

Winning a cooperative online vocabulary learning tournament: Teamwork strategies applied by Ecuadorian teachers and students during the COVID-19 pandemic

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ABSTRACT

In foreign language learning contexts, vocabulary acquisition is sometimes perceived as a solitary activity with word lists and flash cards for memorization. However, it is possible to create vocabulary learning tasks that take into account both individual and cooperative efforts in a competitive environment that promotes engagement and motivation. The paper provides an account of the vocabulary learning and teamwork strategies employed by a group of Ecuadorian teachers and students who took part in an international online vocabulary tournament under the unprecedented circumstances of the COVID-19 lockdown in 2020. The data analyzed include reflective vocabulary journals and the WhatsApp messages exchanged. The authors conclude that in addition to the discovery and consolidation strategies for vocabulary learning, the team's cooperative interactions combined with a high level of social motivation have significantly contributed to their success.

Keywords: vocabulary acquisition, cooperative learning, teamwork strategies, social motivation, online vocabulary applications.

RESUMEN

Dentro de los contextos del aprendizaje de un idioma extranjero, la adquisición de vocabulario a veces se concibe como una actividad aislada con listas de palabras y tarjetas para memorizar. No obstante, es posible crear tareas que tomen en cuenta el aprendizaje léxico, considerando tanto el esfuerzo personal como la cooperación, en un ambiente competitivo que promueva compromiso y motivación. Este estudio provee un recorrido por las estrategias de aprendizaje y de trabajo en equipo enfocadas a la adquisición de vocabulario aplicadas por docentes y estudiantes ecuatorianos, quienes participaron de un torneo internacional en línea de aprendizaje de vocabulario bajo las circunstancias singulares de cuarentena debido al COVID-19 en el 2020. Los datos analizados incluyen diarios reflexivos de su aprendizaje de vocabulario y los intercambios de mensajes vía WhatsApp. Las autoras concluyen sosteniendo que, a más del descubrimiento y consolidación de estrategias para el aprendizaje de vocabulario, las interacciones cooperativas del equipo con un alto nivel de motivación social, contribuyeron significativamente a su éxito.

Palabras clave: Adquisición de vocabulario, aprendizaje cooperativo, estrategias de trabajo en equipo, motivación social, aplicaciones en línea de vocabulario.

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Introduction

Vocabulary acquisition activities in an English as a Foreign Language (EFL) context are not usually set up to exploit the full benefits of cooperative learning. Essential as it may be for communication, studying vocabulary is often perceived as an activity during which the individual language learner first encounters and then consolidates the knowledge of words or multi-word units (Nation, 2013; Barclay & Schmitt, 2019). However, learning goals may be set in such a manner that they combine cooperative, competitive and individualistic efforts (Johnson & Johnson, 2013). In the account that follows, we describe how an international vocabulary learning tournament provided a unique opportunity to bring these three types of endeavors together under the unprecedented circumstances of the COVID-19 pandemic.

The research project itself followed the main stages of Exploratory Action Research: exploring a *success story* in order to find out why it proved to be successful (Mercer, 2020), asking pertinent questions, gathering and analyzing the data and reflecting on the results (Smith & Rebolledo, 2018). Taking part in the tournament was the logical outcome of an exploratory phase when we had been looking for effective ways to help millennial ‘digital natives’, who are familiar with digital technology from an early age, to discover and consolidate vocabulary (Schmitt, 1997; Nation, 2020). Furthermore, the competitive element introduced by the international tournament also offered an opportunity to explore how teamwork can enhance the learning process since the extrinsic motivation of a substantial prize (the free use of the vocabulary learning web application for a year for all members of the University community) prompted contestants to work harder than they would have done with individually set goals. This type of motivation is better described as ‘social motivation’ (Pittman & Heller, 2003) and is also related to *belongingness*, which can be defined as “an innate need to belong to a group” (St-Amand, Girard, & Smith, 2017, p. 107). In our case, the newly-established, *ad hoc* group satisfied our need to belong, while our social motivation urged us to exert a substantial effort for others who belonged to a larger community at a time when solidarity and empathy were needed even more than under normal circumstances.

