

MEASURING POSITIVE EMOTIONS: A PRELIMINARY RESEARCH DESIGN ON THE INFLUENCE OF ACTIVE METHODS IN ENGLISH LANGUAGE TEACHING

Měření pozitivních emocí: Design předvýzkumné části o vlivu
aktivizačních metod ve výuce anglického jazyka

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Abstract: *The paper introduces a preliminary research design of a prepared dissertation thesis. It explores the theoretical overview of active learning and explains key features of derived teaching methods referred to as “active methods”. The preliminary research aims to measure emotional responses among Czech young adults, employing self-report questionnaires adapted from the Achievement Emotions Questionnaire and gather initial data into a more extensive investigation on positive emotions in English language teaching.*

Key words: *active learning, active methods, positive emotions, ELT research, gamification, brainstorming, cooperative learning, learning engagement*

Abstrakt: *Příspěvek představuje předběžný výzkumný design připravované disertační práce. Příspěvek zkoumá koncept aktivního učení a vysvětluje základní charakteristiky odvozených výukových metod nazývaných „aktivizační metody“. Předvýzkumná část si klade za cíl změřit emoční reakce českých studentů ve věkové kategorii 18–26 let. Pro tyto účely využívá sebehodnotící dotazník vytvořený z Achievement Emotions Questionnaire. Cílem výzkumu je shromáždit počáteční data pro rozsáhlejší studii o pozitivních emocích ve výuce angličtiny.*

Klíčová slova: *aktivní učení, aktivizační metody, pozitivní emoce, pozitivní psychologie, výzkum výuky anglického jazyka, kooperativní učení, zapojení do výuky*

1 Introduction

The following paper introduces a preliminary research of a prepared dissertation thesis that focuses on the implementation of active methods in today's English language teaching (ELT). The research aims to find the emotional aspects these methods exhibit, particularly towards a group of Czech young adult learners. Furthermore, it introduces the methodological design, aims and questions of preliminary research which focuses at gathering initial data about students' emotions during application of active methods. This will provide a basis for the main part of the dissertation thesis, in which active methods will be implemented into a longer period of teaching practice.

The theoretical basis of this paper discusses the definition of *active learning* and how it gave rise to teaching methods encompassed under the term of *active methods*. After explaining the intricacies of the definition, the paper shows how *active learning* is fostered in today's teaching of English language by establishing and identifying the key features of active teaching methods. The paper then uses these key features as a framework of reference for the categorization and classification of active methods. Then, it looks at the research of positive emotions and how it relates to the theory of positive psychology and mainly shows how positive emotions are researched in the context of foreign language learning.

The paper introduces the research questions, methodology, and aims of the preliminary research design which focuses on exploring the emotional attitudes of learners towards different categories of active methods. The preliminary research aims at gathering initial data and hopes to see which categories of active methods display a prevalence of positive emotions among the students. The theoretical outcomes from this paper will offer initial insight into the main part of dissertation research which aims at promoting learners' positive emotions in the classroom and refining the definition of active methods from their emotional perspective.

2 Theoretical bases

The notion of *active learning* has had its place in didactics for many years. The broadest meaning defines *active learning* as "any instructional method that engages learners in the learning process" (Fornari & Poznanski, 2021, p. 9). If more precisely stated, *active learning* represents the conscious or present acquisition of information and the making of judgements on the basis of one's own initiative (Bonwell & Eison, 1991; Freeman et al., 2014; García Peñalvo et al., 2022; Siegllová, 2019). *Active learning* may seem as "an alternative to the traditional lecture and note-taking model" (Fornari & Poznanski, 2021, p. 9). The notion derives its findings from several already established teaching

approaches such as constructivist learning, Task-Based Learning, Team-Based Learning or self-directed learning. It may be said that active learning not only helps the learning process to be more permanent, but also, it may influence learners' social-emotional development, students' overall perception of learning, and learners' emotional well-being during learning, thus increasing the overall learner's motivation. Additionally, *active learning* helps to improve cognitive skills such as critical thinking, communication, or problem-solving (Entwistle, 1991; Lamb et al., 2019; Özöztürk et al., 2023; Struyven et al., 2008).

