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AUTOMATIC CLASSIFICATION OF EFL LEARNERS' SELF-REPORTED TEXT DOCUMENTS ALONG AN AFFECTIVE CONTINUUM

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This study aims to place EFL learners along an affective continuum via machine learning methods and present a new dataset about affective characteristics of EFL learners. In line with the purposes, written self-reports of 475 students from 5 different faculties in 3 universities in Turkey were collected and manually assigned by the researchers to one of the labels (positive, negative, or neutral). As a result, two combinations of the same dataset (AC-2 and AC-3) including different numbers of classes were used for the assessment of automatic classification approaches. Results revealed that automatic classification confirmed the manual classification to a great extent and machine learning methods could be used to classify EFL students along an affective continuum according to their affective characteristics. Maximum accuracy rate of automatic classification is 90.06% on AC-2 dataset including two classes. Similarly, on AC-3 dataset including three classes, maximum accuracy rate of classification is 71.79%. Last, the top-10 features/words obtained by feature selection methods are highly discriminative in terms of assessing student feelings for EFL learning. It could be stated that there is not an existing study in which feature selection methods and classifiers are used in the literature to automatically classify EFL learners' feelings.

Keywords: affective factors; EFL learning; text classification; feature selection; EFL students; higher education; affective barriers.

Introduction

There is a notion called the affective domain and positive feelings are driving forces to attain language learners' goal of language acquisition. The idea behind this study is to propose an alternative machine learning-based approach in order to place learners along a continuum based on their affective characteristics as EFL (English as a foreign language) learners instead of qualitative, or quantitative approaches.

The notion of the affective domain was initially developed by Krathwohl et al. (1964) and it has received considerable contributions from researchers and experts in the field of education so far (Sousa, 2016). Affective domain addresses to feelings and emotions, as well as their outward expression. To provide a more operational definition, the affective domain has three subcomponents: behaviour, feeling, and cognition. Feeling is the personal sensation experienced. Cognition is the personal judgements that accompany feelings, and behaviour is the observable reaction which involves both cognition and feelings (Brett, Smith, & Huitt, 2003). Emotions, on the other hand, involve expressive behaviour, bodily reactions and subjective feelings as a result of one's interaction with the context (Cahour, 2013).

Affective variables are significant for learning in general (Schutz & Lanehart, 2002) and for language learning in particular (Méndez López & Peña Aguilar, 2013). Unlike any other subject matters, a level of personal engagement is necessary to learn a foreign language. As recognized by language teachers, learners have to cope with the ambiguities and stress of interaction within the parameters of an unfamiliar culture while conveying conversationally appropriate and personally meaningful messages through unfamiliar phonological, semantic, and syntactic systems. That is why most learners find this process inherently stressful (Horwitz, 1995; Kęłowska, 2012). Language learning is potentially the most threatening experience of all other school subjects since learners are expected to express themselves using a language they are not proficient in (Kęłowska, 2012). It must be acknowledged that while all the cognitive factors may be optimally operating in the learning process, learners can fail because of an affective block (Brown, 1973; Griffith & Nguyen; 2006; Garrett & Young, 2009).

The idea that affect plays a significant role in language learning was first put forward by Gardner and Lambert (1972). After that, Gardner's (1979, 1985) socio-educational model focused on the effect of motivation and attitude on second language learning, and then further studies expanded or revised the original model (Gardner & Clément, 1990; Gardner, 2001). Motivation could be defined as willingness pushing an individual to achieve a predetermined goal (Anderson & Bourke, 2000). Recently, motivation in

second language learning has been studied by second-generation researchers (Dörnyei, 1990, 2005, 2015; Dörnyei & Al-Hoorie, 2017; Noels, 2005).

In the socio-educational model, attitude is associated with approaches of language learners to learning situation such as school, language teacher, classmates and so on (Gardner & Lambert, 1972). According to Anderson & Bourke (2000), learning a foreign language entails the attitude of learners towards self, learning context and target culture. Concepts associated with learner's self are self-respect, self-confidence, self-efficacy and self-perception. Recently, attitude in language learning has still been investigated from various aspects such as attitude of language learners toward pronunciation (Huensch & Thompson, 2017) and learner attitudes toward learning English (Zulfikar, Dahliana & Sari, 2019).

Another affective variable widely explored is anxiety. Studies as to language anxiety have been initiated by Horwitz et al. (1986) and the concept was defined as a situation specific worry or nervousness about using a second language. Initial studies have been expanded with further studies demonstrating the correlation between language anxiety and various components of the learning process (Horwitz, 1995, 2000, 2001). Recently, another concept investigated in relation to anxiety is enjoyment (Boudreau et al., 2018; Dewaele, Magdalena & Saito, 2019; De Smet et al. 2018).

Previous research in language learning has either underestimated the feelings or their relevance to learning or studied them as stable and isolated individual variable (Garrett & Young, 2009; Sampson, 2020). Although studies researching affective variables in a holistic manner are few in number, the most influential theory as to second language learning in this regard was proposed by Krashen as "Affective Filter Hypothesis" (1982). According to the hypothesis, positive feelings remain driving forces to attain language learners' goal of language acquisition whereas negative feelings disallow them to perform successfully in learning because negative affective variables disallow information about language to reach language areas of the mind and build barriers into the acquisition of the language. The content, functions and nature of the "affective filter" suggested for second language learning context were tested by Laine (1988) in a foreign language learning context. Results revealed that significant affective filter lowers or raisers were situation related attitudes, personality traits, foreign language self-concept, and target language related attitudes. Studies that aim to explore the affective filter hypothesis exist in the recent body of literature, as well (Nath, Mohamad & Yamat, 2017; Wang, 2020).

Considering the utmost importance of affect in language learning, foreign language teachers need methods for affective assessment and measurement. While assessment means gathering information about affective variables of students, measurement means giving numerals to students according to the degree of their affective attributes (McCoach, Gable & Madura, 2013). Affective characteristics form an important part of the lens through which students perceive and react to the school context. Thus, early identification of affective variables may enable teachers to provide the type of assistance students need (Anderson & Bourke, 2000). Assessment informs teachers about weaknesses, strengths, and abilities of students, which is necessary to improve students' learning outcomes (Setiawan & Mardapi, 2019).

Most researchers or practitioners find affective assessment and measurement problematic for some reasons such as vagueness of affective outcomes, privacy and intangibility of affective characteristics (Anderson & Bourke, 2000). Affective outcomes are not easy to measure or teach because they vary from internally consistent qualities of character to simple attention or selected phenomena (Pierre & Oughton, 2007). Teachers do not have sufficient competence in designing assessment instruments for the affective aspect because it has a complicated construct. To put it in another way, affective domain is hard to measure and define since it is abstract and vague (Setiawan & Mardapi, 2019).

McCoach, Gable & Madura (2013) and Anderson & Bourke (2000) suggest an affective continuum (Figure-1) for affective assessment. According to them, learners could be placed along an affective continuum based on the affective characteristics they develop toward a target. Strength or degree is related to the intensity of the feelings and they might be strong, weak or moderate. Also, the direction of these feelings might be positive, neutral or negative.

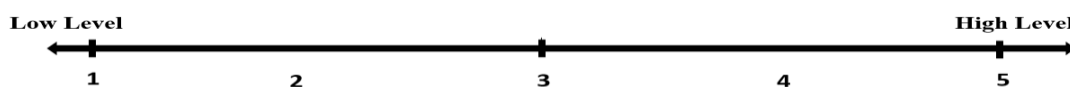


Figure 1. *An Affective Continuum (McCoach, Gable & Madura, 2013, p.36)*

In order to achieve this aim, Anderson & Bourke, 2000; McCoach, Gable & Madura, 2013 propose to gather data about affective characteristics through direct observations or self-reports (preferably self-reports) and follow a number of steps in order to reveal latent constructs.

The initial aim of this study is to propose an alternative method, machine learning, in order to place learners along a continuum based on their affective characteristics as EFL (English as a foreign language) learners. Research aiming to reveal affective characteristics of students is carried out with qualitative (interviews, observations), or quantitative (surveys, questionnaires or scales) approaches (Buissink-Smith, Mann & Shephard, 2011). Although these existing methods are useful for both revealing affective characteristics of students and finding out their relations with various factors, they may require immense time and effort of researchers and practitioners. Unlike these methods, this study aims to present a practical and time-efficient method to define the place of students along an affective continuum and categorize them into two (positive or negative) or three (positive, neutral or negative) groups along this continuum via machine learning. Furthermore, this study displays how the objectivity of affective assessment is increased by means of computerized methods.

The affective measurement suggested here could be used for various purposes. For example, a teacher may have a desire to find out the affective stance of his/her learners on EFL learning for designing effective learning courses or for predicting possible affective domain-related difficulties or challenges for the entire year. Defining affective characteristics at the outset of an EFL course or program is highly significant in terms of detecting students' negative feelings and taking precautions to replace these negative feelings with positive ones.

Moreover, the study aims to present a new dataset about affective characteristics of EFL learners. Thus, researchers may conduct further studies by using computerized methods. The study could be evaluated as a first step of analyzing affective variables through computerized methods. In the next subsections, information about the dataset and automatic classification scheme based on machine learning is given in addition to the results of the study including accuracy and feature set analysis.

Methods

Creating the dataset

The first step of the study is creating the dataset about affective characteristics of EFL students. In this step, self-reporting technique was used to gather detailed information as to the target topic. Participants are required to assess and reflect on their own internal traits or states through self-report instruments which are effective in inferring a person's level on the affective characteristic of interest (McCoach, Gable & Madura, 2013; Anderson & Bourke, 2000; Buissink-Smith, Mann & Shephard, 2011). Initially, a question was prepared to gather information about feelings of students for EFL learning. The question was as follows: "please write a paragraph that describes your feelings for English learning considering your past and present English courses". As the question and answers were in Turkish language, the dataset created is in Turkish.

The question was delivered to EFL students from 5 different faculties (engineering, tourism, business and management, and education) in 3 state universities in Turkey via online and hardcopy forms during two consecutive academic years (2019-2020 and 2020-2021). English is the main medium of instruction in engineering departments and ELT department in education faculty while Turkish is the medium of instruction in the faculties of tourism, business and management, and other departments in faculty of education. At the end of this period, total 475 paragraphs about the affective characteristics of Turkish EFL students were obtained. While 200 students answered the question in hardcopy forms, 275 students answered it in online forms.

After gathering the paragraphs, they were transferred to text files. Then, all of the 475 paragraphs were read through by the researchers and manually assigned the following labels: 1:positive, 2:negative, and 3:neutral. The paragraphs assigned to label-1 entails totally or mostly positive feelings toward learning EFL; label-2 entails totally or mostly negative feelings and label-3 entails both of them or the ones expressing no feeling. The dataset could be reached from <https://drive.google.com/file/d/1dgUBivSYQRTQx43NS2ldf3uPYXDh0d0o/view?usp=sharing>. As a result of the dataset creation step, two combinations of the same dataset including different numbers of classes were used for the assessment of automatic classification approaches. While the first combination consists of positive and negative classes, the second combination of the dataset consists of positive, negative, and neutral classes. The detailed information concerning the dataset is presented in Table 1 below. These two combinations of the dataset will be referred as AC-2 and AC-3 in the next parts of the study.

Table 1. *Affective continuum (AC) dataset*

Class Label	Number of Samples
positive	164
negative	153
neutral	158

Automatic classification scheme used to classify students along the continuum

In this study, machine learning approaches including feature selection and classification stages were used. To obtain a successful automatic classification scheme, it is crucial to apply efficient dimension reduction approaches such as feature selection methods (FSMs). Feature selection is a significant step for tasks including classification of text documents because it allows the selection of relevant features/terms and removal of the irrelevant ones. After selecting the discriminative features, it is necessary to apply appropriate classification algorithms for tasks including the classification of text documents. FSMs and classifiers employed in this study are presented in the next subsections.

Feature selection methods (FSM)

Filter-based FSMs are widely used for the purpose of classifying texts as they are advantageous in terms of computation time (Parlak & Uysal, 2020). Five well-known filter-based FSMs, distinguishing feature selector (DFS), Gini index (GI), Information Gain (IG), discriminative features selection (DFSS), and chi-square (CHI2), used in the experiments are explained below.

Gini index (GI), a global FSM, produces a single score for each feature in the training set (Shang et al., 2007). The GI formula is given below.

$$GI(t) = \sum_{i=1}^M P(t|C_i)^2 P(C_i|t)^2 \quad (1)$$

The GI formula entails two conditional probabilities. In this formula, $P(t|C_i)$ means the probability of feature t in class C_i and $P(C_i|t)$ means the probability of class C_i when feature t presents. Also, M is the number of classes in the dataset.

One of the well-known filter-based FSMs for classifying texts is Distinguishing feature selector (DFS) (Uysal & Gunal, 2012). It relies on some pre-defined criteria about discriminative characteristics of features. The DFS formula is as following.

$$DFS(t) = \sum_{i=1}^M \frac{P(C_i|t)}{P(\bar{t}|C_i) + P(t|\bar{C}_i) + 1} \quad (2)$$

DFS formula entails some conditional probabilities. The probability $P(C_i|t)$ means the probability of class C_i when feature t presents and M is the number of classes in the dataset. $P(\bar{t}|C_i)$ is the probability of lack of feature t given class C_i . $P(t|\bar{C}_i)$ is the probability of feature t when all other classes except C_i present.

Information gain (IG) is utilized to measure the impact of the presence or absence of a feature on the correct classification decision (Deng et al., 2019). Obtaining a high score for a feature with IG method means that the feature is highly discriminative for classification. IG formula is given below.

$$IG(t) = - \sum_{i=1}^M P(C_i) \log P(C_i) + P(t) \sum_{i=1}^M P(C_i|t) \log P(C_i|t) \\ + P(\bar{t}) \sum_{i=1}^M P(C_i|\bar{t}) \log P(C_i|\bar{t}), \quad (3)$$

In the IG formula, M means the total number of classes and $P(C_i)$ is the probability of class C_i in the training set. While $P(t)$ refers to the probability of existence of feature t , $P(\bar{t})$ is the probability of the absence of the feature t in the training set. Also, the meaning of the statements $P(C_i|t)$ and $P(C_i|\bar{t})$ is the probability of the existence of class C_i for two separate cases where feature t is present or absent, respectively.

Discriminative features selection (DFSS) is another filter-based FSM utilized for classifying text documents. DFSS aims to select features with a higher document and average term frequency in documents belonging to a certain class (Zong et al., 2015). The DFSS formula is presented as following.

$$DFSS(t, C) = \frac{tf(t, C)/df(t, C)}{tf(t, \bar{C})/df(t, \bar{C})} \times \frac{a}{(a+b)} \times \frac{a_i}{(a+c)} \times \left| \frac{a}{(a+b)} - \frac{c}{(c+d)} \right| \quad (4)$$

In the formula, $tf(t, C)$ and $tf(t, \bar{C})$ refer to the frequencies of feature t in class C and in the other classes, respectively. While $df(t, C)$ refers to the number of text documents feature t occurs in class C , $df(t, \bar{C})$ refers to the number of text documents feature t occurs in other classes. While a refers to the number of text documents in class C including feature t , b refers to the number of text documents in class C not including feature t . While c refers to the number of text documents in all classes except class C that includes feature t , d is the number of text documents in all classes except class C not including feature t .

Chi-square (CHI2) FSM is based on a well-known statistical test to investigate how far two events are independent of each other (Deng et al., 2019). The CHI2 formula is presented below.

$$CHI2(t, C) = \sum_{t \in \{0,1\}} \sum_{C \in \{0,1\}} \frac{(N_{t,C} - E_{t,C})^2}{E_{t,C}}, \quad (5)$$

In the formula of CHI2, E means the expected frequency and N means the observed frequency for each state of class C and feature t .

Classifiers

Filter-based FSMs are utilized in the experiments. These kinds of dimension reduction methods do not depend on the learning model. For this reason, two different well-known classifiers were used in order to reveal how much selected features contribute to the accuracy of classification. These two classifiers are Support Vector Machines (Joachims, 1998) and Naïve Bayes (Chen et al., 2009). It should be noted that these kinds of classifiers were used in some previous studies related to education and computation (Liu et al., 2021; Pei & Xing, 2021). These methods are briefly explained in the next subsections.

Support Vector Machines (SVM) classifier is a successful and well-known classifier for classifying text documents. Margin maximization concept (Joachims, 1998) is the main theory that lies behind SVM classifier. The margin of the SVM classifier is the distance between the closest data point in the training set and the decision surface. In this study, linear version of SVM classifier, one of the most popular classifiers for tasks including classification of text documents, was used in the experiments.

Naïve Bayes (NB) classifier is based on Bayes theorem that assumes the features are independent from each other. Therefore, a score of probability is found by multiplying the conditional probabilities in a classification algorithm based on the independence assumption (Jiang et al., 2013). NB classifiers can be implemented using various event models such as multi-variate Bernoulli and Multinomial. Multi-variate Bernoulli event model considers document frequencies; however, multinomial event model takes term frequencies into account, instead of during the calculations (Uysal, 2016). In the present study, the former model, multi-variate Bernoulli, is used while implementing NB classifier.

Results

This section presents the results of the in-depth investigation done with the purpose of evaluating the performance of FSMs and classifiers on the two combinations of the dataset including a different number of classes. Experiments were carried out for two cases including no stemming or stemming. Zemberek (Akın & Akın, 2007), one of the common frameworks for Turkish stemming, was used in the experiments. It should also be asserted that lowercase conversion was used as the pre-processing step besides weighting terms with term frequency-inverse document frequency. The results were obtained using 10-fold cross validation to measure the datasets objectively. Besides, an accuracy measure is adopted so as to evaluate the performance of classification as the class distribution of the datasets is nearly balanced.

Accuracy analysis

Different numbers of the features selected by five diverse selectors were given as input to two classifiers that are SVM and NB. Dimension reduction was performed via constructing feature sets with 10, 50, 100, 300, 500, 800, and 1000 features. Accuracies obtained in the experiments with SVM classifier are listed in Table 2 for the AC-2 dataset. In the tables, the highest scores are indicated in bold.

Table 2. Accuracies for the AC-2 dataset obtained with SVM classifier

Feature Size	Accuracy (Zemberek stemming)							Accuracy (No stemming)						
	10	50	100	300	500	800	1000	10	50	100	300	500	800	1000
DFS	69.33	85.64	88.34	85.03	87.12	85.74	86.68	73.33	80.64	84.39	82.68	85.02	84.00	85.71
GI	57.66	79.69	85.73	87.01	90.06	88.08	88.06	53.76	79.99	78.71	83.63	82.63	84.96	85.63
IG	70.35	83.28	84.37	86.06	87.07	85.76	85.69	75.34	82.33	82.05	84.68	85.00	85.36	87.03
CHI2	68.36	85.30	83.71	88.37	87.73	88.72	85.69	75.67	80.71	82.42	84.99	85.65	84.70	85.72
DFSS	73.31	79.64	85.30	86.68	85.75	88.03	89.07	66.39	79.69	79.65	80.03	78.32	80.35	76.67

For SVM classifier, the highest accuracy was obtained with 500 features using GI FSM and Zemberek stemming on AC-2 dataset. While the highest accuracy was 90.06% with Zemberek stemming, the highest accuracy with no stemming was 87.03% using SVM classifier on AC-2 dataset. It should be noted that the highest accuracy using no stemming was obtained with IG FSM and SVM classifier on AC-2 dataset. Accuracies obtained in the experiments with NB classifier are listed in Table 3 for the AC-2 dataset where the highest scores are indicated in bold.

Table 3. Accuracies for the AC-2 dataset obtained with NB classifier

Feature Size	Accuracy (Zemberek stemming)							Accuracy (No stemming)						
	10	50	100	300	500	800	1000	10	50	100	300	500	800	1000
DFS	70.37	82.35	83.35	84.32	81.00	80.97	80.99	74.34	86.67	84.71	82.99	83.32	79.68	76.66
GI	59.98	75.05	80.36	82.04	81.35	79.64	80.64	55.05	80.35	79.70	83.69	84.37	82.70	80.67
IG	72.69	80.33	81.70	82.68	81.32	79.32	80.99	76.02	83.68	82.69	82.65	81.38	81.37	77.68
CHI2	70.33	81.32	82.04	82.33	81.64	80.31	80.99	77.02	82.38	84.38	83.98	81.34	81.69	77.68
DFSS	69.75	79.02	80.66	79.36	79.03	79.99	80.96	68.70	78.04	78.25	79.00	79.00	77.32	77.36

For NB classifier, the highest accuracy was obtained with 50 features using DFS FSM and no stemming on AC-2 dataset. While the highest accuracy was 86.67% with no stemming, the highest accuracy with Zemberek stemming was 84.32% using NB classifier on AC-2 dataset. It should be noted that the highest accuracies were obtained with DFS FSM using both no stemming and Zemberek stemming with NB classifier on AC-2 dataset. Accuracies obtained in the experiments with SVM classifier are listed in Table 4 for the AC-3 dataset where the highest scores are indicated in bold.

Table 4. Accuracies for the AC-3 dataset obtained with SVM classifier

Feature Size	Accuracy (Zemberek stemming)							Accuracy (No stemming)						
	10	50	100	300	500	800	1000	10	50	100	300	500	800	1000
DFS	54.48	62.92	66.26	64.91	69.34	69.58	68.92	55.36	61.78	63.84	61.08	62.43	64.66	64.23
GI	40.68	58.23	67.40	67.79	68.46	70.26	70.69	42.26	60.92	62.73	64.25	63.10	67.38	65.34
IG	52.24	63.56	65.37	65.98	67.13	70.27	70.21	55.11	61.97	63.81	64.25	63.13	64.92	65.38
CHI2	56.04	63.15	64.69	63.56	70.26	69.78	71.12	55.35	62.88	64.24	62.41	59.56	66.04	64.48
DFSS	47.14	59.56	66.50	67.78	70.03	71.14	71.79	46.68	60.68	61.17	60.47	62.04	62.05	63.36

For SVM classifier, the highest accuracy was obtained with 1000 features using DFSS FSM and Zemberek stemming on AC-3 dataset. While the highest accuracy was 71.79% with Zemberek stemming, the highest accuracy with no stemming was 67.38% using SVM classifier on AC-3 dataset. It should be noted that the highest accuracy using no stemming was obtained with GI FSM and SVM classifier on AC-3 dataset. Accuracies obtained in the experiments with NB classifier are listed in Table 5 for the AC-3 dataset where the highest scores are indicated in bold.

Table 5. Accuracies for the AC-3 dataset obtained with NB classifier

Feature Size	Accuracy (Zemberek stemming)							Accuracy (No stemming)						
	10	50	100	300	500	800	1000	10	50	100	300	500	800	1000
DFS	53.80	59.12	63.83	59.11	57.77	54.21	55.14	54.47	60.93	62.06	64.05	64.04	59.39	54.96
GI	40.53	53.13	58.25	59.57	58.49	56.67	54.25	38.76	57.15	60.31	63.64	63.18	61.62	58.28
IG	52.25	60.91	60.04	59.56	57.80	55.80	53.80	53.77	60.72	62.27	63.60	59.37	59.84	57.85
CHI2	54.26	59.36	59.39	59.33	58.46	54.67	56.25	55.14	61.58	63.60	62.27	59.81	59.15	56.93
DFSS	46.24	55.79	58.25	58.25	58.03	57.59	56.26	42.74	58.71	59.86	63.17	61.86	61.86	60.08

For NB classifier, the highest accuracy was obtained with 300 features using DFS selection method and no stemming on AC-3 dataset. While the highest accuracy was 64.05% with no stemming, the highest accuracy with Zemberek stemming was 63.83% using NB classifier on AC-3 dataset. It should be noted that the highest accuracies using both no stemming and Zemberek stemming were obtained with DFS selection method with NB classifier on AC-3 dataset.

The highest accuracies obtained on AC-2 and AC-3 datasets were 90.06% and 71.79%, respectively. So, the performance of classification degrades after including the class ‘neutral’ into the dataset. While the highest classification performance was obtained with the combination of GI selection method, Zemberek stemming, and SVM classifier on AC-2 dataset, the highest classification performance was obtained with the combination of DFSS feature selection, Zemberek stemming, and SVM classifier on AC-3 dataset. Although the highest classification performances were obtained with GI and DFSS FSM on two datasets, it should be noted that DFS was the best performer for 4 out of 8 cases in the experiments. While the highest accuracies obtained using Zemberek stemming were always better than the results obtained with no stemming on two datasets for SVM classifier, the highest accuracies obtained using no stemming were always better than the results obtained with Zemberek stemming on two datasets for NB classifier.

Feature set analysis

Top-10 features for AC-2 and AC-3 datasets obtained are presented in Tables 6–9. The translation of the features to English was also shown in the brackets. The tables given also illustrate feature sets regarding five diverse FSMs. The features specific to an individual FSM are written in bold, in the tables. It should be noted that there are not so many features selected by only one feature selection according to these tables. Also, the top-10 features selected by corresponding FSMs using the same stemming setting differs for AC-2 and AC-3 datasets.

Table 6. Top-10 features for the AC-2 dataset using Zemberek stemming

No	1	2	3	4	5	6	7	8	9	10
DFS	hiç (never)	eğitim (education)	sev (like)	kötü (imperfect)	öğrenci (student)	yanlış (inefficient)	güzel (good)	biz (we)	okul (school)	gör (see)
GI	ingilizce (english)	ol (be)	bir (one)	ve (and)	ders (course)	öğren (learn)	bu (this)	dil (language)	için (for)	çok (many)
IG	hiç (never)	eğitim (education)	sev (like)	kötü (imperfect)	yanlış (inefficient)	öğrenci (student)	güzel (good)	biz (we)	okul (school)	gör (see)
CHI2	hiç (never)	eğitim (education)	sev (like)	kötü (imperfect)	öğrenci (student)	gör (see)	yanlış (inefficient)	biz (we)	okul (school)	güzel (good)
DFSS	eğitim (education)	ders (course)	sev (like)	dil (language)	hiç (none)	bu (this)	gör (see)	konus (speak)	ol (be)	okul (school)

Table 7. Top-10 features for the AC-2 dataset using no stemming

No	1	2	3	4	5	6	7	8	9	10
DFS	seviyorum (I like)	hiç (never)	eğitim (education)	konuşma (speaking)	yetersiz (insufficient)	güzel (good)	kötü (imperfect)	bize (to us)	sınıftan (since the grade)	yanlış (inefficient)
GI	ingilizce (english)	bir (one)	ve (and)	için (for)	çok (many)	bu (this)	dil (language)	seviyorum (I like)	de (as well)	hiç (never)
IG	hiç (never)	eğitim (education)	konuşma (speaking)	kötü (imperfect)	bize (to us)	sınıftan (since grade)	yanlış (inefficient)	rağmen (although)	seviyorum (I like)	eğlenceli (joy)
CHI2	hiç (never)	eğitim (education)	konuşma (speaking)	seviyorum (I like)	kötü (imperfect)	bize (to us)	sınıftan (since the grade)	yanlış (inefficient)	rağmen (although)	zor (difficult)
DFSS	hiç (never)	ve (and)	eğitim (education)	de (as well)	dil (language)	bu (this)	öğrenmek (learn)	ama (yet)	konuşma (speaking)	dersi (course)

Table 8. Top-10 features for the AC-3 dataset using Zemberek stemming

No	1	2	3	4	5	6	7	8	9	10
DFS	hiç (never)	ama (yet)	kötü (imperfect)	eğitim (education)	zevk (enjoyment)	sev (like)	fakat (but)	yap (do)	ver (give)	yanlış (inefficient)
GI	ingilizce (english)	ol (be)	bir (one)	ders (course)	ve (and)	öğren (learn)	bu (this)	çok (many)	için (for)	ama (yet)
IG	hiç (never)	ama (yet)	eğitim (education)	sev (like)	kötü (imperfect)	güzel (nice)	fakat (but)	öğrenci (student)	yap (do)	ver (give)
CHI2	ama (yet)	hiç (never)	eğitim (education)	kötü (imperfect)	sev (like)	fakat (but)	yap (do)	ver (give)	ders (course)	öğrenci (student)
DFSS	ama (yet)	ol (be)	ders (course)	dil (language)	eğitim (education)	öğren (learn)	yap (do)	sev (like)	çok (many)	hiç (never)

Table 9. Top-10 features for the AC-3 dataset using no stemming

No	1	2	3	4	5	6	7	8	9	10
DFS	seviyorum (I like)	hiç (never)	yetersiz (insufficient)	ama (yet)	kötü (imperfect)	fakat (but)	yanlış (ineffective)	sınıftan (since grade)	eğitim (education)	zevкли (joyful)
GI	ingilizce (english)	bir (one)	ve (and)	çok (many)	için (for)	ama (yet)	bu (this)	dil (language)	de (as well)	daha (more)
IG	hiç (never)	ama (yet)	eğitim (education)	fakat (but)	konuşma (speaking)	kötü (imperfect)	yanlış (inefficient)	sınıftan (since grade)	bize (to us)	seviyorum (I like)
CHI2	ama (yet)	hiç (never)	seviyorum (I like)	fakat (but)	kötü (imperfect)	eğitim (education)	konuşma (speaking)	sınıftan (since grade)	yanlış (inefficient)	yetersiz (insufficient)
DFSS	ama (yet)	hiç (never)	seviyorum (I like)	çok (many)	bir (one)	dil (language)	ve (and)	için (for)	daha (more)	iyi (well)

The top 10 features that were obtained as a result of feature set analysis are highly discriminative in terms of assessing student feelings toward EFL learning. For instance, the top features associated with positive feelings are güzel=nice, iyi=good/well/nice well, zevk=joy, eğlenceli=joyful, seviyorum=I like. These features show that students throughout the right end (positive end) of the affective continuum frequently describe EFL learning process with these words. Regarding the features associated with negative feelings, the most frequent words are kötü=imperfect, yanlış=inefficient, zor=difficult, yetersiz=insufficient and the students placed throughout the left end (negative end) of the affective continuum use these words to describe their feelings for EFL learning. Although, some features among the top 10 seem neutral, when the dataset is examined, these features may be associated with the negative end of the continuum. For example, the features “hiç=never, sınıftan=since grade, eğitim=education, konuşma=speaking, okul=school, and ders=course” are mostly used by the students to express that “they have *never* learned English language because of imperfect/insufficient/inefficient *education* system/teachers/courses although they have been learning it *since* the second *grade* of primary *school*” and “they have never improved their *speaking* skills as teachers don’t prefer *speaking* activities, so they want more *speaking*-centred English *courses*”. The linkers expressing contrast like ama=yet or fakat=but and the linkers expressing a parallel idea like de=as well, or

ve=and show neither negative nor positive feelings of students. Likewise, some verb stems like sev=like, ol=be/become, yap=do, öğren=learn were assessed neutral as they do not express any feelings either negative or positive.

Discussion

This study has two main purposes. The initial purpose of the present study is to create a new Turkish dataset about the affective characteristics of EFL learners. The second purpose is to place learners along a continuum based on their affective characteristics as EFL learners via machine learning. In line with these purposes, written self-reports of 475 students from 5 different faculties (engineering, tourism, business and management and education) in 3 state universities in Turkey were collected and then manually assigned by the researchers one of three labels: 1:positive, 2:negative, and 3:neutral.

Considering the manual classification of learners' self-reports, these 3 groups of students could be placed along an affective continuum as illustrated in figure 2.

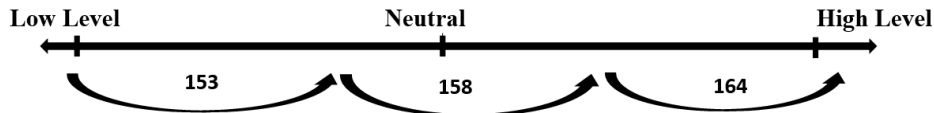


Figure 2. Classification of learners' self-reports along an affective continuum

Regarding the automatic classification of EFL learners' self-reported text documents, the accuracy rate of classification via five different FSMs and two different classifiers changes from 90.06% to 84.32% on AC-2 dataset including two classes that are positive and negative. Similarly, on AC-3 dataset including three classes that are positive, negative, and neutral, the accuracy rate of classification via five different FSMs and two different classifiers changes from 71.79% to 63.83%. The results of the FSMs show that automatic classification confirms the manual classification to a great extent and machine learning methods could be used to classify students along an affective continuum according to their affective characteristics as EFL learners. While the accuracy rate is quite high for the two-class dataset, it is slightly lower for the three-class dataset. Moreover, feature set analyses for both datasets have proved that the most frequent top-10 words are highly discriminative in terms of assessing student feelings toward EFL learning. Thus, machine learning methods are appropriate for discriminating expressions students use to express their feelings for EFL learning.

Considering the significance of affective characteristics in EFL learning, methods helping practitioners or researchers detect affective features of students will contribute both to the related body of literature and in-class practices. This study could be assessed as the first step of using computerized methods in defining affective factors and needs to be elaborated with further studies. Also, it presents a time-and-effort-efficient method for practitioners to detect the affective characteristics of their students. Another point is that as far as we know, there isn't an existing study in which FSMs and classifiers are used in order to automatically classify text documents including EFL learners' feelings. Hence, we could state that the present study is unique and is expected to fill a gap regarding data science applications in EFL learning.

Regarding the future work, similar investigations could be carried out for different languages and language learning settings, e.g. ESL (English as a Second Language) or ESP (English for Specific Purposes). In particular, feelings of students learning Turkish as a second language in TOMERs (Center for Teaching Turkish Language) in state universities in Turkey seem worthy of concern. Moreover, similar studies could be carried out for individual affective characteristics such as attitude, motivation, or anxiety. For instance, EFL students could be placed along a continuum according to their level of positive or negative attitudes toward EFL learning process. Last, as a follow-up study, in addition to placing students along the continuum in groups, studies investigating placement of individual students along a continuum could be conducted.

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Conflict of interest statement

The authors declare no conflicts of interest.

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INDIVIDUAL AND GROUP AUTONOMY IN DIFFERENTIATED ESP INSTRUCTION OF INFORMATION TECHNOLOGY STUDENTS

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This study was aimed to check the effectiveness of links between individual and group autonomy of information technology (IT) students who studied ESP at university with the use of differentiated tasks. The mixed type of research was used. The study was held in 2020-2021 academic year and involved 40 IT students of the Physics and Technology Department of National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". For the purpose of the study we used a three-degree individual autonomy model involving the partial autonomy, semi-autonomy and conditionally full autonomy degrees, and a two-degree group autonomy including the minimum and relatively maximum degrees. Both models were based on the criteria of motivation; goal, content and procedure; control and reflection. The significantly and insignificantly effective links between individual and group autonomy of IT students in differentiated ESP instruction were identified. The relatively maximum degree of group autonomy combined with individual semi-autonomy of IT students, as well as the relatively maximum degree of group autonomy combined with conditionally full individual autonomy of IT students were found significantly effective. In contrast, the combinations of the minimum degree of group autonomy with partial individual autonomy of IT students, as well as the minimum degree of group autonomy with conditionally full individual autonomy of IT students were found insignificantly effective. It was concluded that the promotion of the individual and group autonomy in differentiated ESP instruction should be based on individual characteristics of students.

Keywords: differentiated ESP instruction; individual autonomy; group autonomy; IT students.

Introduction

With the fast progress of globalization and the growth of information technologies (IT), there is a need for enhancing the quality of IT students' education at university level with focus on their professional skills. Additionally, the knowledge of a foreign language will help them to solve any problem through communication at the workplace. Effective developing foreign language communicative competence of IT students should be based on the differentiated English for Specific Purposes (ESP) instruction oriented on the students' level of English language proficiency, their learning style and their individual and group autonomy.

ESP differentiation is a phenomenon that allows ESP teachers to arrange the educational process flexibly and proactively and help ESP learners with different foreign language proficiency levels and abilities "to achieve maximum growth" (Tomlinson, 1999, p. 14). Usually, a mixed-ability ESP class is composed of learners whose learning style and level of English language proficiency are different (Synekop, 2018). In view of this, it is reasonable to gradually increase the level of complexity of tasks in "the zone of proximal development" (Vygotsky, 1935). Simultaneously, the level of complexity of tasks should be as feasible as possible for both the learner and the group with the aim of supporting the developmental function of teaching and learning (Zankov, 1968, p. 34). "The zone of proximal development" (Vygotsky, 1935) is provided by the ESP educators and learner interaction and in this case, the individual and group autonomy of ESP learners play a crucial role in achieving educational aims.

A complex concept of autonomy is defined as "constantly changing and fluctuating depending on the activity being pursued, the way it is being pursued and the amount of guidance or supervision from the teacher or advisor, from peers and from the technology or the materials being used, whether learning is in a classroom context, using self-access resources or at a distance" (Everhard, 2015, p. 12).

A whole number of recent publications are devoted to the autonomy of foreign language learners and possibilities of its use in the educational process: developing learner autonomy via blended learning (Nikolaeva, Zadorozhna, Datskiv, 2019); the correlation between choosing a personal educational pathway and developing learner autonomy (Tuchina et al., 2020); fostering learner autonomy by using Google education tools (Borova et al., 2021); tools for developing learner autonomy (Stanojević Gocić, Janković, 2021); the impact of language learner autonomy (Little, 2020); effects of individual versus group work on learner autonomy (Liu, Ming-Chi, Huang, Yueh-Min, Xu, Yo-Hsin, 2018); learner autonomy as an educational goal of teaching English (Teng, 2019); the use of individual and collaborative learning logs and

their impact on the development of learner autonomy (Judy Shih, 2020); students' autonomy and attitude in learning TOEFL online (Octaberlina, Muslimin, 2021).

A number of studies have explored the degrees of individual autonomy (Winch, 2002; Scharle, Szabo, 2005; Nunan, 1997; Kohonen, 2001; Littlewood, 1996, 1997; Van Lier, 1996). Kumaravadivelu (2003) points out that the degree of autonomy does not correlate with the students' level of foreign language proficiency and "teachers and learners can follow different stages of autonomy depending on the linguistic and communicative demands of a particular task in a particular class" (p. 144). The degrees of autonomy depend on "the disposition and predisposition of the learners in terms of affect, motivation, commitment, engagement, interaction, cooperativeness, ownership, reflection and uptake, and fluctuates according to circumstances" (Everhard-Theophilidou, 2012, p. 51).

With the increased attention to the effectiveness of group and teamwork, the importance of understanding of the essence of group autonomy has also grown in different fields of knowledge. The terms "group autonomy" or "group work autonomy" (Bailey, Adiga, 1997; Blumberg, 1980; Cordery, Mueller, Smith, 1991; Langfred, 2000), "group learner autonomy" (Ponton, 2020); "team autonomy" (Thomas, Tymon, 1993; Kirkman, Rosen, 1999) appeared in studies on the features of the group / teamwork in companies. "Collaborative autonomy" is mentioned in the context of cooperative and collaborative learning (Myskow et al., 2018), "social autonomy" (Palfreyman, 2018), foreign language learning.

Langfred (2000) singled out the low and high degrees of the group autonomy and argued that "autonomy can simultaneously reside at both the group and the individual level in a work group" (p. 564). He argues that "a group may have considerable discretion in deciding what group tasks to perform and how to carry them out, but individual members within the group may have very little discretion or control" (Langfred, 2000, p. 564). Alternatively, the group members may have high individual autonomy but low group autonomy (Langfred, 2000, p. 564). In support of this point of view, we believe it is important to make further research into both individual and group autonomy and the influence of both autonomies on group / team work.

"Autonomous work groups are defined as groups of interdependent workers, who regulate much of their own task behaviour around relatively whole tasks" (Van Mierlo et al., 2001, c. 292). Similar definition is suggested by Cohen and Ledford (1994) who determine a self-managing team as a group of interdependent team members that can self-regulate their behaviour performing a single task which involves group autonomy, but does not exclude individual autonomy. Consequently, the group autonomy in differentiated ESP instruction can be considered as the readiness and ability of interdependent team members to self-regulate professional communication to achieve a common goal at both the group and the individual levels.

Thus, it is urgent to explore the synchronous effects of individual and group autonomy of IT students in the differentiated ESP instruction.

The **aim** of this study is:

- 1) to define the degrees of individual and group autonomy and the links between these degrees in the differentiated ESP instruction;
- 2) to outline the factors of development of individual and group autonomy of IT students.

Methods

Research design

In this study, the mixed research method was used. The qualitative research method was used for analyzing the degrees of individual and group autonomy in the differentiated ESP instruction, interpreting data during the experimental learning. Quantitative research method was employed for determining the effective links between the degrees of individual and group autonomy in the differentiated ESP instruction.

Research participants

The participants of the study were 40 students of the Physical and Technical Department of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" who voluntarily took part in the study in 2020-2021 academic year.

Research instruments and procedures

The research consisted of six stages.

The first stage. Initially, IT students were offered a pre-test for defining their English language proficiency level according to Common European Framework of Reference for Languages: Learning, Teaching and Assessment / CEFR (2018). The test involved tasks on listening, reading, speaking and writing assessed by 10 points each. The maximum score for the test was 40. Points 35-40 indicated C1 (Advanced)

level, points 29-34 – B2 (Upper Intermediate) level, points 23-28 – B1 (Intermediate) level, points 17-22 – A2 (Pre-Intermediate) level, points 1-16 – A1 (Elementary) level.

Speaking was also assessed using CEFR (2001, 2018) levels: 1-2 points were given for Elementary level (speech is marked by very frequent hesitation; response on the whole is not adequate to the task; ideas are limited; pronunciation is not easily understood; vocabulary and grammar are limited; numerous mistakes are evident; interaction is very limited); 3-4 points – for Pre-Intermediate level (speech is marked by very frequent hesitation; response is occasionally adequate to the task; ideas are not well connected; frequently, pronunciation cannot not be easily understood; vocabulary and grammar are occasionally appropriate and varied; frequent mistakes are evident; interaction is occasionally appropriate); 5-6 points – for Intermediate level (speech is fluent, with a little hesitation; response is not always adequate to the task; ideas are partly limited; pronunciation is not always clear; vocabulary and grammar are appropriate and varied on most occasions; occasional mistakes are evident; interaction is not always appropriate); 7-8 points – for Upper Intermediate (speech is fluent, without much hesitation; response is mostly adequate to the task; ideas are almost always developed; pronunciation is almost always clear; vocabulary and grammar are generally appropriate and varied; few mistakes are evident; interaction is almost always appropriate); 9-10 points – for Advanced level (speech is fluent, without hesitation; response is adequate to the task; ideas are well developed; pronunciation is clear; vocabulary and grammar are appropriate and varied; very few or no mistakes are evident; interaction is appropriate).

Correspondingly, written assessment involved 1-2 points for Elementary level (the purpose of the text is generally unclear; ideas are limited; the organization of the text is poor; vocabulary and grammar are limited; numerous mistakes are evident); 3-4 points for Pre-Intermediate level (the purpose of the text is not entirely clear; ideas are not well connected; the text is not well organized; vocabulary and grammar are occasionally appropriate and varied; frequent mistakes are evident); 5-6 points for Intermediate level (the purpose of the text is generally clear; ideas are partly limited; the text is reasonably well organized; vocabulary and grammar are appropriate and varied on most occasions; occasional mistakes are evident); 7-8 points for Upper Intermediate level (the purpose of the text is clear; ideas are almost always developed; most of the text is well organized; vocabulary and grammar are generally appropriate and varied; few mistakes are evident); 9-10 points for Advanced level (the purpose of the text is very clear; ideas are well developed; the text is well organized; vocabulary and grammar are appropriate and varied; very few or no mistakes are evident).

The second stage. At this stage for the purposes of the differentiation, a *three-degree individual autonomy model* as an adapted version of those presented in previous research (Stolk, Martello & Geddes, 2007; Everhard-Theophilidou, 2012; Zadorozhna, 2012) was outlined. The degrees, such as partial autonomy, semi-autonomy, conditionally full autonomy (Table 1) were characterized according to the following criteria: motivation; goal, content and procedure; control and reflection.

Table 1. *Adapted three-degree model of individual autonomy based on models of Stolk, Martello & Geddes (2007), Everhard-Theophilidou (2012), Zadorozhna (2012)*

Criteria Degree	Motivation	Goal, content and procedure	Control and reflection
Partial autonomy	Mostly extrinsic motivation	The teacher defines the goals according to the student's level of English language proficiency and his / her learning style; envisages and plans the progress and pace of the task; coordinates the ways of its implementation, offers appropriate strategies, content, materials.	Hetero-assessment, strict management by the teacher, mechanical reflection are predominant.
Semi-autonomy	Balancing of extrinsic and intrinsic motivation	Both the student and the teacher define the goals according to the student's level of English language proficiency and his / her learning style; envisage and plan the progress and pace of the task, coordinate ways of its implementation, select appropriate strategies, content, materials.	Priority is given to combined types of assessment (peer assessment, hetero-assessment, self-assessment), relatively strict management by the teacher; pragmatic reflection.

Conditionally full autonomy	Mostly intrinsic motivation	The student sets goals according to his / her level of English language proficiency and learning style; forecasts and plans the progress and pace of the task, coordinates the ways of its implementation, uses appropriate strategies, content, materials.	Combined types of assessment, especially self-assessment, flexible management by the teacher, emancipatory reflection are preferred.
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The *criterion of motivation* relies on the notion of “motivation” as a tool for the differentiated ESP instruction which activates speech activity and affects the success of its realization. Therefore, in case of *partial autonomy*, when the goals and algorithm of the task are determined by the teacher, there is a predominance of *extrinsic motivation*. In conditions of *semi-autonomy*, the cooperation of the student and the teacher, the ability to choose a task according to the level of language proficiency and learning style significantly stimulate the student’s desire and interest in the task performance, which creates a balance of extrinsic and intrinsic motivation. When a student has *conditionally full autonomy* and therefore a maximum freedom of choice in the process of performing the task, *intrinsic motivation* dominates.

The goal, content and procedure criterion implies outlining the goals in accordance with the student’s level of English language proficiency and his / her learning style; planning the progress of the task, coordinating the ways of task solution, choosing appropriate strategies, content and materials. Thus, the *partial autonomy* provides the maximum dependence of the student on the teacher in determining the goals, content and process of the task performance while the *semi-autonomy* allows for the teacher and the students’ consolidation of efforts throughout all the stages (from goal setting to task realization) and *conditionally full autonomy* stipulates the student’s independence in defining objectives and ways to achieve them under minimal guidance of the teacher.

According to *the criterion of control and reflection*, the *partial autonomy* involves strict management by the teacher, dominant hetero-assessment; the *semi-autonomy* relies on relatively strict management by the teacher, combined types of assessment (hetero-assessment, peer assessment, self-assessment) with the prevalence of hetero-assessment and peer assessment; the *conditionally full autonomy* involves optimally flexible management by the teacher, combined types of assessment (hetero-assessment, peer assessment, self-assessment) with the preference of self-assessment.

Since the differentiated ESP instruction is a cyclic process from goal setting to assessment, reflection plays a crucial role in it. Reflection sets the rhythm of the cyclic educational process, activating the focus on skills that need to be further improved. The theory of “knowledge-constitutive interests” (Habermas, 1972; Huttunen, 2003, p. 125-126) offers three levels of reflection (mechanical, pragmatic and emancipatory), which Everhard-Theophil (2012, p. 29-30, 62) uses in her four-degree model of student autonomy in foreign language learning. *Mechanical reflection* means that “the content of the message is taken as such, without paying attention to its relevance or links to personal experience” (Huttunen, 2003, 125-126). *Pragmatic reflection* is realized through learner’s “increased understanding of an issue during an action or as a result of it, but does not analyze it further or link it with wider experiences” (Huttunen, 2003, 125-126). In *emancipatory reflection*, “the learner gets new insights and new ways of looking at things while deliberately engaging in reflection. Connections are sought with one’s own experiences, and there are reasons for action and for the outcome of action” (Huttunen, 2003, 125-126). These outlined degrees of reflection can be implemented in the three-degree individual autonomy model in the differentiated ESP instruction. Thus, the partial autonomy correlates with mechanical reflection, the semi-autonomy – with pragmatic reflection, the conditionally full autonomy – with emancipatory reflection.

Thus, it is obvious that the choice of individual autonomy will vary in both classroom and extracurricular time, depending on the learning goals of IT students, the realization of which is based on student’s level of English language proficiency and learning style, their ability to self-regulation and motivation.

The third stage. Then, on the base of different studies (Pearson, 1992; Langfred, 2000; Pekruhl, 1994; Myskow et al., 2018), in the differentiated ESP instruction, a two-degree model of group autonomy of minimum and relatively maximum degrees was developed according to the criteria of motivation; goal, content and procedure; control and reflection.

Table 2. *Two-degree model of group autonomy in differentiated ESP instruction*

Criteria Degree	Motivation	Goal, content and procedure	Interactivity	Control and reflection
Minimum degree of group autonomy	Group members demonstrate neutrality in their attitude, desire and interest in the task performance; extrinsic motivation.	The teacher determines the overall goal of the group and individual work of each student; plans the progress of the task; influences group decisions; outlines the individual (according to the language proficiency level and learning style) contribution of each student in the group; sets deadlines for the task; distributes and changes roles if necessary; develops the group strategy. The role of the teacher is maximum.	Limited interactivity of students in communicative situations (ability to request information, explain, find out somebody's point of view, make suggestions, agree and disagree, exchange ideas, criticize, avoid conflicts). Scaffolding is offered by the teacher.	Peer assessment under the control of the teacher is dominant. Group reflection (superficial and moderate reflection) is carried out within the group with the participation of the teacher.
Relatively maximum degree of group autonomy	Group members demonstrate a positive attitude, desire and interest in fulfilling the group's task; intrinsic motivation	Students determine the overall goal of the group and individual work of each student; plan the progress of the task; make group decisions; outline the individual contribution (according to the language proficiency level and learning style) of each student in the group; make changes if necessary; set deadlines for the task; distribute and change roles if necessary; develop the group strategy. The role of the teacher is minimal.	Optimally flexible interactivity of students in communicative situations (ability to request information, explain a point of view, make suggestions, agree and disagree, exchange ideas, criticize, avoid conflicts). Scaffolding is not offered by the teacher.	Group assessment and peer assessment are dominant. Group reflection (deep and moderate) within the group is carried out without the intervention of the teacher or with his / her minimal participation.

According to *the motivational criterion*, with a *minimum degree of group autonomy*, the group members demonstrate *extrinsic motivation* (neutrality in attitude, desire and interest) during the performance of the group task, whereas with a *relatively maximum level of group autonomy* they show the *intrinsic motivation* (a positive attitude, desire and interest) in the process of task performance.

In accordance with *the criterion of goal, content and procedure*, in conditions of *the minimum degree of group autonomy*, the role of the teacher is dominant. He / she determines the overall goal of the group and an individual in the group; plans the progress of the task; influences group decisions; outlines the individual contribution (according to the language proficiency level and learning style) of each student; sets deadlines for the task; distributes and changes roles if necessary; develops a group strategy. With *the relatively*

maximum degree of group autonomy, all these teacher's functions are transferred to the group of students and their role is maximum. At the same time, minimal teacher intervention (as a consultant) remains.

With reference to *the interactivity criterion*, under the *minimum degree of group autonomy*, the interactivity of students in a group (the ability to ask for information, explain, find out somebody's points of view, make suggestions, agree and disagree, exchange ideas, criticize, avoid conflicts) is limited in communicative situations. The teacher offers scaffolding as a support. At the same time, a *relatively maximum degree* of group autonomy supports optimally flexible interactivity of students in communicative situations.

According to *the control and reflection criterion*, the *minimum degree of group autonomy* relies on the combined types of assessment, predominantly peer assessment under the control of the teacher. Under *the relatively maximum degree* of group autonomy, the combined types of assessment are used, predominantly the group assessment and peer assessment.

This criterion involves specifics of reflection too. West and Sacramento (2010) highlight that reflection in teams or groups differs in depth. Thus, superficial reflection "consists of thinking about issues closely related to the task at hand" (West & Sacramento, 2010, p. 907). Moderate reflection "is characterized by a more critical approach toward tasks" (West & Sacramento, 2010, p. 907). Finally, deep reflection "involves rethinking the norms and values of the team or organization" (West & Sacramento, 2010, p. 907). Thus, under *the minimum degree of group autonomy*, groups do not always understand the goals and the ways to achieve them; mostly follow ready-made patterns and do not anticipate the consequences when analyzing the task, are unable to quickly adapt to changes in the communicative situation; use superficial and moderate reflection. With *the relatively maximum degree of group autonomy*, groups clearly understand the goals and strategies to achieve them, carefully plan communicative actions, anticipate possible consequences, analyze the communicative situation and make adjustments as needed during the task performance, quickly adapt to changes; realize deep and moderate reflection.

The fourth stage. The links between individual and group autonomy of IT students in differentiated ESP instruction were identified. Significantly effective were found the links between the relatively maximum degree of group autonomy and individual semi-autonomy of IT students, as well as the relatively maximum degree of group autonomy and conditionally full individual autonomy of IT students. Combinations of the minimum degree of group autonomy with the partial individual autonomy of IT students, as well as the minimum degree of group autonomy with the conditionally full individual autonomy of IT students were found to be insignificantly effective.

Table 3. *The links between the individual and group autonomy of IT students in differentiated ESP instruction*

Significantly effective links	
Relatively maximum degree of group autonomy Individual semi-autonomy of IT students	Relatively maximum degree of group autonomy Conditionally full individual autonomy of IT students
Insignificantly effective links	
Minimum degree of group autonomy Partial individual autonomy of IT students	Minimum degree of group autonomy Conditionally full individual autonomy of IT students

The fifth stage. At this stage, two groups consisting of subgroups with different levels of individual and group autonomy were formed and then different communicative tasks were suggested to them. The first group included: the subgroup with relatively maximum degree of group autonomy and semi-autonomy of students at the individual level; the subgroup with relatively maximum degree of group autonomy and conditionally full autonomy of students at the individual level. The second group included: the subgroup with minimum degree of group autonomy and partial autonomy of students at the individual level; the subgroup with minimum degree of group autonomy and conditionally full autonomy of students at the individual level.

The sixth stage. Then, a post-test for defining English language proficiency level was offered. The pre-test assessment criteria were used for assessing the post-test.

Data Analysis

The tests results were calculated automatically using the mathematical statistics method – Fisher’s coefficient. The collected data was analyzed, compared and interpreted.