In the account below, we describe how a group of eight Ecuadorian university teachers and students worked together as a team to learn English vocabulary over a four-week period during the coronavirus lockdown (April-May 2020), namely, how they were able to combine newly acquired e-learning skills with teamwork. The extraordinary outcomes seem to prove that it is possible to create new ways of learning cooperatively despite the material limitations and the restricting conditions in education which were brought about by the economic and health crisis that evolved in Ecuador during the pandemic in 2020.¹

Background and context

The present Action Research study evolved from a mentoring scheme that was set up at the University in December 2019 with the purpose of supporting classroom research. After an exploratory phase of investigating students’ vocabulary size, the project on vocabulary

acquisition was supposed to start at the beginning of April 2020 with the new cohort of students. But a month after the first case of COVID-19 was confirmed in the country (León & Kurmanaev, 2020; Long, 2020), Ecuador went into lockdown, and conducting any Action Research activity became unfeasible.

It was against this backdrop that a team of five teachers² and three students signed up for the vocabulary learning tournament. Under the circumstances of the global pandemic the team members decided that they could use the enforced isolation to examine their own ways of dealing with vocabulary learning.

Entering the tournament offered several advantages: the team's way of competing could throw light on vocabulary acquisition strategies applied by both teachers and mature English major students. During the process, the participants wanted to find out more about their own – often unexplored or non-verbalized – vocabulary learning strategies so that they could apply that knowledge in learning and teaching vocabulary more effectively. They also wanted to explore working in a non-hierarchical, collaborative arrangement.

A wealth of data was generated during and after the vocabulary competition: each team member wrote a reflective vocabulary learning journal and summed up their experience in the form of an evaluative, final reflection as well. The contestants were in touch by WhatsApp messages which, retrospectively, provided an insight into the way the team communicated in order to coordinate their activities as well as monitor and track performance.

The online application and the tournament

WordEngine is a gamified digital flashcard application that can be used both on smartphones and computers. After taking a short vocabulary test (the so-called V-Check), which is a diagnostic tool to assess lexical competence, learners can start studying new vocabulary based on the specific high-frequency words which, according to the V-Check, they do or do not know (Browne, 2008; Cihî, 2018).

WordEngine had been conducting individual study tournaments, but in 2019 they organized their first cooperative-learning-based series of matches in line with Slavin's (1995) theory, which claims that groups of students can study independently, at their individual levels, and still compete together as a team. Announcing the 2020 tournament, WordEngine's Support Team Leader, Guy Cihî (EFLtalks Italy, 2020) stressed that in such a set-up, students do not only motivate each other, but they also “develop more interpersonal communication skills, which are lifelong social values that go way beyond just the high-frequency vocabulary”. Clearly, the need for communication during the coronavirus crisis was even more pivotal than usual: our team leader could not meet us face-to-face, but we needed to communicate about team performance and the standing of the competitors. Under the circumstances, the WhatsApp messages, which constitute one of the data sets analyzed below, became not only a lifeline, but the means of tactical and strategic cooperation.

In the next section, we summarize the main themes and findings related to vocabulary acquisition and cooperative learning and present a few recent studies where there is a reference to the merging of the two.

Literature Review

Vocabulary acquisition

For several decades, the study of Second Language Acquisition (SLA) did not specifically focus on vocabulary learning and instruction as these aspects “were seen as somehow isolated and separate from the mainstream theories of SLA” (Browne, 2008, p. 4). However, with the introduction of the lexical perspective (Lewis, 1993), learners’ needs for acquiring vocabulary effectively have become a focus of intense scholarly study. Simultaneously, advances in technology have also changed the approaches to vocabulary acquisition, one aspect being the introduction and widespread use of accessible gamified software for mobiles and PCs. This technological development is now allowing learners to acquire language by receiving rich input even when they are isolated at home (Krashen, 2020). Learners need both, vocabulary input and meaningful language interaction (Berns, 2016) and language games can function as motivators (Silsüpür, 2017) helping to maximize vocabulary acquisition while developing cooperative learning skills (Johnson, Johnson, & Holubec, 1998).

Flashcards and digital games

Currently, the wide access to electronic devices facilitates learner exposure to online language games, which create interest in and support for vocabulary acquisition (Silsüpür, 2017). Browne (2008) mentions that “interactive vocabulary learning games induce automaticity” (p. 10) and can help maintain students’ motivation.

Sheridan and Markslag (2017) point out that digital games containing flashcards resemble physical vocabulary cards and emphasize that they can function as powerful tools of lexicon growth. While mobile devices maximize learners’ time on task (Steel, 2012), accessible game applications help learners to encounter high-frequency vocabulary enough times for them to acquire it successfully (Sheridan & Markslag, 2017).

Cooperative learning

Using the strengths of cooperative learning to acquire vocabulary brings to light visible behaviors in group performance. Online classes, technology-based lessons and tournament participation through language games allow for the synergy of vocabulary acquisition and cooperative, including competitive, elements. Johnson et al. (1998) stress that *positive interdependence*, for instance, energizes team members by making them understand that the group will not be able to succeed unless everyone walks in the same direction. *Individual and group accountability* make each member of the team work as hard as possible to

contribute to the group since the joint effort of all participants, especially in online gaming platforms, count as one.

