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Case Study "Automaticity in L2 Learning and Teaching" Second Language Acquisition (Sla)

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Abstract: Our minds and bodies carry out many processes in our daily lives that take place automatically, without our control or even being aware of them. Moreover, this automaticity, which encompasses almost everything we do, is the subject of heated debate, and no consensus has yet been established on what automaticity is. The ambiguity of the definitions and the diversity of interpretations of the term automaticity make it difficult to define.

According to Groome (1999), automaticity can depend on natural processes (e.g., breathing) that are the result of mastered skills (e.g., learning to drive), attention-seeking processes (which draw your attention to stimuli that require it), and priming (behaviors resulting from unconscious influences).

There are a number of attributes used to describe automaticity in the range of processes it can link to, including loss of consciousness (unaware of the procedure), lack of intention (unintentional processes), and lack of balance by the individual (or rather, conscious control). As a result, automated processes are often contrasted with deliberately controlled, conscious, and intentional processes. Years of practice, problem-solving, and regularity have led to this automaticity. The principle of automaticity applies to both language teaching and language learning. The more often the action is performed, the more automatically it will be in both cases.

In this case study, we will look at automaticity in pronunciation and word memorization and its consequences with the participation of one participant, and I will detail how I organized the situations in it and conducted research on automaticity in learning a second language. As a result, the main focus of this case study is to try to uncover most of the automaticity in the pronunciation and word memorization of a single participant and to consistently describe how it works with automaticity in target language learning.

The following literature review will be conducted from the central chapter of the topic. The case study starts with an overview of the features of automaticity, including processes, and the main subject discussed and considered implications in the following pages is the pronunciation and word memorization processes associated with automaticity in the participant's L2 acquisition. My conclusions and references are included at the end of the case study.

LITERATURE REVIEW

This automaticity has the potential to synthesize findings from a variety of language learning studies to develop a set of general language pedagogical principles. The contributions focus on meaning when it comes to language learning competence (as formulaic and rule-based knowledge). The emphasis is on the need to develop both implicit and explicit foreign language knowledge, as well as the roles of input and output. The necessity of catering to individual variances in learners as well as interaction in learning the fundamentals is based on this. From a range of theoretical perspectives, "provisional specifications" for learning-centered language pedagogy are presented. The term methodology is frequently used to describe how a teacher goes

about doing his or her job as a teacher; it is a sort of umbrella term to define the job of teaching another language. Most people think of methodology as a generic term for approaches, and in certain circumstances, it's even used to refer to specific teaching strategies. Recent research suggests that many processes that have previously been thought to require full conscious control may, in some cases, occur automatically. Highly principled representations of domain knowledge create rapid, effortless performance, as automaticity goes hand in hand with expertise. The methods, on the other hand, become increasingly engrained and difficult to modify. They can be automated to the point that both goals and processes will occasionally activate without the user's knowledge or consent. When a skill gets automated, it no longer performs in a way that can be monitored consciously. Furthermore, it operates continuously without interruption, limiting the potential for change in performance. For the obvious following reasons, the focus here was on students: To begin with, students' linguistic talents differ. Second, their learning styles were dissimilar. Third, students differ in their motivation and interests in classroom involvement, according to several educational studies and research. Finally, students had different points of view. For the reasons stated above, teachers should consider the principles of language education first proposed by Brown (2000). In general, fluent language use is fueled by a type of linguistic knowledge that is implicit (unconscious, procedural, and automatic). Learners of a second language (L2) develop explicit (conscious, declarative, controlled) knowledge of the language in formal instruction contexts, but this knowledge may not be readily available during fluent language use. As a result, language programs should strive to assist in the acquisition of implicit, automatic language knowledge. This equates to encouraging the development of lexical automaticity, or automaticity in accessing vocabulary information, in the context of L2 vocabulary learning. Unlike other characteristics of vocabulary knowledge, lexical automaticity does not frequently appear on teachers' or students' agendas. The purpose of this study is to argue for the importance of promoting lexical automaticity in the L2 classroom and to offer some suggestions for how to do so. It is proposed that repetition and consistent practice are crucial concepts for automaticity training and that processes such as reading graded readers and participating in retelling activities can help to nurture the development of lexical automaticity.

