FACTA UNIVERSITATIS Series: Linguistics and Literature Vol. 22, N° 1, 2024, pp. 27 - 40 https://doi.org/10.22190/FULL240410003N

Review Article

USE OF ENVIRONMENT-THEMED CARTOONS IN ESP TEACHING

UDC 378.147:[811.111'276.6:331.45]

Predrag Niketić

Faculty of Occupational Safety, University of Niš, Serbia

ORCID iD: Predrag Niketić @ https://orcid.org/0000-0002-5500-9112

Abstract. In Serbia, as in many other countries, humour is frequently integrated into General English instruction in primary and secondary schools, but less frequently so in higher education, especially in specialized study programmes offering ESP courses. The present discussion concerns students enrolled at the Faculty of Occupational Safety (FOS), University of Niš, Serbia, particularly those in the environmental protection programme, but may also benefit students in analogous programmes at other higher education institutions. This paper investigates the potential of illustrated cartoons / comic strips as tools for English language instruction tailored to the field of environmental studies. The analysis of these cartoons assesses their prospective advantages for students regarding vocabulary acquisition, grammar proficiency, and a deeper comprehension of pertinent environmental concepts. The latter aspect is emphasized as FOS students are required to take the English Language course for only one semester during their freshman year, well before they encounter more specialized science and engineering coursework. Their familiarity with environmental terminology and fundamental concepts is thus likely to be limited, so pre-exposure to these concepts could prove particularly advantageous for their subsequent studies. Ideally, the inclusion of humour should enhance both their linguistic competencies and their grasp of the specialized subject matter.

Key words: ESP, environmental protection, humour, cartoons, environmental studies

1. INTRODUCTION - ESP FOR ENVIRONMENTAL PROTECTION

One of the key attributes of English for Specific Purposes (ESP) is that it is tailored to the requirements of adult learners who seek proficiency in English in order to use it within their different professional domains, such as business and economics, science and technology, industry, engineering, or medical practice, or in an academic or educational setting. An ESP course design should be based on a needs analysis, as every ESP course, or LSP course for that matter, is aimed towards meeting specific needs, whether they are

Submitted April 10, 2024; Accepted May 9, 2024 **Corresponding author**: Predrag Niketić University of Niš E-mail: predrag.niketic@znrfak.ni.ac.rs

^{© 2024} by University of Niš, Serbia | Creative Commons Licence: CC BY-NC-ND

the needs "of the learners, the community, the language program itself, the university, international trends, or any number of other factors, or indeed, a combination thereof" (Trace, Hudson and Brown 2015, 7). This paper is based on "what learners need in order to operate in the target communicative situation" (Woodrow 2017, 21), wherein "all decisions as to content and method are based on the learner's reason for learning" (Hutchinson and Waters 1987, 19).

The present discussion concerns the application of specific teaching materials in an ESP course as a form of pre-investigation, the aim of which is to later utilize the said materials as efficiently as possible to redesign an ESP course for students of environmental protection. More precisely, environmental protection comprises only one part of the entire course. The course in question, titled simply English Language, is taught at the Faculty of Occupational Safety (FOS), University of Niš, Serbia as a required course during the second semester of the first year of bachelor studies. While ESP courses generally target a single professional or academic field, the course taught at FOS actually targets three. Namely, the course is taken by students of three different study programmes: occupational safety, environmental protection, and fire safety, so it needs to focus on the needs of all three groups of students. In a manner of speaking, the entire course may be regarded as a three-in-one ESP course. The analysis of students' needs has shown that a new coursebook was published in 2002 and was specifically written for the course that was taught for as many as four semesters.

This paper discusses only the environmental-protection portion of the course, which is designed to familiarize students with the basic environmental protection vocabulary as well as some key environmental concepts. The course is designated as 'general academic' according to the Serbian classification, the same as some other first-year courses, such as Mathematics, Physics, Chemistry, and Sociology. The main challenge of the English course pertains not so much to the linguistic aspect, but rather to the conceptual preparation of the students to take a wide variety of specialized science and engineering courses, beginning in their second, and especially in their third and fourth year of studies. This was less of a challenge during the late 2000s and the early 2010s, when English Language was a required third-year course and the students were already familiar with many of the concepts related to their field of study. In 2014, the new accreditation relegated the course to the first year to be taught to fresh-out-of-high-school students who were not entirely familiar with any of the three major fields studied, as these are rarely, if at all, taught in Serbian secondary schools. With regard to environmental protection specifically, there is a need to familiarize students with the concepts they will encounter as they progress through their studies, for instance air, water, and soil pollution, energy use and global warming, waste management, endangered species, and sustainability. Such concepts are best imparted upon the students by relying on the subject areas they learned in school, particularly biology, chemistry, and social sciences.

Linguistically, the biggest challenge is how to accommodate the many different English proficiency levels of FOS students, as these range from beginner and even 'blank-slate' level to considerably high proficiency. Of course, such extremes are a rare occurrence and the majority of the students could be classified somewhere in between. There are other higher education institutions that deal with this issue by offering a beginner level General English course as an elective and the required ESP course afterwards. Unfortunately, this is not the case at FOS, for reasons that fall outside the scope of this paper.

