idea of a Kanban, with six going with standards. Automation refers to self-sufficient mechanization. The objective is not to dispose of people from generation, yet rather to concentrate them on the most astounding quality parts of the practice.

The lean principles of assembling can enhance working execution by focusing on the flow of goods and materials through the esteem stream. In the first place, the different types of assembling waste must be recognized and disposed of. Waste can incorporate any action, step or process that does not include an incentive for the end client. Lean standards characterize the theory of lean; there are five fundamental rules of lean intuition highlighted by Womack and Jone in the year 2003. Of which they recommend that if supervisors apply these lean standards as ideas, they can pick up the advantages of the lean system and as it usually improves the competitive advantage.

There are a few key ideas after that each lean advancement framework is based. Also, there is the particular rule that must be a piece of each lean improvement prepare. A lean development guideline depends on recognizing information reuse and learning creation; performing advancement exercises simultaneously wherever conceivable; recognizing "great" emphases and "awful" cycles, and keeping up a procedure center all through.(Locher, 2008: p45).

The lean development principles are as follows:

1. Value

   Value is usually defined as an ability that is given to the client at the correct time at a suitable cost, as characterized for each situation by the customer. Value is essential to the lean standards. Value is also described by the client and is just

important when communicated as far as a particular item that addresses the clients' issues at a particular cost and at a particular time. The mistake that has been made by most producers is inside characterizing esteem: if consumers don't react, they include more extravagant accessories or modify the cost. At that point, if that does not work, they attempt an alternate promoting technique to showcase an item that clients don't need. They are inside centered, and esteem is lost subsequently. What they ought to be doing is reexamining the incentive from the client. Esteem must be characterized by a definitive client (Womack and Jones, 1996).

2. Value stream

The esteem stream is included the majority of the means and procedures required to bring a particular item from raw materials to the completed thing in the hands of the client. Breaking down the whole stream of an item will quite often uncover gigantic measures of waste and non-esteem included arrangements (Womack and Jones, 1996). This is as often as possibly alluded to as process re-engineering. Value stream examination will quite often demonstrate that three sorts of activities are happening along the esteem stream: steps that make esteem; actions that make no esteem yet are unavoidable because of current innovations or generation techniques or resources; and steps which make no esteem and are avoidable the quick focus of chance, regularly alluded to as low hanging organic product. To wind up plainly genuinely lean, a whole undertaking must examine and enhance the esteem stream all in all.

Value stream is the arrangement of all the particular activities required to bring a particular item through the three primary management activities of any business: the critical thinking errand running from idea through a detailed schedule that is outlined and build to create dispatch, the data administration undertaking running from request taking through point by point planning to conveyance, and the physical change undertaking continuing from crude materials to a completed item in the hands of the customer (Womack and Jones, 1996).

3. Flow

The description of the flow is "the dynamic accomplishment of errands along the esteem stream so that an item continues from configuration to dispatch, request to the conveyance, and crude materials under the control of the client without any stoppages,

scrap or the reverses." (Womack, p.306). When the value has been correctly indicated, the esteem stream for a particular item completely mapped by the venture, and inefficient strides disposed of, the time has come to make the rest of the means stream. These lean principles possibly involve the best takeoff from conventional considering. They identify with a universe of capacities and offices, with a conviction that exercises should be gathered by sort so they can be performed all more productively and oversaw all the more effectively. Likewise, it is judgment skills to perform exercises in clumps where items course through various arrangements and operations in clusters. This makes hold up times the bottlenecks while the subject sits tight for the following operation or grouping, or divisions change over to the kind of movement the item needs next. Traditional firms usually have got trust, since this keeps everybody occupied, it is proficient. Things work better when the emphasis is on products and its needs, instead of it being on the association or the hardware, so that every one of the exercises expected to configuration, request and the product is produced continuously.

The flow is the heart of the lean message that shortening the slipped by time from raw materials to completed products (or administration that prompt the best quality at the minimal cost and briefest conveyance time. One can’t see Toyota simply by putting machines together and providers and constraining one-piece stream where it doesn't fit (Liker, 2004). Flow inventory supports are utilized wisely where the nonstop stream is unrealistic in the day in day out. In any case, the perfect of stream gives a reasonable heading. At Toyota, it implies that utilizing little parcels, having forms near one another, and keeping the material traveling through procedures without interference is superior by delivering anything huge clumps of stuff and having them sit and hold up. Advantages of One-Piece Flow are Builds in Quality, Creates Higher Productivity, Frees up Floor Space, Improves Morale, creates real flexibility and Reduces Cost of Inventory.

4. Pull

It can be said Pull as the " a system of cascading production and delivery instructions from downstream to upstream activities in which nothing is produced by the upstream supplier until the downstream customer signals a need’ (Womack,.1996). The result of transforming all the departments as well as the patches into teams of products and the flow too. So the time that is usually needed of launching, giving out

the delivery of the goods, as well as the raw materials to the customers most of the times falls dramatically. Once the flow is introduced in the market, most of the products that may require many years to be designed are completed within few months. The takes many days to process are done within hours also. The physical product that involves weeks and months is also finished within days and minutes. Sincerely speaking by the use of the lean system, any product that is produced in any combination like that of shifting the demands is usually accommodated fast. It is also advisable for the company to let the customers describe the things the way they want it to be since will be comfortable with it as they are the users. Rather than the company to implement the product by themselves. The customer demand raises and becomes stable too once the client is in the position of knowing that they can get what they want and at the right time. And the time when the producers stop the pricing period of giving out the discounts through the campaign that is for selling the products that are not needed by the customers.

5. Perfection

This is the nonstop change part of Lean. By understanding the process today is usually imperfect and there is a requirement for ceaseless reevaluation of the procedure, or the products are important to stay focused and lean. Once the entire organization starts to specify the value accurately, identification of the whole stream, making value onto the steps of the products to flow continuously, letting the customers pull value of the enterprises then something great may happen. Then people begin by realizing that there is no need of ending reducing the effort of the process, cost, time, mistakes and space while giving out the product of lean principles. Perfection is said as the final principle in the thoughts of lean as they are achievable. The other principle usually interacts with each other and makes the flow of value to fast as it exposes wastes that are hidden in the value stream.

If the pull is hard, most of the obstacles are revealed of which they need to be removed. Most of the products that are directed to the customers have got ways of specifying values accurately and find a way of enhancing flow and pulling. Sincerely speaking in the lean system, almost everyone is involved; the suppliers, distributors, employees, customer, assemblers are in the position of seeing and therefore it is easy for creating value. There is also a positive feedback that is expected from the

employees so that there might be some improvements. So this is the key element of lean principles and powerful thing to have continuous improvement.

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.

2.2.4. Lean Implementation and Learning Organization in Higher Education

There are numerous definitions related with learning association. De Geus was the first who utilized the term in 1988, and he portrayed it as comparable to living elements with learning attributes. Geus in 1997 noticed that "in such association, arranging ought to be viewed as equal to learning." Senge (2008) characterized the learning association as a gathering of individuals cooperating by and large to upgrade their abilities to make comes about they think about. HE is an exceptionally remarkable piece of the general population subdivision with its usual way of doing things (Allen and Fifield, 1999). The scholastic ranges of HEIs are portrayed by a very individualistic authoritative culture that anxieties proficient self-governance (Tierney, 1988).

In outline, the exercise framework is a basic framework for an understudy to finish and solidify the subjects about which he/she has insufficient learning. All things considered, this framework may have weaknesses as well. The inadequacies which happened when the piece framework in the instructive foundation was inspected can be recorded as takes after: The understudies don't completely know the subjects about which they have insufficient learning. The educators don't think about which subjects the understudies have inadequate learning and how lacking understudies' information is. The arrival, i.e. utility, of exercises, can't be entirely measured. (Memika, Polat, 2015).

At the point when the inadequacies in the exercise framework are additionally viewed as the foreordained waste in "the Etude assurance process" can be given as takes after:

Waste of time: The learner who know the subject tune into a similar issue yet again amid the pieces actualized, which is an exercise in futility for both the understudies and the instructor.

Waste of documents and materials: Since the tests, and books given in exercises are not delivered by a particular framework, the archives and materials given to the learner who needn't bother with them are wastes

Waste of energy: Listening to the topic about which they have no inadequate information yet again and tackling inquiries concerning the subject are a misuse of vitality for understudies. Educating the topic again to the understudies who know the subject and conveying tests and giving them out to these understudies are pointless activities, superfluous transportation, and a misuse of vitality for instructors. (Memika, Polat, 2015).

At the point when procedures are steady, and waste and wasteful aspects turn out to be openly manifest, there is a chance to gain persistently from enhancements. To be a learning association, it is important to have dependability of faculty, moderate advancement, and extremely watchful progression frameworks to secure the hierarchical information base. To "learn" implies having the ability to expand on the past and push ahead incrementally, as opposed to the beginning once again and reexamining the wheel with new faculty with each new venture (Liker, 2004).

Most schools and colleges confront an endless battle to convey significant instructive administrations while in the meantime proceeding with a possible money related position. Many difficulties are confronting advanced education associations. For example, an atmosphere of constantly enhancing does not exist; there is additionally diminished subsidizing, interest for more noteworthy responsibility, and the view of training as costly and wasteful. The test is for HE directors, personnel, and staff to acknowledge the requirement for and advantages of process change. Any college confronts impediments related to the improvement of another program, for example, constrained educational modules space and accreditation obstacles. Lean projects likewise confront the constrained accessibility of and access to great educating

materials. Numerous educators might need to convey shelter understudies, however, are hesitant to do as such without the bolster that demonstrated classroom materials can give (Taninecz,). Lean has been connected to colleges on the grounds that most authoritative expenses are regulatory, work is finished quicker and all the more precisely, and efficiency and resolve are progressed

Lean generation has been actualized to numerous enterprises and field frameworks, and advanced education is one of these fields. Lean deduction changes the method for assembling as well as is an approach to enhance any sort of association. The instructive framework is one of these associations that considers utilizing lean standards to enhance the present framework (Alp, 2001).

Lean is a program of hierarchical change that enable every single specialist in an educational system (from understudy through director) to build her/his own execution and occupation fulfillment through process change. Lean connect with everybody in a streamlining his or her work forms by distinguishing and taking out the progression inside each procedure that are inefficient, pointless or don't contribute the incentive to work. By fusing an esteem including approach framework wide, schools can be more proficient in their operation and more powerful at convey their administrations, advance the learning execution of all understudies, and make a culture of accomplishment and fulfillment for all(Ziskovisky, 2011,).

Lean is as yet a moderately new way to deal with Higher Education change. Just amid the last 5-8 years colleges and schools started to explore different avenues regarding Lean standards. The mind greater part of cases canvassed in writing are from the US where most HEIs dependably worked in a focused market condition, and this manner are more open to private segmentation of the management rehearsal (Owlia & Aspinwall 1997). The majority of it falls under the class of dark writing, e.g. a few online papers with rather episodic confirmation (Moore et al. n.d.; Alp n.d.; Kusler n.d., see also Jin & Kachroo 2010). In these records, which don't meet scholarly models of experimental research, the creators commend the accomplishment of their Lean ventures, however, stay extremely dubious on the connected Lean approach and the quantitative results. A couple of insightful articles on the theme remain hypothetical (Dahlgaard & Østergaard 2000) or put each sort of change action in HE under the Lean heading (Comm & Mathaisel 2005, 2005) – again a case of ex-post legitimization.

Over lean thinking programs, many universities have qualified complete method developments and cost decreases. Many universities have received the benefits of lean thinking, which include lead-time reduction, an increase in throughput, inferior cost, and better student satisfaction scores (Waterson et al., 1999). Lean's roots are from industry, not academia, but lean organization can be successfully applied to HE organizations. The influence of lean in HE has been premeditated and established to be potentially useful. Reports examining lean in higher education have showed that lean principles are being successfully applied. The lean methodology has become more common in higher education organizations to reduce waste, streamline processes, and re-engage a workforce drained from the effects of the 2008 financial crisis (Balzer, 2010; Finn & Geraci, 2012; Radnor & Bucci, 2011). Universities and colleges are looking for better effectiveness in their academic programs and facility delivery areas and are making decisions to prioritize key areas (Dickeson, 2011).

Lean creations have been connected in numerous colleges around the globe and have demonstrated that enhanced fitness, cost decrease, and dispensing with misfortunes are the most regular goals of lean. A portion of the lean intuition enhancements acknowledged at numerous colleges (without staff diminishments) are recorded here:

1. University of Wisconsin: Reduced time allotment of a few research forms by over 80%.

2. University of Iowa: Saved $500,000 in the main year of the activity incorporating a diminishment in yearly mailing costs of $100,000.

3. University of Washington: Reduced process time allotment for stipends and decreases by 90%.

4 University of Notre Dame: Reduced contracting process by 66%.

5. University of New Orleans: Reduced the normal process duration for work force forms by 99% (Business and Finance Leadership Academy Action Learning Team, 2010).

6. University of Hungary: Increased proficiency by 94% and diminished expenses by 65%.

7. 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.

8. 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.

9. 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.

10.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).

Various articles, books and specialized reports are distributed identifying with usage of lean in advanced education. For example, Balzer distributed Lean Higher Education: Increasing the Value and Performance of University Processes, which contained reasonable counsel, contextual analyses, and speculations about how lean ought to be actualized in advanced education. He characterized lean in advanced education (LHE) as the estimation of procedures from the viewpoint of recipients, distinguishing process stream (i.e., Does each progression and movement in the process include esteem?), taking out the sorts of waste that include no esteem, making forms stream easily, and seeking after flawlessness through a mix of ceaseless change and radical change of the procedure. Balzer (2010) furnished cases with stream outlines and esteem stream mapping that indicated where forms separate because of squandered material or else time. He additionally highlighted where lean was viable

in enhancing grounds capacities thought to be wasteful (i.e., understudy enlistment, a move-in process for understudy habitations, changes to the physical plant).

Moreover, Comm and Mathaisel distributed two research papers about lean in advanced education in 2005. They initially introduced outcomes from LHE contextual analyses at various New England colleges. The creators contended that no settled quality estimation system existed around then in post-auxiliary instruction (with the conceivable exemption of a for every understudy cost). They utilized their past 2003 structure to depict contrasts in how open and private colleges were assessed. Besides, Finn and Geraci of the year 2012 distributed an exploration brief depicting lean usage at four colleges. They displayed data regarding why establishments had picked a lean approach as individuals from an official roundtable that is Education Advisory Board that were worried with the oversight of college money related issues. They watched that official level pioneers regularly presented Lean activities and outer experts were frequently contracted to supervise ventures. Lean activities normally intended to lessen the measure of time and assets required for procedures, institutionalized procedures crosswise over offices, or enhanced the nature of procedures. In each of the four cases, the oversight of Lean ventures happened through a focal office worried with quality activities, staffed by either workforce or staff individuals. They reasoned that lean tasks empowered establishments to spare time and assets, enhanced the quality and precision of procedures, and enhanced representative relations and fulfillment levels. Lean activities required in the vicinity of two and eight months to finish, contingent upon their intricacy.

Further, Radnor and Bucci said that an exploration report titled "Examination of Lean Implementation in UK Business Schools and Universities" for the Association of Business Colleges (ABC), a business college backing bunch in United Kingdom. The report concentrated on five contextual investigations to incorporate how lean was being utilized as a part of advanced education, where it originated from, and its encounters at these schools, including expectations about future of lean initiatives. Lean administration is not another idea, but rather it is new for the instruction business. Lean specialists have great qualifications and years of experience directing procedure change endeavors in assembling and administration organizations (Ziskovisky and Ziskovsky, 2007).

Lean is a helpful apparatus all in all, and the lean participatory approach specifically might be one of the strategies that can help advanced education colleges by advancing cross-departmental joint effort, expanded information sharing, and enhanced effectiveness. Lean impacts representative strengthening; it has been intended for strengthening, which is multidimensional. It can be presumed that the effect of lean creation on HE is certain on the grounds that lean expanding quality at framework, associating with best practices in the classroom and including new ones, supporting administration advancement at all levels and parts and helping the framework enhance learning for all understudies.

2.3. 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 includes, knowing other peoples; trade, culture, travelling and even their religion. The emergence of the political changes in countries within Europe in the sixteen century let to the importance of the other languages such as the French, Italians and the English. The emergence of other languages let o 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 has been introduced in the effort of teaching the foreign language effectively has led to the understanding of the learners needs. It has involves the changes in the proficiency of the leaner’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 refers to has 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 results of the common questions that is being ask in the language teaching process. Its 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 he 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 tto be language professionals. Teaching and learning of the language is much importance o 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 involves 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 involves 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 leaner 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.

