A REVIEW OF TEACHING STRATEGIES FOR ENGLISH AS A FOREIGN LANGUAGE IN HEALTHCARE STUDIES

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ABSTRACT

Teachers of English as a foreign language are faced with difficulties in selecting the proper teaching strategy for students learning English for academic and professional purposes. Fifteen research studies were included in the current study on teaching strategies for students with English as a foreign language in healthcare studies. The objective is to determine the most useful and effective teaching strategies for healthcare students learning English as a foreign language. The review study was conducted using Noblit and Hare methasynthesis and Dearholt and Dang’s Johns Hopkins Nursing Evidence-Based Practice Model and Guidelines for evaluation, selection and analysis. Language teaching strategies play an important role in teaching English as a foreign language especially in specific professional environments such as healthcare and medicine. The study divides language teaching strategies for English in healthcare into two perspectives; those concerned with improving students’ language learning performance and those examining specific instruction strategies and their effects on students’ knowledge. Further it gives an outline of four general English language skills and most commonly used teaching strategies. The results of the study may be used by English language teachers and content creators for developing new teaching materials and courses to help students succeed. For healthcare as a profession, a future with newly educated professional who have skills in English and other foreign languages will be beneficial in helping their target population.

Key words: teaching strategies, healthcare studies, EFL, nursing, medical English

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BACKGROUND

English has become the central language of medicine and healthcare, both in academia and work environments. The need for speaking English as a foreign language is an indispensable skill in today’s education of medical professionals but also in everyday communication with patients. Due to the content and degree of knowledge these students acquire during their studies, keeping their focus on learning English for professional purposes is challenging. The teacher has to find new and innovative teaching strategies to motivate and aid students in learning the target language.

English language skills are divided into four categories: reading, listening, speaking, and writing. In order to succeed in a healthcare environment, students must be competent in each of these categories. It is even more difficult in the medical field, since the students not only must be proficient in general English, but they also must learn medical terminology, almost a second language in itself (1). It has been reported that the level of medical English used in lectures, textbooks and journal articles has been increasing steadily (2). There is an increasing growth in the development of English for Specific Purposes (ESP) courses worldwide. The content and aims of these types of courses are oriented towards learners’ professional needs, they address the language, skills, and genres applicable to the specific tasks learners need to fulfill in English (3). A major focus in ESP are medical/healthcare professionals, due to their professional and educational need to read, write and communicate in English. ESP courses prepare students for reading academic papers, accessing the latest health information delivered in English, attending international conferences, collaborating with international colleagues, and treating international patients (4). So far, most of the research on teaching strategies in English for Specific Purposes, such as healthcare and medicine, has been focused on English as a Second Language (ESL) learners, and not on English as a Foreign Language (EFL) learners.

The purpose of this literature review is to establish which strategies are most effective in teaching English as a foreign language for healthcare students at the Faculty of Health Studies. This review will examine the strategies for teaching English as a foreign language at bachelor studies at the Faculty of Health Studies in Mostar. The Faculty of Health Studies offers bachelor degrees in nursing, physiotherapy, radiologic technology, sanitary engineering, and midwifery. According to the study curricula, all of the above mentioned studies have English as a
compulsory course for two or three years of the bachelor programme. The review study will draw suggestions on teaching strategies for English language teachers in this specific field, but also become a useful resource for textbook developers and educational institutions in the advancement of their current study programmes. Another motivation for this type of study is the challenges foreign language teachers meet at university studies where students are thought English for Specific Purposes. Professional medical English consists of terminology and constructions specific for this field of study and it is something most students have not encountered before during their previous education. This is an additional burden for foreign language teachers who have not been educated for work in these specific environments, and are in need of proper and clear recommendations in terms of teaching strategies.

The review of literature will include the following, we will conduct a comprehensive search of databases PubMed, Science Direct, and Google Scholar. These databases were searched for the period of the 21st century, from 2000 to 2023. This range was chosen because it allowed for a sufficient number of articles to be reviewed. The search for keywords included the following: medical English, teaching strategies, instruction strategies, EFL (English as a Foreign Language), ESOL (English for speakers of other languages), and ESP (English for Specific Purposes). In addition to EFL and ESP we have included another term with synonymous meaning, ESOL. English for speakers of other languages (ESOL) is designed for students whose native language is not English and who want to increase their English language skills for a specific career.

