INTENTIONAL VS INCIDENTAL ESP VOCABULARY ACQUISITION BY POLITICAL SCIENCE STUDENTS

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The article discusses an experiment that researched the intentional vs incidental ESP vocabulary uptake in two university groups of third year political science students and addresses the implications of using an authentic audiovisual material as an input text for an ESP course. The procedure of intentional vocabulary learning involved pre-teaching of lexical items and explicitly informing the students they would have to use the vocabulary in a following productive activity (writing an essay), while the incidental uptake took place in the course of self-study where the students had to watch an authentic audiovisual recording and then write an essay on the subject discussed in the video. The case study employed a quantitative research method to calculate the amount of the target words and collocations used in the written output, and a qualitative method to assess the accuracy of their usage. Two months later a delayed posttest was done to check the students' productive knowledge of the target lexis form. The experiment correlated with output- and involvement load hypotheses, and had to assess the effect of a text-based output on learning outcomes, as well as observe how applicable is the involvement load hypothesis to analysing the students' self-study strategies. The study showed that the intentional mode of learning outperformed the incidental acquisition by over 20% and suggested what factors may have enhanced the scope of the ESP vocabulary retention. Further studies could concentrate on evaluating ESP learners' both productive and receptive target vocabulary competence over a longer-term perspective.

Keywords: ESP; political science; intentional vs incidental vocabulary uptake; involvement load; audiovisual input; vocabulary acquisition.

Introduction

Due to the importance of solid vocabulary knowledge for successful mastery of a foreign language, the mechanisms of L2 vocabulary retention have been researched from various perspectives. The studies have focused on retention rates in intentional and incidental acquisition, various forms of input materials, and factors that may influence learning gains. It has generally been accepted that to be effective vocabulary learning strategies should have an explicit component, while vocabulary input materials are expected to have a number of characteristics which would stimulate learners to notice new lexical items, retrieve them and stimulate their further productive usage, but also raise students' interest and involve them into cognitive processing of new words and multi-word units. At the same time current studies, especially in the realm of English for Specific Purposes (ESP), have mainly concentrated on reading texts as the main source of new vocabulary input, leaving aside a mass of audiovisual materials (particularly unadapted ones, i.e., not accompanied with subtitles or transcripts) which recently have gained enormous popularity with learners, who often benefit from them as a source of incidental vocabulary learning. Another understudied area of vocabulary acquisition remains incidental uptake of collocations, with no agreement as for the factors that may enhance their retention.

Although it is a universal L2 teaching axiom that vocabulary knowledge is "fundamental to all language use" (Schmitt et al., 2017, p.213), "major goal in most teaching programmes" (Thornbury, 2006, p. 240), and "should figure high on language learners' and teachers' agendas" (Nguyen & Boers, 2018, p. 5), it is even more so for ESP learners, whose command of L2 subject matter terminology is viewed as a sign of their overall professional competency.

A common approach in ESP courses to enhance the learners' vocabulary retention is to engage them with authentic, self-directed and purposeful materials (Carter & Nunan, 2002; Blagojevic, 2013). The relevance of the material gets them to be more interested in the content of the presented text than in the language forms available in it. This prevents learners from consciously concentrating on language forms and thus helps to 'acquire' a foreign language subconsciously, as a by-product of content-based learning (Krashen, 2009). According to Ellis (1999), such learning is referred to as incidental, i.e. such that occurs when learners concentrate on understanding messages but have no intention to learn certain words.

A study into incidental vocabulary retention was conducted by Nguyen and Boers (2018), who discuss the outcomes of content-focused activities in the input-output-input sequence based on a video recording serving as an input text. So far the investigation into the amount of incidental vocabulary uptake from

listening input materials has not attracted much attention from researchers, and even if they did include listening into their research, it was mostly viewed as "auditory stimuli which could reinforce acquisition from reading" (van Zeeland & Schmitt, 2013, p.610). Audio vocabulary lessons containing pairs of L1 and L2 equivalents were examined by Zubenko and Shwedel (2019), who argue that such listening input can act as a facilitator of lexical retention by activating both implicit and intentional memory. Unlike listening, reading has been in the centre of attention of numerous studies focussing on various aspects of vocabulary uptake: the number of encounters with the lexis, the presence of context, the interest students take in the topic, etc. (e.g. Lee & Polido, 2017; Webb, 2008; Ponniah, 2011; Xu, 2010), as well a more modest number of investigations into students' behaviour when faced with the task of learning words in a list format (Pauwels, 2018).

