

**PERCEPTION OF THE ANIMATED MOVIES IN TEACHING AND  
LEARNING ENGLISH FOR SPECIFIC PURPOSES  
(based on the ESP course for the biotechnology students)**

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**Abstract.** The teachers of National University of Food Technologies, upon delivering the course “English for Specific Purposes” to the first-year students majoring in biotechnology, affirm the artistic education as the important factor of forming professional skills and abilities, which is evident in using the animated movies as much frequently. Primarily, these movies are retrieved from the Internet and then spoken in class; furthermore, the students get eager to make such cartoons on their own. Hence the purpose of this work is to confirm the esthetic and educational role of animated movies applied to teaching and learning the basics of foreign language for biotechnologists; to achieve this purpose, the didactic, perceptive esthetics, scientific modeling, and communication methods were used.

Traditionally, the characters of educational animated movies are not only people, but also, even far more frequently, unanimated objects; this is why the first-year students gets involved in such a creative work, developing their language competencies as well as the team work skills. Generally, the first step of figuring out an animated movie is writing a script; the practice shows that any specific reading text from an ESP workbook can be transformed into an interesting and capacious story. The next stage is selection of visual images: unlike any action movie, an animated one is able to display the momentary transformations of one object into another and teleportation from one location to another, which is an expedient method to give as much material within a short period of time. Finally, the cartoon is planned to be presented and discussed in class.

Overall, it was asserted that working with animated movies represents the motivational pedagogical phenomenon: for a teacher, it is to reveal one’s awareness of various areas of science; for a student, it is to apply the creative approach to comprehend the foreign-language material, to boost the skills to analyze and furthermore to present it successfully. On the other hand, it is the good method to organize language learning and to self-assess the individual skills and abilities in language mastering as well as in profile subjects to be taught in English.

**Keywords:** students, animated movie, creativity, English for specific purposes, natural sciences.

**LA PERCEZIONE DEI FILM D'ANIMAZIONE NELL'INSEGNAMENTO E  
NELL'APPRENDIMENTO DELL'INGLESE PER SCOPI SPECIFICI  
(basato sul corso “ISS” per gli studenti di biotecnologie)**

**Astratto.** I docenti dell’Università Nazionale delle Tecnologie Alimentari, insegnando il corso “Inglese per Scopi Specifici” agli studenti del primo corso della specializzazione in biotecnologie, affermano l'educazione artistica come l'importante fattore di formazione di competenze e abilità professionali, che si evince dall'uso del film d'animazione più spesso. In primo luogo, questi film vengono recuperati da l’Internet e poi parlati in classe; inoltre, gli studenti sono ansiosi di realizzare tali cartoni animati da soli. Quindi, lo scopo di questo lavoro è quindi quello di confermare il ruolo estetico e didattico del cinema d'animazione applicato all'insegnamento e all'apprendimento delle basi della lingua straniera per i biotecnologi; per raggiungere questo scopo

sono stati utilizzati i metodi della didattica, dell'estetica percettiva, della modellazione scientifica e della comunicazione.

Tradizionalmente, i personaggi dei film d'animazione educativi non sono solo persone, ma anche, molto più frequentemente, oggetti inanimati; questo è il motivo per cui gli studenti del primo anno vengono coinvolti in un lavoro così creativo, sviluppando le loro competenze linguistiche e le capacità di lavoro di squadra. Generalmente, il primo staggio per capire e creare un film d'animazione è scrivere una sceneggiatura; la pratica mostra che qualsiasi testo di lettura specifico da una cartella di lavoro "ISS" può essere trasformato in una storia interessante e capiente. La fase seconda è la selezione delle immagini visive: a differenza di un film d'azione, un film animato è in grado di mostrare le trasformazioni momentanee di un oggetto in un altro e il teletrasporto da un luogo all'altro, che è un metodo utile per fornire tanto materiale in un breve periodo di tempo. Infine, un film è previsto per essere presentato e discusso in classe.

Nel complesso, è stato affermato che lavorare con i film d'animazione rappresenta il fenomeno pedagogico motivazionale: per un insegnante, è rivelare la propria consapevolezza di varie aree della scienza; per uno studente, è applicare l'approccio creativo per comprendere il materiale in lingua straniera, aumentare le capacità di analisi e inoltre presentarlo con successo. D'altra parte, è il buon metodo per organizzare l'apprendimento delle lingue e per autovalutare le competenze e le abilità individuali nella padronanza della lingua così come nelle materie di profilo da insegnare in inglese.