From the teaching perspective, instructional methods which derive their aims from this concept are in the contemporary research encompassed under the umbrella term *active methods* or *student-activating methods* (Bonwell & Eison, 1991; Lombardi et al., 2021; Loveland, 2014). In this paper, the term *active methods* will be used to refer to any teaching strategy which draws its teaching aims from the *active learning* approach. For the purposes of this research, these essential teaching aims must be found, compared and analyzed. The paper has taken its findings from didactic materials in which active methods are characterized or classified (Fornari & Poznanski, 2021; O'Dell & Head, 2010; Rinvoluceri & Davis, 1995; Salmon, 2002; Sieglóvá, 2020; Zaorob & Chin, 2007) and found their common and identical features. On these bases, the essential characteristics of what must be done in order for the teaching strategy to fall under the term of active methods are as follows:

- students must read, write, discuss, or be engaged in solving problems;
- students must engage in higher-order thinking tasks such as analysis, synthesis, and evaluation;
- students must make judgments on the basis of one's own initiative;
- the focus must be shifted from the teacher to the learner;
- students must learn rather than be taught;
- an active method must have a learning outcome.

In order to completely understand what an active method is, teaching activities and processes that derive from these features must be selected and classified into categories. In the current research, there are many ways *active methods* are already classified (Fornari & Poznanski, 2021; O'Dell & Head, 2010; Rinvoluceri & Davis, 1995; Salmon, 2002; Sieglóvá, 2020; Zaorob & Chin, 2007). Methods may be categorized based on the skill they aim to teach, the language level, the levels of participation or engagement, based on the material and environment necessary, or based on the number of participants. Furthermore, given the broad definition of active learning, active methods encompass a variety of teaching strategies with no distinct boundaries. This study employs the reference conditions outlined above and together with the presented literature uses it as its framework for its own categorization. Before

being classified into the appropriate category, each method must undergo an analysis based on these conditions and adhere to the established framework.

The primary aim of this study is to explore the attitudinal aspects of active methods, rather than focus on an appropriate language level, the number of participants, or the specific skill they aim to teach. Therefore, the categories of active methods are established based on general teaching strategies in the classroom, considering factors such as the level of participation and the specific learning outcome targeted by each method. This ensures that each category comprehensively covers different variants and possibilities of the methods. Additionally, the classification in this paper considers categorizations presented by researchers in didactic materials above. Some categories are already well-known and established within pedagogy (such as Flipped Classroom or Experiential Learning) and some common categories were found, cross-referenced and encompassed under one category (e.g. Team-Based Learning, Cooperative Learning, or Interactive Learning). The classification does not include general teaching approaches such as Task-Based Learning or Problem-Based Learning as it has already been established that those are general teaching approaches that active learning may encompass or may be encompassed under. The study works only with activities or concrete and practical ways (methods) of implementing active learning into teaching practice, not teaching approach or a teacher's strategy. Overall, the classification resulted in eight categories in which activities that adhere to the conditions presented above may be classified into.

2.1 Classification of active methods

Brainstorming methods

Brainstorming methods include all methodological variations “in which students are posed a question and have to engage or use their brain, sometimes individually and sometimes in communication with others in the class, to problem solve” (Fornari & Poznanski, 2021, p. 42). They aim at generating ideas and answer specific questions outlined by the teacher. Other brainstorming techniques include: Brainwriting, Cinquains, questions generator, inferencing, brainstorming dice, concept-mapping or mind-mapping (Al-Samarraie & Hurmuzan, 2018; Fornari & Poznanski, 2021; Geuna & Giacobini-Robecchi, 2002; Ritter & Mostert, 2018; Siegllová, 2019).

