Language learning strategy use and levels of autonomy in online and traditional education

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ABSTRACT: The goal of this study is to investigate the level of learning strategy use and autonomy in online and traditional education. The study included 157 preparatory school students from the foundation university. The data were collected using Oxford's (1990) Language Learning Strategy (LLS) and a learner autonomy questionnaire (Zhang & Li, 2004). SPSS22 was used to analyse the data. The findings revealed that autonomy level was high in traditional education, but moderate throughout the online education. Furthermore, the results of the LLS questionnaires revealed that students employed a moderate number of language learning strategies in both traditional and online education. The results of the LLS questionnaires revealed that students employed a moderate number of language learning strategies in online and traditional education. Finally, the correlation analysis utilized to determine the association between learner autonomy and LLS use revealed a positive and linear relationship between the two variables
Keywords: language learning strategies, learner autonomy, online learning, metacognitive strategies

Uso de estrategias de aprendizaje de idiomas y niveles de autonomía en la educación en línea y tradicional

RESUMEN: El objetivo de este estudio es investigar el nivel de uso y autonomía de estrategias de aprendizaje en la educación tradicional y en línea. En el estudio participaron 157 estudiantes de secundaria de la universidad estatal. Los datos se recopilaron utilizando la Estrategia de Aprendizaje de Idiomas (LLS) de Oxford (1990) y un cuestionario de autonomía del alumno (Zhang y Li, 2004). Se utilizó SPSS22 para analizar los datos. Los hallazgos revelaron que el nivel de autonomía era alto en la educación tradicional, pero moderado en toda la educación en línea. Además, los resultados de los cuestionarios de LLS revelaron que los estudiantes emplearon un número moderado de estrategias de aprendizaje de idiomas tanto en la educación tradicional como en línea. Además, los resultados de los cuestionarios de LLS revelaron que los estudiantes emplearon un número moderado de estrategias de aprendizaje de idiomas en la educación tradicional y en línea. Finalmente, el análisis de correlación utilizado para determinar la asociación entre la autonomía del alumno y el uso de LLS reveló una relación positiva y lineal entre las dos variables.
Palabras clave: estrategias de aprendizaje de idiomas, autonomía del alumno, aprendizaje en línea, estrategias metacognitivas.

1. Introduction

Online learning was introduced years ago and is not a new notion in language education (Slim & Hafedh, 2019). The introduction of online learning was aligned with 21st-century criteria such as connectedness, teamwork, inventiveness, and critical thinking (Rusdin, 2018). Online English language instruction offers students freedom and convenience. However, when pupils are not independent, it is seen as less successful (Brown, 2009). Lack of autonomy and language skills in online classes can lead to psychological distance, dissatisfaction, and failure, particularly among those who are unfamiliar with online learning (Olmanson & Liu, 2018), as autonomy and the use of language learning strategies are central to the language learning process. Autonomy has a lengthy history, dating back to the 1970s as a notion in the context of English language instruction. Autonomy implies learners' ability to keep track of their education. The cultivation of one's learning through active participation is a necessity for language learning success, whether it is for monitoring or being in command of learning (Benson, 2013). Learner autonomy does not necessarily reflect innate capacity. Learners should be allowed to establish autonomy to learn the target language more effectively (Benson, 2011). According to Chan (2001), an instructor should be accountable for ensuring that students realize that they are expected to become autonomous learners. In this regard, the development of each learner's autonomy should be a goal in the context of second language acquisition (SLA) and language classroom instruction. This aim raises awareness about how student autonomy in the course design procedure should be included in the curriculum. Cotterall (2000) outlines numerous approaches that contribute to learner outcomes and learning experiences and may be used to enhance student autonomy across the curriculum. These strategies can also play an important part in the process of language teaching. In other words, language teachers should prioritize student autonomy. It is also true that instructors cannot pass on all of their experience to their pupils, further supporting the necessity for this inclusion. It's easier to teach kids how to learn on their own (Barbara, 2007).