Results

The results of our study demonstrated that at the beginning of the experimental learning the level of foreign language proficiency in both experimental groups was almost the same. The Ukrainian students’ desirable foreign language proficiency level is B1 (intermediate) at the entrance and B2 (upper-intermediate) at the graduation from a bachelor’s degree program according to CEFR (2018). According to the results, ESP learners’ language levels range from B1 to B2 with the majority having B1 level. In the first experimental group, there were 15 such students, in the second experimental group – 14 students (Table 4). Correspondingly, 5 students from the first group and 6 students from the second group reached level B2. After the experiment, the IT students of the first experimental group showed better results compared with those of the second one.

Table 4. *IT students’ English language proficiency levels*

Number of IT students in experimental groups	Pre-test		Post-test	
	B1	B2	B1	B2
English language proficiency levels				
EG-1 (sub-group 1 and 2) 20 students	15	5	2	18
EG-2 (sub-group 3 and 4) 20 students	14	6	11	9

Then the Criterion of Fisher (2017) was used for identifying which groups showed more effective links between individual and group autonomy and correspondingly a higher level of English language proficiency.

The following hypotheses were formulated:

H₀: the percentage of IT students who have increased the level of English language proficiency in the first experimental group (EG-1) is not bigger than in the second experimental group (EG-2) as reported by the obtained results.

H₁: the percentage of IT students who have increased the level of English language proficiency in the first experimental group (EG-1) is bigger than in the second experimental group (EG-2) as reported by the obtained results.

The students who received 29-34 points (level B2) were considered to have gained an “effect” during the experimental learning, while the students who got 23-28 points (level B1) were regarded as those who did not achieve it.

To calculate the Fisher (2017) Criterion ($\varphi^*_{emp} = (\varphi_1 - \varphi_2) \cdot \sqrt{\frac{n_1 \cdot n_2}{n_1 + n_2}}$, φ^*_{emp} , where $\varphi_1 = 18$ (90%), $\varphi_2 = 9$ (45%) (Table 5)) we used PSYCHOL-OK software (https://www.psychol-ok.ru/statistics/fisher/fisher_02.html) and got $\varphi^*_{emp} = 3.248$, which is greater than 2.31 and thus is in the significance zone. This means that only hypothesis H₁ is correct. According to the obtained results, the percentage of IT students who increased the level of English language proficiency in the first experimental group was bigger than in the second experimental group.

Table 5. *The degree of effectiveness of learning outcomes in the experimental groups*

Experimental groups	Learning effect	No learning effect	Total
	Number of IT students (%)	Number of IT students (%)	
SPEAKING INTERACTION			
EG-1	18 (90%)	2 (10%)	20 (100%)
EG-2	9 (45%)	11 (55%)	20 (100%)

Discussion

We totally agree with the opinion of Ledford (1994) that it is reasonable to pay attention to the synchronous effects of individual and group autonomy in differentiated ESP instruction of IT students. Our

study made it possible to outline significantly and insignificantly effective links between individual and group autonomy. As the individual autonomy is integrated in the group autonomy of IT students, these types of autonomy are interconnected and interdependent.

Our research was based on Vygotsky's (1935) assumption that the individual autonomy is oriented on the student's ability to act independently and take responsibility in setting the goals and searching for the ways to achieve them in "the zone of proximal development". Such ability depends on the individual potential of each student: his / her learning style, the level of foreign language proficiency.

Unlike the individual autonomy, group autonomy focuses on determining the goals and the ways of achieving them at the level of the group. But, in our opinion, this type of autonomy is more complicated than the individual one, because a group is composed of different students who have various individual potential and are able to solve tasks at their own level and the level of the group. The group work in our study was organized in accordance with the current literature which states that autonomous groups imply: distributing tasks among group members, sharing responsibilities for a clearly defined segment of work (Jessup, 1990) and a common task of the group (Jönsson and Lank, 1985); performing tasks that require different skills relevant to group work (Wall, Clegg, 1981); providing feedback, which relies on controlling deviations from the goal (Pearson, 1992). An important feature of teamwork in our research was team reflection which we viewed as "the extent to which team members collectively reflect on the team's objectives, strategies, and processes ..." (West & Sacramento, 2010, p. 907). As shown by the results of our study, the variation of the degree of group autonomy makes an impact on the coordination of group actions in defining the goals, content and process of the task performance; interaction, which ensures the effectiveness of communication and coordination of the group; control and reflection by the teacher and the students.

According to the experimental results, the link between the relatively maximum degree of group autonomy and the semi-autonomy of IT student, as well as the relatively maximum degree of group autonomy and the conditionally full autonomy of IT student was significantly effective. In contrast, the combinations of the minimum degree of group autonomy with partial autonomy of the student, as well as the minimum degree of group autonomy with conditionally full autonomy of the student were found ineffective because of insufficient coordination and cohesion of task performance.

The effective balance of individual and group autonomy is provided by such factors as individual potential of students (his / her level of English language proficiency and learning style); the level of complexity of tasks that should be as feasible as possible for both the individual learner and the group; sufficient background professional knowledge; distribution of roles within the group; proper choice of tasks; effective communication (sharing information, avoiding conflicts, finding consensus); clear definition of rules and procedures; frequent feedback; mutual trust and respect; team discipline; proper teacher guidance.

In addition, with the increase of socially distributed regulation and co-regulation of students in groups, the level of group autonomy increases. In the process of the differentiated ESP instruction the teacher's influence on the student decreases, and, correspondingly, the level of the individual and group autonomy increases. The promotion of the individual and group autonomy in differentiated ESP instruction should be based on individual potential of IT students. When organizing group work in differentiated ESP instruction of IT students, it is necessary to take into account different combinations of individual and group autonomy in classroom depending on the learning goals.

Limitations

The research was limited by Ukrainian students only (n=40). Thus, in our opinion, similar studies conducted in other countries and involving a bigger number of participants could receive new insights.

Conclusions

Based on the results of our research we may conclude that the links between the relatively maximum degree of group autonomy and the individual semi-autonomy of IT students, as also between the relatively maximum degree of group autonomy and the conditionally full individual autonomy of IT students are significantly effective. On the contrary, the links between the minimum degree of group autonomy and the partial individual autonomy of the students, as well as between the minimum degree of group autonomy and the conditionally full individual autonomy of the students are insignificantly effective. Also, the effective development of individual and group autonomy is provided by such factors as the individual potential of the students; the level of complexity of tasks; sufficient background professional knowledge of students; distribution of roles within the group; proper choice of tasks; effective communication; clear definition of rules and procedures; frequent feedback; mutual trust and respect; team discipline; appropriate teacher guidance. The use of different combinations of individual and group autonomy in classroom depends on the

learning goals and the promotion of the individual and group autonomy in differentiated ESP instruction should be based on individual potential of IT students.

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THE EFFECTIVENESS OF COOPERATIVE LEARNING IN DEVELOPING GRAMMAR SKILLS

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The article presents the results of the experimental enquiry aimed at studying the impact of cooperative learning on improving grammar skills. The research focused on two interaction modes – pair work and group work, which were compared in terms of their potential to address accuracy. The experiment was carried out in the first term of the 2020-2021 academic year (September-October). The participants included 23 third-year students of the Foreign Philology Faculty of H. S. Skovoroda Kharkiv National Pedagogical University and constituted two academic groups, with one being offered pair-work activities and the other working in small groups. The experimental study comprised three phases: pre-experiment testing, teaching, post-experiment testing. Both quantitative and qualitative methods were used. The results demonstrate the validity of the assumption about the efficacy of pair work and group work in promoting accuracy, at the same time indicating no statistically significant difference between the two modes. The presented evidence suggests that grammar instruction can clearly benefit from incorporating both pair work and group work into classroom practices, however further research might be advisable to maximize the effectiveness of these interaction patterns by refining the procedure involved and improving students' cooperative learning skills.

Keywords: cooperative learning; pair work; group work; accuracy; grammar skills.

Introduction

The primary task of present-day English language teaching (ELT) methodology is to ensure that the teaching-learning process enables students to engage in meaningful communication. To that end, teachers are encouraged to regularly employ pair work (PW) and group work (GW) in the ELT classroom. Extensive research has been carried out on the effects of PW and GW in relation to language fluency. By contrast, accuracy is not generally associated with these interaction patterns. In this paper, we endeavour to find out whether PW and GW are conducive to practising grammar and if there is any noticeable difference in terms of the impact each interaction mode exerts on students' grammar performance.

The issue of using PW and GW in foreign language classes has been attracting the attention of methodologists and teachers for a number of decades now. The fact can be explained by certain reasons, the most fundamental of which is that both patterns of interaction are called to realize cooperative learning that is “doing with others” (Herrmann, 2013; Yavuz & Arslan, 2018). The main conception of cooperative learning is cooperation which “exists when individuals work together in a group in order to promote both their individual learning outcomes as well as the learning outcomes of their peers” (Herrmann, 2013, p. 175). Cooperative learning is strongly associated with the Communicative Approach to teaching foreign languages and has some considerable advantages in comparison to learning a foreign language by doing activities individually.

One of the most important characteristics of cooperative learning is its ability to provide a natural environment, which contributes to the development of interpersonal skills (Gilbert, 2021; Hsiung, 2012; Zarrabi, 2016). It is claimed that “higher level thinking skills are developed by cooperative learning” (Laal & Ghodsi, 2012, p. 488) because when working in groups, students learn how to solve problems, receive immediate feedback and respond to questions and comments (Laal & Ghodsi, 2012).

The primary condition that contributes to the realisation of cooperative learning is the involvement of two or more participants in the solution of the same task, which allows one to consider PW and GW to be the main tools that build cooperation. “Both pair work and group work promote meaningful communication” (Rakab, 2016, p. 82). Group work enables students to exercise different types of speech interaction, thus helping create a stress-free and cooperative atmosphere in the classroom (Raja, 2012, p. 157). Moreover, it is reported that teachers frequently use GW and PW in order to increase students' talking time (Byram & Hu, 2013). As a result, more students gain an opportunity to speak, to improve their interpersonal skills and to develop their communicative competence.

The interaction patterns of cooperative learning have a great potential to create social interdependence in the foreign language classroom. Social interdependence – emerges when attaining goals by a person is influenced by contributions from others (Johnson & Johnson, 2008, p. 11), which as a rule takes place in the GW and PW

modes. Considering that language is a social phenomenon and learning it makes sense only if it is or was used by a social group, providing social interdependence is a strong factor in making foreign language classes effective. It should be noted that there is positive and negative social interdependence. Positive interdependence is associated with cooperation and exists when people become aware that they will achieve their goals only on the condition that other people, participating in the same activity, also achieve their goals. Consequently, they encourage each other in the pursuit of their common objectives (Johnson & Johnson, 2008, p. 11) and both sides benefit from the process. It is believed that positive social interdependence results in higher achievement and greater productivity (Laal & Ghodsi, 2012). At the same time, negative social interdependence is associated with competition and “exists when individuals perceive that they can obtain their goals if and only if the other individuals with whom they are competitively linked fail to obtain their goals” (Johnson & Johnson, 2008, p. 12). Negative interdependence can promote language learning if it forms the basis of communicative games such as guessing or debates. Both positive and negative types of interdependence can be fostered by assigning complementary roles, modifying group composition and providing deliberate fragmentation of information (Johnson & Johnson, 2008, p. 19) and both should be incorporated in language education in order to facilitate the acquisition of communicative skills by learners.

Despite considerable scientific attention given to cooperative learning in general and to separate methodological devices that promote it, a literature review of the topic leads to the assumption that there is a tendency to regard PW and GW as one and the same phenomenon in opposition to individual efforts in learning (Mayo & Zeitler, 2017; Raja, 2012; Rakab, 2016). PW and GW are rarely compared. Moreover, “pair work is often seen as a subset of group work” (Byram & Hu, 2013, p. 290). However, PW and GW have a number of characteristics that differ them from each other.

First of all, the existence of two separate terms clearly suggests that interaction in pairs is opposed in our consciousness to interaction in clusters that include more than two participants. The fact can be explained by the different sensations that we have while communicating in pairs and in small groups. When we interact in pairs, we do not need to ‘compete’ for a chance to participate in the conversation: *if my partner is talking at the moment, I will always be the next to speak up when he/she finishes*. When we are communicating in a group (no matter whether there are three or five participants), we often have to wait for the right moment when we can change our role from ‘the listener’ to ‘the speaker’ and we should be quicker than the other members of the group to speak or we can miss our turn and thus lose the topicality of the idea we want to express. On the other hand, there is always a possibility in a group that a participant may stick to the listener’s role without saying a word during the whole conversation. That cannot happen in pair interaction which can be sustained on the condition that there is at least a small contribution from both partners. These distinctions are typical for real-life conversation and are definitely in evidence in language classes.

Besides, it is believed that PW is easier to manage in the classroom in pedagogical terms (Byram & Hu, 2013). “The obligation to contribute is much more strongly marked when only two people are involved” (Byram & Hu, 2013, p. 290) because “the smaller the size of the group, the greater the individual accountability” (Johnson & Johnson, 2008, p. 23) which appears “when the performance of each individual member is assessed” (Johnson & Johnson, 2008, p. 22). It is also claimed that to organise PW we need to use materials that presuppose fewer actions on the part of both the teacher and learners to ensure that activity of some sort takes place (Byram & Hu, 2013). At the same time, GW is described as more viable than PW as it creates more interaction opportunities for learners. It is also claimed that GW is a more effective classroom management device in large classes in comparison to PW (Otienoh, 2015). There being both similarities and differences between PW and GW, the question arises as to whether the two patterns of interaction have the same potential to create social interdependence in the ELT classroom that can stimulate higher academic achievement.

The review of the literature on the topic of cooperative learning also raises the question of the effectiveness of PW and GW in terms of addressing accuracy. Whereas most researchers agree on the benefits of cooperative learning when it comes to acquiring fluency due to an increase in student talking time and the focus on meaningful communication (Namaziandost, Homayouni & Rahmani, 2020; Renou, 2001; Rakab, 2016), there seems to be lack of data indicating that PW and GW can promote accuracy as researches that bring into focus accuracy development through cooperative learning are quite scarce. Hampshire and Anoro (2004) argue that PW and GW activities are not conducive to focusing on grammar. Moreover, some scholars point out the fact that in the case of students’ sharing the same first language, there is a risk of the fossilisation of their incorrect interlanguage (Ammar, Lightbown & Spada, 2010; Lightbown et al., 2002; Simard & Wong, 2004). We believe that both PW and GW can be successfully used to address grammatical accuracy if certain conditions are fulfilled. Firstly, PW and GW activities should be designed in such a way that students will feel the need to repeatedly use the target grammar. Secondly, students should be closely

monitored by the teacher (or in the case of GW by one of the students who can be assigned the role of 'monitor'). Finally, PW and GW activities should be accompanied by a grammar focus follow-up, with the teacher (or the group monitors) providing feedback on students' mistakes. As for which interaction mode (PW or GW) is more conducive to grammar practice, it is difficult to make valid assumptions because each mode has its own advantages and disadvantages. PW offers more chances of involvement and thus more talking time per student. Besides, in some academic settings, e.g. in Ukraine, it is easier to organise due to the typical seating arrangement in the classroom and the fact that students are more used to working in pairs than in groups. On the other hand, GW may be easier to monitor as there are fewer groups than pairs and, as has been mentioned above, during GW one of the students can act as an observer and keep a note of their group mates' mistakes. The bigger number of students in a group also increases the chances of peer correction in the course of doing an activity. Thus it becomes evident that the issue of promoting accuracy when using PW and GW in the ELT classroom calls for empirical enquiry. The current paper is an attempt at such an exploration. The **aim** of this study is to explore and assess the impact of PW and GW on the acquisition of grammar skills. To achieve this aim, it was necessary to carry out the following tasks: to examine the nature of cooperative learning, to determine the distinctive features of PW and GW, to design a set of grammar activities for PW and GW, to try out the designed activities via experimental teaching, to interpret and discuss the results.

The detailed study of the nature of cooperative learning in general, and the peculiarities of PW and GW in particular, enabled us to propose two **hypotheses**:

Hypothesis A: cooperative learning in the form of either PW or GW can prove effective when addressing accuracy with no considerable difference between the two specified modes.

Hypothesis B: cooperative learning in the form of either PW or GW can prove effective when addressing accuracy, with one of the two specified modes yielding substantially better results.

The suggested hypotheses were to be tested out in the course of an experiment.

Method

Research Design

The implementation of the experimental enquiry necessitated a mixed research design as both quantitative and qualitative methods were employed. The former were used to assess the target grammar skills (pre- and post-experiment tests), interpret and statistically analyse the test results (Bespalko's proficiency quotient, Fisher criterion). The latter included systematic observation carried out by the teacher conducting the experiment and a survey carried out among the students participating in the research.

Participants

The subjects of the research included 23 third-year students of the Foreign Philology Faculty of H. S. Skovoroda Kharkiv National Pedagogical University. The students constituted two academic groups – 32 (10 students) and 33 (13 students). Both groups were given instruction by the same teacher during the same period of time – the first term of the 2020-2021 academic year (September-October).

Instruments and Procedure

The experimental study took place within the course of Practical Grammar. At the time the participants were receiving instruction on using modal verbs. To determine the level of their expertise at the starting point of the research, the students were offered a pre-experiment grammar test, which consisted of 20 items: 10 error correction questions and 10 gapped sentences. The means of the two groups were calculated and statistically compared. The results indicated that there was no significant difference in the students' grammatical competence in terms of using the modal verbs CAN and MAY.

Over the next five sessions, group 32 were offered activities to practise CAN and MAY in pairs, while group 33 were working in small groups. Both the GW and PW took up 50% of the class time. The activities were semi-communicative and communicative in nature and consistent with the specific character of PW or GW correspondingly. For PW there had been designed such activities as dialogue, interview, information-gap activity, role play/simulation, game; for GW – discussion, group interview, information-gap activity, problem-solving activity, role play/simulation, game.

To establish whether the students had acquired the target grammar skills and whether PW or GW proved to be more effective, the participants were given a post-experiment test similar in nature to the pre-experiment one. The results of both tests will be presented in the next section of the article.

Throughout the course of the experiment, the teacher completed an observation sheet during and after each PW or GW activity. The teacher's observation sheet consisted of seven questions that covered the students' response to the PW or GW activities they were offered, the degree of the students' participation

and the students' language production as well as the teacher's on-action reflection about monitoring the pairs/groups, achieving the task objectives and the difficulties experienced (see Appendix A).

At the end of the experiment, the students were asked to fill out a questionnaire, which consisted of seven questions and had them reflect on their attitude to PW or GW, the degree of their participation in performing the suggested tasks, the teacher's monitoring, the grammar skills they had acquired and the difficulties they had encountered (see Appendices B1, B2).

Data Analysis

The data collected throughout the experiment were processed in two stages. During the first stage, the pre- and post-experiment tests were marked, the proficiency quotients were calculated, and the results were analysed statistically by means of Fisher criterion (Sidorenko, 2000). In the second stage, the teacher's and students' responses to the questionnaires were examined and interpreted in percentage terms. Subsequently, the conclusions were drawn and the experimental results were used to formulate methodological recommendations.

Ethical issues

Prior to the experiment, the participants were informed of its aims, voluntary nature and the fact that their names would not be made public. All 23 students freely consented to take part in the research.

Results

Testing out the hypotheses about the effectiveness of PW and GW in terms of developing accuracy entailed comparing the results of the pre- and post-experiment tests. Tables 1 and 2 show the proficiency quotient before and after the experimental teaching.

Table 1. *The results of the pre- and post-experiment assessment (Group 32)*

	Proficiency quotient	The mean	Proficiency quotient	The mean
	Pre-experiment test		Post-experiment test	
Student 1	0,38	0,34	0,75	0,71
Student 2	0,30		0,60	
Student 3	0,35		0,75	
Student 4	0,35		0,55	
Student 5	0,30		0,60	
Student 6	0,25		0,70	
Student 7	0,40		0,73	
Student 8	0,25		0,78	
Student 9	0,45		0,85	
Student 10	0,40		0,80	

Table 2. *The results of the pre- and post-experiment assessment (Group 33)*

	Proficiency quotient	The mean	Proficiency quotient	The mean
	Pre-experiment test		Post-experiment test	
Student 1	0,45	0,36	0,75	0,75
Student 2	0,40		0,70	
Student 3	0,35		0,65	
Student 4	0,45		0,60	
Student 5	0,43		0,73	
Student 6	0,40		0,80	
Student 7	0,25		0,78	
Student 8	0,38		0,85	
Student 9	0,35		0,70	
Student 10	0,35		0,80	
Student 11	0,25		0,78	
Student 12	0,43		0,85	
Student 13	0,25		0,78	

From the tables above it can be seen that before the experiment neither of the groups was thoroughly familiar with all the communicative functions of the modal verbs CAN and MAY – the pre-experiment results, which are not significantly different in the two groups, do not reach the satisfactory proficiency quotient – 0,7 (Bespalko, 1989). After the experiment, the means of both groups exceeded the satisfactory level, with 70% of the results being satisfactory in group 32 and 84,6% in group 33. The difference in figures was analysed statistically and proved to be insignificant. Thus hypothesis A was confirmed: cooperative learning in the form of either PW or GW can prove effective when addressing accuracy with no considerable difference between the two specified modes.

As has been mentioned above, apart from the quantitative there were collected qualitative data – through questionnaires completed by the students and the teacher. The students' questionnaire was reflective in nature and was distributed among the students at the end of the experiment. Overall, the response to both PW and GW was quite favourable. The overwhelming majority – 20 students (86,9%) described the experience of practising grammar in pairs/groups as *enjoyable and useful*; 18 students (78,2%) stated that they had had *enough opportunity to practise the target grammar*; 16 students (69,5%) rated the teacher's monitoring as *quite sufficient*; 17 students (73,9%) claimed that *they had acquired the target grammar skills*, with the rest being not sure. It is worth noting that most students were satisfied with the given mode of work (PW or GW) and expressed no strong wish to have worked differently (e.g. in groups instead of pairs or vice versa). However, in both groups, the students experienced certain *difficulties*. Those who had been working in *pairs* mentioned such problems as differences of opinion, having to negotiate an agreement, mixed-ability partners, lack of time, ensuring equal participation, remembering to use the target grammar. GW seemed to present similar challenges having to do with cooperative learning in general and lack of the corresponding experience, while imposing additional limitations due to the larger number of participants – limited opportunity for individual expression, limited speaking time.

The teacher's questionnaire entailed both in-action observation and on-action reflection and was completed during and after each activity. According to the teacher's observations, in group 32 (PW) the students' *response* to the tasks was fairly enthusiastic – in most cases (62%) the students found the suggested tasks exciting, while in the other cases the students seemed either mildly interested, indifferent or even clearly unwilling. It should be mentioned that in the course of doing certain activities the initial excitement turned to indifference or reluctance. As for group 33 (GW), only 50 % of the tasks appeared to get the students excited. The response to the other activities ranged from mildly interested to clearly unwilling. Of special interest are the teacher's observations in terms of the students' *participation*. The students working in pairs seemed to be equally active most of the time (92,3%), whereas during GW there prevailed groups with certain students dominating (83,3% of the time). Another crucial point in terms of this research was the students' *language production*. In group 32 (PW) the students either used the target grammar with a clear focus on accuracy (38%), used the target grammar but paid less attention to grammatical correctness than usual (24%) or ignored the target grammar using instead other language means (38%). In group 33 (GW) the students' language behaviour was basically similar – in most cases, the students seemed to use the target grammar – either with a clear focus on accuracy (42% of the time) or paying less attention to grammatical correctness (42%). However, the students were sometimes heard to resort to their native language.

While observing the pairs and the groups, the teacher also noted the *difficulties* encountered by the students: having to stick to the target grammar, organising various ideas into a logical whole, running short of time, working in a mixed-ability pair/group, assuming and performing a certain role in role-play activities, establishing a rapport with the 'random' pair/group mates sufficient to discuss sometimes personal issues (if it is required by an activity), sharing responsibility and working as a team. It should be pointed out that most of these difficulties were also mentioned by the students themselves.

The results of the teacher's on-action reflection are as follows: the *objective* of the most tasks was accomplished in both groups with the teacher having *enough opportunity to monitor* all the pairs and groups. In answer to the question about the *difficulties* experienced when facilitating PW or GW, the teacher pointed out the following: having to remind the students to use the target grammar/to speak English, being pressed for time, getting the students to talk. Interestingly, when reflecting on the PW, the teacher most frequently mentioned the students' tendency to ignore the target grammar, whereas the biggest problem with GW was time management. The latter can be explained by the larger number of people and, accordingly, ideas in groups in comparison with pairs, while the former may have been due to the fact that both interlocutors in a pair got distracted by fulfilling a task and there was no third person to hear them and remind them to stick to the target grammar.

All in all, the qualitative data allow a considerable insight into the way grammar can be practised in pairs or groups and enable us to rightly interpret the results, the latter being the subject matter of the next section.

Discussion

The experiment yielded positive results, namely, developing the participants' grammar skills, and as a consequence, our assumption about the effectiveness of cooperative learning in terms of grammar instruction was confirmed. It transpires that both PW and GW can provide an environment conducive to practising grammar and the described above differences between these two modes do not appear to be substantial enough to have a noticeable effect on the final outcome. Still, the absence of a statistically significant difference between the effectiveness of PW and GW seems to be a point in favour of GW. As practice shows, PW is generally preferred to GW for the reasons mentioned above— the seating arrangement and the students' language learning experience. Thus the fact that GW can be no less effective than PW may inspire teachers to regularly use GW to help students develop grammar skills.

The results of the experiment being overall positive, one cannot overlook the fact that the means of both groups only slightly exceed the satisfactory threshold. It can be accounted for by a number of factors. First of all, the experiment took place at the initial stage of studying modal verbs and although the uses of CAN and MAY were explored in detail, there may not have been enough opportunity to practise them thoroughly. Secondly, one must take into account occasional absences. Missing even one session out of five is bound to make an adverse impact on the end result. Thirdly, the students clearly lacked experience in cooperative learning, which was commented upon by both the students and the teacher and which is of crucial importance to this research. Sharing responsibility proved to be especially difficult in groups – according to the teacher's observations, most groups were dominated by certain students. Lack of experience was also evident in terms of doing communicative tasks. As was pointed out by the teacher, on several occasions it was difficult to get the students talking because they were either too reserved to discuss personal matters or not imaginative enough to play the suggested roles. On the other hand, if an activity did engage the students' interest, they tended to get carried away by conversation and forgot to use the target grammar (or paid little attention to grammar correctness). To remedy the situation, the teacher had to repeatedly remind them to focus on the modal verbs in question. One can only assume to what degree the above-mentioned factors may have influenced the outcome of the experiment, however, all things considered, it is self-evident that for students to fully benefit from cooperative learning, they need to engage in PW and GW on a regular basis, thus gaining the necessary experience.

The quantitative and qualitative data obtained during the experiment are consistent with the principles of Communicative Language Teaching (CLT), whose advocates stress the importance of meaningful communication taking place in the ELT classroom, which entails using PW and GW for students to interact with each other and designing activities that involve information sharing and negotiation of meaning (Baydikova & Davidenko, 2019; Celce-Murcia, 2013; Kasumi, 2015; Rambe, 2017; Richards & Rodgers, 2014). It should be noted that although our experimental teaching was aimed at the acquisition of grammar skills, the primary focus was on the communicative functions of the target grammar, which complies with the basic postulates of CLT (Brown, 2014; Celce-Murcia, 2013; Richards & Rodgers, 2014).

Our findings are also in agreement with the research into the use of PW and GW in vocabulary learning. The studies conducted by Fernandez Dobao (2014) and Teng (2017) demonstrated the effectiveness of collaborative tasks in terms of vocabulary accuracy. However, both studies indicated that GW was more effective than PW (Fernandez Dobao, 2014; Teng, 2017), with the latter yielding better results than individual work (Teng, 2017).

In combination with the results of the previous research, our own conclusions allowed us to produce methodological recommendations on using PW and GW for grammar instruction. First and foremost, care should be taken to ensure that when working in pairs or groups, students are practising the target grammar. It may prove rather challenging if one aims to promote meaningful communication within a pair or a group, as students are likely to choose their own linguistic means to perform the suggested communicative functions. To channel students into using the target grammar, the instructions for activities should be formulated in such a way that the use of a certain grammar point seems the most natural and the best possible option. In the case of modal verbs, it was sometimes enough to specify their typical functions (e.g. expressing permission, possibility, etc.) for students to use the intended grammar patterns. Providing examples or sentence beginnings might also prompt students to adhere to the target language. Besides, if need be, students could be reminded by the teacher (or the group monitor) about the necessity of practising the target grammar structures. Still, if students decide to use alternative language means, these and the target ones could be

compared and analysed during the follow-up grammar focus. It must be admitted that all this detracts from the communicative nature of students' interaction, yet such interference appears necessary if our ultimate purpose is for students to master certain grammar points.

As has already been pointed out, monitoring PW and GW is of special importance when it comes to addressing accuracy. By closely observing students at work, the teacher can not only make sure that they are performing the task in question, speaking solely English and using the target grammar, but also note down the most common mistakes and, if necessary, offer students guidance and even suggest corrections to avoid fossilisation. One of the mentioned earlier advantages of GW is that due to a larger number of participants in comparison with PW, it offers students more favourable opportunities in terms of monitoring the other students' language use, which can consequently boost peer correction. It is advisable that students be encouraged to make use of this opportunity as such peer monitoring fosters students' language awareness and, on a broader scale, increases learner autonomy.

The principal focus on accuracy often requires that a pair or group activity be accompanied by a follow-up, which allows students to analyse their mistakes in the use of the target grammar and get additional practice. Such a follow-up can take different forms: from writing the faulty sentences on the board for the students to offering corrections and their own examples of the pattern involved to, preferably, giving students extra activities for further practice of the problem points.

It should be noted that the essential prerequisite for students successfully learning grammar by engaging in PW or GW is their experience of cooperative learning or, in case of lack of it, the corresponding training. Working together with a partner or partners requires certain skills, such as sharing responsibility, negotiating solutions, managing one's talking time, etc. These skills should be developed in the course of regular practice in pairs or groups. The importance of training prior to cooperative learning has been repeatedly highlighted by researchers (Swain & Lapkin, 2001; Teng, 2017).

On the whole, our empirical enquiry demonstrates that cooperative learning has considerable potential with regard to developing grammar skills. The obtained results can benefit both university and school teachers who are willing to consider increasing the amount of PW and GW in the ELT classroom. At the same time, this study indicates possibilities for further research into the ways of raising the effectiveness of PW and GW. For one, the effects of different types of activities and tasks in terms of addressing accuracy could be examined in more detail. Ways of monitoring PW and GW as well as providing effective feedback on students' grammar mistakes are also worthy of exploring further. Investigating these and other matters related to the impact of cooperative learning on grammar accuracy will enable teachers to use PW and GW more efficiently and extensively.

Limitations

As is frequently the case with empirical research, our study may have been affected by certain limitations, the most crucial among them being time constraints and the small sample size. Both factors can be accounted for by the circumstances under which the experiment was conducted. As the experimental teaching took place within the course of Practical Grammar, we had to abide by the corresponding syllabus and could not devote as much time as we might have deemed necessary to practising the modal verbs in question. Regarding the number of participants, it was determined by the workload of the teachers involved in the experiment, with only two groups of third-year students being available for the research.

Conclusions

The current paper documents our endeavour to explore the impact of cooperative learning on developing grammar skills. By means of experimental teaching, it was proved that both PW and GW can be effectively used to address grammar accuracy. Despite obvious distinctions between the two interaction modes, the difference in the results (quantitative data) was not significant enough to recommend giving preference to either one.

The qualitative data obtained by means of questionnaires indicated a number of difficulties encountered by the students, which can be attributed for the most part to their lack of experience in terms of cooperative learning and engaging in communicative language practice.

The value of our study lies in the fact that it supplies data in favour of cooperative learning as one of the approaches to practising grammar. The results might encourage teachers who are hesitant to use PW and GW to reconsider their views and incorporate these interaction modes into their classroom practices.

Taking into consideration the described above limitations of the research, it might be advisable to conduct a similar study for a longer period of time and with more students involved. To verify the results, the current enquiry should be replicated with different student age groups and by varying both the target

grammar material and the suggested activities. The focus could also be shifted onto vocabulary learning. One of these directions could become the subject of our future research.

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**APPENDIX A
TEACHER'S OBSERVATION SHEET**

Group _____ GW /PW (Circle)
Session _____ Task _____

For questions 1-5 tick the most appropriate option. Questions 6 and 7 are open-ended.

In-action observation

- 1) How would you describe the students' response to the task? (If the response is varied, specify the number of students):
 - excited
 - mildly interested
 - indifferent
 - reluctant
 - clearly unwilling
- 2) Which of the following is true in terms of the students' participation?
 - there are more pairs/groups with all the students being equally active than those dominated by certain students
 - there are more pairs/groups with certain students dominating than those where the students' participation is equally active
- 3) Which of the following best describes the students' language production?
 - most students are using the target grammar with a clear focus on accuracy
 - most students are using the target grammar but pay less attention to grammatical correctness than usual
 - most students ignore the target grammar by using instead other language means
 - most students resort to speaking their native language

On-action observation

- 4) Do you think the objective of the task was accomplished?
 - yes
 - no
 - not sure
- 5) Did you have enough opportunity to monitor all the groups/pairs?
 - yes
 - no
 - not sure
- 6) What difficulties (if any) did you experience (e.g. maintaining discipline, time management, placing students into pairs/groups, etc)?
- 7) What difficulties (if any) did the students encounter (e.g. seating arrangement, personal issues affecting performance, etc)?

APPENDIX B

Appendix B1: STUDENT'S SELF-REFLECTION SHEET (PAIR WORK)

For questions 1-6 tick the most appropriate option. Question 7 is open-ended.

- 1) How would you describe the experience of practising grammar in pairs?
 - enjoyable and useful
 - enjoyable but not particularly useful
 - a waste of class time
- 2) Were the instructions clear enough?
 - yes
 - no
 - not sure
- 3) Was the teacher's monitoring helpful? Give your answer on a scale of 1 to 5 where **1** – not helpful at all, **5** – really helpful.
 - 1
 - 2
 - 3
 - 4
 - 5
- 4) How would you estimate the degree of your participation in performing the suggested tasks?
 - I had enough opportunity to practise the target grammar
 - I didn't get enough chances to practise the target grammar
 - I had no opportunity to practise the target grammar
- 5) Do you think you have acquired the target grammar skills?
 - yes
 - no
 - not sure
- 6) Would you have preferred to work in groups (instead of pairs)? Give your reasons.
 - yes
 - no
 - not sure
- 7) What difficulties did you experience during pair work?

Appendix B2: STUDENT'S SELF-REFLECTION SHEET (GROUP WORK)

For questions 1-6 tick the most appropriate option. Question 7 is open-ended.

- 1) How would you describe the experience of practising grammar in groups?
 - enjoyable and useful
 - enjoyable but not particularly useful
 - a waste of class time

 - 2) Were the instructions clear enough?
 - yes
 - no
 - not sure

 - 3) Was the teacher's monitoring helpful? Give your answer on a scale of 1 to 5 where **1** – not helpful at all, **5** – really helpful.
 - 1
 - 2
 - 3
 - 4
 - 5

 - 4) How would you estimate the degree of your participation in performing the suggested tasks?
 - I had enough opportunity to practise the target grammar
 - I didn't get enough chances to practise the target grammar
 - I had no opportunity to practise the target grammar

 - 5) Do you think you have acquired the target grammar skills?
 - yes
 - no
 - not sure

 - 6) Would you have preferred to work in pairs (instead of groups)? Give your reasons.
 - yes
 - no
 - not sure

 - 7) What difficulties did you experience during group work?
-

NEW TECHNOLOGIES AND THEIR IMPACT ON FOREIGN LANGUAGE TEACHER PROFESSIONAL BURNOUT (under COVID-19 pandemic conditions)

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Because of the dynamic and rapid development of digital technologies, teachers are facing more than ever challenging issues related to coping with educational innovations. This situation has become ultimately evident under COVID-19 quarantine and the necessity to work remotely. Such requirements induce extra pressure on teachers, which causes excessive stress, often leading to emotional and professional burnout. In our paper, we aim to focus on the types of impact (positive or negative) of digital technologies in relation to foreign language teachers' age and experience and the level of professional burnout. Specific emphasis is put on the study of coronavirus-related remote learning mode circumstances. To reach the research goal, a mixed method was used, engaging 140 English language teachers from 18 Polish schools, Silesia region, with a questionnaire and a semi-structured interview as the tools used in the quantitative and qualitative stages of the study. The research findings show that even though teachers are ready to integrate technologies in the classroom, they are vulnerable to technical problems which often occur during the lessons, causing the feeling of disappointment, frustration, anxiety, and lowering the efficiency of teachers' professional performance. The implications of the study suggest that the professional support for teachers in technology use, better working conditions, and equipping language classrooms with good quality digital devices should serve as the best remedy against teacher burnout.

Keywords: digital technologies; information technology competencies; teacher burnout; foreign language teaching; COVID-19.

Introduction

Burnout is a well-known phenomenon that affects teachers worldwide, regardless of age, gender, or geographical location. Frequent changes in the system of education, increasing expectations and requirements for teachers inject some negative connotations into their profession, making them suffer from the effects of professional burnout. In the related literature, many factors are indicated to contribute to teacher burnout, among which the following can be mentioned: poor student attitudes towards compulsory schooling, problems with maintaining discipline in the classroom, excessive bureaucracy, poor communication between members of the teaching staff and school administration, the lack of social support from the superiors to name but a few. Needless to say, in the era of digitization and the rapid development of modern technologies, teachers face a new challenge: they must keep up with new technological innovations and successfully integrate them into the learning process. Since it is not an easy task, it can trigger stress and anxiety and contribute to burnout. The situation can be exacerbated if teachers do not have any choice among the alternatives in their professional activity, as has been the case with the COVID-19 pandemic conditions in schooling, where all teachers have been forced to use technologies online (e-learning, blended or hybrid formats) studies. Unfortunately, very few (if any) studies can be found illustrating the relation between the obligatory use of technologies by teachers and the level of their professional burnout.

Literature review

Our paper joins a growing body of literature that employs both theoretical and practical frameworks of identification, prevention and elimination of teacher burnout side effects to create favourable conditions for efficient professional activity of educators. Research results show that it is not only a cross-cultural phenomenon, but a very serious problem (Wieczorek, 2017). The stress may not only lead to health problems, but it can also affect the quality of teachers' work and their relationships with other participants of the educational process such as students, colleagues at work, and family members. Teachers who suffer from constant stress leading to burnout in a majority of cases escape from their duties, often take sick leave and

become less effective. Therefore, it seems crucial to focus on the roots of teachers' stress, try to understand the nature of burnout and find effective ways to cope with its negative consequences.

As indicated by Kocór (2019), teachers are at risk of burnout more than any other professionals. Because of the fact that in their work they are in close contact with students and their parents; it is teachers who educate, behave and solve problems. An educator's job requires not only comprehensive knowledge but also engagement and commitment. As a result, teachers have their students' problems in mind even when they do not perform their professional activity but are at home getting prepared for the next lessons. It can lead to the situation that a teacher may transform school problems into family life. It causes conflicts, a tense domestic atmosphere, and blurs the border between work and family life, violating all the more importance for decent health balance.

In a similar vein, Pokhrel and Chhetri (2021, p. 135) emphasize that working from home as an additional job obligation to working in the classroom setting exacerbates the stress response. One of the greatest factors in chronic work stress is working consistently in the evenings in addition to a full-time day shift, spending the supposed relaxation time planning and grading. Work that penetrates teachers' personal and family time is perceived as an additional hardship that was not meant by the initial "work agreement". Furthermore, working from home deletes the perception differentiation between home and comfort. The teacher's brain never feels "at home", the environment where it can relax and separate the educator from professional challenges and responsibilities (Herman et al, 2018).

It is often claimed that educators are likely to suffer from dissatisfaction with their professional activity when focusing emotionally on their complaints about students' poor educational achievement, some negative aspects of their conduct in class, since "the habitual patterns in teachers' judgments about student behaviour and other teaching tasks may contribute significantly to teachers' repeated experience of unpleasant emotions and those emotions may eventually lead to burnout" (Chang, 2009, p. 193).

Furthermore, Tucholska (2008) adds up that the teacher's profession has been facing the problem of constant social expectations because of being responsible for educating young generations. However, these expectations are not supported by the corresponding financial and social status. As a result, the lack of decent remuneration combined with other detrimental factors like overloaded classes, students' inappropriate behaviour, and the lack of support from supervisors leads to frustration, loss of motivation, and, consequently to burnout.

Ravichandran & Rajendran (2007) believe that stress is inseparable and unavoidable in people's lives and it is impossible to eliminate it from everyday existence. Despite such bleak claims, stressful situations are known to be advantageous, motivating people to look for new coping strategies and as a result, reducing the level of anxiety created by challenging demands. As a consequence of positive personal or organizational growth, such a situation can lead to greater success at work. However, it is worth stating that excessive constant stress in most cases leads to burnout with devastating consequences for both teacher's life and the whole social surrounding of a person (Gembalska-Kwiecień, 2019).

Our analysis replicates the finding by Woźniak-Krakowian (2013) who claims that devoted and engaged teachers in particular lose motivation and energy to work. Such teachers become tired, frustrated and finally burnt out. The job once bringing satisfaction and enjoyment, becomes a source of sadness and disappointment. Instead of satisfaction, a teacher experiences indifference, the place of success is taken by the sense of defeat.

As observed by Wiczorek & Mitręga (2017), stress should not be discussed as a problem of individual teachers but rather as a social problem. Since occupational stress decreases efficiency and has a detrimental impact on work satisfaction and organizational engagement, it appears crucial to contemplate not only what teacher burnout is by definition but also what its sources, symptoms and consequences are.

Travers & Cooper (1996) indicate that the main sources of occupational stress are: teaching students who have a low level of motivation, problems with maintaining discipline, time pressure and workload (for example, too much additional, paperwork), being evaluated by others (teachers, headteacher, parents, society), dealing with colleagues' self-esteem and status, administration and management, poor working condition, role conflict and ambiguity, with all of them making teachers cope with constant changes.

As proposed by Wiczorek & Mitręga (2017), consequences of stress may include an emotional manifestation, behavioural manifestation, and physiological manifestation. With emotional manifestation in mind, it is necessary to mention that it may take the form of depression, anxiety, fear, and anger, eventually leading to burnout. Behavioural manifestation frequently triggers the following problems: eating disorders, sleeping disorders, smoking, drinking alcohol, and taking drugs. Withdrawal from social life, frequent absenteeism at work, early retirement, or the plans to leave the teaching occupation are often seen as consequences of behavioural manifestation as well. It cannot be denied, though, that frequent sick leaves

seem to be the way to escape from stress at work, but they prove efficient only for a short time. It should be mentioned that numerous consecutive sick leaves and absences at work disorganize timetables and have a destructive impact on the process of teaching. Consequently, when the teacher is absent, the students either do not make progress, or fail to achieve appropriate educational results, which, in turn, causes more stress for teachers lowering their self-esteem, thus making the vicious circle close and go on.

As Skaalvik & Skaalvik (2009) remark, there is a need not only to raise the awareness about this phenomenon, its causes and consequences, but also to find ways and methods to fight it successfully.

Teacher burnout in foreign language teachers. Innovations in the field of new technologies and language teaching have created a new role for teachers, especially the group of teachers who teach a foreign language in Polish schools. Language teachers are no longer the only knowledge and information providers within the subject they teach. In the era of globalization and advanced technology, where English is considered the main and common language in the process of communication, English teachers play a crucial role as a speaker of one of the most widely used languages in the world (Mousavi, 2007).

However, if foreign language (FL) teachers want to be experts in their field and role models for contemporary students, they have to constantly improve their language skills, develop their vocabulary to make their language authentic, updated, and true to life (Tichenor&Tichenor, 2005). It means that modern FL teachers not only teach the young generations, but they become learners themselves, they are obliged to be creative, open to innovative ideas and suggestions, and eager to learn new things. What is more, they should be ready to search for new techniques and methods of teaching foreign languages successfully even if they are long-serving teachers. Such a situation can have a few advantages, for example, it helps teachers look at their students from a different perspective and understand the students' needs and fears. However, the need to learn all the time and spend their free time developing their skills and language competence can be time-consuming and can cause stress and frustration among FL teachers.

According to Mousavi (2007), FL teachers are expected to motivate and engage the learners to participate actively in language learning, especially when speaking in a foreign language is concerned. This requires teachers and students to constantly interact with each other, involving the emotional commitment not only from students, but also from the educators. Such engagement can cause emotional exhaustion and have a negative impact on the teachers' overall well-being.

The fact that the prevailing majority of FL teachers in Polish schools and universities are non-native teachers, affects the level of stress among these professionals. It is believed that all language teachers should know a foreign language perfectly. However, it cannot be denied that language learning is a continuous lifelong process, with language developing and changing constantly, compelling the teachers to improve their communicative skills non-stop, trying to approach the native-speaker level of communicative competence. As a result, non-native FL teachers may experience a lack of sufficient language knowledge and experience low self-confidence in their professionalism. All this invokes negative emotions in relation to the duties at school and the intention of quitting the job because of too high emotional costs. Apart from teaching and continuous professional development, FL teachers may feel inundated with other tasks and duties, paperwork, student assessment procedures, maturation exam preparation responsibilities, as well as some extra-curriculum activities as part of any teacher's job.

The relation of new technologies to teacher burnout. It is commonly believed that being a teacher is not an easy job, however, it is rarely recognized as a difficult and stressful job, although posed with ever-increasing expectations.

While many papers investigate the overall sources of teacher's stress and professional burnout (like those mentioned above), few look at its roots in the application of new technologies in the process of teaching. There is some evidence in the literature that "teacher's stress can be explained by the fact that the requirements (internal and external) prevail for a long time over the resources (also internal and external), thus the person experiences the condition of losing balance" (Morska, 2017, p. 18), our *paper* contests this claim, proving that external requirements in the realm of innovation technologies implementation often lead to a more intense negative impact on psychological well-being of teachers, exacerbating the burnout problem.

As Mashhadi & Kargozari (2011) indicate, nowadays, the dynamic and rapid development of new technologies encourages people to use the internet to share information, look for new ideas and communicate with each other, with students worldwide being particularly eager to spend a lot of time on the net for educational and entertainment purposes.

Using new technologies in education is considered to be not only a crucial but also an effective way of improving the process of learning and teaching (Rodinadze and Zarbazoaia, 2012). As far as students are

concerned, information technology helps them to acquire new knowledge easily because of the fast access to international libraries and other sources of information. With regard to teachers, information technology provides them with a wide range of multimedia devices, different applications which have proved helpful in planning, designing and conducting exciting and interaction-rich lessons.

Furthermore, new technologies provide an unprecedented opportunity to utilize cloud computing to store different documents, edit or modify, if necessary, and then share with other educational process participants, since both teachers and students can have immediate access to them. This allows educators to design group work and collaborative assignments for students, which does develop both the content area skills and some essential soft skills necessary for future professionals (leadership, argumentative and persuasive skills among them).

Therefore, information technologies have a significant effect on teaching and learning and, if used properly, can increase the level of motivation among learners as well as the pace of learning. This means that the teachers have to face another challenge: the requirement to teach students how to use technology as a tool in their study process. However, for many teachers, especially those who have been working at school for many years, the necessity to use new technologies can be a real barrier and often unfavourable new task in their career, bringing about difficult and stressful experience into their professional activity (Mashhadi & Kargozari, 2011).

In the wake of the COVID-19 pandemic, when the virus hit – first in China in December 2019, then spreading rapidly to other countries in the early months of 2020, the education sector was facing unprecedented problems in proceeding with delivering educational services, and educational leaders were more than ever concerned about overwhelmed teaching staff and increased stress, as well as increased mental health needs of both staff and students, which at the same time had to be addressed remotely (Arundel, 2020), exacerbating all the more drastic issue. Although a lot of educational institutions introduced special virtual educational environments aimed at facilitating the institutional society in their endeavours to cope with the urgency of turning on-line (Melnychenko & Zheliaskova, 2021, p. 4), for most educators the necessity to use technologies daily became quite a challenge.

The topic of digital technology implementation in teaching did not seem to be new for educators before the pandemic, for the mere reason that they were supposed to deal with learners of the 21st century, being the children of millennials – zoomers, who are the first generation to be considered digital natives (also known as a net generation) or digitally savvy self-starters born in the early 2010s (Selwyn et al., 2020). In the technology-oriented age and the age of individualism requiring teaching professionals “to strive for teaching in personalised ways that would promote intrinsic motivation, agency, self-direction, self-regulation, life-long learning and continuous development in posthuman higher education” (Laskova, 2021), it is fundamental to understand how an educator can strike a balance and encourage sustainable and interdependent learning model, known as Education 4.0 framework (Hussin, 2018) and grow into an individual human learner in the present society being ‘on the doorstep’ of the Fourth Industrial Revolution (or Industry 4.0) (Schwab, 2016), or probably already inside.

Aim and research questions

Hence the question arises if, under such urgent unexpected conditions, there is a correlation between technology use and teacher burnout. In our study, we pose the following research question: Does the necessity to utilize new technologies in the classroom environment make the teachers stressed and influence the development of the burnout syndrome? At the same time, we aim to find out whether the stress and tension turn them into professionals being more motivated and involved in the process of gaining new competencies.

The aim of this article is to examine the immediate impact of the COVID-19 pandemic on teachers being required to use distance/online/hybrid/blended learning technologies on demand (without any personal consent or the possibility to choose the alternative options and modes of teaching) and discuss the possible implications of these impacts on how the educators value the use of technologies in teaching. Because of the fluidity of the situation, it relies mainly on the information derived from the accessed educational institutions as the pandemic unfolded. These sources frequently changed as the pandemic evolved and may not have remained consistent for future reference. In the light of these limitations, the intention of this article is not to provide a definitive assessment of the impact of technology application on the welfare of the education sector during the pandemic. Rather, it provides a preliminary framework for a closer examination of the urgent problem in responding to the stresses of an unprecedented global crisis.

Methods

Research Design

To reach the research goal, a mixed research methodology has been used. In the quantitative study, the research tool was a questionnaire specifically designed for the purpose of the study. The qualitative part implied the application of a semi-structured interview.

Research sample. The research started in January 2021 and finished at the end of February 2021. The study participants were 140 English language teachers from 18 Polish schools, Silesia region. The participants of the study were divided into four groups according to the number of years of work experience. This provided us with information on whether there is a correlation between the level of burnout and the years in teachers' performance on the job. All the groups were made equal. Each of them consisted of 35 teachers. Group 1 consisted of teachers whose teaching experience is the lowest because they have been working as teachers for less than ten years. Group 2 included these teachers who have been working at schools for 10-15 years. Group 3 included the teachers who have been teachers for 15-20 years. Group 4 consisted of teachers with more than 20 years of experience.

Instruments and procedure. A questionnaire consisting of 29 questions (an adapted version of Maslach Burnout Inventory (Maslach, 2001) was used to provide information about how teachers perceive new technologies (the set of questions was divided into two parts, clarifying the information on whether teachers utilize new technologies as a tool to reduce the level of stress or whether the necessity of using them increases their stress levels) was sent to research participants by email.

In the questionnaire, the teachers were asked to describe their attitudes towards using new technologies in the classroom and the feelings and emotions connected with technology implementation in the process of teaching. We used the Likert scale, and the teachers were requested to express their opinions in the range from strongly disagree, agree, neither agree nor disagree up to strongly agree.

In the qualitative part of the study, semi-structured interviews with 20 randomly chosen respondents were conducted (five teachers from each of the four groups) to obtain relevant data about how the necessity of implementing new technologies as a didactic tool influences the development of teacher burnout. The interviews consisted of 8 open-ended questions, and all the respondents were given the same set of questions. The purpose of the interviews was to see the differences in answers of teachers with a different number of years of teaching experience.

Data analysis. We used the Likert scale for the questionnaire, in which the teachers were requested to express their opinions in the range from strongly disagree, neither agree nor disagree up to strongly agree. The Pearson correlation coefficient was defined to describe the correlation between the level of technology and the level of burnout in teachers.

Ethical issues. All the participants gave their informed consent for participating in the study (were informed of the possibility of withdrawing, with no other consequences on their status).

Results and discussion

The study results indicate that FL teachers, regardless of their age and duration of teaching experience, accept new technologies as a helpful and sufficient tool in their professional activity. The majority of them teach English using new technologies and traditional coursebooks. In their opinion, using a combination of methods allows for reaching the best results. The teachers express quite clear awareness that implementing new technologies in the process of teaching is a necessity, often a must if one wants to keep up with the generation of the young students, referred as "cyber/digital natives". These findings are consistent with those reached by the other authors worldwide, for example, in Saudi Arabia (Almaki, 2020; Lytovchenko & Voronina, 2020), which confirmed a positive attitude of teachers towards applying new technologies during English language lessons while mentioning it was time-consuming and challenging process.

Our study revealed that the youngest teachers are the most creative in terms of implementing new technologies into classroom teaching (almost 80% of respondents). In contrast, about 20% fewer long-serving teachers (with more than 20 years of experience) declare that they have many ideas about integrating them into their lessons. A possible explanation for this finding is that young teachers, with up to 5 years of work experience (the mean age in this group is 28 years old), are close to the generation of "cyber natives", being taught IT at schools, and thus being comfortable with constant IT evolution and development since their childhood. Whereas long-service teachers have to learn IT from scratch, forced by the necessity to meet the expectations of contemporary students and deserve respect and admiration in this regard, rather than being intrinsically motivated by the technologies themselves. Based on our findings, it is possible to conclude that most teachers are interested in applying new technologies during their lessons, considering them an advantageous and efficient way of teaching a foreign language (many of them underlined that

unlimited access to authentic materials online motivates students and helps them develop their language skills, especially speaking and listening), but motivated to do so by different types of motivation.

Another finding of this study is that all teachers declare a high intensity of integrating the online activities as a part of their lessons. More than 80% of the respondents express the idea that the Internet is a helpful tool in classroom language teaching. What seems to be surprising in this regard is that the largest number of responses on using the Internet during their lessons comes from the teachers who have been working at school for more than 20 years (constituting 94% of the group voting in favour of the Internet use in the lessons). This finding is consistent with the findings of the previous studies, confirming that teachers over 40 are more willing to use the Internet because it is a new and innovative tool. This situation can also be connected with the supposition that such teachers are on the stage of their professional promotion, so they are obliged to use new technologies to be considered innovative and thus promoted successfully (Iwanicka, 2019).