Criteria for evaluating and selecting research studies
The following criteria was used for evaluating and selecting research studies:

1. An adapted meta-ethnographic approach of Noblit and Hare

2. Dearholt and Dang’s Johns Hopkins Nursing Evidence-Based Practice Model and Guidelines

An adapted Noblit and Hare’s seven-step process for conducting a meta ethnography was employed: getting started; deciding what is relevant to the initial interest; reading the studies; determining how the studies are related; translating the studies into one another; synthesising translations; and expressing the synthesis (5). According to Britten and associates this is perhaps the most well-developed method for
synthesising qualitative data, and one that clearly has origins in the interpretive paradigm from which most methods of primary qualitative research evolved (6). Dearholt and Dang’s Johns Hopkins Nursing Evidence-Based Practice Model and Guidelines was used to evaluate the level of evidence associated with each study selected. The level indicated how strong the evidence was based on the chosen research method, and quality indicated how well the individual study was conducted. The model lists three levels of strength of evidence. It labels randomized control studies as level I evidence, quasi-experimental studies as level II, and non-experimental studies as level III (7).

**Number and types of studies included in the review**

A total of fourteen studies were included in the current review. The range of retrieved studies is from 2011 to 2023, there were no studies found before 2011 which shows that there is a lack of research on teaching strategies in EFL, and this now contemporary subject needs further study. According to the Evidence-Based Practice rating system, there were four level I studies and ten level II studies retrieved from the comprehensive search.
Table 1. – General characteristics of studies

<table>
<thead>
<tr>
<th>Authors</th>
<th>Study design</th>
<th>Data collection</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suliman &amp; Tadros (2011)</td>
<td>descriptive repeated-measure</td>
<td>questionnaire</td>
<td>78 participants</td>
</tr>
<tr>
<td>Chang, Chan, &amp; Siren (2013)</td>
<td>quasi-experimental approach</td>
<td>intervention, role-play</td>
<td>101 participants</td>
</tr>
<tr>
<td>Tai, Pan, &amp; Lee (2015)</td>
<td>single-group experimental study</td>
<td>Demographic variables, The SRCT, The CSQ, TD, Ethical Considerations</td>
<td>51 participants</td>
</tr>
<tr>
<td>Hashemi &amp; Hadavi (2015)</td>
<td>quasi-experimental</td>
<td>The Course Interest Survey, the Utrecht Work Engagement Scale, midterm and final examination scores</td>
<td>229 participants</td>
</tr>
<tr>
<td>Zhang, Zhang, Cao, Zhu, &amp; Yang (2023)</td>
<td>single-group experimental study</td>
<td>Nelson test, 2 test, questionnaire</td>
<td>40 participants</td>
</tr>
<tr>
<td>Riahipour &amp; Saba (2012)</td>
<td>single-group experimental study</td>
<td>pre-test, post-test</td>
<td>23 participants</td>
</tr>
<tr>
<td>Rachayon &amp; Soontornpipat (2019)</td>
<td>single-group experimental study</td>
<td>pre-test, post-test</td>
<td>23 participants</td>
</tr>
<tr>
<td>Su, Tsai, &amp; Tai (2022)</td>
<td>action research</td>
<td>questionnaires, interviews, and field notes</td>
<td>308 participants</td>
</tr>
<tr>
<td>Kadoyama (2015)</td>
<td>experiment, pilot study</td>
<td>teaching sessions, listening test, questionnaire</td>
<td>29 participants</td>
</tr>
<tr>
<td>Moradimokhles &amp; Hwang (2020)</td>
<td>experimental research</td>
<td>pre-test, post-test</td>
<td>59 participants</td>
</tr>
<tr>
<td>Huertas &amp; Rojas (2014)</td>
<td>qualitative, mixed-methods research</td>
<td>pre-post course writing task, self-evaluation, surveys</td>
<td>38 participants</td>
</tr>
<tr>
<td>Brown (2013)</td>
<td>experimental research</td>
<td>survey, tests</td>
<td>78 participants</td>
</tr>
</tbody>
</table>

**ANALYSIS**

Table 1 shows general information on retrieved studies and it mostly assisted during rating within the Evidence-Based Practice system. The fourteen selected studies were labelled as directly comparable as they all consisted of themes and questions of similar interest, as listed in Table 2. According to the analysis, articles in this review can be divided into two general categories. Studies that focus on teaching strategies that improve learning performance, and those focusing on examining specific instruction strategies and their effects. Within these two general categories we can further divide the studies according to language skill; writing, listening, reading, and speaking (communicative skills).
Table 2 – Results, themes and limitations of studies

