DECODING DIGITAL FOOD ADVERTISEMENTS: A SEMIOTIC APPROACH TO ENHANCING ENGLISH PROFICIENCY IN FOOD ENGINEERING

Roxana MIHALACHE
"Ion Ionescu de la Brad" Iasi University of Life Sciences, Romania

Abstract: This study investigates the impact of digital food advertisements on enhancing English language skills and shaping consumer perceptions among food engineering students. Through an analysis of both linguistic and visual elements in food ads, the research evaluates how these advertisements serve as a tool for language acquisition, cultural awareness, and professional competency. A questionnaire was used to gauge students' interaction with English-language food ads, focusing on areas such as vocabulary learning, pronunciation, and understanding cultural references. The results demonstrate that food advertisements significantly support language development, particularly in pronunciation, vocabulary, and cultural knowledge, while also influencing consumer attitudes towards food quality and safety.

Keywords: food advertisements; English proficiency; language learning; cultural awareness; consumer perception

1. Introduction

The globalization of the food industry has led to an increasing presence of English-language food advertisements worldwide. The food engineers have to navigate through these advertisements sometimes to understand the market trends, and the behaviour of the consumers. This paper examines how semiotic and stylistic analysis of online advertisements can enhance the English proficiency of 1st year food engineering students. The study also investigates the semiotic elements in advertisements—images, colours, slogans, and symbols—and their effectiveness in facilitating language learning.

During the study, the students analysed both Romanian and English food advertisements, especially processed meat products, as a starting point for the research. These advertisements were analysed along two seminars in which the first-year food industry students examined the semiotic elements present in online ads. After these sessions, students were asked to complete a questionnaire assessing their engagement, comprehension, and language-learning experiences.

The growing influence of media in general has reshaped how consumers interact with food advertisements. With the rise of social media platforms, online videos, and targeted digital marketing, the food brands craft advertisements in such a strategical way, so that they appeal to diverse audiences. This shift provides an opportunity for the students to analyse not only the language used in advertising, but also the visual and cultural elements embedded in these ads. By getting involved in genuine digital food advertisements, students can better understand marketing strategies while improving their English proficiency at the same time.

Furthermore, the semiotic analysis in advertising has proven to be an effective method for language acquisition, because it encourages students to decode messages

BUPT

beyond mere linguistic elements. The interplay between text, imagery, and cultural references from the food advertisements allows students to develop important critical thinking skills and a deeper awareness of how language functions in the commercial and the professional contexts. This study aims to bridge the gap between the theoretical language learning and the practical use, demonstrating how digital advertisements can serve as valuable educational tools when teaching English at 1st year students at food engineering specialization.

2. Literature Review

Semiotics, the study of signs and symbols, plays a crucial role in marketing. The advertisements employ a combination of linguistic and visual cues to persuade consumers. The theory of semiotics suggests that meaning is constructed through signs, making advertisements a valuable resource for language learning. Laksani and Pandanwangi (2023) examined the implications of the semiotic analysis of advertising for English language learning, highlighting how advertisements function as multimodal texts that enhance comprehension and critical thinking skills. Similarly, Samah (2022) conducted a multimodal semiotic analysis of digital advertisements, demonstrating how the interplay of verbal and non-verbal cues contributes to meaning-making and audience engagement. Kress and van Leeuwen (2006) contributed to multimodal semiotics, providing a framework for analysing the visual and the verbal elements found in advertising. The recent studies have also expanded these frameworks. Madsen and Hansen (2018) explored how visual and textual elements found in advertising shape the consumer's perception across various cultures. Lee and Cho (2017) focused on the emotional engagement created by the combination of image and text in advertisements, while Kumar and Sharma (2020) analysed the effectiveness of multimodal advertising in the digital areas, where the interaction between different medias enhances the persuasive power of ads. Additionally, Dahlen, Lange, and Smith (2010) discussed the role of digital advertising in transforming traditional sign systems. Brunn and Kallin (2014) examined global advertising strategies, investigating how cultural symbols are employed to resonate with diverse audiences in international campaigns. And last, but not least, Laksani and Pandanwangi (2023) brought into attention how semiotic analysis in advertisements enhances the learning of a language within visual communication design programmes.