**Parole chiave:** studenti, film d'animazione, creatività, Inglese per Scopi Specifici, scienze naturali.

**The relevance of the research topic.** According to Scott Thornburry, a word is a microcosm of human consciousness [9, p. 1]. This thesis is consonant to the one by the Ukrainian philologist Oleksandr Potebnya, declared more than a hundred and the half years ago, who asserted that human consciousness is able to create the picture of the world through the sequence of words; meanwhile, the semantics of notions allows a human to express one's attitude to the environment, and also to participate in cognition of unrecognizable things around [5, p. 116]. Language, as well as the entire human culture, exists in the shape of the special reality to be defined as 'human-within-the-world' and 'world-within-the-human.'

These concepts can be embodied by the means of the cartoon movie whose possibilities are extraordinarily wide, primarily due to the novelty informational technologies. A cartoon movie may represent any genre, for instance a comedy, a drama, a suspense film, a biopic, a scientific-popular picture; thenceforth, it is still remaining the part of a 'must-see' massive among young people.

On the other hand, any kind of animated movie can be didactic somehow, especially for Ukrainian students, because it would boost at least listening and use-of-language competencies while being watched. Consequently, apparent is the reason to use its potentials in elaboration of Anglophone didactic materials that would combine the elements of various subjects from the course curriculum, in compliance with the principles of interdisciplinary connections.

**Analysis of the recent researches and publications.** Movies of any genre can be very effective in teaching vocabulary, grammar and syntax of any language. Wu She [10, p. 21] holds that the objectives of teaching and learning through motion pictures are to build up interpretation, listening, speaking, grammar, and vocabulary skills of any language, which would be doubtlessly helpful for students in preparing to the United Entrance Exam in the foreign language to the master's program

(implemented in Ukraine in 2020), to the First Certificate Exam and so on. In the same way, Zhao Baohe signified that an innovative motion picture would be extremely inspiring and thought-provoking and thereafter can make language learning more pleasant [11, p. 849].

As the Pakistani pedagogues Mushtaq Hammad and Zera Taskeen noticed, “Animated movies like *Tangled* are generally meant for the purpose of entertainment and amusement of younger students who like to watch movies, and if these feature films function to teach the students as well as entertain them, a double purpose is served. Students tend to learn more when they are taught using visuals i.e. movies, video clips, etc., than by regular mode of verbal teaching. Their vocabulary and pronunciation can be improved through the use of movies in language classrooms” [2, p. 79].

Upon using the statistic methods in evaluation of the individual level of mastering English vocabulary (before and after watching the certain kinds of cartoon movies), Indonesian specialists in teaching methodic came to conclusion that not only students, but also a teacher should be creative enough to make students’ motivation increased in using media or strategy that make students do not feel bored in the class [1, p. 26].

Scott Thornburry outlines four indicators of teaching vocabulary [9, p. 27], which we also would like to comment upon:

1. **Pronunciation.** Research shows that words that are difficult to pronounce are more difficult to learn. Potentially difficult words will typically be those that contain sounds that are unfamiliar to some groups of learners (such as ‘*tourist*,’ ‘*either*,’ ‘*earth*,’ ‘*thirteenth*’ for Ukrainian speakers. Many of the latter find the words with clusters of consonants, such as *strength* or *straightforward* or *breakdown*, too problematic, owing to the fact that euphony, particularly alternation of vowels and consonants, is highly appreciated in Ukrainian language. – N.N.)

2. **Spelling.** Sound-spelling mismatches are likely to be the cause of errors, either of pronunciation or of spelling, and can contribute to a words difficulty. While most English spelling is fairly law-abiding, there are also some glaring irregularities. Words that contain silent letters are particularly problematic: *foreign*, *listen*, *headache*, *climbing*, *bored*, *honest*, *cupboard*, *muscle*, etc.

3. **Meaning.** When two words overlap in meaning, learners are likely to confuse them. Make and do are a case in point: you *make breakfast and make an appointment*, but you *do the housework and do a questionnaire*. Words with multiple meanings, such as *since* and *still*, *else* and *also*, can also be troublemakers for Ukrainian learners. Having learned one meaning of the word, they may be reluctant to accept a second, totally different, meaning. Unfamiliar concepts may make a word difficult to learn. Thus, culture specific items such as word and expressions associated with the game cricket (a sticky wicket, a hat trick, a good innings) will seem fairly opaque to most learners and are unlikely to be easily learned.

4. **Using word.** The latter is the most authentic, but even that task is constrained by a contrived situation in which the test taker, usually in matter of seconds, has to come up with an appropriate sentence, which may or may not indicate that the test taker “knows” the word.