Promotive interaction encourages face-to-face contact, but it is also present in the form of social network exchanges, for example, WhatsApp messages, students' Facebook posts and online video conferences. *Interpersonal and social skills* in the team can be perceived as an innate characteristic of the group, and finally, the *group processing* element examined by Bertucci, Conte, Johnson, and Johnson (2012) makes the team reflect on their advances and the strategies that help to achieve the group's goal (in our case, acquire vocabulary quickly and effectively).

Gaming and motivation

Perhaps one of the most powerful aspects of vocabulary language games is the element of enjoyment while practicing incidentally (Huyen & Nga, 2003). In their research involving Vietnamese students, Huyen and Nga (2003) found that games create a relaxing atmosphere, which enhances vocabulary retention in the learners' brain, while they also promote friendly competition and help meet the students' expectations of the class.

When cooperation and competition trigger motivation, the latter is capable of driving human behavior (Dörnyei, 1998) including the manifestation of intrinsic and extrinsic motivation. For years, researchers have debated whether intrinsic motivation can overlap with extrinsic motivation. As one of the leading academics on the topic of motivation, Dörnyei (1998) claims that "under certain circumstances - if they are sufficiently self-determined and internalized - extrinsic rewards can be combined with, or can even lead to, intrinsic motivation" (p. 121).

Social motivation

Beyond the binary categories of intrinsic and extrinsic motivation, *social motivation* can also play a role in how groups act not just for the sake of the individuals involved or the 'team' but for an even bigger social group. Pittman and Heller (1987) provide a comprehensive overview of social motivation that often guides social behavior (p. 480). After her interview related to the unprecedented circumstances under which teachers and students were forced to start functioning at the time of COVID-19, Sarah Mercer (2020) stressed the role of this type of motivation:

We are often motivated by such lovely human characteristics as not wanting to let others down, a sense of belonging to a team/group, and our drive to help others beyond ourselves. ... Goes to show humans are driven most effectively by our humanness - this kind of social motivation and group identities. (Personal communication, June 20, 2020)

Korpershoek, Canrinus, Fokkens-Bruisma, and de Boer (2019) investigated the relationship between school belonging and students' social-emotional conduct. The results of

their meta-analytic review revealed that school belonging showed a positive association with social-emotional outcomes such as self-concept and self-efficacy (p. 25). One can only assume that these results would be valid for students and teachers at a flagship Ecuadorian state university whose mission is to train a new generation of teachers through, among others, systematic inquiry, reflective practice and Action Research.

Combining vocabulary acquisition and cooperative learning

An overview of the relevant literature shows that there has been ample research on vocabulary acquisition using games and online applications. The advantages of cooperative learning and interaction in the language classroom have also been explored extensively. In our study we combine these elements and include the aspect of social motivation as a strong motivator for a team in which teachers and students collaborated to achieve a common goal.

In the next section, a range of strategies will be analyzed to demonstrate how vocabulary acquisition and cooperative learning merged and became a powerful motivator for individual and team learning while competing for the benefit of a much larger social group – the community of the University.

Methodology

The Action Research design

According to Smith and Rebolledo (2018, p. 29), one of the motivations for doing teacher research is to explore why something has worked well. In our case, the proof of success was that we had won the first prize so, as the next step, we wanted to understand better how and why we succeeded (Mercer, 2020) because we believed that once we were able to disentangle the threads, there would be lessons to take back into our classrooms. After gathering and analyzing the relevant data on vocabulary acquisition and cooperative learning, we also intended to reflect on the experience so that the elements of success could be employed repeatedly.

Research questions

What were the most important vocabulary learning strategies employed by the group that resulted in success?

How far did the *cooperative* and *collaborative* teamwork strategies applied during the vocabulary tournament contribute to winning WordEngine's Team Challenge?

Data gathering

The data for the Action Research project was collected during and after the vocabulary tournament. Quantitative data were provided by Lexxica, the company behind the WordEngine application, while qualitative data were gathered from reflective journals, the team members' final reflections and the WhatsApp messages exchanged.

The tournament started on 6th April and ended on 3rd May 2020 with 38 teams from seven different countries participating (Appendix A). The teaching/learning profile of the 8-member team shows the wide range of language skills and experience (Appendix B). The only reason why its members could compete as one team is that, following an initial vocabulary assessment by WordEngine (V-Check), the contestants competed at their own level of lexical competence, and their correct responses (CRs) were averaged.