In language education, **Gonzalo Galian-Lopez** (2018) looked into the automaticity in second language vocabulary learning elements. In his paper, he presented that to function in a second language, learners would need a broad vocabulary, a deep understanding of the words they knew, and the ability to retrieve them automatically. Teachers and students both preferred to emphasize the need for expanding and deepening one's vocabulary over the requirement to access known terms automatically in fluent conversation. Nevertheless, just because a word was well-known did not mean it would be readily available during fluent language use. As a result, learners could have a broad vocabulary yet struggle to access the words they knew quickly and easily. It was arguable that language programs should strive to enhance not only the breadth and depth of vocabulary knowledge but also automaticity. The focus of that paper was on automaticity in vocabulary learning, and it would unfold as follows: first, the explicit-implicit knowledge distinction would be considered, with particular reference to the area of vocabulary. That would be followed by a discussion of the role of implicit knowledge in the wider context of L2 learning. Thereafter, the nature and role of automaticity in language use would be considered, and a final section would outline some principles for fostering the development of lexical automaticity in the L2 classroom. He mentioned that certain empirical evidence suggests that the practice impact appears to be highly skill-specific, which was an important concern for automaticity training approaches. As a result, automation in one skill was unlikely to transfer to other talents, and separate training for diverse skills appeared to be required. As a result, practicing with familiar vocabulary in reading and listening materials was not enough to improve the automatization of lexical knowledge; additional methods had to also be implemented to automate lexical retrieval in productive modes of language use.

Yakubova Lobar Gulamova (2017) conducted a study based on automaticity to increase students' ability when learning a foreign language. She suggested a summary of the automaticity principle: A timely transition from the control of a few language forms towards automatic

processing of a virtually endless number of language forms was required for efficient second language learning. Overanalyzing language, thinking too much about its forms, and actively dwelling on the laws of language all work against automaticity. She asked what that principle, which was usually applied to adult education, had to say to a person as a teacher. The following were some options: (1) There was no need to avoid paying attention to language systems entirely because classroom learning usually began with controlled, concentrated processing (of grammar, phonology, and discourse). That focus, however, should not prevent pupils from developing a more automatic and fluent grasp of the material. Grammatical explanations or exercises dealing with what was commonly referred to as "users" have a place in the adult classroom, but teachers risk overwhelming their students with language. Such processes could obstruct pathways to fluency if they become overly focused on the formal elements of language. (2) Autonomy did not emerge overnight. As a result, teachers had to be patient with kids as they guided them toward fluency.

Ishonqulov Sherzod Usmonovich (2017) conducted a study to investigate automaticity in language learning and teaching. He offered to look at a group of principles known as "cognitive" because they were primarily concerned with mental and intellectual activities, and it was tough to deny that children could learn other languages well, especially when they lived in the nation where the language was spoken. He described children's success as their proclivity for learning language instinctively—that was, without examining its forms. They picked up the language without even realizing it. Automatic processing was a term used to describe childish processing. As a result, in order to deal with language's tremendous complexity, learners had to shift from unit-by-unit and piece-by-piece processing to automated processing in which language forms had to be on the periphery. The transition to automaticity was hampered by overanalyzing language by thinking too much about its forms and conventions. As a teacher, he asked, "What did that principle say to us?" He gave some options to consider. 1). Make sure that a significant percentage of your lessons were devoted to the use of language for non-academic objectives.2). Automaticity does not develop overnight, even in a school setting. Teachers had to be patient with kids as they worked to improve their fluency over time.