Due to the increased emphasis on learner autonomy, there is a growing interest in the various strategies utilized by pupils. Barbara (2007) asserts that individual variables such as age, gender, incentive, and aptitude might impact the adoption of learning techniques. These ideas are all distinct. Such a study may demonstrate that language learning methods are a key component of efficient learning and will become increasingly significant as language instruction is viewed as an endeavour in which pupils actively participate in differences among themselves. Macaro (2006) examines the basic framework of language learning approaches in his research. According to him, learning techniques should involve an objective, a situation, and a mental intervention. The study's findings also suggest that quality teaching extends beyond the frequency with which methods are used. The organization of different tactics should be based on the context, not the frequency. Similar to autonomy, kids have expressed a strong interest in learning methodologies. The link between language learning techniques and other principles, such as the degree of learning skills, is critical (Lai, 2009). Language learning strategies are thus recognized as crucial, and studies to define them and determine how they interact with other educational ideas, such as autonomy and the level of linguistic knowledge, are regarded as critical. According to recent studies, English language learners categorize LLS in a variety of ways. Oxford created the standard taxonomy in 1990. She

divided LLS into two categories: direct "memory, cognitive, and compensatory strategies" and indirect "metacognitive, affective, and social strategies." Effective learners understand the approaches they employ for language learning and why they utilize them (Oxford, 1990).

An array of studies have focused on the usage of LLS and the recognition of strategies most commonly utilized by students (Dawadi, 2017; Charoento, 2016). Further research has focused on the use of the LLS by students in school (Pfenninger and Singleton, 2017; Platsidou and Kantaridou, 2014). The application of LLS in language acquisition is also being investigated to facilitate learning and improve language competency (Rao, 2016; Charoento, 2016; Platsidou & Kantaridou, 2014). Some studies have emphasized that mastery largely influences how the approach is applied. Successful students used a larger range of tactics than those who were less successful (Rao 2016). Some research have looked at how the LLS affects linguistic abilities. LLS is important for evaluating perceived language production and influences the language acquisition process (Platsidou & Kantaridou, 2014). Another significant part of the research is the investigation of the application of strategy in relation to characteristics such as attitudes and motivation (Platsidou and Kantaridou, 2014; Shang, 2010). According to the majority of research, those who are positive are more likely to utilize LLS.

LLS and learner autonomy are regarded as key topics to debate. The research papers indicate that, although sharing some characteristics such as age or department, various language students differ in terms of autonomy levels. Furthermore, children may learn new language-learning techniques that work well for them in various situations. Individuals, with their learning techniques and autonomy, should be handled holistically, therefore, there is a growing interest in defining their link to one another. Furthermore, pupils began to learn through online schooling which required more independent learning. This has led to the demand for autonomy and the use of language learning methodologies.

According to Oxford (1999), language learning strategies demonstrate learner autonomy since LLS may help students organize, monitor, and direct their learning processes. The likelihood of a relationship between students' autonomy levels and the employment of their approach during the language acquisition process must thus be studied. While several studies on the ideas of autonomy and learning styles are conducted independently, it is worthwhile to investigate the link between the two before and during online education. Numerous longitudinal research studies have been undertaken on learner autonomy and language learning techniques for language students (Sakai & Takagi, 2009). As Wong (2005) mentioned, it can encourage LLS use among students who are self-sufficient. He also discovered that metacognitive approaches impact the self-efficacy of EFL students. The research described above were conducted at the university level. Furthermore, various research investigations were conducted to examine learners' autonomy (Swatevacharkul, 2008; Tayjasanant & Suraratdecha, 2016).

Learner autonomy is crucial because it allows students to actively participate in the learning process and obtain better results. Several research examined the various LLS employed by learners. According to the findings of these studies, students find it difficult to employ these LLS while learning a new language. However, research on the link between the two is quite limited, so a study on this topic is worthwhile. The current study aims to broaden existing information by investigating the association between learner autonomy and LLS use in traditional and online education. The hands-on component of this research

suggests that if such LLS are implemented to promote students' autonomy, they can be led more deliberately and effectively. Aside from the fact that the interaction between LLS and learning autonomy deserves to be investigated in depth, the most important aspect is to recognize how they are employed in online and conventional education. Furthermore, it is critical to examine how various LLS and levels of autonomy are applied in conventional and online education.

In consideration with the above argument, the purpose of this study is to determine the amount of autonomy and usage of LLS in both traditional and online education. The study also looks into whether these two factors have a significant relationship. The research questions for the current study are as follows:

(1)How autonomous are the students in traditional and online education? (2)What are the language learning strategies employed in traditional and online education? (3)Is there a link between autonomy level and the adoption of language learning strategies in traditional and online education?