Discussions and debates

Discussion methods include group generation of ideas, arguments, or comments mainly to find a solution. These methods include Devil's Advocate, Hot Seat, plenary debates, discussion webs etc. They aim at presentation

of arguments, developing critical thinking skills and overall developing communicational skills (see Fornari & Poznanski, 2021; Sieglová, 2019).

Interactive learning

Interactive learning encompasses all pair-work, group work and Team-Based Learning methods as “a special form of collaborative learning using a specific sequence of individual work, group work and immediate feedback to create a motivational framework in which students increasingly hold each other accountable for coming to class prepared and contributing to discussion” (Fornari & Poznanski, 2021, p. 22). They aim at application, sharing, retrieval of knowledge, and promotion of interpersonal skills. These methods may be included among Interactive Learning: Think-Pair-Share, Expert groups, Buzz groups, teamwork and pairwork, cooperative learning, projects, Jigsaw and many more.

Flipped Classroom methods

The Flipped Classroom model delivers content to students prior to class and “frees up time for focused active learning exercises that engage students in the application and extension of that content” (Freeman et al., 2014). Methods include any learning that takes place in asynchronous setting and is further explored during the lesson (e.g. autonomous learning, watching lectures, reading materials, deducing information etc.)

Experiential learning

Experiential learning focuses on the broad experience of learning by becoming acquainted with it rather than just knowing about it (Beard, 2022, p. 69). Simply put, experiential learning is learning by doing. In language teaching, experiential learning encompasses role-play or variations of simulation activities (Bloom & Gascoigne, 2017; Moore & Hudson, 2022; Sieglová, 2019). Aim of these methods is to be able to experience the atmosphere, context, emotions through which students are able to develop their roles in society and are learning how to react to different environments.

Gamification and didactic games

This category includes the use of game elements in language learning environment. Further, it includes not only games in the face-to-face environment but also it looks at the use of digital tools and games employed in an online context. This category includes every game that has been adapted for the purposes of language learning and therefore its immediate focus is not on the learning process. However, this research implements only games where learning outcome is present (Jones et al., 2023; Peterson et al., 2021).

Cognitive methods

Cognitive methods focus on comprehension, reading and analysis. Apart from enhancing literacy, the main goal of cognitive methods is to develop critical thinking through fact selection and dealing with presented information. This category includes Skimming, Scanning, PQRS method, mirrored reading and strategies which focus on active text analysis (see (Elbro & Buch-Iversen, 2013; Ponniah & Venkatesan, 2018; Sieglóvá, 2019).

Composition methods

Composition methods include any active form of writing. This may include brainwriting, writing blogs, diaries, summaries, recipes or translating books. The immediate goal must be to enhance literacy through writing (Bean & Melzer, 2021; Berg & May, 2015; Peacock, 2017; Sieglóvá, 2020).

Active learning and *active methods* have been widely researched mainly in the education in science, technology, engineering, and mathematics (STEM) looking at the difference between lecture-taking approach and its differences with students' performances (Bloom & Gascoigne, 2017; Freeman et al., 2014; Houston & Turner, 2007; Jones et al., 2023; Loveland, 2014; Peterson et al., 2021; Struyven et al., 2008). However, only a limited segment of literature deals with the effects of active methods on a theoretical level from a psychological and attitudinal perspective (Freeman et al., 2014; Gershman & Ölveczky, 2020; Houston & Turner, 2007; Hyland, 2011). The knowledge about how these methods may influence students' feelings and emotions may be integral for the enhancement of students' well-being in the classroom and their positive attitudes towards language learning. This paper aims at researching active methods from their attitudinal perspective and finding out which categories of active methods display the range of positive emotions among learners. Before the study can establish its methodological design and research questions, ways to research positive emotions in foreign language learning must be presented.