Even fewer studies have looked into the acquisition of collocations, which are notoriously difficult for learners, especially in productive use (Snoder, 2017). While in *The Lexical Approach* Lewis (1999) cites developing learners' ability to 'chunk' language successfully as "a central element of language teaching" (p. vi) and emphasises raising learner awareness of collocations in input materials (Lewis, 2000), other research has shown that it is unlikely to result in enhanced learning outcomes (Boers & Lindstromberg, 2012). The authors also question Lewis's overreliance on learners' skill of noticing and learning collocations on their own (Boers & Lindstromberg, 2009).

As for the intentional vs incidental learning of collocations, some previous research has shown the effectiveness of the former (Peters 2014, 2016), but relatively little is known about the outcomes of incidental acquisition of L2 collocations, with a number of factors viewed as essential predictors of collocational knowledge by some studies and dismissed as such by others (Garnier & Schmitt, 2016). Thus, with the limited empirical evidence available so far, little is still known about how, and if, collocations can be learned incidentally (Pellicer-Sanchez, 2017).

Our research largely refers to Laufer and Hulstijn's hypothesis of task-induced involvement—also known as the involvement load hypothesis (Laufer & Hulstijn, 2001), which suggests three components of engagement that help to predict vocabulary uptake from texts—need, search, and evaluation. Our experiment involved the learners into the task as they had to write an essay after watching an input recording. The essay writing task had to offer a *need* to use input text as a source of useful ESP vocabulary; if the learners lack sufficient lexical resources to express their ideas this could prompt them to *search* for the vocabulary pieces of the puzzle; the students supposedly also had to *evaluate* the accuracy of their texts against the input material (Nguyen & Boers, 2018).

The text-based output part of the experiment was conducted in line with Swain's output hypothesis (Swain, 1995) claiming that the output task that follows the input promotes the learners' skill of *noticing* vocabulary, as they may experience lacunae in their lexical resources and may want to revisit the input text again (Nguyen & Boers, 2018), which obviously benefits a more efficient retention.

The experiment in question subjected both groups to the text-based output, while Group 2 could also benefit from the Laufer & Hulstijn's triad (unlike Group 1 who had been deprived of the *search* element). Although Group 2 appears to be in a more privileged position, the expected outcome of the study is higher learning gains to be demonstrated by Group 1 subjected to the intentional mode of learning. Thus, the **aim of this paper** is primarily to estimate the scope of ESP vocabulary retention in content- versus language-focused activity (which could be labelled as incidental vs intentional vocabulary uptake), the source of the vocabulary being an authentic TV talk show (BBC *HARDtalk*), and to analyse the factors which may have influenced the amount of the words and collocations retained; and secondly to assess the accuracy of the target vocabulary usage in the learners' text-based output (essays). The small sample size enabled the researcher to focus on a detailed analysis of each student's essay. Another issue addressed, which may be viewed as a sub-aim of the research, is assessing the effectiveness of third year ESP students' self-study skills, i.e. the learners' ability to use an authentic audiovisual recording as a source of relevant professional lexis which could later be used in essay writing.

Our study is different from the available research in the following aspects: the object of study (we compare intentional and incidental ESP vocabulary uptake); the material (authentic audiovisual recording as a source of relevant ESP vocabulary); assessing the accuracy of the ESP vocabulary actual usage in the learners' written output; and a special attention given to evaluating the learners' skill of using multi-word units.

Methods

Participants The experiment was held in two groups of Taras Shevchenko National University of Kyiv students who major in political science, with a comparable level of English (B1+/B2 according to CEFR). Group 1 was made up of 12 students altogether, while Group 2 of 15; the total of 20 students took part in the experiment (9 of Group 1; 11 of Group 2) by writing the essay that the study asked for; the retention rate attested in the final posttest was calculated based on the results demonstrated by 19 students (9 of Group 1; and 10 of Group 2, who had attended the target lexis presentation class). Female students prevailed in both groups: 6/9 in Group 1; 6/11 in Group 2. The experiment consisted in presenting the learners with audiovisual input as a source of target ESP vocabulary, followed by text-based output, and a delayed posttest to see how much of the target words and collocations were retained by the learners two months after the initial input-output activity. A *HARDtalk* interview (https://www.youtube.com/watch?v=t3IeSz8sku0&t=1107s) was selected for the experiment due to its topicality at the time of conducting the lessons and the relative simplicity of its understanding taking into account the students' familiarity with the notions discussed. The quantitative method was employed to calculate the number of lexical items used in the written output and later recalled in the posttest. The qualitative method was used to assess the accuracy of the learners' productive output.