To tackle these challenges, one idea worth considering is to use humour as an instructional tool, since humour is a universally used mechanism to facilitate social

interaction and university classes can easily be regarded as a form of social interaction. In Serbia, humour has long been a staple in General English classrooms in primary and secondary schools, at first because of the distinctive and globally well-known characteristics of English humour and in more recent times owing to the ubiquity and mass availability of humorous content from English-speaking parts of the world. The humorous instructional tools discussed here as potential materials for the environmental protection ESP course include environment-themed illustrated cartoons and short comic strips. They were chosen for consideration because their presentation is less time-consuming than that of typical jokes or animated cartoons (an important factor for a single-semester course) and yet they offer the best of both worlds – a humorous effect and a visual reference. The following sections will focus on instructional humour in general, followed by the pros and cons of using cartoons in the classroom and by several examples of cartoons/strips analyzed for how much linguistic and environment-related information can be extracted from them.

2. INSTRUCTIONAL HUMOUR

In general, humour has been used as a teaching tool throughout the world in various educational settings and across all education levels, making it a universal form of communication. To a layperson, humour is perhaps most frequently associated with language teaching and learning due to the prominent verbal component of jokes, as joking is commonly metonymically used to refer to humour in general. However, humour is far from languagelearning specific, as exemplified by Fig. 1. Even though nowadays no one would be in the least surprised at being told that teachers use humour in the classroom, the main question is why. If humour is such a common occurrence in classrooms, it would be reasonable to assume that its use is somehow beneficial to learning and to learners. Yet, previous scholarly research does not seem to support the said assumption as a general truth. Instructional humour has been studied empirically for at least 50 years (Attardo 2020, 368), and to date there is yet to be a strong, empirically well-founded consensus regarding the instructional benefits of humour. According to Bell and Pomerantz (2015, 101), "[g]iven the current evidence, the most robust argument for using humor in education is affective." Admittedly, the literature contains more publications in support of the claim that humour is beneficial to learning than those that are on the side of doubt. Despite the inconclusive evidence to unequivocally support the instructional benefits of humour, many teachers still resort to using it and will most likely continue to do so. As Attardo concludes, use of humour "probably will not do any serious damage to our students" as long as teachers remember that humour is not a cureall for education and that it "will not lead to massive improvements of learning and retention. It may improve the students' attitude and perception of the learning experience and that's obviously a good thing" (Attardo 2020, 379-80). The key takeaway is that humour comes in many shapes and forms and may be used in an infinite number of ways. It is also important to note that classroom humour need not always be intentional (see Martin 2007, 14-15). This paper obviously focuses only on intentional humour.



Fig. 1 Humour used in a physics class

Banas et al. (2011, 125) reviewed the (at the time) four decades worth of research on humour as a teaching tool and found that "the relationship between instructional humor and educational cannot be understood without taking into account the type of humor used, particularly regarding appropriateness and offensiveness." The appropriateness and inappropriateness of humour as a teaching tool are dependent upon students' perception of the humour, and the line between the two may often be blurred (Fig. 2). Martin et al. (2003) introduced four categories of classroom humour: affiliative, self-enhancing (as positive uses and therefore appropriate), aggressive, and self-defeating humour (as negative uses and therefore inappropriate). In one study, a typology of appropriate and inappropriate instructional humour was devised, the result being that students were more likely to benefit from appropriate forms of humour, but their perception of the categories offered did not overlap; for instance, sarcasm and irony were perceived as appropriate by some and as inappropriate by other students (Frymier, Wanzer and Wojtaszczyk 2008). The benefit of appropriate humour over inappropriate was confirmed in a Saudi Arabian study (Fadel and Al-Bargi 2018), whereby the students' perception of humour appropriateness differed substantially from the aforementioned American study owing to general cultural differences. It is worth noting that both studies were conducted on university students. Indeed, some of the environment-themed cartoons presented here may be deemed inappropriate insofar as they appear to disparage humanity as a whole or at least big corporations for being the chief culprits responsible for most environmental issues.



Fig. 2 Classroom humour generally considered inappropriate – a failed student test returned with a McDonald's employment form

Through literature review, three main criteria have been identified as they pertain to the present topic. The first one is that humour should be used in such a way as to facilitate learning. Secondly, in order to have any benefit at all, humour has to be understood by the

30

students, or otherwise it could have the opposite effect. Finally, humour needs to be properly placed to have a positive effect.

The first criterion is the most general one and involves several aspects. Teachers will often use humour for purposes other than learning, for example, to relieve the tension during a test or exam or to lighten the mood before the lesson. These notions will be discussed below in relation to the third criterion. However, the most important reason should be to enhance learning (Wanzer, Frymier and Irwin 2010, 2). Another aspect is that humour can be manifested in myriad ways, so not every humorous manifestation will be suited to every age and level of students. Regarding foreign language teaching, strictly verbal humour, spoken or written, would typically be better suited to learners with higher proficiency, while visual tools such as funny pictures or cartoons would be more suited to younger or less proficient learners. Furthermore, the humorous medium to be used should also fit the teacher, as individual differences among teachers, such as gender, sense of humour, cultural background, or degree of immediacy (i.e. "the degree to which the teacher makes a close personal connection with students, as opposed to remaining distant and aloof" (Martin 2007, 353)), have been shown to affect the delivery of a lesson using humour (see Banas et al. 2011, 125-129).