When it comes to the research question aimed at clarifying how teachers perceive new technologies in terms of avoiding stress/teacher burnout, the findings show that new technologies could be related to the fight with the teacher stress and burnout, but not for all teachers with equal intensity.

The findings suggest that the majority of the surveyed teachers consider new technologies as a tool that supports the didactic process and makes the work at school more manageable and more convenient. More than 70% of the respondents declared the use of the Internet both at school and while planning and designing the next lessons at home. The majority of the teachers pointed out that the Internet is a beneficial source of information in the content area as well as for new ideas on how to make lessons more engaging and inspiring for the students.

Moreover, the prevailing number of FL teachers involved in our study declared that having the competence in using new technologies minimizes or helps to reduce the level of stress in their professional activity. All the four groups of respondents claimed that they implement online games, a number of educational applications such as Kahoot or quizzes during their lessons. The average score for the three groups is more than 80% and reaches 75 % in the group of senior teachers.

Surprising results have been found concerning the use of interactive boards. Only 29 % of the teachers from Group 2 (with 10-20 years of work experience) declare that they use them in the classroom. At the same time, 37% of the teachers from Group 1 (the youngest teachers) indicate the use of interactive boards.

There might be two possible explanations for these findings. Firstly, classrooms in Polish schools are inadequately equipped with such facilities, with limited access to them. In other words, if the classrooms are not equipped with interactive boards and if the teachers have an opportunity to use them only occasionally, they will not be willing to use them, merely because of the necessity to overcome additional barriers. The lack of equipment availability, and, as a result, the lack of competence in operating it obviously makes the teachers unable to integrate it into the lessons.

This finding appears to be consistent with that obtained by Skaalvik & Skaalvik (2009), which emphasize that school administration and local authorities should pay more attention to the working conditions of teachers and make more effort to improve the availability of modern facilities. The researchers argued that good working conditions and good quality educational equipment could help the teachers adapt to constantly changing occupational requirements and rapid technological development. It could be a favourable factor to help diminish stress and burnout among teachers.

The same opinion has been shared by Ravivchandran & Rajedan (2007), whose survey results indicated that the lack of support from school administration and poor facilities at schools are the two major factors that highly impact the level of stress among teachers.

The result of our study suggests that FL teachers in most cases are interested in implementing new technologies in classroom teaching, but quite a sizeable number of educators somewhat avoid integrating them in their professional activity. The findings show that the teachers with the amplest working experience (Group 4) are the least eager to opt for technology use. Almost 14 % of the respondents from the aforementioned group provide the reason for their reluctance, which sounds as follows: implementing new technologies requires extra preparation time at home. Almost 6% of the participants are put off by numerous technical problems and their inability to solve the possible obstacles; 9% of the teachers are not excited by the prospect of being laughed at by their students who are by far more competent in the technological realm. The questionnaire findings correlate with the analysis of the interviews carried out with the teachers. It was revealed that even though teachers are enthusiastic about new technologies, they find it hard to cope with technical problems. At the same time, they expressed dissatisfaction with their knowledge and skills in handling educational information technologies, complaining about the lack of technical support provided by their school administration.

Being enthusiastic about new technologies, the teachers are open to learning new things and express willingness to get trained by professionals. Thus, professional training and workshops in the field of new

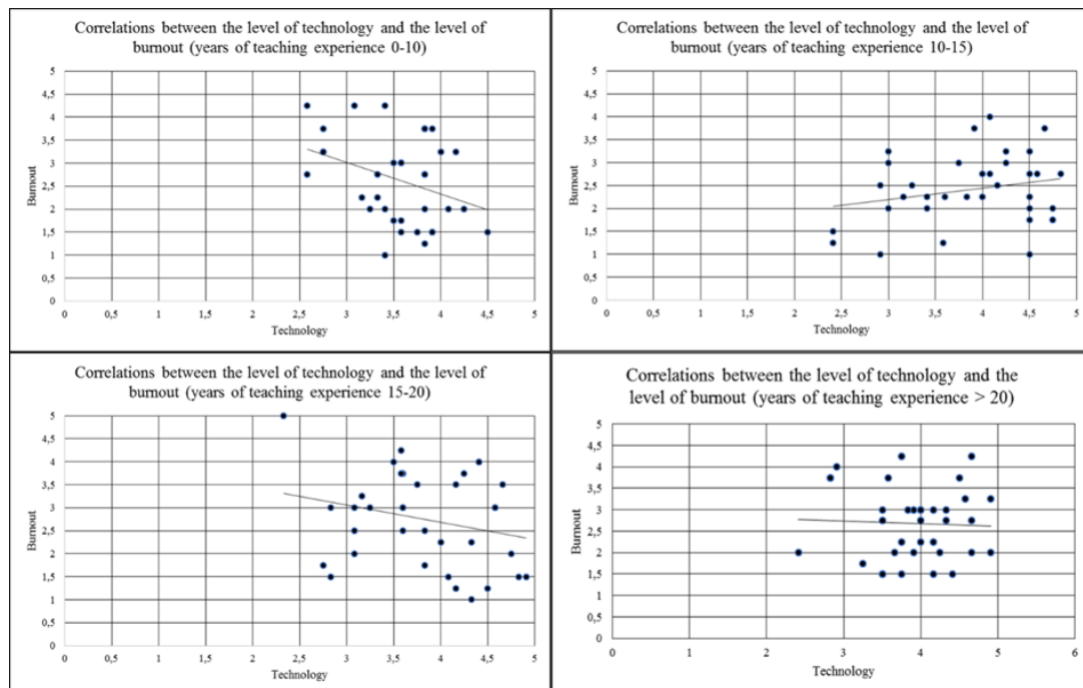
technology implementation may offer an excellent solution to the prevention of teacher burnout. This idea correlates with the study conducted by Bonfield et al. (2020), who found that attending workshops and training sessions appears favourable and sufficient in the fight against fatigue and the syndrome of burnout, in motivation increase, boosting self-confidence and positive feelings which contribute to well-being on the job. Almalki (2020) came to a similar conclusion, while carrying out the research with teachers in Saudi Arabia.

The focus on whether the implementation of new technologies can reduce/increase stress in teachers allows for the conviction that the teachers willingly utilize new technologies to make their work less time-consuming and more efficient, which, in its turn, ensures job satisfaction. More than 50 % of the respondents declare that they create multimedia presentations at home to use them later in the classroom; 70% of the survey participants use projection devices. Therefore, we may conclude that technology-rich classroom teaching of foreign languages should not be viewed as a source of stress and negative emotions for most teachers.

In addition, the analyses of the interviews confirmed the aforementioned findings. Teachers indicated that the requirement of implementing new technologies is not only a necessity for them, but a challenge as well: "*Exploring new technologies is the next step in our career*", such were the ideas expressed by some of the long-service teachers. Being faced with the obligation of learning new things, improving their skills in educational digital technologies, encourages many of them to look at the process of teaching from a new perspective, refreshing their self-esteem as teachers.

Another interesting finding of this study showed a correlation between the intensity of technology implemented while conducting foreign language lessons and the level of burnout experienced by the teachers. The findings show that the teachers with the reported highest intensity of technology use manifest a low level of burnout. However, there is a significant correlation between the intensity of technology implementation and the level of burnout as far as Group 2 is concerned (which included the teachers with 10 to 15 years of working experience, and the average age of 38 years old (see Fig. 1). The findings display that the higher the intensity of technology application, the more the teachers are at risk of burnout. Such findings seem to be confirmed in the research carried out by Tucholska (2008). According to her studies, the highest level of burnout is reported as experienced by teachers aged between 30-39 years old. A possible explanation for these and our findings might be connected to the social and family status of FL teachers, who are predominantly female professionals. It seems obvious that women teachers under 40, apart from occupational functions, have the most intense time of their lives in relation to family duties and roles, being responsible for the proper growth and development of their children, mostly teenagers, who need care and attention. Furthermore, these teachers are on the path to professional promotion, which may cause additional pressure on their performance. However, our findings are not consistent in this aspect with some previous studies, according to which, Norwegian long-service teachers are more at risk of burnout in comparison with their younger colleagues (Skaalvik & Skaalvik, 2009).

Figure 1. *Correlation between the level of technology and the level of burnout in four groups of teachers*



*Source: own research

To sum up, work experience of teachers does not appear to stand out as a factor that has a negative impact on the level of burnout in the majority of the teachers covered by our study. All the groups of our respondents indicated a relatively similar level of occupational stress, and there are no significant differences between groups (see Table 1). These findings correlate with the results for Polish teachers from different types of schools in Poland (Korczyński, 2014). No evidence confirming the influence of teachers' age and working experience on professional burnout was obtained. However, quite the contrary findings are presented in the paper by Grayson & Avarez (2007), who carried out a study with educators in Hong Kong. Their findings indicate that the young teachers are more to burnout than their older and more experienced colleagues. Moreover, the aforementioned scientists' findings also correlate with research results obtained by Ozdemir (2007), who studied burnout in European teachers and concluded that young teachers, those with little experience in teaching, are more at higher risk of burnout than the teachers who report more experience. Therefore, we can assume that the years of experience cannot be considered the only or the most salient factor responsible for the development of teacher burnout. This brings us to the conclusion that further and more profound study is necessary.

Table 1. *Correlations between the intensity of technology use and the level of burnout in FL teachers*

	Group 1	Group 2	Group 3	Group 4
Teaching seniority	0 -10	11 – 15	16 – 20	>20
Technology implementation index	3.55	3.88	3.82	3.92
Level of burnout	2.64	2.40	2.75	2.69
Correlation	-0.34	0;23	-0.25	-0.04

*Source: own research

In our research, we have found that the highest intensity of technology implementation in FL lessons was reported by long-service teachers, whereas the lowest one by the youngest educators. Such results may seem out of the ordinary and in discordance with the commonly held view (the younger the teachers, the more proficient with technology they are, and the more willing they should be to use modern educational innovations in their professional activity), but they correlate with the findings of Iwanicka (2019). Her latest research confirmed that the young generation of teachers, known as cyber natives, does not manifest high digital competencies, or they are rather digitally passive. However, the findings of this study are inconsistent with the ones obtained by Almalki (2020), where it is argued that there is no significant correlation between the teachers' age and the years of experience with the intensity of technology they implement in the classroom.

Since the study has been carried out with Silesia region teachers, it would be reasonable to investigate the geographical, economic, and social factors that might have some impact on the correlation between technology use and the level of burnout in foreign language teachers. Further research could bring about the findings answering the question of whether richer regions in the west of the country experience a similar pattern to that described for Silesia. Furthermore, the scientific endeavours might reveal some interdependence between the subjects taught by teachers, their technological competency, and the level of burnout. We assume that background education might also serve as a significant variable in further studies in the same vein.

Limitations

At the same time, we are aware of the fact that a few limitations can have an impact on the final results of the study. First of all, the population of the research consisted only of female teachers (we didn't mean to exclude male educators; it is quite uncommon for men to opt for the job of a FL teacher in Poland). Those male teachers, who were available at schools, unfortunately, were not willing or interested in expressing their opinion on the reasons for teacher burnout. The participation of male teachers in further research might bring about the understanding of the issues behind teacher stress from a broader (gender-related) perspective.

The second limitation of our study is connected with the COVID-19 pandemic situation. It was impossible to meet respondents face to face in order to collect the data, our questionnaire was in the online mode. As a result, the questionnaire may not have reached many teachers who avoid using new technologies

or may have developed burnout. Furthermore, those teachers, who reported some signs of burnout, may have been anxious because of the pandemic hardships both in family and occupational life. In the case of qualitative research, it can be concluded that because of the inability to meet respondents and carry out interviews in person, we had to rely on semi-structured interviews only. Additionally, a few respondents agreed to participate in the interview but did not express consent to have their answers recorded. As a result, there were no possibilities to ask additional questions, which could help us to collect more information or better understand the feedback. Collecting the data via the Internet instead of face-to-face conversations can cause many respondents to be partially reserved. In our further scientific endeavours, we intend to eliminate the aforementioned limitations and replicate the study, assumably under the post-pandemic conditions, and compare these and future findings.

Conclusions and implications of the study

The results suggest that teachers are generally interested in integrating new technologies in the process of teaching foreign languages. They appreciate the importance and the role they play in the lives of the young generation of learners, especially those who are called "cyber natives". As our findings show, teachers are open to innovative technologies and ready to learn new things to make lessons appealing and attractive. However, they seem to be left alone in this process, lacking support from school administration and local communities.

The teachers complained about being lost and anxious because of the fast pace of changes and development of modern educational digital technologies, at the same time, lacking the necessary skills to operate. As a result, even though the teachers are ready to integrate technologies in the classroom, they are vulnerable to technical problems which often occur during the lessons, causing the feeling of disappointment, frustration and anxiety, lowering the efficiency of teachers' professional performance. With an average teacher's age in Poland of 50 years old, in most cases a female, it can be assumed that the majority of contemporary teachers in Poland had been born before the digital technologies were introduced into schools, resulting in limited knowledge and low technological skills. Therefore, such teachers need support from professionals, individual and group training aiming to help to cope with technical problems and implement new technologies successfully, without stress and anxiety. Our research shows that teachers lack professional training in the IT field, which might have helped them find out more about the use of technology in their professional activity and how to cope with various technical problems.

Moreover, introducing "teacher hotline" (a particular telephone line or platform for teachers in need) seems to be a good solution when teacher stress and burnout are concerned. Here teachers can call, talk about stress-related problems and receive advice from professional counsellors. This method of helping teachers suffering from stress or facing burnout problems should be seriously considered by local authorities and those responsible for education in Poland on an all-country scale.

To sum up, the professional support for teachers in technology use, better working conditions, and equipping language classrooms with good quality digital devices should serve as the best remedy in the fight against teacher burnout.

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INTEGRATION OF INTERNET MEMES WHEN TEACHING PHILOLOGICAL DISCIPLINES IN HIGHER EDUCATION INSTITUTIONS

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A rapid increase of available information affects students' perception of any message and formation of priorities; the period of concentration on one subject is reduced; students prefer concise vivid visual images. Internet memes become a part of students' daily communication and broadcast today's cultural and information realities. The aim of the study was to evaluate the effectiveness of Internet memes integration while mastering philological disciplines (for example, English) by Ukrainian students. The authors experimented to check the methodology proposed within one program unit. We conducted the experiment in the 2020-2021 academic year and involved 68 students and 5 teachers of Dnipro Academy of Continuing Education, Donetsk State University of Internal Affairs and Mykhailo Tuhan-Baranovskyi Donetsk National University of Economics and Trade. The authors conducted pre- and post-experimental surveys and informal interviews to compare academic achievements and provided a system of tasks integrating memes. Implementing the experiment, we clarified the dominant way of students' perception and processing of information and revealed the expediency of integrating memes into teaching English. The authors determined the dynamics of the levels of students' motivation to learn English through Internet memes integration and established quantitative values of the levels using the method of mathematical statistics. The conclusions emphasize the need to improve teachers' pedagogical skills, developed critical and creative thinking to integrate memes into educational activities. The authors stress the relevance of the further detailed study of the educational potential of memes in teaching not only philological disciplines but also other subjects of the curriculum.

Keywords: Internet meme; philological discipline; English; multicultural education; media-information literacy; motivation.

Introduction

The development of digital technologies and digital transformation of many branches of social activity form citizens' attitude to modern political parties and leaders, social changes and events, cultural aspects as well as influence their behaviour. 94 % of young people aged 14 to 25 are digital natives, i.e., active users of information and communication technologies (ICT), including the Internet and social networks (Eurostat, 2020). They can quickly find and process information and perform several tasks simultaneously, preferring gamification and interaction in the networks, which, in turn, significantly affect the way they perceive any information. The scientists (Kornuta, Pryhorovska & Potiomkina, 2017; Strutynska, 2020) have also concluded that modern adolescents (especially students of high education institutions) are characterized by “clip thinking”, i.e., the inability to concentrate for a long time on one task, the dominance of visual perception of information in short bright passages, etc.

In today's educational environment, applying Internet memes at the lessons of philological disciplines becomes relevant due to their authenticity and validity (following reality). The issues of memes and their role in society, their media function, and peculiarities of distribution were initially studied by Dawkins (2006), Rushkoff (2003), and Brodie (2009) who emphasized that memes contained the cultural information and could change the perception of local and global events. It should be mentioned that the term “meme” itself does not originate from the English word “memory” but from “memetics” (the theory of the evolution of cultural information).

The Internet has made the spread of memes highly popular due to their visibility, concision and memorability, and the term has integrated into the vocabulary of active users. The scientists (Shifman, 2013; Cannizzaro, 2016) explored the essence of an Internet meme as a component of digital culture and conducted a meme-oriented analysis of digital content. At the same time, Internet memes and digital media texts were considered viral and jointly remixed, modified, or transformed (Cannizzaro, 2016).

Nevertheless, the scientists (Boa Sorte, 2019; Elmore & Coleman, 2019; Dongqiang et al., 2020) aimed at presenting reflections on adopting Internet memes as possibilities for teaching in the context of digital

cultures or as an innovative pedagogy. The teaching strategies were grounded on classifications of memes analysis; remixing existing memes in order to investigate narratives of dominant ideologies, issues of race, age, gender and social backgrounds; and reading and writing political memes as instruments of manipulation.

Some scientists (Purnama, 2017; Sedliarova, Solovyeva & Nenasheva, 2020; Lara & Mendonça, 2020; Keno, 2020; Kayali & Aslı Altuntaş, 2021) studied how to incorporate Internet memes when teaching languages, social sciences and humanities within enjoyable learning and teaching environment, others analysed the variety of interpretations of memes on the Internet (Putra & Triyono, 2016) and conducted the experiment to explore whether the use of memes as visual forms of communication on the Internet could help students improve creative writing skills (Ramadhika, 2020). The scientists Reddy, Singh, Kapoor, and Churi (2020) made a numerical and statistical analysis, using memes even during testing, and proved the feasibility of their use in classroom activities.

The Ukrainian scientists (Dziubina, 2016; Poda, 2017; Vityuk et al., 2021) explored Internet memes as a phenomenon of modern digital culture and emphasised that the main characteristics of memes could include information saturation (the presence of a concise and short phrase understandable for students, question, aphorism, etc.), emotional colour (usually humorous nature of the text), unusual and easy perception of the idea (filling the idea with a new atypical content through words play, metaphor, figurative the meaning of words, etc., i.e., the meaning of the phrase is unstable).

Summarizing the above researches, we have identified the following functions of Internet memes:

1) representative: reproduction of the characteristics and properties of a certain idea, which can express the opinion of a particular person and/or community with appropriate emphasis on the necessary information message and its change;

2) communicative: reaction to a discussion situation, creation of a special language space, understandable to a certain group;

3) manipulative: the ability to advocate certain ideas, to form and influence people's opinions, to change attitudes toward events;

4) creative: reproduction of modern events and interesting phenomena in a creative format using online tools and constructors (for example, Canva, Iloveimg, Meme Generator, Crello, Mr-mem, Meme arsenal, Risovach, Makeameme.org, etc.).

Thus, accelerating the pace of life and constantly increasing the flow of available information, changing needs, values, and priorities of students, especially their perception of any message, require adaptation of the educational process and education system in general: the study and application of new forms and methods of information dissemination that it would be noticeable to students and effectively remembered by them. One of such methods is incorporating Internet memes, which, among other things, are a part of modern students' daily communication and broadcast both cultural and informational realities of today. The phenomenon of Internet memes has already been studied from many aspects, but the peculiarities of their integration into the process of teaching philological disciplines in higher education institutions in order to increase students' motivation to learn languages remains relevant.

Therefore, **the aim** of the article is to present the educational potential of Internet memes in teaching philological disciplines (for example, English) in higher education institutions.

To achieve this goal, we have outlined the following tasks:

1) to analyse the effectiveness of using memes as a means of forming students' foreign language communicative competence, multicultural education and media-information literacy;

2) to determine the level of students' motivation to learn philological disciplines (for example, English) through the integration of memes into educational activities.

Methods

Research Design

To conduct a comprehensive study on the integration of Internet memes the following methods we used the mixed research design based on quantitative (pedagogical experiment; tests to compare academic achievements; measuring variables; hypothesis testing) and qualitative (oral interview before and after the experiment; informal interviews; observation of participants in the learning process; comparison and generalization of pedagogical experience on the research problem; analysis of the data collected in a statistically valid manner, e.g., via the method of mathematical statistics to establish quantitative values of the level of students' motivation to learn English through the integration of memes into educational activities).

Participants

68 students of the Communal Institution of Higher Education “Dnipro Academy of Continuing Education” of the Dnipropetrovsk Regional Council”, Donetsk State University of Internal Affairs and Mykhailo Tuhan-Baranovskyi Donetsk National University of Economics and Trade were involved in the experimental activity in the 2020-2021 academic year. All the students participated in the experiment at all stages of it. The authors decided to trace the dynamics of their motivation to learn the English language through integrating Internet memes while teaching and to compare the results at the ascertaining and control stages.

To conduct the pedagogical experiment, we got support from 5 teachers of the English language who delivered classes and workshops to the students in the high educational institutions mentioned above.

Instruments and Procedure

In order to study the possibilities of using memes in educational activities, we decided to choose classes of English as a philological discipline. The pedagogical experiment was conducted to investigate the influence of their integration on students' motivation to learn English.

At the ascertaining stage of the pedagogical experiment on the integration of memes into teaching English, the students were interviewed about the general expediency of using memes in educational activities, the way the students perceived and processed information in general; and we also conducted individual interviews and questionnaires among the teachers.

The survey among the students consisted of the following questions:

1. What is an easier and more effective way for you to perceive information?
2. What do you think a meme is?
3. What functions does a meme perform, in your point of view?
4. What are the most important features of memes, in your point of view?
5. Can Internet memes be used as a tool for teaching philological disciplines (for example, English)?

These surveys and interviews aimed at developing methods of integrating memes in the process of teaching philological disciplines (i.e., English) and determining the necessary tools.

At the formative stage, the pedagogical experiment was implemented through the activities in synchronous mode (i.e., studying the topics “Mass Media” and “Internet” at the classes of English and processing visual materials (memes) as well as lexical and grammatical material for classroom activities) and asynchronous mode (i.e., homework done by the students). The new language input on the topics defined was introduced and activated by the teachers during class activities. The students exercised materials with the visual support of memes within the following lexical range: the Internet, modern means of communication and information, communication on the Internet, social networks in the life of modern young people. Introducing rules and structures of the sentences within the following grammatical range (the use of Gerund, Participle I, the First and the Second Conditionals and sentences with the construction ‘What if..?’, Modals of Deduction) was also updated and developed.

We should mention that educational activities with Internet memes incorporated when teaching English were built on the principle of “from simple to complex”, i.e. there were involved thinking skills in both lower and higher-order: skills which help to remember certain facts; to understand the meaning of educational materials; to promote using the information in a new (but worked out typical) situation; to determine the relationship between the studied material; to develop information evaluation skills; to create a new intellectual product based on the processed material. When teaching philological disciplines, especially any foreign language, we took into consideration the fact that knowledge and understanding of lexical and grammatical material should be the basis before students could be able to pursue agenda and produce their ideas and opinions through a foreign language. Depending on the level of students' language and speech training, lesson objectives and expected learning outcomes, a teacher was allowed to use various forms of work with the integration of Internet memes.

Consider an example of the integration of memes (created via meme generators imgflip.com) that was used, among others, when teaching English during the formative stage of the experiment. It should be noted that the teachers were offered certain forms and methods of integrating memes into an English class but each decided which of them were appropriate for working with a particular group, depending on the students' psychological characteristics, language and speech training. For instance, the students were asked to analyse the meme “Expanding Brain” created via memes generator imgflip.com which consists of a text part with lexical and grammatical structures of the topic (becoming aware of daily media impact; learning specific skills of critical thinking; creating personal media responsibility; sharing insights on media literacy with friends) and a creolized part, which depicts the brain that achieves greater enlightenment at each new stage

of learning. Integrating a certain meme into the educational process, the students were offered the following forms and methods of work:

1. Brainstorming (warming-up).
 - In small groups complete the chart “Reasons to consume information sensibly”. Summarize your ideas.
 - Answer the questions and elicit the information: Is it essential to check the source of information? Why (not)? In what way do media influence people? What do people need to improve their level of media literacy? etc.
2. Lexical exercises to activate and consolidate the material.
 - Underline keywords and give or choose their definitions (for example, media literacy is...).
 - Put the phrases of the meme into chronological order.
 - Match the picture with the phrase; fill in the gaps (becoming aware of... media...; learning specific skills of ...; creating ... media...; sharing insights on... with friends) with the words and phrases “daily impact”, “media literacy”, “critical thinking”, “personal responsibility”.
 - Do the crossword puzzle. The answers are the words from the text of the meme.
3. Control of understanding the lexical and grammatical features of the meme.
 - Complete the phrase with the correct word without looking at the text of the meme.
 - Paraphrase the text by transforming the phrases with Participle I into sentences with verbs in Present Simple, for example: “becoming aware of daily media impact” could be paraphrased as “when you become aware of daily media impact”, etc.
 - Define the form of the verbs in the text or the function of the underlined words (for example: when analysing the phrase “becoming aware of daily media impact”, the students are supposed to define “becoming” as a gerund that acts as a subject in the sentence, and so on).
4. Development of search and creative skills.
 - Find out the origins of the meme and socio-cultural features by analysing informational articles on the Internet.
 - Find memes with similar grammatical structures online.
 - Think about the continuation of the phrase.
 - Make up two sentences, using a word with “-ing” form as Gerund and as Participle I: sharing insights on media literacy with friends (for example: Sharing insights on media literacy with friends benefits them in the future. Sharing insights on media literacy with friends, I help them create consume information wisely).
 - Using the text of the meme, find another picture on the Internet to illustrate it.
 - Think of another text for this meme to illustrate its meaning connected with media literacy.
5. Development of speech and language competencies.
 - To improve written skills, the teachers prepared their students for essay writing (e.g., What should we do to consume information wisely? How can we create personal media responsibility?) and also suggested them to create a cinquain (e.g., they transformed the meaning of the meme into a cinquain, a five-lined poem).
 - In order to develop oral speech, the students were invited to participate in the discussion “To be or not to be media literate?” based on the method of “Six thinking hats”, which involves the presentation (oral coverage) of group work from different points of view, as well as contributes to the formation of students’ critical thinking. United into mini-groups, the students looked for the answer to their questions:
 - a. What do you know about daily media impact/specific skills of critical thinking/personal media responsibility/media literacy?
 - b. What emotions do you have about media literacy? What does your intuition tell you?
 - c. Is it essential to be media literate? What are the possible problems/difficulties/challenges? What should you pay attention to?
 - d. What are the advantages of being media literate? What is the value? Can media literacy be implemented or developed?
 - e. What creative ideas are there to overcome the difficulties with media literacy? What are the possible alternatives?
 - f. What is on the agenda? What are the conclusions and the goals? What steps should we take to develop and improve the level of media literacy?
6. Project activity.

Referring to the text of the meme define your level of media literacy and develop your program of individual work aimed at improving your critical thinking skills and media literacy overall. Visualize it.

Thus, by integrating this meme when teaching the topic “Mass Media: the Internet”, the teacher was able to clearly demonstrate not only the use of key lexical and grammatical units but also the basic steps of media literacy and issues related to multicultural education.

However, defined forms and methods are not stable for each individual educational environment: the teachers had the opportunity to change the order of exercises, to choose other agreed memes based on the students’ characteristics and preferences, to vary the exercises for homework.

At the control stage of the experiment, a repeated survey was conducted among the teachers to find out quantitative and qualitative changes in the students’ motivation to learn English. The dynamics of the levels of the students’ motivation to learn English through the integration of memes into the educational process has been analysed and generalized; the quantitative values have been established using the method of mathematical statistics.

Results

At the ascertaining stage of the pedagogical experiment, it was found that 16.1% of the students thought it easier to perceive information through listening (they are auditory learners), i.e. a teacher’s oral explanations were important to them; 25% of the students were visuals, i.e. they memorized information that contained certain images; 26.8% of the students were kinaesthetic learners, for whom the physical activity was quite important and who were able to learn best when combining movement, coordination, rhythm, emotional response and physical comfort; 32.1% of the students did not have a clear form of perception of information, i.e. they tended to combine visual images with sound and/or emotional component, that is why it would be advisable to take into account the combination of different forms and methods of introducing and practising lexical and grammatical material.

Almost unanimously, the students defined a meme as an amusing recognizable picture with a funny (even hilarious) text that is generally etched in memory. This was an obvious result, since the students are active users of the Internet and social networks, so they are familiar with memes as a phenomenon of digital culture and use them in their daily communication both in the virtual space and in personal interaction.

Regarding the functions performed by memes, the following answers were most often heard: entertaining (52%), informative (23%), advertising (37%), political (49%), other (19%). However, all the students agreed that the main purpose of a meme might be to attract and retain the audience’s attention.

Important characteristics of memes for the students were a familiar and acceptable context, easy to understand text (i.e., written in simple words), humorous nature, and cute aesthetic look. However, most of the students still found uncertainty about the possibility of using memes while teaching any subject (67%), philological disciplines (including English) were not an exception.

At the ascertaining stage of the experiment, this survey among the students was conducted in order to identify the general feasibility of using memes in educational activities, the way the students perceive and process information in general. In addition, we held individual interviews and questionnaires with the teachers as well, since the purpose was to determine the level of their students’ motivation to learn English. Summarizing the answers provided by the teachers, we obtained the following results: according to the teachers’ observations, 27 students (39.7%) had a low level of motivation, i.e. they did not show much desire to participate at the course, they periodically did homework on the subject, had a low level of language and speech competences (level A1: the students were able to build elementary sentences to meet specific needs and interact at a simple level); 24 students (35.3%) showed a medium level of motivation, i.e. they were more interested in activities during the lesson, partially but on a regular basis doing homework, had a mediocre level of language and speech competence (level A2: the students could understand isolated phrases and widely used expressions necessary for everyday communication and converse in simple and ordinary situations); 17 students (25%) had a high level of motivation, i.e. students were interested in activities during the lesson, fully regularly did homework on the subject, had a sufficient level of language and speech competence (level B1: the students could understand the basic content of clear normative speech and were able to simply and coherently speak on topics of personal interest or familiar ones).

This survey of the teachers was conducted to develop methods for integrating memes while teaching English and determining the necessary tools, which should be implemented at the formative stage.

At the control stage of the experiment, the results of the repeated survey with the teachers testified quantitative and qualitative changes in the students’ motivation to learn English. The dynamics of the levels of the students’ motivation to learn English through the integration of memes into the educational process

was analysed and generalized; the quantitative values were established using the method of mathematical statistics (Table 1).

Table 1. *The dynamics of the levels of the students' motivation to learn English through the integration of memes in the educational process*

Levels	The ascertaining stage		The control stage		Dynamics
	students	%	students	%	%
Low	27	39.7	23	33.8	- 5.9
Medium	24	35.3	25	36.8	+ 1.5
High	17	25	20	29.4	+ 4.4

Analysing the data in Table 1, we observe positive dynamics in the levels of the students' motivation to learn English, which can be explained by their interest in non-standard forms and methods of teaching, the proximity of visual support of lexical and grammatical material to their realities and interests.

Discussions

The results of the study allow us to conclude about gradual changes in the levels of the students' motivation to learn English due to the use of non-standard forms and methods of introduction, actualization, and processing of lexical and grammatical material, in particular, through the integration of memes. According to the teachers' opinion, the forms and methods of memes integration into the educational process did not significantly affect the level of the students' language and speech competencies, as the experimental period was relatively short but had a positive effect on their interest and involvement in the work process as well as completeness and correctness of home tasks: memes were one of the effective tools to attract and retain students' attention. The teachers also noted the prospects of using the forms and methods of memes integration into educational activities not only in terms of teaching English but also in the development of the students' media literacy and multicultural education, as all these components are easily combined and complementary.

As for the students' observations, the level of their motivation to learn philological disciplines (especially, English) increased due to the unexpected integration of topical and satirical memes into educational activities. Previously it had already been reported that for high school students or university students, memes should reveal social satire, social protest, cultural issues, political comedy, or other complex issues of today to involve them into educational activities and strengthen their intrinsic learning motivation (Keno, 2020).

Our results are in good agreement with other studies (Boa Sorte, 2019; Dongqiang et al., 2020) which have shown that memes can be adapted into various contexts and subjects to catch students' attention while educational activities. That is why in our study we have analysed the peculiarities of integrating memes in terms of teaching English, promoting students' multicultural education and media literacy.

The results have shown that by using memes in foreign language classes, the teachers had the opportunity to practice and consolidate individual words or phrases, constant expressions or catchphrases, jokes or repatie (conversation characterized by quick, witty comments or answers), grammatical constructions, remarks or some parts of a dialogue. When studying certain lexical items and/or figures of speech, the pictures with memes offered to the students also contained comparisons, metaphors, allegories, antitheses, etc., which students had to determine. We have also proved that in foreign language classes memes could be used to introduce students to a foreign language environment (as warming up), to adjust to work and activate the acquired knowledge of vocabulary and grammar, to introduce new material during the main part of a lesson, to apply initially and independently their knowledge in standard situations, to develop students' creative and critical thinking, to integrate aspects of multicultural and media literacy, to relieve tension in the final part of the lesson during reflection, etc. This is noted by other researchers as well (Ramadhika, 2019). Moreover, we should mention that the results of this study overlapped with the research by Kayali and Asli Altuntaş (2021), in our case, students' target vocabulary increased due to memorable phrases used when creating memes and the students managed to overcome difficulties with learning new lexical items and their application in practice.

The results of our study evidenced that memes allowed updating students' background knowledge and promoting their multicultural education, as it turned out, memes could reflect and reproduce cultural features and phenomena of the past and present. We realised that an adequate understanding of culture (by both meme creators and meme consumers) was crucial in determining whether the use of any meme would be

successful or fail (Nieuburt, 2021). That is why we adapted memes information content to local realities (i.e., misunderstanding of certain cultural concepts or lexical items can affect communication) and supplemented by images of famous people, events, works of art etc., taking into account other scientists' experience (Putra & Trijono, 2016; Nakaznyj & Kyrpa 2016).

Moreover, it should be stressed that memes could contain a number of meanings, including hidden ones, and form a stereotypical perception of the event or phenomena, or people in general, etc. Therefore, using memes at the classes, the teachers encouraged the students to discern contexts, critically analyse information, draw conclusions on the basic idea through the analysis of text media messages and their illustrative design (available logos, cultural markers, recognizable symbols, etc.), which would possibly prevent the thoughtless spread of potential fakes and media viruses in the future. It also promotes the development of critical thinking as a basis of media literacy (Naidonova & Sliusarevskiy, 2016; Elmore & Coleman, 2019).

Furthermore, our findings on the role of Internet memes during the educational process also correlate with the conclusions of some scientists (Reddy, Singh, Kapoor, & Churi, 2020) who affirm that memes are not able to make the subject absolutely easy to understand. Memes are supposed to be rather supplementary tools combined with other pedagogical approaches, forms and methods.

We consider it is essential to outline the benefits of teaching philological disciplines (for example, English) applying a number of forms and methods of memes integration. The main advantage is that students' overall motivation to learn any philological discipline (for example, a foreign language) increases. Also, we observe that the students' vocabulary is formed and activated, and practice of grammatical structures is improved since the students are involved into the activities at the lesson and while doing home tasks. Incorporating forms and methods of memes integration to teach philological disciplines (especially English) provokes the students' creative and critical thinking skills as well as lays the ground for their media-information literacy and multicultural education and develops "learning by doing" habit.

However, some limitations in the research should also be acknowledged. First of all, we did not observe significant changes of the level of the students' language and speech competencies as experimental period was relatively short. Implementing this study during a longer period would also be beneficial. Secondly, the teachers had chosen specific tasks with Internet memes (among proposed) to teach their students depending on their interests, psychological characteristics, language and speech training, that is why we were not able to develop a single and multipurpose script to deliver classes with memes integration. Integrating a certain set of tasks when teaching definite topics could benefit future research in this area. Despite these limitations, the students were satisfied with the performing non-standard tasks to master a foreign language. According to the obtained results, the level of their motivation to learn philological disciplines through the integration of memes into educational activities has increased.

Conclusions

Regarding the rapid flow of information and in the dominance of the network space, Internet memes are not only a part of students' daily communication but also convey the cultural and information realities of today.

Exploring the phenomenon of Internet memes, the article identifies the main characteristics and functions of memes, analyses ways to integrate memes in teaching philological disciplines (for example, English): as a means of forming students' foreign language communicative competence, multicultural education and media literacy. The methods of their integration into philological disciplines (for example, English) teaching are presented, the peculiarities of creation and/or selection and use of Internet memes in the educational process of high education institutions are emphasized. The influence of Internet memes on students' concentration, perception and memorization of informational messages is analysed.

Implementing a pedagogical experiment, the dominant way of perception and processing of information by the students was clarified and the expediency of integrating Internet memes into teaching English was revealed. The positive dynamics of the levels of the students' general motivation to learn English through the use of forms and methods of work with memes in educational activities has been experimentally confirmed: quantitative values of the levels have been established using the method of mathematical statistics.

However, it is worth emphasizing the advisability of integrating Internet memes, keeping in mind the boundary between entertainment content and education. Memes can be seen as additional aids to other pedagogical tools, such as video-based learning, flipped classroom, and so on. Of course, integration into the educational process and the creation of a successful (from a didactic point of view) meme requires from a teacher not only perfect mastery of the subject and pedagogical skills but also developed critical and creative thinking, awareness of their students' interests, the realities in which they live, taking into account the rapidity of memes popularity and their constant updating (therefore a teacher should update the templates and examples of memes prepared for a lesson at least once a year). We do not rule out the possibility of

irrational use of Internet memes in classroom activities: using meme resources, it is necessary to take into account students' psychological characteristics, their language and speech training, clearly formulate goals, objectives and expected results or learning outcomes, avoid ambiguous or provocative situations, and shifting the emphasis from educational activities to entertainment. In our opinion, the expediency and educational potential of Internet memes in teaching both philological and non-philological disciplines require detailed and in-depth study.

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ACADEMIC STAFF ADAPTATION TO THE CHALLENGES OF THE COVID-19 PANDEMIC: A CASE OF PAVLO TYCHYNA UMAN STATE PEDAGOGICAL UNIVERSITY

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Currently, higher education system is characterized by the growing role of personal ability to adapt to the challenges of COVID-19 and finding opportunities for further development considering the global changes in all spheres of life. It puts pressure on the institutions in general and academic staff in particular. This paper aims at studying the challenges academic staff of the English Language and Methods of Teaching Department of Pavlo Tychyna Uman State Pedagogical University has faced during the COVID-19 pandemic and staff's preparedness and consequent adaptation amid new conditions that are constantly appearing because of the pandemic. The article presents a case study research to answer the following questions: What is the level of academic staff readiness to teach under conditions of the COVID-19 pandemic from a diachronic perspective? In what ways has academic staff adapted to the challenges of the COVID-19 pandemic? The study uses predominantly quantitative and occasionally qualitative analysis to gain insights into our researched issues. The research has shown a steady increase in the number of department lecturers who feel ready for the challenges of online and blended teaching caused by the pandemic and comfortable with their professional competence due to sustainable adaptation to the current situation. The research prospects are clearly seen in the further process of adaptation and professional activities paradigm re-evaluation under the constantly changing global and local conditions as well as researching the issue in a broader context of similar or corresponding cases.

Keywords: adaptation; challenges; academic staff; pandemic; higher education; online teaching; blended teaching.

Introduction

The influence of the COVID-19 pandemic on learning and teaching is huge because of the transition from face-to-face to the distance/blended/online format and education has become one of the most affected areas.

The impact of COVID-19 on universities and other higher education institutions around the world was analyzed and shared by UNESCO in IAU Global Survey Report (2020). It is mentioned that "one particular issue that the COVID-19 pandemic has shown is the need for increased international and global perspectives to analyse the various impacts of COVID-19 in the short, medium and long term" (Marinoni Van't Land & Jensen, 2020, p. 6). Indeed, pandemic affects all of us and touches every sphere of life. For sure, it had an immediate effect on higher education, such as "emergency online education" and caused all the challenges that followed. In general, the educational process has been transformed and changed the direction to distance mode (Watermeyer et al., 2021). The world will never be the same and humanity must learn to adapt to new realities and current conditions.

Literature review

In recent years, there has been an increasing amount of literature about teaching and learning peculiarities in higher education in different countries during the COVID-19 pandemic, e.g. China (Bao, 2020; Zhu, 2020), Romania (Coman et. al., 2020), Turkey (Aksu, 2020), Ghana (Owusu-Fordjour, Koomson & Hanson, 2020), Georgia (Basilaia et. al., 2020; Basilaia & Kvavadze, 2020), Brazil (Salvagni, Wojcichoski & Guerin, 2020), Pakistan (Dogar et. al., 2020), India (Chugai & Pawar (2021), Ukraine (Melnychenko & Zheliaskova, 2021). Much of the current literature pays particular attention to the challenges to implement remote education in a pandemic context (Salvagni, Wojcichoski & Guerin, 2020; Toader et. al., 2021; Piotrowski & King, 2020; Toquero, 2020; Chang, 2020). The comparative research between three countries highly impacted by the pandemic (Spain, Italy, Ecuador) shows that teachers and students show their preference to face-to-face learning, but they recognize positive elements in virtuality (Tejedor et. al., 2021).

There is a large volume of published studies describing the huge impact of COVID-19 on the educational process (Rashid & Yadav, 2020; Pokhrel & Chhetri, 2021; Khan, 2021; Marinoni Van't Land & Jensen, 2020). The pandemic requires a very rapid response and transformation of pedagogic practice. This situation generates a huge strain on academic staff and sets several tasks. The study of Stukalo and Simakhova (2020) convinced that COVID-19 has a significant impact on the Ukrainian higher education system and causes effective transformation of the university structure, which leads to the necessity to

modernize teaching methods, find new approaches to the educational process organization, and self-education approach application. Overall, there seems to be some evidence to indicate that the digitalization of higher education and the creation of digital universities are identified as necessary responses to today's societal challenges (Areshonkov, 2020) and the importance of digital personal assistants as well as online and lifelong learning in delivering world-class learning and teaching (Bonfield et. al., 2020; Dey, Al-Karaghoulis & Muhammad, 2020). The educational process in general moves to the distance mode and blended learning (Nenko, Kybalna & Snisarenko, 2020; Shandra, Yuzik & Zlenko, 2021; Mizyuk, 2019; Mishra, Gupta & Shree, 2020). Yuriy Malyovanyi (2020) in his study mentioned the priority directions of improvement and development of distance learning. However, the researcher is convinced that there are reservations about the absolutization of distance learning opportunities and the possibilities of establishing it as the only dominant type of education in Ukraine.

According to Gokuladas & Baby Sam (2020), in the educational field, all challenges amidst a pandemic could be categorized into psychological challenges (loss of continuity; attitude towards e-learning option; lack of community feeling and/or isolation) and operational challenges (technology adaptation within a short span of time; communication challenges; difficulty in ensuring parity while delivering remote teaching; infrastructural facilities to host e-learning classes; hindrances for inclusive education) that educators are likely to face as a result of the outbreak of pandemic (p. 145-148). Certainly, mental health and well-being during the COVID-19 pandemic in higher education also belong to psychological challenges. The study (Nurunnabi, Almusharraf & Aldeghaither, 2020) explores universities' health and wellbeing in the G20 countries during the COVID-19 epidemic. It reveals that the lockdown, social distancing, and self-isolation requirements are stressful for many individuals and have caused students' health and wellbeing concerns. Certainly, for academic staff, it is necessary to be stress-resistant, flexible, creative, adaptable to new circumstances, and effective as mentioned by a group of Ukrainian researchers who developed attributes of effective teachers in Ukraine (Levrints (Lőrincz), Myshko & Lizák (2021).

Brammer and Clark (2020) claim that COVID-19 has stimulated significant pedagogical innovation and provides opportunities for higher education along with challenges. They investigated the speed and quality of adaptation of professional and academic staff to new communities and the acceptability of experiments with new ways of engaging in teaching and research. Researchers say that the variety of alternative methods of helping students in distance learning, creativity, development of new forms of support and evaluation of learning, and the willingness of staff to implement new technologies, is a response to the challenges of pandemic time. The study of Dey, Al-Karaghoulis & Muhammad (2020) highlights some of the issues about adoption and adaptation faced during COVID-19. The authors consider the topic of adaptation of academic staff to the challenges of the COVID-19 pandemic relevant and exciting because the study results can affect the organization of the educational process in a particular educational institution and be attractive to other academic partners to improve the quality of education as a whole.

To sum up, we have observed a great research interest in the topic of the COVID-19 pandemic in relation to education and the challenges that are arising from it. Now, we need to bring the issue to a narrower context in order to see how the academic staff of a particular institution and department adapts to the above-mentioned challenges.

Aim and hypothesis

The hypothesis of the study lies in the presumption that the level of academic staff readiness for the challenges of online teaching was at a relatively low level before the COVID-19 outbreak but gradually has increased as well as the level of their professional competence with the help of adaptation steps taken by the staff itself and department administration.

The aim of the paper is to study the challenges, the academic staff of English Language and Methods of Teaching Department of Pavlo Tychna Uman State Pedagogical University had to face during the COVID-19 pandemic, as well as the staff's preparedness and consequent adaptation amidst new conditions that appeared as a result of the pandemic. It is also important to define education assurance in the context of blended and distance learning and find out the staff's attitudes and feelings in different periods of the pandemic. According to the aim, we are striving to reveal the answers to the following research questions:

1. What is the level of academic staff readiness to teach under conditions of the COVID-19 pandemic from a diachronic perspective?
2. In what ways has academic staff adapted to the challenges of the COVID-19 pandemic?

Methods

Research design

Taking into account relevant theory and state-of-the-art resources, we decided that the use of a case method based on the survey would be a reliable and effective scientific approach for the grounded research; therefore, it may provide our study with sustainable data and significant findings to make this research worthwhile. The structure of the case study is presented below in Table 1.

Table 1. *Case study structure*

Case anatomy	Academic environment of English Language and Methods of Teaching Department of Pavlo Tychna Uman State Pedagogical University
Case topic	Academic staff adaptation to the challenges of the COVID-19 pandemic
Case questions	1. What is the level of academic staff readiness to teach under conditions of the COVID-19 pandemic from a diachronic perspective? 2. In what ways has academic staff adapted to the challenges of the COVID-19 pandemic?
Case data	The findings of the survey and their interpretations
Case solution	Inductive and divergent
Case analysis	Open case – several possible answers and solutions
Case timespan	March 2020 – December 2021

Participants

21 representatives of the academic staff of the English Language and Methods of Teaching Department took part in the survey. We believe that the mentioned number of participants of the research can provide us with feasible and reliable results as the methodology of a case study indicates the recommended number of participants (cases) between 5 and 50, consequently, 21 participants comprising 84% of the department academic staff can prove the results objective in the described academic environment. Detailed information about the participants of the study is given in Table 2.

Table 2. *Data about participants*

Position	Professor	Associate professor	Senior lecturer	Lecturer
	1 respondent 5%	11 respondents 52%	2 respondents 10%	7 respondents 33%
Gender	Male	Female		
	5 respondents 24%	16 respondents 76%		
Age	23-26 years	30-35 years	36-45 years	55-65 years
	2 respondents 10%	5 respondents 24%	11 respondents 52%	3 respondents 14%
Work experience	1-3 years	4-10 years	11-20 years	more than 20 years
	2 respondents 10%	6 respondents 28%	8 respondents 38%	5 respondents 24%

Instruments and procedure

We consider a survey to be the most effective tool for collecting data for our case study. Our group of authors compiled a list of questions of different types: multiple choice, as well as open short and long questions (see Appendix 1). A number of multiple-choice questions gave the respondents the opportunity to choose more than one variant for answering the questions and, as the result, some data can vary more than 100% frame. Having had a successful experience in collecting data we chose Google Forms as an online tool for conducting the survey.

The survey consists of 4 parts: the 1st is called “Introduction” and includes personal information, though without personal identification; the 2nd part is devoted to teaching and learning during the first year of the COVID-19 pandemic in 2020, the 3rd contains questions about teaching and learning during the COVID-19 pandemic in 2021, and the last, the 4th part, is about academic staff reflection and perspectives. In the following part of our study, we will present and interpret all the results of the survey.

Data analysis

Initially, the data for the research was collected by means of a Google Forms questionnaire distributed among the participants at the beginning of December, 2021. We are convinced that this type of survey proves to be a reliable, feasible, rapid and economic way to deduce and generalize findings. For this study, we used the questionnaire consisting of 39 questions, grouped in 4 parts, in which the department academic staff could select or give their answers and share their personal opinions. Overall, it took 2 weeks to receive and collect survey responses from participants. The collected data was further analyzed and discussed, conclusions were drawn during December, 2021–January, 2022.

Ethical issues

The project was conducted with regard to the Ethical Guidelines for Educational Research (BERA 2011) and reviewed by the Board of Department of English Language and Methods of Teaching of Pavlo Tychyna Uman State Pedagogical University in order to grant permission for the research. Following ethics, participation in the project was voluntary. 21 lecturers out of 25 opted to participate (over $\frac{3}{4}$ of the department academic staff), making the findings reliable. Participants were informed about the nature of the research which was anonymous, and about the way, its findings would be used before they proceeded with the questionnaire. The participants of the research had confidence that they are protected and that the elicited information would not be misused.

Results

As mentioned above, the survey consists of 4 parts (sections). In the “Introduction” section, we asked 9 questions. The first four questions were given to find out the position, gender, age and work experience of our respondents.

In the frame of our research, it is necessary to define the subjects, which the respondents teach, with the focus on whether they are theoretical or practical. The respondents mentioned 11 subjects, 7 of which are theoretical and 4 – practical. However, it would be wrong to think that the main part of the respondents can share their experience in distance and blended learning mainly in the context of theoretical courses. According to the curriculum, practical courses contain more academic hours. Some of them are studied for four terms while others are even for eight terms and the majority of the lecturers teach several courses, that is why the number of times the practical subjects were mentioned by lecturers in the survey is 27. In order to see the correlation between these two types of subjects, we used the formula (X : Y) where X stands for practical subjects and Y – for theoretical ones. We have got the correlation 1 to 3,8, which gives us more information about practical courses adaptation.

In the first section, the respondents were asked to indicate the students’ age range they work with. The results are presented in figure 1.

What students’ age range do you work with?

21 responses

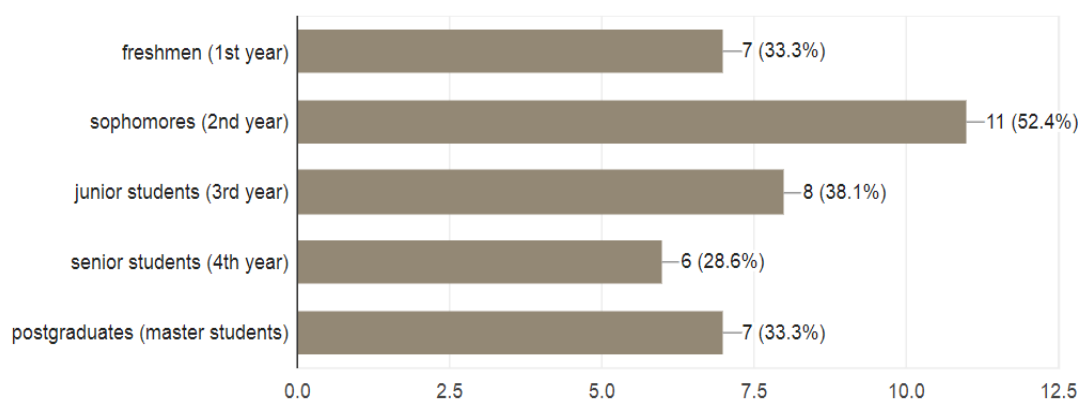


Figure 1. *Students’ age range*

The last three questions of the “Introduction” section led respondents to the main issue of our study. These questions were set to determine the previous experience of distance learning and teaching, which our participants could have had before the period of the pandemic. The first of the three questions sought to discover if our respondents had such experience at all and 38,1% of them answered positively while the other 61,9% didn’t work remotely. Figure 2 below illustrates the data.

Did you have experience of distance teaching before the COVID-19 pandemic?

21 responses

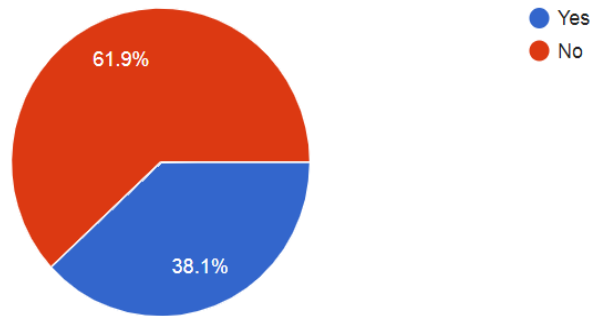


Figure 2. Distance teaching experience data

The next question with an open answer was suggested only for those respondents who worked distantly before the pandemic. We got the following answers which are presented in Table 3:

Table 3. Ways of work in the distance learning mode before the COVID-19 pandemic

Way of work	Number of respondents	Percentage (%)
Platform Moodle	3	14
Online apps for video conferences	Skype	3
	Google Meet	1
	Zoom	1
	Viber	2
Uploading tasks for students with the following check	2	9
Using online apps for lesson content creating	2	9

The data results in Table 3 lead us to the conclusion that before the pandemic fewer than 14% of our lecturers used online apps or platforms to work with students.

The last question of prerequisites to our research concerned the courses, webinars or workshops on how to organize distance learning that our participants could have taken. So, 11 of 21 respondents answered positively and 10 gave a negative answer. Furthermore, some of them mentioned the exact courses they took. Mostly, there were workshops organized by our chair, and the mode of those events was both offline and online. But also there was one teacher development course and some workshops conducted by other organisations or institutions.

Section two of the survey is devoted to teaching and learning during the first year of the COVID-19 pandemic (2020) which consists of 12 questions. It contains the same number of corresponding questions in section three, in order to compare some issues. The comparative analysis of the responses to these questions will be presented in the third section description. Other questions will be described below.