<table>
<thead>
<tr>
<th>Authors</th>
<th>Themes</th>
<th>Results</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suliman &amp; Tadros (2011)</td>
<td>instruction strategies, coping strategies</td>
<td>positive reappraisal, problem-solving, social support, self-control</td>
<td>convenience sample within one college, all female students</td>
</tr>
<tr>
<td>Chang, Chan, &amp; Siren (2013)</td>
<td>teaching strategy, simulation based learning</td>
<td>improvement of reading strategies, higher self-efficacy in reading strategies, lifelong learning skills</td>
<td>inclusive bias of the convenience sample</td>
</tr>
<tr>
<td>Tai, Pan, &amp; Lee (2015)</td>
<td>TPACK, writing course, teaching approach</td>
<td>improvement of writing competence, did not like indirect feedback</td>
<td>no control group, convenience sampling, small sample</td>
</tr>
<tr>
<td>Hashemi &amp; Hadavi (2015)</td>
<td>vocabulary learning strategies</td>
<td>social strategies, preference strategies, least used note taking and autonomy</td>
<td>not generalizable</td>
</tr>
<tr>
<td>Zhang, Zhang, Cao, Zhu, &amp; Yang (2023)</td>
<td>motivation-based teaching, ARCS model, traditional lecture</td>
<td>motivation-based teaching improved learning motivation, learning engagement, and learning performance</td>
<td>one setting</td>
</tr>
<tr>
<td>Riahipour &amp; Saba (2012)</td>
<td>task-based language teaching, flipped learning, digital game-based language learning</td>
<td>task-based language teaching, digital game-based language learning, and flipped learning improve English oral skills</td>
<td>small number of participants, only one study group, only collected quantitative results</td>
</tr>
<tr>
<td>Rachayon &amp; Soontornwipast (2019)</td>
<td>task-based instruction, speaking skills, flipped learning environment</td>
<td>more emphasis on reading comprehension by EAP teachers, different teaching approaches for reading and listening effective in improving writing performance, demanding tasks and peer review</td>
<td>only one context</td>
</tr>
<tr>
<td>Atai &amp; Taherkhani (2018)</td>
<td>reading, speaking, writing, and listening skills, teacher cognitions</td>
<td>no significant improvement in listening ability, highly effective in motivating, developed film-based teaching materials</td>
<td>convenience sampling strategy, no control group, female students, small sample</td>
</tr>
<tr>
<td>Su, Tsai, &amp; Tai (2022)</td>
<td>TPACK, writing skills, note writing, process writing approach</td>
<td>the course was very useful, raised awareness on how to learn words</td>
<td>small number of participants, one setting</td>
</tr>
<tr>
<td>Kadoyama (2015)</td>
<td>medical-themed film, EFL, development of materials</td>
<td>online learning and blended learning have a positive effect on English skills</td>
<td>small scale, classroom-based</td>
</tr>
<tr>
<td>Chan (2014)</td>
<td>strategy instruction, language learning strategies, online learning, blended learning management system, blended learning</td>
<td>implemented methods have a positive impact on English communicative skills</td>
<td>small number of participants, one setting</td>
</tr>
<tr>
<td>Moradimokhles &amp; Hwang (2020)</td>
<td>task-based learning, video and online learning</td>
<td>strategy instruction improved language learning strategies</td>
<td>one setting</td>
</tr>
<tr>
<td>Huertas &amp; Rojas (2014)</td>
<td>language integrated learning, vocabulary learning strategies, content and language integrated learning</td>
<td>the course was very useful, raised awareness on how to learn words</td>
<td>small number of participants, one setting</td>
</tr>
</tbody>
</table>

Findings and synthesis of key objectives

There were fewer studies that examined teaching strategies for improving learning performance among students, more exactly only four of the overall fourteen studies reviewed. All of the studies in this group examined all four general English language skills by applying different teaching

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strategies. Suliman & Tadros examined student coping strategies in order to facilitate meaningful learning in English. The participants used six coping strategies for all general English language skills. The results suggest that teacher must install these strategies through EFL teaching (8). Hashemi & Hadavi used a student centred approach to see what vocabulary strategies were used by medical sciences students in order to help teachers in the selection of which strategies to teach during vocabulary acquisition. Social strategies and guessing had the highest rates while note taking and autonomy were the least used strategies (9). Zhang, Zhang, Cao, Zhu, & Yang implemented motivation based teaching through an online course. The conclusion was that motivation-based teaching effectively improved learning, motivation, engagement, and performance of nursing students (10). Chan investigated the effect of Strategy-Based Instruction on students’ learning process. The strategies used were: memory-related, cognitive, compensatory, metacognitive, affective, and social. The highest improvements were on listening skills. Through this instructional process and learning strategy, students were able to more actively participate in classes and accomplish various tasks, and more aware of their own learning (11).