2.3.1. Methods of English Language Teaching

The word technique is normally given lip-benefit as a clarification for the way a given educator approaches his/her instructing. It is a kind of umbrella term to depict the occupation of instructing another dialect. Frequently, a philosophy is comprehended to allude to strategies in the general sense, and at times it is even likened to particular educating procedures.

The strategy idea in education is an effective one, and the journey for better strategies was a distraction of numerous educators and connected language specialists all through the 20th century. Three decades prior, Edward Anthony (1963) gave us a definition that has outstandingly withstood the trial of time. His idea of strategy was the second of three various leveled components, specifically, approach, technique, and method. An approach, as indicated by Anthony, was an arrangement of suppositions managing the way of dialect, learning, and instructing. Strategy was characterized as a general arrangement for methodical introduction of dialect in view of a chosen approach Basic to every strategy is the conviction that the instruction rehearses the technique underpins more compelling and hypothetically solid reason for educating than the strategies that went before it. The technique for educating includes; the

standards and strategies utilized for direction to be actualized by instructors to accomplish the coveted learning in understudies.

These techniques are resolved incompletely by the topic to be educated and mostly by the way of the learner. For a specific instructing strategy to be suitable and proficient it must be in connection with the qualities of the learner and the kind of learning it should realize (en.wikipedia.org). Davis (1997) has recommended that the plan and choice of showing techniques must consider the way of the topic as well as how understudies learn. In today's schools, the pattern is to energize a ton of inventiveness. Human progression comes through thinking and unique idea of upgrade inventiveness.

The methodologies for instructing can be extensively characterized into instructor focused and understudy focused. In the instructor focused way, in order to deal with learning, educators are the fundamental expert figure in this model. Understudies are seen as "vacant vessels" whose essential part is to inactively get data with a ultimate objective of testing and appraisal. It is the essential part of instructors to pass learning and data onto their understudies. In this model, educating and evaluating are seen as two separate substances. Understudy learning is measured through equitably scored tests and evaluations. In the understudy focused way, educators are a specialist figure in this model, instructors and understudies assume a similarly dynamic part in the learning procedure.

The instructor's essential part is to mentor and encourage understudy learning and general understanding of the material. Understudy learning is measured through both formal and casual types of evaluation; including bunch ventures, understudy portfolios, and class interest. Educating and evaluating understudy learning is persistently measured amid educator guideline. Ordinarily utilized showing techniques may incorporate class support, exhibition, recitation, retention, or a blend of these.

English dialect education incorporates ten strategies: the linguistic use interpretation strategy, the immediate technique, the audio-lingual strategy, group dialect taking in, the Silent Way, Suggestopedia, add up to physical reaction, the regular approach, open dialect instructing, and undertaking based dialect learning.

Grammar-translation method: The principle motivation behind taking in an outside dialect is to have the capacity to peruse the composed writing of this dialect. The capacity to convey in the objective dialect is not an objective of remote dialect

guideline. Understudies just review the composed culture of the objective group and its expressive arts. Abstract (composed) dialect is better than talked dialect. A vital objective for understudies is having the capacity to make an interpretation of one dialect into the other (from L2 into L1 or the other way around). Dialect learning gives a great mental exercise. In a classroom setting, the correspondence medium is L1. An educator asks understudies in their local dialect, and understudies speak with the instructor in their local dialect. The principle aptitudes to be produced are perusing and composing. Little consideration is given to talking and tuning in, and no consideration is given to articulation. Hence, understudies demonstrate their perception by methods of composed dialect. (They work out their responses to perusing understanding inquiries.) The instructor is the specialist in the classroom. It is critical that understudies find the right solutions. The educator chooses whether an answer is right or wrong. In the event that the appropriate response is wrong, the instructor chooses an alternate understudy to supply the right answer or the educator herself/himself gives the correct answer. Understudies attempt to locate the local dialect reciprocals for every one of the words in L2 (word records). Learning is encouraged through concentrating the comparable focuses amongst L1 and L2. Understudies need to remember vocabulary. Also, understudies retain present state, past tense, and past participle types of one arrangement of unpredictable verbs. It is essential for understudies to find out about the type of the objective dialect. Hence, they are given language structure that runs straightforwardly and they apply the tenets to the given illustrations. Linguistic use tenets that are given deductively, in some cases sentence structure information is checked by requesting that understudies express the related linguistic use to run the show. Syntax interpretation has eight procedures: interpretation of a scholarly section, antonyms, equivalent words, cognates, deductive use of a control, fill-in-the-spaces, remembrance, arrangement, and utilizing words in sentences.

Direct method: This approach, otherwise called the "oral" or 'regular technique', begun around the 1900s as a contrasting option to the customary syntactic interpretation strategy. As of now, educators were beginning to try different things with instructive models as past procedures were neglecting to enhance talked correspondence. The immediate strategy depends on the immediate association of the understudy when talking and tuning in to the outside dialect just like manner ordinary

circumstances. Therefore, there is a lot of oral communication, unconstrained utilization of the dialect, no interpretation, and little if any investigation of linguistic use standards and language structure. The concentrate of the lessons is on great elocution, frequently acquainting learners with phonetic images before they see standard composition illustrations. The immediate strategy keeps on inciting interest and eagerness today, however, it is not a simple procedure to use in a classroom circumstance. It requires little classes and high understudy inspiration, and in the manufactured condition of a classroom it is hard to create normal circumstances of comprehension and certification adequate practice for everybody. Notwithstanding, variations of this strategy have been created in which the instructor permits constrained clarifications in the understudy's local dialect and discloses some language structure standards to right regular blunders an understudy may make when talking. The immediate strategy incorporates eight methods: perusing resoundingly, question and answer works out, getting understudies to self-amend, discussion hone, fill-in-the-clear activities, transcription, outline, and section composing. The fundamental attributes of direct technique are as per the following:

1. Lessons are in the objective dialect.
2. There is an attention on regular vocabulary.
3. Visual guides are utilized to educate vocabulary.
4. Specific consideration is set on the precision of elocution and linguistic use.
5. A precise approach is created for cognizance and oral expression.

Audiolingual method: : The following insurgency as far as dialect shows philosophy harmonized with World War II, when the United States wound up plainly mindful that she required individuals to rapidly learn remote dialects as a major aspect of its general military operations. The "armed force strategy" was all of a sudden created to construct informative capability in interpreters through exceptionally escalated dialect courses concentrating on oral abilities. This in blend with some new thoughts regarding dialect taking in originating from the controls of unmistakable semantics and behavioral brain research which went ahead to end up what is known as the audio-lingual strategy (ALM). This new technique fused a significant number of components common to the prior direct strategy, however the controls specified above included the ideas of showing phonetic examples in mix with something by and large alluded to as 'propensity framing'. This technique was one of the first to have its underlying

foundations "immovably grounded in phonetic and mental hypothesis" (Brown, 1994:57), which evidently added to its validity and presumably had some impact on the fame it delighted in over an expanded timeframe. It additionally impacted on the dialect instructing strategies that were to take after, and it can at present be found in major or minor indications of dialect showing technique even right up 'til the present time.

Another variable that represented the technique's notoriety was the brisk achievement it accomplished in driving learners towards informative ability. Through broad mimicry, retention, and over learning of dialect examples and structures, understudies and educators were frequently ready to see quick outcomes. This was both its quality and disappointment over the long haul, as commentators started to call attention to that of the strategy which did not convey regarding creating long haul to open capacity.

The investigation of etymology itself was to change the territory of second dialect learning turned into a teach in its own privilege. Subjective analysts grew new perspectives on learning as a rule, contending that mimicry and repetition learning couldn't represent the way that dialect learning included full of feeling and relational elements and that learners could create dialect structures and examples that they had never listened. The possibility that reasoning procedures themselves prompted the revelation of autonomous dialect lead arrangement (as opposed to "propensity development") and a conviction that emotional variables impacted their application made ready towards the new strategies that were to take after the audio-lingual strategy.

Similarly as with the immediate technique that went before it, the general objective of the audio-lingual strategy was to make open skill to learners. Be that as it may, it was believed that the best approach to do this was for understudies to "over learn" the dialect being concentrated through broad reiteration and an assortment of expound drills. The thought was to extend the phonetic examples of the dialect (in view of the investigations of basic etymologists) into the brains of the learners in a way that made reactions programmed and "routine." To this end, it was held that the dialect propensities for the principal dialect would always meddle, and the best way to beat this issue was to encourage the learning of another arrangement of propensities suitable phonetically to the dialect being contemplated. The audio-lingual strategy

incorporates eleven systems: exchange retention, in reverse develop (extension penetrate), reiteration bore, chain bore, single space substitution bore, numerous opening substitution bore, change bore, question-and-answer bore, utilization of insignificant sets, finish the discourse, and sentence structure amusements.

Silent Way method: In expansion to powerful hypotheses with respect to dialect taking in, another test to the audio-lingual strategy was at that point under route in the 1960s as the psychological code and an instructive pattern known as "disclosure Learning." These ideas most straightforwardly tested dialect learning as dealing with mimicry and great propensity development. An accentuation on human insight in dialect learning tended to issues, for example, learners being more in charge of their own picking up—detailing free theories about the principles of the objective dialect, testing those speculations by applying them, and acknowledging blunders. The Silent Way is a strategy for dialect educating conceived by Caleb Gattegno. Gattegno's name is outstanding for his recovery of enthusiasm for the utilization of hued wooden sticks called Cuisenaire bars and for his arrangement "Words in Color," a way to deal with the education of starting perusing in which sounds are coded by particular hues. His materials are copyrighted and promoted through an association he works called Educational Solutions Inc. in New York. The Silent Way speaks to Gattegno's wander into the field of remote dialect instructing. It depends on the commence that the instructor ought to be quiet however much as could be expected in the classroom and the learner ought to be urged to create however much dialect as could be expected. Components of the Silent Way, especially the utilization of shading diagrams and the hued Cuisenaire poles, became out of Gattegno's past involvement as an instructive fashioner of perusing and arithmetic projects. "Cuisenaire poles were first created by Georges Cuisenaire, a European instructor who utilized them for the education of mathematics. Gattegno had watched Cuisenaire, and this gave him the thought for their utilization in dialect instructing." The Silent Way imparts an incredible arrangement to other learning speculations and instructive theories. The Silent-Way incorporates the eight systems of sound-shading diagram, educator's hush, peer redress, poles, self-revision motions, word graph, fidel outline, and organized criticism.

Community language learning: In the mid-seventies, Charles Curran built up another training model which he called "advising taking in." This was basically a case of an imaginative model that essentially viewed as full of feeling elements as principal in

the learning procedure. Drawing on Carl Rogers' view that learners were to be viewed not as a class, but rather as a gathering, Curran's reasoning directed that understudies were to be thought as "customers," with their necessities being tended to by an "advocate" as the instructor. Dark colored (1994: 59), in remarking on this approach likewise noticed that "all together for any figuring out how to happen what is first required is for the individuals to connect in a relationship in which understudies and instructor consolidate to encourage learning in a setting of esteeming and valuing every person in the gathering." Curran was best known for his broad reviews on grown-up learning, and a portion of the issues he tried to address were the undermining way of another learning circumstance to numerous grown-up learners and the uneasiness made when understudies dreaded making "simpletons" of them. Curran trusted that the guiding learning model would help bring down the natural protections grown-up learners hurl, that the nervousness caused by the instructive setting could be diminished through the support of an intelligent group of kindred learners. Another critical objective was for the instructor to be seen as a compassionate helping specialist in the learning procedure instead of being seen as a risk.

The directing learning instructive model was likewise connected to dialect learning; in this frame, it wound up noticeably known as group dialect learning. In light of the vast majority of the standards above, Community dialect learning tries to urge educators to see their understudies as "entire" people, where their emotions, keenness, relational connections, defensive responses, and craving to learn are tended to and adjusted. Understudies regularly sit around, with the instructor (as the advisor) outside of the ring. They utilize their first dialect to build up a relational relationship in light of trust with alternate understudies. At the point when understudies need to state something, they initially say it in their local dialect, which the educator at that point makes an interpretation of back to them utilizing the objective dialect. The understudies at that point endeavor to rehash the English utilized by the instructor, and afterward understudies can react utilizing a similar procedure. This method is utilized over a significant timeframe, normally until understudies can apply words in the new dialect without interpretation, bit by bit moving from a circumstance of reliance on the educator advisor to a condition of autonomy. Group dialect learning has six average strategies: copying understudies' discussions, interpretation, reflection on experience, intelligent tuning in, human PC, and little gathering undertakings.

Suggestopedia: In the late 1970s, Bulgarian analyst GeorgiLozanov presented the dispute that understudies normally set up mental boundaries to learning—hindrances in light of fears that they will be not be able to perform and are restricted regarding their capacity to learn. Lozanov trusted that learners may have been utilizing just 5% to 10% of their mental limit and that the mind could prepare and hold considerably more material if given ideal conditions for learning. In view of mental research on extrasensory recognition, Lozanov started to build up a dialect learning strategy that concentrated on the "DE proposal" of the confinements learners think they have tried to give the kind of loose perspective that would encourage the maintenance of material to its most extreme potential. This strategy wound up plainly known as Suggestopedia (additionally, and rather confusingly, De-suggestopedia) — the name mirroring the use of the power "(de)suggestion" to the field of teaching method. One of the kind qualities of the technique was the utilization of delicate Baroque music amid the learning procedure. Rococo music has a particular cadence and an example of 60 beats for every moment, and Lozanov trusted it as a level of loose fixation that encouraged the admission and maintenance of sizable amounts of material. This expansion in learning potential was related with the increment in alpha cerebrum waves and a reduction in circulatory strain and the heart rate that comes about because of tuning in to Baroque music. Another perspective that contrasted from different techniques to date was the utilization of delicate agreeable seats and diminishes lighting in the classroom (different elements accepted to make a more casual perspective). The attributes of Suggestopedia incorporated the giving of finish control and expert to the educator (who on occasion can give off an impression of being some sort of instructional trance specialist utilizing this technique) and the consolation of learners to go about as "adolescently" as could reasonably be expected, frequently notwithstanding accepting names and characters in the objective dialect. These standards, when consolidated, were seen as making the understudies "suggestible" (or their feelings of trepidation of dialect learning "de-suggestible"), and, in this way, ready to use their most extreme mental potential to take in and hold new material. Suggestopedia has ten ordinary strategies: classroom set-up, fringe learning, positive proposal, perception, picks another personality, pretends first show, second show, essential initiation, and auxiliary enactment.

Total physical response: As ahead of schedule as the late 1800s, a French instructor of Latin by the name of Francois Gouin was working diligently contriving a technique for dialect showing that gained by the way youngsters normally take in their first dialect—through the change of observations into originations and afterward the statement of those originations utilizing dialect. His approach wound up plainly known as the arrangement technique, which includes the direct applied education of dialect utilizing a progression between associated sentences that are straightforward and simple to see, in light of the fact that the dialect being utilized can be specifically identified with whatever the speaker is doing at the prompt time of the articulation (i.e., one's activities and dialect coordinate each other). His reasoning was well relatively revolutionary, and the arrangement technique turned into a beneficiary of the energy encompassing the other new approach at the time of the immediate strategy. Add up to physical reaction has three normal procedures: utilizing summons to direct conduct, part inversion, and activity succession.