The criterion that students need to understand humour to benefit from it is perhaps the most obvious one. On the other hand, it is a particularly difficult aspect when working with larger groups of students with many different proficiency levels. Even if students understand the humour, there is still the issue of how the students will interpret the humour, as not everything is funny to everyone, and if they will interpret it as appropriate or not. The risk of 'missing the mark' is ever-present for every teacher, but thorough preparation and familiarity with one's students should reduce the risk of humorous material 'misfiring'.

The most nuanced of the three criteria is the proper placement of humour during a lesson. There are two distinct categories with regard to humour placement - contiguous humour and integrated humour. The former "is humor that is not tied to the content of an educational message in an integral manner, is separated from an instructional message by time, and can be related or unrelated to core content" (Markiewicz, 1974; Vance, 1987), while the latter "is humor that is embedded in instructional lessons or activities (Vance, 1987), and occurs when humorous information is incorporated into core instructional messages" (Bolkan, Griffin and Goodboy 2018, 146). Wanzer, Frymier and Irwin (2010) proposed the Instructional Humour Processing Theory to examine why the use of humour by teachers sometimes benefits learning and sometimes does not. They found that integrated or, as they termed it, related humour, correlated with enhanced learning, while it was inconclusive whether contiguous, or unrelated humour impacted learning, as it was not connected to the taught material. Similar findings were reported by Kaplan and Pascoe (1977). On the other hand, Bolkan, Griffin and Goodboy (2018) found that contiguous humour was more likely to enhance learning, since it is used to reduce boredom among students and to motivate them to engage in class activities, which promotes better lesson retention. Conversely, students exposed to integrated humour were shown to have decreased retention compared with students who were exposed to course material in a serious manner. Although none of the above studies incorporated cartoons/comic strips into the experiments, the contrasting findings further underscore the importance of strategy concerning humour placement.

Provided that the said three criteria have been met, relevant literature suggests that there are five main benefits of instructional humour: (1) it attracts attention and interest; (2) it facilitates content acquisition; (3) it creates a positive learning environment; (4) it strengthens the student-teacher relationship; and (5) it develops divergent (lateral) thinking

skills (see Banas et al. 2011; Opplinger 2003; Aylor and Opplinger 2003; Schmidt 2002; Ziv 1983; Ziv 1988).

Considering that humorous cartoons are the main topic of this paper, the following section will focus on their use as a teaching tool.

3. INSTRUCTIONAL HUMOROUS CARTOONS

The idea to use humorous illustrated cartoons/comic strips extends both to classroom use and to coursebook inclusion. Their use has been a fairly common practice in educational and academic coursebooks and lessons. The usefulness of humorous illustrations in academic textbooks was studied over forty years ago by Bryant et al. (1981), with some less than motivating findings. Namely, they generally concluded that "[g]raphic humorous embellishment of textbooks is rather clearly a 'mixed blessing.' On the positive side, such humor usage makes the text more enjoyable and potentially more marketable. In terms of educational value, humor appears neither to help nor to hurt. Looking at the negative, if the author has a point to make, his or her persuasive potential tends to be impaired by employing pictorial humorous illustrations" (Bryant et al. 1981, 56). This seems to be a precursor to Attardo's conclusion given above (sec. 2, p. 3). Martin (2007, 357-358) reached the same conclusion. Similarly, another study showed that students supported the use of cartoons in textbooks but no improvement in material retention was recorded compared to groups who were taught without cartoons (Özdoğru and McMorris 2013). Humorous cartoons did seem to be beneficial to readers of bestselling academic books according to a study by Chua (2014), but the study was conducted on a convenience sample via e-mail and did not focus on a university setting. Doring (2002) found that a careful selection of appropriate humorous illustrations can help students relax and gain confidence in developing flexibility of thought. Thus, cartoons have been shown to improve the affective aspect, i.e. students' attitude towards the material, but not so much the cognitive aspect, i.e. students' retention of the material. One study did, in fact, show that humorous cartoons facilitate memorization, but only compared to those same cartoons but modified with image description instead of the original caption or with added drawings to make the cartoon "weird" instead of funny (Schmidt 2002). The majority of the above findings are in stark contrast with the previously mentioned idea that the primary use of humour in teaching is to enhance learning. Nevertheless, it is unclear if the findings are readily applicable to ESP teaching, as the literature on cartoons in ESP coursebooks is prominently lacking. The presented studies were mostly conducted on psychology students rather than foreign language learners.

Satisfying the criterion that students need to understand humour for it to be beneficial may also be problematic when cartoons are concerned, because "the widely held view that cartoons are a direct and easy way of conveying a message [...] is admittedly put into question. Cartoons can be rather complex and not so easy to decode, after all, due to the variety and the interaction of the humorous mechanisms involved in the production of each one of them"; furthermore, "the decoding of a cartoon requires and presupposes detailed knowledge of the social and cultural information exploited for the production of humor" (Tsakona 2009, 1186).