David Frank Feldon (2007) investigated the impact of automaticity, which referred to mental operations that process information with little or no conscious awareness (i.e., impose little or no cognitive load). He found that automaticity had the following characteristics: (a) it happened without intention (or continued without effort); (b) it was not susceptible to conscious monitoring; (c) it used few, if any, attentional resources; and (d) it happened quickly. As individuals practice their talents, routines for specific tasks within their realm of competence had become more predictable and require less concentration to accomplish. As a result, they put little or no strain on working memory. In their comparative classroom study of expert and novice mathematics teachers, he described such routines. They discovered that experienced teachers conducted successful educational and classroom management procedures more consistently with little or no monitoring. Furthermore, experienced teachers' automatic routines and well-structured teaching schemas imposed low levels of cognitive load, giving them the mental and temporal space they needed to handle the dynamic parts of the class. Novices, on the other hand, performed slower and more laboriously, limiting the dynamic allocation of mental resources. He also discovered that experienced teachers follow educational scripts with minimal clear-thinking or planning. The acquisition of automaticity was the result of the continuous, repetitive mapping of inputs to reactions. The gradual absence of conscious intermediate decision points during skill execution was the outcome of extensive practice. Automated inferential processes like situational assessment and attribution, on the other hand, could grow implicitly without the focused effort that advanced skill learning generally necessitates. Recent research suggests that many processes that had previously been thought to require full conscious control could, in some cases, occur automatically. Highly principled representations of domain knowledge create rapid, effortless performance, as automaticity went hand in hand with expertise. The methods, on the other hand, had become increasingly ingrained and difficult to modify. They could be automated to the point that both goals and processes would occasionally activate without the user's knowledge or

consent. When a skill got automated, it no longer performed in a way that can be monitored consciously. Furthermore, it operated continuously without interruption, limiting the potential for change in performance.

In conclusion, the importance of promoting the development of lexical automaticity in L2 learning situations has been argued in these works. It first explored the difference between explicit and implicit knowledge before concluding that learners must cultivate the latter in order to be functionally competent in the L2. It then went on to identify automaticity as an intrinsic aspect of implicit knowledge, as well as reasons why lexical knowledge automatization should be more prominent in L2 curricula. Finally, it has suggested various strategies to promote lexical automaticity in formal learning contexts. While the recommended activities and processes may only provide a minor contribution to the job at hand, they do present plausible possibilities for lexical automaticity training to be used in the L2 classroom. Moreover, automaticity is useful and crucial to a teacher's ability to perform well in the classroom in some aspects. It minimizes the overall cognitive burden required to comprehend several complicated interactions, allowing working memory to be allocated to detailed assessments of individual students' requirements. Automaticity, on the other hand, can degrade classroom instruction by causing teachers to develop biased assessments and default to unwanted behaviors when the cognitive load is too high. More explicit descriptions of these effects and their underlying processes will be possible in future investigations of cognitive load's impact on teaching performance that directly evaluates its magnitude in authentic classroom contexts.

PARTICIPANT PROFILE

This study's participant is Abdulloh Islomov, a 10-year-old schoolboy who has been learning English for two years. He is in the 4th grade of the language specialized secondary school 18 in Keles city. He is enrolled in a combined classroom. His family’s lifestyle belongs to the category of middle average families. Because his willingness to learn English is greater than that of his peers, he was picked for how he used automaticity in language learning. The first language of the participant is Uzbek and his second language is English. Furthermore, he conducted his interest in L2 and his emphasis on learning a second language. At this point, he was speaking in a child-friendly language, and when I asked him why he was interested in English, he said he wanted to be an English teacher like me and study at prestigious universities like Webster. At the same time, it is experiencing significant changes in a globalized life. Culture's priorities are shifting today. These concepts fueled his interest in English classes and motivated him to study. In today's society, students have access to an abundance of resources.

SUBJECT	ENGLISH
NAME	ABDULLOH
AGE	10
LEVEL OF FL	BASIC
GENDER	MALE

RESEARCH DESIGN

In this study, I have opted to evaluate the relationship between vocabulary proficiency and word recognition accuracy in a quantitative manner. The association between identification speed and accuracy and general vocabulary knowledge is not well understood, hence this study is exploratory. A quantitative method was chosen because the average values given by the tasks offered a suitable foundation for automaticity in learning the L2 process.

This is a two-period class action research project. Planning, acting, observing, and reasoning are all steps in a self-reflecting spiral of action research. The movement research refers to a growing trend in educational research. As a result, the teacher is encouraged to think about his own practice to improve the quality of education for himself and his students. It is a type of self-reflective survey used in school curricula, professional development, and school improvement programs, and elsewhere takes an active part in the conversation.