The natural approach: Stephen Krashen and Tracy Terrell built up the normal approach in the mid-1980s (Krashen& Terrell, 1983) in light of Krashen's hypotheses about the second dialect procurement. The approach imparted certain shared traits to Asher's aggregate physical reaction technique as far as pushing the requirement for a noiseless stage, sitting tight for talked generation to "develop" voluntarily, and underscoring the need to make learners as casual and as conceivable amid the learning procedure. Some vital hidden standards that ought to be a great deal of dialect "obtaining" instead of dialect "preparing," and there should be a lot of "understandable contribution" from the instructor. Significance is thought to be the quintessence of dialect, and vocabulary (not sentence structure) is the heart of dialect. As a component of the normal approach, understudies tune in to the instructor utilizing the objective dialect openly from the earliest starting point. It has certain similitude with the substantially prior direct strategy, with the essential exemption that understudies are permitted to utilize their local dialect nearby the objective dialect as a major aspect of the dialect learning process. In the early stages, understudies are not rectified amid oral generation, as the educator is concentrating on significance as opposed to frame (unless the mistake is drastic to the point that it really blocks meaning). Informative exercises win all through a dialect course utilizing the common approach, concentrating on an extensive variety of exercises including diversions, pretending,

exchanges, assemble work and discourses. There are three nonexclusive stages distinguished in this approach:

1. Preproduction: creating listening abilities;

2. Early generation: understudies battle with the dialect and make numerous blunders which are redressed in view of substance and not structure;

3. Extending creation: advancing familiarity through an assortment of all the more difficult exercises.

Krashen's hypotheses and the normal approach have gotten a lot of feedback, as far as the suggestion of a quiet period that is ended when understudies feel prepared to develop into oral creation and with respect to the possibility of understandable information. Faultfinders call attention to that understudies will rise at various circumstances (or maybe not in the least), and it is difficult to figure out which types of dialect information will be fathomable to the understudies. These variables can make a classroom that is basically exceptionally hard to oversee unless the educator is profoundly talented. Still, this was the main endeavor to make a broad and general approach instead of a particular technique, and the common approach drove normally into and large acknowledged standard for viable dialect educating: informative dialect instructing.

Communicative language teaching approach: Of all the techniques portrayed up to this point are typical of the advance outside dialect showing belief system experienced in the most recent century. These were strategies that traveled every which way, and impacted or brought forth new techniques, in a cycle that must be portrayed as the opposition between opponent strategies or notwithstanding passing crazes in the methodological hypothesis hidden remote dialect educating. At long last, by the mid-1980s or somewhere in the vicinity, the industry was developing in its development and moving towards the idea of a wide way to deal with dialect showing that included different strategies, inspirations for learning English, sorts of educators, and the necessities of individual classrooms and understudies themselves. It is reasonable for say that if there is any one umbrella way to deal with dialect showing that has turned into the acknowledged standard in this field, it would need to be the open dialect educating (CLT) approach.

Task-based learning: This idea compares the possibility of a "learning undertaking" to a dialect learning strategy in itself. This could be a critical thinking movement or a

venture, yet the undertaking has an unmistakable target, fitting substance, a working and application technique, and a set scope of results. The term errand based surely covers a wide range of elucidations, however it can for the most part to be characterized as "a bit of work embraced for oneself or for others, openly or for some reward. In this manner, cases of assignments incorporate painting a fence, dressing a kid, rounding out a frame, purchasing a couple of shoes. As such, by "assignment" implied the hundred and one thing individuals do in regular day to day existence, at work, at play, and in the middle of (long, 1985: 89). Richards, Platt and Platt (1992) additionally alluded to undertaking based as "an action which is intended to help accomplish a specific learning objective, for example, utilizing the phone to get data, drawing maps in view of oral directions" (p. 373). As of late, some origination of the undertaking has been chosen as the fundamental unit of examination in various methodologies, and there has been a consistent increment of enthusiasm for the utilization of assignment based contrasting options to second dialect instructing.

Three new, assignment based syllabus sorts showed up in the 1980s: the procedural syllabus and errand based dialect educating. They are all explanatory, sort B syllabuses (White, 1988: 44-112). With the appropriation of assignment based methodologies, the accentuation is set on learning forms instead of the final results of these procedures.

2.4. LEAN AND ENGLISH LANGUAGE TEACHING

Being a teacher is a standout amongst the most vital jobs on the planet. Educators' classrooms ought to reflect high showing guidelines and exemplify their vision of a protected, all around carried on, and persevering condition. Advanced education has experienced significant changes in cost and rivalry, yet the norm wins with regards to instructing. Since quite a while ago utilized instructional methods are losing their allure among understudies, payers, and managers. They need and merit better.

Squanders in instruction happen when time and exertion are used. However, understudies don't increase any new learning or aptitude. Cases of waste are showing subjects as of now instructed in different courses, the over the top survey of essential course materials, superfluous and erratic presentations, spoon-encouraging, educating out of date themes, and sitting tight for ill-equipped understudies to get up to speed.

As per Steve Albrecht and Robert Sack (2000), it gives the idea that the accentuation in bookkeeping instruction is not centered on esteem including exercises.

(Tatikonda, spring 2007, vol. 8, no. 3).

Lean Teaching is a commonsense guide for school and college educators who are occupied with ending up plainly better instructors. Lean is about learning regard for individuals because, without engagement, there is no learning and ceaseless change that essentially includes learning, nor are there movements in feeling that empower us to see things unexpectedly. A composed domain encourages youngsters to be more autonomous and enables educators to invest more energy in their understudies as opposed to investing time seeking to discover what is required. Most new businesses fizzle since they squander excessively time and cash constructing the wrong item before acknowledging past the point of no return what the correct item ought to have been. Accordingly, instructors ought to acquaint understudies with the possibility of the lean startup—an approach that has demonstrated effectiveness for some youthful cutting edge organizations (Eisenmann, 2011).

Lean is a theory of persistently rearranging forms and wiping out waste. Its uses are straightforward, and it offers straightforward devices that can be connected in any authoritative setting. Drawing on the inventive considering workers, an association can apply lean standards without immense capital uses. Associations applying lean standards experience huge outcomes, for example, increments in profitability diminish in deformities, decreases in stock, and enhanced time conveyances and money streams (Tatikonda, 2007).

Instructing confounded ideas, for example, lean reasoning to understudies or representatives who have never had any contact with it might be a very difficult undertaking. The test, when showing understudies, is to make a setting with the goal that they can envision and comprehend why lean rationality is imperative and how it can function. The test is to make an involvement with the majority of the significant specialized and also social ideas, for example, pull generation, process duration, work-in-advance, adjusting, cooperation, and correspondence (Dukovska-Popovska, 2014).

While lean process change is a new idea for the training business overall, some ground breaking teachers have connected this effective approach particularly to find approaches to enhance understudy learning. The consequences of these spearheading endeavors to recognize and kill squander in the educating and learning procedures are

predictable with the outcomes experienced by other lean associations—enhanced execution with cost funds (Zikovisky, 2007).

By applying a lean philosophy to the showing forms, educators can wipe out errands that don't include esteem and are along these lines inefficient, and they can concentrate their endeavors on the progression of instructing and learning. By applying the lean standards and strategies created in the business, instructors can refine the substance, instructional method, association, and appraisal techniques utilized in their bookkeeping courses to help and guarantee that understudies pick up the information and abilities that will make them most alluring to bosses.

Lean can be instructed all through a few strategies and apparatuses, for example, readings and class discourse, amusement and recreation based techniques, and the open discussion strategy. The readings and discourse technique presents understudies with the open door, and even the commitment, to express their Point of view on specific issues, requiring the understudies to think basically regarding the matter and utilize rationale to assess others' positions through open and dynamic cooperation. A portion of the advantages of utilizing readings and talk as a learning strategy, are that it encourages understudies to investigate and break down an assortment of points of view, it builds their scholarly snappiness and cooperation propensities; it builds up understudies' blend and joining aptitudes, and it prompts change (Bonwell and Eison, 1991).

This strategy has been connected by Hamzeh (2013) and Tsao et al. (2013), among different speakers at the American University of Beirut in a 16-week semester. Hamzeh gives a prolog to lean by including readings that relate to the Toyota way (Liker, 2003) and the change stream esteem hypothesis of creation (Koskela, 2000). After these readings, Hamzeh requests that the understudies post inquiries on the course site and these inquiries are utilized as a reason for a class talk. Rybkowski at Texas A&M University (Tsao et al., 2013) arranges readings and requests that understudies compose brief expositions that outline their decisions—a movement that is later trailed by a gathering talk and trade of thoughts. Tsao et al. (2012) at the University of Cincinnati timetable readings, for example, Critical Chain (Goldratt, 1997) to furnish understudies with an essential foundation.

The game-based methods (also known as “gamification”) which consolidate diversion like cooperations, might be the most well-known of the lean learning

procedures. These specific strategies show lean standards in real life and include the group of onlookers. With gamification, understudies can come up short with insignificant results and gain from their oversights. If an understudy falls flat, this essentially implies he/she needs to attempt to play again with another approach. Moreover, it advances a long haul maintenance of the learning picked up and of critical thinking abilities (Ghosh and Bhattacharjee, 2011). The diversion based approaches are foreign made from lean administration conditions, and they are extremely valuable to instruct and demonstrate some dynamic ideas, for example, persistent process stream, squander, pull arranging, inconstancy, creation leveling, joint effort, and collaboration.

The open classroom gathering is a dynamic showing technique in which understudies intelligently share considerations and gain from class discourses about contextual analyses and required readings. The reason for an open classroom gathering is to set up another instructional method for showing 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 relating to learning lean depends on the blended strategy for dynamic and team up strategies, with the plan to beat the constraints of the established techniques. Through this approach, understudies turn into the heroes of their learning, and instructors assume the part of consultants, managing the learning procedure as they advance in their explores (Blank, 1997; Harwell, 1997). The accompanying contextual investigations present how lean, a method customarily utilized just in the assembling business, is custom-made to the particularities of the advanced education forms and actualized.

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 the 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 enhance 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 enhancements 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.

STUDY #3

Facility: Large internal city open center school in a noteworthy metropolitan territory.

Project: Determination of how to enhance understudy scholastic accomplishment, particularly test scores on short-cycle indicative tests that empower staff to reexamine and enhance showing strategies and better plan understudies for state accomplishment tests.

Summary: The venture incorporated the meaning of the whole appraisal prepare, cross-utilitarian concentration group discourses, and coordinated effort to comprehend and streamline the whole procedure and exact estimations of the understudy execution results.

Results: The venture brought about a typical comprehension of the points of confinement of the remediation window, a lessening in the outcomes pivot time, and the empowering of educators to re-instruct recognized understudy zones of shortcoming. This finished in the change of understudy execution on accomplishment tests.

STUDY #4

Facility: An expansive provincial extensive secondary school serving sixteen neighborhood groups.

Project: Develop a showing framework joining cerebrum research and information examination to ceaselessly enhance understudy learning.

Summary: This venture was started as an endeavor to meet increased understudy execution prerequisites. It consolidated cross-useful group dialogs and the progressing coordinated effort of showing staff, understudies, and executives as equivalent accomplices in quality training. The venture additionally included information gathering and investigation, utilization of the discoveries, and open correspondence. Over the ten-year term of the venture, persistent refinement was made to the showing framework given input requested from all partners. Specific consideration was paid to outlining the framework to meet the necessities of tested learners, in this manner concentrating on client needs.

Results: The venture brought about the advancement of a broadly perceived arrangement of educating and discovering that accomplished a 65% expansion in the quantity of understudies passing the state dialect expressions appraisal test in one year.

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. All school forms in all divisions exist to bolster understudy learning. All are potential focuses for such change. On the off chance that the procedures are enhanced, at that point, the conveyance of instruction administrations is enhanced, which thus enhances learning. 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. The lean objective is, in the long run, to enhance quality in training; cost decrease is an optional advantage. Lean enables schools to refresh their procedures, decrease waste, and spare expenses while enhancing school execution (Zikovisky, 2007).

Lean usage on schools has two fundamental point: first Increase the learning yield for the students which Provide understudies with more opportunity for learning, educators with more opportunity for instructing, and increment the nature of educating, Second Improve the workplace for the instructors to Create a more alluring workplace at the school and evacuate "time hoodlums" in organization of classes (T. Netland, 2005).

2.4.1. 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 hider 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 mean 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).

Since value stream charting is one lean instrument that might be valuable to simplify continuous improvement of instructional delivery, an example is provided in Figures 1-4. Value stream charting is illustrated a three step process of:

1) Visually mapping (Figure 1) an instructional process in its current state (Figure 2) through the eyes of the stakeholder, the student.
2) Investigative the map for ways to upsurge value to the student (known as kaizen) and representative those on the present state map.
3) Enlightening the method from kaizen to form a future state map.

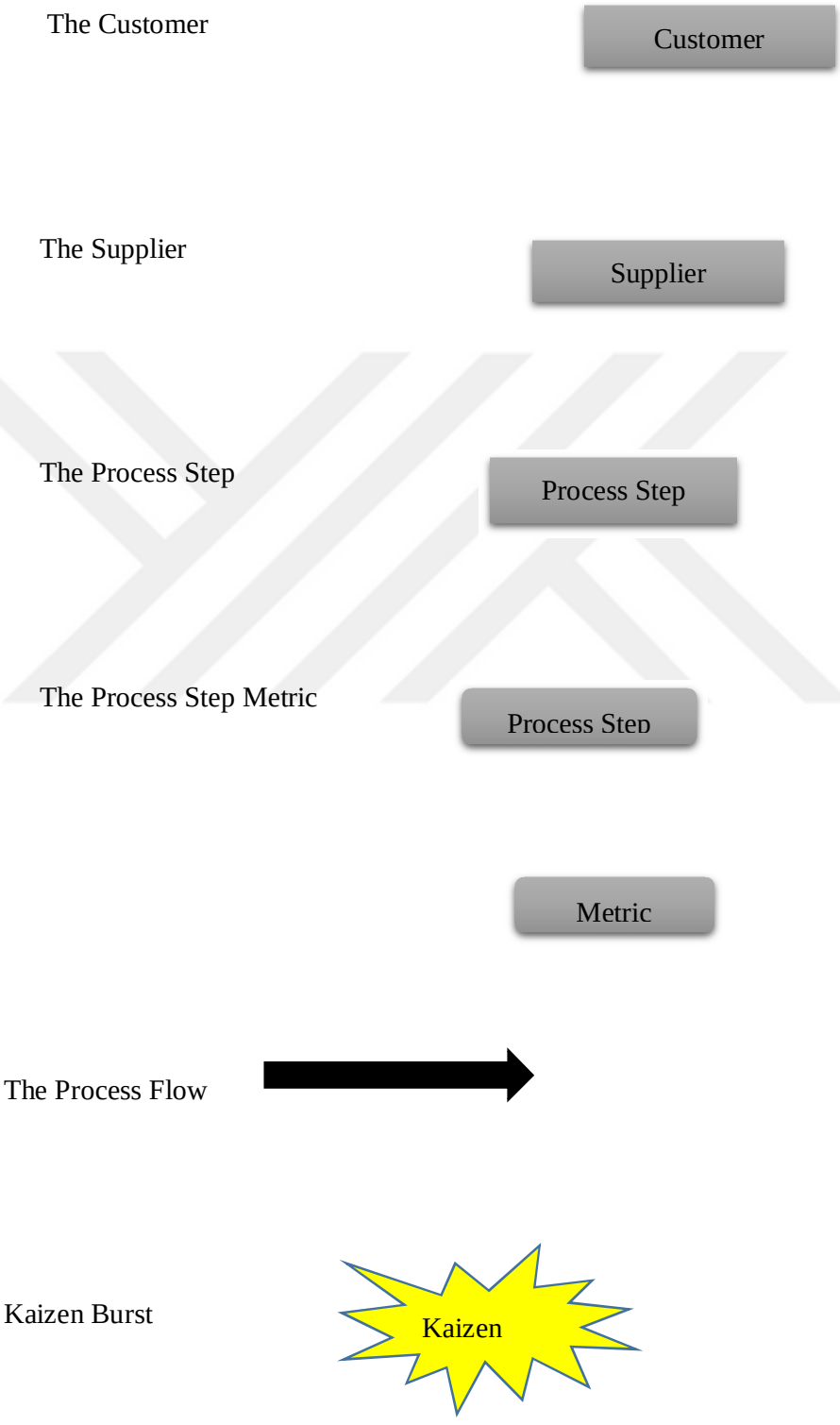
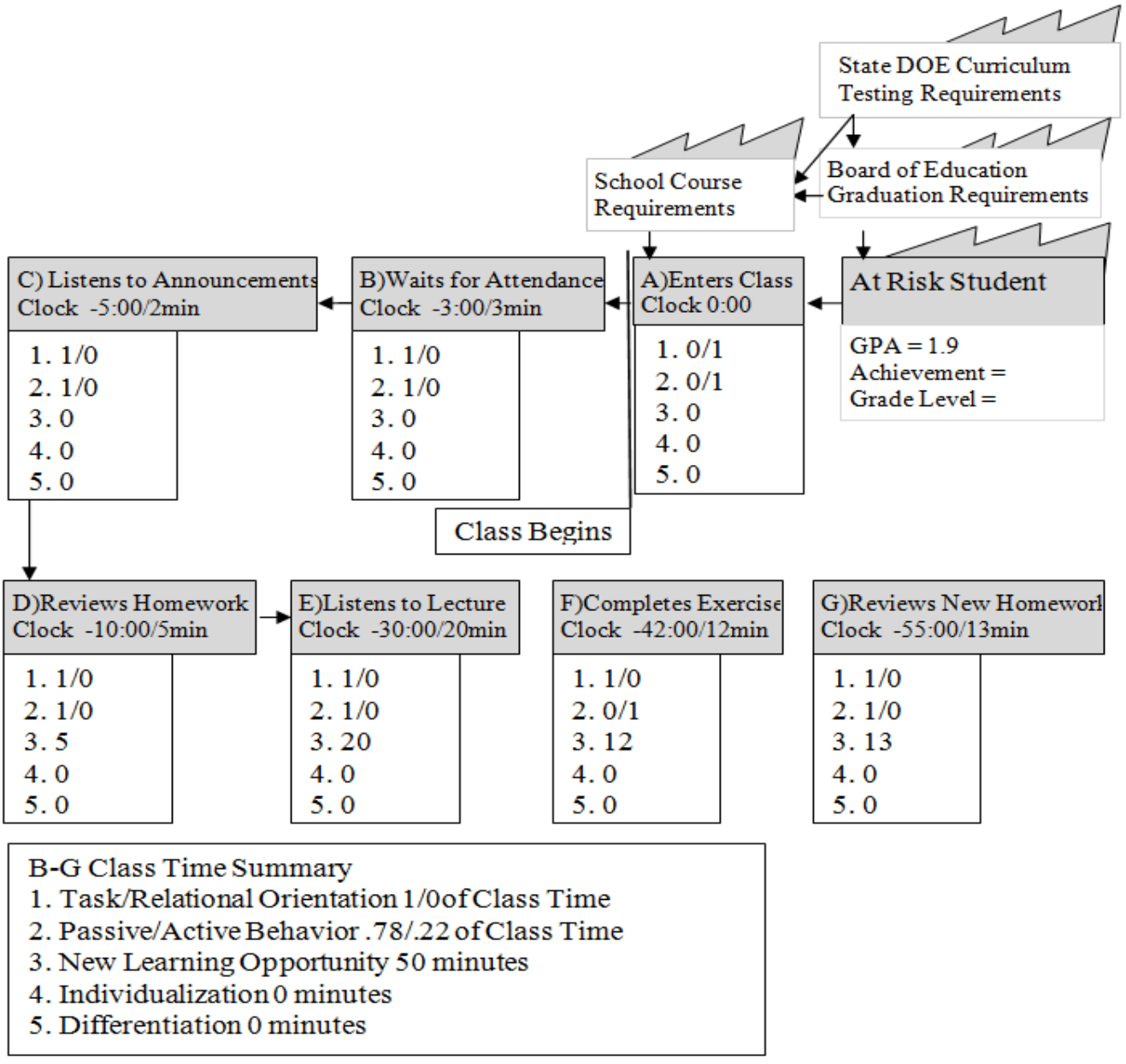