3.1. Humorous Cartoons in Environmental Education

The present discussion is supposed to benefit students of environmental protection studying for an engineering degree, and there are, in fact, several studies from related or matching disciplines focusing on cartoons. Diehl (2018) reported his own experience teaching an engineering class using cartoons that he himself had created. He did not measure the degree of students' retention of the concepts, but he did observe that the inclusion of humour improved the student-teacher rapport and promoted class discussion. There is, however, an extensive study conducted on first-year secondary school students that tested if and how cartoons helped students resolve environmental issues during Environmental Education classes (Toledo, Yangco and Espinosa 2014). The study showed that utilizing cartoons significantly enhanced the students' environmental issue resolution skills compared to traditional cartoon-less methods. Furthermore, two pertinent studies focusing on cartoons in environmental courses were conducted on Turkish secondary school students. The first one explored the impact of instructional comics on the cognitive and affective learning about environmental issues and found that comics positively influenced both the students' academic achievement and their attitudes about the environment compared against the control group (Topkaya 2016). The other study investigated how educational comics impacted lessons on environmental issues and environmental organizations in a social studies course; again, the findings were in favour of the experimental group exposed to comics, both cognitively and affectively (Topkaya and Doğan 2020). The last three findings clash with the previous ones, which may warrant a future hypothesis that the benefits of instructional humour depend on the discipline or subject matter being taught.

3.2. Humorous Cartoons in EFL/ESP Teaching

There is also a scarcity of studies pertaining to cartoon use in EFL/ESP teaching, especially with regard to higher education. For instance, Bahrani and Soltani (2011) wrote favourably about the use of cartoons in language classes for primary school students, for both the affective and the cognitive aspect, but their discussion seems to include predominantly animated, and to a lesser extent, illustrated cartoons. They stated, however, that cartoons can be replicated across different learner groups and teaching situations, including higher education (Bahrani and Soltani 2011, 21). Similarly, Nazar et al. (2019) found that animated cartoons in an EFL course enhanced primary school students' comprehension level and vocabulary acquisition, with the added benefit of increasing their motivation to learn.

A study that is more germane to the present discussion was conducted by Gamage (2019) on Sri Lankan students of architecture who learn English as a second language. By using illustrated cartoons, which she carefully selected so that they do not in any way promote her own points of view or in any way be considered offensive, Gamage found that discussions about the cartoons enhanced students' speaking skills. Based on her results, she listed three relevant points concerning the use of cartoons: (1) "use of cartoons in ESL classrooms needs to be contextualized in relationship to their core subject fields"; (2) "[c]artoons can be used to initiate classroom discussions, debates, role playing, dialogues and essay writing to promote a deeper level of engagement with issues via 'critical thinking'"; and (3) "[s]tudents need to be exposed to extended academic opportunities by instructing them to draw a cartoon based on their own issue" (Gamage 2019, 115-16). In theory, all three points should also apply to an ESP course focusing on environmental protection, with point number three probably being the most difficult to implement within a 15-week course

duration, which is usually reduced to 13 or 14 weeks due to national holidays. The most topic-relevant study was conducted by Nigmatzyanova et al. (2019), who used illustrated environmental cartoons on a variety of environmental topics, such as deforestation, climate change, pollution, waste disposal, etc. as a part of the ESP course for students of ecology at a Russian university. As in the previous study, the results indicate that such cartoons proved highly beneficial for developing the students' speaking skills. Yet, it must be noted that the cartoons were not used as supplementary tools but constituted the entire lessons. The authors identified the following benefits of the cartoons: they "are appealing and interesting from the professional point of view;" "they enhance students' motivation, foster a positive attitude to learning, particularly to developing speaking skills in ESP classes;" they "have a positive effect on students' concentration and behavior in class;" and they "have a polemical focus, promote critical thinking, [and] trigger [an] emotional response encouraging students to speak out" (Nigmatzyanova et al. 2019, 4093). They recognized that the material should be adapted to the students' proficiency levels and background knowledge, while acknowledging that their study was limited by a small sample of students (n=22).

4. ENVIRONMENT-THEMED CARTOONS – POTENTIAL COURSEBOOK MATERIAL

The cartoons presented in this section to be used in the ESP course for environmental protection have been selected based on the assessed needs of the FOS students studying to become environmental engineers and the needs of the FOS itself, while taking into account all the relevant arguments discussed in the previous sections. The cartoons are intended for use solely as supplementary teaching tools, without taking too much time from the main lessons, but, ideally, further clarifying some of the major points and facilitating students' retention of the lesson. In addition to environmental issues, cartoons also target vocabulary and grammar. The cartoons are thus considered as integrated/related humour and they do not display any aggressive or offensive content, i.e. they are appropriate. In addition, they are primarily aimed at enhancing students' comprehension of the length limitation of the paper, only several cartoons will be analyzed below based on the vocabulary, grammar, and environmental concepts that can be extracted from them and presented to the students. Depending on what kind of benefits the cartoons offer, their placement will also be suggested.