2. Method

A descriptive study using quantitative methods was recently designed. The correlation and descriptive models were employed in this study. LLS and autonomous learning serve as the dependent variables in this study. This study tried to characterize the current context and assess the degree of the association between factors in conventional and online education. This study was conducted by 157 students at a foundation university's preparatory school between 2020 and 2021. 49.6% of the prep grade pupils in the sample are female, and 50.3% are male.

2.1. Data collection tools

To gather data, two scales were utilized. One was Zhang and Li's (2004) Learner Autonomy Questionnaire, while the other was Oxford's (1990) Language Learning Strategies Questionnaire. In order to capture personal data, these surveys included a question about the students' gender. Students participated in this study voluntarily. The students that took part in the study gave their consent. The data collection and processing followed Ankara Hacı Bayram Veli University's standard research ethical guidelines.

The learner autonomy scale (Zhang & Li, 2004) is built around four aspects: students' willingness, self-confidence, motivation, and ability. There are two primary sections of the scale. The first phase intended to assess participants' levels of autonomy through self-evaluation. In the second section, the purpose is to gather more specific information about their self-definition of autonomy. The scale has 11 items on a 5-point Likert scale. The amount of autonomy is calculated by the participants' median scores on the eleven items that make up the first portion of the questionnaire. In terms of categorization, the range of 1.0-2.4 is low, 2.5-3.4 is medium, and 3.5-5.0 represents a high degree of learner autonomy. The scale's Cronbach alpha coefficient is found to be.79.

The students' usage of LLS was assessed using Oxford's (1990) Language Learning Strategy Scale, which included 50 items. It is organized into two primary categories and six

subcategories to analyse language learning processes. The basic categories are separated into two divisions, "Direct Strategies" and "Indirect Strategies;" sub-categories of direct strategies are "memory, cognitive, and compensation strategies," while sub-categories of indirect strategies are "metacognitive, affective, and social strategies." The component analysis yielded a 46-item structure with six sub-categories, indicating the scale's constructive validity. The Cronbach alpha coefficient for the entire scale was estimated to be 0.79. The sub-categories have the following reliability coefficients: "Memory strategies as.77, cognitive strategies as.79, compensation strategies as.79, metacognitive strategies as.77, affective strategies as.78, and social strategies as.81". Based on the Cronbach alpha coefficient values, it was determined that the scale is dependable.

2.2. Data collection and analysis

The data were gathered using two surveys issued throughout conventional and online education to preparatory school students studying at a foundation university. The study began during the Covid-19 outbreak. The researcher wanted to conduct a research study to investigate students' autonomy levels and usage of language learning strategies at a preparatory school of a foundation institution, and data was collected using the aforementioned scales. However, now that Covid-19 has come to an end, she has opted to reconfigure the project to examine the autonomy level and use of language learning tools in conventional and online schooling. The students were informed about the goal of the data collection while using the scales. Participants were carefully selected to participate in the study. The primary data was collected following legal requirements and ethical considerations. Following confidentiality guidelines, participants received notification about the study's goal. The participants also provided a consent form. The data was examined using the SPSS 22 software. First, the Kolmogorov-Smirnov test determined if the sample had a normal distribution. The study revealed that the data followed a normal distribution ($p>-0.05$).

3, Results

3.1. The level of learner autonomy

This section discussed the findings from the analysis of data collected through the learner autonomy scale. The level of autonomy is calculated in the questionnaire using the participants' average score. In terms of categorization, the range of 1.0-2.4 is low, 2.5-3.4 is moderate, and 3.5-5.0 represents a high degree of learner autonomy. First, to demonstrate the participants' total learner autonomy level, the means and standard deviations of each domain in the questionnaire were provided. Also, a t-test was employed to analyse the data. The t-test was performed to compare the average values of two samples. The T-test contrasts the levels of student autonomy in traditional versus online education. Table 1 summarizes the results of the learner autonomy scale.