figure 1. Key elements of lean value stream map current state, kaizen, future state



Key-Process Box Metrics of Ideal Class Time Allocation for:	
Ideal - Actual Results	Number and Description of Metric
1/1 – 1/0	1.Orientation: Task/Relational (Teacher to Student Orientation Ratio)
0/1 - 1/.21	2.Passive/Active Student Behavior Ratio
55 - 32	3.New Learning Opportunity (Minutes)
55 - 0	4.Individualization (Minutes)
55 - 0	5.Differentiation (Minutes)

Figure 2. Sample classroom instructional delivery current state value stream map

Value stream maps evaluate each progression in a procedure by assigning out esteemed measurements all through and recognizing where enhancements can be made. These maps are normally attracted appropriate to left and utilize basic symbols, noted in Figure 1. Figures 1-4 show how esteem stream mapping is utilized to comprehend what a secondary school with a developing at hazard understudy populace can do to enhance direction (TechSmith, 2011). Figure 2 delineates customary instructional practice in one secondary school class (55 minutes) conveyed to the at-hazard understudy and how every movement in the class tolls against five measurements, imperative to the at hazard understudy.

These five measurements are:

1) The proportion of time dispensed to assignment/social exercises.

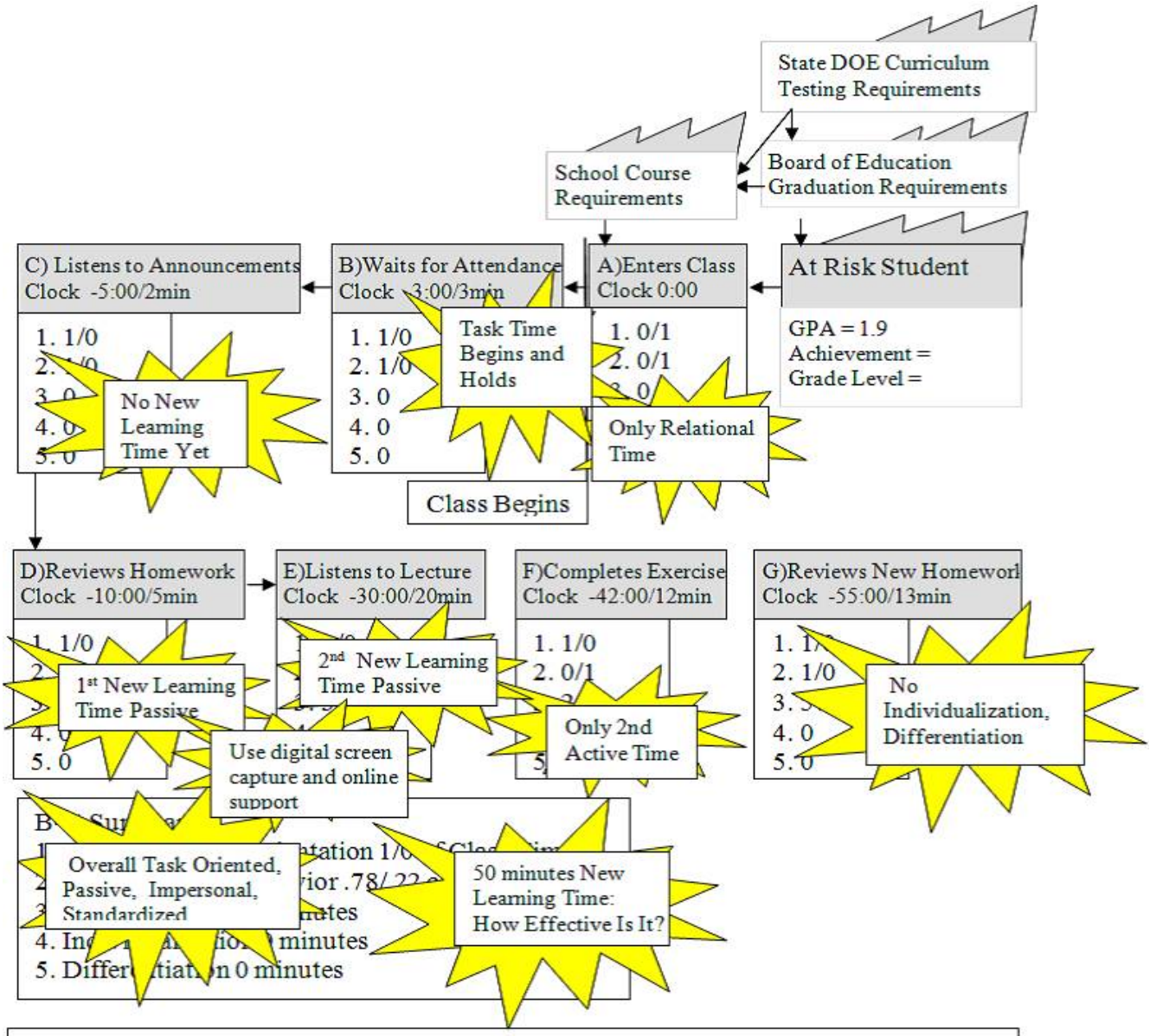
2) The proportion of time dispensed to uninvolved/dynamic learning.

3) The measure of time dispensed to new learning opportunity.

4) The measure of time distributed to individualization.

5) The measure of time distributed to separation.

For each class movement or process box, a metric box demonstrates the status of these five measurements. For every metric box, the outcomes can be totaled and after that contrasted with the perfect outcomes in the key gave. In the event that the real outcomes miss the mark concerning thought comes about, at that point conceivable purposes of change are distinguished, made arrangements for, conveyed, and reassessed, sanctioning persistent change. Figure 3. Test classroom instructional conveyance current state kaizen delineate change happened at the exhibition site, the at-hazard secondary school, around a few focuses, as potential zones of change were highlighted by kaizen blasts (Figure 3) (Flumerfelt, S., and Green, G.,2013).

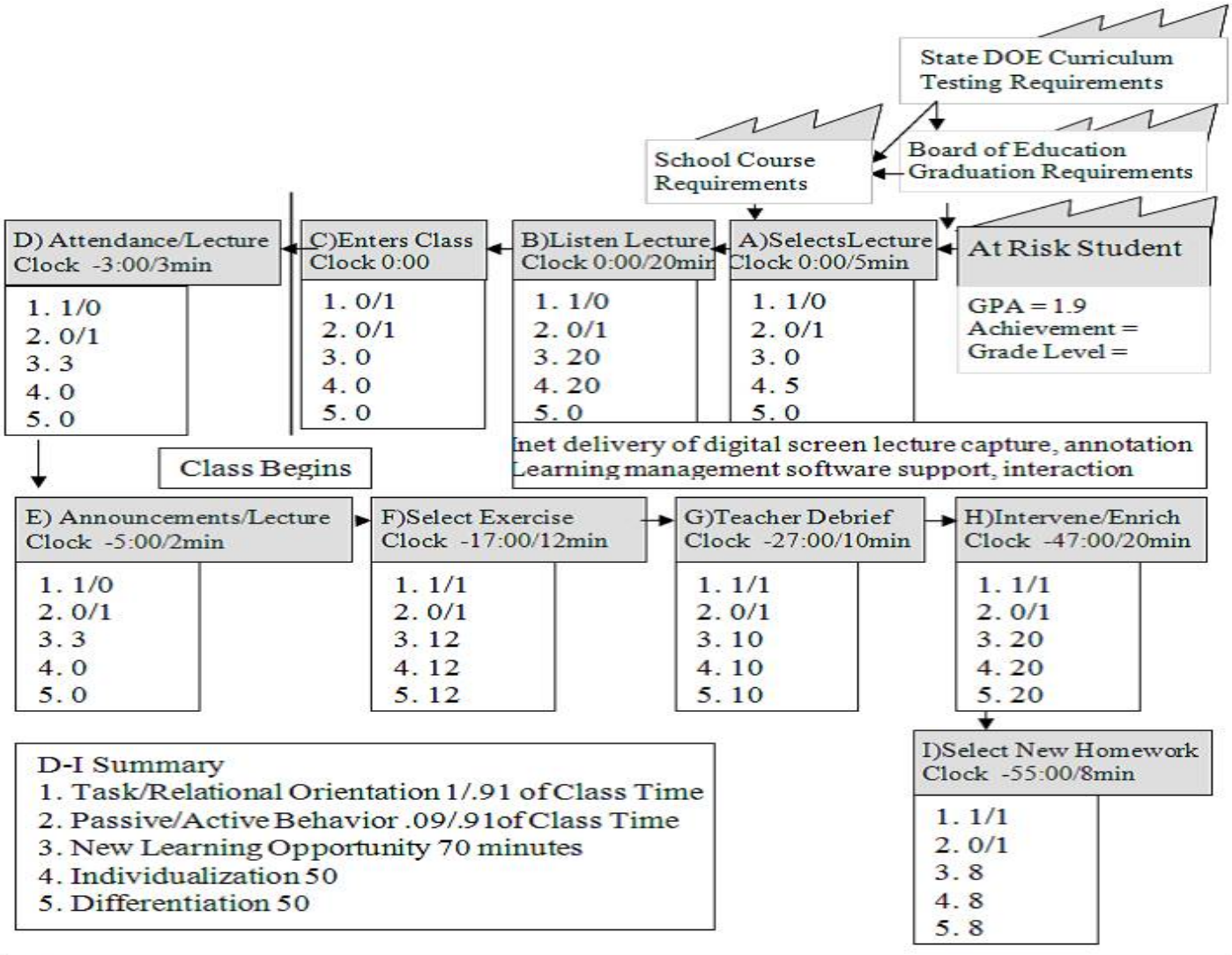


Key **Process Box Metrics of Ideal Class Time Allocation for:**	
Ideal Result	Number and Description of Metric
1/1	1.Orientation: Task/Relational (Teacher to Student Orientation Ratio)
0/1	2.Passive/Active Student Behavior Ratio
55	3.New Learning Opportunity(Minutes)
55	4.Individualization (Minutes)
55	5.Differentiation (Minutes)

Figure 3. Sample classroom instructional delivery current state kaizen map

As every individual procedure step was analyzed, change options originated from the craving to convey more esteem and in light of accomplishing better measurements for the student for each stage all the while. As showed, the school chosen to utilize instructional innovation to "flip" (Bergman and Sams, 2011) the utilization of classroom time far from address to encourage of individualized and separated guideline. This enormously affected the measurements by empowering educators to encourage adapting additionally amid class time and to convey content outside of class time. Moreover, the utilization of learning administration programming to encourage online assistance and support was additionally recognized, coming about again in change in classroom elements that prompt better measurements (Flumerfelt, S., and Green, G., 2013).

As the procedure change later on state, Figure 4 delineates how the school made an incentive by utilizing computerized screen catch innovation and web based learning systems. Screen catch is a product device that empowers an instructor to record anything that is on the PC screen, comment on it and include voice over. Once the recording was handled, it was transferred specifically to a video sharing website for dispersion through the web. Internet learning was utilized to give assets, learning gatherings, understudy checking and instructional help. The measurements in Figure 4 show the effect of these upgrades (Flumerfelt, S., and Green, G., 2013



Key **Process Box Metrics of Ideal Class Time Allocation for:**	
Ideal - Actual Result	Number and Description of Metric
1/1 – 1/.90	1.Orientation: Task/Relational (Teacher to Student Orientation Ratio)
0/1 - 0/1	2. Passive/Active Student Behavior Ratio
55 - 55	3.New Learning (Minutes)
55 - 50	4.Individualization (Minutes)
55 - 50	5.Differentiation (Minutes)

Figure 4. Sample classroom instructional delivery future state value stream map

Currently as stream maps in figures 2-4 indicate, the split in education cliffs has been bridged resulting to a better and completely different way in which teachers are delivering the content by adapting to the current technology. The bridging of the gap has paved a way for maximum utilization and application of the new technology in education. There is an improvement in the process of delivering content to students as both teachers and students participate fully. The digital screen capture gives the students an opportunity to reassess it, as it is a requirement of the proceedings performed thereafter. The stream maps further demonstrate an enhanced and conducive environment which enables students to manage the available time effectively as they get assistance or support from their colleagues or even their teachers. The teachers are in core position to perform responsibilities. In modernizing the learning system, the students are integrated together according to their needs. Instructional technology indicates an improvement to a better direction in which the students handle the instructions as given by the teachers which has led to a better position which has a positive implication in the way students draw their decisions.

Metrics further demonstrated continuity in improvement as a result of using the highlighted improvement tools such as lean tool and used metrics which was useful to both teachers and students. However, the decisions on the use of the metric knowledge and skills may not depict the only merit for the improvement solutions. The instructional technology solution equipped teachers with flexible knowledge and skills about grouping the students in considering the basis of their needs. This led to positivity in the attitude and competence of teachers in delivering their mandate. Based on the instructional time the teachers could choose and plan the lecture content on the basis of their ability and expertise to deliver the content in a more effective way to the students. The value stream maps, which are teacher based could be significantly used in referencing the subordinate improvements in relation to the metrics.

The improvements in the initial outcomes are auspicious. The improvements indicates an enhancement to a better and improved basis from a small class where students applied and used control group for comparison in a government related class to higher increments in performance compared to previous semesters. The results further demonstrate an increment in the rate at which students engage themselves in online activities and also a change in the rate of attempting homework compared to previous semesters. The percentage rate of successful students increased to a higher

percentage compared to previous periods. However, the students who were unable to meet their intended objective of success had their contact with the school being terminated; this was one amongst other consequences which the students encountered. Due to these changes, new grading system was designed from the perspective that there was an improvement out of adoption of instructional technology. The results further indicated betterment of the behavior of students as the disciplinary cases had declined by a higher rate.