Fig. 3 Co-existence

Fig. 4 The umbrella species

The cartoon shown in Fig. 3 offers a plethora of environmental issues, all of which affect a wide variety of animal species, and two of them, a lion and a tiger, dwell on the notion of co-existence, which is in turn an important concept for understanding how our planet is dependent on biodiversity. The dialogue also makes an indirect reference to humans through a list of detrimental human activities, which are useful both as environmental concepts and as vocabulary items. Other vocabulary points include the use of *neither* when referring negatively to two entities and the use of *into* with a double meaning: being involved in something and being enthusiastic about or interested in something. Grammar-wise, the lion provides a typical example of question formation using only intonation without an inversion. The cartoon should be placed after the main lesson, when a broader context for the issues listed in the right bubble has been provided.

In Fig. 4, the most prominent benefit is drawn from the joke regarding the umbrella species, which refers to "species that are selected as representatives of their ecosystem when conservation plans are being made", because through their protection "other species that are a part of their ecosystem will also benefit under the same conservation 'umbrella'" (Rhode 2021). Even though the cartoon joke relies on the literal meaning of *umbrella*, the protective relationship between an umbrella species and other species in an ecosystem remains evident. The joke introduces students to a previously (most likely) unfamiliar concept and also broadens their vocabulary. In this author's previous experience, students have often benefited from being reminded that the noun *species* has the same singular and plural form, as the form **specie* is a common mistake, although the word form exists with a different meaning. Furthermore, the cartoon presents an ideal opportunity for students to be creative. The words spoken by the animal on the left (mostly reminiscent of a squirrel) are obviously a response to a question posed by the animal on the right. Students could work individually or in groups to come up with the best worded question. This cartoon should also follow the main lesson, after the students have been familiarized with the word species and the concept of endangered species.



Fig. 5 Denial



"How can anyone say our factory isn't green? Most of our waste is that colour!"

Fig. 6 Green industry

With regard to environmental concepts, the cartoon in Fig. 5 offers two major concepts. The first is renewable resources, such as solar energy, wind, biomass, or water currents, which can immediately be juxtaposed to non-renewable resources, such as fossil fuels, which are depicted in the cartoon. The second concept is denial, a word with which many students would be unfamiliar but could learn through the context of climate change / global warming denial. This means that many of the students would not be able to understand the punchline initially, which seems to go against the second criterion of humour benefitting the learner mentioned in section 2 above – humour has to be understood. However, the criterion does not specify the order of understanding. *Denial* could then be extended to the agentive noun *denier*. In terms of grammar, the cartoon lines showcase the use of superlatives and embedded questions, the latter being more suited to students with higher English proficiency. The cartoon should also be placed after the main lesson as it relies on complex environmental issues and contains vocabulary with which more students are expected to be unfamiliar.

The cartoon in Fig. 6 should perhaps most easily meet the criterion of students having to understand humour, since it relies on the ambiguity of the adjective *green*, referring both to the colour and to the quality of not being harmful to the environment. Most students should be familiar with the latter meaning. Other vocabulary items include the noun *factory*, which could be extended to its synonyms – *plant, mill*, and *works*. Likewise, students can learn / be reminded how to use *waste* as a noun (waste disposal; a waste of time) and as a verb (to waste money, to waste water, but not *to dispose of waste*). Another benefit may be derived from the use of *most* as opposed to *much/many*, because FOS students often mistranslate *most* by mistaking it for *much/many*. Regarding placement, this cartoon contains an easily graspable concept and is not particularly demanding in terms of vocabulary and grammar, which makes it ideal as an introduction to the main lesson concerning green practices, pollution, and/or waste management.





Fig. 7 Consideration

Linguistically, the most important aspect of the cartoon in Fig. 7 is the ambiguity of the verb *consider* – to think about something carefully on the one hand and to look or gaze attentively/reflectively at something on the other. Again, few students are expected to be familiar with the latter meaning, so the joke would need to be explained through vocabulary building. This cartoon would, in fact, be best suited as a supplement to a lesson on the environmental impact, such as soil and water pollution, of numerous everyday activities.

The printing example can be used to remind the students of the fact that printer cartridges greatly contribute to pollution. Not only do the ink and the toner contain chemicals that have a serious impact on the environment, but the cartridges are also made of non-recyclable and non-biodegradable metals and plastics. Even though it contains a higher-level ambiguity, the cartoon could still be placed before the main lesson if the idea is only to introduce the topics of soil/water pollution or waste management. However, if it is used as a discussion starter on how students as individuals can contribute to or harm the environment, it should be placed after the main lesson, when the students have been exposed to different ways humans impact the environment.

The analysis of the cartoons presented in this section combined with the major points taken from the literature review has resulted in the formulation of three main guidelines for including illustrated cartoons and comic strips as supplementary materials in an ESP course. The first one is that cartoons should be relevant to the topic of the lesson taught, as exemplified by the few, albeit various, environmental topics in the analyzed cartoons. Secondly, they should target specific learning needs, which means that they should contain specific vocabulary pertinent to the field of study, ideally accompanied by grammatical points covered during the students' previous education. This is why cartoons with added text would be preferable, whether one-liners or exchanges. Thirdly, cartoons/comics should be carefully and properly placed during the lesson, usually after or before the main lesson, depending on the cartoon content and on the specific lesson target. In this author's opinion, cartoons of this type should not be used in the middle of the main lesson as they would most likely distract the students from the main lesson content.