**Formulation of the purpose and tasks of the article.** The purpose of this article is to confirm the esthetic and educational role of animated movies applied to teaching and learning the fundamentals of foreign language for biotechnologists, which combine the elements of biology, microbiology and chemistry. The main tasks of this work is to observe the specifications of animated movies as the specific artistic genre, to highlight their possibilities in showing any scientific phenomenon in dynamics and therefore to conclude about the relevance of including it into the course curriculum as the part of students' independent work.

**Presentation of the main research material.** At National University of Food Technologies (hereinafter named NUFT), working with artistic phenomena on the foreign-language classes is aimed at not only boosting the students' soft skills, including various language competencies, but also confirming the specifications of the creative collaboration between students and teachers [8, p. 6]. This is completely correspondent to the novelty principles of 'student-oriented education,' when a student is not an object, but a valid subject of educational process.

The scientific data about the role of arts in forming the students' soft skills and broadening their worldview are of the great significance today. The specialists in age psychology share the opinion that effective and full-fledged learning is possible only when accompanied by creative work [6, p. 110]. On the other hand, essential are the perception channels, according to which people are usually categorized into four groups: visuals (with eyesight and the visual memory as the triggers of the mental activity); audials (perceiving primarily the audible component); kinesthetics (perceiving the world in movement); discretics (are interested in 'what is inside').

Along with that, the didactic materials are expedient to be based on the combinations of visible, audible and tactile components, in accordance with 'the golden rule of didactics' formulated by Jan Amos Komeński, which predicts the activity of all sensory organs in comprehension and interpretation of any scientific data, even of utmost difficulty [11, p. 72].

The teachers of NUFT, upon teaching the course "English for Specific Purposes" to the first-year students majoring in biotechnology, affirm the artistic education as the important factor of forming both soft and hard skills, using the animated movies more and more frequently. For the time being, these movies are retrieved from the Internet, mostly from YouTube hosting; furthermore, the students are determined to make didactic cartoon by their own.

It is also necessary to regard some terminological aspects of the problem. Since 1989, while the large cinema festival 'Krok' (The Step) was being held in Ukraine, the term 'animated movie' was used in the newspapers for the first time, thanks to which the accents shifted from multiplication of a visible image to its 'animation.'

Talking about the didactic movies whose substantial core centers are the main notions from chemistry, biology, microbiology and so on, their authors traditionally tend to express the essence of sciences and the possibilities of embodying their concepts by the means of arts and language. Therefore, a many-dimensional semantic space, indicated by the term 'ecphrasis' in art and literary criticism [7, p. 85], is being created; within the framework of educational activity, in our opinion, the term 'scientific and popular animation' appears to be more capacious.

The high-quality animated movie is the products of synthesis of the following arts [4, p. 122]: literature (writing a story), dramaturgy (setting up the script), painting and graphics (the figures of characters, backgrounds, and footage), theatrical art (movements and poses of the characters, changes of scenery), cinema and photo (dynamic or static images shooting), music and sound recording (figuring out the soundtracks). Many examples of how the authors of the didactic cartoon movies on the foreign language comply with these rules can be found in large amounts in the Internet, mostly on the YouTube, where the best specimens in this genre are uploaded.

Nowadays, taking into account the development of updated informational technologies and enhancement of their role in didactics, it is expedient to design the animated movie (drawn, puppet or 3D one) based on every point of the curriculum of the course “Foreign Language for Specific Purposes.”

A possible method to do it is the Microsoft Office Power Point software that includes the ‘Animation’ function [3, p. 43]. Though it is not yet an animated movie itself but just making a visual object (a picture, a letter, a sequence of letters) move, it would be very fruitful in learning the basics of cartoon movie making, in addition to comprehension of fundamental notions in biology, chemistry or microbiology.

As a preliminary stage, the students of the faculty of biotechnology and ecological control, together with their teacher, launched a creative discussion about how the cartoon movies would benefit the studies of their professional language, regarding its specifications like using the large quantity of Latin-originated terms. The obtained opinions are presented in this article:

“Actually, the idea is great. As a matter of fact, the cartoon movie possesses enough means to combine the visual and audible elements in picturing a natural phenomenon or an experiment to be observed.” (Maksym Klymenko)

“Students, the yesterday’s children, are so fond of watching the moving pictures, the scenes changing every minute, and when to put the specific terms instead of people or animals into a story, it would be thenceforth easier to recognize them in any serious scientific text.” (Tetyana Melnyk)

“The cartoon movies are quite useful, owing to the fact that the distant education, conditioned by either an epidemic situation or by wartime, cannot allow working at the laboratories. Hence the movie is the best way to show the course of an experiment and to help us comprehend its essence.” (Anastasia Sakhnevych)

Subsequently, the first step of figuring out such an animated movie is writing a script. The practice shows that any specific reading text from an ESP workbook is open to transform into a page-turner; for instance, the topic “Laboratory Glassware and Equipment” may become a base for a virtual ‘excursion’ around the animated chemical laboratory.