As it is already known, English proficiency is essential for food engineers, given the dominance of English in scientific literature, regulations, and global trade. ESP focuses on teaching English within professional contexts, emphasizing relevant vocabulary, discourse, and communicative skills. Hemais, Pessôa, and Barros (2022) explored the role of English as the "Esperanto" of business, highlighting how marketing discourse in English shapes professional identities and the communication within global business. Their findings highlight the necessity for food engineers to engage with industry-specific advertisements in order to enhance the language proficiency and the cultural awareness. Similarly, Piqué (2018) examined how food engineering professionals can enhance the communication skills through the exposure to technical advertisements in English, while Green and Williams (2015) focused on English for food scientists, thus discussing the blending of technical language and advertising discourse in professional settings.

An outstanding opinion was exposed by Bhatia (2012), who emphasized the importance of understanding advertising rhetoric within the ESP contexts, particularly for

BUPT

the food engineers and other technical professionals. Additionally, Miller and Cho (2020) explored the integration of technical advertising materials into ESP curricula, arguing that such materials could enhance learners' professional communication skills. In a related study, Shaw (2020) also investigated how targeted advertisements could improve the proficiency of English among food engineers by providing exposure to the industry-specific terminology, while Tsou (2017) was interested to see how ESP programmes in the food industry foster the international collaboration, and Han and Yu (2015) examined the role of advertising in shaping professional knowledge and communication within the food sector.

The digital media, and not only, has transformed the advertising area, making it more interactive and visually engaging. Food advertisements incorporate persuasive language, branding strategies, and cultural references, providing a rich linguistic resource for learners. Dohaei and Ketabi (2015) analysed the discourse of coffee and chocolate print advertisements, pointing out how the linguistic complexities in food marketing pose challenges for EFL learners. Their study concluded that exposure to real-world advertisements helps learners navigate through the industry-specific terminology and rhetorical strategies. Soegoto et al. (2023) further examined the use of semiotics in the food product advertisements, revealing the way in which branding strategies shape consumer's perception and the effectiveness of the marketing. Meanwhile, Oparinde and Agbede (2019) explored the visual hyperbolism found in fast food advertisements, shedding light on the exaggerated semiotic techniques employed to attract the attention of the consumers. These studies collectively emphasize the educational potential of advertisements as a medium for ESP learning.

The interactive nature of digital food advertisements was investigated by Sernane (2018), who found that they enhance comprehension and language skills for the learners. In a related study, Sharma (2020) tackled the role of social media advertisements in shaping language acquisition for food industry professionals. Huebner (2017) discussed how food engineering advertisements in digital spaces can bridge cultural and linguistic gaps, facilitating global communication. As digital advertising continues to evolve, other studies explored its role in advancing into the specialized language learning, especially on virtual platforms where consumers are able to interact with the ads (Park, Lee 2020; Alavi, Nemati 2019) Recent studies such as those by Petrea and Patraș (2015) on the integration of ICTs in applied life sciences education and Velescu (2024) on the use of AI in language teaching offer new perspectives on enhancing learning through digital platforms. These advancements further emphasize the importance of incorporating technology in the language education, especially for the food engineering students who engage with dynamic and interactive digital content.

3. Material and method

The study employs a mixed-method approach, thus integrating both quantitative and qualitative data. A questionnaire was administered to food engineering students to assess their interaction with food advertisements and the interpretation of English-language.

Participants were undergraduate food engineering students with varying levels of English proficiency. The sample included students with beginner, intermediate, and advanced proficiency.

BUPT

A structured questionnaire was designed to evaluate students' perception of semiotic elements in food advertisements and their impact on the students' level of English. The questionnaire was divided into four sections: General Information, Interpretation of Food Advertisements, English Language Learning Through Advertisements, Application in Food Engineering.

Prior to completing the questionnaire, students participated in two seminar sessions analysing 10 English and 10 Romanian digital food advertisements. These sessions provided a basis for understanding semiotic elements and cultural differences in food marketing.

The quantitative responses were analysed by using statistical methods, while qualitative responses were examined from the point of view of the tackled themes.

4. Results and Discussion

The study shows that food advertisements are a valuable resource for improving English language skills among food engineering students, particularly in vocabulary acquisition. Exposure to digital food ads provides contextualized learning of industry-specific terminology and persuasive language, helping students enhance their language proficiency. While some students did not report learning new vocabulary, the overall findings suggest that advertisements can genuinely enrich professional vocabulary when integrating them into a language learning curricula.

In addition to vocabulary, the food advertisements also help improve pronunciation, cultural awareness, and comprehension. The students highlighted the role of ads in familiarizing them with native speech patterns and increasing their understanding of cultural nuances. Ads also contribute to better comprehension of both technical and consumer-oriented language. While grammar improvement was less emphasized, the results indicate that food advertisements are a useful tool for language development, offering real-world exposure to English that can support various aspects of language learning, despite challenges like fast speech and unfamiliar vocabulary.