During the four weeks of the tournament, the team, which chose a name that combined the acronym of the University and Ecuador's international calling code, won in each round.

Table 1. Correct Responses (CRs) of the University team and their competitors

Team	Week 1	Week 2	Week 3	Week 4
The University	2 860	3 602	2 244	4 353
The team in second place	2 029	2 909	1 449	1 480

Source: WordEngine (Lexxica) data

The team members practiced intensely and this was reflected in the high number of hours that they spent online:

Table 2. Number of hours that team members spent practicing

	Week 1	Week 2	Week 3	Week 4	Total number of hours	Correct Responses (CRs)	Rank on last day (3 rd May 2020)
Teachers:							
Catalina	02:34:33	06:03:12	04:03:23	11:57:11	24:38:19	13 255	5
Isabel	04:36:56	05:39:28	03:48:59	02:33:42	16:39:05	10 010	12
Ivy	06:19:10	09:08:59	05:52:08	10:43:08	32:03:25	16 865	3
Maribel	05:40:31	05:49:06	04:58:02	05:46:52	22:14:31	12 544	7
Mathew	04:24:15	06:56:25	03:56:51	07:01:47	22:19:18	11 393	10
Students:							
Aiden	03:09:02	07:12:15	06:25:33	11:12:43	27:59:33	12 705	6
Alexander	12:07:28	07:28:15	07:37:25	14:39:06	41:52:14	17 900	2
Joe	07:19:05	07:35:18	00:32:43	07:40:10	23:07:16	9 841	13
Total	46:11:00	55:52:58	37:15:04	71:34:39	210:59:41	104 513	

Source: VAdmin data (WordEngine)

In the end, the University won the series of matches by gaining altogether 6637 points more than the Romanian team in the second place. As can be seen in Table 2, on the last day

of the tournament all team members were among the first 13 in the ranking (out of about 4000 players). We were declared the winners and this meant that the university community stood to receive almost 3000 free WordEngine licenses for 360 days.³

Results and discussion

Members of the team expanded their vocabulary size considerably. Table 3 presents the data that show that most contestants managed to improve their reading comprehension skills by one level in the Common European Framework of Reference (CEFR) and one of the teachers, Catalina, moved up by two levels.

Table 3. Team members' vocabulary gains

	Vocab size at start	CEFR	IELTS	Vocab size at end	CEFR	IELTS
Teachers:						
Catalina	8,615	B1	5.7	13,073	C1	7.0
Isabel	11,379	B2	6.8	14,208	C1	7.0
Ivy	6,453	B1	4.9	11,061	B2	6.3
Maribel	8,548	B1	5.7	12,274	B2	6.8
Mathew	4,216	A2	4.2	7,955	B1	5.3
Students:						
Aiden	1,094	A1	3.4	4,101	A2	4.0
Alexander	5,509	A2	4.6	9,950	B1	7.0
Joe	7,065	B1	5.2	9,675	B2	6.1

Source: VAdmin data (WordEngine)

Note: All participants' names are anonymized

It needs to be pointed out that these results reflect a certain point in time, after weeks of intense practice and they represent improvement in word recognition based on multiple choice questions with three options to choose from.

The five teachers and three students employed a number of vocabulary learning strategies. They utilized 33 out of the 59 strategies listed down in Schmitt's (1997) taxonomy. Teachers often used determination strategies, such as analyzing parts of speech, examining the roots of a word as well as the affixes and they often related the words on the digital flashcards to cognates in their first language (L1). Both students and teachers employed the strategy of guessing from context, but students were more inclined to relate the meaning of a new word to their life experiences. The most frequently utilized memory strategies included studying the spelling and sound of words and saying them aloud while practicing.

The reflective vocabulary journals provide an insight into how team members went about organizing the task, which had both logistical and meta-cognitive elements that sustained the vocabulary learning effort.

Some of these include:

- signing up with WordEngine as individual users (free trial before the tournament began);
- familiarizing themselves with the application and taking a V-Check test;
- joining the group as team members and taking the V-Check test again to establish a benchmark;
- setting daily and weekly goals and monitoring one's own performance as well as that of others during the competition.