After they wrote the final posttest, the students were informed of our intention to use their written work and results of the posttest for the purposes of the article. They were advised that their names would not be disclosed in the study, and they were free not to give their consent with no further academic consequences. All the students gave their consent to participate in the study. The reason for not informing the students about the experiment before it actually started was that it was a necessary pre-requisite to keep the study as close to their real-life academic practices as possible, as their awareness of participating in the experiment may have impacted the final outcomes, as well as ruined the pre-conditions for incidental vocabulary uptake procedure.

Instruments and Procedure Group 1 were offered the vocabulary input in the lesson and were expected to use it in their essays done at home, while Group 2 were given the link to the video as part of their self-study task over a long winter break. They had to watch the video on their own and then write a reflection on their attitude to the problem discussed in the conversation. The article refers to the above approaches as 'intentional' and 'incidental' learning. Although the difference between the concepts of intentional and incidental vocabulary uptake is not always straightforward, the first one can be emphasised by an explicit task given to the students to use the vocabulary presented in some practical activities of their own (Nguyen & Boers, 2018). This is what was done in our experiment. While Group 1 were informed about the following task of using the presented vocabulary in their written output, the Group 2 were not explicitly asked to use any of the vocabulary they would encounter in the video. Therefore, it is maintained that Group 1 were submitted to intentional learning, while Group 2 were exposed to incidental acquisition.

Group 1 (Intentional Acquisition)

As a lead-in, the students were asked to work in groups of four and discuss their views on the blockade of the self-proclaimed republics of Donbas. This stage of the lesson finished with the comparison of groups' feedback and reflection on the vocabulary that the students reported they had lacked to express their ideas.

After the initial stage which put the students into the appropriate mindset, activated their schemata and fuelled their interest in the topic under discussion, the learners were offered to watch an episode of BBC HARDtalk with the former Ukrainian Prime Minister Arseny Yatsenyuk, where he is asked about the issue by the host Stephen Sackur. The following eight lexical units from the video were introduced at the pre-listening stage: *eastern breakaway regions; impose a blockade; under (the Minsk) deal; (launch) a full-fledge ceasefire; to pave the way for a political solution; to shell (shelling); death-toll is rising; impose restrictions on trade.*

The words and multi-word units were put on the board, and the whole group discussion followed of the form and meaning of the lexical items, with occasional translation into the students' L1 provided in case the vocabulary units have direct equivalents in the learners' mother tongue.

Because the goal of the exercise was the enrichment of the students' vocabulary relevant for the topical political issue, the above lexical items were introduced with the aim of widening the students' pool of synonyms, as they tend to use quite a restricted range of lexis when talking about this subject, e.g.: *separatist* regions; *put* or *set* the blockade; *according to* (a deal) instead of *under*; *stopping the fire* instead of *ceasefire*; *limitations* instead of *restrictions*; *number of the dead* instead of *death-toll* (or the number of casualties); the idiom *'to pave the way (for smth)'* also seemed quite helpful to be used in various contexts and appeared quite easy to retain as the metaphor it is built on is similar to the one used in Ukrainian/ Russian. Thus, the vocabulary was pre-taught to get the students to 'notice' it before internalising it and starting to use it in production activities.

During the listening for gist stage, the students listened to the 4 minutes (from minute 1 to minute 5) of the conversation which covered the issue of the Donbas blockade and had to answer the question *'Does Yatsenyuk support the economic measures against the self-proclaimed republics?'* Then they had to compare their answers in pairs and give a quick feedback to the class.

In the following listening for detail stage students were given five statements that they had to identify as true or false and then listen to the recording to check their answers.

The class finished with the whole group discussion of Yatsenyuk's stance on the political situation vs students' positions. As the homework the students were asked to write a 300-350 word essay expressing their view on the economic and political implications of the blockade using as many of the target lexical units activated in the lesson as they possibly could.

Group 2 (Incidental Acquisition)

The fifteen students of the second group had to listen to the interview at home and then write a 300-350 word reflection on the same question as Group 1 learners. Unlike the first group, they worked with the video themselves and could revisit it as many times as they needed. They had not been told explicitly that they had to benefit from the input material as a source of relevant vocabulary to be further used in their written output. This was a necessary pre-requisite for our experiment, as this group had to show the results of incidental vocabulary uptake. A sub-aim of the experiment in this group was to see how efficient third-year students are in terms of their self-study skills, in this case, processing an audiovisual material as a source of relevant ESP vocabulary.