The results show that 23 out of 29 students (79%) reported having learned new English words or expressions from food advertisements. This indicates that digital food advertisements can serve as an effective tool for vocabulary acquisition and language development among food engineering students.

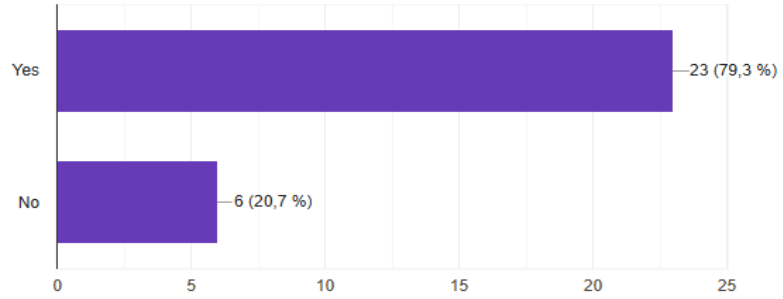


Figure 1. Have you ever learnt new English words or expressions from food advertisements?

BUPT

The high percentage of affirmative responses suggests that advertisements provide contextualized and engaging exposure to industry-specific terminology, persuasive language, and cultural nuances. The combination of visual elements, slogans, and branding language may enhance comprehension and retention of new words.

Conversely, 6 students (21%) did not report learning new vocabulary from advertisements, which could be due to factors such as prior English proficiency, lack of attention to language in ads, or differences in learning styles.

Thus, integrating advertising analysis into English learning curricula can be beneficial, particularly for students in technical fields like food engineering, where understanding marketing language is essential for professional development.

To assess the impact of food advertisements on English language learning, students were asked which aspects of the language they believed were most improved through exposure to such ads. Advertisements often combine visual and auditory elements, making them a valuable resource for language acquisition. By engaging with real-world ads, students may enhance various linguistic skills, including pronunciation, vocabulary, grammar, and cultural awareness.

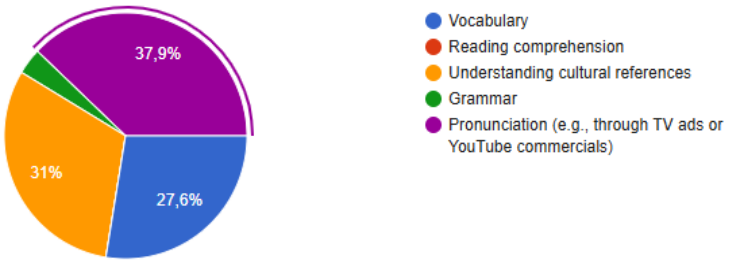


Figure 2. Which of the following aspects of English do you think food advertisements help improve?

The results reveal that pronunciation is the most commonly improved aspect of English through food advertisements, with 37.9% of students selecting this option. This finding suggests that exposure to spoken language in TV commercials, YouTube ads, and other digital media helps learners develop better pronunciation by familiarizing them with native speech patterns, intonation, and phonetics. Repeated exposure to spoken English in advertisements allows students to internalize correct pronunciation and improve their listening skills, which are crucial for overall language development.

Vocabulary acquisition was identified as another key benefit, with 27.6% of students indicating that food advertisements helped them learn new words and expressions. This result implies that advertisements introduce learners to both industry-specific terminologies related to food products and general consumer-oriented language used in marketing. Through catchy slogans, brand messaging, and persuasive language, students are exposed to frequently used expressions that can enhance their understanding and retention of new vocabulary.

Additionally, 31% of students reported that food advertisements contributed to their understanding of cultural references. This suggests that advertising serves as more than just a linguistic tool; it also provides insight into cultural norms, traditions, and values.

BUPT

Advertisements often incorporate culturally specific themes, idiomatic expressions, and references to social trends, enabling students to develop a broader cultural awareness that is essential for effective communication in English. By engaging with advertisements from various countries, learners can gain a deeper appreciation of how language is used in different cultural contexts.

On the other hand, only 3.4% of students indicated that food advertisements helped them improve their grammar. This low percentage suggests that while advertisements are useful for pronunciation, vocabulary, and cultural knowledge, they may not offer the structured learning environment needed for mastering grammatical rules. Unlike traditional educational materials, advertisements prioritize persuasive messaging over grammatical correctness, making them less effective for explicit grammar instruction.