Table 1. *The level of learner autonomy in traditional and online education*

Domain		traditional education	online education	t	Sig.
Willingness	$\bar{X}$	4,20	2,26	4,365	0.000*
	Sd	0,91	0,45		
	Autonomy Level	High	Low		
Self-confidence	$\bar{X}$	3,80	3,12	3,917	0.000*
	Sd	0,64	0,80		
	Autonomy Level	High	Moderate		
Motivation	$\bar{X}$	3,74	2,11	4,946	0.003*
	Sd	0,90	0,89		
	Autonomy Level	High	Low		
Capacity	$\bar{X}$	3,31	3,36	-1,414	0.202
	Sd	0,79	0,75		
	Autonomy Level	Moderate	Moderate		
Total	$\bar{X}$	3,76	2,71	4,311	0.002*
	Sd	0,81	0,72		
	Autonomy Level	High	Moderate		

**p<0,05*

Table 1 reveals that the whole mean ($\bar{X}$) of the learner autonomy level of preparatory school students in conventional education was 3,76 with a standard deviation (SD) of 0.81, whereas in online education, the total mean was $\bar{X}$ 2,71 with an SD of 0.72. According to the criteria, a range of 3,76 suggests a high level of learner autonomy, while 2,71 shows a moderate level of learner autonomy. Thus, although participants in conventional education had a high level of learner autonomy, it was only modest in online education. When comparing both groups, there was a significant difference in autonomy levels (t:4,311 $p<0.05$). This implies that the individuals had higher degrees of learner autonomy in conventional schooling.

Table 1 shows that in conventional learning, individuals showed high degrees of learner autonomy in all dimensions except the ability to learn. The willingness scale had the greatest level ($\bar{X}$ = 4.20, SD = 0.91), followed by self-confidence ($\bar{X}$ = 3.80, SD = 0.64). Additionally, their motivation was high ($\bar{X}$ = 3.74, SD = 0.90), whereas their ability to study autonomously was modest ($\bar{X}$ = 3.31, SD = 0.79). When the data collected during online education was evaluated, it was found that the participants exhibited moderate to low degrees of learner autonomy. The ability to learn was at the highest level of the scale ($\bar{X}$ = 3,36, SD = 0,75), albeit at a moderate level, followed by self-confidence ($\bar{X}$ = 3,12, SD = 0,80). In addition, both willingness ($\bar{X}$ = 2.26, SD = 0.45) and motivation ($\bar{X}$ = 2.11, SD = 0.89) were low.

There was a significant difference in the readiness to learn independently between the two groups (t:4,365, $p<0.05$). This suggests that students were less inclined to participate in online education. The individuals' self-confidence levels differed significantly (t:3,917 $p<0.05$). This suggests that in online education, pupils' self-confidence was lower. The t-test findings for motivation demonstrated a statistically significant difference between the groups (t:4,946 $p<0.05$), indicating that online education learners had a lower level of motivation. Finally, the significance threshold of the capacity to learn independently, 0.202 ($p > 0.05$), did not show a statistically significant difference between the groups.

3.2. The level of language learning strategy use

This section discussed the findings of the examination of data collected using the LLS scale. First, to demonstrate the participants' degree of LLS use, the means and standard deviations of each domain in the questionnaire were determined. Even a T-test was employed to compare the two groups' average scores. The T-test compares the mean levels of LLS use in traditional and online learning. In terms of classification, 1.0-2.4 is low, 2.5-3.4 is moderate, and 3.5-5.0 indicates a high level of LLS use. Table 2 summarizes the results of the LLS scale.

Table 2. *The strategy usage results in traditional and online education*

DOMAIN		TRADITIONAL EDUCATION	ONLINE EDUCATION	T	SIG.
A)DIRECT	$\bar{X}$	3,58	2,00	-4,813	0.000*
	Sd	0,68	0,77		
	LLS Use	High	Low		
MEMORY	$\bar{X}$	4,03	2,11		
	Sd	0,88	0,81		
	LLS Use	High	Low		
COGNITIVE	$\bar{X}$	4,08	2,09		
	Sd	0,41	0,73		
	LLS Use	High	Low		
COMPENSATION	$\bar{X}$	2,64	1,81		
	Sd	0,76	0,77		
	LLS Use	Moderate	Low		
B)INDIRECT	$\bar{X}$	2,41	3,10	-3,211	0.000*
	Sd	0,42	0,67		
	LLS Use	Moderate	Moderate		
METACOGNITIVE	$\bar{X}$	2,35	3,29		
	Sd	0,22	0,69		
	LLS Use	Low	Moderate		
AFFECTIVE	$\bar{X}$	1,99	3,12		
	Sd	0,81	0,67		
	LLS Use	Low	Moderate		
SOCIAL	$\bar{X}$	2,69	2,91		
	Sd	0,24	0,65		
	LLS Use	Moderate	Moderate		
TOTAL	$\bar{X}$	2,96	2,55	-4,114	0.000*
	Sd	0,55	0,72		
	LLS Use	Moderate	Moderate		