This draws a conclusion that adoptions of the instructional technology and other standardized tools have driven the level of educations to higher position. The students had improved in English language as the rate of failing had declined. However, the implication of these improvements in instruction didn't alter the desire for continuous study on instructional technology.

In addition to these methods, simulation games are a method which provides useful skills and knowledge with an aim of improving students. This method has resulted to a better action in aptitude as it tries to solve the intricate challenges to its effective structure in order to educate students on the methodologies and techniques which precisely match their creativities and abilities. It is a problem based approach were the students are given the initial outlay of the topic or problem after which they research on their own to find the solutions required hence creating freedom of participation among the students in study. This method promotes intellectualism among the students. Currently institutions are employing too much effort to ensure that they will continue with the goal of continuity in challenging the new changes which is heavily awarding an improvement. However, schools in the modern society have a distinguishing characteristics compared to the schools over the past centuries which strived to achieve their own curriculums. Instead, the modern schools try to use a curriculum which has existed and already tried by other institutions with an intention of sorting students in consideration of their needs and their competence. However, this methodology does not guarantee a credential in the education system as it applies the odd criteria such that not all students are assured a place in the next level.

CHAPTER III
METHODOLOGY

3.1. PRESENTATION

The purpose of the study is to present and reveal how the lean improvement process can support the education system's development by focusing on teaching and research, by developing a culture of continuous enlargement and respect towards people. This chapter presents research design, data collection tool plus technique, data analysis.

3.2. DESIGN OF THE STUDY

In this study, a descriptive research design was carried out to define lean production and its integration in teaching processes. Hence, the aim is to investigate and understand as much as possible about the integration of lean methodology and its principles and how they may impact on teaching. A descriptive research is one in which evidence is collected without exchanging the atmosphere. Descriptive studies, in which the researcher cooperates with the participant, may include investigations or interviews to collect the necessary data, it is which the investigator does not interrelate with the participant contain observational studies of people in an situation and studies containing data collection using existing records.

Descriptive thesis are typically the best methods for collecting data that will prove relationships and define the world as it occurs. These types of studies are often done before an experiment to know what specific things to operate and include in an experiment. Bickman and Rog (1998) suggest that "descriptive studies can answer questions such as "what is" or "what was." Experiments can typically answer "why" or "how." Descriptive studies are aimed at finding out "what is," so observational and survey methods are frequently used to collect descriptive data" (Borg & Gall, 1989).

Descriptive investigation can be either quantitative or qualitative. It can contain gatherings of quantitative information that can be prepared along a range in statistical form, such as scores on a test or the number of times a person chooses to use a-certain feature of a hypermedia program, or it can describe groups of information such as gender or patterns of interaction when using technology in a group situation.

Descriptive study includes gathering data that describe proceedings and then organizes, arranges, illustrates, and describes the data collection (Glass & Hopkins, 1984). Most quantitative research falls into two parts: studies that describe actions, and studies aimed at discovering implications or causal relationships. According to Dr. Y.P. Aggarwal (2008) "descriptive research is devoted to the gathering of information about prevailing conditions or situations for the purpose of description and interpretation. This type of research method is not simply amassing and tabulating facts but includes proper analyses, interpretation, comparisons, identification of trends and relationships".

Descriptive research is "aimed at casting light on current issues or problems through a process of data_collection that enables them to describe the situation more completely than was possible without employing this method" (Fox, W. & Bayat, M.S. (2007)). According to Burns and Grove (2003:201), descriptive research "is designed to provide a picture of a situation as it naturally happens". It may be used to explain current exercise and make decision and also to improve ideas. Descriptive research studies are those studies which are apprehensive with re-counting the features of a specific person, or of a group, whereas investigative research studies define the frequency with which something happens or its suggestion with something else. (C.R.Kothari, 2004).

3.3. DATA COLLECTION TOOL AND TECHNIQUE

Qualitative researchers are interested about the validity of their statement. To decrease the probability of misunderstanding, we use various processes, including idleness of data gathering and technical challenges to clarification.

3.3.1. Interview

Interview is a technique of data gathering, material or outlook gathering that exactly contains requesting a set of questions. Characteristically, an interview exemplifies a meeting or conversation between people where private and communal communication arise. Interviews are mainly useful for receiving the story behind a participant's data. The interviewer can pursue in-depth information around the subject.

Interviews may be valuable as follow-up to positive respondents to questionnaires, e.g., to additional survey their replies. (McNamara, 1999). Kvale, 1996 stated that; "The qualitative research interview seeks to describe and the meanings of

central themes in the life world of the subjects, the main task in interviewing is to understand the meaning of what the interviewees say's".

3.3.2. Semi-Structured Interview

Semi-structured interviews are used frequently in strategy research. In semi-structured interviewing, a conductor is used, with questions and topics that must be covered. The interviewer has some caution about the order in which questions are requested, but the questions are standardized, and investigations may be provided to confirm that the researcher covers the exact material. This category of interview gathers detailed information in a pattern that is slightly conversational. Semi-structured interviews are regularly used when the researcher wants to investigate deeply into a topic and to recognize methodically the answers provided. (Margaret C. Harrell, Melissa A. Bradley, 2009).

3.3.2.1 Interview Question

An interview (also known as a structured, standardized interview or a researcher-administered survey) is a quantitative investigation technique frequently engaged in investigation study. The purpose of this method is to certify that each interview is offered with exactly the same questions in the same dispose. This assures that answers can be reliably combined and that evaluations can be made with assurance between sample subgroups or between different survey periods. Interviews are argumentation, usually one-on-one between an interviewer and a person, meant to gather information on a particular set of subjects. Interviews can be directed to person or over the phone. Interviews contrast from surveys by the level of structure placed on the communication (Margaret C. Harrell, Melissa A. Bradley.2009).

Structured interviews are a funds of gathering data for a statistical survey. In this case, the data is gathered by an interviewer rather than through a self-administered questionnaire. Interviewers read the questions exactly as they appear on the survey questionnaire. The choice of answers to the questions is often fixed (close-ended) in advance, though open-ended questions can also be involved within a structured interview.

The study has a set of questions that conducted to the response directly and they are:

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?

3.3.3 Questionnaire

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 participant 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 a assessable manner such as:

Never =1

Seldom =2

Sometimes =3

Usually =4

Always =5

Student were required to answer 35 statement. The total time allowed to fill the questionnaire was 24 hour. The item in the questionnaire were in statement form, English and Kurdish. The point for the responses were 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.

Level of the Strategy Use	**Mean**
	Always or almost always used
High	Usually used
Medium	Sometimes used
	Generally not used
Low	Never or almost never used

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 through lean learning strategies questionnaire and achievement grade of the students, they were sorted and evaluated in the computer environment using SPSS standard statistical analysis program. While assessing the frequencies and the percentage of the usage of lean learning strategies, the frequency and percentages that are on the column of 'sometime', 'usually', and 'always' were summed in order to find the total usage of lean learning strategies in the table of frequency and percentages.

3.4. 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."

3.5. 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.

CHAPTER IV
DATA ANALYSIS

4.1 PRESENTATION

The aim of the study was to describe lean method and to discover the extent to which the lean method can be integrated into English language teaching and learning. The result of each item will be discussed referring to the tables containing the frequencies, percentage of the student use of lean learning strategies.

4.2 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.

4.2.1. Data Analysis of the Quantitative Phase

4.2.1.1. 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.4.1 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 (4.2.)

Table 4.2: 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	1.	I use English language in my daily life.	3.9*	0.94	3.91
Pull-demand	2.	I feel bored in English language lesson.	1.8***	1.39	3.47
Synchronize the supply to the student externally	3.	Our teacher explains English language lessons clearly.	4.6*	1.34	3.27
Synchronize Internally	4.	We use technological materials in a lesson to make it more understandable.	2.2***	1.87	2.96
Create flow	5.	Our teacher uses map in the lesson.	2.0***	1.06	4.13
Create flow	6.	I write notes in English for improving my language.	3.0**	1.22	3.44
Synchronize Internally	7.	I write reports in English for improving my language.	2.5**	1.40	2.69
Create flow	8.	Lesson material in our school are put in a specific order.	4.0*	1.28	3.70
Synchronize the supply to the student externally	9.	I understand and participate the lesson.	4.5*	1.35	3.55
Synchronize the supply to the student externally	10.	Charts help me understand what teacher says.	3.5*	1.45	3.59

Synchronize the supply to the student externally	11. Diagrams help me understand what teacher says.	3.3**	1.40	3.22
Synchronize the supply to the student externally	12. There is a show-board in our class	2.9**	1.10	1.83
Synchronize Internally	13. Our teacher checks our homework in the lesson one by one.	4.1*	1.35	3.39
Create flow	14. I remember structures I have heard in class better than structures I have read.	3.4**	1.24	4.13
Create flow	15. In my classroom, I have a group participation to make a suggestion on problem resolution.	2.6**	1.32	3.81
Create flow	16. I take all the suggestion made by our teacher to improve my English language.	3.7*	1.36	2.63
Create flow	17. I usually make a revision on new structures.	3.5*	1.52	2.91
Pull-demand	18. I arrange my schedule to study and practice English regularly, not just for the exam.	3.5*	1.41	3.25
Pull-demand	19. I prefer group work to individual work.	3.2**	1.36	3.63
Pull-demand	20. 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	21. Our teacher encourages us continuously to improve my language.	4.1*	1.58	2.99

Synchronize the supply to the student externally	22. I use new English words in a sentence so I can remember them.	3.7*	1.36	3.69
Create flow	23. Our teacher uses projection in the lesson	2.6**	0.84	4.59
Create flow	24. I pay attention to my friend's mistakes.	2.9**	1.47	3.10
Synchronize the supply to the student externally	25. I write new English words several times.	3.2**	1.45	3.64
Synchronize the supply to the student externally	26. Our teacher makes us take notes in the lesson.	3.6*	1.57	2.80
Synchronize the supply to the student externally	27. I try to find as many ways of using new structure I've learned.	3.3**	1.32	2.79
Create flow	28. 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	29. I highlight the text in different colors when I study English.	3.7*	1.39	2.73
Create flow	30. I participate in debate discussions.	3.1**	1.33	2.20
Synchronize Internally	31. At the beginning of the class, I receive the daily homework schedule of English language lesson.	3.6*	1.07	2.01
Synchronize Internally	32. At the beginning of the class, I receive the weekly homework schedule of English language lesson.	2.7**	1.39	3.05

Create flow	33. I share the outcome of the new subject with my group through class debate.	2.7**	1.46	2.52
Create flow	34. 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	35. 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 sentences so I can remember It.' (Item 20) beside, 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 frequency of lean learning strategy utilize for the learner with high, moderate and low scope.

Table 4.3 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, Q31	4.1* 3.6*	1.35 1.7	3.39 2.01

	2.Synchronize the supply to the student externally	Q3,Q9, Q10,Q21, Q22,Q26	4.6*, 4.5* 3.5*, 4.1* 3.7*, 3.6*	1.34, 1.35 1.45, 1.58 1.36, 1.57	3.27, 3.55 3.59, 2.99 3.69, 2.80
	3.Create flow	Q16,Q17, Q29,Q34	3.7*, 3.5* 3.7*, 3.5*	1.36, 1.52 1.39, 1.27	2.63, 2.91 2.73, 4.01
	4.Pull-demand	Q1,Q18	3.9*, 3.5*	0.49, 1.41	3.91, 2.91
Moderate	1.Synchronize internally	Q32,	2.7**	1.39	3.05
	2.Synchronize the supply to the student externally	Q11,Q12 Q25, Q27 Q35	3.3**,2.9** 3.2**,3.3** 2.7**	1.40, 1.10 1.45, 1.32 0.83	3.22, 1.83 3.64, 2.79 4.51
	3.Create flow	Q15, Q6 Q24, Q28 Q30,Q33	2.6**,3.0** 2.9**,3.0** 3.1**,2.7**	1.32, 1.22 1.47, 1.53 1.33, 1.46	3.81, 3.44 3.10, 3.50 2.2, 2.52
	4.Pull-demand	Q19, Q20	3.3** 3.2**	1.40, 1.36	3.41 3.63
Low	1.Synchronize internally	Q2	1.8***	1.39	3.47
	3.Create flow	Q4	2.0***	1.06	4.13
	4.Pull-demand	Q5	2.2***	1.87	2.96

4.2.1.2 Finds 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 4.4: 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 4.4, the learner reported using create flow strategy with an average (28.20%), which was the highest frequent use. This means that the student try 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 lead 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 intends 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 aims 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.

4.2.1.3. Finds 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 4.5 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 4.2.1, 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 4.6

Table 4.6 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]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	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 effect on lean learning strategy.

4.2.2. 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 student 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 contain 4 participants. High level applicants (P1, P2, P3, P4), moderate level applicants (P5, P6, P7, P8) and low level applicants (P9, P10, P11, P12).

Table 4.7. Reported frequency of using interview questions by learner.

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

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
Moderate	Synchronize Lean Internally Strategies	How do you learn English? Do you highlight the right and important subjects?	L1,2,3,4, 5
Low	Synchronize Lean Externally Strategies	What do you do to practice English outside the class? How do you organize your learning? Are your materials always in the right places when you study English?	L7, 11,2,

*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 do 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 revels 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 lead 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.

4.2.2.2 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 make 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.

4.2.2.3 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 “l 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 conclude, 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 is 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.

CHAPTER V
CONCLUSIONS & DISSCUSIONS

5.1 PRESENTATION

In the previous part, data analysis and the results of the research were presented. This chapter cover the result of this study. In the conclusion part, discussions about the findings of the research will be in concern. Finally, suggestions and recommendation for further studies are made and implications of the study in teaching and learning environment will take their place in the current chapter.

5.2 SUMMARY OF THE RESEARCH

This research was carried out in 2016-2017 academic year at Gaziantep University. The total sample participants were 622 students from Sabis international school in Duhok city. This sample included 282 female and 340 male students.

The initial impartial of current research was to answer the research question "to what extent do the students use the lean strategies while learning English?" Data were collected by the means of lean learning strategies. The questionnaire administrated to the students of the Sabis International School in Duhok city.

In the earliest stage of the study, lean learning strategies questionnaire consisting of 35 items was conducted to 50 learners starting one level of the learners to test the validity and reliability of the questionnaire as an initial study. In order to size the reliability of the questionnaire the split-half and Alpha reliability were used. The split-half reliability coefficient was studied to be 0, 80 which was well-defined to be reliable for likert-type attitude balances.

There were 622 applicants from the total of 622 learners in the study from different levels (grade 3 level A, grade 4 level B, grade 5 level A, B, C, grade 6 level A, grade 7 level B, grade 8 level C grade 9 level A, grade 10 level A) in the English Preparatory School of Sbis International School of Duhok city.

5.3. CONCLUSIONS CONCERNING THE RESEARCH QUESTION #1 "WHAT IS THE FREQUENCY OF USING LEAN LEARNING STRATEGIES?"

According the results, the use of the strategies by inclusive students stays within the scope of high frequency (3.5-5.0) and moderate use (2.5-3.4). So, according to the outcomes, there was not low frequent use of any of the strategies (1.0-2.4). In addition, the whole average reported frequency of strategy use was 3.2, it can be determined that all students use lean strategies almost in equivalent amount. This shows that there is significant relationship between lean learning strategy use and the student

5.4. CONCLUSIONS CONCERNING THE RESEARCH QUESTION # 2 "WHICH LEAN LEARNING STRATEGY IS MOST FREQUENTLY USED BY THE LEARNER

All the students used the overall lean learning strategies according to the one way of assessing language learning strategy analysis by (mean: 9.84). According to the table 4.4, the learner reported using Create flow strategy with an average (28.20%), which was the highest frequent use, learner also 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 while learner reported using Pull-demand strategies with the an average (18.76%) to be the lowest frequent used by learner. in conclude, the learner prove that they use lean strategies in order to minimize waste and Non value added (NVA) tasks from production, invention design, and improve the value added (VA) process, Improve their learning process, seek to innovate for better learning, and resolve problem they face during learning process by themselves.

5.5. CONCLUSIONS CONCERNING THE RESEARCH QUESTION # 3 "IS THERE A RELATIONSHIPS BETWEEN GENDER OF THE STUDENTS AND THE USE OF LEAN LEARNING STRATEGIES?"