The question “What challenges do you face when trying to understand food advertisements in English?” sought to uncover the difficulties food engineering students experience when interpreting English-language food ads. Understanding these challenges is crucial for assessing the overall effectiveness of advertisements as learning tools. By identifying the most common barriers to comprehension, the study sheds light on the areas where students might require additional support to fully benefit from these ads in their language development.

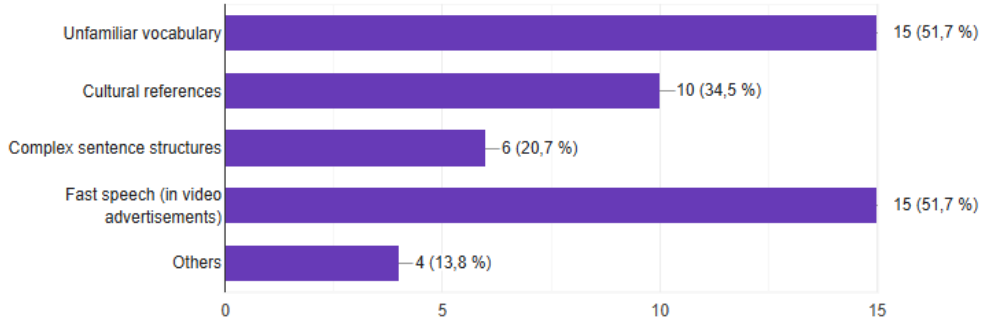


Figure 3. What challenges do you face when trying to understand food advertisements in English?

The responses to this question revealed several key challenges that students face when engaging with food advertisements in English. 51.7% of students, or 15 respondents, identified unfamiliar vocabulary as the primary difficulty. This indicates that many students struggle with the specialized terminology and jargon often used in food marketing, which can hinder their understanding and retention of information presented in ads. Additionally, 34.5% of students (10 respondents) mentioned cultural differences as a challenge. This suggests that food advertisements often incorporate cultural nuances, idiomatic expressions, or references that may not be immediately clear to learners, especially those who are not familiar with the culture behind the ad.

Another significant challenge identified by 51.7% of students (15 respondents) was fast speech. Many advertisements, particularly in online videos or TV commercials, use rapid speech, which can make it difficult for students to catch all the words and phrases. This can lead to missed information or confusion about the message being conveyed. A smaller proportion of students, 13.8% (4 respondents), cited complex sentence structures as a barrier to comprehension. The use of long, convoluted sentences or

BUPT

passive constructions may make it harder for learners to fully grasp the meaning of an ad. Finally, 13.8% of respondents (4 students) mentioned other unspecified challenges, indicating that there may be additional factors that affect students' ability to comprehend food advertisements in English.

Overall, these findings highlight that while food advertisements offer valuable opportunities for language learning, they also present several obstacles that learners must overcome. Addressing these challenges – such as unfamiliar vocabulary, fast speech, and cultural differences – could enhance the effectiveness of digital advertisements as language-learning tools for food engineering students.

The question, "How do you think food advertisements influence consumer perception of food quality and safety?" aimed to understand how food engineering students perceive the role of advertisements in shaping consumer attitudes toward food products. The diverse responses reveal that food ads have a significant influence on consumer perceptions, though the extent and nature of this influence vary across individuals.

A substantial portion of respondents highlighted the powerful role food advertisements play in shaping perceptions of food quality and safety. 36% (9 respondents) mentioned that food advertisements can create a perception of high quality by emphasizing the product's benefits, ingredients, and appealing visuals. These respondents pointed out that advertisements, through the use of emotional appeals and visuals, convey messages that the food is safe and of superior quality, which in turn influences consumer trust and desire to purchase.

On the other hand, 12% (3 respondents) noted that food advertisements may not always impact consumer perception significantly, with one respondent emphasizing that consumers often need to try the product themselves to form an opinion. This perspective suggests a more critical approach, where individuals rely less on the advertisements and more on personal experience or independent research.

Another notable trend is the recognition that food advertisements can lead to misguided or overly optimistic perceptions. 16% (4 respondents) acknowledged that advertisements often promote only the positive aspects of a product, which might not always reflect its true quality or safety. The use of images and language designed to beautify or exaggerate the benefits of the product may create unrealistic expectations, making consumers believe that the product is of higher quality or safer than it may be in reality.