$*p<0,05$

Table 2 reveals that the overall mean and standard deviation of the level of LLS usage of preparatory school students in conventional education was ($\bar{X}$ = 2,96, SD = 0.55), while in online education, the total mean was $\bar{X}$ 2,55, SD 0,72. According to the specifications, these ranges imply moderate LLS usage. As a result, it is possible to conclude that participants in traditional and online schooling used LLS somewhat. A t-test revealed a significant difference in LLS use levels between the two groups (t: -4,114, $p<0.05$). This indicates that the individuals used LLS more in conventional education. When the utilization of direct strategies

was evaluated, it was found to be at a high level in conventional education, with a grand mean of 3.58 and Sd of 0.68, and at a low level in online education, with a grand mean of 2.00 and Sd of 0.77. In conventional schooling, the majority of participants used cognitive strategies ($\bar{X}$ = 4,08 Sd = 0.41). Memory strategies ($\bar{X}$ = 4.03, Sd = 0.88) were employed at a high level, whereas compensatory strategies were used at a moderate level ($\bar{X}$ = 2.64, Sd = 0.76). However, statistics from online education revealed that students utilized a low degree of direct strategies ($\bar{X}$ = 2,00 Sd = 0.77). At the low level, compensating strategies ($\bar{X}$ = 1,81 Sd = 0.77), cognitive strategies ($\bar{X}$ = 2,09 Sd = 0.73), and memory strategies ($\bar{X}$ = 2,11 Sd = 0.81) were utilized. The t-test results of both groups' direct strategies showed a significant difference (t:-4,813 $p<0.05$). This suggests that in online education, pupils used less direct strategies than before.

Table 2 shows a moderate utilization of LLS in both conventional and online schooling ($\bar{X}$ = 2.41 Sd = 0.42; $\bar{X}$ = 3.10 Sd = 0.67). The use of indirect strategies in conventional education revealed that social strategies were adopted by the majority of students ($\bar{X}$ 2,69 Sd = 0,24). Metacognitive and affective strategies were adopted at a low level ($\bar{X}$ 2,35 Sd = 0,22; $\bar{X}$ 1,99 Sd = 0,81). In online education, metacognitive strategies were the most commonly used ($\bar{X}$ 3.29 Sd = 0.69). Affective and social strategies were employed somewhat ($\bar{X}$ 3.12 Sd = 0.67; $\bar{X}$ 2.91 Sd = 0.65). The t-test results for the indirect strategies revealed a significant difference between groups (t:-4,813 $p<0.05$). This means that pupils employed more indirect strategies in online education.

3.3. Correlation of LLS use and learner autonomy

The final aim of this present study was carried out using Pearson's r-correlation analysis. The correlation analysis was used to determine if the groups' autonomy levels and LLS use were statistically significant in both traditional and online schooling. The correlation analysis was conducted independently for each group to determine how the connection changed between traditional and online schooling. Table 3 displays the results of Pearson r correlation research on learner autonomy and strategy utilization.

Table 3. *Correlation between learner autonomy and LLS use*

Sig.	L.A versus LLS Use
Pearson's r in traditional education	.65*
Pearson's r in online education	.80*

**Correlation is statistically significant at the 0.01 level (2-tailed).*

The Pearson r correlation analysis revealed a positive relationship between learner autonomy and the usage of LLS in conventional education ($r(157) = +.65$, $p<.001$ two-tailed). Pearson's r correlation analysis revealed a statistically significant relationship between participants' autonomy and their usage of LLS in online education ($r(157) = +.80$, $p<.001$ two-tailed). Table 4 also shows the findings of the correlation study between the sub-dimensions.