Firstly, we asked our respondents to assess their readiness for the remote learning process at the beginning of the lockdown. Such self-assessment gave us the starting point of the research. The results are presented in figure 3 and they are not very encouraging.

Figure 3 shows that only 42 % of respondents assessed their readiness in “5” and more, the rest 58% felt unconfident under new conditions. In the following two questions, the respondents were asked to indicate students’ and their own digital skills level during the first year of the pandemic. Despite different results, the digital skills level assessment, which is presented in Figures 4 and 5 respectively, shows that if taking data from 5 to 10 in both figures the results are almost the same. As for lecturers’ opinion of students’ readiness, we have got slightly increasing data – 71%, while self-assessment shows 67%. It means that lecturers consider that students had better digital skills than they did.

Assess your readiness for the remote learning process at the beginning of the lockdown from 1 to 10 where 1 is “not ready at all” and 10 is “completely ready”.

21 responses

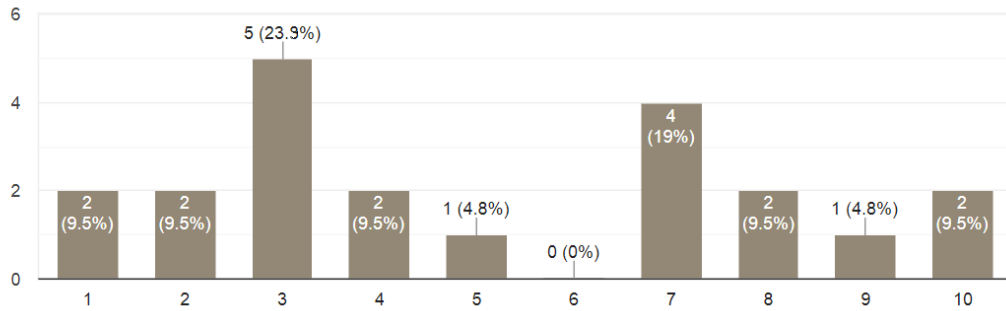


Figure 3. Distance learning readiness assessment

Assess your students’ digital skills during the first year of the pandemic from 1 to 10 where 1 is “low level” and 10 is “high level”?

21 responses

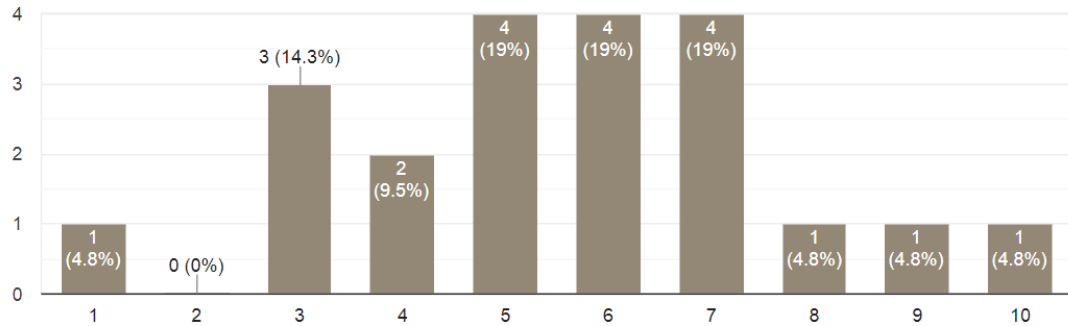


Figure 4. Students’ digital skills assessment

Assess your digital skills during the first year of the distance learning mode from 1 to 10 where 1 is “low level” and 10 is “high level”?

21 responses

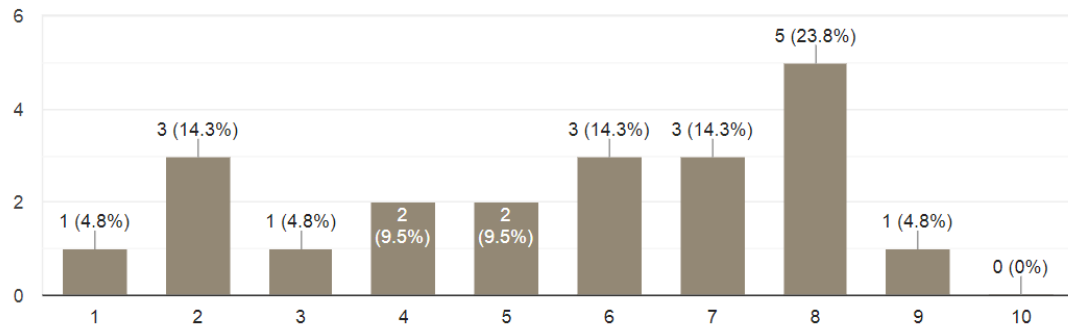


Figure 5. Staff’s digital skills assessment

Furthermore, the respondents shared their experience at the lessons of teaching management. Taking into consideration the lack of any opportunities for offline learning mode, lecturers together with their students needed to use an online platform. The academic staff of Pavlo Tychyna Uman State Pedagogical University has used Moodle platform for online teaching. But it is not the only platform accessible online, and it was important for us to find out which platforms the respondents used. Unexpectedly, the answers to this question show that not all the lecturers know the difference between platforms and applications as they mentioned many services that are not platforms. However, it is important to indicate that the results of these

responses suggest that the majority of respondents used Moodle platform (67%), though 2 respondents also used the Google Classroom platform (9%). We also gained our interest in platform functionality evaluation and asked the participants to share their impressions. The results are shown in figure 6.

Do you consider the platform you worked with functional enough for teaching your subjects?

21 responses

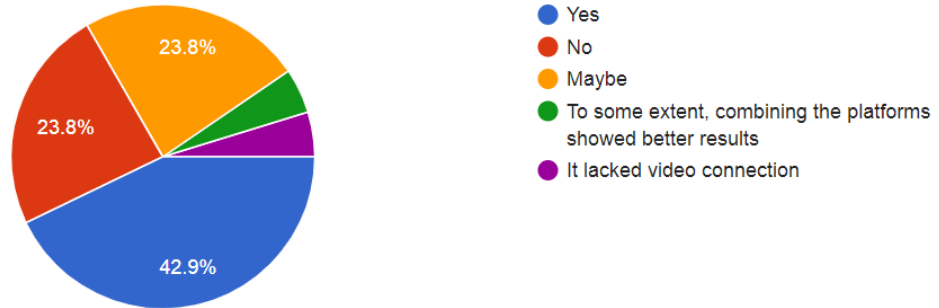


Figure 6. Platforms functionality evaluation

As can be seen from Figure 6, 9 respondents (42,9%) were satisfied with the platform they worked with. In our opinion, these results cannot be considered as positive because when we have summed up the rest of the responses we got a bigger percentage (57,1%) of those who couldn't teach their subjects in the way they wanted or expected because of the platform functions limitations.

Further, three questions were asked to indicate the ways lecturers used to get students' feedback and testing. When the participants were asked about the ways of checking home assignments, the majority (85,7%) commented that their students sent them the papers via email. The other results are shown in figure 7.

In what way did you check home assignments?

21 responses

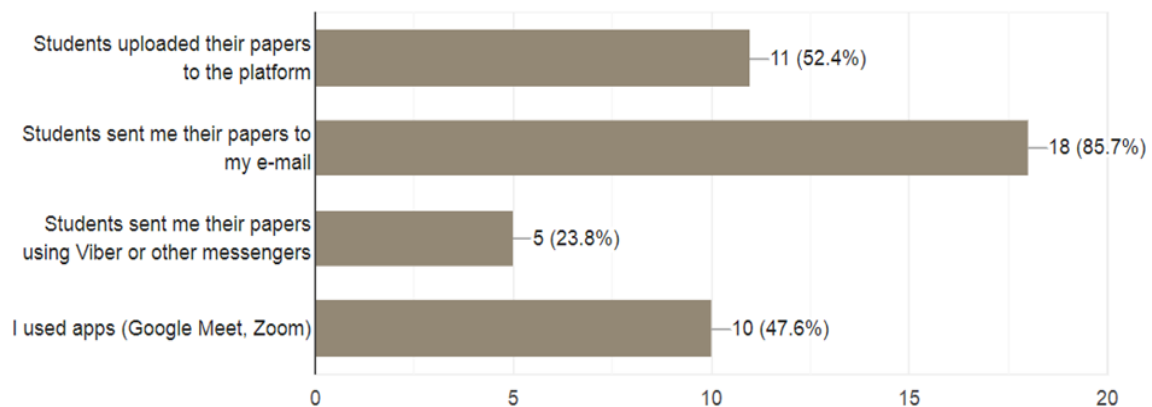


Figure 7. Ways of home assignment checking

In response to the question about the ways of taking tests, 100% of the respondents reported that they used Moodle platform tests. It is worth mentioning that there are some other variants of responses such as using apps (Google Forms) and sending tests as Word files via email. In the response to the same question about exams, most of the surveyed indicated that they used apps for video conferences (Google Meet, Zoom) – 61,9 % of the participants. Other responses to this question included 38,1% of answers that the participants used Moodle platform or Google Form tests. Comparing the two results, it is obvious that the lecturers preferred the oral mode of interaction for exams and found the necessary tools for arranging them.

The following three questions of this section were set to find out more about the online resources which the respondents considered helpful during the first year of the pandemic. In response to the question “What online resources or apps did you start to use for your subjects teaching after the first term of distance learning?” a range of responses were elicited. The majority indicated Google Meet (47%) as an app they started using for online teaching. Other responses included Zoom, YouTube videos, Google Forms,

Mentimeter, Quizlet, LiveWorksheets, Kahoot, Learning Apps, etc. As we expected the respondents to name many apps and resources, the question was, if they found all the necessary resources to replace face-to-face activities with relevant ones in the online classroom. Only one participant (4,8%) answered negatively, others succeeded to replace but in a different way. The most remarkable result to emerge from the data is that 33,3% of the total respondents number found all the necessary online services for online teaching. Nevertheless, the respondents indicated activities and modes of interaction that they couldn't replace, some of them are worth maintaining:

- group work/discussions;
- oral activities checking;
- pairwork/interaction monitoring;
- jigsaw reading;
- test protection from alleged cheating;
- work in micro-groups and regrouping;
- board games.

The third section is called “Teaching and learning during the current year of the COVID-19 pandemic (2021)”. The first question is mostly the same as in the previous section but the period is different. It was important for us to investigate if anything changed after a year of distant learning and in what way. As we have reported earlier, at the beginning of the pandemic 67% of respondents accessed their digital skills from “5” to “10” using 10 points scale. In 2021, the percentage increased rapidly to 90%. The difference is seen in the diagram in figure 8.

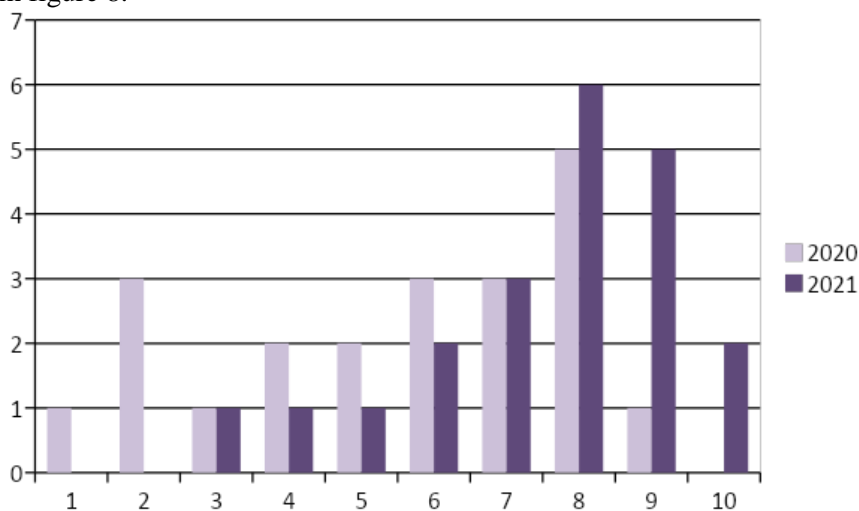


Figure 8. Lecturers' digital skills self-evaluation in 2020 and 2021

In response to the question about students' digital skills evaluation, there is also a clear trend of increase. In 2020, there were 71% of responses from “5” to “10” while in 2021, 95% of the participants evaluated students' digital skills using the same indicators. More detailed data can be seen in figure 9.

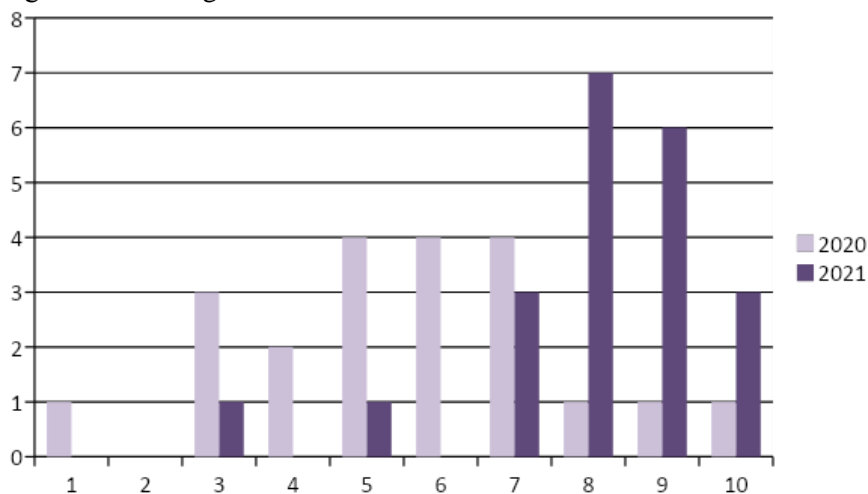


Figure 9. Lecturers' evaluation of students' digital skills in 2020 and 2021

These results are expected, but we also aimed at finding out which skills the respondents have developed. The most-reported skills can be listed as follows:

- use of online platforms and apps;
- online conversation;
- use of online Jamboard;
- creating online tests;
- sharing screen and tabs with students online;
- work with breakout rooms;
- planning online lessons using Google Calendar;
- lessons recording;
- managing students' grades using Excel Tables;
- creating online documents.

According to the lecturers' point of view, students developed the following digital skills:

- use of the platforms and apps;
- creating posters online;
- work with social media;
- use of mobile phones for learning purposes;
- using emails;
- searching for the necessary information on the Internet;
- creating presentations;
- sharing students' screens for presentation demonstrations.

As can be seen from the lists above, the skills are almost the same with some differences caused by purposes if those skills are necessary for teaching or learning.

Other questions were set to compare the ways lecturers used to get students' feedback and testing in 2020 and 2021. The respondents were asked to indicate the ways of checking home assignments, taking tests and exams. The results are shown in the table below.

Table 4. *Data of checking and testing ways during distance and blended learning*

Ways of checking and testing	Percentage (%)	
	2020	2021
Home assignment checking		
Papers uploading to the platform	52,4	52,4
Sending papers to email	85,7	57,1
Sending papers to messengers	23,8	14,3
Using apps (Google Meet, Zoom)	47,6	85,7
Checking traditionally, using blended learning	0	38,1
Tests taking		
Online, using Moodle or other platforms	100	90,5
Online, using apps (Google Forms)	14,2	28,6
Sending the tasks for tests via e-mail	19	28,6
Offline, in the traditional way, using blended learning mode	0	28,6
Exams taking		
Online, using Moodle or the other platform	57,1	33,3
Online, using Google Meet, Zoom	61,9	71,4
Online, using other apps (Google Forms)	14,2	0
Offline, in the traditional way, using blended learning mode	0	33,3

The following key findings emerged from the analysis of checking and testing ways preferred by lecturers. In 2020, sending papers to email and messengers were used more than other ways for home

assignment checking, while in 2021, using apps increased and also offline checking was possible, as during some periods in 2021 the university worked in the mode of blended learning. The data on test-taking ways shows that in 2021 there was an increase in the use of online apps and tools and a decrease in platform use consequently. The same dynamics is seen in the exam taking section where platforms were used more in 2020 but in 2021 services for video conferences were mostly used. Surprisingly, no responses were given to indicate using other apps like Google Forms, though it can be explained by additional opportunities for offline mode and video conference apps.

Respondents were asked to indicate the online resources or apps they use for teaching their subjects in the current period. The same question was asked in the second section and we have already listed the responses above but we are interested in finding out if the choice of online services has changed and if yes, what these changes are. The collected data are presented in the table below.

Table 5. *Online resources or apps use for teaching during the pandemic*

Online resources or apps	Data in percentage (%)	
	2020	2021
Apps		
Google Meet	47,6	61,9
Zoom	9,5	9,5
Google Classroom	9,5	9,5
Google Forms	4,7	14,2
Testportal	0	4,7
Google Workspace	0	4,7
Google Podcasts	0	4,7
Google Pictures	0	4,7
Google Documents	4,7	4,7
Breakout rooms	0	4,7
Jamboard	0	4,7
Random Group Generator	0	4,7
Resources		
YouTube	14,2	23,8
BBC Learning English	9,5	9,5
Mentimeter	9,5	9,5
Live worksheets	19	9,5
My Grammar Lab Platform	0	4,7
TED talks	4,7	9,5
Quizlet, Kahoot	4,7	4,7

As was expected, the data is different, especially in app use. The most striking results to emerge from the data comparison were the increase in Google Meet use (in 14,3 %), Google Forms use (in 14,2%) and a great number of other Google apps use. Also, it is worth mentioning that respondents tried several apps for the same purpose in order to choose the best one, for example, Google Form app and Testportal for creating tests or taking exams. The resource use also changed, as shown in table 5 – in 2021, respondents used YouTube and TED talks more often, also My Grammar Lab Platform appeared in the list of used resources.

The most interesting results came from the responses about the problems of online educational process management that the respondents had at the beginning of lockdown and at the current time of the survey. Five most reported problems at the beginning of lockdown were: possibilities for students' cheating (81%), students' preference to work without cameras (76,2%), poor students' attendance (66,7%), lack of interaction modes with students (57,1%), lack of digital skills (52,4%). Interestingly, there are differences in data of the current period, where the most reported problems are: lack of students' motivation (52,4%), lack of digital skills (33,3%), time management and lack of interaction modes with students have the same number (28,6%), paper checking and assessment (19%). It is crucial that the list of problems has changed a lot. The respondents have solved many problems, which they had in 2020. Now, the main problem to face is the lack of students' motivation.

In the response to the last question of the third section “What online activities cannot be used in current blended learning, especially in face-to-face mode?” a range of responses is “none or just some”. A small number of the surveyed reported that they had difficulties with jigsaw activities or writing tests using online tools. But one participant commented: “If you work in face-to-face mode and online (for those who cannot be physically present in the classroom) simultaneously it’s difficult to split students into micro-groups and it takes more time to manage the blended classroom”.

The last section in the survey deals with respondents’ reflections on the distance and blended learning modes and perspectives for future teaching. It includes 10 questions for sharing opinions and impressions of the pandemic period.

In the first question of this section, the respondents were asked to indicate their points of view on what technologies and skills they need for teaching their subjects more efficiently if the distance learning mode goes on. The list of responses was diverse but there were some items that participants had in common. In order to systemize the responses, we grouped them in the following collective notions: digital skills improvement (33,3%), resources use (33,3%), psychological support (14,2%), teaching management (28,5%), gadgets and the Internet allowance (9,5%). The results are shown in figure 10.

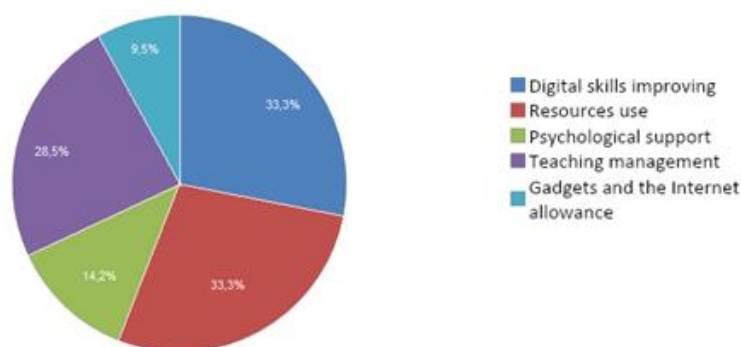


Figure 10. *Technologies and skills needed for further teaching*

Answering the question about ways for students’ digital skills improvement, more than a half of the respondents (66,6%) reported that students have to take courses on technologies or visit workshops or other events, 9,5% of the surveyed responded that students need motivation to raising and the same figure of participants considered that students have enough digital skills for online learning.

The most expected responses were to the questions about the benefits and drawbacks of online and face-to-face learning. 12 of the surveyed (57,1%) see the benefits of online learning in work flexibility, preferable conditions for time and location management; a bit less – 11 respondents (52,3%) – consider that one of the main benefits is digital skills developing, 3 responses (14,2) are concerned with additional possibilities for SEN students and next 3 – are about students’ autonomy development.

As for face-to-face learning benefits, one participant’s comment reflects the majority of other respondents’ point of view: “The atmosphere of conventional communication, observation of facial expression, monitoring the feedback of the class, informal communication during breaks, possibility to indulge students in after-class activities, the possibility to promote team spirit”. Possibilities for live communication were supported by 10 respondents (47,6%), for different modes of interaction and dynamic increasing – 11 responses (52,3%) were reported, alleged cheating monitoring was also mentioned by 3 participants (14,2%). One respondent reported that the main benefit was spending less time in front of the computer.

The next item of the survey is online and face-to-face learning modes drawbacks defining. Interestingly, the majority of online benefits turned out to be the drawbacks of face-to-face mode and vice versa. The most mentioned drawbacks of online learning are as follows:

- problems with Internet connection (28,5%);
- lack of social interaction (23,8%);
- harmful for health (19%);
- low students’ motivation (14,2%);
- some activities (e.g. pair or group working) cannot be used (9,5%);
- choosing the appropriate resources (9,5%).

It is also important to list other drawbacks from the survey: less time for doing activities, no eye contact with students, wasting time on waiting while tabs or windows are opening, checking students’ oral answers

(dialogues) which they can read from their screens, the problem with alleged cheating while doing tests, lack of soft skills development, sometimes electricity went off or there is some loud noise inside or outside the house, it is easier for students to skip classes, problems with developing time management skills, expenses on buying gadgets, lack of digital skills.

The list of traditional learning is shorter, as 4 respondents (19%) indicated that there were no drawbacks at all. Nevertheless, the problems reported by participants are as follows: time and money consuming mode, as you spend time to get to the university location (19%); lack of necessary equipment and applications (19%); necessity to carry all the textbooks and other visual materials with you (14,2%); scheduling problems (14,2%); fewer possibilities for students to attend classes (9,5%); risk of COVID infection, lack of home comfort, loading with paperwork, doing online tests due to the lack of needed facilities (4,7%). Generally speaking, more than half of respondents consider that the blended mode of learning is rather effective for teaching their subjects. Interestingly, distance learning mode is preferred by only 4,8% of participants, while the rest of the surveyed feel more comfortable teaching in the offline traditional mode as shown in figure 11.

What way of teaching is more efficient for learning your subject?

21 responses

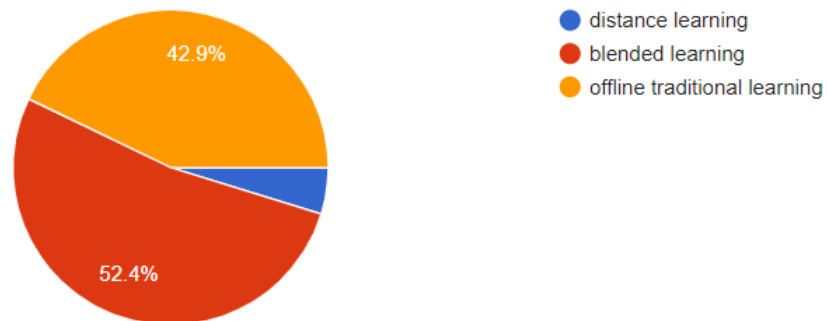


Figure 11. Modes of teaching preferred by respondents

In response to the next question, respondents were asked to assess how their way of teaching distantly differs from traditional face-to-face teaching from 1 to 10 where 1 is “not different at all” and 10 is “totally different”. Almost one-third of the participants (33,3%) evaluated this item in 5 points, the same figure is for 6-8 indicators and the rest is from 2 to 4 points. Interestingly, points 1 and 10 weren't chosen by participants, as shown in figure 12.

Assess how your way of teaching distantly differs from traditional face-to-face teaching from 1 to 10 where 1 is “not different at all” and 10 is “totally different”.

21 responses

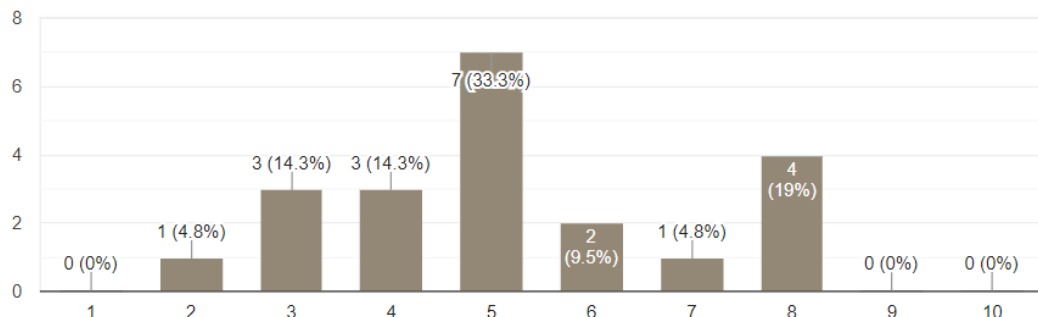


Figure 12. Respondents' evaluation of teaching ways

In the following question, respondents were required to assess the changes in the methodology of teaching the subjects between online and offline learning modes. 28,8% of the respondents haven't changed methodology much (3 points), on the other hand, 19% of the surveyed have greatly changed their way of teaching (8 points). Other data are presented in figure 13.

Assess how much you had to change the methodology of teaching your subject from 1 to 10 where 1 is “no changes” and 10 is “complete changes”.

21 responses

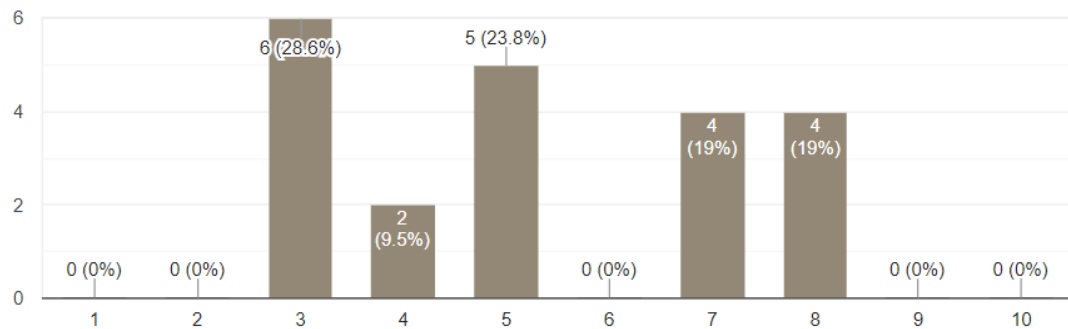


Figure 13. Respondents' evaluation of teaching methodology changes

The last question of the survey required respondents to share their opinion about the ways of teaching they consider the best in the nearest future. About one third want to teach offline in the traditional way (33,3%); 19,1% would like to teach online distantly. But, the majority of those who responded (47,6%) to this item reported that blended learning mode would be preferable to others in future. Moreover, one participant commented on how it should be: “I think that the best way would be if interactive lectures and lessons were online but credit lessons for students' dialogues or vocabulary checking and doing tests or exams should be in face-to-face mode”.

Discussion

The results obtained via survey require further discussion as to empirically find out the academic staff readiness to teach under conditions of the COVID-19 pandemic from a diachronic perspective and outline the ways how academic staff has adapted to teach in constantly changing conditions.

The main problem requiring study was determined as an investigation of the changes of academic staff readiness and competence level to the challenges of online teaching in the process of adaptation to the COVID-19 pandemics conditions.

According to the case study methodology and following the experience of relevant research, e.g. a case study of Peking University, (Bao, 2020; Zhu, 2020), a case study of CUI, Abbottabad Pakistan (Dogar et. al., 2020), we have chosen a survey by means of an online questionnaire as a prevailing method to adopt for the research. The study uses predominantly quantitative and occasionally qualitative analysis in order to gain insights into the issues we aimed to research. Data for this study gave us the opportunity to involve lecturers of the department teaching various subjects, both theoretical and practical.

Firstly, almost 2/3 of the respondents (61,9%) did not have the sustainable experience of distance teaching before the outbreak of COVID-19, consequently, their level of readiness for it can be considered low, even tending to be lacking at all. Besides, the number of lecturers who regularly used online apps or platforms to work with students before the pandemics are stunning (14%) though more than half of them took courses, webinars or workshops on how to organize distance learning in the past. Consequently, 58% of the respondents mentioned their unconfidence and unpreparedness when they faced new conditions. One of the reasons for this might be the abrupt change of conditions: academic staff had been preparing for purely distant learning but never realized it could become a reality at a glance. As a result, at the beginning of the pandemic lecturers tended to use Moodle platform (67%) which was familiar to them and only 2 respondents also used the Google Classroom platform (9%) as an addition to Moodle. However, only 42,9% of the respondents indicated they were satisfied with the platform they worked with because of its functional limitations. We cannot consider these results positive though presume that the majority of Ukrainian universities faced the same problem and their academic staff had to look for other options to maintain the quality of the educational process.

We cannot consider these results positive though presume that the majority of Ukrainian and international universities (as mentioned by Brammer & Clark, 2020; Toquero, 2020; Gokuladas & Baby Sam, 2020) have faced the same problem and their academic staff had to look for other options to maintain the quality of the educational process. In our case, the answer was found in face-to-face apps, particularly Google Meet, the use of which showed the increasing number from 47% to 62% and then to 86% and from

the spring term of 2021/22 academic year this number should reach 100%. The variety of apps used by the lecturers is also worth mentioning – Zoom, YouTube videos, Google Forms, Mentimeter, Quizlet, LiveWorksheets, Kahoot, Learning Apps, etc. – as every respondent felt like finding new options for teaching when distance learning was underway. As a result of this outburst of internal motivation and adaptation to new conditions, the number of respondents who accessed their digital skills from “5” to “10” using 10 points scale increased from 67% in 2020 to 90% in 2021. To our minds, another important reason to boost the lecturers’ adaptation process is the increase of the students’ digital skills level assessed by the numbers 71% in 2020 and 95% in 2021 from “5” to “10” using 10 points scale respectively.

We praise the variety of skills that the department lecturers managed to develop under new conditions namely: sustainable use of online platforms and apps; ability to maintain quality online conversation; use of online Jamboard; creating online tests; sharing screen and tabs with students online; work with breakout rooms; planning online lessons using Google Calendar; lessons recording; managing students’ grades using Excel Tables; creating online documents etc.

We consider worth further attention to the increasing number of Google Workspace users as it is free of charge for the University staff and provides a number of quality apps and products as well as the intensive use of the resources from YouTube and Ted talks for the actualization of the lesson content. However, implementation of other apps into the educational process would be a good asset for the variety and quality reasons as the academic staff is still facing the problem of the lack of students’ motivation and the urge for further digital skills development, though we believe this is just a matter of time and effort. We got this conclusion after eliciting the lecturers’ needs for further improvement in the nearest future which were grouped in the following collective notions: digital skills improvement (33,3%), resources use (33,3%), psychological support (14,2%), teaching management (28,5%), gadgets and the Internet allowance (9,5%).

Finally, it should be mentioned that the majority of department lecturers clearly see the difference between traditional offline, distance and blended teaching, their advantages and drawbacks though in a bit subjective perspective, and their opinion about the ways of teaching they consider the best in the nearest future (traditional way – 33,3%, 19,1% – online, 47,6% – blended teaching) should be definitely taken into consideration by the department and University administration. The implications drawn from our research results can be considered by education researchers when dealing with similar issues in corresponding contexts and cases as well as by educational authority representatives when deciding on institutional policy and strategic planning.

Limitations

The only limitation worth mentioning is that the research is built around a case study and it imposes restrictions as to the number of research participants and the area of the research environment. On the other hand, a case study gives a huge opportunity to have a better insight into an actual problem in a specific context.

Conclusions

To sum up, the study has shown a steady increase in the number of department lecturers who feel ready for the challenges of online and blended teaching caused by the pandemic and comfortable with the level of their professional competence as the result of sustainable development adaptation to the current situation.

We managed to find the answers to both research questions. Firstly, the level of academic staff readiness to teach under conditions of the COVID-19 pandemic, as well as the level of its digital competence, were relatively low at the outbreak of the disease and the beginning of lockdown. The lack of readiness was caused by psychological and technological impediments of personal and traditional character. It was a turning point for the department academic staff as some senior lecturers chose to retire rather than get used to new conditions. However, the majority of the staff representatives entered the adaptation period and have taken a number of successful steps.

Secondly, the department academic staff has been adapting to the challenges of the COVID-19 pandemic in a number of different ways, namely: self-education, continuing professional development events of different types (seminars, webinars, online marathons, online conferences etc.), joint workshops with colleagues from partner Universities, guidance by the University department of distance education, support from peers and heads of subject sections (traditional practice at our department), periodical department meetings aiming at solution of urgent organizational and methodological issues etc. Obviously, the majority of the staff representatives managed to adjust to current conditions though the constantly changing epidemic leaves room for further improvement, so additional research after some time might be needed in order to verify and update the conclusions of the study.

Finally, the necessity for extensive introduction of blended teaching forms and methods in the nearest future expressed by the department academic staff coincides with the latest ideas of the academic community and educational authorities. Consequently, further research perspectives can be connected with continuous adaptation and professional activities under the changing conditions of the pandemic as well as providing a broader context to the issue by bringing together similar cases from different higher education institutions.

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Appendix 1. List of questions for online survey

Introduction

1. Your position
2. Your gender
3. Your age
4. What is your work experience?
5. What subject(s) do you teach?
6. What students' age range do you work with?
7. Did you have experience of distance teaching before the COVID-19 pandemic?
8. If you had the experience in distance teaching before the COVID-19 pandemic, describe the ways how you worked in the distance learning mode.
9. Did you take any courses, webinars or workshops on how to organize distance learning which were helpful for teaching your subject? If yes, indicate the courses in the variant "other".

Teaching and learning during the first year of the COVID-19 pandemic (2020)

10. Assess your readiness for the remote learning process at the beginning of the lockdown from 1 to 10 where 1 is "not ready at all" and 10 is "completely ready".
11. Assess your students' digital skills during the first year of the pandemic from 1 to 10 where 1 is "low level" and 10 is "high level"?
12. Assess your digital skills during the first year of the distance learning mode from 1 to 10 where 1 is "low level" and 10 is "high level"?
13. What platforms did you use when you started to work remotely during the lockdown?
14. Do you consider the platform you worked with functional enough for teaching your subjects?
15. In what way did you check home assignments?
16. In what way did your students take tests?
17. In what way did your students take exams?
18. What online resources or apps did you start to use for your subjects teaching after the first term of distance learning?
19. Did you find all the necessary resources to replace face-to-face activities with relevant ones in the online classroom?
20. What traditional offline activities you were not able to use online?
21. What problems with online educational process management did you have at the beginning of lockdown?

Teaching and learning during the current year of the COVID-19 pandemic (2021)

22. Assess your current students' digital skills after two years of the distance learning experience from 1 to 10 where 1 is "low level" and 10 is "high level"?
23. What digital skills have your students developed?
24. Assess your digital skills after two years of the distance learning experience from 1 to 10 where 1 is "low level" and 10 is "high level"?
25. What digital skills have you developed?
26. In what way do you check home assignments at the current time?
27. In what way do your students take tests? In what way do your students take exams?
28. What online resources or apps do you use for your subjects in the current period?
29. What problems with online educational process management do you have at the current time?
30. What online activities can not be used in current blended learning, especially in face-to-face mode?

Reflection and perspectives

31. If distance learning mode goes on, what technologies and skills do you think you need for teaching your subject more efficiently?
32. What should be done for improving your students' digital skills?
33. What benefits do you have from online distance learning?
34. What drawbacks does online distance learning have?
35. What benefits do you have from traditional face-to-face learning?
36. What drawbacks does traditional face-to-face learning have?
37. What way of teaching is more efficient for learning your subject?
38. Assess how your way of teaching distantly differs from traditional face-to-face teaching from 1 to 10 where 1 is "not different at all" and 10 is "totally different".
39. Assess how much you had to change the methodology of teaching your subject from 1 to 10 where 1 is "no changes" and 10 is "complete changes".
40. What way of your subject teaching do you consider the best in the nearest future?
41. I give consent to process the submitted data within the framework of the research

SLOVAK AS A FOREIGN LANGUAGE FOR THE FIRST-YEAR BACHELOR STUDENTS

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Every year, more and more foreign students are enrolled at the Faculty of Manufacturing Technologies in Prešov of the Technical University in Kosice. For this reason, Slovak Language for Foreign Students was introduced as a compulsory subject in the 1st year of bachelor's study. The purpose of the paper was to emphasize the teaching of Slovak as a foreign language and thus help to overcome the problems of foreign students in studying professional subjects. The aim is to provide them with suitable tailor-made study material within the blended form of teaching. Slovak language teachers at the Department of Social Sciences and Humanities used mixed innovative methods and forms of study and tried to increase the language and communication skills of students. The paper compares the results of e-exercises and the final e-test of 140 foreign students from different study programmes in the first year of their bachelor study in the winter semester 2021. Slovak language teachers were able to identify students' strengths and weaknesses based on the results of experimental research. Elimination of the most frequent mistakes will help students to increase the level of technical Slovak language, which they can apply during the study of professional subjects and in future practice in Slovak companies. The university-wide Moodle platform was used for blended learning in teaching Slovak as a foreign language at the Faculty.

Keywords: Slovak as a foreign language; e-exercises; e-test; Moodle, terminology; manufacturing technologies.

Introduction

The Slovak language is the official language of the Slovak Republic. In the Indo-European family of languages, Slovak belongs to the Western branch of Slavic languages, together with Polish, Czech, as well as Lower and Upper Sorbian. Slovak became one of the official languages of the European Union on 1 May 2004. Slovak thus opened the gates to the world more significantly. This addresses a range of foreign applicants, especially those who want it or need to adopt it for personal, study or work reasons. The mobility of people, mainly students, is currently increasing. Interest in the Slovak language is thus growing due to the possibility of obtaining job opportunities in Slovakia or acquiring knowledge by studying at Slovak universities. I state that changes in every society are accompanied by changes in education, new concepts and approaches to teaching individual subjects, including Slovak as a foreign language. Differentiated requirements for teaching Slovak as a foreign language testify to this.

Every year, more and more students come to Slovakia to study mainly from Ukraine on the basis of an international agreement between the Slovak Republic and Ukraine. The teaching of Slovak as a foreign language resulted from the practical needs of these foreign students, with their interest in studying in Slovakia, but also with a low active knowledge of Slovak. The level of knowledge of the Slovak language by Ukrainian students is therefore different. Universities must respond appropriately to the new situation by improving teaching. Also, The Faculty of Manufacturing Technologies (FMT) in Prešov, Technical University (TU) in Košice notes the growing interest in studying from Ukrainian students. A study with a technical focus on study programmes at individual faculties shows that information and communication technologies (ICT) are very helpful in the teaching process at present. Similarly, creating a Slovak as a foreign language course is easier than ever, both technically and in terms of content, as we live in the age of ICT. However, the problem is to sometimes find a suitable textbook for foreign students of the Technical University, which would help them to overcome the initial problems in the study of specialized subjects in individual study programmes.

Literature review

What is the current situation with teaching Slovak as a foreign language? The Slovak national language is intensively researched at the Slovak Academy of Sciences. Specialized workplaces have been established in Slovakia, which deal with the teaching and research of Slovak as a foreign language, such as Studia Academica Slovaca Centre - a centre for Slovak as a Foreign Language at the Comenius University in Bratislava. Interest in study and teaching materials, textbooks, exercise books, translation dictionaries, conversation guides, which are focused on the purposeful development of receptive and productive skills in accordance with the requirements of the Common European Framework of Reference for Languages is

growing with increasing interest in Slovak (Dratva & Buznová, 2007; Kamenárová et al., 2018; Kvapil, 2018; Mešková, 2012; Ondrejovič, 2008; Pekarovičová, 2020; Sedláková et al., 2013; Uličná, 2018).

Web <https://slovake.eu/en> offer materials for self-learning of Slovak language. Students can learn Slovak online for free. Language courses at different levels – A1, A2, B1, B2 are included there. The advantage of the website is multilingualism, which has the potential to effectively satisfy the needs of those interested in Slovak. This portal contains many exercises, tests and dictionaries and is particularly useful for foreigners living in Slovakia, partners in mixed marriages, ethnic Slovaks abroad, Slovakists and Slavists, immigrants, students and tourists.

Many authors emphasize the importance of e-learning in language teaching (also Slovak as a foreign language), which is widespread and very common (Khonamri et al., 2020; Poláková & Klímová, 2021; Shumeiko & Nypadymka, 2021). Similarly, Azarova et al. (2020) state that “teaching Ukrainian as a foreign language requires a competent combination of traditional forms of learning and the possibilities of information technologies” (p. 39). I stress that blended learning (I mean a combination of face-to-face and online classes) was a good choice in teaching and learning Slovak as a foreign language at the FMT. Boelens et al. (2018) point out the fact that the implementation of blended learning in higher education is increasing, often with the aim to offer flexibility in terms of time and place to a diverse student population. They explore strategies for differentiated blended learning in their study. On the other hand, I have to agree with Stradiotova et al. (2021), that “achieving a fair evaluation in virtual space is not easy at all. Teachers also need to keep in mind that some students may use unfair methods” (p. 74). Several authors emphasize the effectiveness of language courses in the Moodle platform not only for students (Lukianenko & Vadaska, 2020; Havelková & Jančařík, 2022), but also for academic staff (Kirkova-Bogdanova, 2021).

Many Slovak universities are preparing study material for foreign students who have decided to study at their university. Kováčová Švecová and Smilley (2020) state that “the Faculty of Education at the Matej Bel University in Banská Bystrica provided methodological assistance in securing the didactic-methodological aspect of Slovak language teaching. One of its goals was to create printed methodological material that would be helpful in the teaching” (p. 5834). On the other hand, Šarvajcová and Štrbová (2021) compared the differences in language teaching in the past and today in the Slovak republic. They emphasized the need to learn languages at every level of education.

Some universities in Slovakia have started to educate their foreign students not only in the field of general Slovak language, but they have also focused on vocabulary and conversation from their field. For example, The Faculty of Arts Pavol Jozef Šafárik University in Košice offers the course Slovak as a Foreign Language for Medical Students to future foreign students at their faculty. They practice communication skills for a medical and dental practice in Slovak language. The similar situation is at the Faculty of Arts University of St. Cyril and Methodius of Trnava, as well as many others.

Similarly, Slovak language teachers at the FMT decided to prepare professional study material for their foreign students to support the teaching of vocational subjects in an effort to help students acquire knowledge in the professional Slovak language as much as possible. Publications Slovak to Support the Teaching of Vocational Subjects I (Gluchmanová, 2019), Slovak to Support the Teaching of Vocational Subjects II (Gluchmanová, 2020) and Slovak Language for Foreign Students (Gluchmanová, 2021) were designed to enable the development of basic communication skills necessary to better master the curriculum in vocational subjects in accordance with the requirements of the Common European Framework of Reference for Languages (CEFR). The aim of the study is to find out the results of e-exercises that foreign students developed during online classes in the compulsory subject Slovak Language for Foreign Students in the winter semester 2021. The results of e-exercises will be compared with the results of the final e-test, which students developed at the end of their study in the winter semester 2021. Another partial goal was to find out what are the most frequent mistakes students make in these e-exercises and e-test. Two hypotheses can be expected: First hypothesis - students achieve better results in the final e-test compared to e-exercises during online classes. Second hypothesis - several spelling and grammatical mistakes in writing as a result of learning Slovak as a foreign language are expected. E-test and e-exercises are designed to cover all language skills. Tasks and assignments in e-exercises contain study material that was intended for study during face-to-face lessons. The e-test summarized the curriculum for the entire winter semester 2021.

Methods

Research design

To meet the stated goal of the study, Slovak language teachers decided to choose research using mixed methods. Quantitative and qualitative data were obtained from selected tasks of Slovak as a foreign language related to the preparation of foreign students for their profession (study organization, university, faculty), as

well as professional study material Economics, Market, Enterprise, Properties of Technical Materials and Technical Documentation. The analysis, evaluation of identified tasks and their feedback provided enough data that were needed to compare the results of e-exercises and e-test in the study programmes Automotive Production Technologies, Computer-Aided Manufacturing Technologies, Industrial Management, Renewable Energy Sources and Smart Technologies in Industry.

Participants

In the first year of bachelor's studies at the Faculty of Manufacturing Technologies in Prešov Technical University of Košice, 140 foreign students took part in the experiment. The research took place in the academic year 2021/2022 in the winter semester (WS) within the compulsory subject Slovak Language for Foreign Students I. The processing of assigned tasks in the e-exercises and the final e-test took place via the Moodle system, on the EnGeRu for Technicians faculty portal. The online exercises and the final test applied language competences (writing, listening & reading). Two Slovak language teachers from the Department of Social Sciences and Humanities prepared the tasks. The sources of authentic professional study texts were didactically modified professional textbooks that foreign students used to study professional subjects. Part of the individual tasks was an issue that students solved with experts in their specialized subjects in the winter semester of 2021.

Procedure

Ukrainian students at the FMT in the 1st year of bachelor's study must complete 2 hours of the Slovak language course for foreign students. Both semesters in this course end with a graded credit. In the literature review, I stated that in Slovakia there are several textbooks for teaching Slovak as a foreign language. We have also started using some publications at the FMT. However, over time, we found out that they were not sufficient for our students because, in addition to general Slovak in the introductory classes, they did not meet the professional needs and requirements imposed on students of manufacturing technologies. This was the reason for preparing different publications, which would be asked by students to help them study professional subjects, especially those from which they have lectures and seminars during the first and second semesters. Thus, Ukrainian students needed a publication that would help them clarify, explain, and add ambiguities in the study of their professional subjects. Therefore, in the winter semester, we added to the publication the knowledge that was part of the lectures and seminars in the compulsory subjects Economics, Technical Materials and Technical Documentation. These professional subjects are compulsory for students of all study programmes in the first year of bachelor's study. They belong to the general basis of the student of manufacturing technologies. This means that students have attended lectures and seminars in these professional subjects in Slovak. At the same time, they also attended Slovak language seminars, where they deepened their curriculum in these professional subjects in the form of various exercises - grammar, translation, to supplement, multiple-choice exercises, matching words and pictures or definitions, odd-one-out exercises, word rearranging exercises, word building, synonyms and antonyms exercises, etc. Slovak language teachers, in cooperation with teachers of vocational subjects, selected appropriate professional texts, which they didactically modified, supplemented with appropriate exercises, with the help of which Ukrainian students better understood the essence of the professional subject. Thus, the study material became interesting for students, as well as the procedures for working with this study material were useful for them.

The concept of Slovak language is therefore based on an innovative and modern didactic principle of blended learning. At the beginning of each semester, Ukrainian students are introduced to the Slovak as a foreign language study portfolio. They have elaborated and determined tasks for each week of the semester. Within each week, they also have information on the content of work during face-to-face and online classes which are distributed by teachers during the 13 weeks of the semester. In addition to the study material provided, the portfolio also contains links to additional independent study and work, demonstrations, and examples of better acquisition of language and communication skills in professional Slovak.

Slovak Language for Foreign Students publication includes a technical Slovak course for foreigners, bachelor's students at the FMT. Individual texts were created gradually as additional study material based on direct specific needs and respecting the real situation in teaching Slovak as a foreign language at the Faculty. It develops the basic communication skills (listening, reading, writing & speaking) needed to better master the curriculum in vocational subjects in accordance with the requirements of the CEFR for level B1. Basic knowledge of Slovak orthography and the grammatical and lexical system of the Slovak language are offered to students.

In the introductory lessons, we place emphasis on acquiring the basic communication skills needed to function successfully in an academic (university) environment, aimed at managing communication in situations related to vocational training (study organization, university, faculty), and later topics related to the application in the future profession are added. The core of the publication consists of lessons that focus on the issues of professional subjects, such as Economics, Technical Materials, Technical Documentation,

Physics, Mathematics, as well as Automotive Production. The principle of continuity and gradual complexity is observed. The publication includes audio and video recordings, which enrich the variety of teaching materials and help to improve the perception of Slovak as a learned language. It also contains clear grammar tables. E-exercises as well as the final e-tests prepared in the Moodle system are its complement. Students use them during online classes. Moodle is one of the popular educational tools that teachers use for blended learning in teaching Slovak as a foreign language at the Faculty.

The individual face-to-face lessons usually have the following structure: exercises on the topic of the lesson, which have a lexical, lexical-grammatical or communicative character; the text of the exercise is designed to develop receptive skills (listening, watching videos, reading comprehension, fast reading to find partial or specific information); exercises and activities designed to develop productive skills (speaking & writing); basic grammar with a link to a website with a more detailed explanation of the issue; terminology on the topic (basic vocabulary, technical terminology & word structure). The texts contain multimedia elements (video, audio, images) linked by hyperlinks. Additional exercises to consolidate the curriculum from each lesson diversify the work with publication. The current online publication is located on the EnGeRu for Technicians website using the university-wide Moodle platform. Slovak language teachers practice a blended way of teaching during the semester. One lesson is face-to-face and the next one is an online class. During a face-to-face lesson, students use the Slovak Language for Foreign Students publication to obtain new information. They consult the issue together with the teacher. Then they clarify grammar, do exercises together or individually. During the online class, students work individually, doing e-exercises in the Moodle system. In the winter semester, they developed e-exercises individually. They covered basic (useful) information, study and student life, the properties of technical materials, crystal lattices, economics and the market, enterprise, as well as technical product documentation. In this case, students are assigned two or more attempts for this type of e-exercises. They are not limited in time and after passing the student has the opportunity for immediate feedback. It is basically a self-education and consolidation of the curriculum, because the content of the e-exercises follows on from the taken and studied a curriculum of the face-to-face lesson. Students thus deepen their professional curriculum in e-exercises in Slovak. We see close cooperation between the professional subject and the subject Slovak Language for Foreign Students. After elaborating and sending the e-tutorial, Slovak language teachers assign students a continuous assessment from 100% -51%. At the same time, these exercises partly prepare them for the final e-test.

At the end of the winter semester, students take the final e-test. The results of them affect their final evaluation. The content of the tasks is almost identical to e-exercises. However, for many students, it seems to be more challenging than e-exercise because there is only one attempt for each student and the time is limited. The content of the final test is based on the target requirements for the knowledge and skills of a graduate of a technical university. The level of difficulty corresponds to level B1 of the CEFR. Teachers incorporate tasks and assignments into the final e-test. The content of the final test consists of the curriculum that students had to study during the winter semester – Economics, Technical Materials and Technical Documentation. They include the following parts: listening to the professional text and its understanding, professional terminology and grammar (using professional language) as well as reading and understanding the professional texts. The final e-test uses short-answer tasks, True/False tasks, completion tasks, tasks focused on the formation of technical words, multiple-choice tasks, etc. Instructions for completing tasks in e-test are formulated in Slovak. If the type of test task requires it, teachers will also present a sample solution.

Data analysis

The analysis of experimental research data for quantitative and qualitative analysis of experimental results was based mainly on statistical and mathematical methods. In addition, the teacher noticed the frequent mistakes made by the students in e-exercises as well as e-test. Data for individual tasks in e-exercises during online classes and the final e-test were evaluated in the Moodle system during the winter semester and at the end of the winter semester 2021. Results and grades of all tasks focused on general information concerning the University, Economics, Market, Enterprise, Properties of Technical Materials and Technical Documentation - were separately summarized for individual study programmes from 140 foreign students in the 1st year of bachelor's study for the winter semester 2021.

Results

All students at the Faculty of Manufacturing Technologies who complete the compulsory subject Slovak Language for Foreign Students in the 1st year of bachelor's study were included in e-exercises during the winter semester and the final e-test at the end of the course in the winter semester 2021. The experimental group of 140 students involved in e-exercises and the final e-test complete the following study programmes: Renewable Energy Sources (RES) – 6 students; Smart Technologies in Industry (STII) – 12 students;

Automotive Production Technologies (APT) – 21 students; Computer-Aided Manufacturing Technologies (CAMT) – 26 students and Industrial Management (IM) – 76 students. Depending on the focus of e-exercises and e-test, the results of students were monitored. The Faculty uses the European Credit Transfer System (ECTS) for evaluation.

E-exercises were divided into three groups according to individual subjects when evaluating the results. The aim of the first group was to clarify technical terminology related to economics, market, market mechanism, demand, supply, profit, economic growth, enterprise, GDP and the like through appropriate language assignments. 140 foreign students completed these kinds of e-exercises. Surprisingly, the result A was achieved by up to 75 students (53.6%), B – 22 students (15.7%), C – 8 students (5.7%), D – 4 students (2.9%), E – 15 students (10.7%) and FX – 16 students (11.4%). These results are generated in the Moodle system. The teacher has the opportunity to look at the mistakes in each completed task. Frequent mistakes in students' written speech were behind the evaluation failure. We tried to find out even the most frequent mistakes in the written speech of Ukrainian students during the e-exercises and the final e-test. These findings primarily serve as a starting point for teachers in the preparation of study material, e-exercises and e-tests in the next semester. During face-to-face lessons, the teacher points out these mistakes so that students can eliminate them in the future. Slovak uses modified Latin orthography. As some Slovak phonemes do not have their own characters, the Slovak alphabet uses diacritical marks. The palatalization of consonants is marked by a “'” symbol (d', t', ň, ľ; also used for graphemes ž, š, č, dž). In Ukrainian, palatalization is not described as such, so it often seems to be a problem for students in e-exercises as well as e-test. The importance of mastering the correct form of the sound realization of Slovak is subsequently shown in the written speech, because mistakes in the oral speech are often transferred to the written work of students.