5. CONCLUSION

The paper presented a literature review of the use of humour in general and humorous illustrated materials in teaching a wide variety of subjects across all levels of education. Higher education and EFL learning received the most prominent focus because the purpose of the entire discussion was to filter relevant information that will facilitate the inclusion of cartoons / comic strips in a university ESP course/coursebook related to environmental protection. The discussion showed that teachers cannot expect a guaranteed improvement of their students' knowledge simply by adding humour to their lessons, as there has been no conclusive evidence to suggest that humour will necessarily improve information retention compared to the more serious methods. Nonetheless, humour was not found to be detrimental to students' learning and performance, either. Moreover, there is a sufficient number of studies suggesting that the use of humour did in fact enhance students' learning (cognitive aspect) as well as their motivation to learn (affective aspect). Such cases serve as justification for using humour as a teaching tool, the limitations of most of these studies notwithstanding.

One of the uses of humour during classes is to lighten the mood and to establish a rapport between the teacher and the students, but this paper primarily focused on the strictly instructional aspect of humour, regarding which several conclusions can be made. In an ESP course, supplementary instructional cartoons should contain appropriate humour, i.e. not aggressive or offensive, as they are not meant to elicit a negative emotional response from the students but to facilitate learning of the course material. This also means that whatever the specific purpose of the ESP course is, the cartoons need to reflect that. For instance, a cartoon, however funny, dealing with mathematics or business economics would be ill-suited

for an environmental protection ESP course. A teacher needs to determine what the students need from the ESP course and base the selection of cartoons on those needs. Cartoons also need to be understood by the students, but this is not always feasible with large groups at different proficiency levels. Thus, explanations of the jokes are sometimes in order and should not depreciate the humorous value if there is any. Finally, once cartoons have been carefully selected, the teacher has to consider their placement in relation to the main lesson. The most beneficial placement appears to be either before or after the main lesson, depending on specific needs and lesson targets. If the curriculum allows it, cartoons can themselves be the main lesson, but with shorter, single-semester courses, it would be ill-advised.

In order for this discussion to become an empirical study, the future coursebook/syllabus needs to be completed and a sufficiently large sample of students' needs to be secured to ensure validity. A practical investigation of the theoretical considerations proposed here is indeed a future plan, but whether it will come to fruition remains to be seen.

Acknowledgement: This paper is supported by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia pursuant to agreement N_{2} 451-03-66/2024-03/ 200148 with the University of Niš, Faculty of Occupational Safety.

REFERENCES

- Attardo, Salvatore. 2020. The Linguistics of Humor: An Introduction. London, England: Oxford University Press. Aylor, Brooks, and Patrice A. Oppliger. 2003. "Out-of-Class Communication and Student Perceptions of Instructor Humor Orientation and Socio-Communicative Style." Communication Education 52, no. 2 (January): 122–34. https://doi.org/10.1080/03634520302469.
- Bahrani, Taher, and Rahmatollah Soltani. 2011. The pedagogical values of cartoons. *Research on Humanities and Social Sciences* 1, no. 4: 19–22.
- Banas, John A., Norah E. Dunbar, Dariela Rodriguez, and Shr-Jie Liu. 2011. "A Review of Humor in Educational Settings: Four Decades of Research." *Communication Education* 60, no. 1 (January): 115–144. https://doi.org/10.1080/03634523.2010.496867.
- Bell, Nancy, and Anne Pomerantz. 2015. *Humor in the Classroom: A Guide for Language Teachers and Educational Researchers*. London, England: Routledge.
- Bolkan, San, Darrin J. Griffin, and Alan K. Goodboy. 2018. "Humor in the Classroom: The Effects of Integrated Humor on Student Learning." *Communication Education* 67, no. 2: 144–64. https://doi.org/10.1080/ 03634523.2017.1413199.
- Bryant, Jennings, Dan Brown. Alan, Roger B. Silberberg, and Scott Elliott. 1981. "Effects of Humorous Illustrations in College Textbooks." *Human Communication Research* 8, no. 1 (September): 43–57. https://doi.org/10.1111/j.1468-2958.1981.tb00655.x.
- Chua, Yan Piaw. 2014. "The Effects of Humor Cartoons in a Series of Bestselling Academic Books." *Humor: International Journal of Humor Research* 27, no. 3 (January): 499–520. https://doi.org/10.1515/humor-2014-0069.
- Diehl, Edward James. 2018. "Using Cartoons to Enhance Engineering Course Concepts." Paper presented at 2018 ASEE Annual Conference & Exposition, Salt Lake City, Utah, United States of America (June 24-27). https://doi.org/10.18260/1-2--31200.
- Doring, Allan. 2002. "The Use of Cartoons as a Teaching and Learning Strategy with Adult Learners." New Zealand Journal of Adult Learning 30 (May): 56–62.
- Fadel, Sahar Ali, and Abdullah Al-Bargi. 2018. "The Use of Humour in EFL Classrooms: Comparative Conversational Analysis Case Study." Arab World English Journal (Online) 9, no. 2 (June): 262–282. https://doi.org/10.24093/awej/vol9no2.18.
- Frymier, Ann Bainbridge, Melissa Bekelja Wanzer, and Ann M. Wojtaszczyk. 2008. "Assessing Students' Perceptions of Inappropriate and Appropriate Teacher Humor." *Communication Education* 57, no. 2 (April): 266–88. https://doi.org/10.1080/03634520701687183.