2.2 Positive emotions research

Research into positive emotions is primarily driven by the theoretical advancements of positive psychology, a relatively recent branch within the field of psychology. Defined as "the scientific study of what goes right in life, from birth to death and at all stops in between" (Peterson, 2006, p. 4), positive psychology directs its research towards the positive aspects of existence, departing from an emphasis on dysfunctions and human suffering (Gregersen, 2020). Today, its research goes far beyond simply focusing on the study of positive emotions and positive life experiences, but also includes the study of human emotions (e.g., the phenomenon of *flow*, the study of resilience or emotional intelligence and creativity), cognition (*mindfulness*,

the desire for knowledge, effective goal setting, the individual's inner needs), or biological influences (the biological demands of the individual on his or her mental well-being). The scientific interest of positive psychology also includes the application of specific procedures and exercises to develop the cognitive and emotional traits of the individual (e.g., exercises to increase motivation, productivity or reduce excessive self-criticism and prevent negative experiences). Over time, positive psychology has also found its application in the psychology and emotion of language learning and teaching (Csikszentmihalyi, 1990; Lamb et al., 2019; Peterson, 2006; Seligman, 2018; Wissing, 2022).

Foreign language learning research, which is based on the theory of positive psychology, focuses on the measurement of students' attitudes towards learning and the prevalence of positive or negative emotions in the classroom (Fredrickson, 2001; Gregersen, 2020; Pekrun et al., 2002; Reeve, 2009; Schweder & Raufelder, 2022; Smith, 2018). For this, multiple questionnaires and batteries have already been developed (PERMA, Achievement Emotions Questionnaire (AEQ), Foreign Language Classroom Anxiety Scale (FLCAS), Foreign Language Enjoyment Scale (FLES)) (Fallah, 2016; Pekrun et al., 2002; Schweder & Raufelder, 2022). The primary emphasis of this research is to determine the prevalence of specific emotions within the classroom environment, particularly during study sessions, examinations, homework activities, or the overall language learning process. Additionally, the research aims to explore factors that impact students' emotional states and investigate their correlation with academic performance and competencies.

A relatively new area of interest is the use of teaching methods in foreign language teaching in order to create mental states based on positive psychology in foreign language learners (see Gabryś-Barker & Gałajda, 2016; Gregersen, 2020; Hollingsworth & Lewis, 2006). These studies focus on finding specific didactic methods which induce the phenomenon of *flow* or fulfil the conditions necessary for the *mindfulness* state (concentration, awareness and lack of prejudice) during learning. In the exploration of practical ways to incorporate positive psychology into foreign language teaching, several didactic aspects have been identified. For example, fostering a sense of accomplishment in Task-Based Learning or promoting social building in Interactive Learning has been shown to enhance *flow-like* experiences in the classroom (Aubrey, 2017). Other aspects that promote positive emotions include focusing on students' engagement, promoting students' autonomy and ability to set goals (Gregersen, 2020), providing constructive feedback or taking part in constructive dialogues (Fresacher, 2016). From this research, it is obvious that many of these presented teaching methods or strategies are defined on the same basis as active methods, and therefore show potential alignment of active methods as a way to enhance positive emotions in the classroom.

3 Preliminary research methodology

3.1 Preliminary research problem

The findings presented indicate that active methods align with many of the principles of positive psychology (see Gabryś-Barker & Gałajda, 2016; Hollingsworth & Lewis, 2006). A question then poses asking: Can implementation of active methods into teaching practice positively enhance students' attitudes towards English learning? The integration of active methods in foreign language teaching raises various challenges and before advocating for active methods as a means to foster learners' emotional well-being and addressing initial question, several other considerations arise: Does every active method increase positive emotion in the classroom? Does every active method have engaging and stimulating effects? Can an active method display negative emotions in the students? In order to answer these questions, the emotional aspects of active methods must be measured and analyzed.