The aim of the second group of e-exercises was to demonstrate technical materials from the viewpoint of manufacturing engineering. Exercises were focused on descriptions and division of technical materials, definitions of similar words “liatina” (cast iron) and “zliatina” (alloy) and their explanation using current online Slovak dictionaries, internal structure and properties of technical materials, reading and understanding of the professional text on crystal lattices, etc. 136 foreign students took part in the evaluation, 4 were absent. The results for e-exercises were as follows: A – 45 students (33.1%), B – 23 students (16.9%), C – 15 students (11.0%), D – 36 students (26.5%), E – 10 students (7.4%) and FX – 7 students (5.1%). We have found that many students theoretically already know the grammar rules, but they forget to apply them practically in writing. The most problematic ones are mastering the correct use of quantity and accent in Slovak, the use of diphthongs, the use of only one phoneme / i / in Slovak, or correct consonant palatalisation. They used adjectives (adj.) to a greater extent in describing the properties of technical materials. Those in Slovak differ from adverbs (adv.) in quantity. This usually made it difficult for students to distinguish, for example, dobré (adj.) and dobre (adv.), kryštalický (adj.) and kryštalicky (adv.), etc.

The third group consisted of e-exercises focused on technical documentation, types of technical standards, Slovak technical standards, their use and binding, as well as geometric bodies. 138 students participated in e-exercises. The two apologized. The results: A – 35 students (25.4%), B – 26 students (18.8%), C – 24 students (17.4%), D – 31 students (22.5%), E – 22 students (15.9%), FX – 0 students. In the technical documentation, students must be able to write correct numbers and decimal numbers. The problem for many was the written form of the Slovak ô and ä, for example, 5 – päť, 8. – ôsmy, 20 – dvadsať, the spelling ä as a, is rare, e.g. *napat(i)e*. In this area, less common mistakes included writing soft d', t', ň, ľ in words of foreign origin, e.g. *fi[P]m, popu[P]arny, komu[ň]ikacia, faku[P]ta* and the like.

The total results of the final e-test in the winter semester 2021 in the subject Slovak Language for Foreign Students, but also the results within the individual study programmes are shown in Table 1.

The results are average with some shortcomings. Again, surprisingly, compared to e-exercises, where there were relatively more A ratings, in the final e-test there were only 3 A-grades (2.1%). The next results: B – 30 students (21.4%), C – 42 students (30.0%), D – 22 students (15.7%), E – 31 students (22.2%), FX – 12 students (8.6%). Given that more students received an A grade in e-exercises, we expected it to be the same in the e-test. Within the study programmes, the best results were in CAMT study programme. It turns out that mastering the work with ICT also affects the results of the e-test. Students were more flexible and more responsive in processing tasks. Table 1 and the evaluation data in e-exercises show that the students managed the e-exercises better than the e-test. It was easier, less demanding for them, as evidenced by the higher number of mainly A ratings compared to the final e-test. However, it should be borne in mind that e-exercises were not limited in time, had an unlimited number of attempts and feedback was available to them, so if they had few points in the first attempt, they could start a new attempt. They thus learned from their mistakes when they repeated it. At the same time, feedback was helpful in getting a better rating. The first hypothesis that e-exercises will help students to better manage topics and thus achieve better results in the

final e-test has not been confirmed. It turns out that the reason was the different conditions for completing the tasks and perhaps the unfair approach of students in writing e-exercises.

Table 1. Total results of e-test in winter semester 2021

	RES	STiH	APT	CAMT	IM	Total-grades
A (100%-91%)	0	0	0	1	2	3
B (90%-81%)	3	2	2	9	14	30
C (80%-71%)	1	4	6	10	21	42
D (70%-61%)	1	2	4	2	13	22
E (60%-51%)	0	3	7	3	18	31
FX (50%-0%)	1	1	2	0	8	12
Total number of students	6	12	21	25	76	140

However, the second hypothesis was confirmed that several spelling and grammatical mistakes in writing as a result of learning Slovak as a foreign language will be expected (Table 2). This prevented students from achieving better results in the final test. They knew how to process individual tasks better and faster. It is one of the important findings that affects each individual.

Table 2. Example of students' common mistakes in e-exercises

Posteľ je (ja) môj	✗ Posteľ je (ja) moja	✓	Lampa je (Zuzana) Zuzaný	✗ Lampa je (Zuzana) Zuzanina	✓
Počítač je (on) Eho	✗ Počítač je (on) jeho	✓	Kniha je (Róbert) Róbertá	✗ Kniha je (Róbert) Róbertova	✓
Tie sa v procese výroby (meniť) menite	✗ na služby.		Na uspokojovanie potrieb človeka (byť) ste	✗ k dispozícii limitované zdroje.	
Tie sa v procese výroby (meniť) menia	✓ na služby.		Na uspokojovanie potrieb človeka (byť) sú	✓ k dispozícii limitované zdroje.	
Výrobok (mat) ma	✗ hmotnú podobu.		K základným ekonomickým kategóriám (patrit) partia	✗ výrobky a služby.	
Výrobok (mat) má	✓ hmotnú podobu.		K základným ekonomickým kategóriám (patrit) patria	✓ výrobky a služby.	

Teachers had the opportunity to track the most frequent mistakes in Moodle. These mistakes will alert students when processing assignments in the summer semester. Frequent mistakes will help teachers in the preparation of study material in the summer semester. Students will have to learn lessons from the created portfolio of spelling shortcomings. The source of mistakes for almost all those interested in Slovak is the existence of long vocals, diphthongs, syllable sonatas r, f, l, í. Ukrainian does not have long vocals. In Slovak, their important function is the ability to distinguish the meanings of words. Compared to Slovak, Ukrainian has a less extensive vocal system. In Slovak language is the length of vowels by an acute accent (á, é, í, ý, ó, ú). Vowels are not subject to reduction. They are pronounced in full form in each position. Under the influence of an accent (the accented syllable is indicated by a bold), students often extend short vocals, e.g. *na Ukrajíne, pracovať*. In addition to simple vowels and consonants, so-called i-diphthongs (ia, ie, iu) and one u- diphthong (uo, graphically **ô**) occur in the Slovak language. Ukrainian students replace diphthongs with short monophthongs, e.g. *beriem – berem, môžeš – možeš, nie – ne*; or replace semi-vowel from diphthongs with consonants *j* or *v*, e.g. *viem – vjem, mriežka – mrježka, o deviatej – o devjatej, dôležité – dvoležite*; or insert *j* among the components of diphthongs, e.g. *priateľ – prijateľ, bývanie v internáte – byvanije v internate*. In standard Slovak, the accent is on the first syllable of the word and is permanent (not movable). The accent in Ukrainian is free and mobile. Due to its absence in the mother tongue of Ukrainian students, the problem of acquiring quantity appears to be a very demanding, "unnatural" and permanent task.

Discussion

The experimental group of 140 foreign students in the 1st year of bachelor's study at the Faculty of Manufacturing Technologies was a sample of the research in the winter semester of 2021. They were from different study programmes: the largest group of 76 Industrial Management students, 26 Computer-Aided Manufacturing Technologies students; 21 Automotive Production Technologies students, 12 Smart Technologies in Industry students and the smallest group of 6 Renewable Energy Sources students. Slovak Language for Foreign Students is a compulsory subject in the 1st year of study for all Ukrainian students. They were included in e-exercises during online classes as well as the final e-test at the end of the course.

The topics of the exercises and the final test included study material with a focus on Economy, Technical Material as well as Technical Documentation.

Within the methodology of Slovak as a foreign language, we specified the concept, content of the curriculum and the selection of learning forms and methods. The methodology dealt with the creation of teaching materials for the differentiated language training needs of foreign students at the FMT using new forms and environments, such as the Internet and blended learning. In connection with new forms and methods of teaching and the introduction of information technologies into language teaching at the FMT, we have started to apply the already created EnGeRu portal for teaching foreign languages also in the teaching of Slovak as a foreign language. Modern media and the many possibilities of the Internet are also helpful. We have also created the concept of teaching Slovak as a foreign language, which fulfils an informational, educational and promotional function. Poláková & Klímová (2021) state that students can also be interested in Slovak in this way and thus enable mutual communication between the teacher and other course participants even during quarantines and lockdowns. Foreign students have no problem joining a Slovak language lesson from Ukraine as well. The biggest benefit of the Moodle system lies in the offer to develop students' communication skills, as well as the possibility of controlling the outputs in e-exercises in the form of feedback. The educational program via the Internet has become a modern alternative to the didactic manual for the needs of Slovak as a foreign language and the faculty EnGeRu portal is an effective tool for foreign students in creating and developing contact with the Slovak language.

The aim of the subject Slovak Language for Foreign Students is to make Slovak accessible to the largest possible number of foreign students at the FMT also in the form of blended learning, i.e. to offer special topics with the possibility of feedback. The course is focused on the acquisition of basic communication strategies, but also monitors the expansion of knowledge in new professional topics. It allows the student to choose an individual pace, supports the learner's autonomy and at the same time deepens his responsibility for the progress in learning. During online classes, students have the opportunity to test their curriculum through appropriately designed e-exercises with multiple tasks. The teacher selects adequate topics and language phenomena, helps to overcome the initial difficulties and tries to lead students to active learning and acquiring communicative competence as well as consciously overcoming communication barriers. The right forms of study have the potential to increase the positive motivation for learning Slovak. Adherence to the main didactic principles – adequacy, clarity, sequence and expertise in mediating Slovak to foreign students is very important. The independent student work that the teacher prepares for students in the Moodle system is also important in their individual work. Similarly, Kotlovskiy et al. (2020) show that a language portfolio is an effective tool that is used in students' independent work.

I note that at the beginning of their stay in Slovakia, Ukrainian students, outside of school, mostly moved in homogeneous Ukrainian groups. Thus, students began to learn a genetically related language. In the teaching process, we motivate students by pointing out the similarities with their mother tongue, in our case Ukrainian. This contributes to the faster acquisition of communication skills and overcoming the barrier in working with a foreign language. During their studies in Slovakia, students have a great advantage in studying the Slovak language, because they can learn the language in an environment that forces them to communicate not only at the Faculty but also outside it - on the street, in the city, in a store, in a company, etc. They can watch Slovak television, listen to Slovak songs, read Slovak newspapers, magazines, books and professional literature. More communicative types of students acquire certain language skills outside the Faculty and language teaching, which is a certain advantage for them. Although they have a richer vocabulary, they do not yet know the grammar rules. All this was reflected in the online classes in e-exercises and at the end of the winter semester of 2021 in the final test. E-exercises were intended to prepare students for the final test, in which teachers expected better results. The hypothesis was not confirmed here. Students did not achieve better results in the final e-test compared to e-exercises during online classes. However, the results of the research confirmed the second hypothesis. Several spelling and grammatical mistakes in writing as a result of learning Slovak as a foreign language were expected. The absence of language teaching makes language habits difficult to eliminate. This was also one of the reasons for preparing a language publication for foreign students of manufacturing technologies at the FMT, which would eliminate their frequent mistakes.

Education in the Slovak language, especially for foreign students who are not native-speaking, aims to prepare qualified graduates to practice their profession in the field of manufacturing technologies. Otherwise, they may have difficulties in their professional life in terms of knowledge of a professional Slovak language. A similar dilemma was addressed by Bozdoğan and Kasap (2019), which concerned the acquisition of communication competencies and written skills in future engineers. Many authors provide valuable information on how foreign students perceive online education. Chugai and Pawar (2021) state “the findings

of the research show that despite understanding the necessity of studying online, some students are reluctant to accept it fully” (p. 7). My own experience with teaching foreign languages at the FMT is also an inspiration for me in teaching Slovak as a foreign language. By applying blended learning, students also have space for self-study. E-exercises within the Moodle system are a suitable complement to their face-to-face lessons. This teaching model has proved successful not only in our case, but it is also documented by the findings of other authors. Blended learning serves as a means for self-study and doing homework, for preparing practical lessons more effectively as well as for simplifying and improving the quality of students’ training in education (Isayeva et al., 2021; Magos & Georgopapadakou, 2021). Students’ attitudes to blended learning are positive. They have their own workspace and online class facilities, a compelling internet connection, so they can be ready for independent work during online classes. But there are some students who are more comfortable with face-to-face study. However, I suppose that blended education develops the self-realization and self-discipline of many students.

Conclusions

Interest in Slovak as a foreign language is growing from year to year. Teachers of Slovak as a foreign language face difficult tasks: to motivate foreign students to learn the Slovak national language, to focus on a communicative approach to teaching the Slovak language as a foreign language, innovate study programmes, prepare high-quality printed or digitized study materials.

Slovak language teachers at the Department of Natural Sciences & Humanities are trying to apply new technologies, methods and forms in language teaching. They developed the concept of teaching Slovak as a foreign language by implementing the CEFR as well as the didactics of Slovak as a foreign language, applied the model of improving Slovak in the teaching of professional subjects, presented a variety of practices, techniques and strategies aimed at developing receptive and productive speech skills as well as linguistic and intercultural competences. They actively use the Moodle platform, where assignments for students of the compulsory subject Slovak language for foreign students are located. They have thus included a suitable complement to classical teaching in the teaching process, thus supporting innovative modern theories of pedagogy and developing activity, cooperation and self-reflection. They have made available a new e-course in Slovak as a foreign language, where there are 30 e-exercises placed on the EnGeRu website using the university-wide Moodle platform.

Professional study material focused mainly on the issues of professional subjects, such as Economics, Technical Materials, Technical Documentation, Automotive Production, Physics and Mathematics (Vagaská, 2021) are the content of the e-course in Slovak as a foreign language. The created and made available professional study materials and e-courses are literally tailor-made, thus taking into account the specifics of the students’ study programmes. The results of teachers’ work are applied by foreign bachelor students at the Faculty of Manufacturing Technologies within the subject Slovak Language for Foreign Students in the pedagogical process.

I propose to continue experimental research in the summer semester of 2022 due to the diverse results of students in e-exercises and e-test. There was an unconfirmed first hypothesis, that students will achieve better results in the final e-test compared to e-exercises during online classes as well as a confirmed second hypothesis, that several spelling and grammatical mistakes in writing as a result of learning Slovak as a foreign language will be expected. I assume that other factors also played a role in the mixed evaluation results in e-exercises and e-tests: the first year of stay at a foreign university away from home, new foreign environment, language barrier, pandemic situation, new virtual environment during studies, weaker ICT skills, many professional subjects, technical terminology, etc. For this reason, in order to obtain more objective evaluation results, I propose to monitor the results of e-exercises and the final test at the end of the academic year in the summer semester of 2022. It could be interesting to compare the results in the winter and summer semesters. One of the reasons is the fact that the conditions and rules of study in the summer semester are clear to all students involved in the experimental research.

Technical universities should not neglect language training at present, but they should understand it as part of higher education, because the professional help of a teacher is really necessary for the acquisition of a professional language. At present, universities are no longer satisfied with the classical way of teaching. They need to respond to changes in technology and, above all, to the changing behaviours and needs of their students. Communication skills should be properly structured, delivered in precise professional language and scientific style with effective support for audiovisual technology. Digitization is something you cannot run from. Thus, the success of language teaching also depends on whether it can be at the forefront of innovation, flexibly identify trends and link them to students’ needs.

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SPACED VOCABULARY ACQUISITION WHILE INCIDENTAL LISTENING BY ESL UNIVERSITY STUDENTS

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Based on a prior study by Zubenko and Shwedel (2019), the present study investigated the possible effects of repetition (repeated exposure) on the incidental acquisition and retention of 120 English target words by 51 Ukrainian-speaking ESL learners at a Ukrainian university. The hypothesis was that regular repetition of vocabulary while incidental listening would have a significant and positive effect on students' vocabulary acquisition and performance. The paper examines the results of the implementation of spaced repetition of L2 vocabulary strategy of the second-year students who were covering the same vocabulary they learned during the experiment in the previous year. 7 audio lessons were created for increasing the long-term retention of target vocabulary in the students' memory. Participants (N=51) were second-year Ukrainian university students majoring in English as a second language (ESL) at the age of 17-19. They were assigned to three groups, one experimental and two comparison. The optimal result based on the interval of repetitions influences the vocabulary recall and retention. Students who used the spaced L2 vocabulary acquisition strategy (SVAS) outperformed on the End-of-Experiment test 84,1 versus 80,6 for the Comparison group. The results prove that spaced L2 vocabulary acquisition strategy is an efficient part of enriching new vocabulary. The findings indicate that implications of this research are connected with the spaced vocabulary acquisition strategy as an effective tool for learning new lexical units by ESL learners while incidental listening to the audio dictionary lessons. Thus, the study results open up new possibilities for the teachers and learners to consider implementing audio dictionaries and similar tools as assets for efficient vocabulary learning.

Keywords: vocabulary acquisition; spaced learning; incidental listening; audio dictionary; ESL university students.

Introduction

According to the Program of English for Universities / Institutes of Foreign Philology (Program, 2001), at the end of the first year of study, students must use about 1500 English lexical units in oral and written communication. Each next year, the number of learned new English lexical units should increase by 1000 words. It means that students must learn at least 100 words per month. To achieve this objective, instructors focus on improving vocabulary acquisition through different input modes, including reading, writing, speaking, and listening. The logical task is to improve strategies and technologies for effective teaching of English vocabulary for youth and adults. Such strategies help direct learning of new words and facilitate vocabulary instruction.

The primary **goal** of this study was to examine the effects of spaced learning vocabulary while incidental listening on its acquisition among ESL university students.

Literature review

Vocabulary learning has been extensively studied by second language (L2) acquisition scholars in various aspects. In relation to the presented study, the scholarship in the following areas is discussed: (1) incidental L2 vocabulary learning; (2) effects of repetition on vocabulary knowledge; (3) spacing and second language acquisition; (4) spacing and retention.

Incidental L2 vocabulary learning

Incidental vocabulary acquisition is an approach to learning words, and it is described as a process when "learners incidentally gain knowledge of words in small increments, building upon their previous gains through repeated encounters until a word is known" (Webb, 2008, p. 232). The researchers examined L2 incidental vocabulary gain through different input modes: reading (Rott, 1999; Webb, 2007; Chen & Truscott, 2010; Liu & Todd, 2016), writing (Webb & Piasecki, 2018), communication tasks (Newton, 2013), and viewing (Montero Perez et al., 2014; Peters & Webb, 2018).

In addition, L2 incidental vocabulary learning was studied through listening (Brown et al., 2008; Vidal, 2011; van Zeeland & Schmitt, 2013). Vidal (2011) compared the effects of listening and reading on the incidental vocabulary acquisition. The results revealed that the reading subjects made greater vocabulary gains than the listening subjects for all 4 levels of proficiency analyzed. The earlier study by Brown, Waring, and Donkaewbua (2008) examined the rate of English vocabulary acquisition through three input modes of

reading, reading-while-listening, and listening to stories. The study findings demonstrated that “subjects picked up some words from their reading and listening experiences in this study, but far fewer words were picked up in the listening-only mode compared with the other two modes” (Brown et al., 2008, p. 154).

While both studies (Brown et al., 2008; Vidal, 2011) provided a comparative analysis of incidental vocabulary acquisition through reading and listening input modes, a more complete picture of vocabulary gains from listening was provided in the research by van Zeeland and Schmitt (2013). This study investigated L2 learners’ acquisition of 3 vocabulary knowledge dimensions (form recognition, grammar recognition, and meaning recall) in comparison with meaning-based vocabulary tests used in previous listening studies. According to the study results, learners started developing knowledge of a word (form and grammar recognition) long before they acquire the form-meaning link since knowledge of meaning seemed harder to acquire: “It appears that some types of knowledge (i.e. word form) are acquired relatively easily through L2 listening, while others (i.e. meaning) are not” (van Zeeland & Schmitt, 2013, p. 622). In addition, the study by Webb and Chang (2015) emphasized the role of listening used together with extensive reading arguing that “relatively large vocabulary learning gains may occur through reading and listening to multiple texts” (p. 29).

Future research with incidental vocabulary acquisition through listening is necessary to reveal how listening can contribute to effective vocabulary development among L2 learners.

Effects of repetition on vocabulary knowledge

Scholars in the field of word knowledge acquisition emphasize the role of repeated exposure to target words and study effects of such repetition on incidental vocabulary acquisition (Webb, 2007; Chen & Truscott, 2010; Heidari-Shahreza & Tavakoli, 2016). More specifically, Webb’s (2007) study examined how repetition influenced vocabulary acquisition through the number of times the participants, 121 students learning English as a foreign language (EFL) in Japan, encountered target words (TWs). The study findings revealed that repetition affects incidental vocabulary learning: “Learners who encounter an unknown word more times in informative contexts are able to demonstrate significantly larger gains in vocabulary knowledge types than learners who have fewer encounters with an unknown word” (Webb, 2007, p. 64). The study concludes that considerable vocabulary learning gains occur if learners meet unknown words ten times in context; however, “to develop full knowledge of a word more than ten repetitions may be needed” (p. 64).

Chen and Truscott (2010) based their research on Webb’s (2007) study and examined the impact of the number of repetitions with 72 freshmen at two Asian universities. In general, the results of this study supported Webb’s (2007) findings while demonstrating much higher ecological validity of the study. Later, based on Chen and Truscott’s (2010) study, Heidari-Shahreza and Tavakoli (2016) investigated the possible effects of repetition, as one of the factors, on incidental vocabulary acquisition among 90 Persian speaking EFL learners. The study findings indicated that, “in general, increasing the number of exposures to TWs (from one exposure to three or seven) facilitated learners’ development of vocabulary knowledge” (Heidari-Shahreza & Tavakoli, 2016, p. 29). These results concurred with the findings in the studies by Webb (2007) and Chen and Truscott (2010).

In brief, all three studies discussed in this section of the literature review investigated the effects of repetition on incidental vocabulary learning through reading. Further research addressing the effects of repetition through other input modes, including listening, may help determine how and which gains in vocabulary knowledge occur among L2 learners.

Spacing and second language acquisition

Scholars’ interests in L2 vocabulary learning have also been focused on how the temporal distribution of input might impact language development (Bahrick et al., 1993; Rogers, 2017; Rogers & Cheung, 2020; Nakata, 2008; Nakata, 2015; Nakata & Elgort, 2021). Spacing is defined as “the phenomenon of distributed learning conditions, that is when multiple learning episodes are spread over a longer period of time, resulting in better learning and retention than massed conditions, that is, when learning is concentrated into a single intensive session” (Rogers & Cheung, 2020, p. 616).

Nakata (2015) examined the effects of expanding and equal spacing on L2 vocabulary learning with 128 Japanese college students. The study results demonstrated a statistically significant advantage of expanding spacing over equal spacing: “expanding spacing increased learning by 4.6% - 8.5% relative to equal spacing on the receptive posttest” (Nakata, 2015, p. 702). In addition, in this study, the researcher compared the effects of massed (with items repeated 4 times in a row) and spaced (with items also repeated 4 times but after intervening trials of approximately 6 minutes) schedules on L2 vocabulary learning. Posttests conducted a week after the treatment showed that spaced learning was more than twice as effective as massed learning. Nakata and Elgort’s (2021) study examined the effects of spacing on contextual L2

vocabulary learning with Japanese speakers of English by comparing the impact of spaced and massed distributions. The study results showed an advantage of spaced over massed learning. However, since both explicit and tacit vocabulary knowledge was measured, the results revealed that “[a]lthough spaced distribution was significantly more effective than massed distribution on posttests measuring explicit knowledge (meaning-form matching and meaning recall), the present study demonstrated no significant advantage of spaced distribution for the acquisition of tacit knowledge” (Nakata & Elgort, 2021, p. 249). Thus, massing appeared to be as effective as spacing for the acquisition of tacit semantic knowledge.

The recent study by Rogers and Cheung (2020) examined the impact of input spacing on L2 vocabulary learning by 90 young L2 learners in a Hong Kong primary school in an authentic learning context using ecologically valid training procedures. Results of this study indicated that “shorter lags between learning episodes lead to better retention, as measured following a 4-week delay” in contrast to the findings of laboratory-based research conducted previously (p. 629). In other words, the study participants learned L2 vocabulary items presented in a spaced-short manner better than items presented in a spaced-long way. The authors call for more relevant research to investigate the effects of input spacing on the learning of L2 vocabulary.

Spacing and retention

Learning and retention are interconnected relating to the period of the starting of acquisition and vocabulary repetitions and referring to the period after rehearsals where retrievals from the memory occur. Scholars in this field (Cepeda et al., 2006) suggest planning the general organization of the spacing process first before delivering the learning sessions. The scholars concentrated on the effect of study-time intervals on the final retention and found out that there was a huge relationship between interstudy interval (ISI) and retention interval (RI). They realised that there was an importance to lead longitudinal studies to determine the effects of the relationship between the interstudy interval and the retention interval (RI/ISI) in long-term retention.

Skill-related language tasks guide learning but at the same time increase retention. The enhancing of intention depends on the spacing which leads to equivalent learning (Cepeda et al., 2006). Cepeda et al. (2008) gave participants the test of 32 facts across two sessions and after that provided a retention test. In the first learning session, facts were learnt only to one recall and in the second session, facts were studied twice with feedback. The spacing interval between the first and second session ranged from 0 to 105 days. The interval between the second sessions and retention test ranged between 7 and 350 days. The improvement of retention was shown as the spacing interval increased but then decreased. The optimal space was different depending on the retention delay, with the optimal interval being longer for longer retention delays. The researchers were really interested in finding the optimal RI/ISI combination which would resolve the best time to repeat information given at certain retention lags.

Namaziandost et al. (2020) emphasized the effect of massed and spaced instruction on vocabulary recall and retention. The research consisted of 75 participants selected based on the outcomes of an Oxford Quick Placement Test, from three classes among Iranian students. The participants were divided into massed and spaced distributed groups. Having two sessions with pre- and posttests, there was the conclusion that the spaced distribution group made more progress on the immediate posttest. Moreover, when evaluated on the 4-week-delayed posttest (retention test), the results revealed that the spaced group also significantly excelled the massed group in the delayed posttest. The findings suggest that spaced distribution instruction may positively improve EFL learners' long-term vocabulary learning.

As seen from the analyzed scholarship, while there has been extensive research addressing the areas of spaced vocabulary acquisition, retention, and effects of repetition in vocabulary learning, the majority of studies examine the rate of vocabulary acquisition through reading and activities related to this output. Considerably less attention has been paid to other inputs, including listening. This study fills in the current research gap by investigating the possible effects of spaced repetition on L2 vocabulary acquisition through incidental listening to audio dictionary lessons with the target vocabulary. So, the **hypothesis** was that regular repetition of vocabulary while incidental listening would have a significant and positive effect on students' vocabulary acquisition and performance.

Methods

In this research, the quantitative method was used. It involved the processes of collecting, analyzing, interpreting, and writing the results of a study.

Participants

The participants were 51 non-native speakers of English enrolled in an English proficiency program at a university in Ukraine, ranging in age from 18 to 19. In future, they will work as philologists, teachers,

translators, interpreters, etc. The participants were informed of the withdrawing possibility, with no other consequences on their status and they gave their informed consent for participating in the study. The participants were classified within the program as being at a pre-intermediate to intermediate level (B-1) according to the descriptions of CEFR standard and their scores on the course testing at the end of the term. At the beginning of the research, the average English proficiency of each group was assumed to be equal. Four teachers, the coauthors of this research, taught ESL in the experimental and controlled groups of the experiment at Petro Mohyla Black Sea National University.

Instruments and Procedure

The researchers have been running an experiment for two years. It was carried out in accordance with the plan of scientific work of the English philology department and was previously approved by an ethics committee. It was divided into two parts. The first part of this experiment was described in the research “Integrating mobile listening and physical activity to facilitate intentional and incidental vocabulary acquisition” by Zubenko and Shwedel (2019). The authors supported the hypothesis that students’ initial acquisition of vocabulary can be enhanced through incidental regular listening while physically active. At the result of the experiment students who repeated vocabulary regularly performed better on End-of-Unit test than students who did not repeat it and did not use audio vocabulary lessons.

The second part of the study was aimed at examining the results of spaced repetition of L2 vocabulary while incidental listening once a month during the next four months in the second year of study. For this part of the research, second-year students were covering the same vocabulary they learned during the experiment in the previous year. It was the fifth unit covered during their first academic year related to homes and apartments. For this unit 7 audio lessons were created by the first researcher. Lessons were kept short so that students could potentially listen and repeat an audio lesson multiple times on their walk to the dormitory or commute home. Students could access the lessons via the Telegram app on their mobile phones. The hypothesis was that further regular spaced repetition while incidental listening will increase the long-term retention of target vocabulary in the students’ memory. The rationale for this is because prior researches have revealed that even one-week spacing produced superior long-term retention compared to massed learning (Sobel et al., 2011; Zubenko & Shwedel, 2019).

During the first year of study “it was recommended to students that the number of repetitions of each audio vocabulary lesson (from 15 to 20 or more) should be distributed as follows: seven repetitions within the first week; four repetitions in the second week, three in the third, two in the fourth week, and the rest – at any interval in time. During the second year of study students had to repeat the target vocabulary once a month for four months. The general sequence of each lesson was presented in previous research (Zubenko & Shwedel, 2019). The procedure of the first and second parts of the study is shown in Figure 1.

Participants of the second part of the experiment ($N = 51$) were the same students who participated in the first part of this research, which were randomly assigned to three classes, one experimental and two comparison. The difference between the treatment groups was that the experimental group used the “integrating physical activity with listening to vocabulary lessons” strategy (Zubenko & Shwedel, 2019) during the first year of study and continued regular repetition (once a month) of the target L2 vocabulary during the first four months of the second year of study in addition to the traditional learning strategy. The rationale for this is because prior research has revealed that spaced L2 vocabulary acquisition is more useful (Rogers, 2017; Rogers & Cheung, 2020; Nakata, 2008; Nakata, 2015; Nakata & Elgort, 2021). Students had to repeat the target L2 vocabulary once a month at any time convenient for them on the way to the university or a shop, walking in the park or running in the stadium, etc., using “A Thematic Bilingual Audio Dictionary” on their mobile phones and pronounce it aloud. This dictionary was created to be studied by both first- and second-year students and covered vocabulary related to homes and apartments. Seven audio lessons were created. They covered topics such as “materials”, “opinions about housing arrangements”, etc. Each audio vocabulary lesson was about 2 to 8 minutes long. Lessons were kept short so that students could potentially listen and repeat an audio lesson multiple times on their walk to the dormitory or commute home. The repetition was performed in the following sequence: a new word and its phrases were pronounced in the students’ mother tongue and after a short pause their meaning in L2. In addition, the developed audio lessons were supplemented with the same lists of words and phrases only in the text format, so that students had the opportunity, if necessary, to visually see and read the words and expressions they heard. Students could access the lessons via the Telegram app on their mobile phones (t.me/audiodictionary2). The experimental task did not require the students to allocate any of their spare time specifically to this activity since it was to be part of their daily routine. The use of mobile phones allows them to perform listening to an unlimited number of times anywhere without causing fatigue or boredom.

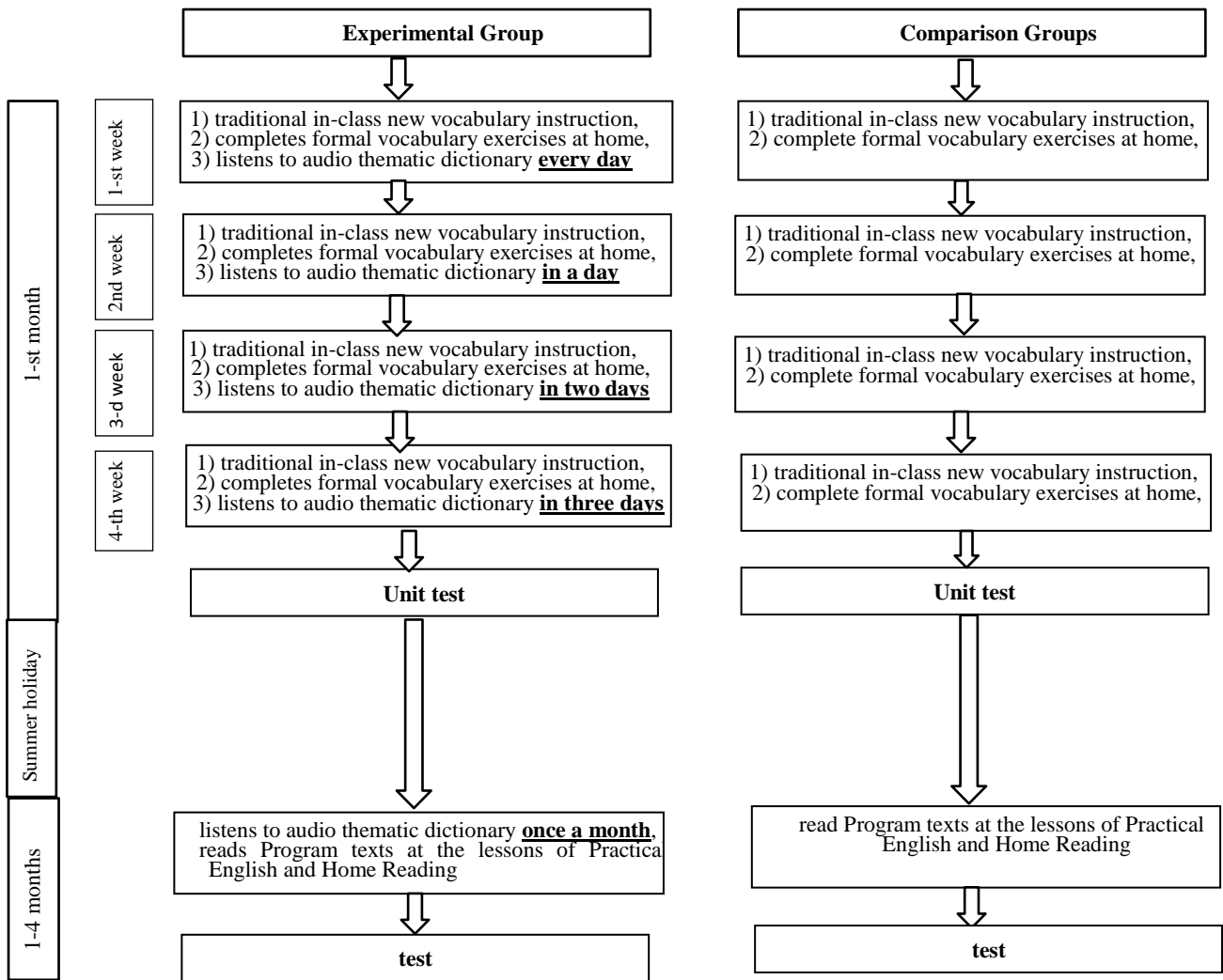


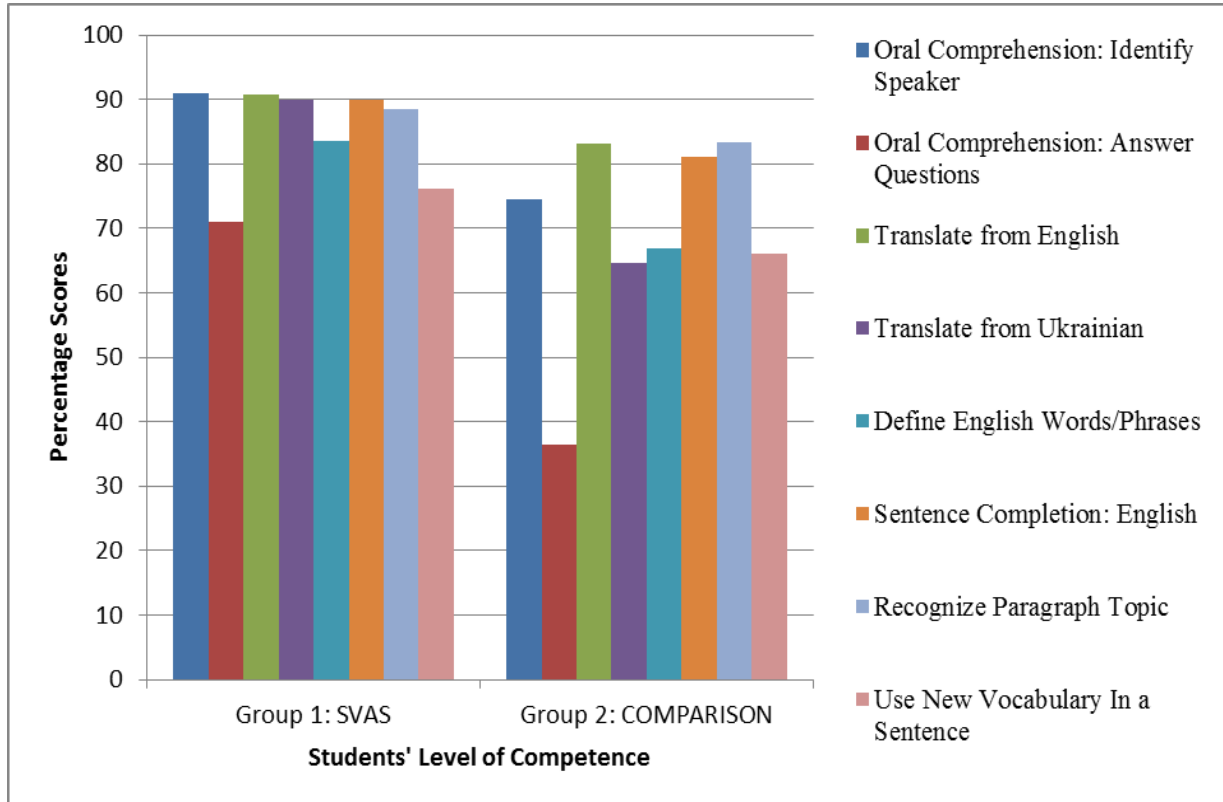
Figure 1. Procedure of the first and second parts of the study.

1. Spaced vocabulary acquisition strategy group: to retain in mind 120 topical words learned during the first part of the experiment students in the experimental group were instructed with the spaced L2 vocabulary acquisition strategy and asked to listen to every audio vocabulary lesson they had on the Telegram app once a month in any sequence beyond the classroom (e.g., while walking in the park, training in the gym or running in the stadium, on the way to the university or a shop, etc.) using their mobile phones and pronounce them aloud. In addition, the students were given the task to write out in their own dictionary the target vocabulary related to homes and apartments that they encountered in texts at Home Reading and Language Practice lessons.

2. Traditional strategy group: to retain in mind 120 topical words learned during the previous term students did not repeat the target L2 vocabulary once a month beyond the classroom, they only repeated it when they encountered the target L2 vocabulary in Home Reading texts or at Language Practice lessons (e.g. translating or defining the meaning of the words, sentence example, etc.). It is necessary to say that the Home Reading curriculum includes fiction texts from classic English and American writers, and target L2 vocabulary related to homes and apartments is encountered there very rare. The Language Practice curriculum in the first term includes such topics as “Leisure”, “Sports”, “Theater”, “Choosing a Career” and target L2 vocabulary related to homes and apartments is used there very rare too. Thus, the students of the control groups during their second year of study met the target vocabulary at the English classes very rarely that does not contribute to its retention in students’ memory.

Data Analysis

Hypothesis #2: Students who used the spaced L2 vocabulary acquisition strategy (SVAS) beyond the classroom will perform better on the End-of-Experiment test than students who do not use this strategy in learning target vocabulary. The End-of-Experiment results are presented in Graph # 1. Students in the SVAS group had a mean score of 84,1 versus 80,6 for the Comparison group. Results from a one-way ANOVA indicate that the test performance difference was statistically significant (see Table #1).



Graph 1. *Experiment Beginning Percentage Scores Parallel*

In accordance with the testees' results of the second stage of the experiment, represented in Graph #1, the students from Group 1: SVAS and Group 2: Comparison have different competence levels. The percentage scores taken from the rubrics of Oral Comprehension (Identify Speaker: 91% – 74,5%; Answer Questions: 71% – 36,5 %; Translate from Ukrainian: 90 % – 60,4 %; Define English Word/Phrases: 83,6 % – 66,9%) within the groups are rather different, because the students of Group 1: SVAS applied the educational approach worked out by the first researcher during the first year of studying English as a foreign language, whereas the Group 2 – did not.

Results

At the end of the second part of the experiment, a comparative analysis of the obtained data was made, utilizing students' percentage scores received in the first part and second part of the experiment. According to the results (see Graph # 1), the data of both the groups after carrying out the test significantly varied. Beyond the second part of the experiment term (see Table # 1), corresponding tests were given to both of the groups' members, and it was found out that the group 1: SVAS, that made use of the approach of space vocabulary acquisition while incidental listening during both of the experiment parts (during 1st and 2nd years of studying English), achieved much better results in contrast to the group 2: Comparison, that did not apply the proposed educational approach and followed a standard and currently accepted methodology offered by the postsecondary institution. Scrutinizing the data, it is no surprise at all that the former of the testees' group outperformed the latter one. In particular, pursuant to rubrics # 1a, 1b, 3, and 4 (see Table # 1), the group SVAS achieved the following percentage scores: 91.8%, 71.4 %, 90, and 83.6 % while the group 2: Comparison was less successful: 74.5%, 36.5%, 64.6%, and 66.9 % respectively. The average standard deviation (see Table 1, the rubric SD) of the assessment in the group 1: SVAS constitutes – 19.8, in the group 2: Comparison – 18.1. Apparently, the SVAS group got ahead of the Comparison group in all the rest of the above-shown rubrics.

Table 1. *End-of-Experiment Test Percentage Scores*

End-of-Experiment Test Components	Maximum of points	Group 1: SVAS			Group 2: Comparison		
		M	SD	n	M	SD	n
Overall Total Score	100	81.1	19.8	14	63.2	18.1	37
Total Score Minus Oral Comprehension Scores	70	58.3	10.3	14	49.5	14	37
1a. Oral Comprehension: Identify Speaker	7	91.8%	2.7%	14	74.5 %	5.1 %	37
1b. Oral Comprehension: Answer Questions	23	71.4%	11.9%	14	36.5 %	8.9 %	37
2. Translate from English	10	90.7%	3.5%	14	83.1 %	3.2 %	37
3. Translate from Ukrainian	10	90 %	1.2 %	14	64.6 %	5.6 %	37
4. Define English Words / Phrases	10	83.6%	4.6%	14	66.9 %	10.1 %	37
5a. Sentence Completion English	5	90 %	2.3%	14	81.1 %	9.1 %	37
5b. Recognize Paragraph Topic	5	88.6 %	2.9%	14	83.3 %	7.1 %	37
6. Use New Vocabulary In a Sentence	30	76.2%	4.6 %	14	66.1 %	5.4 %	37

Thus, the obtained results are quite well-spoken, as the outcomes emphasize the effectiveness of the implementation of the recommended approach of learning new lexemes to the process of language learning.

Discussion

The outcome of the investigation reveals that a spacing educational approach for studying a foreign language leads to more effective performance of lexemes memorizing and bearing in mind by students. The findings justify a so-called spacing effect, introduced into scientific discourse by Ebbinghaus (1885) (*Memory: A Contribution to Experimental Psychology*): “repetitions spaced in time tend to produce stronger memories than repetitions massed closer together in time” (p. 351).

According to Weinstein and Smith (2016), this approach helps students systemize information before taking examinations. In other words, there is no need for a binge studying for students if they were taught to apply a spaced learning technique in advance: for instance, it is far better to study in intervals / spaces during a couple of weeks and spend 7 hours in total than to pass 7 hours at a single sitting before the examination. However, it requires time management and organizational skills from trainees that might be a challenge in a way.

In Casebourne’s research (2015) it is stated that one-off teaching does not lead to information retention too, as the stage of forgetting inevitably comes soon afterwards. It corresponds with the idea of Ebbinghaus about the so-called ‘learning curve’ and ‘forgetting curve’ which are two interlinked processes of information systematization and retention. Therefore, in accordance with Casebourne and Ebbinghaus respectively, in order to store information efficiently one should not endeavour to learn something during a short period of time all at once, but make spaces in the process of learning to diminish the level of forgetting and simplify the process of posterior memorizing.

Introducing a spaced learning program demands presenting learners with the idea of a learning target, as well as explaining the peculiarities of this pedagogical approach (for example, explicating the importance of taking intervals in information storage and emphasizing the essence of presenting the same conceptions over and over again) (Toppino & Cohen, 2010). Importantly, the spaces between repetitions should be ‘tailored’ on the basis of the audience’s needs, priorities, and information content. Aside from that, the educational approach of spaced repetition of information may be quite effectively used in various other spheres dealing with the generalization of concepts and their retrieval.

Thus, the presented study is in accord with the increasing scope of empirical literature focusing on the advantages of spaced learning for educational purposes and the methodology development as well as usage of the very approach in practice. One of the assets of spaced learning ‘path’ is the discovery that it is not merely limited to memorizing and retrieval of some information, but also triggers the processes of acquisition and comprehension. According to conceptions of Bransford and Schwatz (1999), the spaced learning strategy is of value as it forwards the procedure of information synthesis outside a learning situation.

Conclusion

Therefore, the outcomes of the research prove that spaced L2 vocabulary acquisition strategy is an effective tool that helps second language learners (SLL) acquire new lexemes more efficiently and less stressfully at the same time. The captured data affirm the hypothesis that learners who applied the spaced L2 vocabulary acquisition strategy beyond the classroom, indeed, show better results than those who do not make use of this strategy in the process of boosting target vocabulary.

Since the students participating in the experiment in the future will probably work as translators or interpreters, the next step in their training will be to include in the curriculum of EFL listening to professional texts with as much target vocabulary as possible. Such training will help to create skills for recognizing target vocabulary in oral speech and, therefore, its use in professional communication.

The curriculum allocates only about a month to study 100-120 target lexemes. This is significantly very little for the retention of target vocabulary in memory and for mastering speech. A spaced learning strategy allows you to return to the covered topics and repeat them regularly. It might be worth thinking about including in the curriculum of the course “English as a Foreign Language” reiteration of the previously covered topics on a regular basis under the motto "one step forward – two steps back".

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COMMUNICATIVE LANGUAGE TEACHING APPROACH IN PROMOTING THE LINGUISTIC COMPETENCE OF EFL LEARNERS

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The article is devoted to the problems of foreign language education in linguistic universities, namely to promoting the students' linguistic competence, which has been the most urgent in mastering the language as a means of communication. The research prompts the standards to progress the grammatical competence. In the current study, we make a hypothesis that, in contrast to traditional teaching approach, the communicative approach is supposed to be more effective in teaching grammar and helps students to master the language and upgrade their linguistic competence in comprehending and processing spoken and written texts and become professionals after graduating the University. In the experiment two groups of students were involved: one using traditional approach to learning grammar at the classes and the other practising communicative language teaching approach. In total 79 bachelor's degree students of Kyiv National Linguistic University (Ukraine) took a tentative course in grammar. The current study testifies the effectiveness of the communicative approach to studying grammar structures as a way to develop the linguistic competence of students and to help them to acquire proficiency level for achieving success in real communication.

Keywords: foreign language education; linguistic competence; grammatical competence; communicative language teaching.

Introduction

The significance of foreign language competences cannot be overestimated, and with the increased mobility of students as potential workers, there is a crucial need for them to learn to communicate freely and effectively without any boundaries.

Gaining foreign language competence is very important for English foreign language (further on as EFL) students. Fluency in a foreign language can be supported by the substantial knowledge base of lexicon, sentence processing as well as of peculiarities of culture (Cavalheiro, 2016; Christiansen & Chater, 2010; Dale, 2010; Kaur, 2017; Schleef, 2017; Musiienko, 2017). EFL learners should learn to communicate effectively in order to promote mutual respect, cooperation and problem-solving in an increasingly global and multicultural environment (Boyne, 2011; Jenkins, 2015; Li, 2016; Pring, 2012; Shohamy, 2011; Vettorel, 2016; Wierzbicka, 1985). The ability to communicate freely in a foreign language is one of the key competencies of an educated 21st century person (Kasper & Omori, 2010; Roberts & Liszka, 2019). The key competency to be mastered by a student is the ability to speak a foreign language. It is no longer the target of an academic subject as a part of the study of a foreign language in the university curriculum but as a life skill (Gass, 1997; Lopriore, 2016). This innovation prescribes that the University classes have to treat a foreign language not simply as a set of rules, but as a means of communicating for achieving specific goals in everyday life activity. One of the most popular ways to classify life competences is the so-called "Seven Cs", which can also be developed by studying a foreign language. They are: critical thinking (creators), creativity (creating), collaboration, cross-cultural understanding (context), communication (creation), computing (consumption) as well as career and learning self-reliance (curricular) (Lubart, 2018).

In Europe, to test the level of competence an attempt has been made to provide a common framework with the Common European Framework of Reference for Languages (CEFR) by the Council of Europe in 2001. The CEFR forms the basis for defining competences for language learners and for professionals who deal with teaching foreign languages and assessment of language proficiency, with the levels ranging from the most basic A1 to the most advanced C2. Within the CEFR framework, competences are defined both with regard to their structure and to the levels, which may be attained by learners (Glaesser, 2018, p. 70). In terms of its structure, the CEFR comprises two broad areas of competence: general and communicative. The communicative language competences include linguistic, socio-linguistic and pragmatic, each with further subdivisions. The linguistic competence, in its turn, comprises the following competences: lexical, grammatical (which we focus on in our study), semantic, phonological, orthographic and orthoepic (Glaesser, 2018, p. 72), each of which is also fundamental alongside with pragmatic and socio-linguistic competences.

In accordance with the needs of a particular communication process, students should use various grammatical structures to be clearly understood by the partners of communication. It is of vital importance,

therefore, to develop grammatical competence, which is the most valid of all linguistic competences and serves as the basis for other communicative competences in the process of foreign language acquisition. The main approach for teaching grammar chosen at Kyiv National Linguistic University is a descriptive one, which offers a number of advantages, such as real examples, coverage of language variation, preference and frequency parameter and interpretation of context. In contrast to the prescriptive approach, based on prescribing to use of language units in accordance with the norms which are often not followed in spoken and written discourse, descriptive grammar focuses on actual patterns in use and reveals the possible reasons for those patterns (Hengevald & Mackenzie, 2008; Owen, 1993). Rather than a prescriptive grammar with the human factor excluded and the description of the form and meaning of grammatical constructions displayed out of context, descriptive grammar provides the analysis of different registers: conversation, fiction, news, general prose and academic prose in both American and British English. Only the descriptive communicative grammar, including basic topics for investigation (namely, the structure, processing and functioning of major 1) phrase types; 2) clauses; 3) sentences; 4) texts), places the main spotlight on spoken English and shows how the grammar of conversation is adapted to the particular demands of spontaneous spoken interaction. Moreover, we pay considerable attention to one more crucial point – the influence the mother tongue can have on the foreign language studied (Ganuza & Hedman, 2019). To avoid a number of problems the students have much practice in translating and retelling native fiction or academic texts in English. It is not the question whether to teach grammar but how the grammatical knowledge base is to be provided in the process of foreign language studying (Sifakis, 2019; Tsuchiya, 2020).

In recent years the process of teaching grammar was associated with the traditional methods, including learning the numerous rules and endless repetitions of the structures, which in the long run in the course of time revealed to be ineffective in teaching students to communicate. Fluent conversational English as an objective of every student can be gained in the process of language learning by using the communicative approach, introduced by a British linguist D. A. Wilkins and specified in his book titled ‘‘Notional Syllabuses’’ as communicative language teaching (Richards & Rodgers, 2001, p. 154), with the focus on the speech activity in the process of learning. The communicative approach appeared latest embraced many useful elements from other approaches: performing tasks from the Task-Based Language Learning (Bhandari 2020), reproducing words and phrases from the audiolingual approach, making up situations close to reality from the natural approach and working in teams from the cooperative language learning approach (Richards & Rodgers, 2001, p. 178-244).

With a communicative language teaching (CLT, in terms of D. A. Wilkins, or, in other words, communicative grammar) the range of activities is unlimited and focused on: 1) both the content and the expression sides; 2) functionality in the choice and the generating of structures; 3) context and the situation in the learning process; 4) usage of authentic materials; 5) communicative tasks and 6) individualisation in organising the process of learning (Richards & Rodgers, 2001, p. 165).

Aim and hypothesis

In the current study, we make a hypothesis that, in contrast to traditional teaching approach, the communicative approach is supposed to be more effective in teaching grammar and helps students to master the language and upgrade their linguistic competence in comprehending and processing spoken and written texts and become professionals after graduating the University. We also hypothesise that the EFL learners do not have sufficient linguistic competence and are not well skilful in using proper language structures to display different facts and attitudes to them in daily communication until they are provided with a special communicative grammar course. To test the assumption this research was initiated and carried out. The aims of our study were: 1) to compare the efficiency of traditional and communicative approaches in teaching grammar at the university; 2) to progress the linguistic competence of EFL students in using grammatical structures by applying the communicative language teaching approach.

Methods

Research Design

In order to achieve the goals set we initiated a combined research model based on quantitative, statistical, qualitative and descriptive methods. To obtain the objective results quantitative and statistical methods were used, which helped us to process the test results of students in two experimental groups, one using the traditional language teaching (further on as TLT) approach and the other – communicative language teaching (further on as CLT) approach. A qualitative method was designed to examine the students' opinions on the discussion of the lesson's issues. The inquiry in the form of a written questionnaire

was designed to testify to the hypothesis of CLT approach efficacy. A descriptive method was applied for analysing the students' questionnaire and the research results.

Participants

Six academic groups of the 3^d grade students of Kyiv National Linguistic University were engaged in the research. The six academic groups were divided into two experimental groups of students: one experimental group involved three academic groups (39 students), in which grammar was taught by using TLT approach, and correspondingly the other experimental group included three academic groups (40 students), which studied grammar using CLT approach. In total 79 bachelor's degree students of Kyiv National Linguistic University took an experimental course in grammar during the first term in 2019. The participants gave their consent for participating in the experiment. The study included 34 academic hours (2 academic hours a week). The results were assessed on the ABCDEF scale (A=90-100 points, B=89-82 points, C=81-75 points, D=74-66 points, E=65-50 points, F=lower than 50 points).

Instruments and Procedure

In order to check the significance of gaining the linguistic competence, the students of Kyiv National Linguistic University were suggested the experiment, which included three stages: 1) diagnostic: entry testing, aimed to check the initial foreign language learners' linguistic competence 2) training period and 3) checkout: final testing, designed to check the final foreign language learners' linguistic competence.