The specific vocabulary acquisition strategies included creating wordlists and studying the words before sessions like Aiden did: "I was literally speaking in front of my mirror and practicing the words". Isabel used a specific strategy, which implied relating the unknown English words to cognates that she knew from her additional languages (Modern Greek and Latin): "I was often just listening out for the root of the word or thought about the Greek I know, especially when it came to scientific expressions and numbers". Some team members started using the words that they had learnt actively as shown by Aiden's journal entry in Week 2: "I started to work on my laptop in the yard of my house because ... I felt that my living room or bedroom [look] like a cell (cell is a word I learnt on WordEngine)". Catalina went back to the words that she missed in the 15-item rounds and checked their meaning as well as examined how they were used in a sentence. Maribel created a word list and made an attempt to memorize the words she had written down as there was not enough time to look at the list while she was playing.

As for some of the final reflections, Alexander, ranking No 2 for a number of days, was able to see the results he achieved clearly:

I noticed that thinking and reading a definition of a word in a short period of time was not as challenging as when I started the tournament. At the very beginning, I struggled with remembering some words, but at the end I could develop the skill to think more carefully and critically to choose the correct word.

The team leader was equally satisfied with her results and the strategies she applied: "I associated the English word to a similar word in Spanish, I made a vocabulary list, I used mnemonics ... When we took the V-check, I went from an advanced level to an expert level".

Beyond the conscious use of vocabulary acquisition strategies, the group used a range of teamwork strategies. In the next section we present the most important elements of working in a non-hierarchical unit during an online cooperative learning experience.

Cooperative and collaborative teamwork strategies

The framework for the analysis of the data pertaining to this aspect of our study comes from Ruiz-de-Azcárate, Hernández-García, Iglesias-Pradas, and Acquila-Natale's article (2017), which specifies a system of indicators that can be used for the assessment of teamwork by looking at the quantity and quality of interactions in online collaborative contexts.

Ruiz-de-Azcárate et al. (2017) provide the following definition for teamwork as a collaborative process:

Teamwork refers to a behavioral pattern between two or more individuals who interact dynamically, establish a regular and constant negotiation to reach agreements through knowledge exchanges and problem solving, while keeping a steady pace and coordinating efforts in order to achieve their shared goals. (p. 2)

The authors go on to say that in *group teamwork*, interdependence and interrelatedness translate into *interactions* between the members:

“Member interactions are an essential element of teamwork and lead to observable behaviors because, in order to achieve the shared goals, the team has to show cooperation and social skills that are not necessary to perform an individual task” (p. 3).

In sum, group teamwork is understood as a collaborative process. Ruiz-de-Azcárate et al. (2017, p. 1) assert that, in the foreseeable future, networked organizations with teams at their heart will replace “traditional hierarchical structures”. In our own context this meant that we were mindful that the three student-contestants were treated as equal members of the team, and we found that the absence of a hierarchy had a beneficial effect on team spirit.

One of the crucial factors that led to the team’s success was effective communication before, during, and after the tournament. According to Ruiz-de-Azcárate et al. (2017), constant interaction among members of the group reveals reciprocity and positive communication and this is one of the factors that determine outcomes. The chat interactions among team members included the use of positive and constructive language to encourage and motivate each other.

Example 1

- 1. **Ivy:** We won 🎉🎉🎉🎉🎉🎉
- 2. **Alexander:** Congratulation team 🎉🎉🎉
- 3. **Ivy:** Congrats team!!! Teamwork 🙌🙌
- 4. **Mathew:** 🙌🙌🙌🙌🙌

There were a total of 574 WhatsApp messages exchanged during the 4-week tournament. From among these, 261 were messages of interaction among members, 223 came from the team leader, and 90 expressed cheering, celebration, and team support.

Table 4. Communication

Subcategories	Communication		
	Interaction among members of the team	Organization and logistics (coming from team leader)	Cheering and encouraging
Number of WhatsApp messages	261	223	90

Source: Data gathered by the co-authors

Similarly, the entries in the journals and the final reflections show how effectively team members communicated. Members of the team were in constant interaction motivating, cheering and celebrating each other's achievements. As Ivy said, “We supported each other from the beginning and we cheered each other on”.

In a somewhat unusual set-up, the team involved both students and teachers, but all members treated each other as equals. Alexander, a student member who was leading the ranking, was praised and cheered for maintaining his position until the end of the tournament (WordEngine continuously provides the ranking details for individuals and during those weeks, there were about 4000 players globally). Isabel was particularly appreciative when she messaged: “I am delighted by the fact that Alexander is now in second place”.

As the tournament advanced, classes at the University started, and some contestants felt frustrated for not being able to contribute to the team goal. The team leader displayed a high degree of organizational and leadership skills when dealing with problems. Aiden was actually on the verge of leaving the tournament: “I saw that all my teammates’ scores were very far from mine. I asked teacher Ivy if she wanted to put another person instead of me but she encouraged me to continue”.