- Gamage, Sandamali U. 2019. "Cartoons as an Authentic Supplementary Teaching Tool in English as a Second Language Classrooms." Advances in Language and Literary Studies 10, no. 1 (February): 107–116. https://doi.org/10.7575/aiac.alls.v.10n.1p.107.
- Hutchinson, Tom, and Alan Waters. 1987. Cambridge Language Teaching Library: English for Specific Purposes. Cambridge, England: Cambridge University Press.
- Kaplan, Robert M., and Gregory C. Pascoe. 1977. "Humorous Lectures and Humorous Examples: Some Effects upon Comprehension and Retention." *Journal of Educational Psychology* 69, no. 1: 61–65. https://doi.org/10.1037/0022-0663.69.1.61.
- Markiewicz, Dorothy. 1974. "Effects of Humor on Persuasion." Sociometry 37, no. 3: 407–422. https://doi.org/10.2307/2786391.
- Martin, Rod A. 2007. The Psychology of Humor: An Integrative Approach. Elsevier Academic Press.
- Martin, Rod A., Patricia Puhlik-Doris, Gwen Larsen, Jeanette Gray, and Kelly Weir. 2003. "Individual Differences in Uses of Humor and Their Relation to Psychological Well-Being: Development of the Humor Styles Questionnaire." *Journal of Research in Personality* 37, no. 1: 48–75. https://doi.org/10.1016/s0092-6566(02)00534-2.
- Nazar, Naureen, Ammara Farukh, Muhammad Ahmad, and Muhammad Mansha. 2019. "The Effectiveness of the Use of Cartoons in Teaching English to the Children of Grade 5: An Experimental Study." *Al-Qalam* 24, no. 2 (January): 287–92. http://journal.alqalamjournalpu.com/index.php/Al-Qalam/article/download/469/305.
- Nigmatzyanova, Yulia, Nailya Valeeva, Maria Rudneva, Alla Guslyakova, Kapitolina Ulanova, and Elena Pavlova. 2019. "Developing Speaking Skills through Cartoons in English for Specific Purposes (ESP) Classes. A Case Study of Ecological Faculty Students." *INTED Proceedings* (March 1): 4091–4094. https://doi.org/10.21125/inted.2019.1026.
- Oppliger, Patrice A. 2003. "Humor and learning." In Communication and emotion: Essays in honor of Dolf Zillmann, edited by Jennings Bryant, David R. Roskos-Ewoldsen, and Joanne Cantor, 255–273. Lawrence Erlbaum Associates Publishers.
- Özdoğru, Asil Ali, and Robert F. McMorris. 2013. "Humorous Cartoons in College Textbooks: Student Perceptions and Learning." *Humor – International Journal of Humor Research* 26, no 1: 135–154. https://doi.org/10.1515/humor-2013-0008.
- Rhode, Emily. 2021. "What Is an Umbrella Species? Definition and Examples." Treehugger. 27 May, 2021. https://www.treehugger.com/what-is-an-umbrella-species-definition-and-examples-5186302.
- Schmidt, Stephen R. 2002. "The Humour Effect: Differential Processing and Privileged Retrieval." Memory 10, no. 2 (March): 127–138. https://doi.org/10.1080/09658210143000263.
- Toledo, Michael A., Rosanelia T. Yangco, and Allen A. Espinosa. 2014. "Media Cartoons: Effects on Issue Resolution in Environmental Education." *International Electronic Journal of Environmental Education* 4, no. 1 (July): 19–51. https://doi.org/10.18497/iejee-green.99250.
- Topkaya, Yavuz. 2016. "The Impact of Instructional Comics on the Cognitive and Affective Learning about Environmental Problems." Eğitim Ve Bilim 41, no. 187 (October): 199–219. https://doi.org/10.15390/ eb.2016.5713.
- Topkaya, Yavuz, and Yakup Doğan. 2020. "The Effect of Educational Comics on Teaching Environmental Issues and Environmental Organizations Topics in 7th Grade Social Studies Course: A Mixed Research." *Eğitim Ve Bilim* 45, no. 201 (December): 167–188. https://doi.org/10.15390/eb.2019.8575.
- Trace, Jonathan, Thom Hudson, and James Dean Brown. 2015. "An Overview of Language for Specific Purposes." In *Developing Courses in Languages for Specific Purposes*, edited by Jonathan Trace, Thom Hudson, and James Dean Brown, 1–22. University of Hawai'i at Mānoa. https://api.semanticscholar.org/ CorpusID:57366914.
- Tsakona, Villy. 2009. "Language and Image Interaction in Cartoons: Towards a Multimodal Theory of Humor." Journal of Pragmatics 41, no. 6: 1171–88. https://doi.org/10.1016/j.pragma.2008.12.003.
- Vance, Charles M. 1987. "A Comparative Study on the Use of Humor in the Design of Instruction." Instructional Science 16, no. 1: 79–100. https://doi.org/10.1007/bf00120007.
- Wanzer, Melissa Bekelja, Ann Bainbridge Frymier, and Jeffrey Irwin. 2010. "An Explanation of the Relationship between Instructor Humor and Student Learning: Instructional Humor Processing Theory." Communication Education 59, no. 1 (January): 1–18. https://doi.org/10.1080/03634520903367238.
- Ziv, Avner. 1983. "The Influence of Humorous Atmosphere on Divergent Thinking." Contemporary Educational Psychology 8, no. 1 (January): 68–75. https://doi.org/10.1016/0361-476x(83)90035-8.
- Ziv, Avner. 1988. "Teaching and Learning with Humor." *The Journal of Experimental Education* 57, no. 1 (September): 4–15. https://doi.org/10.1080/00220973.1988.10806492.
- Woodrow, Lindy. 2017. Introducing Course Design in English for Specific Purposes. London, England: Routledge.