In the next class which took place one week from the lesson in which the vocabulary had been introduced, Group 1 wrote a vocabulary quiz to see how much of the target vocabulary was retained at this stage. The quiz consisted in the teacher providing English language definitions of the target items and the learners' recalling their form and writing them down. Eight students out of the nine who had sent in the essays were present in the class. Group 2 resumed their studies after the break with the feedback on their essays and discussing strategies of content- vs language-focused learning. We re-watched the episode of the interview in class and the students were invited to think if there were any other vocabulary items they would find of interest. After a short discussion, the students were offered my list of vocabulary as an example of a language-based approach to the video. Ten students out of the eleven who had sent in the essays were present in the class.

Approximately two months from the time of the above lessons Group 1 and Group 2 took a Module Test, with tasks identical in both groups. The students were aware of the date of the test but did not know what exactly it would check. The vocabulary part of the posttest had English language explanations of the vocabulary the learners had to produce and provided the first letters of the words and collocations being checked (that was done to prevent students from supplying synonymous expressions they often use). This format of testing has been termed 'cued retrieval' by Per Snoder (2017, p.145).

Results

The research was aimed at estimating ESP learners' vocabulary retention rate in content- versus language-focused activity, and analysing the factors which may have influenced the learning gains; another objective was to assess the accuracy of the target vocabulary usage in the students' text-based output (essays). A sub-aim of the experiment was evaluating the effectiveness of third year ESP students' self-study skills. The study employed a quantitative research method to calculate the amount of the target words and collocations used in the written output, and a qualitative method to assess the accuracy of their usage.

Essays: The text-based output which followed the learners' processing of the input material had to show the amount of the target lexis which the students would be able to incorporate into texts of their own. As a result, nine essays were received from Group 1, and eleven essays from Group 2. The following target items were encountered in Group 1 essays:

St 1: (3/8) - 3 vocabulary items used out of the 8): *breakaway regions* ('war within the breakaway regions of the east of Ukraine'); *pave the way:* ('the blockade has paved the way for a frustrating process…'); *restrictions on trade* ('restrictions on trade will be lifted').

St 2: (5/8) *impose* – albeit in a collocation with a different noun: '*reforms* have to be *imposed',* while *blockade* is used with the verb *'set'*; 'Ukraine has to *pave the way* for getting essential raw materials' (in this context though the idiom sounds too literal to my taste, and a more straightforward phrase 'find a way' would be more appropriate here); *uncontrolled* territories is used as a synonym to *breakaway,* which she also uses*; 'Russia fails to fulfil the Minsk deal conditions'; 'the blockade is a reaction to shelling continued by separatists'*.

St 3: (8/8) the student used all the 8 proposed phrases, however in some cases, they sound rather awkward due to the incorrect collocability: 'is constantly *paving the way* to minimise the capacity of trading with these regions' (wrong collocability of the idiom with the infinitive); 'it *provoked ceasefire*' (provoke, which has negative connotations, does not combine well with the positive *ceasefire*); '*trade restrictions were involved* in negotiations' (wrong collocability here, something simpler like 'were discussed' would sound more natural in this case), 'we don't witness *really full-fledge ceasefire*' (perhaps, the author means we still do not see / we have not reached a ceasefire; 'really full-fledge' sounds like a pleonasm, as the adjective 'full-fledge' does not need additional intensifiers).

St 4: (3/8) 'blockade *imposed* this winter', 'it won't lead to ceasefire'; 'the opposition is *paving the way* for early elections';

St 5: (4/8) 'such called secessionist regions', '*imposing a blockade* of separatist-held territory in the country's east'; 'Should Ukraine still *increase the death toll*?' (death-toll does not sound right as an object of the verb 'increase'); 'Can the *Minsk deal* stop the war between our countries?' 'every day without *ceasefire* brings profit…'; interestingly though the readily available *breakaway* territories was disregarded in favour of adjective *separatist*.

St 6: (3/8) 'there are a lot of opinions towards the *imposition of the blockade*'; 'not everybody agrees that *ceasefire* will be reached *under the Minsk deal*'.

St 7: (3/8) 'political analysts called for *imposing the blockade*', 'so called people's republics', '*to pave the way* to peaceful resolving of the situation'; 'the international community is obsessed of reaching *ceasefire*'.

St 8: (0/8) the student sticks to familiar *separatist* regions and keeps using the phrase: '*the blockade was set*'.

St 9: (0/8) no target items used; the essay was a copy-paste from an internet resource.