As the study presented above, there are multiple ways to measure positive emotions in the classroom; however, there is no comprehensive overview of teaching methods with regard to their attitudinal aspects. Further, there is no framework or classification of which teaching methods bring positive emotions in the classroom. The research presented in this study aims at alleviating this gap and exploring students' emotions during a particular teaching activity – active methods. This study draws mainly from conclusions presented by positive psychology about positive attitudinal aspects in foreign language learning, uses instruments by positive psychology researchers, and attempts to study the positive emotions in active methods. The preliminary research focuses on the measurement of positive emotions prevalent in students during an active method implementation and therefore finding their attitudes towards them.

3.2 Aims

There are two aims of the preliminary research:

1. to measure the emotional aspects of all eight categories of active methods;
2. to identify categories of active methods that show a prevalence of positive emotions among students.

Additionally, the research hopes to find common characteristics of active methods in relation to students' enjoyment and provide further insight into the methods' application in teaching practice.

3.3 Research questions

On the basis of the research problem and aims presented above, the preliminary research asks the following research questions:

1. Which categories of active methods show a prevalence of positive emotions in the classroom?
2. Which categories of active methods show a prevalence of negative emotions in the classroom?

Answering these questions will help clarify the emotional aspects of active methods and help to further distinguish the methods based on the positive or negative feelings they may insinuate.

3.4 Material

The research of the dissertation thesis and therefore also of its preliminary research will take place among a group of Czech young adults between the ages of 18 and 26. The preliminary research will use quantitative methodology based on self-report questionnaires. The aim of the preliminary research is not to measure long-term effects of active methods; it is mainly to measure students' attitudes towards their implementation. Therefore, the questionnaires will be handed to students immediately after the method's execution in order to ensure that memory retrieval is possible (Martínez Agudo, 2018; Zembylas & Schutz, 2016). In methods, where this memory bias may arise (such as in the category Flipped classroom), students will be instructed and reminded as to which method took place and on what they must report. To ensure that language barrier may not impale the students' understanding of the questionnaire, the original questionnaire is in the Czech language (see the English version in Attachment). An even number of activities ($n = 2$) from each of eight methods' categories (e.g. activities brainwriting and skimming both fall into the category of Composition methods) will be implemented into the teaching practice on the same students. The preliminary research will span across several months to guarantee the seamless implementation of each method into lesson plans and the curriculum.

The questionnaire of the preliminary research is adapted from The Achievement Emotions Questionnaire (AEQ) (Pekrun et al., 2011). The AEQ questionnaire was chosen for the preliminary research as it mainly focuses on the emotions that arise during class and therefore is the most suitable methodological instrument for the purposes of this research. The main research will draw from the Foreign Language Enjoyment Scale (FLES) questionnaire (Dewaele & Macintyre, 2016) and will research how active methods influence students' overall enjoyment in the foreign language classroom. The AEQ questionnaire focuses on eight emotions: enjoyment, hope, pride, anger, anxiety, shame, hopelessness, and boredom, and in its original format is aimed at finding the students' attitudes towards learning, studying, test-taking or homework-doing. The AEQ questionnaire may be used to measure students' feelings during class, after studying or after taking tests and its items are

created in order to retrospectively self-report students' feelings. Due to this nature and also the length of the original questionnaire, items were adapted to measure only one activity that took place during the lesson. Students are then instructed to report how they felt during the activity as was conducted in a similar research (Bieg et al., 2017)⁶. Further, an item focusing on engagement adapted from the PERMA-Profiler questionnaire (Gregersen, 2020; Lamb et al., 2019; Seligman, 2018) was added to measure students' motivation to engage in the activity.

The questionnaire centers around two aspects:

1. Positive emotions

Items aiming at finding the prevalence of positive emotions that arose during the method are focused on emotions of enjoyment, joy, pride and engagement.

2. Negative emotions

Items aiming at finding the prevalence of negative emotions that arose during the method are focused on emotions of anger, anxiety, shame, hopelessness, and boredom.

It is important to note that teachers are not primary subjects of the preliminary research, and they will not be subjected to it. The primary research aims only at gathering initial data about the overall students' attitudes on active method implementation.