As a result, in order to do action research, I needed to be able to reflect on the challenges I was confronted with as a researcher. Because the goal of this study is to increase the students' cognitive potential, I believe this approach is the most appropriate. He is a fourth-grader at the language specialized secondary school 18 in Keles. According to a 5-point assessment scale based on a linguistic background survey I administered, he knew English at a basic level. He was more engaged in English language classes and spoke the language more fluently. I enrolled this student because he wanted to study.

The interview is conducted in a friendly atmosphere since, as stated earlier, a set of pre-structured questions are used. Furthermore, not all of the questions are used. The discussion starts with some basic questions designed to elicit and comment on the participant's learning experience. To investigate relevant issues, informative responses based on responses were recommended. It should be noted that the survey is administered orally as a means of allowing the participant to gather factual information as well as participate in the initial interview. The first section of the questionnaire required the participant's name, age, and level of interest in English, and the participant was asked to highlight the relevant information for this study. For example, the "interest" section is critical in identifying the participant. Individual participation is required to solve the problem.

1. What is your name?
2. How old are you?
3. How is your English going on?
4. What problems do you have when learning English language?
5. What inspires you to learn English?
6. What do you hope to gain from learning English in the future?

This section contains the entire interview (simple questions and developed responses). The participant attempted to be engaged in the process by expressing his opinions on the questions as much as he could.

DATA COLLECTION AND FINDINGS

This study had one student in the academic year 2021-2022. Test-1 lasted four weeks during the month of January. Test-2 lasted four weeks during the month of February.

In this study, there were two sorts of data: qualitative and quantitative. Observation and interviews were used to gather qualitative data. Before utilizing the automaticity in teaching pronunciation and word memorizing, and after using the automaticity in teaching vowels and consonants, I conducted an observation-learning process. It was all about getting to know the student's abilities as well as his issues with pronunciation and word memorization.

The follow-up focused on the application of word memorizing strategies in the classroom. As a researcher and an English teacher at this school, I was able to see the action firsthand. An interview is the second approach to getting high-quality data. I did this by interviewing the student after the learning process to add information. Testing was used to acquire quantitative data.

It was conducted to measure a student's automatic ability taken from a word memorization test before using automaticity techniques to teach pronunciation and word memorization (pre-test) and after using automaticity techniques together to teach pronunciation and word memorization (post-test). From the standpoint of learning a second language, the most impressive finding here is that the participant has typically indicated automaticity for a set of elementary words that are not the main goal of the teaching course. The participant should know 300 keywords (elementary English words for *come, give, clever, black, jump, person, friend, etc.*) before beginning a course, these were words that were naturally repeated frequently throughout the integrated learning activity. They were never included as new words in the vocabulary list at the end of each chapter of the course text, so they were not subject to student-directed learning. The increased automaticity in processing these words at the end of the course may be related to the

fact that they are more prevalent in the course of everyday events. According to automaticity theories, the student came across these words in a consistent mapping mode (i.e., he saw or heard the word and then immediately thought about its central meaning). It has been demonstrated that consistent mapping conditions result in automatic processing. Furthermore, in this study, the student experienced a random acquisition of the discussed automaticity. The findings indicate that exposure to such random words (i.e., keywords that are not the focus of a clear instruction) can lead to increased automaticity and that this automaticity is relatively easy to document.

The weeks in January were made up of an initial and middle test, and the weeks in February were made up of a middle and final test. Both tests' topics were designed to the student's age and cognitive ability. The information was averaged. First, I demonstrated word pronunciation and memorization at a simpler recognizable elementary level. Then, I observed the degree of automaticity with individual differences in the student's ability to pronounce and recognize words.

We take a closer look at the data for the first week of January in the table.