The following target items were used by the students of Group 2 who sent in their essays:

St 1: (3/8) the student used three of the target vocabulary items: 'breakaway regions', 'the *blockade was imposed*', 'full-fledge *ceasefire* can hardly be expected in the near future'; at the same time he used synonyms like '*secessionist* territories' and '*separatist-held* regions of Donbas'.

St 2: (2/8) 'to promote *ceasefire* in Donbas', '*breakaway regions*', 'to launch negotiations' (the verb was used in the video, however in a collocation with *ceasefire*);

St 3: (2/8) 'separatists didn't stop *shelling* destroying *Minsk deal* decisions' (probably *ignoring* the Minsk deal would sound better here); the student keeps referring to 'separatist regions';

St 4: (2/8) 'Russian troops in *breakaway regions*', 'stopping the blockade is a way to *ceasefire* and peaceful coordination' (it seems 'lifting the blockade' would sound more natural);

St 5: (2/8) 'the *imposition of the blockade* brings threats to Ukraine'; '*according to Minsk deal*' (must sound more familiar than *under* the Minsk deal);

St 6: (0/8) the student prefers to stick to the familiar reliable vocabulary: 'the blockade shows', 'the situation in Donbas is an opportunity to understand what [Russia] expects…'; 'the blockade is a kind of a political game…';

St 7: (1/8): '*ceasefire* will make people forget about post-war world', the text mostly makes use of long time familiar lexis, which does not always produce the right collocations: 'stopping the blockade would be fully an economic winning', 'increasing the blockade can lead to unexpectable consequences…';

St 8: (3/8) 'the *blockade was imposed* according to the Ukrainian government's decision'; '*trade restrictions* have both pros and cons', '*ceasefire* can start collaborating with…' (although in an awkward collocation); 'regions controlled by separatists' but not 'breakaway regions'.

St 9: (0) 'the blockade makes Ukraine not very interesting for powerful countries…'; 'trade limitations won't help us get out of the 'crisis-to-be' (old favourite 'limitations' instead of 'restrictions' offered in the video);

Sts 10, 11: (0) Sts rely on the familiar words: 'separatist regions', 'the blockade might have a negative impact on the Ukrainian people', 'if the blockade is liquidated'.

The results of the first part of the experiment are summarised in Table 1.

The first part of the experiment showed the difference in the vocabulary usage between the two groups. On average, Group 1 used over a half of the target words and multi-word units (52%) per student, while Group 2 a little less than 25%. This provides clear evidence that the learners who were aware of the need to use the target vocabulary in their output (i.e. intentional learning group) were approximately twice as likely to use it as the incidental acquisition group (Group 2).

Table 1. Target Vocabulary Usage in Learners' Text-Based Output

Aspect of Vocabulary Usage	Group 1 (n=9)	Group 2 (n=11)
Number of Sts who used at least one target item	7/9 (78%)	7/11 (64%*)
Average number of items used (per St /out of 8)	4.14 (circa 52%)	1.9 (circa 25%*)
Average number of items used correctly (per St /out of 8)	3.3 (circa 41%)	1.6*
The most popular vocabulary item (number of Sts who used it / number of Sts who used at least one target item)	Impose blockade (6/7); pave the way (5/7)	Ceasefire: 5/7 (only once with adjective *full- fledge*)
The least popular vocabulary item (times used)	Shelling (1); death-toll (2)	Pave the way (0); death-toll (0); shelling (0)
Collocations used mostly correctly	Impose the blockade; breakaway regions; under the Minsk deal	Breakaway regions (3**), full-fledge ceasefire (1**), blockade was imposed (2**)
Collocations used mostly incorrectly	Pave the way	---- (no other target collocations)

*the vocabulary was not used in collocations that the video offered but rather as single words

** number of times encountered in Group 2 essays

Tests: In the next class, one week from the lesson in which the vocabulary had been introduced, *Group 1* wrote a vocabulary quiz (*immediate test*). Out of the 8 lexical items checked: 2 students managed to remember all of them (these two students were those who had used a maximum of the collocations in their essays – 8 and 5), 4 were short of one vocabulary unit (the most problematic was *shelling* commonly replaced by *shooting*), 1 (3/8 in essay) failed to recall three expressions (*shelling* and *impose a blockade/restrictions*) (=5/8); 1 recalled *under the Minsk deal, impose a blockade, impose restrictions* (=3/8) – for summarised results see Table 2.

Approximately two months later a *delayed posttest* was administered, which had to show the retention rate of both groups. The test showed that all Group 1 students managed to recall at least 2 of the target items, on average the students recalled 4.3 lexical items per person (53.75%), and predictably the more words and collocations a student had used in their essay, the better this student performed in the module test (with the exception of one student who had used 3 expressions in her essay, and scored 6/8 in the posttest).