At the beginning of the learning process at the very first stage, the students were offered an entry test to check the initial foreign language learners' linguistic competence. At the third stage, the students were given a final test to assess their achievements. For both tests, they could get a maximum of 100 scores. The time needed to assess the levels of linguistic competence was about 80 minutes.

Both the diagnostic and final tests 'Testing the linguistic competence of EFL students' were similar in tasks and included three parts. In Part 1 (Word use in the sentence) students were given a series of tasks designed to check the students' competence in using appropriate to the context words in the correct forms and positions. The next tasks of Part 2 (Sentence processing) were designed to clear out the students' ability to create sentences in accordance with the speech situation. The last tasks of Part 3 (Sentence functioning) included three sections: 'Team work', 'Individual work' and 'Discussion'. Section 'Team work' checked the abilities of the students in: 1) making up a dialogue using some of the indicated grammar patterns (different types of questions, comparative structure, have something done, incomplete sentences, one-member or two-member sentences, different communicative types of sentences) in one of the situations suggested; 2) discussing the situation from different topical perspectives using as many grammar patterns as possible; 3) describing the pictures using the listed grammar phenomena. Section 'Individual work' was designed to examine students' skills in presenting soliloquies (stories, essays etc.). Section 'Discussion' included tasks to control the students' communicative capacities in interpreting different issues, on which the students were to share their opinions.

During the second stage – training period – the groups of students were expected to integrate grammar and vocabulary in close to real communicative situations. In both groups, there were studied the same grammar issues on the basis of the vocabulary from the same topics. The methods, though, were quite different.

That group, which was taught grammar applying TLT approach, was given the usual instructions explaining new terms and items, doing spoken and written tasks, writing essays. The teacher acted as the instructor, who controlled all the students' activities.

In the second group with the CLT approach used, students practised nearly all the grammar phenomena in groups. Teachers recommended students to use strategies such as predicting, summarizing, clarifying, questioning, supporting etc. A special accent was laid upon developing teamwork and communication skills. Accordingly, the situations in the tasks were designed to be close to real. EFL students communicated with each other using the studied grammar units within the setting of a certain life problem. The basic aim of the teacher was to give maximum independence to students and to help them only if needed. The full learning period included three periods in the curriculum of grammar: 1) the teacher's presentation of the phenomena (or students' pre-reading), 2) language practice, 3) communicative practice. During the first period, new grammar units were introduced to students, stimulating their participation in the explanation, encouraging them to logically associate new terms or structures with the previous. The assignments of the language practice session were the following: filling in the blanks, transforming the structures, reproducing authentic dialogues, analyzing the contents of the texts. The communicative practice session included such tasks as filling in the missing contents in the sentence or a text, making a choice of the way to solve a problem,

answering open-ended questions, analyzing the structures logically, discussing diagrams/pictures etc., making up dialogues, practising role-plays, recoding the information. The tasks of language and communicative practice motivated students to generate their understanding of the external (formal) features of the studied grammar units and their incorporation into the internal (semantic) cognitive basis and use the studied phenomena in discourse. At the final period during the group activity, students performed different communicative tasks, which represented various life situations. The teacher's role was a bit different in this group: being rather the assistant than the instructor.

For acquiring the linguistic competence during the communicative grammar course EFL learners in the group with CLT approach investigated different language structures in divergent communicative situations through various activities. To achieve the goals set in the research teachers used certain strategies and methods, most of which at the final teaching stage dealt with interactional dynamics (Brooks, 2009; Dobrowolska, Balslev, 2017; Nunan, 1989; Richards & Renandya, 2002). The prevailing was collaborating interactive approach to create a cooperative classroom rather than a competitive one. Students achieved success as a result of paying attention to their peers, asking questions, helping each other. The cooperative strategy as the prevailing in the communicative language teaching approach revealed the most effective collaborating forms of group work: problem-solving, discussion, active learning, writing reports, essays, articles, literary sources studying for finding and commenting the illustrative material, translating, making up dialogues, making presentations, watching and discussing video materials, interactive/participatory role-play and games.

For instance, during the teaching session at the grammar classes while studying particles students practised their use in the form of the game "Guess the activity". This game was based on informing some facts, which students should have interpreted with the implication shown by the appropriate modal word.

Guess game: "Where did students go at the weekend?" aimed at studying the meaning and use of modal words in discourse. Teacher/student gave some clue sentences: *Pete travelled by car. Jane visited her friends. Anna celebrated her birthday.* Students made their assumptions taking into account the value of the particle: 'only' implying contrast, while 'even' – addition. For example: *Only Sam did his home exercise in grammar / Even Sam had a rest from studying.* Having made their supposition students could verify it by checking the teacher's version.

Another practice activity suggested at the grammar classes was paraphrasing the sentence with the modal word or expression by using the correlating modal verb. For instance, in the sentences like "*Perhaps they go/went to the zoo*" the students substituted the modal words for the modal verbs *might/may/could* with the Indefinite or Perfect Infinitives.

After students' finishing communicative based course in English grammar, having practised different activities and having exercised various communicative tasks suggested, it was an easier matter for them to cope with the tasks of the final testing.

After the final stage in order to check the value of the CLT approach, the students from the second group practising this approach were suggested an anonymous questionnaire, which contained several assertions for the respondents to agree or disagree. This questionnaire contained 5 questions with variants of answers that could be chosen by the respondents. All the questions were closed-ended. The time needed to complete the questionnaire was about 5-7 minutes.

Ethical issues

The study was carried out following the main ethical principles, which point to the need to do good and do no harm. The participation of the students in the experiment was completely voluntary. The students were informed about all the details and benefits of the research in advance and gave their informed consent for participating in the experiment.

Data Analysis

The process of data analysis contained three stages. First of all, an entry test (stage 1) was offered to the EFL learners to define the level of their communicative competence. Six levels were singled out for assessing the students' achievements: A (90-100 points), B (82-89 points), C (75-81 points), D (66-74 points), E (50-65 points) and F (lower than 50 points). After the experimental learning final testing (stage 2) was conducted. The results of the two tests were interpreted by the statistical significance tests, namely Mann-Whitney and Wilcoxon non-parametrical pair tests. The purpose of the Mann-Whitney test was to examine and process independent patterns which were entry and final tests within different groups. The Wilcoxon pair test was designed with the dependent samples (the entry test and the final tests within the same group). The significance level of $\alpha = 0.05$ of the tests mentioned above was suggested by

Brownlee (2019), Sharpe, De Veaux, and Velleman (2010). For calculating the data received the statistical program 'Statistica 10' was used. Finally, after the testing period, the questionnaire (stage 3) was suggested to the participants to clarify their attitude toward the CLT approach in the education process at grammar classes. Almost all the respondents involved in the experiment (97%) took part in the questionnaire and mostly 80% of them were sure in answering the questions. A number of participants (75%) testified that using CLT approach was engaging and helpful. All research results are illustrated by tables, presented in the next article section.

Results

The results of the entry testing revealed no remarkable differences in the levels of communication skills in both groups (See Tables 1 and 2). To assess the results the ABCDEF scale was used (A=90-100 points, B=89-82 points, C=81-75 points, D=74-66 points, E=65-50 points, F=lower than 50 points). Both groups had approximately the same percentage of students who achieved grades A: 5.1% and 5%, respectively, B: 7.7% and 7.5% of students, respectively, C: 51.3% and 55 % of students, respectively, D: 28.2 % and 25 % of students, respectively, E: 7.7% and 7.5 % of students, respectively. The final test results testified to the considerable rise in both groups. However, the percentage of students who got high grades (A, B) in the group increased significantly (thrice) compared to the group that used TLT approach (by 15% vs 5.1%, 17.5% vs 5.1% respectively). Also, the percentage of students who received low grades, D and E, decreased more significantly in the group with CLT approach than in the group using TLT approach (by 20 % vs 7.7%, 7.5% vs 2.6%, respectively).

Table 1. *Entry and final test results in the group with TLT approach used in the grammar course*

Grades	Entry test		Final test		Difference
	Number of students (39)	%	Number of students (39)	%	
A	2	5.1	4	10.2	+5.1
B	3	7.7	5	12.8	+5.1
C	20	51.3	18	46.2	-5.1
D	11	28.2	8	20.5	-7.7
E	3	7.7	4	10.3	-2.6

Table 2. *Entry and final test results in the group with CLT approach used in the grammar course*

Grades	Entry test		Final test		Difference
	Number of students (40)	%	Number of students (40)	%	
A	2	5	8	20	+15
B	3	7.5	10	25	+17.5
C	22	55	20	50	-5
D	10	25	2	5	-20
E	3	7.5	-	-	-7.5

The entry and final tests, which included communicative tasks (one part being focused on checking the sentence generating skills, the other – on sentence using skills), were given to both groups of students. Carrying out the research we calculated the p-value to find out the existence of statistical significance, which is usually represented as a p-value between 0 and 1. To obtain p-value index the results of the whole group were evaluated not a particular student's one. The lower p-value indicates that the null hypothesis should be disputed (McLeod 2019). The statistics results are demonstrated in the table 3.

The research result showed that the students of both groups improved their final points, though, in the group, in which CLT approach was used, much better results both in sentence generating and in sentence using were revealed. It could be verified by comparing the figures. The outcomes of sentence generating in the group with the CLT approach show that 14 students out of 40 raised their grades in contrast to 5 out of 39 students from the group in which TLT approach was used. Much better results are also achieved in the sentence using part of the final testing: 15 students of 40 in the group with the CLT approach improved their level in comparison to 6 out of 39 students in the group in which TLT approach was used. It is notable that in the group with the CLT approach p-value indices are lower than the significance level of 0.05, as there are statistically essential distinctions between the entry test and the final test results both for sentence generating

and sentence using. The p-value for processing sentence generating in the group with the CLT approach equals 0,000020, thus it testifies great results. Concerning the sentence using skills in the group with the CLT approach – the result is also improved and is quite high – p-value equals 0.000070 which is slightly worse than for sentence generating skills. To sum up, the students from the group with the CLT approach improved a lot, mastering both sentence generating and sentence using skills. That means their linguistic competence was remarkably promoted. In the group in which TLT approach was used, in contrast, the p-value indicators are a little higher than the significance level of 0.05, what means that considerably lower results are obtained. Students increased their sentence generating and sentence using skills, though slightly. So, it became evident from the test results difference that the students after the CLT course demonstrated the efficiency of its integration into teaching EFL learners.

Table 3. *The results of the entry and final tests in both experimental groups*

Group	Points	Communicative skills					
		Sentence generating			Sentence using		
		Entry test results %	Final tests results %	p-value	Entry test results %	Fnal tests results %	p-value
With TLT approach used	90-100	6.1	11.2	0.051320	5.1	10.2	0.051960
	82-89	6.7	11.8		7.7	12.8	
	75-81	50.3	44.2		51.3	46.2	
	66-74	30.2	23.5		28.2	20.5	
	50-65	6.7	9.3		7.7	10.3	
With CLT approach used	90-100	4	18	0.000020	5	20	0.000070
	82-89	8.5	27		7.5	25	
	75-81	50	45		55	50	
	66-74	32	10		25	5	
	50-65	5.5	-		7.5	-	

After the testing period, the questionnaire was suggested to the participants to clarify their attitude toward the CLT approach used in the education process at grammar classes. Data analysis results of the questionnaire are presented in Table 4 below. It is clear, that a large number of students – 78 % – support the CLT approach in the process of learning, 75 % of students consider CLT approach to be engaging in the process of learning and rather helpful to obtain communicative skills and improving their level of English.

Table 4. *Questionnaire results about students' opinion on learning process based on CLT approach*

Assertion	Highly agree (%)	Agree (%)	Not sure (%)	Disagree (%)	Highly disagree (%)
CLT approach in the process of learning is quite effective	25	53	12	8	2
CLT approach is more engaging than other approaches to learning	16	59	15	7	3
CLT approach can improve my communicative skills	10	66	14	4	6
CLT approach can improve my level of English	13	62	16	5	4
I would rather learn by TLT approach	5	10	25	40	20

Considering the communicative skills, the most of students (76%) are sure that CLT approach can improve their communication competence. Due to the interview with the students, it can be indicated that they increased the level of their communicative skills after the application of CLT approach. Besides CLT approach was effective not only for the practice of speaking, but they occurred to be very helpful in many ways including listening skills, increasing vocabulary, especially such lexical units as slang, idioms, and academic words, widening the general outlook in terms of customs and cultural traditions of the English speaking countries.

Discussion

The results showed that the students taught with CLT approach used at the grammar classes greatly promoted their linguistic competence and had higher results than those who were taught by applying TLT approach. It can be clearly seen from the data provided in the tables and their interpretations above. Accordingly, the objectives set in this research (to compare the efficiency of traditional and communicative approaches in teaching grammar at the university and to progress the linguistic competence of EFL students in using grammatical structures by applying the communicative language teaching approach) were successfully achieved.

The findings, therefore, have proved our hypotheses: 1) that the communicative language teaching approach is more effective than the traditional language teaching approach in the process of teaching grammar to EFL students and in helping them to develop their communicative competence, 2) the EFL learners do not have sufficient linguistic competence and are not well skilful in using proper language structures to display different facts and attitudes to them in daily communication until they are provided with a special communicative grammar course.

Giving EFL learners the fundamental grammar experience with guidelines to proper language use for communicating effectively in a cooperative way in a particular communicative situation by using CLT approach gave the possibility to promote their linguistic competence. To develop the grammatical competence during the teaching period in the University grammar course with the communicative based learning EFL learners practised divergent forms of studying: online comprehension, reading comprehension, debates, problem-solving, role-play, games, team-work, competition, testing, writing essays, discourse analysis, speaking on a social topic (food, drinks, people, interest, jobs, holidays, hotels, films, music, jokes, restaurants, books, economy, clothes, weather etc.), pair conversation, which, in terms of the communicative grammar, consider the language as it is used in real communication between native speakers.

To train the grammatical competence of students as EFL learners the teachers tried to make the process of learning informative and engaging, to some extent even entertaining, and practised a variety of forms of instruction: direct, indirect, independent, experiential, independent and interactive what provided the students' developing their communicative competence.

This research supports the importance of the studied issue and the achieved results reflect the EFL learners' variation in their diligence during the studying. The experiment revealed some handicaps students faced in the learning process. It appeared difficult for some of the students to use grammar structures in different situations. Some students didn't have well-developed skills in using grammar forms. The number of students tended to use the structures of sentences, which didn't look authentic. The figures presenting the elementary level (E) of grammatical competence can be partially explained by the students' lack of motivation to study and missing a number of grammar classes. Even if working out all the missed classes, the students were not able to gain the proper level of the grammatical competence. Concerning other figures reflecting the dynamic move to a higher grammar competence level, they might have been much better. The University course of grammar for EFL learners is considered to be supported by the grammatical knowledge base of the native language, which was sometimes very poor. What is more, the general tendency of students' attitude to the process of learning is such: they demonstrate lower motivation at the beginning (during the first two years of study), but having moved to the third course they become more initiative, more creative and more engaged in the studying activity. This interest can be easily explained by their solid knowledge base, which gives them the full support for further progress.

The results of this experimental investigation are similar to those gained in the research carried out by Bhandari (2020), Bazylyak & Cherkhava (2017). We support the idea of L. Bhandari (2020), who states that using communicative tasks in the classroom changes the grammar practice routines through which many learners have previously failed to learn to communicate (p. 4). We also share the opinion of Bazylyak and Cherkhava (2017) that the main objective of the communicative approach is to provide the students with input and promote interaction between them (p. 345), because interaction, as the basic issue in the communicative tasks, is important for language acquisition and within the communicative approach language is used for communication and is learned through communication.

These research conclusions are in the line with other investigations (Klein & Manning, 2005; Bhandari, 2020; Roberts & Liszka, 2019) devoted to communicative competence. We agree with the scientists, we referred to above, that by developing communicative competence students become more confident in their class and everyday life activities. This study proceeds the initiative of the previous investigation concerned with the study of the level and the ways of improving the pragmatic competence of EFL students (Berezenko, 2019) and confirms other researchers' (Chernenko, 2019; Kubots, 2010; Turnbull, 2017; Shleef,

2017; Zhu, 2019) ideas that pragmatic and cultural knowledge are crucial alongside with the grammatical competence for the process of teaching EFL students the basics in their mastering the language.

Limitations

It is appropriate to emphasise that an approach to evaluating the results of the study was limited as only one institution was involved in the experiment, as well as the fact that solely third-year students' achievements were assessed.

Conclusions

The research testified the fact that after a special training grammar course the EFL students succeeded in processing and developing their linguistic competence, the lack of which can block the communicative process at its very initial stage.

Judging by the results presented, we can make a conclusion that the communicative language teaching approach applied in the research helped to promote the EFL students' linguistic competence in using grammatical structures appropriate to the communicative situations and as a result to maintain successful communication in different life situations. It proved to be more effective than the traditional language teaching approach.

Accordingly, teachers of EFL learners should focus on the practical application of the knowledge base in communication and process communicative competences of students at each university class. The promotion of grammatical competence as the basic one within the set included into the communicative competence is an integral part of the foreign language acquisition in the University course. To achieve this goal there are still perspectives for further research of other types of communicative or socio-cultural competences all in particular and together aimed at students' progressing in using language units in different speech situations.

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WRITTEN AND ORAL CODESWITCHING PREVALENCE: FUNCTIONS AND DIDACTIC IMPLICATIONS IN ESL CONTEXT

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Despite longitudinal studies conducted along written and oral codeswitching linguistic prevalence considering ESL context, none of the ensuing studies has attempted to propose a theory delineating the preceding occurrence committed by L2 interlocutors which add to the novelty aspect of this paper. The quantitative analysis redounds to the formation of philosophical data on the constructive aspects associated to codeswitching occurrence in ESL classroom despite its adverse impressions in the context of pedagogy. This paper predominantly explores codeswitching from L1 to L2 in a multifaceted milieu as it has hidden purposes and functions along the channels of communication. For instance, codeswitching for equivalence (*Mam the villain in the story is "masama", because uhmmm.... She done bad thing to the main character*). After careful scrutiny, the study emphasizes that the highlighted linguistic prevalence should uncover its positive aspects for communicative competence sake. The paramount goal must always be the understanding of the text and glitches along the channels of communication must be deemed secondary. This practice has functions and purposes in the context of the interlocutors of the language itself. They do such for clarity, emphasis, emotion expression, and equivalence for the most part. The role of ESL teachers counts a lot to bring the students to a high level of communicative competence. L1 shall serve as a bridge to reach L2 fluency.

Keywords: codeswitching; communicative competence; ESL context; grounded theory; 3Cs theory.

Introduction

There are ensuing arguments globally by scholars on how practically L1 influences L2 acquisition such as the studies of Bingjun (2013); De La Fuente & Goldenberg (2020); and Alghazo (2018). The former accentuates that function of L1 in L2 learning process comprises 6 diverse components: (1) with the behavioural theory to elucidate Second Language Acquisition (SLA) concentrating on the purpose of conditions; (2) to illuminate the interaction of SLA, highlighting communication and social prerequisites; (3) to expound the SLA with the cognitive theory, accentuating the logic and thinking procedures; (4) with the nativist theory or biological theory to explicate SLA, underscoring the inherent genetic capacity; (5) to accentuate the learner and learning strategies. (6) L1 transfer in L2 acquisition of phonetics, lexicology, syntax, semantics as well as pragmatics. De La Fuente & Goldenberg (2020) explored whether L2 classroom instruction that integrates a principled methodology into the use of L1 by students and teachers has an impact on beginning learners' progress of L2 speaking and writing adeptness as likened to L2 instruction only. Findings reveal that courses under both conditions spurred improvements in speaking and writing. As for Alghazo (2018), the value of using the L1 as a teaching resource may be explicitly relayed to L2 teachers in training courses and workshops in order to equip teachers with the required skills to successfully undertake a teaching assignment. Her findings may help increase the awareness of L2 teachers and enable them to benefit from strategic L1 usage as another valuable teaching method when providing L2 instruction, and, at the same time, to be cognizant of how to avoid any negative consequences stemming from L1 overuse. To supplement, Storch & Wigglesworth (2003) underscores that the use of learners' L1 in L2 education has been a controversial issue. Language learners are usually discouraged to use their L1 during interactions and classroom activities with the belief of less likelihood of successful L2 acquisition. Be that as it may, Iswati et. al. (2018) postulate that the role of L1 both by teachers and learners in English classrooms at tertiary level is essential. This is vouched by the findings that 70% of the teachers stated that L1 should be used in their class whilst 87% of students postulated that L1 should be used during discussion of difficult concepts of L2. L1 likewise lessens learners' affective filter as it will make them more secure, comfortable, and eventually confident to use the target language.

In the Philippines, the Department of Education issued DepEd Order No. 36 s. 2006 otherwise known as the "Implementing Rules and Regulations on Executive Order 210 or Establishing the Policy to Strengthen

the use of the English Language as medium of instruction (MOI) in the Education System”. Pursuant to this order, teachers are hereby mandated to teach English as a second language starting with Grade I. Similarly, as provided for in the 2002 Basic Education Curriculum, English shall be used as the medium of instruction for English, Mathematics, and Science starting at Grade III (Estremera, 2017a). Apparently expressed in the above mandate that, English language shall be used as the primary medium of instruction in all public and private schools at the secondary level, including those established as laboratory and/or experimental schools, and vocational/technical institutions. As the primary medium of instruction, the percentage of time allotment for learning areas conducted in the English language should not be less than 70% of the total time allotment for all learning areas in all grade levels.

However, pursuant to Section 16 of Republic Act No. 10533, titled “An Act Increasing the Philippine Basic Education System by Strengthening Its Curriculum and Adding the Number of Years for Basic Education, Appropriating Funds therefor and for Other Purposes,” dubbed “Enhanced Basic Education Act of 2013,”. The K-12 curriculum shall ensure proficiency in Filipino and in English, on a condition that the first and dominant language of the students shall serve as the essential language of education. As for Kindergarten pupils and the first three years of elementary education, instruction, teaching materials and assessment shall be in the regional or native language of learners. DepEd shall therefore establish a mother language transition program. Be that as it may, the second language (L2) to the subsequent languages of the curriculum whenever deemed appropriate to the language capacity and needs of learners from Grade 4 to Grade 6 shall be gradually introduced (Estremera, 2017b; Gempeso & Mendez, 2021; Metila et. al., 2017). Consequently, Filipino and English shall be gradually introduced as languages and can become the primary languages of instruction at the secondary level. In addition, the curriculum shall adhere to the principles and framework of Mother Tongue – Based Multilingual Education (MTB-MLE) which starts from where the learners are and from what they already know proceeding from the known to the unknown; instructional materials and capable teachers to implement the MTB-MLE curriculum shall be available. For this purpose, MTB-MLE refers to formal or non-formal education in which in the classroom the learner’s mother tongue and additional languages are used in the classroom (Caffery et. al., 2014). These conflicting issuances by the Department of Education pose ballooning problems and confusion to teachers and even the students. Teachers seem to have been groping in the dark unsure of what really is the right medium to use in the classroom setting to make sure learning of concepts is easier and more practical. Although the latest issue is alongside educational transformation from a 10-year basic education and now already a 12-year system, it somehow opens the door for the use of both the vernacular and the target language (L2). This is where codeswitching of students from vernacular/Filipino to the target language or *vice versa* is prevalent (Gempeso & Mendez, 2021). Having delineated the preceding premises, this study sheds light on the reasons and functions of written and oral codeswitching prevalence in the ESL context. This academic piece likewise envisioned to highlight some didactic implications for ESL teachers to consider in their pedagogical practices in order to increase L2 fluency among learners by degrees.

Research Questions (RQ's) & Hypotheses (H_o)

The negative impressions associated with codeswitching occurrence in the classroom setting rather than its concealed semantic features are usually the ones that are instilled onto the minds of the hearers of information. This gap in communication process is what the present study hopes to fill by highlighting its positive aspects. In effect, sociolinguists who had explored codeswitching specified that factors such as extra-linguistic structures such as topic, setting, relationships between participants, community norms and values, as well as societal, political and ideological developments, are linguistic factors that influenced speakers’ choice of language in *tête-à-tête* (Albarillo, 2018; Suurmeijer et. al, 2020). Thus, researchers were spurred to conduct a study on the prevalence of code-switching among Grade VI pupils. Conversely, the long term purpose of this academic pursuit is to help the pupil respondents improve their academic performance by determining the frequency of use and knowing the purposes of codeswitching occurrence among the respondents. In detail, this academic undertaking envisioned to provide philosophical answers to the framed **research questions**:

- How prevalent is codeswitching on subjects with English as a medium of instruction?
- Is there a significant relationship between written and oral codeswitching prevalence?
- What new language theory may be formulated to delineate the purpose of code-switching in SLA?

For the preceding research questions (RQ's), the following hypotheses were proposed:

- The prevalence of codeswitching in written and in oral discourses does not vary.
- There is no significant relationship between written and oral codeswitching prevalence.
- A new language theory may be formulated to delineate the purpose of codeswitching among the respondents.

Methods

Research design

The current paper conforms to the views of De Belen (2015) and Snyder (2019) who underscore methodology as a philosophy of the research process because it includes the assumption and values that serve as the justification for research and the standards or criteria the researcher uses for understanding data and reaching conclusions; whereas a method would include the rationale and principles of research, and the philosophical underpinnings that underlie a particular pursuit. Thus, this study fittingly considered the descriptive-correlational method of research. It is considered a descriptive study insofar as, in the process, it elucidated the frequency of use and determined the purposes behind code-switching occurrence. This is, conversely, correlational since the researcher thoroughly correlated the occurrence of transcribed responses both in oral and written discourse. The population may be defined as a group of classrooms, schools, or even facilities. Hence, the chief sources of data for this undertaking are the 18 pupils chosen purposively. Scholtz (2021) delineates purposive sampling as determining the target population, those to be involved in the study. The respondents are chosen on the bases of their knowledge and the information desired. The researchers, for the most part, considered purposive sampling to ensure a high validity gauge of the pursuit.

Participants

Besides, the highlighted chosen participants represent 80% of performing pupils of the class who are active during class recitations and can somehow write paragraphs. The rest of the students might not be able to contribute to this pursuit since they have difficulty in both oral and written communication. The respondents represent 80% of the class which surpassed the ideal 20% sampling to ensure high validity as highlighted in figure 1 developed by the authors. There are 22 pupils in the class, 6 females and 16 males. The main instrument employed by the researcher was the transcribed/recorded oral recitation of the respondents and the written essays of the students. The subjects of the study were informed that they will be under research; however, they were not informed that they are allowed to switch codes whenever expressing their views.

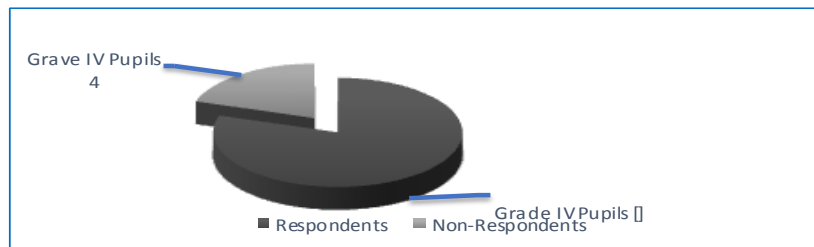


Figure 1: Purposive selection of participants

Data collection

Codeswitching, in effect, is a normal leeway given to students for the sake of airing their views since they are not that exposed to L2 much and are still at the coping level (Mangila, 2018). The data gathering commenced on October 8 to 12, 2018 two weeks prior to the second quarter examinations. The subjects that were observed are Music, Arts, Physical Education and Health (MAPEH) [8:00-8:40], Technology and Home Economics (TLE) [8:40-9:30], Mathematics (9:30-10:20), English (10:20-11:30), and Science (1:50-2:40). These subjects are taught using English as a medium where students would resort to switching codes whenever they do not know the English term to utter. Ethics in research must have been observed in order to circumvent future plights. Hence, parents of the minor respondents were notified through a permit letter that their children will be the subject of study. The school head, in effect, was informed thru a communication of the purposes of the conduct of research. In the process of research, the data and information that were taken from the respondents had been held with utmost confidentiality and anonymity.

Ethical Issues

Ensuing research ethics and rules had also been aptly observed by the researchers to circumvent future problems relative to plagiarism, intellectual dishonesty and the like (Allmark, 2002; Artal & Rubenfeld,

2017). Cited researchers and authors can be verified as highlighted in the succeeding pages. This academic undertaking had likewise been undertaken to respond to DepEd's call for research amplification and also methodically finding philosophical answers to the issues met by teachers relative to the implementation of K to 12 curriculum and is not categorically divulging the incompetence of the respondents or the low academic performance of pupils featured in this masterpiece.

Data Analysis

The quantitative process of analyzing data was primarily exploited in this research. Besides, descriptive statistics which involve mean, frequency, and percentage had likewise been exploited to satisfy question no.1. Further, a textual analysis was deemed necessary to demarcate written codeswitching prevalence by the ESL pupil participants. However, in order to establish the correlation between two variables (oral and written), correlation coefficient and covariance were adopted to analyze the perceived relationships. For question no.3, researchers opted to make a thematic analysis of responses. Tabular and graphical presentations make this pursuit informative and aesthetic for future readers' sake, as well as easy analysis of linguistic data accentuated.

Results

The data gathered from documentation, observations, and transcriptions had been categorized into themes in order to observe parallelism of ideas. Therefrom codes were assigned to the recorded responses of the participants. The chief purpose of this paper is to illuminate the grey areas on the negative impressions of codeswitching in the context of ESL. To provide philosophical answers to the prevailing research questions, both the written and oral communications occurrences were looked into carefully represented by the graphs and figures. Hence, portrayed in table 1 is the frequency of codeswitching on subjects with English as a medium of instruction. As observed by the researcher during the first day, pupils are switching codes both in oral and in written discourse. This is proven by a frequency of 3 in oral and 4 based on their written output. As highlighted, the frequency of 7 tantamount to 10% for the second day in oral, and 3 or 27% in written denotes a practice of codeswitching by the respondents also. This continues until the 5th day of data gathering by the researcher. In fact, the frequencies and percentages for the last three days show similar patterns.

Table 1: Codeswitching Prevalence per Subject Area With English a Medium

DAYS	MAPEH				TLE				MATHEMATICS				ENGLISH				SCIENCE			
	X	%	Y	%	X	%	Y	%	X	%	Y	%	X	%	Y	%	X	%	Y	%
1 st Day (10/8/18)	3	10	4	36	2	12	1	14	3	38	1	33	4	13	4	21	3	11	2	33
2 nd Day (10/9/18)	7	25	3	27	8	47	2	29	2	25	1	33	8	25	6	31	7	26	1	17
3 rd Day (10/10/18)	8	29	1	9	0	0	1	14	1	12	0	0	9	28	4	21	8	30	0	0
4 th Day (10/11/18)	5	18	2	18	3	18	0	0	0	0	0	0	5	15	3	16	4	15	2	33
5 th Day (10/12/18)	5	18	1	9	4	23	3	3	2-	25	1	33	6	19	2	11	5	8	1	17
Σ	28	100	11	100	17	100	7	100	8	100	3	100	32	100	19	100	27	100	6	100
Σ/n	5.6	20	2.2	20	3.4	20	1.4	20	1.6	20	1	20	6.2	20	3.8	20	5.4	20	1.2	20

Legend: X= Oral; Y= Written

Respondents do the codeswitching either from vernacular/Filipino to English or *vice versa* to participate in the class discussions. The Σ/n values of 5.6 for oral and 2.2 for written imply that respondents are switching codes more frequently in oral discourse than in written. For Technology and Home Economics (TLE), it reveals that respondents obtained the highest frequency of 8 for oral codeswitching while it earned a frequency of 2 or 29% for written. Interestingly, there was no occurrence of switching codes in written discourse on the third day of study. Mathematics by nature largely involves numbers to solve such as rational numbers, integers etc. insofar as the Curriculum Guide is concerned, pupils are expected to create their own word problems based on the lesson discussed. Teachers likewise use the higher-order-thinking-skills (HOTS) questions to bridge the students to the right answer and concept. There has still been an interaction, apparently, between and among students and teachers which may serve as a venue for code-switching for the sake of communication. As noted based on the tallied responses, Mathematics obtained the least occurrences based on Σ/n value of 1.6 in oral and .6 in written discourse due possibly to its

being highly numerical. English as opposed to Mathematics usually offers a lot of opportunities for communicative competence of the learners. Teachers, on the other hand, may initiate debate, role-play, etc. which pave the way for communicative development among the students. As highlighted in the above table, both oral and written discourse obtained the highest occurrences of code-switching as vouched by \sum/n values of 6.8 and 3.4. This data presupposes that the very essence of communication was achieved since respondents are able to express their feelings, thoughts, and emotions relative to the lesson considering sentence structure as merely trivial and secondary. This is supported by the \sum/n values of 5.4 and 1.2 for both means of communication. This is indicative of minimal communicative activities during the conduct of the study. Pupils are performing experiments that do not require much communication and, the question and answer portion. The noted switching of codes is palpable during the output presentation where pupils ought to defend the findings of their experiments. This recorded conversation goes for the oral code-switching for the most part.

Clearly presented in the hereunder developed graph by the authors is the correlation between the oral and written speech variables based on \sum/n values. Coming up with a correlation between the two variables has been a *sine qua non* as this could serve as a basis for providing more meaningful communicative activities toward the linguistics competence without having to set aside the L1 of the learners. This will also serve as a reminder for both teachers and administrators relative to the boon side of switching codes in the essence of communication. As noted, oral codeswitching has obtained \sum/n values of 5.6, 3.4, 1.6, 6.2, and 5.4 respectively. Conversely, inasmuch as written responses are concerned, it gathered \sum/n values of 2.2, 1.4, .6, 3.8, and 1.2. The correlation coefficient value of .767897246 implies a positive correlation between oral and written speech variables. This means that the prevalence of codeswitching among the respondents both in oral and in written move in somewhat the same direction and magnitude. As the oral codeswitching occurs, there is also the counterpart of written codeswitching occurrence along with the 5 subjects with English as a medium of instruction (MOI).

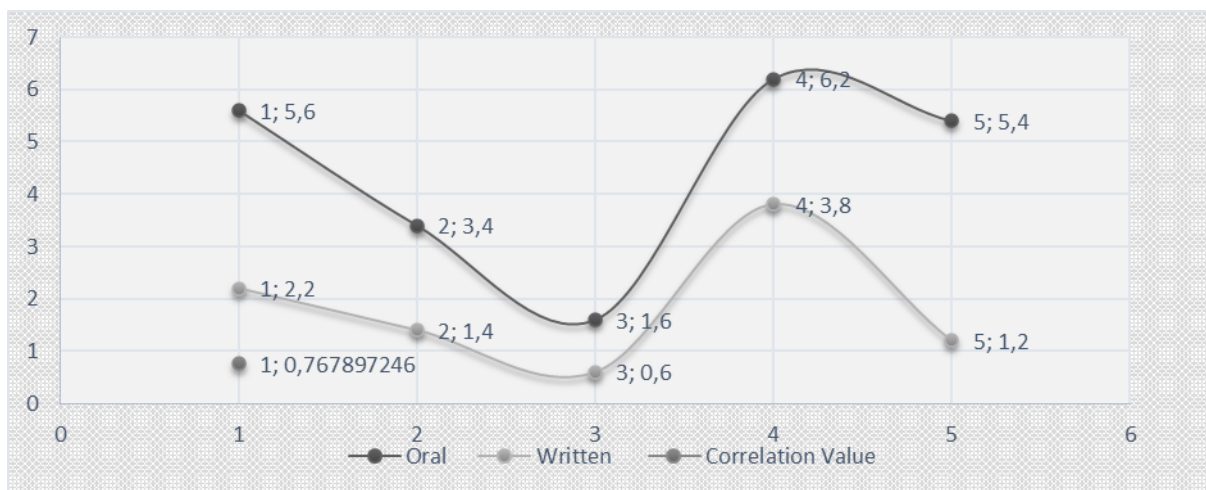


Figure 2: Correlation between Oral (x axis) and Written (y axis) Code-switching as occurred in the Five Identified Subjects

Testing the difference between oral and written codeswitching will somehow provide data on its relevance in the classroom setting. The gaps between the two variables can be a source of feedback where interventions and school-initiated activities may be drawn upon. Teachers of English as an L2 will be guided on what strategy to use, appropriate materials to utilize and language activities to execute which form part of the language development of the clientele. Thus, presented in the developed graph by the authors are covariance values of 1.4464 (T.L.E.), 1.6775 (MAPEH), 2.12 (Mathematics), 0.52 (English), and 0 (Science) are indicative of speech intervals between oral and written discourse.

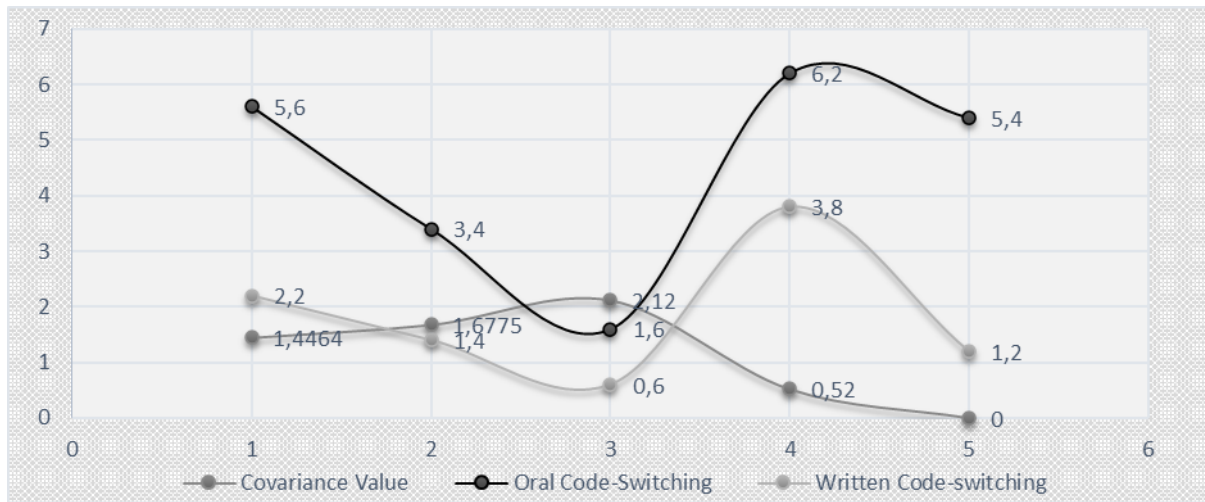


Figure 3: Test of Difference between Oral and Written Codeswitching Prevalence Based on Mean Score (Σ/n)

These are already the speech gaps as they occurred during speech events. The 0 and nearly 0 (e.g. 0.6) covariance values would mean that one variable transpired more recurrently as likened to the other variable of the study. Contrariwise, covariance values of more than 1 in this pursuit presuppose a parallel occurrence between oral and written codeswitching. The pupils switch codes at almost the same pace and magnitude along TLE, MAPEH and Mathematics; while oral codeswitching may have occurred more prevalently in English and Science in the main.

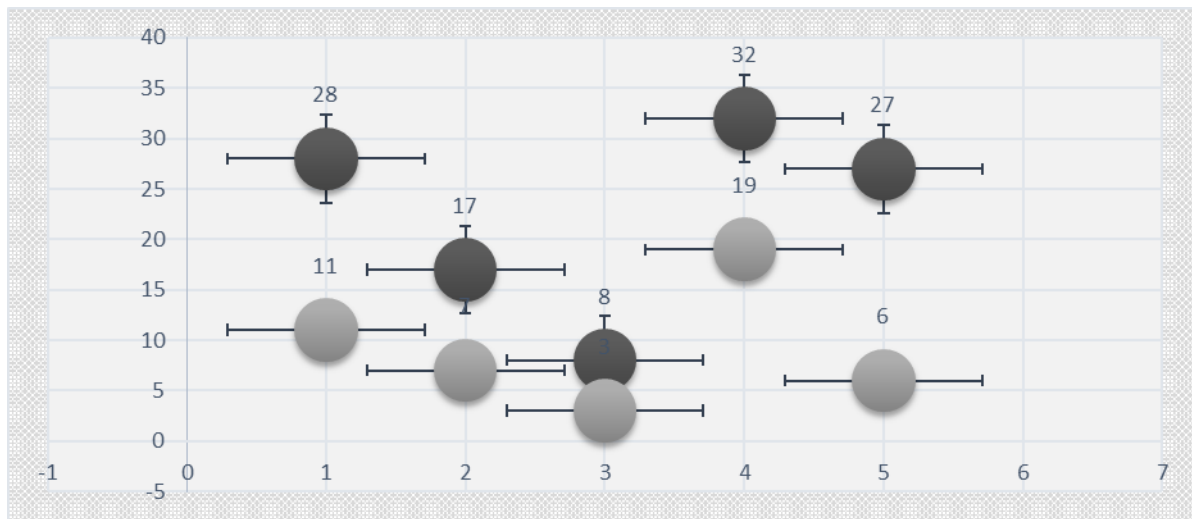


Figure 4: Prevalence of Codeswitching Based on Total Score per Subject Area

Worthy of scrutiny in figure 4 (developed by authors) is the prevalence of codeswitching based on total score transcribed responses. The data above shows that English subject topped among the subjects in terms of oral and written code-switching. This is followed by MAPEH with 28 and 11 total scores. Ranked third also is Science with 27 and 6 total scores tallied. The fourth, therefore, is TLE earning a total score of 17 and 7 in oral and written prevalence. Mathematics, as noted in the graph, obtained the least occurrence of code-switching in both speech variables of the study.

Theme 1: Codeswitching for Description and Clarification

Extract 1 transcribed by the authors on different dates of observations is oral and written code-switching occurrences that had been coded based on their purposes and functions of communication by the respondents. These transpired during oral recitation, class discussion and question and answer portion between respondents and teacher. For the written variable, researchers looked into the essays and in the

evaluation part of the lesson which demands the respondents to explain and/or write a paragraph based on a stimulus triggered by an ESL teacher. However, for English and Science subjects where the most occurrence of codeswitching had been noted, the researcher considered enrichment activities such as role-playing and presentation of outputs significant. Empirically, these parts have had many switching of codes that transpired. Some of the codeswitching occurrences are featured hereunder:

These coded conversations show how respondents switch codes from Filipino to English and at times from vernacular to English language with distinct purposes and functions. In effect, codes [TCMLE#1] & [TCMLE#2] show clear purpose of description. The respondent perchance is not aware of the English equivalent of the descriptive words in the recorded conversation. Be that as it may, the majority of the pupils are able to express their ideas to emphasize and clarify things relative to the lesson despite the noted error in sentence structure. In like manner, coded conversations [TCMLE#3] & [TCMLE#4] confirm the researcher's hypothesis on code-switching for clarification and emphasis.

Extract 1:

- Teacher:** What can you say to the villain in the story?
- Student:** Mam the villain in the story is “masama” because...uhmmm...she done bad thing to the main character [TCMLE#1]
- Teacher:** What do you is importance of animals in the environment?
- Student:** For me, ang mga hayop ay “mahalaga” sa environment uhm...because they give food to eat [TCMLE#2].
- Teacher:** Do you think is it okay to do revenge to someone who hurt us?
- Student:** “Para sa akin po sir” ... it's ok to be get revenge to others because they also do bad to me [TCMLE#3].
- Teacher:** So now, you are going to make a collage showing animal adaptation.
- Student:** “Sir ano po ang gagawin naming output sa” Science? Can we a make a collage showing animal adaptations po sir? Yes! Mapabakal ako pictures kay mother tomorrow [TCMLE#4].

The respondents want to clarify the process of making their outputs for the subject. If scrutinized closely, in code [TCMLE#4] the speaker's pattern of speech is from Filipino (L1) + English (L2) + Filipino (L1) + English (L2) + vernacular +English (L2) + Filipino (L1), then back to English (L1). This pattern usually is prevalent on subjects with English as a medium of instruction. Students seem to have no other recourse but to switch codes just to convey their message effectively.

Theme 2: Codeswitching for Equivalence

According to Cacoullos (2020), one of the functions of student code-switching is equivalence. In this linguistic scenario, students make use of the native equivalent of some lexical items in the target language (L2) and consequently code switches to his/her native tongue. This progression is perchance interconnected with the insufficiency in linguistic proficiency of the target language, which forces the student to use the native lexical item when he/she has not the ability to use the target language description for a particular lexical item. So “equivalence” serves as a defensive mechanism for students as it offers the student the opportunity to continue communication by bridging the gaps resulting from foreign language inability. The preceding notion concerning the function and purpose of switching codes in the context of students has also been one of the points of this study. This is evident in Extract 2 transcribed by the authors themselves in various class sessions.

Extract 2

- Teacher:** What can you say to the villain in the story?
- Student:** Mam the villain in the story is “masama” because...uhmmm...she done bad thing to the main character [TCMLE#1]
- Teacher:** Why do you think exercise is necessary class?
- Student:** “Exercise” is “mahalaga” in our body to make abs [referring to mucle] and sexy bodies [TCLME#5]
- Teacher:** Why do animals adapt to their environment?
- Student:** Animals adapt to their environment to make them “ligtas” for many enemies [TCLME#6].

Obvious in the coded responses that respondents probably forgot and/or perhaps practically do not know the equivalent translations of “masama”, “mahalaga”, and “ligtas”; hence, they resort to switching codes from English to Filipino then back again to lexical terms in English to complete their sentences and convey their thoughts to their teacher and peers.

Discussion

From the results adopting descriptive-quantitative statistics as well as considering empirical data, have paved the way for the verification or rejection of research hypotheses.

How prevalent is codeswitching on subjects with English as a medium of instruction?

RQ₁ highlights the prevalence of codeswitching on selected subjects with English as MOI (*Table 1 & Figure 4*). From the dataset, it is noticeable that the above linguistic occurrence transpired to a varying degree both oral and written forms with documented purposes and functions in ESL context. According to Razak & Shah (2020) codeswitching in ESL classrooms has positive impact used as a strategy to acquire the target language which is also one of the salient points of the current study. In fact, students code-switch for non-linguistic purposes such as establishing rapport and interpersonal relationships as well as maintaining the line of communication without disruption to circumvent any sort of conflict or misinterpretation (Hussein, et al., 2020). To supplement, Nurhamidah et al.(2018) likewise emphasized that code-switching prevalence in ESL classroom has indeed been essential for both teachers and students. ESL teachers can use code-switching for translation, clarification, comprehension check, procedure and directions giving, classroom management and learning strategy to bridge the classroom level of language proficiency (Estremera, 2021). Most importantly, students can utilize this linguistic occurrence for translation, clarification, response, and identity sharing.

Hence, data revealed in *Table 1 & Figure 4* leads to the rejection of the first hypothesis. This result is linked to the views of Adriosh & Razi (2019); Puspawati (2018); Shafi et. al., (2020) who similarly posit that codeswitching still has semantic features in conveying messages. Communication is still possible despite the noted errors in the delivery of the message. Hence, it is just proper to emphasize that this linguistic phenomenon should uncover its positive aspect for the sake of communication in the classroom. The paramount goal must always be the understanding of the text and errors along the channels of communication must have been deemed negligible and trivial. It should open the door of acceptance and reverence due to cultural differences and linguistic typologies (Estremera & Gonzales, 2021). Taking into account the results, teachers must be aware of this linguistic episode to be able to cope with the phenomenon accordingly. Since there has also been language assimilation in codeswitching, this can be used as an avenue to master the second language by guiding learners toward fluency and accuracy of the target language. Learning of structure will just follow through series of drills and good practice.

Is there a significant relationship between written and oral codeswitching prevalence?

RQ₂ indicates the positive correlation between oral and written discourse (*Figure 2*), and communication gaps (*Figure 3*) which implies that both discourse forms could have occurred in the same magnitude and degree posing pedagogical challenges to ESL teachers. This could, similarly, presuppose that ESL teachers may consider this occurrence as a prelude towards L2 fluency. Perceived errors along the channels of communication could have been deemed trivial and paying much attention to the semantic aspect

is what matters to foster communicative competence. These are in acquiescence to the claims of Bingjun (2013); and Iswati et. al. (2018) that the role of L1 both by teachers and learners in English classrooms at tertiary level is essential to lessen learners' affective filter as it will make them more secure, comfortable, and eventually confident to use the target language (L2). The former emphasizes that role of L1 in L2 acquisition consists of 6 different areas: (1) with the behavioral theory to elucidate the SLA, concentrating on the role of conditions; (2) to explicate the interaction of SLA, highlighting communication and social needs; (3) to expound the SLA with the cognitive theory, underscoring the logic and thinking processes; (4) with the nativist theory or biological theory to describe SLA, stressing the inherent genetic aptitude; (5) to accentuate the learner and learning strategies. (6) L1 transfer in L2 acquisition of phonetics, lexicology, syntax, semantics and pragmatics (Dako, 2002; Oflaz, 2019).

What new language theory may be formulated to delineate the purpose of codeswitching in SLA?

RQ₃ reveals the main contribution of this academic piece to the body of knowledge specifically along language theories (Figure 5) leading to the acceptance of the third hypothesis. It highlights some pedagogical implications on the positive aspects codeswitching occurrence during TLP. This is further underpinned by the studies of Nordin et. al., 2013; Zainil and Arsyad (2021) who emphasized that ESL learners were also noted to believe that code-switching enables them in understanding the target language. This finding indicates that the use of codeswitching is indispensable when the situation necessitates the use of L1 in the classroom to enable the learners to become more self-assured in mastering English (Biliková & Seresová, 2021). In the same vein, Wu et. al. (2020) likewise accentuated that teachers and students have the same attitude in using codeswitching, and experienced teachers used this more frequently than novice teachers.

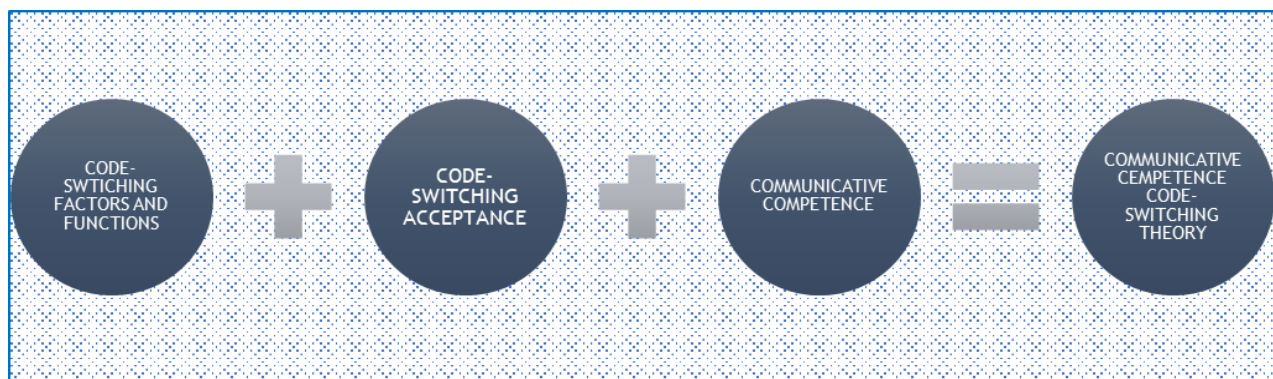


Figure 5: *Communicative Competence Codeswitching Theory or the 3Cs Theory*

Moreover, the concepts of communicative competence had been overtly underscored by Kabirl and Sponseller (2020); Torres-Gordillo et. al. (2020) who accentuated competence as the speaker's ability to use language forms appropriately in different communicative contexts, i.e. to know what to say, to whom in what conditions, and how to express it. This concept especially resounded through the sociolinguistic, psycholinguistic and applied linguistics speech community. Researchers in these fields were already aware that the notion of linguistic or *grammatical competence* alone was insufficient when describing what language users actually did with the language or what, for example, second language users needed to acquire in order to use their new language successfully. As a result, language proficiency started to be seen as an interaction of linguistic and *communicative competence*. They do such for clarity, emphasis, emotion expression, and equivalence for the most part. The role now of the L2 teacher counts a lot to bring the students to a high level of communicative competence specifically along vocabulary development (Alshammari, 2020) to develop both writing and oral competence (Huang, 2021; Hurajova, 2019).

Conclusion

Codeswitching as a prevalent linguistic phenomenon in ESL classroom has concealed didactic implications. The present study sheds light on the negative impression associated with codeswitching due to its confirmed positive correlation between oral and written speech variables as a product of empirical investigation. Based on the confirmed hypotheses, researchers recommend that English teachers both NS and NNS shall not pay much attention to grammatical competence initially if they want their students to be participative in the class discussions, language activities, and output presentations. This concern will merely transpire then and there and naturally after meaningful attempts and exposure to the target language. Hence,

taking into account the results and discussion has paved the way for the formulation of a new language theory called *Communicative Competence Codeswitching Theory or the 3Cs Theory*. This theory delineates the automatic tendency of the ESL learners to do code-switching in dealing with classroom activities and when conversing with peers as attempts to master L2. This is prevalent commonly in Asian countries such as Philippines, Thailand, Japan, Malaysia and all countries having English as a second language. Learners attempt to speak and write the combinations of the native language and the target language. These attempts of the learners to shift from one code to another help them complete the cycle of communication. This linguistic phenomenon plays an essential role to be able to send the text successfully using various channels of communication. In the case of the respondents of the study, code-switching helped a lot to assimilate the phonology, syntax, and lexical aspect of English language gradually as observed by the researcher. The examples of these attempts [*sentences spoken and written by the learners*] to learn the second language L2 are well-discussed in the results section of the paper.

Limitations and Future Research

There have been foreseen limitations in the present study which can be addressed by future researchers in the same field. Foremost, this study involved many subjects with English as a medium delivery, it is far preferable if one or two subjects only shall be subjected to investigation to capture more details of code-switching and arrive at a more detailed purpose of ESL. There could also be better chances of capturing many purposes of codeswitching to make the pursuit more comprehensive. Next, the data gathering of the present paper was done for a week-long period only. It is suggested that the gathering of data be conducted on a month-long scheme, if possible. Last, more thematic presentations and categorization of collected data to practically capture the ESL functions, purposes and didactic implications. Hence, for the sake of parallel studies, other functions of code-switching which might have happened in the conduct of this study but are not discussed are recommended to be investigated. These functions and purposes may include: *Switching for the principle of economy, switching for checking, switching for message qualification* and the like.