Pronunciation Table 1

Level	Intonation	Consonant	Vowel	Period
Low	1.25%	1.41%	1.53%	1 week
Moderate	2.09%	2.14%	2.11%	2/3 weeks
High	2.29%	2.34%	2.35%	4 week

The composition of the first criterion. Intonation in the first week's pre-test and result was 1.25 percent on a 5-point scale, followed by consonants at 1.41 percent and vowels at 1.53 percent. It can be stated that the students' automatic skills with relevant content have slightly improved. First, he discovered that he could automatically distinguish between letters. In the second and third weeks, the student's results showed an average increase of 2.09% in intonation, an increase of 2.14% in consonants, and an increase of 2.11% in vowels, and the participant's pronunciation skills have improved. As of the fourth week, there had been a 2.29 percent increase in intonation, a 2.34 percent increase in consonants, and a 2.35 percent increase in vowels. Within four weeks, there was a moderate increase in student pronunciation, and his automatic ability improved, which was undoubtedly the result of his efforts.

Pronunciation Table 2

Level	Intonation	Consonant	Vowel	Period
Low	3.25%	3.41%	3.13%	5 week
Moderate	4.19%	4.28%	4.11%	6/7 weeks
High	5.00%	4.84%	4.75%	8 week

The composition of the second criterion. After the fifth week of testing, the intonation was 3.25 percent on a 5-point scale, the consonant sounds were 3.41 percent, and the vowels were 3.13 percent. It can be said that the students' automatic skills with relevant content improved from above average. As a result of his hard work on it, he discovered that he could automatically distinguish letters. In the sixth and seventh weeks, students reported an increase in the intonation of an average of 4.19%, consonants by 4.28%, and vowels by 4.11%, and participants' pronunciation skills improved. From the eighth week onward, intonation increased by 5.00 percent, consonants by 4.84 percent, and vowels by 4.75 percent. In the first table, we found that although the student was able to correct his mistakes gradually, he often made mistakes in intonation, consonants, and vowel letters. Within eight weeks, the student's pronunciation had grown significantly and his automatic ability had improved dramatically, which was undoubtedly the result of his efforts. It can be concluded that students' ability to use automatism correctly in pronunciation has improved.

Memorizing words Table 3

Level	Nouns	Adjectives	Verbs	Period
Low	**2.32%**	**2.13%**	**2.69%**	**1 week**
Moderate	**2.89%**	**2.78%**	**3.02%**	**2/3 weeks**
High	**3.24%**	**3.06%**	**3.65%**	**4 week**

The composition of the third criterion. In the first week, the first-word memorization test, and the resulting nouns were 2.32% in the 5-point system, adjectives were 2.13%, and verbs were 2.69%. It should be noted that students' automatic skills in word memorization have improved slightly. First, he found that he could automatically distinguish words into nouns, adjectives, and verbs. In the second and third weeks, the student's results showed an average increase in nouns of 2.89%, adjectives by 2.78%, and verbs by 3.02%, and the participant's memory skills improved. At the beginning of the fourth week, nouns grew by 3.24 percent, adjectives by 3.06 percent, and verbs by 3.65 percent. Over the course of four weeks, there was a moderate increase in the student's word memorization, and his automatic ability to memorize words improved, which was undoubtedly the result of his efforts.

Memorizing words Table 4

Level	Nouns	Adjectives	Verbs	Period
Low	**3.84%**	**3.54%**	**3.89%**	**5 week**
Moderate	**4.39%**	**4.28%**	**4.52%**	**6/7 weeks**
High	**4.98%**	**4.86%**	**5.00%**	**8 week**

The composition of the fourth criterion. After the fifth week of testing revealed that word memorization and the resulting nouns were 3.84 percent on a 5-point scale, adjectives were 3.54 percent, and verbs were 3.89 percent. It can be said that the students' automatic skills with relevant content improved from above average. As a result of his hard work on it, he discovered that he could automatically distinguish word categories. In the sixth and seventh weeks, students reported an increase in the memorization of nouns by an average of 4.19%, adjectives by 4.28%, and verbs by 4.11%, and participants' memorization skills highly improved. From the eighth week onward, the percentage of memorized nouns increased by 5.00 percent, adjectives by 4.84 percent, and verbs by 4.75 percent. In the third table, we found that although the student was able to memorize a lot of words gradually, he sometimes got confused in the memorization of nouns, adjectives, and verbs. Within eight weeks, the student's memory had grown significantly and his automatic ability had improved dramatically, which was undoubtedly the result of his intensive efforts. It can be concluded that students' ability to use automaticity correctly in the memorization of words has improved.