Additionally, 16% of respondents (4 students) pointed out that food advertisements can shape perceptions by creating trust through well-known brands or claims about health and safety. However, there is also some recognition that misleading advertisements can occur, with one respondent mentioning that the edited visuals and over-polished images can mislead consumers into thinking the product is of superior quality when it might not be.

A small proportion of respondents, 8% (2 students), expressed uncertainty or doubt about the influence of food advertisements, suggesting that they are either unsure of their impact or believe that other factors outweigh advertisements when it comes to consumer decision-making.

The responses reveal that food advertisements significantly shape consumer perceptions of food quality and safety, often through emotional messaging, appealing visuals, and claims about the product's benefits. However, there is also an understanding that advertisements can sometimes be misleading, creating a perception of higher

BUPT

quality or safety than what is accurate. This highlights the complex role food advertisements play in consumer decision-making, balancing between persuasion and potential misinformation.

The question of what key elements students would include in a food advertisement in English offers valuable insight into their understanding of effective advertising strategies in the food industry. By analysing their responses, we can identify the various components they perceive as essential to crafting an engaging and persuasive advertisement.

The responses highlight several key components that students believe are crucial in creating a successful food advertisement. The most commonly mentioned elements include ingredients, with a focus on transparency regarding nutritional value and allergens, reflecting consumers' growing interest in health-conscious choices. Appealing visuals were frequently emphasized, with many students suggesting the use of vibrant colours, appetizing images, and dynamic layouts to capture attention. Catchy slogans and clear messaging were also prominent, as these elements help communicate the product's key benefits and attract the audience's interest. Several respondents noted the importance of a call to action to prompt consumers to make a purchase, such as offering promotions, discounts, or highlighting product availability. Furthermore, emotional appeal and brand trust elements were frequently mentioned, suggesting that students recognize the power of advertising to build connections with consumers and establish a positive brand image. Some students also highlighted comedy or the use of familiar personalities to create a more relatable and engaging advertisement. Lastly, the inclusion of nutritional information and health claims was emphasized, reflecting an increasing demand for products that align with healthier lifestyles. Overall, the responses suggest that students are aware of the multifaceted nature of food advertisements, combining visual appeal, emotional connection, product information, and persuasive strategies to influence consumer behaviour effectively.

Overall, these findings highlight the potential of food advertisements as a supplementary language-learning resource. While they may not replace formal instruction, they provide valuable exposure to natural language use, pronunciation, and cultural elements, making them an engaging and practical tool for improving English proficiency.

4. Conclusions

The survey results indicate that food advertisements are a significant tool for language acquisition and consumer perception among food engineering students. A majority of students (79%) reported learning new English words or expressions from food ads, showcasing their effectiveness in vocabulary acquisition. The blend of visual elements and persuasive language helps engage students, particularly with industry-specific terms.

Pronunciation (37.9%) and vocabulary (27.6%) were the most commonly improved aspects of English through food ads, with students benefiting from exposure to spoken language and new words. Cultural awareness (31%) also stood out, as ads introduce cultural references and idiomatic expressions. However, only 3.4% of students mentioned grammar improvement, suggesting that ads are not as effective for teaching grammatical rules.

BUPT

Students identified challenges such as unfamiliar vocabulary and fast speech in ads, which can hinder understanding. These findings point to the need for additional support in addressing these barriers.

In terms of consumer perception, food advertisements significantly influence how products are viewed, with many students noting that ads create perceptions of high quality and safety. However, some students acknowledged the potential for misleading information, emphasizing the importance of critical thinking in interpreting ads.

When asked to create a food ad, students identified key elements like clear messaging, appealing visuals, catchy slogans, and nutritional information as essential. These responses highlight students' understanding of effective advertising strategies and their potential to influence consumer behaviour.

In conclusion, food advertisements are a valuable resource for language learning and shaping consumer perceptions. While they improve vocabulary, pronunciation, and cultural awareness, challenges in comprehension remain. Additionally, ads play a powerful role in shaping consumer attitudes, but they should be critically evaluated for accuracy.