Acknowledgement

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MASTERING TEST-TAKING READING SKILLS WITH CONTEXTUAL GUESSING: THE CASE OF UNIFIED ENTRANCE EXAM

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A high percentage of bachelor test-takers who failed the unified entrance examination test in 2021 demonstrated the lack of adequate reading strategies such as contextual guessing for improving exam performance. The study aims at evaluating the use of contextual guessing strategy during extra-curriculum EFL classes as a way to improve students' unified entrance examination performance. The present study also examines the impact of word formation as a component of contextual guessing strategy and the effectiveness of contextual guessing with online vocabulary application in exam preparation. A quasi-experimental design was employed which involved 24 third-year students from different departments of Higher Educational Institution "Podillia State University" in 2020-2021. The quantitative research method was employed to assess the effectiveness of using contextual guessing to improve students' test performance using the mean score formula. Additionally, we produced a test statistic based on the ranks (Mann-Whitney U-criterion). The results showed that the experimental group that was taught the strategy of guessing unknown words with the help of word-formation processes, and contextual clues, in particular, and applied the vocabulary platform for fixing and retaining guessed words had higher results than those who were taught unified entrance examination tests with the help of the grammar-translation method. Based on Mann-Whitney U-criterion we have statistically significant evidence to conclude that contextual guessing significantly affects EFL learners' test performance in experimental and control groups. The guide on word formation was designed during the experiment.

Keywords: reading; contextual guessing; extra-curriculum; clues; on-line dictionary

Introduction

Currently, the reading skills gained new emphasis in the context of the unified entrance examination (UEE) that is used for admission into the Master's programme in Ukrainian universities. Administered by the National Agency for Quality Assurance in Higher Education (NAQAHE) UEE tests the level of candidates' ability to independently read and understand authentic texts for a certain period (60 min.). Except for different reading skills the candidate should be able to set the meaning of unfamiliar words based on guess and similarity to the native language. In 2021 unified entrance examination test results showed that almost 25 per cent of entrants (21,939 people) did not score the minimum required number of points. New words and long texts are seen by the students who participated in the experiment as a major obstacle to comprehending a reading text. Therefore, we find it important to employ efficient reading strategies to read English texts more effectively with non-English speaking readers. We consider contextual guessing a valuable reading strategy that can benefit successful passing the unified entrance examination.

Language instructors are often frustrated by the fact that most university students follow the grammar-translation method in reading: starting by reading word by word, and stopping to look up every unknown vocabulary item in the dictionary. Such an approach takes a lot of time and yields no results. Effective language instructors show students how they can adjust their reading behaviour to deal with different reading purposes. So the teacher's responsibility in the context of exam preparation is to teach reading strategies that enable the students to read at higher levels of proficiency and, respectively, increase the number of Master's degree applicants. Most researchers claim such reading strategy as contextual guessing to be beneficial for reading proficiency, however, the studies on the advantages or disadvantages of vocabulary acquisition through contextual guessing with a focus on online vocabulary platforms still lack. The result of the present study is expected to be useful information and give new insight into improving English reading comprehension by using the contextual guessing technique.

In research from Alsaawi (2013) teaching vocabulary has been mistreated due to the allegation that learners will attain the lexical items through learning without the need to focus on them explicitly. The researcher considers the learner's ability to infer the meaning of words from the context to be a forward-looking reading strategy (Alsaawi, 2013).

There have been attempts to define the language guessing origin and aspects of its implementation in the late 1970s. However, deeper insights into this issue were taken at the beginning of the 21 century. Contextual guessing is the most important skill used by most readers in acquiring new vocabulary. It is closely related to

comprehension and this is one of the useful and most practical skills learners can acquire and apply inside and outside the classroom and, more importantly, can be taught and implemented relatively easily (Thornbury, 2002).

Researchers distinguished two main factors affecting guessing ability: reader-related variables and text-related variables. Reader-related variables are vocabulary size, knowledge of grammar, language proficiency, attention to detail, cognitive and mental effort, and reader characteristics. Some researchers found out that the length of a text has an impact on identifying the meaning of a word (Lantolf & Poehner, 2014). Reader-related variables, language proficiency, in particular, and its influence on the quality of knowledge of technical words were examined by Gablasova (2015). Lee and Oxford (2008) have focused their study on the influences of rarely-considered but very important variables, “in addition to other variables, on EFL students’ strategy they used: (a) strategy awareness, (b) English-learning self-image, and (c) importance of English” (p. 27).

The relationship between the ways L2 learners identify the meaning of unknown low-frequency words within the context and their gender status has been explored, however, the researchers did not establish such a relationship (Inal, 2021). In research from Inal (2021) contextual guessing strategy does not help the reader to uncover the meaning of LFW (low-frequency words) within a text and none of the contextual clues helps to guess the meaning correctly (p. 131-132).

Some scholars examined the effectiveness of contextual guessing strategy in terms of native and target language learning and language proficiency. Thus, Nassaji (2003) and Walters (2006) state that guessing words from contexts, was an effective method for L1 learners but not for L2 learners. Alsaawi (2013), in turn, concludes that contextual guessing was a helpful strategy for upper-intermediate and advanced L2 learners. As we can see, there is no unified view on the influence of students’ foreign language proficiency and nativeness on contextual guessing performance.

Word characteristics, in turn, are text characteristics, the presence of contextual clues and topic familiarity with text-related variables (Kaivanpanah & Alavi, 2008; Çetinavcı, 2014). To be more specific, Çetinavcı (2014), for example, considers that rich context contains more clues and the learners notice them and guess the unknown words’ meaning easily. It was observed in research from Kanatlar and Gül Peker (2009) that the prediction of word meaning utilizing context clues was the most popular strategy. The participants used morphological clues, phonological clues as well as the contextual richness of the passage. The researches of Çetinavcı (2014), Mokhtar and Mohd Rawian (2012) also give insight into the essence of the partial clues and local contextual clues. To conduct the present study we also used partial clues and local contextual clues in contextual guessing instruction. The present paper is in line with the research of other scientists who studied the positive impact of contextual guessing technique on correct answering multiple-choice close tests (Ahmad & Asraf, 2004; Lee & Oxford, 2008).

Some research studies on contextual guessing have revealed that there are some negative aspects of utilizing this technique in EFL learning. For example, Bensoussan and Laufer (1984) administered a test-retest to sixty students on vocabulary once isolated and again in context. An analysis of student answering patterns showed that context helped lexical guessing in only 13 per cent of the responses for only 24 per cent of the words. Word guessability was shown to be less a function of using context than of applying “preconceived notions” (p. 15). Prince (1996) found that learning, from translation, was better than guessing, from the context. Some studies argued that the number of words, learnt from the context, was still lower than learnt from other strategies (Jenkins et al., 1984).

Based on the literature review we formulated the following definitions used in the present study. Accordingly, *contextual guessing* or *contextual guess* (gisting) is the acquisition by a reader of meaning for a word in a text through reasoning from textual clues and prior knowledge (including language knowledge and hypotheses developed from prior encounters with the word), but without external sources of help such as dictionaries or people (Rapaport & Kibby, 2010). *Context clues* involve linguistics such as words, phrases, sentences and nonlinguistic information available surrounding an unfamiliar word, which a reader can use to infer the word's meaning (Taufan, 2020).

The literature review showed that conducted studies examined the factors that affect guessing ability, the positive and negative impact of contextual guessing strategy on reading comprehension and taking multiple-choice tests, however, they were limited by two types of reading tasks: cloze passages and multiple-choice questions. Based on results in the literature on contextual guessing we can state that the surveys on word formation as a component of contextual guessing strategy in test-taking have been insufficient. Moreover, the researchers did not take into account the application of online vocabulary platforms for learning the guessed words.

Research aims

Based on the literature study, observations and the results of the experimental study the problem of the study can be stated as follows: university fourth-year EFL students attending extra-curriculum activities to prepare for the unified entrance examination lack adequate reading strategies such as contextual guessing to improve exam performance. This paper aims at evaluating the use of contextual guessing strategy as a way to improve students' test performance. To reach the aim, the following tasks were set:

1. To examine the effectiveness of contextual guessing in exam preparation during extra-curriculum EFL activities.
2. To survey the impact of word formation as a component of contextual guessing strategy and the online vocabulary platform on students' test performance.

Based on the problem of the study the following hypothesis could be formulated: H0 – there is no significant difference in EFL learners' performance in the experimental and control groups after treatment. H1 – there is a significant difference in EFL learners' performance in the experimental and control groups after treatment.

Methods

Research Design

The method of the current study included the participants, instruments, design, and the procedures followed to carry out the study. The quantitative method such as an experiment was used. The experiment was aimed at identifying the cause-and-effect relations between regular application of contextual guessing technique while preparing the students for unified entrance examination and therefore improving students' test performance.

Participants

24 third-year students from the Departments of Agricultural Engineering, Agricultural Technology and Environmental Management, Veterinary Medicine and Economics served as the subjects of the present experimental study and their native language was Ukrainian. The participants of the study were attending extra-curriculum activities called student EFL workshops. The objective of this scientific EFL workshop is to provide the students with basic unified entrance examination strategies. They were taught by the same English teacher. The experiment was conducted during the sixth and seventh terms of the academic year 2020/2021.

Instruments and Procedure

The scores of the placement test at the beginning of the academic year administered to the participants of the EFL workshop showed that all of them were low intermediate EFL students. They were divided into two groups depending on the desire to work with the online dictionary and access to the Internet. In general, we had 34 hours in the sixth semester and 30 hours in the seventh semester, accordingly. During the experiment both groups prepared for the unified entrance examination, mastering different types of reading using unified entrance examination practice tests (2018-2021). In contrast to the control group, the students of the experimental group were preparing for a unified entrance examination with a strong focus on contextual guessing technique, recording the guessed words in the Quizlet vocabulary platform. Based on the literature review, and our observations we designed a guide on word formation to prepare students for the unified entrance examination (Chaikovska, Humeniuk, 2021), which was also used with the students of the experimental group as a part of our survey.

Reading strategies are not isolated from each other and contextual guessing is not an exception. As a rule, we started all types of reading tasks in both groups by previewing the titles and section headings to get a sense of structure and identify the procedure of text reading. Then we made predictions about the content and vocabulary, skimming and scanning. After this stage, the students of the experimental group started guessing from the context. Remarkably, we used contextual guessing with all unified entrance examination tasks: matching headings or statements, multiple-choice and use of English. We are sure that guessing the context is important for all unified entrance examination tasks. As a rule, the contextual guessing based activities included underlining the unknown words, and analyzing partial or local contextual clues. The explanation of a partial clue was given by Clarke and Nation (1980): "Typhoon Vera killed or injured 28 people and crippled the seaport city of Kellung". The unknown word is crippled. It is a verb, followed by the object city, determined by the seaport. Something happened with a seaport city and this word has the same negative meaning as killed and injured. Typhoon can *ruin*, *destroy* or *damage* the city. Global contextual clues, according to Mokhtar and Mohd Rawian, are clues that are very near the unknown word such as an unknown adjective just in front of a known noun (p. 299). Apart from that, we used the clues that can be used to foster the understanding of unknown words. They are roots, prefixes, and suffixes. During our classes with the experimental group, we focused on word formation. Chaikovska and Humeniuk (2021)

suggest that having studied the meaning of suffixes and prefixes in the English language and the rules of word formation, bachelors can easily translate single-root words and distinguish parts of speech. The authors developed exercises for guessing from the context to identify the part of speech of the word, highlight roots, prefixes, suffixes, and endings, choose antonyms and synonyms and examine the clues of unknown words. Indicating opposite or contrasting meanings in the sentence, some connecting words also can help to guess the meanings of the word. Some of the common punctuation marks such as commas, brackets, dashes, single quotation marks, parentheses and double quotation marks should also be taken into consideration to identify the word. The students can search the dictionary for definitions, roots, prefixes, and suffixes or the Internet for applications. The students have been learning the new words with the online vocabulary platform Quizlet since their first year of study at university. The choice was obvious and we used this online vocabulary platform for recording and learning the guessed words. Although, we were not limited to entering the words in Quizlet, adding pictures and practising the new words with the Quizlet online practice tests. We also used the platform to get a wider context. For example, in the sentences from the unified entrance examination practice tests 2020, the students found it difficult to guess the meaning of the word *trashing* (If you describe someone else as genuine and kind people will also associate you with those qualities. The reverse is also true: if you are constantly trashing people behind their backs, your friends will start to associate the negative qualities with you as well). To guess the meaning of the word *trashing* we have to analyze the previous sentence, here we deal with partial clues: the word trashing means a kind of behaviour that is opposite to describing someone else as genuine and kind people. It means that trashing is talking bad about other people. To our mind, such work on developing contextual guessing is not complete. We choose the English language for entering the word and its definition in the Quizlet module. The platform displays “trashing others or yourself” and gives the definition “globally rate or evaluate someone as totally bad, wicked, or evil because that person has treated you in some unfair, abusive, or inconsiderate manner. To remember the meaning of a new word we asked the students to reword the definition in their own words, add synonyms and antonyms for the word, and examine other contexts with the help of Reverso Context.

Data Analysis

To determine the degree to which learners were prepared for the unified entrance examination, the trial exam, based on the unified entrance examination practice tests 2021, was conducted. The tasks had the usual format: two parts (*Reading* (22 questions) and *Use of English* (20 questions)) one point for each correct answer. The maximum score is 42. To identify the differences between test results of experimental and control groups the Mann–Whitney U-criterion was used.

Ethical Issues

All students were informed about the experiment, its stages, and consequences and agreed to participate. Objectivity and justice, anonymity, and confidentiality were fully accomplished in the research.

Results

Results were presented in terms of the hypotheses of the study. To compare the final test results (we applied the UEE test sample of 2021) in experimental and control groups we used the mean score formula and the Mann–Whitney U- criterion. The Mann–Whitney U-criterion determines whether a small area of intersecting values between two rows (a ranked series of parameter values in the first sample and the same in the second sample) is sufficient. The lower is the value of the criterion the more likely it that the differences between the parameter values in the samples are significant. Table 1 shows test scores (maximum score=42) in both groups.

The data was collected through the test analysis by using the mean score formula.

The formula is:

$$X = \frac{\Sigma X}{N}$$

Where:

X is the mean score

ΣX is the sum of all score

N is the total number of subjects

The table shows that students' mean score in the overall UEE test in the experimental group was (239) compared to that of the control group which was (180). These results indicate that the experimental group outperformed the control group on the UEE test. To verify the study hypotheses we used the Mann–Whitney criterion. First, we put the meanings in one row, rank them and calculate the sum of ranks for the first and the second samples.

Table 1. Results of the control and the experimental groups on the final UEE test

Number/student	Final test score/ The experimental group (n=12)	Number/student	Final test score/ Control group (n=12)
1	11	13	10
2	14	14	12
3	14	15	12
4	16	16	12
5	17	17	14
6	19	18	15
7	19	19	15
8	19	20	15
9	24	21	16
10	26	22	17
11	26	23	19
12	34	24	23
The sum of all score	239		180
Mean score	19,91		15

Table 2. Ranks of experimental and control groups

Ranks of the experimental group	1 2,5 2,5 4 7,5 7,5 7,5 10,5 12,5 19 19 24	117,5
Ranks of the control group	5 7,5 10,5 12,5 15 15 15 19 21 21 21 23	185,5

Results in the table (2) illustrate that the rank sum of the control group is bigger: $117,5 < 185,5$

To identify the empirical meaning we used the following formula:

$$U_{emp} = (n_1 * n_2) + \frac{n_x * (n_x + 1)}{2} - T_x$$

Where n_1 is the number of participants in group 1 (experimental); n_2 is the number of subjects in group 2 (control); T_x is the largest of the two ranked amounts; n_x is the number of subjects in the group with a larger rank amount.

$$U_{emp} = (12 * 12) + \frac{12 * (12 + 1)}{2} - 185,5 = 36,5$$

Then we determine the critical values of the Mann-Whitney U criterion for the selected level of statistical significance or confidence probability with the help of the table. It is

$$U_{cr} = 37$$

$37 > 36,5$. It means that

$$U_{cr} > U_{emp}$$

If $U_{cr} > U_{emp}$ the first hypothesis is accepted (H1) and the null hypothesis (H0) is rejected because the differences are statistically significant. This significant improvement is due to administering the contextual guessing activities to the experimental group.

Discussion

Most students of non-linguistic universities believe that lack of vocabulary is one of the reasons they may fail to pass the unified entrance examination. Taking into account the characteristics of the unified entrance examination it is desirable to integrate the reading strategies that can help the students to get high scores. Even though several studies are examining the impact of contextual guessing in test-taking with a focus on multiple-choice questions and cloze passages, the topic is not fully covered and there is a necessity for further research.

The results of the present study were expected because we were looking for an effective reading technique that involved work without a dictionary and emphasis on EFL proficiency, and observational and critical thinking skills in exam preparation. The mentioned above reader-related variables that affect the guessing ability of the students were used in our study to practice contextual clues following the recommendations of Çetinavcı (2014), Mokhtar and Mohd Rawian (2012).

Our findings suggest that the student's score in the unified entrance examination test in the experimental group is higher than the score of students in the control group during extra-curriculum EFL classes. The calculation based on the Mann-Whitney U criterion proved that the differences are statistically significant. So, the first hypothesis (H1) is accepted: contextual guessing significantly affects EFL learners' performance in the experimental group in the unified entrance examination test. This is in line with the arguments from Ahmad & Asraf (2004) and Lee and Oxford (2008) that contextual guessing can help to answer multiple-choice questions correctly and make cloze passages. However, the study was not limited to two reading types, the contextual guessing was applied to all unified entrance examination tasks.

The students' improvement in test performance could be explained by some other reasons. First of all, we didn't use the contextual guessing technique isolated, during the experiment we also used previewing, predicting, skimming and scanning as the integral process aimed at understanding the text. Such an integrated approach could also contribute to improving test scores.

Our study was designed to eliminate other possible variables that might affect contextual guessing efficacy. Çetinavcı (2014) suggests that word morphology was the major knowledge source used by language learners. Second of all, we conveyed a survey with a strong focus on rules of word formation and word formation exercises. A guide on word formation was designed based on observation during semester extra-curriculum activities to enhance student performance. Since the unified entrance examination was administered first in 2017, guides and textbooks on practising reading and use of English skills lack. It is believed that the materials collected in this book and training exercises designed by the authors can affect students' contextual guessing skills.

And thirdly, to provide effective word learning techniques we applied the online vocabulary platform Quizlet. The effectiveness of using an online vocabulary platform was proved by Chaikovska and Zbaravsk (2020). Quizlet-based word learning includes various methods: gives students the definition of the word in English, very often the whole sentence or phrases are given by the platform for wider context, uses graphic organizers (the students may choose from the available pictures or download their images) to define new words, uses audio organizers, provides a lot of training exercises; conducts testing, displays the student's progress.

Accordingly, word formation as a component of contextual guessing strategy, and the online vocabulary platform had a positive impact on students' test performance. Thus, the results of our research show that bringing together contextual guessing with word-formation knowledge and training and online vocabulary platforms can benefit test-taking. The finding of the study can be applied in EFL classes and extra-curriculum EFL classes with the undergraduate students of all specialities to prepare them for reading and the use of English tests.

Limitations

The present research was limited to 24 participants. Similar surveys can be conducted on the data sets of obligatory EFL classes to engage more participants and receive new insights.

Conclusions

This study compared an experimental class, which prepared for a unified entrance examination based on a contextual guessing strategy, and a control class, which prepared for a unified entrance examination using the grammar-translation method. Based on the results of this study, it can be concluded that there is a significant difference in scores between the students of the experimental and control groups. Implementing the contextual guessing activities with the experimental group significantly affects their test performance. The most noteworthy results show that the students of the experimental group benefited from word-formation knowledge and activities. Therefore, the teachers can contribute towards better and faster guessing the unknown words by integrating word-formation processes into exam preparation. The study also found that using vocabulary platforms as an alternative to paper-based word lists and mind maps can make the contextual guessing process convenient, easy and, in general, improve the test-taking performance of undergraduate students. Therefore, it is strongly recommended that both teachers and students should make good use of the contextual guessing strategy on passing the unified entrance examination. Further research is claimed to investigate other platforms and applications that can help to gain the maximum benefit from this learning activity.

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THE ROLE OF ENGLISH FOR ACADEMIC PURPOSES IN MAINTAINING FUTURE TEACHERS' INTEREST IN RESEARCH

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The university curriculum plays a role in motivating students to take up research. This 2-year action research explored the curriculum in English for Academic Purposes (EAP) and its influence on student further engagement in research work. The data were collected from University Master's students through two questionnaires given to them before and after studying the course. An explanatory framework for the course characteristics that affected students' attitudes towards research focused upon the students' profile (the students' age, gender, major and language proficiency), career orientation and research orientation. The shift in students' attitudes reinforced the complexity of factors that influenced their motivation to take up research after graduation. The authors draw a conclusion that future interventions to address issues with the Academic English course to raise the interest of University students should deal with restructuring the course in a way that the student should have more contact hours. The analysis of learning materials designed for the EAP course shows that most of them introduce students to theory- and research-informed perspectives and guide them in putting theory to use in real-world contexts which would be impossible in 30 contact hours as in the analysed case. Moreover, it should be linked to the students' school practice and their small-scale research in real classroom settings.

Keywords: future teachers' attitudes towards research; English for Academic Purposes; maintaining interest in research

Introduction

Pre-service teacher education is viewed as essential in the students' motivation to take up research, and studies regarding impacts on student attitudes toward classroom research are timely and relevant. The authors explored the curriculum in English for Academic Purposes for Master's students majoring in teaching and its influence on their further engagement in research work.

Literature review. Over the past few decades, a lot of researchers have studied the impact of English as a foreign language on students' attitudes towards different academic and non-academic aspects. There has been some evidence that second language learner expectations are underpinned through the beliefs that are shaped in terms of their cultural backgrounds and past experiences (Borg, 2018). Other researchers have shown the impact of academic writing on the students in terms of their wish to publish their research findings as "universities are competing globally with each other to produce more and more research publications" (Abdulsada & Awad, 2020). As English has become the predominant language of communication in the academic field, the role of English for Academic Purposes as a university course is growing. According to Hyland and Hamp-Lyons (2002), English for Academic Purposes is defined as "the linguistic, sociolinguistic and psycholinguistic description of English as it occurs in the contexts of academic study and the scholarly exchange itself" (Hyland & Hamp-Lyons, 2002). The authors see the purpose of the course as bridging "the gap between secondary and tertiary expectations of academic discourse to promote the students' academic literacy up to graduation" (Hyland, 2006). Past research has shown that students who use English in their academic work tend to have difficulties in properly referring to sources (Mounce, 2010; Lampthey & Atta-Obeng, 2012; Masic, 2013). There are plentiful publications that are extensively focusing largely on academic integrity (McLean, 2018; Harrison, et al., 2017; Richards, et al., 2016). Although there is a lot of research about students' perception of English for Academic Purposes as a course (Bolton & Kuteeva, 2012; Olvera, 2014; Anwar & Wardhono, 2019) or curriculum research (Kong, 2018), there are practically no publications revealing the connection of the course at the MA level and the future teachers' attitudes towards research in their school practice or further taking a postgraduate course.

The theoretical background of the research

The research is based on the assumption that the quality of school education depends on teachers' ability to adapt to the students' needs. As this can be achieved by doing research in both academic and classroom settings it is important that the courses in the pre-service teacher education programmes should develop the students' positive attitudes towards research. The theoretical background of the study lays on curriculum theory seeing a curriculum as "a way to respond to the challenges of contemporary society and acquiesce to the demands of efficiency" (Linden, Annala, & Coate, 2017, p. 7).

The idea is widely applicable to the curriculum design in higher education which is supposed to be flexible to bridge the gap between theory and practice. After the reform, Ukrainian Universities are enjoying a large degree of autonomy in curriculum design, so “in curriculum thinking, the focus is shifting from broad knowledge structures to demonstrable and assessable packages of learning outcomes, competencies and abilities” (Linden, Annala, & Coate, 2017, p.6). In making methodology choices and an opening way to improvement, the researchers may apply a survey (Hurlimann, 2009), action research (Junyent & Celi de Ciurana, 2008), or an interview (Bolander, et al., 2006) etc. According to Wahlström (2019), “a major task for curriculum theory is to identify the constraints that limit curriculum choices and to explore the pedagogic implications that follow” (Wahlström, 2019). Wahlström (2019) uses the term ‘powerful knowledge’ to denote the kind of knowledge that is highly valued in school and thus leads to the high-level achievement of objectives (Wahlström, 2019, p. 5). Thus, throughout our study, we will keep open the question of what forms of knowledge can be considered powerful in developing future teachers’ positive attitudes towards research within English for Academic Purposes course.

Methods

The presented research is mixed, with a combination of curriculum analysis (qualitative research) and questionnaire (quantitative research).

The purpose of the research was to identify the impact of English for Academic Purposes course on the future teachers’ attitudes toward research and their interest in educational research in the future.

The purpose-related *objectives* were:

- to design and carry out a survey of University master's students before and after the English for Academic Purposes course;
- to find out which parts of the course the students consider important for their motivation to take up research after their graduation;
- to draw conclusions on approaches which should be used in the design of curriculum and syllabus of English for Academic Purposes that would evolve an interest in the classroom and/ or academic research.

The research questions were:

- Which parts of the course do the students consider important for their motivation to take up research after their graduation?
- What future interventions should be implemented to address issues with the Academic English course to raise the interest of University students in research?

Participants

The authors draw their conclusions from quantitative research based on the questionnaire with 114 master's students majoring in teaching different school subjects (Ukrainian Language and Literature, History and Law, Sciences, Technologies, IT, Physical Education, Music, Arts, Mathematics, etc.) (see table 1). In the future, according to their career profile, they are supposed to become school teachers engaged in classroom research or proceed to post-graduate course dealing with an academic research project.

Table 1. *Profile of the survey participants*

	Age		Gender		Years of learning English		Language proficiency (self-assessment)						No self-assessment
	Up to 23	24 and more	Female	Male	5 – 12	11 – 16	A1	A2	B1	B2	C1	C2	
%	80,7	19,3	86	14	70,2	29,8	13,2	15,8	44,7	10,5			15,8
Number of participants	92	22	98	16	80	34	15	18	51	12			18

Ethical issues

Before participating in the survey the students were to get acquainted with the short questionnaire introduction saying that all personal data included in the survey results would remain confidential. Besides, the participation in the study was voluntary and they could withdraw from it at any stage.

Instrument and Procedures

We conducted the research in several steps in the period between September 2019 and June 2021 (two academic years). After reviewing the theoretical literature and many previous studies, and analysing educational programmes for training teachers, the authors of the article designed the questionnaire and proposed the students to fill it in online before studying the course. It consisted of 39 questions, with a preliminary indication of students' age, gender, speciality, duration of language learning, etc. Besides, the participants were to define their level of language proficiency by self-evaluation.

The research questions were grouped into 3 domains. The first part (general domain) was used to identify the students' major priorities for the course and to elicit obstacles to the successful mastering of its material. The second domain (research methodology) was to highlight the participants' attitudes toward conducting research. The questions of the third part (academic communication) helped to determine the level of awareness of the discipline's importance for successful professional and scientific communication activities.

After analysing the data, the research team who are teaching the course to Master students introduced minor changes in the curriculum taking into account the students' expectations. After the intervention in the form of delivering the EAP Course and checking the students' portfolios, the research team distributed another questionnaire. The key difference with the introductory inquiry form was that the items in domains 2 and 3 were corresponding to the learning outcomes of the course. After investigating the data that will be presented in the results part of the article, the authors build the discussion part over the forms of knowledge that can be considered powerful in developing future teachers' positive attitudes towards research within English for Academic Purposes course.

Results

The authors studied relations between the students' language proficiency level, the period of studying English, their majors, gender, age, and did not find any significant dependence, with a correlation quotient varying between -0,112 and 0,304 neither the ability to successfully perform different course tasks correlated with the students' positive attitudes towards the role of EAP for further research (between 0,016 and 0,41).

In the survey that was given before the course, the students defined the obstacles that could prevent them from mastering English. Among them, the top five problems identified by the students before the course were: (1) little time for learning the language (66,7 %); (2) difficulties in learning foreign languages (28,2 %); (3) a lot of material for autonomous learning (28,2 %); (4) ineffective teaching (7,7 %). The students' vision of the obstacles that prevented them from successful learning on the course changed significantly as the key positions they defined were: (1) insufficient proficiency in English (48,6 %); (2) few contact hours (21,6 %); (3) complex terminology (13,5 %); (4) the inefficiency of the curriculum (2,7 %).

The respondents also shared their attitudes towards EAP after the course which can be compared to those exposed before the course (see figure 1). The students formulated their attitudes towards EAP in terms of "I will need it for ..." phrases. The respondents could choose more than one variant.

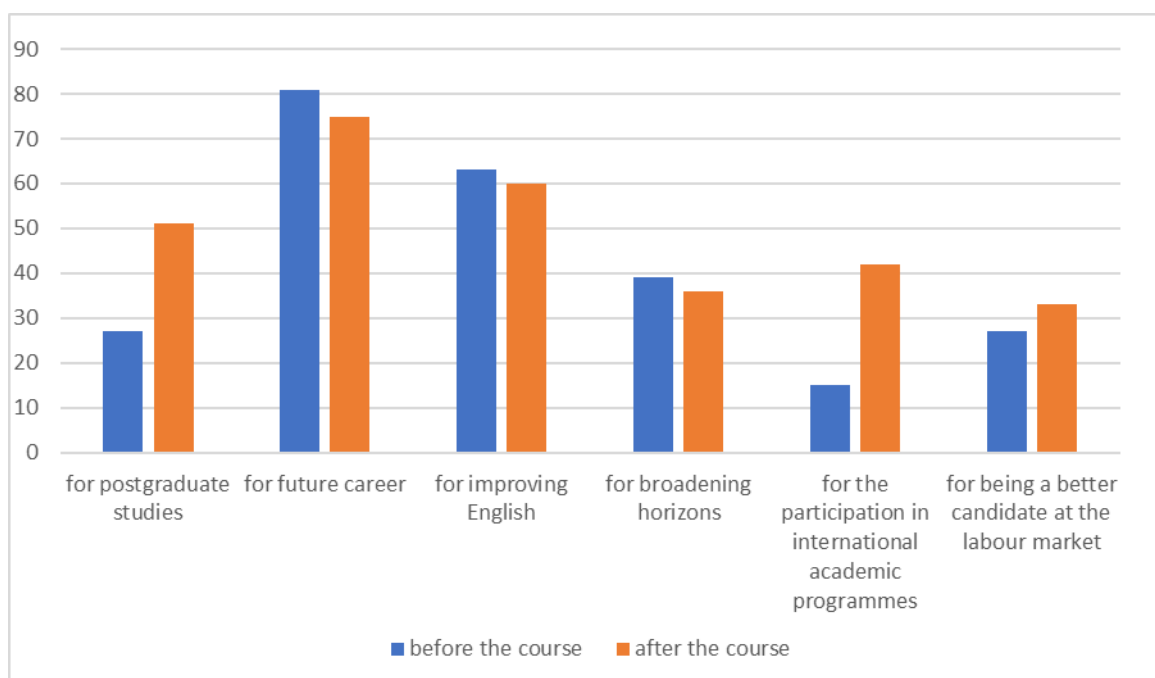


Figure 1. *The students' attitudes before and after the EAP course*

As the figure illustrates, if compared with the data received before the course, after it, there is a significant rise in the number of students who consider that they will need the knowledge and skills acquired in the EAP course for their postgraduate studies (51 vs 27), for the participation in international academic programmes (42 vs 15), and for being a better candidate at the labour market (33 vs 27) which supports the assumption that the EAP course has a positive influence on the students' attitudes towards educational research.

In addition, in both questionnaires, the respondents shared their vision of the importance of different parts of the EAP course for their further career, where 1 is 'Strongly unimportant', 2 is 'Unimportant', 3 is 'Neither important nor unimportant', 4 is 'Important' and 5 is 'Very important'. The mentioned skills are associated with the portfolio items as a task-based approach predominated in learning.

Table 2. *The students' vision of the importance of different parts of the EAP course for their further career*

	Skills	Before the course, %					After the course, %				
		1	2	3	4	5	1	2	3	4	5
1.	Writing a motivation letter	-	-	28,9	42,2	28,9	2,7	2,7	16,3	40,5	37,8
2.	Writing a reference letter	-	5,3	21	26,3	47,4	-	2,7	8,1	27	62,2
3.	Writing a cover letter	-	2,6	31,7	36,8	28,9	-	-	13,5	43,3	43,2
4.	Writing an invitation letter	-	2,6	21,1	34,2	42,1	-	5,7	8,6	45,7	40
5.	Writing a complaint letter	-	5,3	34,2	26,3	34,2	16,2	10,8	24,3	37,8	10,9
6.	Filling in an application form	-	-	13,2	26,3	60,5	-	2,7	18,9	24,3	54,1
7.	Writing a CV	-	2,6	7,9	23,7	65,8	-	-	13,9	22,2	63,9
8.	Making an appointment	-	-	10,6	28,9	60,5	-	-	11,1	27,8	61,1
9.	Making an academic presentation	-	2,6	18,4	26,4	52,6	-	-	8,3	22,3	69,4

The figure below visualizes the percentage of future teachers who state that some thematical parts of the EAP course are 'important' and 'very important' for their further career (see figure 2).

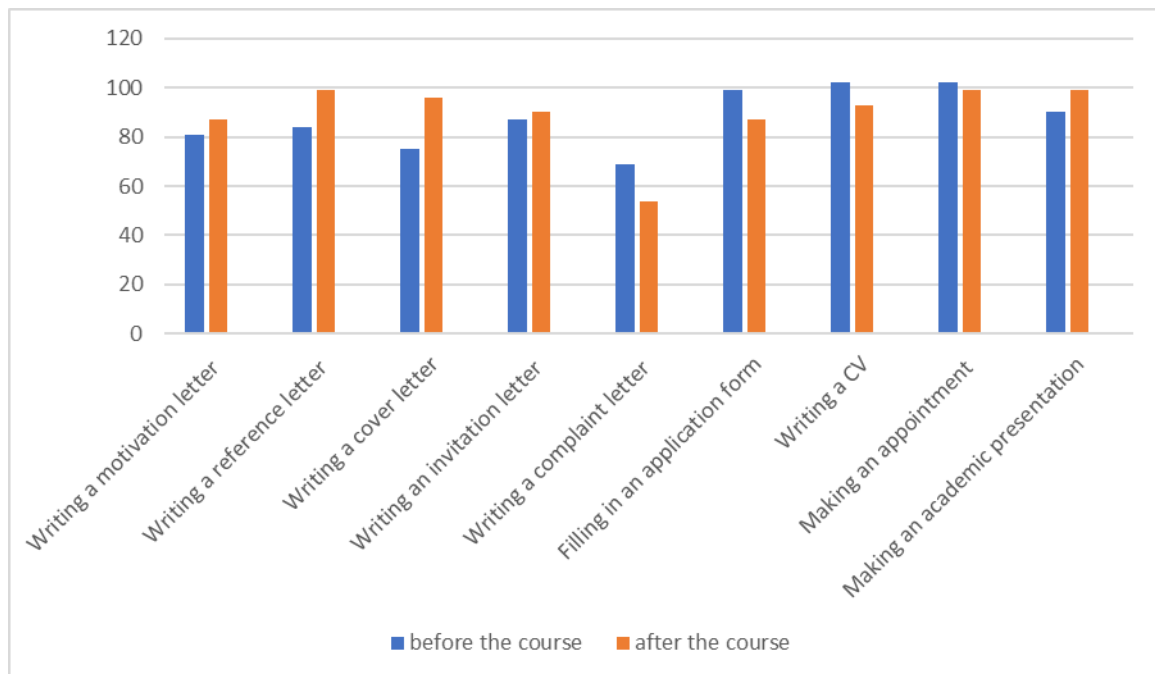


Figure 2. *The number of respondents who state that the following parts of the EAP course are important and very important for their career*

The study before and after the course demonstrates that although the students point to some previous experience of accomplishing the research tasks (writing letters, CVs etc.), they are aware of the importance of other course blocks for their successful professional and scientific communication activities. The respondents express their favourable attitudes to the parts connected with making academic presentations and writing different kinds of formal letters in their answers both before the course and after it. Such blocks as

writing a CV, filling out an application form, and making an appointment remain rather important for students' future career with a slight difference in percentage before and after the course, although a complaint letter takes the least significance in both cases. The number of respondents showing unawareness of the EAP blocks importance was lower after the course than before it.

The questionnaire was targeted at students' needs analysis of two types, namely target situation analysis and present situation analysis (Rao, 2018, p. 42) where target situation analysis deals with the students' future roles, both as teachers and educational researchers, while present situation analysis concerns "their present learning and the information about their current proficiencies and ambitions, revealing not only the "types of text assigned", but also the "reactions of students to assignments and the processes they go through in fulfilling them as well as faculty reactions to student participation and writing" (sited as in Rao, 2018, p. 42).

Also, the questionnaire contained some open-ended items focusing on the student views of the ways to improve the course. Most of the respondents (69%) are committed to having more contact hours with a teacher during an academic year, although some students (17,2%) see such course as optional in their pre-service teacher training. On the contrary, 87% of survey participants are satisfied with the course content and the classroom instruction (teaching methods, management strategies etc.). The students' poor willingness to work autonomously can be explained by different language proficiency (ranging between A 1 and B 2) of Master students studying the course at the same time (see table 1). As the preliminary research results show, the gap between the A 1 / A 2 level of language proficiency and the B 2-oriented course content causes substantial difficulties dealing with different zones of students' proximal development. Therefore, those with more developed language skills are more confident and motivated to take up research after their graduation.

Discussion

This research contextualizes the field of English for Academic Purposes, with a particular focus on the Master students' professional and academic identity and the role of the course in their making further career choices. The study contributes to "the accrual of 'cultural capital' through scholarship and research activity as a basis for establishing the identity and agency of the practitioner" (Ding & Bruce, 2017, p. 117). The authors of the article examine the previously neglected area of academic and employment contexts that are influenced by the course (Rao, 2018). The questionnaire can serve as a technique relevant for collecting information for the course design and improvement. Through it, the authors develop a better understanding of the students' expectations and constraints that may arise from this context, which in turn shape the students' intention either to take up a postgraduate course or carry out classroom research when they start teaching.

In answering the research question "Which parts of the course do the students consider important for their motivation to take up research after their graduation?" we would like to point out the importance of implying a task-based approach linked to the students' prior experience in research. In our view, the course should be more focused on the students' needs by eliminating the items from a broader context, e.g. complaint letters. Moreover, the course materials should rely on a cross-content perspective establishing a connection with other research-related courses from the Master programme.

The future interventions to address issues with the Academic English course to raise the interest of University students should deal with restructuring the course in a way that the student should have more contact hours. The analysis of learning materials designed for EAP course shows that most of them (Jordan, 1997; Graham, 2018; Charles & Pecorari, 2015) introduce students to theory- and research-informed perspectives and guide them in putting theory to use in real-world contexts which would be impossible in 30 contact hours as in the analysed case. Moreover, it should be linked to the students' school practice and their small-scale research in real classroom settings.

Conclusions

To sum up, the EAP course has played a role in building the students' confidence and maintaining interest in research. The skills developed by the course are viewed by the students as important in their further teaching or post-graduate research. Nevertheless, the authors have defined some issues for improving the course in terms of restructuring it and modifying the content taking into account the students' needs and their language proficiency levels.

Further cycles of action research are important to investigate students' motivation to take up research after the intervention and introduce changes in the curriculum. However, the results may depend on the students' profile and thus require considerable change in research methodology in the next research cycle.

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INTERCULTURAL COMMUNICATIVE COMPETENCE DEVELOPMENT IN JOURNALISM STUDENTS

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The paper is focused on the intercultural communicative competence as an integral part of vocational training of journalism students. The aim of the paper is: 1) to define the intercultural communicative competence dimensions; 2) to outline the ways of development of intercultural communicative competence of journalism students; 3) to find out the attitudes of journalism students to intercultural communicative competence development; 4) to assess the levels of journalism students' intercultural communicative competence and develop recommendations for its development. A mixed research design was employed which involved 14 ESP teachers and 26 bachelor students of Ivan Franko National University of Lviv during the autumn trimester of 2021. The study shows that the students are fully aware of the necessity to develop intercultural communicative competence. Based on the survey of the ESP teachers, we outlined the dimensions of journalism students' intercultural communicative competence development and suggested the ways of building intercultural communicative competence in journalism students. The levels of assessment of intercultural communicative competence of journalism students were outlined and defined. The final results indicate that journalism students whose study was more practice than theory oriented (group 1) showed better learning outcomes than those who were mostly focused on the acquisition of theoretical knowledge (group 2). Methodical guidelines for ESP teachers were developed.

Keywords: intercultural communicative competence; journalism students; ESP teachers; knowledge; skills; attitudes; awareness.

Introduction

Recent events connected with the recognition of Ukraine's candidacy for the membership in the European Union have highlighted the necessity to rethink the role of intercultural communicative competence development in English for specific purposes (ESP) courses. ESP has been chosen as the field of research, because more and more adults in Ukraine need English to communicate professionally. Globalization and Ukraine's integration into the EU will increase the need for all kinds of specialists that can speak English (Lytovchenko, Ogienko, Sbrueva, Sotska, 2018). Cultural approach in teaching ESP in today's globalized job marketplace is of utmost importance. It responds to Byram's (1989) call to bring the learning of culture into the research that deals with foreign language teaching and learning. In Byram's (1989) description, the learners aim "must be to participate in the foreign culture and experience it from within as well as observe it and understand it from without" (p.49).

Cultural studies within ESP offer possibilities to bridge different cultures and eliminate misunderstandings that may arise when a "consumer" of one culture perceives and interprets facts, behavior, body language and words of a person who belongs to another culture (Banks, McGee Banks, 2003; Kramsch, 2000). The content of culture has clear parallels with the content of language, as a language itself, is a kind of cultural system. People do differ in language and custom, but the precise ways in which languages, cultures and peoples relate to one another are more complicated than we commonly assume. Hence, acquisition of intercultural communicative competence in language, including ESP learning is urgent nowadays.

Literature review

Intercultural communicative competence involves "the ability to understand the language and behaviour of the target community, and explain it to members of the 'home' community – and vice versa" (Corbett, 2022, p. 2). It is "a process of meaning-making via communication and interaction across cultures" (Camerer, 2014, p. 219). This indicates that "an intercultural approach trains learners to be 'diplomats', able to view different cultures from a perspective of informed understanding" (Corbett, 2022, p. 2). While mastering English and understanding its cultural contexts, learners "are better at intercultural communication, which results from the intercultural communicative competence level" (Sevimel-Sahin, 2020). As stated by Sevimel-Sahin (2020) there is a relationship between the development of intercultural communicative competence and mastering the target language (p. 141).

In the context of intercultural communicative competence development, the researchers have defined its dimensions. According to Sue, Wing, Sue, Neville and Smith (2019) intercultural communicative

competence contains three main domains: “(a) attitudes/beliefs component – an understanding of one’s own cultural conditioning and how this conditioning affects the personal beliefs, values, and attitudes of a culturally diverse population; (b) knowledge component – understanding and knowledge of the worldviews and cultural contexts of culturally diverse individuals and groups; and (c) skills component – an ability to determine and use culturally appropriate intervention strategies when working with different groups in our society” (Sue, Wing, Sue, Neville, Smith, 2019, p. 71). Sevimeh-Sahin (2020) also consider the same components of this competence. Except dimensions mentioned above (Sue, Wing, Sue, Neville, Smith, 2019; Sevimeh-Sahin, 2020), Fantini and Tirmizi (2006) add awareness, which means “being conscious and mindful of one’s own worldview, and the possible differences between culturally diverse clients, and other group identities” (Sue, Wing, Sue, Neville, Smith, 2019). Hofstede and Hofstede (2004) propose another combination of components. The researchers think that three sub-components in the following sequence – awareness, knowledge, and skills – can lead to intercultural competence building. Knowledge and skills are sub-components that are present in all models of intercultural communicative competence but awareness and attitudes are optional.

Nevertheless, Ashwill and Oanh (2009) notice that “developing cultural awareness, acquiring cultural knowledge, and gaining and honing intercultural skills do not automatically assume a commitment to a more peaceful, just, and equitable world” (The SAGE Handbook of Intercultural Competence, p. 143-144). They are convinced that “educators must strive to create a fusion approach that unites both global citizenship and intercultural competence” (The SAGE Handbook of Intercultural Competence, p. 144).

Furthermore, the development of intercultural communicative competence is also related to the issues connected with testing intercultural competence (Camerer, 2014; Schnabel, 2015), the link between intercultural communicative competence and learners’ motivation (Mirzaei, Forouzandeh, 2013), a critical understanding of students’ intercultural experience (Huang, 2022), engagement in intercultural communicative competence and intercultural sensitivity (2021, Vu).

Within the range of ESP specialties cultural studies in journalism are quite important as well. Journalism embraces intercultural communicative competence in both oral and written English. Within oral English, intercultural competence in conducting interviews and discussions require careful preparation and guidance (Chugai, 2017). Writing in journalism requires both individual and collaborative skills and cultural features may manifest themselves in various ways (Fialka, Trishchuk, Figo, Faichuk, 2021).

Intercultural communicative competence in journalism means “removing barriers” because cultural differences can obstruct professional communication and trust. Trust and distrust in journalism, various limitations that are at work in this sphere are strongly predetermined by culture (Engelke, Hase, Winterlin, 2019; Archetti, 2022). Intercultural competence is an important step in building successful communication by journalism students.

The study is fully in line with current tendency of intercultural communication development, in which “culture and language are inseparable and constitute a single universe or domain of experience” (Kramsch, 2000, p. 217). In ESP context, language and culture intersect and different cultures coexist. Hence, language learning needs to be seen not as a purely abstract, cognitive, cerebral process but one that is embedded in action, emotion and aesthetic sensibility (Fleming, 2021).

According to the theory of Kramsch (2000), intercultural awareness constitutes the core of foreign language learning. Foreign language teaching is founded on the conviction that since we all are humans we can easily understand each other if we share the same code; all we have to do is learn that code and use it accurately and appropriately (p. 1). This view of foreign language teaching in general, and ESP in particular, is based on the following assumptions: we have the same basic human needs; this shared basis may be translated from one language into another. Both these assumptions imply that one language is essentially translatable into another. This tendency has been fruitful and it resulted in functional and pragmatic approaches to teaching ESP to journalism students.

Journalism is a fast developing sphere and these days we are witnessing a tendency of the specific language of mass media to transcend the limits of the realm of newspapers and magazines, finding its way into the social media, thus widening rapidly the sphere of its usage. The relationship between journalism, culture and society is a symbiotic one. Journalism influences culture and is influenced by it in its turn. In fact, as some argue, journalism is culture, a set of cultural practices which frame experience and public consciousness of the here and now (Hanitzsch, 2006; Weaver, 2012). Professional journalists are much exposed to cultural and social tendencies, they are on the verge of social changes, and hence, their cultural tolerance is of utmost importance. Journalistic skills are of little help to the community if journalists are not fully aware of their responsibilities to the society. As stated by Weaver, the traditional Western role model emphasizes “non-involvement and a watchdog function” of journalists (Weaver, 2012, p. 492).

The analysis of these works shows that different aspects of intercultural communicative competence in foreign language teaching have been studied quite thoroughly. However, building intercultural communicative competence in journalism students may need further research.

Thus, the **aims** of this research are: 1) to define the intercultural communicative competence dimensions; 2) to outline the ways of development of intercultural communicative competence of journalism students; 3) to find out the attitudes of journalism students to intercultural communicative competence development; 4) to assess the level of journalism students' intercultural communicative competence and develop recommendations for its development.

Methods

Research design

A mixed research design was employed in the study. The methods applied incorporated a quantitative study research design to collect needed data. For these purposes two closed-ended questionnaires were proposed for ESP teachers (in the Google form): the questionnaire "Intercultural communicative competence components" (Part I) with 15 questions, which had to be marked as "strongly disagree", "disagree", "neither agree nor disagree", "agree", "strongly agree"; the questionnaire "The ways to build intercultural communicative competence in journalism students" (Part II) with 8 questions, in which the ESP teachers had to choose either one or several issues. Also the questionnaire "The attitudes of journalism students to intercultural communicative competence development" (Part I) with 4 questions and the test (Part II) before and after the experiment was suggested. To assess the level of intercultural communicative competence in journalism students, the Fisher Criterion was used. The qualitative research method was implied to analyze and interpret the collected data.

Participants

In total 14 ESP teachers and 26 bachelor students of Ivan Franko National University of Lviv were examined anonymously for the development of journalism students' intercultural communicative competence during the autumn term of 2021. The study was conducted in accordance with ethical considerations. All students involved in the research were informed about the objectives of the study and consented to participate.

Research Procedure

In this study there were three stages.

At the first stage the students were divided into two groups (13 students in each one). In the first group, journalism students were better provided with practice than theory (2:1) for intercultural communicative competence development. On the contrary, the second group was focused mostly on theory.

Then the ESP teachers answered the questions of two questionnaires: "Intercultural communicative competence components" (Part I) and "The ways to build intercultural communicative competence in journalism students" (Part II). The aim of Part I was to outline the sub-components of intercultural communicative competence (knowledge, attitude, skills and awareness) and their content. Part II was focused on the ways of building intercultural communicative competence to prospective journalists.

The questionnaire "The attitudes of journalism students to intercultural communicative competence development" was aimed to find out the opinion of students about the development of intercultural communicative competence. The aim of the test was to assess the students' level of the intercultural communicative competence development before the experiment. The test contained two tasks: 1) to analyze the situation and express the attitude; 2) to write the text using intercultural knowledge. The criteria for assessing speaking included: 1) relevance to the situation (1, 2, 3 scores); 2) fluency (1, 2, 3 scores); 3) language accuracy (1, 2, 3 scores); 4) intercultural appropriateness (1, 2, 3 scores). The criteria for assessing writing included: 1) relevance to the topic (1, 2, 3 scores); 2) organization (1, 2, 3 scores); 3) language accuracy (1, 2, 3 scores); 4) intercultural appropriateness (1, 2, 3 scores). 24 scores for both tasks in total.

At the second stage the experiment was conducted. During the autumn term of 2021 the intercultural communicative competence was developed. First, theoretical information was introduced, which was then followed by a number of communicative activities. The analysis of situations individually as well as in groups assisted the students to comprehend the importance of taking into account the intercultural component of situations, to broaden their knowledge about the specifics of different cultures, to form the proper attitude to people of other cultures, to learn to think critically, to develop students' self-reflection, to develop appropriate skills. Discussions and role plays allowed the students to use required knowledge, to drill skills necessary for verbal and non-verbal journalist communication, to understand the nature of cultural stereotypes and avoid their prejudices and to express attitudes in practice.

At the third stage, the after the experiment the test was suggested. In this test two tasks were offered and assessed according to the criteria of the pre-experiment test.

Data Analysis

At the first and the third stages, Fisher Criterion was used to assess the level of intercultural communicative competence in journalism students.

Results

The results of the survey of ESP teachers about the intercultural communicative competence development were summarized in table 1 (Part I).

Table 1. *Intercultural communicative competence components (Questionnaire for ESP teachers, Part I)*

Questions for ESP teachers	Answers
Knowledge	
1. It is important to present target culture with focus on similarities and differences with native culture. a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree	a. 0% b. 0% c. 8% d. 58% e. 34%
2. It is essential to get knowledge from students' mistakes. a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree	a. 0% b. 0% c. 8% d. 67% e. 25%
3. It is urgent to benchmark the limits of students' knowledge and to find the ways of it's expanding. a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree	a. 0% b. 0% c. 8% d. 67% e. 25%
4. It is necessary to teach communication strategies in intercultural situations. a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree	a. 0% b. 0% c. 0% d. 33% e. 67%
Attitude	
5. It is significant to present cultural diversity. a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree	a. 0% b. 0% c. 8% d. 50% e. 42%
6. It is necessary to expose students to different types of communication with people of other cultures. a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree	a. 0% b. 0% c. 17% d. 58% e. 25%

<p>7. It is important to develop student's thinking and behavior void of prejudices and superiority.</p> <p>a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree</p>	<p>a. 0% b. 0% c. 8% d. 50% e. 42%</p>
<p>8. It is urgent to induce students' interest and respect towards people of different cultural backgrounds.</p> <p>a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree</p>	<p>a. 0% b. 0% c. 0% d. 50% e. 50%</p>
Skills	
<p>9. It is essential to teach students to achieve successful verbal communication with a person whose culture is different from your own during journalist communication.</p> <p>a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree</p>	<p>a. 0% b. 0% c. 8% d. 59% e. 33%</p>
<p>10. It is essential to teach students to achieve successful nonverbal communication with a person whose culture is different from your own during journalist communication.</p> <p>a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree</p>	<p>a. 0% b. 0% c. 17% d. 75% e. 8%</p>
<p>11. It is significant to teach students to identify cultural features of a person who belongs to different culture during journalist communication.</p> <p>a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree</p>	<p>a. 0% b. 0% c. 33% d. 42% e. 25%</p>
Awareness	
<p>12. It is important to teach students to develop positive attitude towards cultural diversity.</p> <p>a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree</p>	<p>a. 0% b. 8% c. 0% d. 33% e. 59%</p>
<p>13. It is important to familiarize students with the nature of cultural stereotypes and avoid their prejudices.</p> <p>a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree</p>	<p>a. 0% b. 8% c. 0% d. 67% e. 25%</p>

14. It is important to develop students' self-reflection. a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree	a. 0% b. 8% c. 17% d. 50% e. 25%
15. It is necessary to teach students to deal with ambiguities and bridge gaps during journalist communication. a. Strongly disagree b. Disagree c. Neither agree nor disagree d. Agree e. Strongly agree	a. 0% b. 8% c. 8% d. 58% e. 26%

The general outcome of Part I questionnaire shows that the ESP teachers are fully aware of the importance to present target culture with focus on similarities and differences with native culture (q.1) – agree 58%, strongly agree 33%. The research also clearly indicates that it is urgent to learn from students' mistakes and benchmark the limits of students' knowledge (qq.2,3) – 67%. Concerning intercultural situations (q.4), 9 out of 14 ESP teachers, which make up 67%, strongly believe that it is necessary to teach communication strategies through intercultural situations. Half of the ESP teachers (50%) agree on the importance of the topic of cultural diversity (q.5) and its positive attitude (q.12), the necessity of developing student's thinking and behavior void of prejudices and superiority (q.7), arousing interest and respect towards people of different cultural backgrounds (q.8) and developing students' self-reflection (q.14). As for verbal communication with a person whose culture is different from your own during journalist communication (q.9), more than half of the ESP teachers agree on the importance while 10 out of 14 (75%) can see the importance of nonverbal communication (q.10). Less than a half (42%) find it important to identify cultural specific features of a person who belongs to a different culture (q.11). According to the obtained answers to question 13, it is obvious that familiarization of students with the nature of cultural stereotypes is very important (67%). Concerning the problem of ambiguities and bridging gaps during journalist communication, more than a half (58%) of the respondents agree that it is necessary to teach students to deal with these problems. As we can observe, the results are positive and motivating (all 15 questions have high percentage in options agree/strongly agree), only in qq.12-15 disagreement was expressed (by 8% of respondents).