According to the correlation analysis result, gender has an influence on the use of strategies. According to the liner regression to find the relationship among gender and lean strategies use is statistically highly significant because of $p= 0.000$ ($P<0.01$). In sum, gender has an influence on the use of strategies, which mean that there is a relationship between gender and lean learning strategies. In addition, male student use lean learning strategies more frequently by (mean: 2.10) than female students (mean

score of lean strategies: 2.00) do as it revels in the below table. In conclude that male student use lean learning strategies more than female student do. This results means that there is relationships between gender of student and the use of lean learning strategies.

5.6. CONCLUSIONS CONCERNING THE RESEARCH QUESTION # 4 "IS THERE A RELATIONSHIP BETWEEN DURATION THAT STUDENT HAVE TAKEN ENGLISH COURSE AND THE USE OF LEAN LEARNING STRATEGIES?"

In order to know if there is a relationship between backgrounds of the study (the duration that they take English course) correlation test was computed. The results, point out that there was a significant negative correlation between stated frequency of lean learning strategy use and gender, duration of taking English (r= -.063 p>0.01, n=622). This means that There is negative correlation 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 the duration of taking English course and the use of lean learning strategies. Thus, there is not sufficient evidence to state that this correlation exists in the population According to these result we got to conclude that there is no relationship between duration that student have taken English course and the use of lean learning strategies.

5.7. DISCUSSION OF THE RESULTS

Lean management is new for education but it is an old concept. There are glaring differences between the products from the education service and those from a manufacturing assembly line. That said there are still some massive similarities in both delivery systems of the education service and the manufacturing assembly lines. This is due to the many complicated processes that both delivery systems are composed of. As such, many aspects of Toyota's process improvement methodologies and other Lean tools can and do apply to improving the processes of delivering education. (Ziskovsky, 2007)

Although the Lean Concept principles embraces the whole business most people tend to associate it principles specifically with manufacturing and production processes. The concept needs to be seen as a never ending journey that requires a strong beginning. The Lean concept is basically a commercial idea. From the literature one can gathers that the Lean Concept refines the overall company performance hence

supporting the organizations efficient operations. All organization intent on implementing the concept must be willing to review it as an emerging continually developing and vigorous concept. In spite of some misgivings from some quarters, it is safe to include other approaches without necessarily confronting the core ideals of Lean. Perfect examples include the overall equipment effectiveness (OEE) and the overall supply chain effectiveness (OSCE). The writing suggests that a major confusion is evident whereby critics are of the opinion that Lean's primary focus is solely manufacturing. The Lean concept and idea however mostly works best when applied on the entire organization and not sections. Its ideology is unrestricted and hence it's able to accommodate other instruments and methods that include TQM and Six Sigma.

In as much as the strategic components of the Lean Concept are multifaceted, the empirical evidence available today proves that when the concept is well managed and well executed as a total ideology, any organization using it is sure to reap major financial benefits.

Lean has strategic significance; it makes good business sense. Nonetheless, Lean cannot be implemented in a haphazard fashion as all the relevant components within the value chain have to be managed including the logistics, accounting, HRM, and suppliers whilst developing a conducive culture for Lean to flourish. (Springer, 2015).

This research was aimed at describing the lean strategy and to highlight the level to which it can be inculcated in the teaching and learning of English as a language while examining the effects of the strategy as a whole. Teachers are able to eliminate wasteful and useless task when they apply the lean concept in their teaching process. This allows them to put more of their energy on advancing the teaching and learning process. When players in the education industry apply the lean concept, they are able to refine the content, pedagogy, organization, and assessment techniques used in their accounting courses. This helps by ensuring that students gain job ready knowledge and skills that will give them an added advantage over other candidates applying for similar jobs hence more desirable to employing 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.

Due to the fact that the lean concept is relatively new and has not been used before in any school around the Iraq region, the findings from this research are not surprising. This does not however by any means imply that lean strategies are not useful in learning English. In fact from the results obtained in this study and from studies conducted by many researchers such as Betty Ziskovsky in 2010, it has been proven that that implementing the lean concept and its principles on schools the

student's data obtained thereafter proves it is a methodology for success. The lean concept application leads to improved learning performance, restored interest for learning and long term improvement in self-assurance and personal accomplishment. Despite the fact that this study was confined to one region of the world, its results prove that it has a wider applicability with potential for success in many other areas of the world and in various sectors too.

There is a general misconception that lean practices are only applicable within the manufacturing sphere. This is proven to be untrue in this research where we glean that the lean concept can be successfully utilized in the education sector and produce exemplary results both financially and psychologically by boosting the satisfaction levels of the students who apply it. The lean concept not only needs just the tools needed to make it a success but it also requires the active involvement of the participating students. The lean concept methodologies are used to get rid of non-value adding activities by use of unique approaches and techniques hence the many proposals put forward to use it as a means of streamlining workflow. For any organization to get great and satisfactory economic returns it needs to embrace a reengineering spirit and be motivated enough to apply the lean concept to its fullest potential.

Schools are constantly making efforts to challenge the established instructional practices in an attempt to not just alter the system for the sake of it but to also obtain positive results by taking part in value added improvement. For schools that aim to achieve the vision of the 21st century School, the ability to engage in continuous improvement must be their hallmark behavior. Daggett and McNulty (2005) endorse these approaches to school reform as a continuous challenge to the status quo as follows,

"As the demands to raise standards have become steeper, schools tend to rely on tried-and-true curriculum content and teaching approaches. However, this old methodology was intended for an education system whose mission was to select and sort students, not to move all students to high levels of proficiency. (p. 13)"

Since innovation and creativity massively contribute to the economic prosperity and to the social and individual wellbeing are also essential components for a more competitive and dynamic Europe, they are becoming ever increasingly vital for the evolution and development of the 21st century knowledge society. To foster

creative and innovative skills education must be the core pillar which is why creativity and innovation end up constituting a crucial role in the knowledge society. Furthermore since it's an ability that can be developed by just about anybody it can subsequently be fostered or inhibited. Key players in the education sector have the ability to unleash the creative and innovative potential in the younger folk hence they must have clarity of vision, be constantly aware of and adapt to change and understand what innovation is and entails so they can fully comprehend how the innovation can be enhanced. Judging the originality and value of an output entails seeing innovation as a relative attribute (Anusca Ferrari et al 2009).

According to Julian, and Steve, innovation demands concentration on process; it demands that we pay as much attention to how we teach or train as to which topics get covered along the way, or the tools that we employ. Innovation is best depicted by the introduction of a formative assessment rather than the normal situation where learning is merely viewed as the memorization of facts to be tested by an end-of-year examination. In a different setting where the norm is learning modules and criterion-referenced, continuous assessment introducing assessments through end-of-year written examinations of formal knowledge can be considered as innovation too.

However, although our growing knowledge of the change method and the valuable vision gained, many curriculum inventers and project managers still seen unaware of, or insensitive to, the features that lead to successful curriculum changes at classroom level, as the number of Greek innovation proves (Rea-Dickins, and Germaine, 1998). Project managers must of necessity develop a good understanding of the factors that lead to successful curriculum changes at classroom level. They need to develop a sensitivity to the culture of schools. They need to understand how people cooperate, what are their main concerns, what people need and then they must attempt to mould innovatory projects based on the school's needs and realisms.

As Versopoor (1989) pointed out, "the critical challenge in designing and programing is achievement congruence between constraints and opportunities created by external environments and the intuitional and educational demands of the innovation". In addition, teacher education must occupy the center step of any improvement effort. However, the accomplishment of any innovation that emphasis on preparation teachers for that particular innovation will be short-lived. By the time teachers will feel more comfortable in using particular innovation and it has become

established, other innovation will have been presented (Rea-Dickins, and Germaine, K. 1998).

Schools must engage effectively in continuous improvement more so because the familiar traditional models of instructional practice are increasingly getting reformed. This write up aims at linking the existing extant literature available on the need for continuous improvement, instructional improvement and instructional technology improvement so as to form a theoretical basis for eliciting intrigue in the translational work on the application of the lean concept as a tool for improvement in the sector of education. More so, in this write up there is a good example of one high school's venture into continuous improvement as well as a presentation on how value stream mapping can be applied to work through process improvement. There is also the use of impressive screencast video technology which is a good sign of academic achievement and behavioral referral improvements. All these gives a vivid experience in a pilot of a flipped classroom. It is hoped that this modest example will prompt further scholarly evidence-based practice and research to inform the field regarding viable organizational approaches to school improvement that link theory with practice.(Flumerfelt, S., & Green, G. 2013).

The tasks in this assignment were inevitably achieved in an organized, vigilant and chronological order of needs bearing in mind all the next steps in the process in order to ensure that the various parts of the complex jigsaw fit together. The material is the starting point for all the learning and the programmers have to comply with set standards for higher education studies. Similarly the outcomes and exit levels must be in sync with similar courses in other higher education institutions. A major challenge in developing the materials is achieving the balance between ensuring the full range of skills development whilst introducing sufficiently new and challenging content. Thus it was necessary to develop in broad detail the curriculum structure and the definition of the exact role of each within the course. Assumed learning from previous knowledge, elements to be learned for assessment and keys to the core of the course as well as elements for recognition and passive knowledge which were not to be specifically tested were developed and input as categories of learning with each area being defined for each skill area. Any key learning must be not only adequately covered but also presented in ways that provided opportunities for the learners to self-

test and to revise and consolidate as they moved through the course (Frank Heyworth, 2003).

The lean concept is not only a new way to organize the whole innovativeness, including the development of new products but it is also a new method of production. A lean organization is one that allows students to create products faster and cheaper and better because it provides more value to students. Given that the core principle of lean is that every process should add value as defined by the student, every step that does not add value, known in Lean as waste, should be eliminated to the extent possible. By applying lean innovation students can create instructions for learning. This is because the objectives are stated clearly to them in a manner that allows them to know what to expect. Furthermore the entire course is planned early in advance, hence there are existing standards in each course allowing the students to study at their own pace. They can also easily access the information online. With unit-perfection a requirement for advancement, students are assured of having a better understanding of the concepts taught.

Simply put, when ideas are decoded into new products and processes to create, improve, or expand business opportunities this is termed as innovation. By studying the foundations of Lean students gain insights for example on how to perform kaizen effectively and thus develop skills on how to come up with new products, processes and improve on existing ones. The lean concept is thus undoubtedly one of the most important organizational innovations of the recent management history and a driving force needed to stimulate the innovation process within existing establishments and in startups. The lean concept is more than just an improvement method because its necessities, basic assumptions, practices, and tools have the potential to transform an organization into a Centre of knowledge where ideas and innovations are generated.

The road creation sector also stands to benefit from applying the lean method to improve productivity. Companies and projects have successfully applied lean principles to optimize their processes. Sustainably implementing lean method requires relevant training. An important supplemental tool for teaching is simulation games which are very suitable in imparting lean principles. While learning a second language, successful second language learners are capable of using these strategies for the specified tasks and for their personal requirements as learner and are aware of the strategies they use and why they use them. The findings related with the student's

preference about learning English language contribute to this study and are useful for language teachers and researchers. Lean method has to be understood as a system and implemented with clarity and used appropriately in schools by the student who suffer at the hands of the shortcoming of our current educational system hence making it be extremely helpful. Lean helps academicians to superior understanding student's requirements by choosing and establishing course subjects and activities, changing teaching instruction and making faithful estimate of student learning. Lean principles decrease wastes and add more value without necessitating vast work more so in an environment of rising education system. Lean applications demonstrate highly significant outcomes in production, price, and school by illustrating on the intellect of individuals.

5.8 RECOMMENDATIONS.

Who becomes successful in their second language are careful on the strategy they use. They have the ability to use these strategy for a specified assignment and their requests as learners while learning the second language. Since the result of this study is satisfied with quite good number of participants, it recommended that this research should be conducted in a larger scale with different universities in various cities or distinct groups of participants since what is required is to be able to make more significant generalizations and beneficial confirmations on the results.

Also, the study could be repeated by different group of participants; with older students for instance as to see if the same results are true for them or a different proficiency levels could be chosen as respondents. Furthermore, the study can be repeated focusing on the achievement of each skill; reading, writing, speaking and listening. Gender and level differences would additionally be researched in other studies.

As to achieve efficient learning and teaching lean, education system has to carry required features that appeal to students and teacher's needs. However, the education system we are accustomed to be teacher-oriented and traditional one the efficiency of which is questioned by the researchers all the time. Change is needed at the core of the teaching system; both for the teachers and curriculum. As it is pointed out by Little (2005) if teachers are not well qualified to suit with the modern education approaches and not autonomous, it is not possible for them to bring up self-efficient, autonomous learners. Therefore, educators are to adopt different techniques and outputs of the studies to their teaching content.

Besides, since learning lean strategies are directly connected with English achievement, some courses aiming to make students acquire better learning strategies could be prepared with the target of improving language learning skills. It is significant for the learners and educators to have information about the learning styles and learning lean strategies in the language learning process. For instance, it would be effective to include required or influential learning lean strategies while teaching subjects or principles in each discipline. It would certainly make contributions on the students' academic success. And, also the instructors of these strategies are to be educated in teaching and assessing issues. Actually, at the very beginning, while setting a goal students are to determine strategical approaches, adapt them and arrange new strategies. Throughout the process, views of the learners and teachers have to be gotten as to assess the suitability of the strategies.

In addition, Chang, Liu & Lee (2007) express that it is really significant for the learners to perceive the benefits of using language strategies and teachers should serve the students with this fact whenever possible. The problem is that in spite of easy availibity of them, students are not aware of language learning strategies. Hence, it is occupation of the teachers to raise awareness and when they realize their use, students will be more willing and experienced to apply more.

Hines and Lethbridge [2008] argued that, ''Effective strategies and alignment can only be delivered through strong relationship, which in turn, will o0nly be successfully achieved in positive organization culture that is perceptive to learning and improvement '' this calls to the need for trustable and reliable and continued administrative governing uplift for lean incentive incorporating the need of controls take time to digest before improving the organization .A common mistake is the introduction of lean as the way of minimizing expenses which are the contrast to what methodology is, and it doesn't necessarily result in reduction of cost or just cost minimizing. Institutional heads should remember ''the time to embrace lean thinking is before an organization faces crisis and needs to change'' (Womack and Jones, 1996)

Lean methodology in the higher education is of great importance; it can help both the practitioners and him researchers. Lean production can also be used in higher education to improve the performance of the student. A published research project on the lean production in higher education will help the learning of the future students. The disadvantage of employing other methods of approaching the projects instead of

using the lean method is that it becomes difficult to generalize on completion. The lean program will base its studies on what is happening right now; it, therefore, solve the problems that exist in time. The information that should be obtained from the lean production is helpful on the practitioner as well as the researchers. (David E. Francis, 2014).

The research that is produced by different universities and colleges are unique since the capacity of production varies. It is therefore preferable for the universities and the colleges to practice the lean methodology to discover its maximum benefits. The advantages of introducing lean production in higher education will help in strengthening the businesses as well as opening good relation with other international institution. Furthermore, a loan program will help he continuity of the businesses within the sectors of higher education (David E.2014).

The administration of a firm or a business organization should decide on employing the lead paragraph in their production. They are therefore required to provide learning for their employees for them to know the use of the lean tools and the techniques that are involved. By the management, a cooperate model is required so that the workers of the firm will work together with the management staff for a quality product to be produced. This will help create a good environment for the management. For the employees of the organization to operate well, the management should give them a motivational gift that will encourage them to work harder. The management also has a role in keeping the records of the employees to let them go on with the same spirit of work (Lean Vet. 2017).

The impact that wills outcomes after the lean program is introduced in the higher education will be an improvement of sharing the important ideas with different students. The development of the student after the lean methodology will be a combination of the opinions contributed by many students. Through this the information of the etudes from both the student and the teachers will be obtained, the teacher can be evaluated using this information. In this case, the unnecessary use of some document can be easily eliminated and thiscase the quality and his performance of the student will be improved.

REFERENCES

Aggarwal Y. P. (2008), *Science of Educational Research, Nirmal Book* Agency.

Allen, D.K. & Fifield, N. 1999, "*Re-engineering change in higher education", Information Research***,** vol. 4, no. 3, pp. 1-30.

Altrichter, H., Feldman, A., Posch, P., & Somekh, B. (2008). *Teachers investigate their work; an introduction to action research across the professions***.** Routledge. (2nd edition).

Anusca, F., & R. C. (2009*). Innovation and Creativity in Education and Training in the EU Member States: Fostering Creative Learning and Supporting Innovative Teaching*. Luxembourg: Office for Official Publications of the European Communities.