CARTOON AND IMAGE SOURCES

- Baldwin, Mike. n.d. "Environmental Cartoons and Comics Funny Pictures from CartoonStock." Cartoon Collections. Accessed 20 September, 2023. https://www.cartoonstock.com/directory/e/environmental.asp.
- Chakravarty, Rohan. n.d. "Green Humour." Greenhumour.com. Accessed 20 September, 2023. https://www.greenhumour.com/.
- Globecartoon Political Cartoons Patrick Chappatte. n.d. "Climate Change." Accessed 20 September, 2023. https://chappatte.com/en/climate-change.
- Joyreactor. 2010. "OMG! My math teacher attaches McDonalds applications to failed tests!" Accessed 23 September, 2023. https://img10.joyreactor.com/pics/post/funny-pictures-auto-623407.jpeg.
- Off the Mark Cartoons. n.d. "Environmental Cartoons." Accessed 21 September, 2023. https://www.offthemark. com/cartoon/science/environmental?limit=100.
- Primavera, Mike. 2023. "40 Funny Teachers Who at Least Give an Effort to Make Learning Entertaining." Pleated Jeans. Pleated-Jeans. August 27, 2023. https://pleated-jeans.com/2023/08/27/funny-teachers/.
- RandyG. 2010. "Cartoons About Earth Day, Global Warming, Going Green, Recycling Glasbergen Cartoon Service." Glasbergen Cartoon Service. Accessed 23 September, 2024. https://www.glasbergen.com/globalwarming-going-green/cartoons/page/1.
- Weiss, Jennifer. 2012. "Environmental Cartoons by Joel Pett Climate Action Reserve." Climate Action Reserve. Accessed 20 September, 2023. https://www.climateactionreserve.org/blog/2012/08/31/environmental-cartoons-by-joel-pett/.

UPOTREBA ŠALJIVIH SLIKA I STRIPOVA NA TEMU ŽIVOTNE SREDINE U NASTAVI ENGLESKOG JEZIKA ZA POSEBNE NAMENE

U Srbiji, kao i u mnogim drugim zemljama, humor je često sastavni deo nastave opšteg engleskog jezika u osnovnim i srednjim školama, ali ređe u visokom obrazovanju, naročito u okviru specijalizovanih studijskih programa i kurseva Engleskog jezika za posebne namene. Prikazana diskusija tiče se studenata Fakulteta zaštite na radu (FZNR) Univerziteta u Nišu, Srbija, posebno na smeru Zaštita životne sredine, ali može biti korisna i za studente u srodnim poljima na drugim visokoškolskim ustanovama. U radu se razmatra potencijal šaljivih slika i kratkih stripova kao sredstava za nastavu engleskog jezika prilagođenog studijama zaštite životne sredine. Analizom slika i stripova procenjuju se njihove prednosti za studente po pitanju sticanja vokabulara, gramatičkih veština i dubljeg razumevanja relevantnih pojmova vezanih za životnu sredinu. Naime, studenti FZNR obavezni su da pohađaju kurs Engleskog jezika tokom samo jednog semestra na prvoj godini studija, mnogo pre nego što se susretnu sa specijalizovanim naučnim i inženjerskim kursevima. Pretpostavka je da je njihovo poznavanje terminologije i osnovnih koncepata životne sredine sredine sredine sredine sredine sredine, pa bi rano izlaganje ovim konceptima moglo da bude od posebnog značaja za njihovo dalje studiranje. Idealno, uključivanje humora u nastavu trebalo bi da poboljša kako jezičke kompetencije studenata, tako i njihovo ovladavanje specijalizovanim gradivom.

Ključne reči: engleski jezik za posebne namene, zaštita životne sredine, humor, šaljive slike i stripovi, studije zaštite životne sredine