References

1. Alavi, M., Nemati, H. 2019. The impact of mobile technologies on consumer behaviour: A study on food advertisements in digital formats. *Journal of Marketing Technologies*, 25(4), 41-59.
2. Brunn, S. D., Kallin, H. 2014. Advertising across cultures: Understanding global advertising symbols. *International Journal of Advertising*, 33(3), 435-452.
3. Dahlen, M., Lange, F., Smith, T. 2010. *Marketing communications: A brand narrative approach*. Wiley.
4. Dohaei, M., Ketabi, S. 2015. A discourse analysis of coffee and chocolate print advertisements: Persian EFL learner's problems in focus. *Mediterranean Journal of Social Sciences*, 6, 220-231. https://doi.org/10.5901/mjss.2015.v6n3s1p220
5. Green, J., Williams, K. 2015. English for food scientists: The intersection of technical language and advertising discourse. *ESP Journal of Professional Communication*, 22(2), 49-63.
6. Hemais, T., Pessôa, F., Barros, R. 2022. The "Esperanto" of business... or how to be successful in life: A decolonial reading, using semiotics, of English language courses' advertisements in Brazil. *Marketing Theory*, 22(2), 251-274. https://doi.org/10.1177/14705931221075368
7. Huebner, T. 2017. Bridging cultural and linguistic gaps through digital food engineering advertisements. *Language Learning and Technology*, 21(3), 80-95.
8. Kress, G., & van Leeuwen, T. 2006. *Reading images: The grammar of visual design* (2nd ed.). Routledge.
9. Kumar, V., & Sharma, A. 2020. Multimodal advertising effectiveness in digital spaces. *Journal of Advertising Research*, 56(2), 213-229.
10. Laksani, A., Pandanwangi, E. 2023. Analisis Semiotika Pada Iklan Dan Implikasinya Dalam Pembelajaran Bahasa Inggris Prodi Desain Komunikasi Visual. *AKSA JURNAL KOMUNIKASI VISUAL*, 6(2), 944-956.
11. Lee, D., Cho, H. 2017. Emotional engagement in digital advertisements: A semiotic approach to image and text combination. *Journal of Digital Advertising*, 32(4), 76-92.
12. Madsen, S., Hansen, T. 2018. The impact of visual elements in advertising across cultures. *Journal of Marketing Communications*, 24(3), 297-312.
13. Miller, A., Cho, S. 2020. Integrating technical advertising materials in ESP curricula for food engineers. *ESP Journal of Engineering Education*, 28(1), 67-82.

BUPT

14. Oparinde, I., Agbede, M. 2019. Visual hyperbolism: A semiotic analysis of fast food advertisements in South Africa. *Alternation Special Edition 25*, 272-288. https://doi.org/10.29086/2519-5476/2019/sp25.3a12
15. Park, J., Lee, H. 2020. The role of digital advertising in advancing language learning in virtual platforms. *Journal of Digital Language Acquisition*, 29(4), 45-59.
16. Petrea E., Antoanela Patraș, 2015, A Transdisciplinary Experience for Integrating ICTs into Applied Life Sciences Students' Training, *Proceedings of LUMEN International Conference – LUMEN RSACV 2015*, Medimond- Monduzzi Editore International Proceedings Division, p. 1019-1024, ISBN 978-88-7587-725-5. Web of Science WOS:000378560300177 .
17. Piqué, M. 2018. The role of technical advertising in English language proficiency for food engineering professionals. *Language and Professional Communication Journal*, 40(2), 88-103.
18. Samah, M. 2022. A multimodal semiotic analysis of digital advertisements. *Occasional Papers*, 80(1), 343-366.
19. Shaw, R. 2020. Enhancing English proficiency among food engineers: The role of targeted advertising content. *Global Journal of English Studies*, 25(3), 32-49.
20. Soegoto, S., Aji, R., Nadya, H. 2023. Branding strategies and semiotics in food advertisements. *Journal of Marketing Semiotics*, 19(2), 98-110.
21. Tsou, W. 2017. English for Specific Purposes in the food industry: The need for specialized programs. *Journal of English for Professional Development*, 34(1), 11-25.
22. Velescu E. 2024 New Perspectives In Language Teaching: Integrate Artificial Intelligence (Ai) In Foreign Language Education, *ICERI2024 Proceedings*, ISBN: 978-84-09-63010-3; ISSN: 2340-1095 pp. 5976-5981.
23. McElroy, W. D. 1999. *A Manual of Style*, 12th ed. Chicago: The University of Chicago Press.
24. Owyoung, A. 1979. "High Resolution Coherent Raman Spectroscopy of Gases". In H. Walther and K. W. Rothe (eds.) *Laser Spectroscopy IV.* New York: Springer- Verlag, pp. 175-182.
25. Thole, K., 1997. "Exploring the Possibility of Primitive Life on Mars" in *Undergraduate Engineering Review,* available at *http://tc.engr.wisc.edu/tcweb/uer/uer97/thole.html* [accessed May 2009].

BUPT