Anthony, Edward M. (1963). *Approach, Method, and Technique. English Learning* 17: 63-67. An Arbor: University of Michigan Press.

Balzer, W. K. (2010*). Lean higher education: Increasing the value and performance of university processes*. New York: Productivity.

Bhasin, S., & Burcher, P. (2005*). Lean viewed as a philosophy*. Journal of Manufacturing Technology Management, 17(1), 56- 72.

Bicheno, J., & Holweg, M. (2009). *The lean toolbox. Buckingham: Picsie Buckingham.*

Bickman, L., & Rog, D.J. (1998). *Handbook of applied social research methods.* London: Sage Publications.

Blank, W. (1997). *Authentic instruction. In W.E. Blank & S. Harwell (Eds.), Promising practices for connecting high school to the real world (pp. 15–21).* Tampa, FL: University of South Florida. (ERIC Document Reproduction Service No. ED407586

Berk, R.A., (2003) *Regression Analysis:* A Constructive Critique, Newbury Park, CA, Sage Publications.

Bonwell, C., & Eison, J. (1991). *Active learning: Creating excitement in the classroom* (ASHE-ERIC Higher Education Report No. 1). Washington, DC: George Washington University.

Borg, W. R., & Gall, M. D. (1989*) Educational Research: An Introduction 5th. edn***.** New York: Longman

Borman, G. D., Hewes, G. M., Overman, L. T., & Brown, S. (2003). *Comprehensive school reform and achievement: A meta-analysis. Review of Educational Research, 73(2), 125-230. Retrieved from* http://www.jstor.org/stable/3516091.

Bowen, H. K., & Spear, S. (1999). *Decoding the DNA of the Toyota Production System*. Harvard Business Review, 77(5), 97–106.

Brown & Douglas H. (1994). *Teaching by Principles: An Interactive Approach to Language Pedagogy*. Englewood Cliffs: Prentice Hall Regents,

Burns, N., & Grove, S.K. (2003). *Understanding Nursing Research***,** Saunders, Pennsylvania.

Chang, C. Y., Liu, S. C., & Lee, Y. N. (2007*). A Study of Language Learning Strategies Used by College EFL Learners in Taiwan*. Mingdao Journal of General Education, 3, pp. 235-261.

Clare L. C., & Dennis F.X. Mathaisel, (2005). *"An exploratory study of best lean sustainability practices in higher education"***,** Quality Assurance in Education, Vol. 13 Issue: 3, pp.227-240.

Cohen, L., Manion, L., & Morrison, K., (2000) (5th Edition). *Research Methods in Education*, London: RoutledgeFalmer

Corbett, S. (2007). *Beyond manufacturing: The evolution of lean production. The McKinsey Quarterly*. Vol 3, pp. 95-105.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research (2nd Ed.)*. Thousand Oaks, CA: Sage.

Daggett, W. R., & McNulty R. *J.* (2005). *Best practices of high performing high schools [Electronic version]*. Leadership, 34(4), 12-15.

Dahlgaard, J.J., & Østergaard, P. (2000*) TQM and lean thinking in higher education" in M.N. Sinha, ed., The Best on Quality*: Targets, Improvements, Systems, Volume 11 of International Academy for Quality Book Series, Milwaukee, pp. 203-226.

David E. Francis, (2014*). Lean and the learning organization in higher education*. Canadian Journal of Educational Administration and Policy, Issue #157, April 28, 2014

Davis, N. E. (1997). *Framing Teacher Professional Development (Editorial),* Journal of Information Technology for Teacher Education, 6, pp. 109-114.

David A. Freedman (2009). *Statistical Models: Theory and Practice*. Cambridge University Press. p. 26. A simple regression equation has on the right hand side an intercept and an explanatory variable with a slope coefficient. A multiple regression equation has two or more explanatory variables on the right hand side, each with its own slope coefficient

de Geus, A. (1988). *Planning as learning. In K. Starkey (Ed.*), *how organizations learn.* London: International Thomson Business.

de Geus, A. (1997). *The living company. Cambridge, MA*: Harvard Business School Press.

Donovan, M.S. (2007). *How people learn - bridging research and practice*. Washington: National Academy Press.

Dukovska-Popovska1 , V. Hove-Madsen2 , & K.B. Nielsen3, (2014). *Teaching lean thinking through game: some challenges***,** Aalborg University, Department of Production, DK-9220 Aalborg, Denmark Education. Retrieved from https://youtu.be/MtC4WToqVv0 .

Edwin van Teijlingen, (2014). *Semi-structured interviews.* BU Graduate School, England: Bournemouth University.

Eisenmann T., & Ries E and Dillard S (2011). *Hypothesis-driven Entrepreneurship*: the lean startup Harvard Business School Background Note 812-095

Ekmekci, F. Ö. (1999). *Research manual for social scien***ces.** Vol. 2 Selt Publication.

Farook R. Hamzeh, & Cynthia C.Y. Tsao et al., (2013). *Teaching lean construction – perspectives on theory and practice.* Proceedings IGLC-21, July 2013 | Fortaleza, Brazil

Field, A. P. (2009). *Discovering statistics using SPSS (and sex and drugs and rock' n' roll) (3rd ed.).* London: Sage.

Finn, L., & Geraci, L. (2012). *Implementing Lean for process improvement: Strategies and recommendations for process improvement in financial affairs.*

Education Advisory Board, University Business Executive Roundtable.

Flumerfelt, S., & Green, G. (2013). *Using Lean in the Flipped Classroom for At Risk Students.* Educational Technology & Society, 16 (1), 356–366.

Fox, W., & Bayat, M.S. (2007). *A Guide to Managing Research; Cape Town*: Juta & Co. Ltd

Gault, RH (1907). *A history of the questionnaire method of research in psychology.* Research in Psychology. 14, 366-383.

Gay, L., Mills, G., & Airasian, P. (2006). *Educational research: Competencies for analysis and applications.* New Jersey: Pearson Education, Inc.

George, M. L., Rowlands, D., Price, M., & Maxey, J. (2005). *The Lean Six Sigma pocket toolbook.* New York: McGraw-Hill.

Gillham, B. (2000). *The Research Interview.* New York: Continuum.

Glass, G. V., & Hopkins, K. D. (1984). *Statistical Methods in Education and Psychology (2nd Ed.).* Englewood Cliffs, N. J.: Prentice-Hall.

Harrell, M. C., & Bradley, A. M. (2009*), Data Collection Methods – Semi Structured Interviews and Focus Groups,* Rand national Defense research institute, Santa Monica: Rand Corporation.

Hines, P., &Lethbridge, S. 2008. "*Creating a Lean University*" Public Money and Management 28 (1): 53-56.

Hines, P., Holweg, M., & Rich, N. (2004), *'Learning to evolve: A review of contemporary lean thinking, International Journal of Operations & Production Management***,** vol. 24 no.10, pp. 994-1011.

Hopp, W. J., & Spearman, M. L. (2004). *To Pull or Not to Pull: What is the Question? Manufacturing & Service Operations Management*, 6 (2), 133-148.

Horsley, D., & Kaser, J. (1999*). How to keep a change initiative on track.* Journal of Staff Development, 20(4), 41-45.

Houston, D. (2008). *Rethinking quality and improvement in higher education*. Quality Assurance in Education, 16(1), 61–79.

Howatt. A.P.R. (1984). *A History of English Language Teaching 1984.*

Imai, Massaki (1997). Gemba Kaizen: *A Commonsense, Low-Cost Approach to Management***.** McGraw-Hill Publishing Company, Improvement, Productivity Press, Cambridge, MA.

John D. Bransford, Ann L. Brown, & Rodney R. Cocking. (2003). **"***How People Learn Brain, Mind, Experience, and School."* National academy press Washington, d.c.

John M. Gross, & Kenneth R. McInnis (2003). *Kanban Made Simple: Demystifying and Applying Toyota's Legendary Manufacturing Process*, Volume 1.

J. E., & S. M. (2013). *Innovation in pre-service education and training for English language teacher*. London, UK: British council.

Kelly. L.G (1969). *25 Centuries of Language Teaching 500 BC***.** Newbury House Publishers; First edition

Keyte, B., & Locher, D. (2004). The complete lean enterprise: *Value stream mapping for administrative and office processes*. New York, NY: Productivity Press.

Kothari, C. R. (2004). *Research Methodology: Methods and Techniques***.** New Age International (P) Ltd., Publishers Published by New Age International (P) Ltd., Publishers.

Krafcik, J., (1988). *Triumph of the lean production system. Sloan Management Review*, 41, 41–52.

Krashen, S.D., & Terrell, T.D. (1983*). The natural approach: Language acquisition in the classroom*. London: Prentice Hall Europe.

Kvale, S., & Brinkmann, S. (2009). *Interviews: learning the craft of qualitative research interviewing*. *(2nd edition).* Thousand Oaks, CA: Sage.

Kvale, S. (1996**).** *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.

L. Akshmi., & T. Atikonda. (2007*). Applying Lean Principles to Design, Teach, and Assess Courses:* spring 2007, vol. 8, no. 3.

Lean Education Academic Network (2011). *Teaching lean [Website*]. Retrieve from http://www.lean.org/lean_education_academic_network. pdf

Lean Enterprise Institute (Producer) (2007). *A Wall Street view of lean transformation, Cliff Ransom [Podcast]*. Retrieve from http://www.lean.org/events/webinarhome.cfm

Lean Enterprise Institute (Producer) (2010). Womack on lean management: A live video seminar [DVD]. Cambridge, MA: Lean Enterprise Institute.

LeanVet. (n.d.). Retrieved Jan20, 2017, from http://www.leanvet.eu/

Lee, B. Jo, H. (2007). *The Mutation of the Toyota Production System: Adapting the TPS at Hyundai Motor Company*, International Journal of Production Research, Vol 45, Iss. 15/16.

Lessard-Clouston, M. (1997). *Language learning strategies: An overview for L2 teachers.* Internet TESL Journal 3(12). Available: http://iteslj.org/Articles/Lessard- Clouston-Strategy 18 Sept. 2014.

Levitt, T. (1972*). Production-line approach to service.* Harvard Business Review, 50(5), 20-31.

Lightbown, P. M., & Spada N. (2013*). How Languages are learned*. Oxford: Oxford University Press.

Liker, J. (2004). *The Toyota Way, 14 management principles from the world greatest manufacture*r. New York: Mc-Graw-Hil.

Liker, J.K. (2003). *The Toyota Way 1st ed***.**, New York: McGraw-Hill

Lindlof, T. R. & Taylor, B. C. (2002*). Qualitative communication research methods (2nd ed).*Thousand Oaks, California; London; New Delhi: Sage Publications.

Little, D. (2005). *The Common European Framework and the European Language Portfolio*: involving learners and their judgements in the assessment process. Sage journals online, 2-17.

Locher, D.A. (2008). *Value stream mapping for lean development: a how to guide for streamlining time to market*. New York: Productivity Press.

Lodico, M., Spaulding, D., & Voegtle, K. (2006). *Methods in educational research: From theory to practice*. San Francisco: Jossey-Bass.

Long, M. H. (1985). *A role for instruction in second language acquisition: Task-based language teaching. In K. Hyltenstam, & M. Pienemann (Eds.)*, Modeling and accessing second language acquisition (pp. 77-99). Clevedon: Multilingual Matters.

McNamara, Carter, PhD, (1999). *General Guidelines for Conducting Interviews,* Minnesota.

MEMIKA. T., & POLAT. T. K. (2015). *Lean education system: a case study***,** 16th International Academic Conference, Amsterdam.

Monden, Y. *(1983). The Toyota Production System, Productivity Press*

Nelson, Richard R. (1982**).** *An evolutionary theory of economic change.* Harvard College.

Netland, T. (2017). *Lean in the primary school?* Better operations Norwegian October 8, 2015, Web.

Nunan, D. (1992). *Research methods in language teaching*. Cambridge: Cambridge University Press.

O'Donoghue, T., & Punch K. (2003) *Qualitative Educational Research in Action*: Doing and Reflecting. London: Routledge.

Ohon, T. (1988). *The Toyota Production System: Beyond Large-Scale Production***,** Productivity Press, OR.

Ott, B. (2000). Grundlagen des beruflichen Lernens und Lehrens*: ganzheitliches Lernen in der beruflichen Bildung*. Berlin: Cornelsen. Germany.

Oxfam GB, Oxfam House, John Smith Drive, Cowley, Oxford, OX4 2JY, UK. *Conducting semi-structured interviews***.** Published by Oxfam GB under ISBN 978-1-78077-218-9 in November 2012. Oxford university press.

Patton, M. Q. (1989*). Qualitative evaluation methods.* Beverly Hills, CA: Sage.

P. R., & Germaine, K. P. (1998). *Managing evaluation and innovation in language teaching: building bridges* (1st ed.). New York, USA: Addison Wesley Longman limited.

Pellicer, E., & Ponz-Tienda, J. L. (2014). "*Teaching and learning lean construction in Spain: a pioneer experience***.**" Proc. of the 22nd Ann. Conf. of the Int´l Group for Lean Construction. Oslo, Norway.

Radnor, Z. J., & Bucci, G. (2011). *Analysis of Lean implementation in UK business schools and universities***.** London: Association of Business Schools.

Rencher, Alvin C., &Christensen, William F. (2012). *Chapter 10, Multivariate regression – Section 10.1, Introduction*, Methods of Multivariate Analysis, Wiley Series in Probability and Statistics, 709 (3rd ed.), John Wiley & Sons, p. 19, ISBN 9781118391679.

Richards, J.C., & Rodgers, T.S. (1986). *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press

Richards, Jack C, John Platt & Heidi Platt, eds(1992). *The Longman Dictionary of Language Teaching and Applied Linguistics.* Harlow: Longman.

Robinson. M., &Yorkstone. S (2014). *Becoming a Lean University: The Case of the University of St Andrews,* Leadership and Governance in Higher Education, Volume No. 1.

Robson, G. M. (1991). *Continuous process improvement: Simplifying work flow systems*. New York: Free Press, Macmillan.

Rother, M., & Shook, J. (2003*). Learning to See. The Lean Enterprise Institute*, Brookline, MA.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization.* Sydney: Random House.

Shingo, S. (1988). *Non-Stock Production: The Shingo System for Continuous*

Slack, N., Chambers, S., & Johnston, R. (2007). *Operations Management*, Harlow, FT Prentice Hall.

Stecher, B., & Kirby, S. N. (2004). *Organizational improvement and accountability: Lessons for education from other sectors.* Retrieved from http://www.rand.org/pubs/monographs/2004/RAND_MG136.sum.pdf

TechSmith Channel. (2011). *News and training from TechSmith [Video file]***.** Retrieved May 25, 2011 from http://www.youtube.com/user/ChannelTechSmith#p/c/5/y2QgtPyk_Gk.

Teece D, Pisano G., & Shuen A (1997). *Dynamic capabilities and strategic management, Strategic Management Journal* 18(7), 509-533.

The Macquarie University Community. (Jul 10, 2014). BPII - LEAN in Higher

Tierney, W.G. (1988), *"Organizational Culture in Higher Education***:** *Defining the Essentials"*, The Journal of Higher Education, vol. 59, no. 1, pp. 2-21.

Wei, J. C. (2009).*Theories and principles of designing lean service process*, 6th International Conference on Service Systems and Service Management, Xiamen, on 8-10 June 2009.

Wengraf, T. (2001). *Qualitative research interviewing*: Biographic narratives and semi-structured methods. London: Sage.

Wernerfelt B (1984). *A resource-based view of the firm*, Strategic Management Journal 5(2), 171-180.

White, Ronald (1988). *The ELT Curriculum. Oxford*: Basil Blackwell.

Wilson, L. (2010). *How to implement lean manufacturing*. New York: Mc-Graw-Hill.

Womack, J., & Jones, D. (1996). *Lean Thinking. Banish Waste and Create Wealth in Your Organisation.* Free Press.

Womack, J. P. & Jones, D. T. (2003**).** *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*. Free Press.

Womack, J. P., Jones, D. T., & Roos, D. (1990). *The Machine that Changed the World*, Harper Perennial, New York**.**

Womack, J., & Jones, D. T. (1996). *Lean Thinking: Banish Waste and Create Wealth for Your Corporation*, Simon and Schuster, New York

.

Ziskovsky, B., & Ziskovsky J. (2010). *Optimizing student learning: a lean systems approach to improving K-12 education* introduction by Norman Bodek. ASQ Quality Press.