The interview data of the participant

Interviewer: Good morning my name is Abdulahad Isakov and I am here today to have an interview as planned.

Participant: Good morning teacher. Well, sure.

Interviewer: What is your name?

Participant: My name is Abdulloh.

Interviewer: How old are you?

Participant: I am ten years old.

Interviewer: How is your English going on**?**

Participant: Well, I am learning English very well, but it has some problems.

Interviewer: What problems do you have when learning the English language?

Participant: Mmm…, I have difficulties in pronunciation and memorization of words in learning English.

Interviewer: Believe me, everything will be ok! What inspires you to learn English?

Participant: Mmm…., You are my mirror, I am like you to be a teacher.

Interviewer: What do you hope to gain from learning English in the future?

Participant: One of my big dreams is, to be like you to study at Webster University in Tashkent in the future, which is unique in Uzbekistan.

The study summarizes the responses of the participant to the interview questions. The responses were reviewed and classified into several methods, which are discussed in greater detail below. This study's interview analysis was carried out in a pleasant setting. Differing views, concepts of language and language learning, motivation factors, and more comprehensive classifications representing the concepts of linguistics and language learning were represented by the participant's specific words.

DISCUSSION

In an interesting interview with the participant, he answered some questions based on his point of view. In this section, the participant attempted to discuss some of the difficulties he encountered while learning a second language in terms of pronouncing and word memorization. He employs a variety of strategies to overcome the challenges of obtaining second language acquisition. First, because he was a young student, he claimed that repeating the sounds and words in L2 would quickly eliminate the difficulties associated with his language sounds and rhythms. I told him that repetition is the mother of all knowledge. He was analyzed using perspectives on the morphological and syntactic differences between L1 and L2 (English). Finally, I know he has an intrinsic desire to learn the target language. At this point, the student is attempting to express his child-specific interests while also revealing the general circumstances of his age peers.

CONCLUSION

The purpose of this study was to improve word identification pronunciation and to investigate the relationship between vocabulary knowledge and response time. According to the data gathered, there is no strong correlation between vocabulary and response time. There is, however, an average correlation between vocabulary test scores and accuracy, precision, and response times. Furthermore, at low and high-frequency levels, correlation was lower than in all other words. This suggests that, while there is a moderate correlation, other factors may be more important, and L2 students are more sensitive to frequency level. More research on the frequency levels in the L2 study was required to validate the findings. It has been suggested that encouraging the development of automaticity in L2 learning situations is crucial. Automaticity is advantageous and required for a teacher's school success. However, if the cognitive load is too high, automaticity may undermine classroom instruction by causing teachers to create biased assessments. Future research on the impact of cognitive load on teaching ability will be able to provide enough detailed explanations of these effects and the mechanisms involved in them.

FURTHER IMPLICATION

I am particularly interested in dealing with students as an English instructor. As the findings show, the learner's automaticity influences a number of aspects of the learning process. These variables are complex, but they may include issues such as attitude toward language learning, how automaticity aids learners in perceiving language specifications, and how to think about language abilities in general, as well as what it means to be a language learner. Before designing or teaching a second language, teachers should consider the difficulties associated with automaticity.

The participant who was tested should be discussed. One participant was tested, and he is considered a young participant. This could have influenced the data's outcome if there had been

more participants. Moreover, the method of data collection and analysis takes a long time. Furthermore, testing a single participant more than once is not permitted because this implies that the participant understands how the test is structured and what words are included in it. As a result, if a student takes a vocabulary size test multiple times, the data will be unreliable because the student will be unable to express his knowledge of word-groups if the student only knows the words in the test. However, I recommend conducting additional research with the group to confirm the findings. I also recommend conducting additional research on the relationship between accuracy and vocabulary proficiency. As I checked, students could be at different levels or even at the same level. Students' perceptions of their skill levels or levels of automaticity may also differ. Despite these minor differences, the data from this study can be considered reliable. Another factor to consider is the students' motivation level, even if they volunteer to participate in the research, some students may not take the test as seriously as they should.

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