The eleven students of *Group 2* who had sent in their essays took the *delayed posttest*, ten of whom had also been present in the class where the learners had been supplied with the list of the collocations. Out of the 10 students who had attended the presentation class, 8 (80%) recalled at least one lexical item, on the average 2.5 items were remembered per student, which amounts to 31.25% of the target lexis.

The results of the delayed posttest are summarised in Table 2.

Table 2. Results of Receptive Knowledge Test and Delayed Post-test

	Group 1				Group 2	
St	**Immediate Test**	**Delayed Posttest**	**Used in Essay**	**St**	**Delayed Posttest**	**Used in Essay**
1	8/8	8/8	8/8	1	7/8 *incorrect item:* shelling=shooting;	3/8
2	8/8	7/8 *incorrect item:* shelling=shooting;	5/8	2	6/8 *no* pave the way, *no* death toll	2/8
3	7/8	5/8 *incorrect items:* shelling = shooting; impose restrictions = implement restrictions; impose blockade = implement blockade;	4/8	3	3/8 *correct items:* ceasefire; Minsk deal; breakaway regions;	2/8
4	7/8	6/8: *incorrect item:* shelling=shooting; *no* death toll	3/8	4	2/8– *correct items:* ceasefire, impose blockade;	2/8
5	7/8	4/8 *incorrect items:* put the way; implement blockade; implement + *no* restrictions; shelling=shooting;	3/8	5	2/8 *correct items:* Minsk deal, ceasefire;	2/8
6	7/8	3/8 *correct items:* impose blockade + restrictions, Minsk deal; *incorrect:* shelling=shooting	3/8	6	0/8	0/8
7	5/8	2/8 *correct items:* impose blockade, breakaway regions;	3/8	7	2/8 *correct items:* ceasefire, Minsk deal;	1/8
8	--	similar to St 7 = 2/8;	0/8	8	2/8 *correct items:* ceasefire; impose the blockade;	3/8
9	3/8	2/8 *correct items:* under the Minsk deal + impose the blockade	0/8	9	1/8 *correct item:* ceasefire;	0/8
				10, 11	0/8	0/8
Average: 4.3 items recalled per student (53.75%)				**Average: 2.5 items recalled per student (31.25%)***		

*the retention rate is calculated for 10 students who attended the target lexis presentation class (not 11 students who sent in the essays)

The data as for the most to the least recalled items in delayed posttest are presented in Table 3.

Table 3. Cued Form Retrieval by Item

Vocabulary Item	Group 1 (No. Sts who recalled/total Sts)	Group 2 (No. Sts who recalled/total Sts)
Under the Minsk deal	7/9 (78%)	5/11 (45%)
Impose a blockade	7/9 (78%)	4/11 (36%)
Breakaway regions	6/9 (67%)	3/11 (27%)
Full-fledge ceasefire	5/9 (56%) full unit, 1/9 ('*ceasefire*')	3/11 (27%) (full unit) vs 5/11 ('*ceasefire*')
Impose restrictions	4/9 (45%)	2/11 (18%)
Pave the way	4/9 (45%)	1/11 (9%)
Death toll	4/9 (45%)	1/11 (9%)
Shelling	1/9 (11%)	1/11 (9%)

Table 3 displays that the most and least recalled items in both groups are almost identical, with the exception of '*impose a blockade*' which features on top of recall list in Group 1 and is second best recalled item in Group 2. '*Ceasefire*' is the best retained separate word (6/9 for Group 1 and 8/11 of Group 2 recalled its form). The recall rate of four top items in Group 1 is higher than 50%, while even the best remembered items in Group 2 fall below 50%, with the highest recalled '*under the Minsk deal*' amounting to 45%.

Discussion

One of our research objectives was to see if the intentional mode of learning would outperform incidental under the condition of subjecting the students of both groups to a text-based output (which enhances vocabulary retention rates according to Swain's hypothesis), and how well Laufer and Hulstijn's hypothesis of task-induced involvement (or the involvement load hypothesis) would work for the two ESP groups of university students. It would appear more in line with the involvement load hypothesis to expect the students of Group 2 to show higher acquisition results, as they had been exposed to all of the three involvement load components, while Group 1 to only two of them (apparently, they lacked 'search' element as they had been offered the target vocabulary by the teacher). However, the actual results proved different, which could be explained by the learners' underdeveloped skill of the independent processing of the input material (primarily, audio- or audiovisual recordings) which does not explicitly highlight the lexis to select and study, as is often done in reading texts by typographical enhancing of target words and collocations. Had the students demonstrated the corresponding self-study skills, this could have actually transformed the incidental mode of their learning into intentional and the whole experiment could have resulted in different learning gains.