Ziskovsky, B., & Ziskovsky, J. (2007). *Doing more with less—Going lean in education. Lean education* enterprises.

Zivkosky, B. M., & Zivkosky J. (2007). *Applying process improvement to K-12 education [Whitepaper]*. Cambridge, MA: Lean Enterprise Education.

https://en.wikipedia.org/wiki/Triangulation_(social_science).

http://www.leaneducation.com/whitepaper-DoingMoreWithLess.pdf. Retrieved July 2015.

http://www.springer.com/978-3-319-17409-9, 2015.

http://www.st-andrews.ac.uk

APPENDIX

Appendix I

Dear Students,

I am M.A student at the University of Gaziantep, Department of English Language Teaching. Thank you for taking the time to participate in my research study. The purpose of the study is to investigate about the attitude of student towards learning English and you will receive a series of questionnaires which serve to collect and evaluate responses from participants.

I request you to choose the most suitable choices in the questionnaire that prepared according to the methods and techniques applied in your English lessons. The data gathered from this questionnaire will be used in a scientific study. Your name and other information about you will not be collected in this survey; therefore your response to the survey will be confidential and anonymous. Please choose the option that you think is most appropriate to each statement in the questionnaire. If there is any item you don't feel comfortable answering, please skip themes.

Thank you for your participation.

JIVAN ANWER

Instructor

I

1) **Gender:**
   1. Female ( ) 2. Male ( )
2) **How long have you been learning English?**
   1. 1-5 years ( ) 2. 5-10 years ( ) 3. 10-15 years ( )
3) **High school you graduated:**
   1. Sabis international ( ) 2. Super ( ) 3. General ( )

No.	Item	Never	Seldom	Sometime	Usually	Always
1	I use English language in my daily life.					
2	I feel bored in English language lesson.					
3	Our teacher explains English language lessons clearly.					
4	We use technological materials in a lesson to make it more understandable.					
5	Our teacher uses map in the lesson.					
6	I write notes in English for improving my language.					
7	I write reports in English for improving my language.					
8	Lesson material in our school are put in a specific order.					
9	I understand and participate the lesson.					
10	Charts help me understand what teacher says.					
11	Diagrams help me understand what teacher says.					
12	There is a show-board in our class					
13	Our teacher cheek our homework in the lesson one by one.					

14	I remember structures I have heard in class better than structures I have read.					
15	In my classroom, I have a group participation to make a suggestion on problem resolution.					
16	I take all the suggestion made by our teacher to improve my English language.					
17	I usually make a revision on new structures.					
18	I arrange my schedule to study and practice English regularly, not just for the exam.					
19	I prefer group work to individual work.					
20	I try to take part in class activities in order to apply the new structure of English language.					
21	Our teacher encourages us continuously to improve my language.					
22	I use new English words in a sentence so I can remember them.					
23	Our teacher uses projection in the lesson					
24	I pay attention to my friend’s mistakes.					

25	I write new English words several times.					
26	Our teacher makes us take notes in the lesson.					
27	I try to find as many ways of using new structure I've learned.					
28	I would like to use internet-based material and activities in my classroom as much as possible.					
29	I highlight the text in different colors when I study English.					
30	I participate in debate discussions.					
31	At the beginning of the class, I receive the daily homework schedule of English language lesson.					
32	At the beginning of the class, I receive the weekly homework schedule of English language lesson.					
33	I share the outcome of the new subject with my group through class debate.					
34	I use color coding (e.g. highlighter pen) to help me as I learn.					
35	Our teacher gives us library research in the lesson.					

APPENDIX II

قوتابین خوشتقی .....

ئەز قوتابیا زانکویا غازي عنتابم بە شی زمانی ئینگلیزی , ناما من یا ماستە ری ل سە ر چاوانیا قوتابیان بو فیربونا زمانی ئینگلیزی . نوکە ل بە ر دەستی تە ژمارەکا پسیارا یە ژبو کومکرنا بەرسڤین هەوە و پێشکنینا وان.

ئەز داخازی ژ هەوە دکەم کو هین باشترین بەرسڤ ل دف هەوە پ هەلبژیرن ل سە ر ریک و تەکنیکا پروسیسا چاوانیا وانە گوتنێ , ئەڤ داتا یە دی هینە پ کار ئینان د ناما من یا ماستە ری دا.

ناڤ و پیز انین تە دی نە دیار کری بن لەو ما داخاز دکەم کو تو باشترین بەرسڤ هەلبژێری , هە ر پسیارەکا تو یا ژی پشت راست نە بی لادە.

سوپاس بو پشکدار یا تە.....

ژڤان کمال أنور

ڤەکولە ر

1) **رەگەز**

1- **مێ** 2- **نێر**

2) **چەند سالە تو خو فیر د کەیە زمانێ ئینگلیزی**

1- 1ـ 5 **سال** 2- 5ـ10 **سال** 3- 10ـ15 **سال**

3) **قوتابخانا تە**

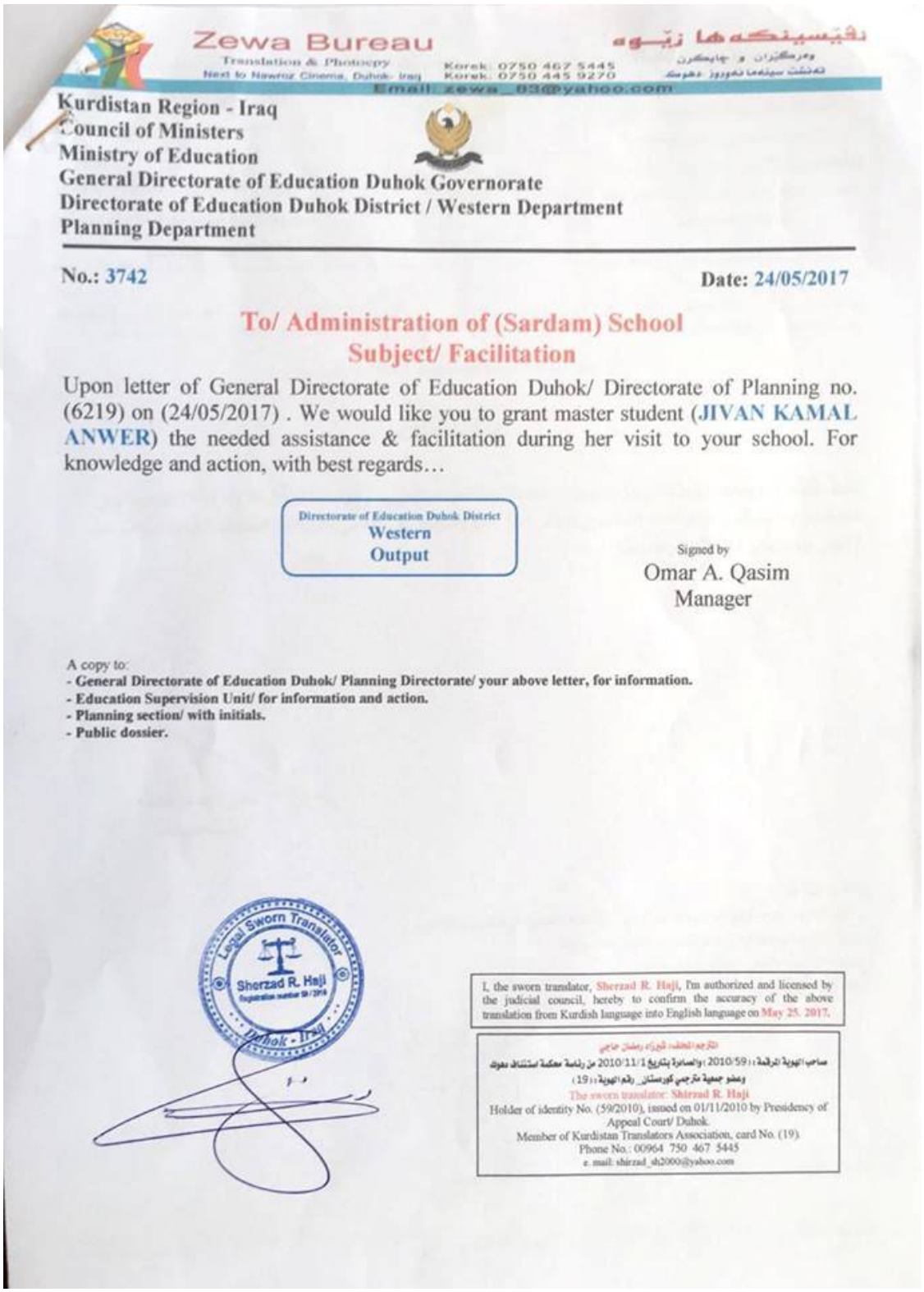
1- **سابیس انترنیشونال سکول** 2- **سوپر** 3- **گشتی**

ذ	ئايتم	هه مي جارا	هه ر جار	هندک جارا	کيم جارا	ج جار نه
1	ئه س زمانی ئينگليزي ب کار دئينم روژانه					
2	ئه س د وانا ئينگليزيی دا هه ست ب وستا نی دکه م					
3	ماموستا مه وانا ئينگليزيێ باش شلوقه دکه ت					
4	ئه م تکنولوجيايێ پ کار د ئينين ژ بو شلوقه کرنا وانه ي پ ريکه کا باشتر					
5	ماموستا مه خيچ کيشی پ کار دئينيت بو شلوقه کرنا وانه ي					
6	ئه س تێبنيت خو پ زمانی ئينگليزی د نقيسم ژ بو پيشخستنا زمانی خو يێ ئينگليزی					
7	ئه س ريپورتاجا پ زمانی ئينگليزی د نقيسم ژ بو پيشخستنا زمانی خو يێ ئينگليزی					
8	کەرستين خاندنی ل قوتابخانا مه پ شيوه يه کی تايبه ت دانانديه					
9	ئه س د وانی دگه هم و به شداريی ژی دکه م					
10	خيچ کيش هاري من دکه ن بو تێگه هشتنا وانی					
11	دايگرام هاري من دکه ن بو تێگه هشتنا وانی					
12	د پولا مه دا داتا شو يا هه ي					
13	ماموستا مه سه ح د که ته ئه رکی مه يێ مال کت کت					
14	رستا من گولێ دبيت د پولی دا پتر د مينيته د ميشکی من دا ش رستا ئه د خينم					
15	د پولا مه دا مه گروپه ک يێ هه ی ژبو چاره سه ر کرنا ئاريشا					
16	ئه س پشنياريت ماموستا خو به رچاف وه ردگرم ژبو پاش خستنا زمانی خو يێ ئينگليزی					

17	ئەس هەر جار پیداچونی ل سە ر بابتین نی دکەم					
18	ئەس هە رجار خشتی خو یێ خاندنی درستکەم نە بە س بو ئەزمونا					
19	ئەس هەس دکەم ل گەل گروپا کار بکەم پتر کو پتنی کار بکەم					
20	ئەس پشکداریی د وانی دا دکەم داکو رستیت نی یت زمانی ئینگلیزی پ کار بینم					
21	ماموستا مە پشتەڤانیا مە دکەت ژبو پاش خستنا زمانی مە ئینگلیزی					
22	ئەس پەیقیت نی یێت ئینگلیزی دکەمە د رستی دا, داکو ژبیر نەکەم					
23	ماموستا مە پروجێکتا د وانی دا د کار د ئینیت					
24	ئەس ل خەلەتیت هڤالیت خو یێ هشیارم					
25	ئەس پەیقیت نی یێت ئینگلیزی گەلەک جارا دنڤێسم					
26	ماموستا مە, مە پالدت ژ بو نڤیسینا تێیێتیا					
27	ئە س هە ول دەم رستیت نی یت ئە س فیربویمی پ گەلەک ریکا پ کار بینم					
28	ئەس هەس دکەم کەرستە و چالاکین انترنیتی پ کار بینم د پولی دا گەلەک					
29	دەمی ئە س ئینگلیزیێ د خینم ئە س نیڤستوکی رەنگا و رنگ دکەم					
30	ئەس بەشداریێ د دیبەیتا دا دکەم					
31	ل دست پیکا وانی ئە س خشتی روژانە یێ ئەرکی مال یی زمانی ئینگلیزی وەردگرم					
32	ل دست پیکا وانی ئە س خشتی هەفتیانە یێ ئەرکی مال یی زمانی ئینگلیزی وەردگرم					

33	ئەس بابەتیت نی یت زمانی ئینگلیزی شێر دکە م گەل هقالیت خو پ ریکا دیبەتیت پولی					
34	ئەس پینوسێ رنگا و رنگ پ کار دئینم چنکو هاری من دکەن بو فیربونی					
35	ماموستا مە د وانی لیکولینێن پەرنوکخانی دە تە مە					

APENDIX 111



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Kurdistan Region - Iraq
Council of Ministers
Ministry of Education
General Directorate of Education Duhok Governorate
Directorate of Education Duhok District / Western Department
Planning Department

No.: 3742 Date: 24/05/2017

To/ Administration of (Sardam) School
Subject/ Facilitation

Upon letter of General Directorate of Education Duhok/ Directorate of Planning no. (6219) on (24/05/2017) . We would like you to grant master student (JIVAN KAMAL ANWER) the needed assistance & facilitation during her visit to your school. For knowledge and action, with best regards…

Directorate of Education Duhok District
Western
Output

Signed by
Omar A. Qasim
Manager

A copy to:
- General Directorate of Education Duhok/ Planning Directorate/ your above letter, for information.
- Education Supervision Unit/ for information and action.
- Planning section/ with initials.
- Public dossier.

Legal Sworn Translator
Sherzad R. Haji
Duhok - Iraq

I, the sworn translator, Sherzad R. Haji, I'm authorized and licensed by the judicial council, hereby to confirm the accuracy of the above translation from Kurdish language into English language on May 25. 2017.

The sworn translator: Shirzad R. Haji
Holder of identity No. (59/2010), issued on 01/11/2010 by Presidency of Appeal Court/ Duhok.
Member of Kurdistan Translators Association, card No. (19).
Phone No.: 00964 750 467 5445
e. mail: shirzad_sh2000@yahoo.com

APPENDIX 1V

هەرێمی کوردستان - عێراق
نەنجومەنی وەزیران
وەزارەتی پەروەردە
ریڤەبەریا گشتی یا پەروەردا دهوک
ریڤەبەریا پەروەردا قەزا دهوک/ڕۆژ ئافا
پشکا نەخشەدانان

إقليم كوردستان - العراق
مجلس الوزراء
وزارة التربية
المديرية العامة لتربية محافظة دهوك
مديرية تربية قضاء دهوك/القسم الغربي
قسم التخطيط

Kurdistan Regional Government
Council of Ministers
Ministry of Education

ژمارە: ٢٧٤٤
ڕێکەوت: / /٢٧١٧ کوردی

No:
Date: ٤/ ١١/ ٢٠١٦

بۆ / کارگێریا قوتابخانا (سەردەم).....

ب/ئاسانکاری

لدیف نقیسارا ریڤەبەریا گشتی یا پەروەردا دهوک/ر.نەخشەدانان یا ژمارە (٦٢١٩) ل ٢٠١٧/٥/٢٤ .هیڤیدارین هاریکاری وئاسانکاری بۆ قوتابیا ماستەری (ژڤان کمال انور) بهێتە کرن دەمێ سەردانا قوتابخانا هەوە دکەت . بو زانین ویا پێدڤی دگەل ڕێزگرتنێ.....

عمر احمد قاسم
ڕێڤەبەر

وێنە یەک بۆ//
- ر.گ.یا پەروەردا دهوک/ر.نەخشەدانان/نقیسارا هەوە ل سەری بو زانین
- یەکا سەربەرشتیا پەروەردەیی /بوزانین هیڤی یە
- پشکا نەخشەدانان /دگەل دەسپێکا
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VITAE

Jivan Kamal Anwer was born in Duhok, Iraq, on July 10, 1984. Between 2003 and 2007 she studied college of Art/ English language department at the Duhok University in Duhok city in Iraq. She has worked as a Translator Assistant at the University of Duhok in 2010.

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Jivan Kamal Anwer 10 Temmuz 1984'te Duhok, Irak'ta doğdu. 2003-2007 yıllarında Irak'ın Duhok şehrindeki Duhok Üniversitesi Sanat/ İngiliz Dili Bölümünü okudu. 2010dan beri Duhok Üniversitesinde mütercim yardımcısı olarak çalışmaktadır.