This can be epitomized by the cartoon movie “Laboratory Tools and Equipment” uploaded on the “Free Animated Education” YouTube channel, in which every type of laboratory equipment and their functions are represented and commented with an expedient alternation of colloquial and academic speech elements. For example, the necessity to put on the safety gear before an experiment is accompanied with the narrator’s humorous comment, “*This not only makes you look*

*cool, or make you feel like a responsible scientist, but also protects you from all kinds of chemicals you may be coming in the contact with” [13].*

Showing a dynamic phenomenon, say a chemical reaction, is considered the special kind of scientific modeling (a system primarily hypothesized and afterwards accomplished in a real time) and otherwise the main rule to compose a story in which the animation means would be successfully used.

The next stage is selection of visual images. Traditional characters of educational animated movies are not only people (laboratory personnel, academicians, lecturers or the ordinary citizens), but also, even far more frequently, unanimated objects – glassware, symbols of chemical elements, molecules, atoms and so on. Unlike any action movie, an animated one is capable of displaying the momentary transformations of one object into another and teleportation from one location to another; in other words, it activates some elements of either science fiction or fantasy as a literary genre, which is quite typical for cinema works favorite in student groups. This is believed to be the best way to expose a complicated process that would need several typed pages to be described in words.

The soundtrack to an educational animated movie traditionally consists of the Anglophone comments (in addition, some YouTube channels allow turning on the subtitles for better comprehension of unfamiliar words and easier copying them out) and alongside of the specially selected musical pieces.

The interesting epitome of the interaction between animated and action movie, music and poetry with the concept sphere of scientific (in this case biological) profile is the three-minute cartoon movie “Vitamania Song – Meet the Vitamins” represented on ‘GenePoolTV’ Australian YouTube channel.

It appears to be of the special interest for the first-year student majoring in biotechnology, thanks to the combination of the most remarkable musical styles (jazz, reggae, country, rap, chill-out) with the witty and easily comprehensible lyrics by Casey Bennetto, the interplay between actors and animated letters symbolizing vitamins (A, B group, C, D, E, K) within a vegetable market where the sources of these vitamins – carrot, avocado, sweet pepper, nuts, legumes and broccoli – are sold. To get convinced of the expedience and fruitfulness of such synthesis, it is necessary to quote just one stanza from the script telling about vitamin C:

Good day, folks, they call me Vitamin C  
I’m a healer and protector, and I can always guarantee  
You’re impervious to scurvy  
If you get your share of me  
Vitamin C, vitamin C, vitamin C [14]

All the factors noticed should not only help a student to memorize the active vocabulary on the topic ‘Vitamins,’ but also to form the skills to understand the essence of the specific terminology in studying the profile disciplines at the upcoming academic years.

Using the art works like those aforementioned as the didactic material in teaching English language to the future biotechnologists would comply with one of

the key requirements to the contemporary education paradigm, which is the establishment of the interdisciplinary connections. Along with learning the specifications of the language for specific purposes themselves, the students would also have an opportunity to actualize the current linguistic skills and to acquire the new ones, to get acquainted with the newest data in the field of natural sciences and to formulate the individual trends of scientific researches.

**Conclusion.** Working with animated movies – either in the class or online – represents the motivational pedagogical phenomenon: for a teacher, it is to reveal one's awareness of various areas of science during selection of cartoons to be discussed and meantime to broaden one's worldview; for a student, it is to apply the creative approach to comprehend the foreign-language material through different perception channels, the skills to analyze and furthermore to present it successfully. On the other hand, it is the method to organize learning the language in its various aspects (predominantly listening / speaking competency) and to effectively self-assess the individual skills and abilities in language mastering as well as in profile subjects to be taught in English.

The perspective trend in mutual working between teachers and students of all specialties and academic levels is the usage of interactive technologies in individual creation of educational animated video on the certain topic in correspondence with a course curriculum. The fact is that, upon composing a movie, the students will not only enhance their phonetic and lexical skills, but also explore the fundamentals of animation art, in particular picturing a scientific phenomenon in dynamics and thereafter improving its visual, audible and emotional perception.

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