Our second research question was examining the factors that may have actually impacted the learners' vocabulary retention. Students of Group 1 had had altogether three encounters with the target lexis (or maybe even four as they may have reviewed the vocabulary before the test) before writing the Module Test. All of the encounters can be viewed as 'intentional'. The students of Group 2 had a various number of encounters with the target lexis: there were students who obviously also had had three (those who watched the video as a content-focused input but then apparently rewatched it as a language-focused material, then used the vocabulary in the essay, and then came to the class in which we explicitly discussed the target vocabulary). However, most students, who used 1-2 of the vocabulary items from the recording in their essays, had had just two encounters (one 'incidental' while watching the video as a content-based input, which most probably was not revisited for the language-focused input, and the second one in the lexis presentation class). For students of Group 2 who reviewed the list of lexis before the module test the latter one may be viewed as 'intentional' in the terms suggested by Nguyen and Boers (2018, p. 2), this could be the case of the two Group 2 students who scored the highest in the delayed posttest.

Predictably, Group 1's higher number of intentional encounters produced almost twice better results in the Module Test: 53.75% of the vocabulary items recalled on average by Group 1 against Group 2's 31.25%. At the same time, the average number of the lexical items recalled by Group 2 in the module test increased by 6% compared to their initial text-based output. This can be explained by their explicit exposure to the target vocabulary list in the classroom that discussed their essays, although for the majority of the students this encounter was rather 'incidental' as they obviously did not review the lexis before the module test. Group 1 showed almost the same result in the module test (approximately 4 items recalled per person), as the number of target words they had used in their essays. This outcome however may be due to the increased number of the learners who actually produced the vocabulary: 7/9 in the essays vs 9/9 in the module test. Individually, almost all students (except one) either improved their score, or it remained equal to the number

of the vocabulary items they had used in their essays. It can be stated then that the success of vocabulary retention largely depends on the amount of 'intentional' or conscious encounters with the target lexis.

The recall list of the target items shows an identical distribution of the items into the most and least difficult to retrieve for both groups. This may be due to the fact that all the students speak Ukrainian or Russian as their L1, which makes certain items easier to memorise due to their syntactic, morphological or phonological form, close to those in the learners' L1, i.e. turns them into 'linguistically congruent' (Snoder, 2017, p.142). The multi-word units *under the Minsk deal* and *impose blockade* were top recalled in both groups, the reason for it could be that the first lexical unit follows the same syntactic structure as the learners' mother tongue and contains the words long familiar to the students; the noun *blockade* has a similar sounding to Ukrainian/ Russian, while the verb *impose* featured twice on the target vocabulary list in two different collocations, which may have enhanced its recall rate. *Ceasefire* was the most remembered single word in both groups (6/9 in Group 1 and 8/11 in Group 2 recalled it as a single word item). The success of '*ceasefire*' may be explained by the lack of other direct equivalents of this word in the learners' L1 (other alternatives would rather include descriptive options like 'stopping shooting', therefore the compact '*ceasefire*' is naturally preferred). Another reason might be the extra effort that the learners make to spell the verb 'cease' correctly, as it is often confused with 'seize'. This extra cognitive effort is likely to stimulate the recall of this particular word.

The least remembered multi-word unit was *impose restrictions*, probably because 'restrictions' is the word not frequently used by the learners, who usually prefer 'limitations'. The students who failed to recall the verb 'to impose' always replaced it with 'to implement' which is likely to come from their school word stock, and which they readily went for, having the initial 'i' on their test page, which served as a cue. The least remembered item was the single word *shelling* – in most cases confused with *shooting*. Interestingly, *shelling* was probably the least popular with students in both Group 1 immediate posttest, and in their essay writing, when it was used only by one Group 1 student. It is also worth noting here that the percentage of correctly recalled items tends to correlate with the number of words in the target item.

A surprising discovery was the idiom 'pave the way' which had been expected to feature high on the learners' recall list. Only 4 students of Group 1's 9 – and just 1 of Group 2 managed to come up with the right form of the expression. The only reason which sounds plausible is that the verb 'pave' must have turned out too hard to recall.