Another category, and the majority of revised studies fall into this group, examined the type of teaching strategy and its positive or negative effects. In testing a particular teaching strategy most authors focused on speaking or communicative English language skills. Rachayon & Soontornwipast used task-based teaching, digital-game based learning and flipped learning to develop and improve speaking skills of nursing students. The integration of these three approaches had positive impact on communication skills and reduced language anxiety in speaking tasks (12). Huertas & Rojas used Task-Based Learning through use of digital tools to improve speaking skills of EFL students within a course project focused on nursing and physiotherapy students. The final outcome of the course project suggests an improvement in students’ English communicative skills (13). Brown developed a course for Medical English with emphasis on vocabulary strategies and communicative skills using Content and Language Integrated Learning and Content-Based Learning. According to student feedback the course and implemented teaching strategies were very useful for students (14). It is no surprise that speaking abilities were the focus of the majority of studies since speaking is considered to be the most important of four language skills.
According to Bueno, Madrid, and McLaren, speaking is one of the most difficult skills language learners have to face. English language learners and teachers should understand the importance of speaking skills and try to acquire them as they need them to be recognized in today’s world (15).

The second most investigated English language skills and teaching strategies were writing and reading. Chang, Chan, & Siren evaluated simulation-based as a teaching strategy for improving reading in nursing students. The intervention students showed more improvement in their English reading ability of nursing journals (16). Atai & Taherkhani investigated four language skills and teaching practices among two groups of teacher, language instructors and content teachers, the focus was mainly of reading practices. The results show that both groups did not use pre-reading strategies, and only a few of them used during-reading and post-reading strategies (17). Su, Tsai & Tai developed a writing course for EFP nursing majors using Technological Pedagogical Content knowledge with various teaching strategies such as process pedagogy writing, multiple revisions, intra-group peer review, teacher indirect feedback, and teacher indirect feedback. The course results suggest significant improvements in nursing note writing after completing the EFL writing course (18). Tai, Pan, & Lee also created a similar online course using the Technological Pedagogical Content knowledge to see the effects on EFL nursing students’ writing performance. In this case, the TPACK also proved to be an effecting teaching strategy that improved students’ English writing performance (19).

Listening skills and their teaching strategies were examined by Kadoyama. This particular study implemented film-based English language classes in order to improve listening abilities. The represented results show how film successfully motivates students and has a positive effect on their attitude toward English but does not improve their listening abilities (20). Moradimokhles & Hwang used blended face to face and online instructional activities in terms of all four general English skills. The results showed that both online and blended learning have a positive effect on students’ language skills, but blended learning yields significantly better general skills than the same amount of time to teaching general skills by online learning (21). Riahipour & Saba applied game oriented teaching to EFL nursing students. The findings show that vocabulary teaching through game affects the interest and motivation of EFL learners in a positive way (22).
DISCUSSION, CONCLUSIONS AND IMPLICATIONS

Being aware of the best and most commonly used teaching strategies and using them in EFL classes contributes to English language learners’ success. The study suggests some solutions to help teachers acknowledge new teaching strategies in English for medical and healthcare purposes, and in these terms design relevant and efficient course contents. The majority of studies included nursing student participants and most of them were females due to the specificity of their major.

Based on findings regarding teaching strategies that can be used to teach English as a foreign language, several effective strategies that can be used by language teachers include: content-based teaching, task-based instruction, online/digital tools for teaching, strategy-based instruction, and simulation-based instruction.

The largest number of studies focused on speaking as a skill of their choice for the testing of a particular teaching strategy (8, 10, 12, 13, 14, 17, 21). Reading and writing were the second set of skills examined by the studies (8, 16, 17, 18, 19, 21). Reading, in general, is considered to be a key nursing skill. The skill is relevant for reading medical references, adding patient notes, or even possible participation in research studies. With English being the international language of medicine it is important for ELF teachers to focus on improving this skill and implementing the right teaching strategies. Reading and writing are “paired” skills and need to develop simultaneously.