4 Preliminary research insights into main research

The preliminary research aims at further distinguishing methods based on their emotional attitudes towards students. Therefore, the study presented in this paper is not a pilot study as it does not aim to verify the chosen methodological approach, only to gather initial data into the main research. The categories of active methods, which will display the prevalence of positive emotions (enjoyment, joy, pride and engagement), will then be used in the main research of dissertation thesis. This research will implement these categories into the teaching practice over longer period of time in an experimental group of young adult students. The aim of the main research is to find out how the implementation of these active methods may influence students' overall feelings of enjoyment in the classroom. The teacher in the experimental group of students will be advised on these active methods and their implementation into the lesson plans. Students' emotions in the classroom will be measured

⁶ This research also measured students' feelings towards teaching strategies not retrospectively but at the moment of execution via technological advancements. Since the research focuses on particular activities during teaching practice, a shorter period of a lesson, not on a teaching approach during the lesson, this procedure was not selected. This will also ensure the students' emotions are completely related to the activity.

using the FLES questionnaire before and after the implementation to measure whether students' positive emotions changed. These data will then be compared with a control group in which intervention will not take place. The preliminary research draws its data from a retrospective self-report questionnaire, which is still considered subjective. Therefore, the main research will employ mixed-methods methodology further employing interviews with the students researching their emotions before and after the implementation and observations of the lessons in both the experimental and the control group.

The preliminary research could also provide an insight into the common traits of teaching methods which may either have a positive or a negative impact on students' emotions and therefore help with their application. Future research could focus on taking into account the teacher's perspective on active method implementation in the classroom and its influence on students' attitudes.

5 Conclusion

The presented paper introduces the theoretical bases and methodological design of preliminary research of a prepared dissertation thesis. The preliminary research aims at finding categories of active methods which insinuate positive emotions among students. The paper examines the definition of *active learning* and based on shared key characteristics, it provides the definition of teaching methods derived from it, referred to in this study as active methods. Then, the research provides a classification of active methods adapted and created on the basis of current didactic materials. The classification includes eight categories: brainstorming, discussions, interactive learning, flipped classroom, experiential learning, gamification, and cognitive and composition methods. Further, the paper looks at how emotions are researched in the current practice and in relations to teaching strategies.

The preliminary research aims to measure the emotional aspects of eight categories of active methods and identify which categories demonstrate a prevalence of positive emotions. The research questions focus on the relationship between students' emotions and active methods, categorizing them on their positive or negative emotional effects. The methodology employs quantitative measurement using a questionnaire adapted from the Achievement Emotions Questionnaire (AEQ). The study will be conducted among Czech young adults through self-report questionnaires immediately following the implementation of active method in the classroom. The study's insights are expected to contribute to the understanding of emotional aspects associated with active methods, laying the groundwork for the main research phase. The main research of the dissertation thesis attempts to contribute to the unexplored area of research and find out whether the implementation of active methods may positively influence students' emotions in the classroom.

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Attachment

Students' questionnaire

Students are instructed to report on how they felt DURING the activity. The questionnaires are to be given immediately after the activity is executed.

I felt moments of joy.

Strongly Agree Agree Neutral Disagree Strongly Disagree

I felt inspired to engage in the activity.

Strongly Agree Agree Neutral Disagree Strongly Disagree

I felt confident.

Strongly Agree Agree Neutral Disagree Strongly Disagree

I felt proud of my accomplishments.

Strongly Agree Agree Neutral Disagree Strongly Disagree

I felt stressed.

Strongly Agree Agree Neutral Disagree Strongly Disagree

I felt frustrated.

Strongly Agree Agree Neutral Disagree Strongly Disagree

I felt embarrassed.

Strongly Agree Agree Neutral Disagree Strongly Disagree

I felt hopeless.

Strongly Agree Agree Neutral Disagree Strongly Disagree

I felt bored.

Strongly Agree Agree Neutral Disagree Strongly Disagree