Table 4. *Correlation between subdimensions*

		WILL-ING-NESS	SELF-CONFI-DENCE	MO-TIVA-TION	CA-PACITY	MEMO-RY	COGNI-TIVE	COM-PENSA-TION	META-COGNI-TIVE	AFFEC-TIVE	SO-CIAL
TRADITIONAL EDUCATION	*Willingness*	1	-,207	,402	,087	,103	,217*	-,009	-,253	-,154	,233
	Self-Confidence		1	,153	,273	,204	,104	,454*	,514	,409	,257
	Motivation			1	,434	,118	,413*	,389	,169	-,139	,156
	Capacity				1	,586	,290*	,087	-,011	,586	,023
	Memory					1	,513	-,189	-,278	-,236	-,011
	Cognitive						1	,147	-,369	-,258	-,455
	Compensation							1	,087	-,006	-,005
	Metacognitive								1	,204	,125
	Affective									1	,492
	Social										1
LINE EDUCATION	*Willingness*	1	,236	,402	,434	,114	,344	,011	,214*	,323	,213
	Self-Confidence		1	,467	,123	,099	,112	,004	,418*	,233	,343
	Motivation			1	,136	,113	,011	,047	,433*	,139	,125
	Capacity				1	,123	,099	,078	,436*	,078	,067
	Memory					1	,123	,148	-,123	-,099	-,091
	Cognitive						1	,123	-,004	-,099	,003
	Compensation							1	-,123	-,115	,136
	Metacognitive								1	,458	,114
	Affective									1	,123
	Social										1

**p<0,05*

When the potential relationships between the sub-dimensions of learner autonomy and LLS use are investigated in traditional education, it is seen that significant positive correlations are observed between cognitive strategies and willingness (r = ,217, p<0,05 at a weak level), motivation (r = ,413, p<0,05 at a moderate level), capacity (r = ,290, p<0,05 at a weak level), while self-confidence dimension is correlated with compensation strategies (r = ,457, p<0,05 at a moderate level).

Meta-cognitive strategies have significant positive correlations with all sub-dimensions of learner autonomy in online education, including willingness (r =,214, p<0,05 at a weak level), self-confidence (r =,418, p<0,05 at a moderate level), motivation (r =,433, p<0,05 at a moderate level), and capacity (r =,436, p<0,05 at a moderate level).

4. DISCUSSION

The primary goal of this study was to assess students' autonomy and their usage of LLS in traditional and online education. The students' levels of autonomy were initially characterized, taking into account both traditional and online education. Participants' learner autonomy was high in traditional education, but moderate in online education. This suggests that conventional schooling provided more autonomy. Although the motivating factor is expected to be stronger during online learning, what actually happens does not match

expectations. Motivation was high in traditional schooling, but low in online education. This might be due to the variety of educational facilities; because students must utilize English in class, they are more driven to study in person. This study is consistent with Dişlen's (2011) findings, which reached a similar result. In his study, he argued that somewhat independent pupils were aware to some extent of the concept of autonomy in their learning. In other words, the pupils recognized the importance of autonomous learning. However, it appears that they were all looking for instructor support because they were all acclimated to traditional teaching techniques.

In terms of learner autonomy, participants in conventional education had a high level of autonomy in all categories except the capacity to learn. The highest levels of willingness and self-confidence were observed across all dimensions. After analysing the data obtained throughout the advent of online education, students' levels of learner autonomy may be classified as moderate to low. The degree of learning ability and self-confidence were at their maximum. Furthermore, the drive and willingness were also poor. As a result, it is possible to argue that students' desire, self-confidence, and motivation were lower in online education than in traditional education. These findings did not correspond to the findings of Zhong (2018). In his study, he argued that pupils who were schooled online were more effective and capable of managing their own academics. This study's conclusions differ from those of Yıldırım (2008). He stated that during online instruction, pupils appeared to take greater responsibility for their learning, and many believed that their failure or performance were the determining factors. However, Sönmez's (2016) study corroborated the study's findings by revealing that the idea of learner autonomy varies depending on the context of student accountability. Briefly, the findings revealed that those who took part were fairly independent and differed in many areas of the idea throughout the online education. The students were also aware of the concept of autonomous learning, but they needed to take certain steps to complete their learning autonomously. Furthermore, the current study's findings are consistent with earlier research in the field (Dişlen, 2011; Sönmez, 2016). According to their findings, students were already aware of autonomous learning, but they needed to take actions to successfully complete their learning on their own.