In essence, the team’s constant communication and mutual support were crucial factors that were reflected in online interactions and played a considerable role in achieving outstanding results.

Cooperation

From the beginning of the tournament, team members had one common goal, namely, to win the competition and obtain thousands of free web application licenses for the University community. At the time, the University was under considerable financial pressure, and winning the licenses potentially meant less pressure on the teachers because of the newly introduced and large online classes. The messages in WhatsApp show that members were constantly discussing their achievements (group processing), following each other's progress (positive interdependence), and encouraging each other (promoting interaction). These concepts are in line with the main elements of cooperation as described by Johnson et al. (1998), so we have included them here to extend the framework provided by Ruiz-de-Azcárate et al. (2017).

Table 5. Cooperation

Subcategories	Cooperation		
	Group processing	Positive interdependence	Promotive interaction
Number of WhatsApp messages	126	102	97

Source: Data gathered by the co-authors

The participants emphasized that group support was essential and that the encouraging and inspiring messages incentivized them to continue focusing on the task. Maribel, who usually played/practiced at night, felt the positive vibes coming from the other contestants: “I felt motivated because of team support and their willingness to succeed”.

An exceptional example of cooperative work was evidenced when Joe, a student, could not accomplish the daily number of words due to internet connection problems. He wrote in his reflections: “My internet was slow! The program freezes... I got as close as possible of the router”. Hearing this, the team decided to reach their weekly goal by distributing Joe’s potentially missed word quota among the rest.

Another incident that revealed the exemplary unity and cooperative spirit among team members was when Isabel, one of the contestants, who has native-like English proficiency, started running out of words in the second week of the tournament because WordEngine does not cater for highly proficient, plurilingual users. She wanted to step aside since she felt that she was jeopardizing the team’s performance and their chance of winning. However, all the participants agreed on not leaving her behind, since she supported and nurtured the team from the very beginning, as one of the journal entries demonstrate. “All team members have agreed to put in extra work as long as we can keep Isabel as part of the team. I am so proud of us! We are very strong!” [Ivy]

This inspired Aiden to create the team motto “TOGETHER EVERYONE ACHIEVES MORE”, whose initials form the word TEAM. Later on, group members also recalled that they made this exceptional effort for something bigger than the team. “I am extremely pleased and thankful for the achievements of our group. We worked hard to honor our team but we also fought for our university”. [Catalina]

The competition, therefore, created a strong sense of collaboration combined with further elements of positive interdependence, effective communication, and effective interpersonal skills, which all play a part in a group’s accomplishments.

Coordination

The analysis of the chat exchanges indicates that the team members coordinated their work effectively. This was reflected in unceasing task execution, task completion progress, and reaching common decisions as shown in Table 6. Ruiz-de-Azcárate et al. (2017) emphasize that these factors are also linked to cooperation and communication.

Table 6. Coordination

	Coordination		
Subcategories	Constant task execution	Task completion	Sharing strategies
Number of WhatsApp messages	48	19	1*

Source: Data gathered by the co-authors

Note: *More strategies were shared in Zoom conversations

Effective coordination was noticeable from the very start when the team decided on the weekly workload and distribution. Since the team keenly wanted to win the competition, Mathew suggested that they should work on 5000 words per week and the team accepted this exceptionally high target. Here is how Maribel reflected on this aspect: “We started and finished this competition as winners. We always had big goals as a group”. In actual fact, the possible top score per week assigned by WordEngine was 3,010 and the team agreed to maintain this figure as its weekly target.

Coordination along with communication and cooperation is considered to be one of the essential components of teamwork that leads to successfully achieving a goal (Rico, Sanchez, Gil, & Taberno, 2011) and the team was successful in this regard as well.

Monitoring and tracking

During the weeks of online teamwork, monitoring and tracking implied each member’s reflection over the tasks performed and the time spent on task (see Table 2). There is ample evidence of time tracking and task performance reports on weekly advances in the chat messages, which was crucial for the winning of the tournament.

Table 7. Monitoring and tracking

	Monitoring and tracking	
Subcategories	Error detection	Reflecting on task
Number of WhatsApp messages	5	24

Source: Data gathered by the co-authors

The analysis of the data shows that when a member of the team informed the others about the amount of time they spent on reaching the goal, other members of the team became even more motivated and they practiced for longer as well.

Example:

1. **Isabel:** I’ll check if I can get some more points for the team tomorrow morning.
2. **Maribel:** I’ll do more words until the last minute.
3. **Joe:** I’ve been working since yesterday. I won’t stop until the morning.