It can be concluded that most ESP teachers fully understand the importance and awareness of intercultural communicative competence for the journalism students and share their knowledge and experience while teaching their subjects.

The results of the survey of ESP teachers about the ways of building intercultural communicative competence in journalism students were summarized in table 2 (Part II).

Table 2. *The ways to build intercultural communicative competence in journalism students (Questionnaire for ESP teachers, Part II)*

Questions for ESP teachers	Answers
1. The aim of journalism students' intercultural competence development is to: a. build verbal successful communication; b. remove barriers because cultural differences can obstruct professional communication and trust; c. pursue interactional goals during journalist communication; d. change a Western model of journalists' function.	a. 54% b. 85% c. 39% d. 0%
2. In the process of developing journalism students' intercultural competence, the following dimensions must be taken into account: a. knowledge, skills b. knowledge, skills, subskills c. knowledge, skills, attitude d. knowledge, skills, attitude, awareness.	a. 8% b. 0% c. 0% d. 92%

3. It is necessary to practice intercultural communication: a. always; b. sometimes; c. never.	a. 77% b. 23% c. 0%
4. The journalist intercultural skills include: a. adapting to verbal communication with a person whose culture is different from one's own during professional communication; b. achieving successful nonverbal communication with a person whose culture is different from one's own during professional communication; c. understanding the situation of a person who belongs to different culture without any prejudices during professional communication; d. others (please indicate)_____.	a. 69% b. 39% c. 69% d. 0%
5. To reflect on cultural diversity is: a. important; b. advisable; c. optional; d. vital.	a. 62% b. 23% c. 0% d. 39%
6. The acquisition of journalist intercultural competence helps to: a. eliminate misunderstanding with an interlocutor of different cultural background; b. dominate during journalist communication; c. achieve speaker's communicative goal; d. provide favorable environment for journalist communication.	a. 77% b. 8% c. 23% d. 85%
7. While building prospective journalists' intercultural competence it is recommended to use: a. discussions; b. role plays / simulations; c. projects; d. analysing situations.	a. 62% b. 92% c. 23% d. 69%
8. While building prospective journalists' intercultural competence it is recommended to offer: a. individual tasks; b. pair tasks; c. small group tasks; d. whole class tasks.	a. 15% b. 62% c. 100% d. 31%

In order to identify the effectiveness of the educational process, we outlined Part II questionnaire for ESP teachers to find out the ways of building intercultural communicative competence. A high percentage (50%-100%) of ESP teachers' answers shows that they have good knowledge of the intercultural potential of different countries and use it correctly in the process of intercultural communication applying appropriate skills and abilities. Concerning the aim of journalist intercultural competence (q.1), 8 out of 14 (which makes up 54%) consider building successful verbal communication is important; also 12 out of 14 (85%) think of removing barriers as cultural differences can obstruct professional communication and trust. 92% (13 out of 14) exactly define the components to take into consideration while developing journalism students' intercultural competence (q.2). As for journalists' intercultural skills (q.4), almost two thirds (69%) of respondents think that it is necessary to adjust to verbal communication with a person whose culture is different from one's own during professional communication and understand the situation of a person. Thus, we can see that the acquisition of journalists' intercultural communicative competence is believed to help eliminate misunderstanding with an interlocutor of a different cultural background (q.6 – 77%). To build prospective journalists' intercultural communicative competence the following activities are recommended for use (q.7): role plays / simulations (92%), analysing situations (69%) and discussions (62%). A unanimous (100%) preference of small group tasks in q.8 shows the understanding of the issue and high level of practical usage of experience in the classroom.

The results of the survey of journalism students about the intercultural communicative competence development were summarized in table 3 (Part I).

Table 3. *Attitudes of journalism students to intercultural communicative competence development (Questionnaire for journalism students, Part I)*

Questions for prospective journalists	Answers
1. Is it important for journalistic activity to develop intercultural communicative competence? a. Yes b. No c. I don't know	a. 88% b. 0% c. 12%
2. Do you have knowledge and skills to realize effective intercultural communication in the field of journalism? a. Enough b. Not enough	a. 30% b. 70%
3. Do you think that your attitude to another culture and awareness of cultural differences affect the course of intercultural communication? a. Yes b. No c. I don't know	a. 92% b. 4% c. 4%
4. Do you need to develop intercultural communicative competence? a. only theoretical knowledge b. only practice c. theory and practice	a. 0% b. 24% c. 76%

The results of the survey (Questionnaire, Part I) show that on the whole (23 out of 26 (88%)) students are sensitive to intercultural communicative competence and are fully aware of the necessity to develop this competence (q.1). According to q.2, 70% of students think that they do not have enough knowledge and skills to realize effective intercultural communication in the field of journalism. As we see 92% of students in q.3 are sure that their attitude to another culture and awareness of cultural differences affect the course of intercultural communication. It is essential for three quarters (76%) of journalism students to combine practice and theory in learning intercultural communicative competence (q.10). Whereas, theoretical knowledge only is not important for the students and only 24% of respondents prefer only practice (q.10).

The results of the survey of journalism students about the levels of intercultural communicative competence development were summarized in table 4 (Part II).

In order to identify the effectiveness of the learning process focused on the development of intercultural communicative competence, we outlined the levels of intercultural communicative competence of journalism students. *The Low Level* of intercultural communicative competence (10-14 scores) means that a student has limited knowledge, skills, awareness of the intercultural communicative competence and makes serious mistakes during intercultural communication, expresses wrong attitudes. *The Medium Level* of intercultural communicative competence (15-19 scores) shows that a student is quite aware of culture similarities and differences, has some knowledge of communication strategies and uses skills correctly in intercultural situations, in general has proper attitudes to intercultural situations. *The High Level* of intercultural communicative competence (20-24 scores) indicates that a student has good knowledge, skills, awareness of intercultural communicative competence, and has proper attitudes to the intercultural situations.

Table 4. *Levels of intercultural communicative competence in journalism students*

Dynamics in experimental group	Before experiment			After experiment		
	High	Average	Low	High	Average	Low
Group 1 (13 students)	2 (15.4%)	2 (15.4%)	9 (69.2%)	5 (38.5%)	6 (46.1%)	2 (15.4%)
Group 2 (13 students)	1 (7.7%)	2 (15.4%)	10 (76.9%)	3 (23.1%)	2 (15.4%)	8 (61.5%)

Table 4 shows that in group 1, where the development of intercultural communicative competence by ESP teachers was more practice than theory oriented (2:1), only 2 (15.4%) students showed a low level of intercultural communicative competence. While in the second group, where focus was made on learning theory (2:1), there were 8 (61.5%) such students. A medium level was achieved in 6 (46.1%) students of group 1 in contrast to 2 (15.4%) students of group 2. Also, a high level of intercultural communicative competence was demonstrated by 5 (38.5%) students in group 1 compared to 3 (23.1%) students in group 2.

For defining which group showed a higher result in the development of intercultural communicative competence, the Fisher Criterion was used. The results are demonstrated in Table 5.

Two hypotheses were formulated:

H_0 : the percentage of journalism students who have increased the level of intercultural communicative competence in group 1 is not higher than in group 2 as reported by the experimental results.

H_1 : the percentage of journalism students who have increased the level of intercultural communicative competence in group 1 is higher than in group 2 as reported by the experimental results.

We considered that the students with high and medium levels of intercultural communicative competence achieved an “effect” during the experimental learning and the students with the low level of intercultural communicative competence did not achieve an “effect”.

Using the formula $\varphi^*_{emp} = (\varphi_1 - \varphi_2) \cdot \sqrt{\frac{n_1 \cdot n_2}{n_1 + n_2}}$, proposed by Fisher (2017), we calculated φ^*_{emp} , where $\varphi_1 = 2.346$ (85%), $\varphi_2 = 1.328$ (38%), $n_1 = 13$ (number of students in Group 1), $n_2 = 13$ (number of students in Group 2) (Table 5).

$$(2.346 - 1.328) \cdot \sqrt{\frac{13 \cdot 13}{13 + 13}} = 1.018 \cdot \sqrt{6.5} = 1.018 \cdot 2.54 = 2.58$$

Since $\varphi^*_{emp} = 2.58$, which is in the significance zone, the hypothesis H_1 is accepted.

Table 5. *The effectiveness of educational process focused on the development of intercultural communicative competence in journalism students*

Experimental groups	“Effect” in learning	“No effect” in learning	Total
	Number of students (%)	Number of students (%)	
Group 1 (13 students)	11 (85%)	2 (15%)	13 (100%)
Group 2 (13 students)	5 (38%)	8 (62%)	13 (100%)

The final results indicate that the students of group 1 who were provided with more practice than theory (2:1) for the intercultural communicative competence development had higher results compared with the students of group 2.

Discussion

According to Spitzberg and Changnon (2009), intercultural competence is “the appropriate and effective management of interaction between people who, to some degree or another, represent different or divergent affective, cognitive, and behavioral orientations to the world” (p. 7). This is in line with our survey which showed that intercultural communicative competence was important for journalism students and most of the students had positive attitudes to the development of this competence (87% of students).

In order to effectively enhance this competence in the learning process, based on the Questionnaire for ESP teachers (Part II), we outlined the following methodical guidelines:

- The aim of journalist intercultural competence development has to be clearly understood not only by ESP teachers but also by the students. We agree with Corbett (2022) that “the goals of cultural tasks will normally involve a combination of intercultural exploration and linguistic development” (p. 41). The aim has to be focused on building verbal successful communication, removing barriers which can obstruct professional communication and trust and pursuing interactional goals during journalist communication.

- It is necessary to practice intercultural communication regularly. Regular implementation of such practice will help students to be effective in journalist communication which implies understanding the features of the other culture better, eliminating misunderstanding with an interlocutor of different cultural

background; achieving speaker's communicative goals successfully; providing favorable environment for the journalist communication; self-reflection on cultural diversity.

- The development of journalism students' intercultural communicative competence has to be focused on the following dimensions: knowledge, skills, attitude and awareness. The students should be aware of similarities and differences between the target and the native culture. They should learn to find communicative strategies for use in various intercultural situations, to assess the limits of their knowledge and find the ways of overcoming them. The key skills of journalism students involve the ability to use verbal and non-verbal communication with a person of another culture; to identify culturally specific features of a person during the communication. The "attitude" dimension is also important for students. The journalist profession requires objectivity, which means being free from individual subjectivity (emotions, perceptions, imagination). "Awareness" as a sub-component of intercultural communicative competence, implies understanding cultural diversity, avoiding prejudices, developing self-reflection, dealing with ambiguities and bridging the gaps during professional communication.

- "A full range of communicative activities can also be used to serve the goals of an intercultural task" (Corbett, 2022, p. 43). Corbett (2022) states that developing intercultural competence does not mean doing away with the information gap or related activities, but developing them so that (1) culture becomes a regular focus of the information exchanged, and (2) learners have the opportunity to reflect upon how the information is exchanged, and the cultural factors impinging upon the exchange" (p. 32). ESP teachers of Ivan Franko National University of Lviv recommended using discussions; role plays / simulations; projects; analysis of situations. The use of the analysis of situations both individually and in groups helped the students to be more aware of the importance of taking into account the intercultural aspect of communication, to broaden their knowledge about different cultures, form proper attitudes to people of other cultures, think critically, develop self-reflection. Discussions and role plays as imitations of real events in journalism allowed the students to use required knowledge, drill skills necessary for verbal and non-verbal journalist communication, understand the nature of cultural stereotypes and avoid prejudices, express attitudes in practice. All these activities helped to improve language skills, reconstruct the behaviour, enhance awareness, increase logical reasoning and objectivity.

- The tasks for journalism students should be in different formats: individual work, pair work, small group work and whole class work. All these formats should "vary throughout a course, so that learners can benefit from peer-group interaction as well as reflect upon their learning in some solitude" (Corbett, 2022, p. 44).

- The intercultural communication (oral and written) of journalism students should be assessed to measure their progress and needs, to diagnose problems and stimulate them to improve their intercultural communicative competence.

Limitations

Our research which was focused on the development of journalism students' intercultural communicative competence had certain limitations:

1. It involved participants from only one institution – Ivan Franko National University of Lviv, which means that the findings may be generalized with caution.
2. The number of participants was quite limited. Thus further studies conducted in broader contexts and including a bigger number of participants are needed.

Conclusions

According to the results of this study, intercultural communicative competence is an integral part of vocational training of journalism students. Since language is one of the most important parts of the culture, foreign language and culture should be taught integrally to students whose future profession is journalism. Language represents a social community, is integrated into culture; triggers the development of cultural values. Therefore, acquisition of intercultural communicative competence in language learning as well as in ESP is important at present.

On the whole journalism students of Ivan Franko National University of Lviv are fully aware of the necessity to develop the intercultural communicative competence. Based on the questionnaires for ESP teachers, it was possible to outline the following dimensions of the journalism students' intercultural communicative competence development: knowledge, skills, attitude and awareness. Ways of building students' intercultural communicative competence were suggested.

The levels of intercultural communicative competence assessment were outlined and defined for students in the field of journalism. The final results indicate that journalism students whose study was more

practice than theory oriented (group 1) showed better learning outcomes than those who were mostly focused on the acquisition of theoretical knowledge (group 2).

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ANALYTICAL READING FOR STUDENTS-PHILOLOGISTS IN THE ENGLISH CLASS

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The study aims to investigate the higher education students' and teachers' perception of using literary text in the foreign language course; to evaluate learners' progress in the foreign language communicative competence throughout the experiment period; to outline the policies and strategies of using analytical reading in the English class, which lead to increasing motivation to learn foreign languages with a focus on literature. The study involves 85 Bachelor's degree students and 35 teachers from linguistics and translation departments of three universities: Igor Sikorsky Kyiv Polytechnic Institute, National Aviation University, Kütahya Dumlupınar University during the spring term in the school year 2021/2022. The students from these universities were using analytical reading in foreign language learning during this term. The quantitative research method allowed us to assess the students' progress in the development of their foreign language analytical reading skills, that included the understanding of the culture of foreign language, literary and aesthetic skills, vocabulary and foreign language skills, critical thinking and problem solving, inferential and interpretational skills. The qualitative research method was used to interpret the data of the experiment. Three questionnaires were employed as an instrument to assess teachers' and learners' perceptions of using literary texts in foreign language teaching/learning; to monitor the development of student's skills in analytical reading. The students-philologists involved in the research increased their motivation to learn English as a foreign language through literary texts and showed progress in the development of analytical reading skills up to 16%. The results obtained can be implemented into the practice of foreign language teaching as literary texts enriched the language input in the classroom and stimulated language acquisition, and analytical reading involved students-philologists emotionally challenging their imagination and creativity.

Keywords: analytical reading; foreign language teaching; literary texts; foreign language communicative competence; students-philologists.

Introduction

The eternal problem of selecting the better methods of teaching foreign languages has always been guided by perfecting the student's communication skills. One of such methods is introducing the learners to the literature of the foreign language. The use of authentic literary texts, including fiction, in teaching English as a foreign language is becoming more widespread. It can be explained by the growing popularity of communicative teaching methods and the gradual rejection of the teacher-centred system in teaching a foreign language. When the teachers decide to use authentic texts in English lessons, they face problems in selecting proper texts and effective methods in order to work with them within language classes. At the same time, they try to consider the interests and preferences of their students and curriculum requirements while focusing on teaching the English language.

The novelty of the research lies in a new approach to the study of the problem and the analysis of the results obtained. Previous studies on the effectiveness of using literary texts in teaching a foreign language were based on studying the experience of methodologists only. This paper presents assessments from all participants in the educational process – both teachers and students.

What problem does an educational institution consider when it adapts a policy of teaching a foreign language to students offering specializations in a field that should always retain its "foreign" character for them? For example, teaching foreign language literature presents a potential dilemma for Dutch English teachers regarding which language they use. On the one hand, they see the target language as a sign of quality. On the other hand, national language policies have constrained teachers from testing literature in the target language. Moreover, teachers in various contexts have indicated that they prefer to teach complex content in L1 (Wolthuis et al., 2020). How can the teachers act to successfully accomplish the established goals by promoting personal and socio-cultural benefits? Since the students belong to a socio-cultural background that is often very different from the English culture they are supposed to study, the teacher should find some ways to modify the established literary education strategies to suit the specific needs of the

given situation. The task in the current study is to analyze the problems encountered by the learners in the language courses and propose suitable solutions to solve these problems.

The literary study contributes to the development of learners' linguistic competence; therefore, in the early stages of learning a foreign language, one must use relatively standard English and leave slang and more literary English for advanced levels. Pronunciation activities, reading aloud while taking into account learners' proficiency level, respect the text and allow the teacher to enhance it and the learner to read it in a more authentic way.

Analytical reading is a cognitive skill that stimulates brain work. It refers to an ability to approach a text critically by giving priority to the objectives that the author might have. While thinking carefully and deeply when reading, the university students may use their experiences and previously gained knowledge to make sense of the author's writing. Intending to use it in language training, it is desirable to introduce literature from the first levels: pre-intermediate and intermediate. For this, it will be necessary to use a global approach to the text by favouring literary reading activities, to the detriment of literary analysis activities: the learner must "learn to understand, he must therefore be able to draw the main ideas, summarize while integrating new knowledge" (Armand, 1996, p. 71).

Literature is a living phenomenon that concerns peoples' daily lives. Its teaching is more important as it is a fruitful way of facilitating the learning of a foreign language. The goal of the language class is to learn the language and its culture. The coinage of language and culture into one word is to emphasize both the discourse level meanings and those that go beyond lexico-grammatical meanings, hence the culture embedded in the language (Liu, 2019). The literary text makes it possible to approach these two areas, and in this context, learners see in English literature one of the greatest possibilities for a relationship between cultures, which proves that the literary texts can address, among other aspects, intercultural exchanges.

Literature is a source of pleasure and self-assertion, says Etienne-Tomasini Delphine (2018). A student awakened by reading becomes much more complete. For sure, the initial difficulties in deciphering the spelling are replaced by other challenges related to linguistic understanding, but in the end, it improves language proficiency.

At the start of learning, reading and writing complement each other in order to promote the acquisition of grapho-phonetic code as well as the discovery of the functions of written language, later reading literary texts can help to appropriate the characteristics of different kinds of texts to discover new ways of expressing oneself in writing. Furthermore, if motivation is one of the key factors for language learning and acquisition, language teachers certainly have an obligation to offer students more challenging and interesting texts and activities that will get them involved on a deeper level and create the feeling that they are using the language for professional purposes.

Literature review

If the main purpose of language teaching is not to develop a narrow perception of language function and style in students, different kinds of texts for developing language awareness have to expose them to a wide range of representational materials, which would invite learners to respond and react, to question and evaluate, to interact with the text, to get involved emotionally and creatively, and to relate it to their own experience. This is where literature finds its way in the language classroom. Wilson (2016) states that a sophisticated framework is needed to support the development of students' critical tendencies, for which critical reading pedagogy can be presented in different ways. Mustofa and Hill (2018) consider several stages of literature interpretation with the final stage for the readers to respond to the text; considering how to connect their own life experience to that of the literary text.

Tsang, Paran, and Lau (2020) looked at the differences between views of short stories, poems and songs for a more nuanced understanding of whether different literary genres are perceived similarly or differently. Short stories seem to be more positively viewed than poems and songs, yet there are areas perceived to be beneficial in both genres. From the learners' perspective, it seems that short stories are regarded as contributing to both language-related and non-language-related development (p. 22).

Akhrib and Nedjai's (2021) findings lead to reconsidering the selection criteria of gender-oriented passages in English as a foreign language contexts, although Brantmeier (2003) selected the texts based on male or female characters, and specified what may be different for each gender. Duff and Maley (2007) formulated three types of justification for using literary texts: linguistic, methodological, and motivational. Linguistically, the use of literary texts is justified on the ground that they offer genuine samples of a very wide range of styles, registers, and texts of many levels of difficulty (p. 6).

The literary text affects the world of human feelings and has an emotional impact on the reader through not only the figurative depiction of reality but also the author's reflection of his vision of the world with which

the reader relates his value system. “Literary texts are in a very real sense the vehicle for culture” (Duff & Maley, 2007). Spirovska Tevdovska (2016) states that one of the most valuable advantages of using literary texts in foreign language learning and teaching is the involvement and enrichment that it cultivates in readers and learners. Readers pursue the development of the story and are willing to share their responses, engaging in literary texts enabling them to focus beyond the grammar and syntax of the foreign language.

Fanlo (2011) is persuaded that it is necessary to think about literature at the university because it reveals an essential aspect of humanity, it is really a matter of understanding and knowing when you study it, and it is about understanding and knowing not only how a literary text works and what it means, but also what it teaches us about a man. Literature is no longer related to the periphery of foreign language teaching, gaining more accessible, meaningful and useful for learners for developing their literary competence and appreciation together with international trends on the integrated curriculum for English and literature in English as a foreign language context with the focus on a skill-based approach to literature opposed to knowledge about literature (Nguyen, 2016). Collins points out that when teaching literature it is hard to imagine a teacher or school leader who is not aware of the importance of teaching higher-order thinking skills to prepare young men and women to live in the 21st Century (2014). In his research on teaching language through literature, Llach (2007) states that literature transmits messages. It is a way of communication between the author and the reader, which motivates the learner to interact.

Carter and Long (1991) identify three main approaches to studying the literary text, combining them into three models: *cultural model* when a literary text is viewed as a product, a source of information about the culture under study. The main emphasis is placed on the social, political, historical context, the belonging of the text to literary trends and genres.

A *language model* requires much attention to lexical and grammatical structures or stylistic analysis, which allows interpreting the text consciously. This model is more student-centred; it improves general proficiency in a foreign language and makes the approach to literature more competent.

A *personal growth model* is focused on students and the process of studying a text. With this approach, students are proposed to express their opinions, describe their own experience, express their attitudes toward what they have read. This model contributes to the interaction between the reader and the text, making the study of the language more memorable and personalized.

Many practising teachers observe students’ positive attitudes toward reading fiction in English at foreign language lessons. They report increased motivation, improved reading skills and increased general interest in the activity. Kramsch and Kramsch (2015) emphasize the importance of the “principle of obligation”, i.e., acquaintance with the golden fund of literature, which will be effective in combination with the principle of scientific and methodological activities. They explained, “the study of language in those days meant the study of literature” (p. 554).

Richards and Rodgers (2010) offer selection criteria, focusing on the purpose of using works of art in the learning process – the development of reading competence. The authors propose to select artistic texts that would show the country’s modern life and raise social and moral issues.

Umirova (2020) points out that these materials create an experience of a real context of the target language for the learners. They will be introduced to the idea of how a conversation in a natural situation of native speakers begins, goes on, and finishes.

The challenges the teachers face today are the syllabus that is not at par with the educational realities, and bookish or theoretical understanding of a subject doesn’t suffice in preparing students for the real world and the lack of e-learning experience – both as a method of learning that students can take up independently and as a tool for teachers to supplement their standard academic syllabus.

Despite such unanimous approval of the use of a literary text for teaching and its use in the educational process as a whole, in the foreign methodology of teaching a foreign language, there are still disputes over the appropriateness of this type of activity. This question remains yet controversial. For example, Maley (2001), author of the chapter “Literature in Language Classes” in “The Cambridge Handbook on Teaching English to Foreigners”, explains the situation as follows. Historically, literature has long been the main source of linguistic information in teaching a foreign language. However, with the development of technical means, methods of teaching a foreign language, and the availability of language material, the role of a work of art in teaching a foreign language began to weaken. The growing popularity of the English language required the mass training of “functionally competent users”. In this process, the use of literature and artistic words became irrelevant and even partly harmful. The debate between the supporters of the “old” and “new” approaches continues to this day, but “recently there has been a gradual rehabilitation of literature and its value in the learning process”. Since the 1980s, the literary text has gradually returned to the practice of teaching English as a foreign language.

Bilonozhko and Syzenko (2020, p. 125) state that generation Z is exposed to new formats and non-traditional content such as memes, Instagram feeds, Twitter, and web-content aggregators, reduces their time to read traditional content. This may have quite a few challenges for introducing the more traditional formats of authentic content to encourage learners to deal with authentic texts in real-life contexts. Students are more willing to read fairy tales and adventure novels than descriptive country studies articles. In addition, the literary work must be read from beginning to end. This supports students' interest, as they want to know what will happen to the characters next. A literary work should have an interesting plot, have a pronounced emotional colour, and contain a large number of dialogues. It should contribute to the formation of high moral qualities of students: kindness, compassion, society, active life position. The text focused on learning objectives serves as a stimulus for educational communication; it contains factual and linguistic material for the development of sociocultural competence.

Thus, foreign methodologists and practising teachers who use literature in the process of developing foreign language communicative competence are faced with the objections that literary reading does not meet the criteria of academic excellence and, accordingly, does not fit into the framework of the educational process. Nuraihan Mat Daud et al. (2018) claim that the language used in literary texts can be daunting for learners who are still mastering the language. Therefore, the focus may be shifted to making them understand the text, not interpreting it. A literary text has a complex grammatical structure and is incomprehensible from a cultural point of view, and it may contain unnecessary lexical units that complicate understanding. However, for some practising teachers, the grammatical and cultural complexity of the text is a motivation for in-depth study of the text.

Despite the significant number of studies regarding the use of literary texts in teaching a foreign language, the issue of perception of literature as an input of a good foreign language class may need further research. Within this context, **this research aims** to evaluate students' progress in foreign language communicative competence and see how they developed their perception of analytical reading in the English class through the completion of the experiment. The main research questions for the study were: What is the teachers' and students-philologists' perception of using literary texts in foreign language teaching/learning? What is the impact of using literary texts in foreign language learning?

The hypothesis in the present study is that students-philologists will enhance their motivation to learn foreign languages, develop specific skills, such as understanding of the culture of foreign language, literary and aesthetic skills, vocabulary and foreign language skills, critical thinking and problem solving, inferential and interpretational skills provided the following conditions are taken into account: 1) integration of literary texts of different genres in foreign language classes during the experiment period; 2) using various analytical reading activities specified in the questionnaires; 3) regular stimulation of students-philologists' independent work.

Methods

Research Design

The study has a mixed-method design with both quantitative and qualitative data. The quantitative research method was used to assess the level of analytical reading skills of students-philologists' learning a foreign language using the Likert scale. The qualitative research method was implemented to monitor and interpret data of the experimental learning. In particular, it allowed us to collect data about teachers' and students' perception of using literary texts in English class, to monitor students' confidence in using analytical reading skills for developing their foreign language communicative competence. For this purpose different semi-structured questionnaires were prepared for teachers and students-philologists.

Participants

The number of participants in this experiment was 120 from three universities: Igor Sikorsky Kyiv Polytechnic Institute (30 students, 15 teachers), National Aviation University (33 students, 11 teachers), Kütahya Dumlupınar University (22 students, 9 teachers) offering Bachelors degree in linguistics and translation. Altogether among the participants were 35 teachers and 85 students learning to get Bachelor's degree, who completed the questionnaires before and after the experiment period, that took place from September 2021 to December 2021 and involved an estimated 15 hours of class and individual work for students (1.5 ECTS). The participants agreed that the results of this experiment could be treated anonymously.

Instruments and Procedure

For conducting our research three blocks of questionnaires were used, including mainly closed items using Likert scale and 5 open questions in each questionnaire to elicit additional information from the respondents. Google forms contained 3 questionnaires, the first one for teachers, the second one for the students, containing 15 questions each to monitor their perception of using analytical reading in English

class, the basic activities, motivation for using literary texts for developing foreign language communicative competence. The third questionnaire was created to assess students' development of analytical reading skills, based on a 5 points Likert Scale and showing students' confidence in using these skills in English class before and after the experiment. For preparing questionnaires some of the questions were used from the survey introduced by Duncan and Paran (2017) to assess teachers' and learners' perceptions on using literary texts in foreign language teaching/learning.

Table 1. *Blocks of questionnaires used in the survey*

Questionnaire 1	Teachers' perception of using literary texts in foreign language teaching
Questionnaire 2	Students' perception of using literary texts in foreign language learning
Questionnaire 3	Monitoring the development of student's skills of analytical reading

Students were expected to read literary texts within the English language course during one semester. Google Forms were used to monitor the results of the survey.

The completion of the experimental research entailed three stages:

Stage 1. At this stage, the teachers and the students-philologists were offered to complete the questionnaires in Google forms to monitor their perception of analytical reading in the English class. A survey was conducted using Questionnaire 1 for teachers and Questionnaire 2 for students. It contained questions for collecting information about participants' motivation to use literary texts, monitoring the main class activities for using literary text. They also contained open questions (5 in each questionnaire) to find out how using literary texts in the English classroom affects the ability to correctly and deeply understand a foreign language, to what extent it increases interest in cultural values; to monitor students' motivation to expand the range of cultural and foreign language communicative competence. Questionnaire 3 was used before and after the experiment period, contained questions for the students-philologists to measure the progress in developing students' analytical reading skills using 5 points Likert scale.

Stage 2. At this stage, the experiment took place during one term, involved an estimated 15 hours of class and individual work for students (1.5 ECTS), when the literary texts were implemented in the foreign language teaching/ and learning process. The goal at this stage was set to foster interest in the target book, to form an active reading activity, the ability to correctly and deeply understand what was read, to develop analytical reading skills, with special attention given to skills of understanding the culture of foreign language, literary and aesthetic skills, vocabulary and foreign language skills, critical thinking and problem solving, inferential and interpretational skills.

The special focus in introducing literary texts in English class was given to the development of student's abilities to analyze received information critically and make decisions or conclusions based on it, to develop students' literary analysis skills, to learn new vocabulary from the literary texts, to deduce meaning from the context in literary text, inferential and interpretational skills. During this period the students-philologists were offered excerpts from the authentic texts by Mark Twain, Jack London, Richard Gordon, Thomas Hardy, Stephan Leacock, Evelyn Waugh, and Jerome K. Jerome. These materials were expected to be motivating because they connected the readers with the outside world and let students know that learning was not just about the classroom.

During this stage, such class activities for analytical reading were implemented for students-philologists: discussions, group work, monologue, dialogue, role play, pair work, group work and improvisations. To develop speaking skills, the students were offered the following tasks: to make up a dialogue, describe the characters, determine the moral of the story, retell the plot, predict the ending. At the same time, the teacher monitored the correctness of the composition of sentences, the use of tenses, the formation of plural nouns, etc. Working with texts involved the development of higher-order thinking such as comparison and opposition, contextual clues, description, conclusions, assessment of facts and opinions, memorization, ordering of sequences, patterns.

Stage 3. Data collection procedures were based on monitoring the results by receiving feedback through Questionnaire 3. At this stage of the research the data was gained from the survey specifically designed for students, that focused on the development of skills needed for using literary text in the foreign language class, such as the skills of understanding the culture of foreign language, literary and aesthetic skills, vocabulary and foreign language skills, critical thinking and problem solving, inferential and interpretational skills, as Duncan and Paran (2017) proposed, and their confidence to use them before and after the experiment. The monitoring of the students' progress was made by collecting the data using questionnaires based on a Likert Scale.

Results

All of the respondents teachers (100%) stated that they strongly agree that literary texts should be used as part of foreign language teaching that proved their high level of motivation to use literary texts in the classroom. About 62.5% of teachers strongly agreed, and about 37.5% agreed that using literary texts makes foreign language learning more interesting for their students. More than 90% of the teachers think that using literary texts helps to raise controversial issues in the English classroom. Using shorter texts for analytical reading in the English classroom was more preferable for 81.3% of teachers (68.8% agreed, 12.5% strongly agreed). Figure 1 shows the results obtained from the teachers.

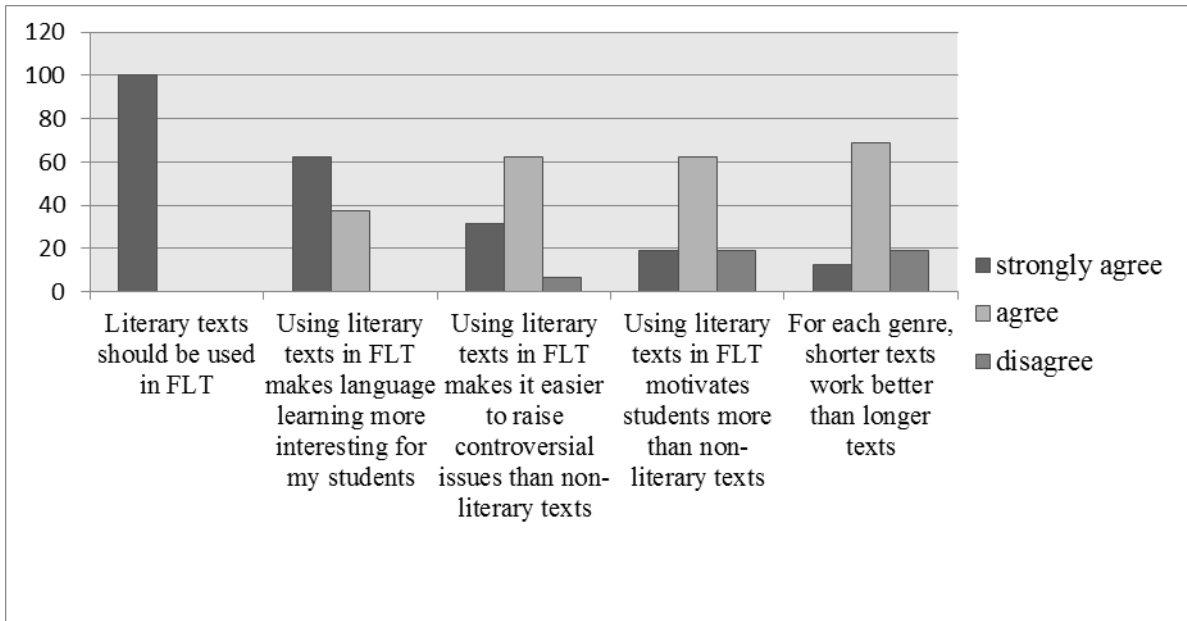


Figure 1. Teachers' perception of using literary texts in Foreign language teaching (FLT)

The results obtained from students-respondents were presented individually in Figure 2. To start with, the results show that 96.5% of students from all the institutions believe that using literary texts makes learning foreign languages process more interesting and enhances their ability to analyze the context critically. On the other hand, the results show that the difference between the students who agree that using literary texts motivates them more than non-literary texts and the students who disagree with this statement was 10.65%, being the students who agree or strongly agree higher. In addition, more than 80% of students claim that using literary texts challenges them from the language point of view, while 20% disagree with the statement.

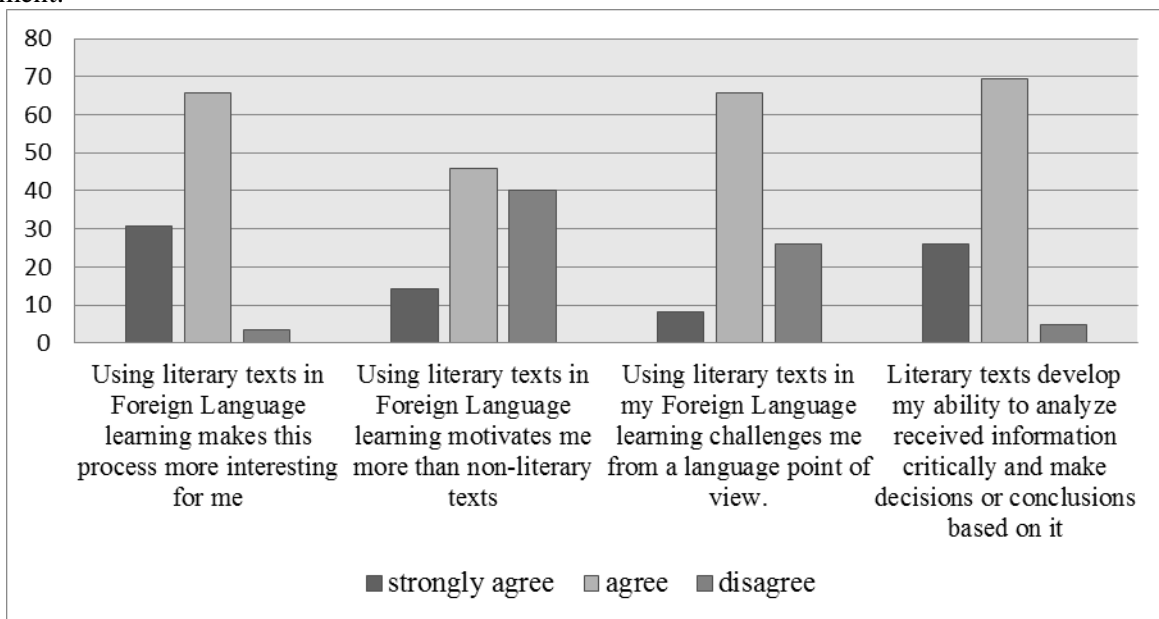


Figure 2. Students-philologists' perception of using literary texts in FL learning

Concerning the influence of using literary texts for developing students' abilities teachers stated among the most important: ability to learn new vocabulary (strongly agreed 68.8%), to analyze received information critically and make decisions or conclusions based on it (agreed total 100%), to transfer literary analysis skills from language A to language B (93.8% agreed).

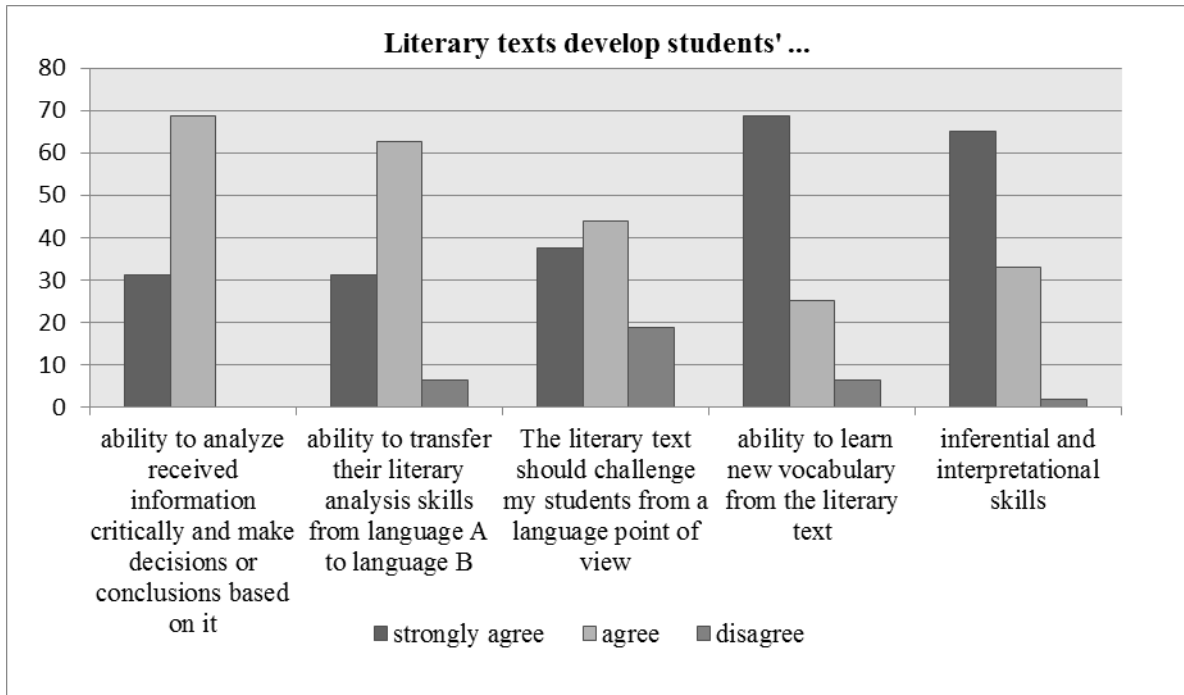


Figure 3. Monitoring the development of students-philologists' skills of analytical reading

Learners need more neutral, more functional English, relevant to the demand of particular uses in business, law, travel or tourism, advertising, and so on. The efficient ways of making literature a more significant part of language teaching help to further the learner's mastery in the four basic areas of listening, speaking, reading, and writing. Many of these activities can be successfully adapted across different levels of language proficiency.

The results in Figure 4 show that teachers and students support various types of class activities with literary texts, with all the respondents preferring discussions (33.3% teachers, 27% students) as the main activities. Then the opinions differ among the group work (18.7%), monologue and role play and pair work in similar proportion (12.5% for each) for teachers; and dialogues (17.6%) group work (13%) and improvisations (10.7%) for students.

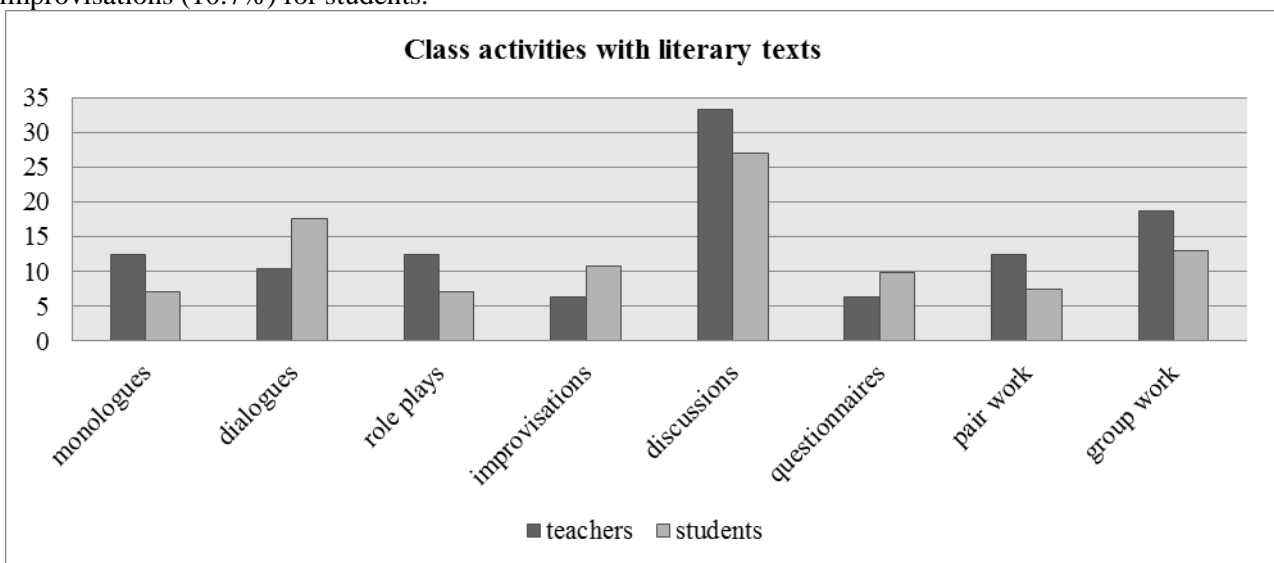


Figure 4. Monitoring class activities for analytical reading (students' and teachers' responses)

At the final stage of the present research, the students were monitored and some feedback was received using questionnaires for students and teachers. Figure 5 introduces the results obtained on the students' progress in different skills. To start with, the results show that students from all institutions enhanced their foreign language skills with the help of implementing analytical reading into the educational process. On this diagram, it is clearly shown that the initial and final level of students' confidence in the field of using literary texts for developing such skills as the understanding of the culture of a Foreign language (it raised from 4.5 to 5 points on the Likert scale, that constituted the 10% increase), literary and aesthetic skills (from 3.8 to 4.5 that constituted 14% increase), vocabulary and foreign language skills (4.2 to 5 meaning 16% increase), critical thinking and problem solving (4.4 to 4.6 meaning 4% increase), inferential and interpretational skills (3.5 to 4.2 that constituted 16% increase), within the Likert scale from 1 to 5.

Table 2. Monitoring the development of students-philologists' skills of analytical reading

Using literary texts helps to develop:	1 st stage	3 rd stage	% of increase
Understanding the culture of FL	4.5	5	10
Literary and aesthetic skills	3.8	4.5	14
Vocabulary and FL skills	4.2	5	16
Critical thinking and problem solving	4.4	4.6	4
Inferential and interpretational skills	3.5	4.2	16

All in all, the results have shown that the students enhanced their foreign language analytical reading skills and motivation to learn English through literary texts up to 16%, with the highest progress in the development of inferential and interpretational skills (16%) and vocabulary and foreign language skills (16%), with the lowest increase in the development of critical thinking and problem-solving skills (4%). The low increase of critical thinking and problem-solving skills can be explained here with an already high level of these skills at the beginning of the experiment. Presumably, the progress would have been higher, yet, it seems that the experiment was beneficial for students-philologists from all the universities.

The students involved in the research manifested the necessary qualities of the reader, the activity and accuracy of the emotional reaction, the depth of comprehension of the literary text, the concretization of literary images in the reader's imagination, the ability to aesthetically evaluate the form of the work, to see behind the artistic world of its author. Most of the students showed the ability to evaluate works of literature on the basis of conscious criteria and the presence of the literary and aesthetic ideals of the individual. At the final stage of the current research, students showed higher motivation for analytical reading while writing reviews, doing creative and research works, writing essays.

Discussion

The research shows that both teachers and students-philologists are almost unanimous in assessing the importance of studying literary texts in a foreign language class at a university level. Although literature was perceived by some participants of the experiment to be a challenge, it was nevertheless felt that the benefits of literary texts in the foreign language classrooms outweighed the challenges. Based on the survey results, analytical reading helped the participants to analyze received information critically and make decisions or conclusions based on it. The results obtained by us are in agreement with the study of Duncan and Paran (2017) towards an understanding of the use of literary texts in foreign language teaching, and developing analytical reading students' skills with the help of using literary texts in English class, but we also concluded that analytical work on the text is not an aim in itself; it is one of the means of teaching students to read, understand and, if necessary, translate foreign texts. Therefore, when applying different types of analytical work to the text, the purpose of this work and the possible practical consequences must be clearly imagined.

Taking into account the results of the experiment and with a view to broadening the perspective of the research, we offer strategies for providing successful practice in analytical reading with regard to 1) stages of analytical work; 2) language enrichment; 3) communicative activities; 4) choice of literary work.

Stages. Among the recommendations we consider it important that all the stages of analytical work should be interrelated to each other before reading, students-philologists should be provided with information about the author, the style of the text, the time when it was written. Then they read the text to understand it and make an idea about it. The following stages are deep analyses of the vocabulary, learning speech patterns, asking and answering questions, role-plays and retelling. For weaker students, the tasks can be narrowed so that they could concentrate on particular skills. In this case, a solution is reading an extract,

not the full text. By reading passages, weaker learners will avoid a bulk of unknown words and monotonous work with difficult reading. The teacher has to persuade his students that they can afford the task that it is not impossible for them even if they encounter difficulties in understanding. Students who complete the tasks successfully will feel more confident, and more likely, they will want to extend their literary interests.

Language enrichment. In terms of different ways in which a text can be explored, we believe that literature provides a rich context in which individual lexical or syntactical items are made more memorable. Based on the experience of our research we recommend encouraging the students to use a dictionary to look up the words that have multiple meanings, and therefore the choice of the desired equivalent in the dictionary article requires a preliminary orientation on the grammatical form and function of the new word. Doing exercises on finding synonyms and antonyms to the words from the learnt extract; finding the odd word out of a synonymic row; learning speech patterns and translating them in sentences also proved to be very productive activities implemented for class work. In this regard, it should be noted that extensive reading increases a learner's vocabulary and facilitates transfer to a more active form of knowledge. The results of the experiment convinced us that reading literary works exposes students to many functions of the written language and consequently to linguistic advantages. When reading students gain familiarity with many features of written language – the formation and function of sentences, the different ways of connecting ideas – which broadens and enriches their own writing skills. It also develops the students' ability to deduce meaning from the context.

Communicative activities. To diversify successfully teaching literature in the English classes the teachers use such activities as monologues, dialogues, role plays, improvisations, discussions, questionnaires, pair and group work, and others. The results of our experiment revealed that both teachers and students-philologists give preference to discussions, although the opinions differ among the other types of activities. The students more readily get involved in dialogues and improvisations, while teachers stated they would focus more on group work, role play and pair work. A possible solution to this problem would be to explain to the students what results can be achieved by doing each type of work. This would probably give rise to a better perception of other types of activities.

The choice of literary work. The desire for quick, specific information, an insufficient level of knowledge leads to a decrease in interest in the book, the modern generation reads little. We believe that the use of literary texts in English or translation classes can be one of the ways to introduce students to the golden fund of world literature, to acquaint them with the works of classic and modern writers. Learners are exposed to language that is genuine and undistorted, as can be managed in the classroom context. Moreover, for many English learners, the ideal way to deepen their understanding of life in the country where this language is spoken is a visit or extended stay, which is not possible. Such learners should adopt that they get an understanding of the life of the country by watching films, videos, reading newspapers and, of course, literary works. Thus, we consider it important that the teacher should present a piece of literature in order to develop a broader range of activities and involve students in them. It also proved to be popular with the students when a teacher matches a literary piece with the main topic, for example, travelling, city plans, student's life, job, earnings, family, relations and so on. By immersing into the world of a novel, play, or short story with a bright context with characters from many social strata, students can reveal their thoughts, beliefs, feelings, customs, discover what they enjoy or fear, how they speak and behave behind the closed door. Contemporary British and American literature offers readers a great variety of original works from established classics Jane Austen, Charles Dickens, George Orwell, J.D. Salinger, Harper Lee, Ernest Hemingway, Toni Morrison, etc. to inventive and emotionally-compelling works of contemporary writers Julian Barnes and Ian McEwan to the evocative historical novels of Hilary Mantel and Pat Barker, and others. By offering students such literature, the teacher will stimulate their language and esthetic development and help them broaden their outlook and see the beauty of the target language at its best.

Conclusion

According to the study, it is evident that reading is the basis for forming a picture of the world of students-philologists, for broadening their horizons. The authors also consider the project important as it provided a favourable environment for both teachers and students to try and test the obtained skills by implementing literary texts into foreign language learning and to realize their potential through project work. The objective of the study was to understand how the perception of analytical reading could influence students' progress in linguistic and intercultural competence. The positive result is obvious, as students-philologists from all the universities progressed with the level of confidence in using literary texts.

To start with, most of the students participants revealed the necessary qualities of the reader and changed their perception of the value of analytical reading. Moreover, they demonstrated a growing ability to

understand the culture of a foreign language, enhanced their inferential and interpretational skills, developed critical thinking and problem-solving skills, which are necessary for forming a competent specialist in any field. It was obvious, that literary texts enriched the language input in the classroom and stimulated language acquisition, analytical reading involved students emotionally, awakened their imagination and creativity. To sum up, the students-philologists showed higher motivation for analytical reading while doing creative and research work.

Thus, working with the text requires considerable effort to fulfil various tasks thoroughly and accurately, which can be immensely rewarding, and the results are highly satisfying. The students will become more creative and adventurous as they begin to appreciate the richness and variety of the language they are trying to master and use some of that potential themselves, which opens up prospects for future research.

There are some limitations in the study that could be addressed in future research. The study focused on the students-philologists from Ukrainian and Turkish Universities and the scope of participants can be extended to the students from other countries that would give more evidence in this field of studies and generalize the recommendations to a larger academic audience.

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Title	The title is maximum 12 words
Abstract	The abstract should be 200-250 words in length. The structure of the abstract must contain: Purpose. State the problem of the study and explain its purpose. Method. In brief specify research model/design (qualitative, quantitative or mixed methods), research sample/participants, research instruments and procedure, data analysis. Findings. Outline the main results. Implications for research and practice. Show how the results can be implied in practice and what we have learned to draw implications for the future research.
Keywords	5-7 keywords
Introduction	An opening paragraph should include these items: a statement of the topic/problem; a general statement what the literature has found; a statement about what the literature is missing. Literature review which identifies the seminal historical contributions, outlines the state of knowledge, and justifies the novelty of the article's contribution The literature review should lead directly into the last section of the introduction – your study overview.
Aim and hypothesis	A hypothesis is a statement that introduces a research question and proposes an expected result. An aim includes the main tasks or questions that must be solved in the study.
Method	Research Model/Design (qualitative, quantitative or mixed methods). Sample/Participants (quantity of students or learners in the groups, quantity of teachers; institutions in which the research was taken place). Instruments and Procedure include questionnaires, tests, texts. Also the steps of research realizing must be described. Data Analysis (stages of data analysis; techniques of mathematical statistics that are used to process data). Ethical issues Mention if the research was previously approved by an ethics committee, or if the participants gave their informed consent for participating in the study (were informed of the withdrawing possibility, with no other consequences on their status etc.)
Results	The results should present the findings and explain findings. Inserting tables is not enough. Comment on the tables. Present both quantitative and qualitative data in the section (but do not cite any references). We recommend following Bem's (2006) instructions for presenting findings: remind readers of the conceptual hypotheses or questions you are asking; remind readers of behaviors measured or operations performed; provide the answer/result in plain English; provide the statistic that supports your plain English answer; elaborate or qualify the overall conclusion if necessary
Discussion	Introduction sentence; Statement of the problem; Review of the Methodology; Summary of the main results; Reference to previous research; Discussion of the results; Recommendations for educators; Implications for research and practice; Suggestions for further research.
Limitations	The study may include such examples of possible <i>methodological limitations:</i> small sample size, lack of available and /or reliable data, lack of prior research studies on the topic; measure used to collect the data etc.; <i>limitations of the researcher:</i> access, longitudinal effects, cultural and other type of bias, fluency in a language.
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