An observation worth mentioning is the accuracy of incorporating the new lexical items into the students' written output. The major problem encountered in Group 1, as well as Group 2 essays, was the wrong collocating of the new items, which led to the awkward-sounding and odd connotations that the writing acquired; another flaw typical of Group 1 writing was the students' usage of the idiom 'pave the way'. The idiom was quite popular with the learners (5/9 used it in their essays) a reason for that could be that an equivalent idiomatic expression exists in the students' L1, which might have misled them as being easy to use correctly. This resulted in a frequent usage of the idiom in a too literal context depriving it of its inherent figurative meaning.

A sub-aim of our research was assessing the efficiency of self-study strategies that third-year students can demonstrate. The self-study experiment in Group 2 revealed that the students' approach to working with an authentic ESP input material on their own is rather ineffective. Deprived of the teacher's straightforward guidance on what vocabulary units to pick up, the students did not seem to make effective use of the video. Although the part of the interview that actually focused on the Donbas blockade issue, which the students had to reflect on in their essays, lasted for no longer than four minutes, and offered quite a lot of useful lexis, the learners in most cases preferred to stick to their long time favourite expressions instead of attempting to enrich their vocabulary bank by what looked like a readily-available offer.

A reason for it might be that the ESP syllabus of Ukrainian universities traditionally emphasised developing reading skills rather than listening competence mostly due to an easier availability of published texts (both authentic and adapted) in practically all professional spheres, and difficulty that the teachers experienced finding relevant listening materials to match the students' subject matter. Luckily, with a recent advent of multimedia into the classroom, the situation has changed, therefore ESP students obviously need explicit training in strategies of processing such input, especially when it comes to out-of-the-classroom settings. No doubt, they have an easy access to various types of content available on the Internet, and the students' skills to benefit from such resources to develop their proficiency in ESP can hardly be overestimated.

Another major observation is the lack of attention to collocability of the vocabulary units, which leads to the learners' struggling with the accurate use of multi-word units. This actually supports the view of Boers

and Lindstromberg, who doubted the learners' ability to attend to the collocational properties of vocabulary items independently (Boers & Lindstromberg, 2009).

The learners' marked preference to work with vocabulary as single words leads to the conclusion that the students failed to have been taught the importance of attending to collocability of lexical units and of learning vocabulary in chunks.

Limitations of Study

It should be admitted that it is quite problematic to assess objectively how the students use certain vocabulary items in their productive activities. One thing is that the teacher is limited by the classroom setting and cannot assess whether the new vocabulary is ever used by the learners outside of the class, another reason is that obviously it is impossible to hear 100% of the students' spoken output even in class. Therefore only passive retention could be checked more or less objectively in the module test. The tasks which could have asked the students to use certain items in, say, sentences of their own, would most probably have turned out too boring and demotivating for them. A two-month span between the first encounter with the vocabulary and the module test could testify on the one hand that the students had transferred their vocabulary in long-term memory, while on the other hand, they may have revised the vocabulary shortly before the test, as they were aware of its date. To eliminate such points of uncertainty, it would be desirable for educators to ensure a possibility of contacting students after having analysed their learning outcomes to clarify any issues that may appear ambiguous.

Another limitation pointed out by Nguyen and Boers (2018) is that a vocabulary test conducted on a selected set of target items can easily underestimate the amount of acquisition that actually occurred. Firstly, the learners may have memorised the words or collocations which were not on the teacher's list, and secondly, there are many other ways in which political science students may have benefitted from engaging with an authentic material related to an issue that they find relevant to a field of their professional interest.

Conclusions

The results of the experiment demonstrate that the intentional retention rate of targeted ESP vocabulary is higher than incidental, at least in the short term. It appears that the best results in recalling vocabulary occur when the learners are aware of the need to learn the words and make a conscious effort to remember them.

At the same time, the experiment demonstrated that, even being equipped with pre-conditions to switch their learning mode from incidental into intentional, third year university students preferred not to do it, citing Laufer and Hulstijn's hypothesis, they failed to benefit from the involvement load triad. This signals that Ukrainian university students may need more explicit training on how to effectively approach vocabulary learning outside of the classroom. The experiment also laid bare the notorious difficulties of learning and accurate using of L2 collocations. There are big prospects for future research into raising ESP learners' awareness of multi-word units in input texts and developing teaching strategies to do with enhancing the accuracy of using such vocabulary in the students' productive activities, as well as for the currently understudied incidental acquisition of collocational knowledge.

In terms of delayed vocabulary recall tests, further research could centre on testing both the receptive and productive retrieval of the form and meaning of the target lexis, i.e. the ability of students to use vocabulary items in their own output and recognise them in input materials over longer time spans.

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