After determining the degree of learner autonomy, LLS utilization in both traditional and online education was investigated. When the literature was reviewed, it was discovered that there were several research on language acquisition strategies (Padem, 2012). In this study, it was discovered that the number of LLS use in conventional and online education was moderate, although students utilized LLS more frequently in traditional education. While direct tactics were used extensively in conventional education, with the highest usage of cognitive strategies, they were used infrequently in online education. This outcome is consistent with prior investigations by Samaie et al. (2015) and White (1995). Furthermore, indirect strategies were employed somewhat in both conventional and online education, although students used more indirect strategies in online education. Students chose metacognitive strategies to social strategies, which were more commonly utilized in traditional schooling. This finding is consistent with several other investigations (Saengaroon, 2015; Thangpatipan, 2014; Qing, 2013; Wong, 2011; Lamatya, 2010). However, this finding contradicts Liu's (2015) study, which found that the most commonly employed LLS was compensation strategies.

Depending on the strategies utilized for language acquisition, it may be argued that the

learning environment, both conventional and online, is crucial. The outcomes of LLS application in traditional education may constitute a method of teaching. Since they used cognitive strategies the most, it was important to examine how they built their learning style, which included practicing, analysing, deductive reasoning, expressing concepts, summarizing, and highlighting the necessity. Because the curriculum allows students to choose their own path rather than directing them in a predetermined manner, students can reflect on their learning experience.

The process of participants' learning is mirrored by the disparities in LLS use, both face-to-face and in online learning contexts. The usage of LLS in traditional schooling produces results that reflect how they were taught. Based on their most effective cognitive strategy, students reflect on how they deduct practices, evaluate or reason from their learning technique, transfer ideas, summarize the lesson, and emphasize the necessity. Because students must reflect on their journey rather than being led in a constrained fashion via the international curriculum, they should be encouraged to analyse the learning process. Traditional education also relied heavily on indirect strategies, notably social strategies. Students employed direct strategies because their language mechanism was immediately impacted. Furthermore, language teachers should familiarize their students with those strategies in order to sustain the application of LLS, allowing them to utilize the strategies naturally during the language learning process. LLSs are noticeable because they can learn and help students become lifelong learners. This approach is also consistent with how autonomy works for learners. So, pupils may have their way and finally become self-sufficient by employing proper strategies. Students, on the other hand, were largely using metacognitive strategies in online education since they had limited opportunity to converse in English as expected. This study might be used to assist teachers think about how to teach language acquisition skills to their pupils, or to demonstrate that their students are independent.

Lastly, correlation analysis was used to investigate the relationship between preparatory school students' levels of learner autonomy and the usage of LLS in conventional and online education. The study of relevant data revealed a positive and linear link between participants' levels of learner autonomy and their usage of LLS. This discovery is consistent with prior findings (Ceylan, 2017; Samaie et al., 2015). In addition, the relationships between the sub-dimensions of learner autonomy and LLS usage were explored in conventional education. Significant positive correlations were found between cognitive strategies and sub-dimensions of learner autonomy, with the exception of the self-confidence dimension. There were strong positive connections found in online education between meta-cognitive strategies and all sub-dimensions of learner autonomy.

5. Conclusion and Suggestions

According to the findings of this study, online learning was used to keep students engaged during the learning process. The only way to assist students engage in this process is to encourage them to employ language learning resources and become self-directed learners. This will positively impact the pupils (Docekal & Tulinska, 2015). Online education provides students with an excellent opportunity to discover online resources for English language study. Learning possibilities can be accessed through electronic books, images, audio, or other discussion materials. This is because pupils should study online independently (Dhawan, 2020).

Based on the results of student autonomy levels, it is advised that teachers and curriculum in both traditional and online education should allow students to rely on themselves more. This study found that students are fairly self-sufficient throughout online education and may better themselves more if they are helped by teachers.

In terms of the results of students' language learning strategies, the study discovered that they utilized a medium proportion of LLS. EFL teachers should consider LLS and teach their students the relevant methods. It is also beneficial to encourage children to apply all of the strategies so that they can develop self-confidence and positive rewards, since affective methods can help students cope with obstacles.

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