Additionally, due to the frequent reporting on positive performance, a healthy competition began among members of the group. The weekly results report shown in the

group chat was a point of reference for every member to try harder. This led participants to regularly compare their scores.

Example:

1. **Ivy:** I'm trying to catch up with Alexander but every time I do 10 Alexander does 50.
2. **Isabel:** Hi everyone, Alexander is now No 12 and I'm No 11....Alexander is our star, with Ivy and Catalina not much behind.

Team members tended to track the time they spent on reaching the objective, which helped them to stay aligned with the weekly goal. Aiden was ready to work hard until 10 am on Sundays (the cut-off point for the week): "I've been working on the platform since 7:00 am. I'll work on it [till] the last minute".

The team leader discreetly and tactfully tracked each member's performance. Every time she shared the weekly results, the team evaluated their own results and efforts without any need for nudging. Thus, when some participants realized they needed to contribute more to reach the common goal, they pledged to try harder.

Example:

1. **Ivy:** Despite our best efforts, we're not in the first place anymore, I think we're 200 hundred points behind. I think if we do the daily conversation [a special section of the vocabulary challenge] as Isabel suggested we can get back on track...
2. **Alexander:** I haven't been doing my best, but it's because I have started classes... I'll be up-to-date with my points.
3. **Joe:** Sorry for the delay in my participation.
4. **Mathew:** I'm a little behind, my internet is not working but I'm doing my best to accomplish the goal.

The way the team leader and the members reflected on their activities and achievements was undoubtedly one of the factors that led them to become the champions.

After having considered the vocabulary learning strategies and the collaboration among the members of the team, let us now return to the initial research questions:

1) What were the most important vocabulary learning strategies employed by the group that resulted in success?

As demonstrated in the data analysis section, the team, which included both teachers (advanced learners) and students (beginning or intermediate students), employed a range of vocabulary learning strategies that contributed to their success. The strategies are familiar from Schmitt's taxonomy (1997) and prove that repetition and the recycling of words are techniques that have resulted in successfully memorizing and retrieving vocabulary, in our case, too. Identifying cognates, resorting to the knowledge of additional languages, saying the words aloud, listening to its sound and paying attention to how it was written were some of the most often utilized strategies. Beyond these familiar strategies, there are two elements

that cannot be disregarded: one is the extraordinary amount of time contestants spent online and offline and the other is the time-constrained nature of the tournament that supported automaticity (Browne, 2008).

2) How far did the *cooperative* and *collaborative* teamwork strategies applied during the vocabulary tournament contribute to winning WordEngine's Team Challenge?

Evidence from the reflective journals and WhatsApp interactions suggests that the participants used cooperative and collaborative teamwork strategies extensively during the four-week tournament. There was *constant interaction* guided by the team leader, who continually organized, informed, and reported results to keep team members focused on reaching the weekly goal. Similarly, *cheering and motivation*, reflects how the exchange of positive and encouraging messages was decisive in motivating the team to continue working.

Weekly workload agreements and a fair distribution of responsibilities can be clearly seen in the way *common goals and equal contributions* were set by the group as a unit. Moreover, *constant monitoring and tracking* effectively informed the group about the status quo, which led to solving problems on the spot. Finally, *immediate action and group decisions* were taken when problems arose (members had poor internet connection or ran out of words to practice). The answer was the reallocation of the workload and covering for members who could not perform well through no fault of their own.

The fact that cooperation and collaboration are key in group teamwork was confirmed when, after the tournament was over, we learned that the Romanian participant, who was ranked first for much of the tournament, was not able to push her team to victory because there were two inactive members in her group and this brought down the group average considerably (Cihî, personal communication, June 9, 2020).

All in all, this shows that not even an exceptionally hard-working and disciplined participant can win in isolation. Beyond acquiring new skills for vocabulary acquisition, our team members also learnt first-hand about the effectiveness of cooperative, collaborative and teamwork strategies, which ultimately led the group to finish at the top.

Reflection and concluding remarks

Our reflections are multi-layered, because one of us was a contestant, but was not a member of the original Action Research team exploring vocabulary acquisition, while two of us had been in the Action Research group but were not WordEngine team members. However, this fact gave us a unique perspective and helped us share and explore the vocabulary learning experience as well as understand more about the dynamics of group teamwork.

As for vocabulary acquisition strategies, we learnt that there are a number of ways one can expand the size of their vocabulary. Contestants employed a range of individual strategies, but it became clear to all that without investing a lot of time and mental effort, vocabulary learning cannot be effective. We also learnt that a specific language learning

activity, which is sometimes carried out as a solitary task (memorizing word lists and flipping over flash cards), can be turned into a cooperative and, at the same time, competitive activity. It became clear that digital applications lend themselves to group competition that can engage participants deeply. We are intending to utilize this learning and create similar set-ups in our future language classes, whether they are given online or face-to-face.

Based on our data, we were also able to confirm that gamified EFL environments are powerful learner motivators (Silsüpür, 2017). Combining authenticity (live tournaments and online contests) with the playfulness of gaming can create the conditions for a long-lasting learning experience.

Over four weeks from early April to early May 2020, the team went on to spend more than two hundred hours of practicing vocabulary and, finally, came first in the competition. As the winners, they were awarded almost 3000 free licenses of the vocabulary learning application for the University's teachers and students.

Under the unprecedented circumstances that the global pandemic brought with it, learning has become exceptionally challenging both for teachers and students, and it was exactly this situation that made us realize that cooperation can be a decisive factor and lead a team to success. Group members often explicitly applied the four basic elements of teamwork: communicating effectively despite the physical distance, collaborating ceaselessly, coordinating their activities and tracking their performance while pacing themselves carefully. These are all skills that we can foster in our multi-level language classrooms in order to promote equity and to appreciate that "We're all in this together" (Mercer, 2020) and nobody is going to be left behind.

As a matter of fact, teachers and students working together as a team created a non-hierarchical system of learning, which is seen to be at the heart of organizations in the future (Ruiz-de-Azcárate et al., 2017). In such an equitable situation, learners feel respected and supported, and this motivates them to participate actively. This kind of motivation should be reproduced and maintained in face-to-face as well in virtual classrooms.

As mentioned by Dörnyei (1998, p. 121), intrinsic and extrinsic motivation are factors that can overlap. In our case, there was a further element of *social motivation*, and a strong sense of belonging to a greater social unit, namely, the University, which was going through a hard time.

When reflecting on the experience of vocabulary learning using an online application in a cooperative manner, we came to understand that online events, tournaments and other virtual modes of learning and teaching will probably become even more widespread. In our new reality, these virtual spaces might become the venues of deep and effective learning as well as offer opportunities for the acquisition of the skills of cooperative behavior whose importance we are only beginning to grasp.

Endnotes

- 1) The country has been one of the worst hit by COVID-19 in the Latin American region (Stott & Long, 2020). The health crisis struck in the wake of years of low growth and a foreign debt amounting to \$36bn.
- 2) From among the authors of the present article, two were members of the original vocabulary research team with one more teacher joining them to participate in the WordEngine competition.
- 3) The distribution of the 2743 free WordEngine licenses started at the beginning of June 2020. By courtesy of Lexxica, the 254 incoming first-year students were also given WordEngine licenses.

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Conflict of interest

Winning the first prize of the WordEngine Team Challenge Vocabulary Tournament meant that all students and teachers at the University were given free WordEngine accounts for 360 days. Moreover, we were awarded a trophy cup, eight badges and two certificates. We requested the organizers that the countervalue of the eight Starbucks gift cards, which were part of the first prize, be donated to a local charity in Cuenca (Hogar de Esperanza), which was providing support to vulnerable people during the pandemic. In compliance with our wishes, \$80.00 was transferred to the said foundation.

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Appendices

Appendix A: Countries and number of teams participating in WordEngine Team Challenge

Countries	Week One	Week Two	Week Three	Final Week
Australia	25	3	3	3 3rd Pl. Winner: Melbourne Storm
Belarus	1	1	1	1
Ecuador	1	1	1	1 1st Pl. Winner: the University
Japan	3	3	3	3
Mexico	6	2	1	1
Oman	1	1	1	1
Romania	1	1	1	1 2nd Pl. Winner: Balcescu Eagles

Source: WordEngine data (Lexxica)

Appendix B: Contestants' language learning and teaching profile

	Status	No of years learning of English	No of years learning of teaching English	First language	Additional languages	No of years spent in an English-speaking country
Catalina	Teacher	22	13	Spanish	English	2 months in the US
Isabel	Teacher	10	45	Hungarian	English Spanish Modern Greek Russian Latin	India: 3 years United Kingdom: 17 years
Ivy	Teacher	10	4	Spanish	English	2 years
Maribel	Teacher	12	8	Spanish		2 years

Mathew	Teacher	25	10	Spanish	English	
Aiden	Student	11	0	Spanish	English	
Alexander	Student	10	0	Spanish	English	
Joe	Student	20	6 months	Spanish	English	19 years, high school and AA* Degree

Source: Data gathered by co-authors

*An Associate of Arts degree, comparable to the first few years of a Bachelor's degree