Content-based instruction (CBI) is the one of recommended teaching strategies found. CBI is an approach in which students acquire the target language through content. Content is usually the subject matter which we learn using language. The principles of CBI are heavily rooted on the principles of communicative language teaching since they involve an active participation of students in the exchange of content (23). According to Brown, CBI uses motivating content to promote foreign language learning, particularly in students with limited English proficiency. This teaching method is often associated with ESP, and healthcare students can benefit from developing both new medical knowledge and language skills through studying relevant, interesting and motivating content (14).

The use and application of digital/online tools was one the most investigated teaching strategies (12, 13, 18, 19, 21, 22). Following the trend of globalization and the advancement of information and
communication technology (ICT), English as foreign language (EFL) and ICT competence have become two necessary skills in the clinical settings for the nursing students as well as practitioners (19). Students performed slightly better in most online course as compared to face to face teaching, but significantly better in blended face to face and online course (21). This is a good recommendation since the majority of English language classes at the Faculty of Health Studies have the opportunity to be organized in this blended form. Two studies (12, 13) focused specifically on the application of digital game in language learning, and indicate positive effects of this teaching strategy on English vocabulary recognition and retention.

Task-based language teaching has become a significant topic in the field of language acquisition in terms of fostering process-focused on syllabi and devising communicative tasks to enhance learners’ real language use (24). The task-based approach provides a meaningful environment for students to practice the target language in a more authentic classroom situation. Students need to accomplish the task with personal experience by sharing with others in an academic context. Since they need to communicate in the target language, the objective is not only on learning language but also sharing meaning (13). As a means to overcome English oral communication difficulties of nursing students, the task-based instruction using a digital game in a flipped learning environment (TGF) was developed by integrating three language learning approaches, namely task-based language teaching, flipped learning, and digital game-based language learning. The findings of this study showed that the students had improved their English oral communication ability after receiving the TGF. The reason might lie in the fact that the integration of these three learning approaches could create effective language learning opportunities for the students. Based on these findings, it is recommended that language teachers should let students practice the target language before coming to class since it facilitates their language learning in two main ways. First, it allows the students to learn at their own pace and in their own preferred ways. Second, it helps students reduce their language anxiety and increase their self-perceived oral communication ability, making them feel more willing to communicate with others in English when performing the speaking tasks (12). In the blended learning the use of educational tools can ensure that learners are not considered only passive audiences but active participants in the learning process (25).
teaching strategies has proven to have good results on students’ communication skills, lowering anxiety of public speaking to its minimum.

Simulation-based learning is known to be one of most effective teaching strategies in the healthcare professional curricula, which brings a clinical setting into the classroom. Simulation-based learning and teaching offer real life setting closely resembling professional environment. Role-play is one of the common techniques used in simulation-based teaching, it enables students to actively be involved in the learning experience and develop proper language skills (16).

There has been a re-emergence of interest in the area of language learning strategies and in particular vocabulary learning strategies. Use of vocabulary and retention of it varies among the learners, therefore, it is generally accepted that students can be trained to use strategies. It is prudent to suggest that language teachers reconsider their teaching styles and consider different techniques to promote vocabulary learning. Some of the proposed strategies are: selective attention, note taking, study preference, and autonomy (9), as well as, positive reappraisal, planful problem-solving, self-control, and social support (8).

Strategy-based instruction shifts the focus of language instruction towards the needs of individual learners. This teaching strategy is beneficial in helping students expand their language repertoire in all four English skills qualitatively. With this learning process students were more active in participating in language classes and accomplishing various tasks, they were also aware of their own learning through writing diaries and reflections (11).

While language instructors implemented routine practices of teaching reading, speaking, and listening, content teachers’ patterns of activities were mainly limited to bottom-up reading activities and word-by-word translation of academic texts. Also, unlike content teachers, language instructors practiced routine classroom activities which were based on eight out of the thirteen reading principles proposed by Grabe. Emphasizing writing was found as a non-routine practice for both groups of EAP teachers (17). Which points to the importance of implementing suggested reading strategies for EFL students. The following reading strategies were used: vocabulary development, main idea comprehension, discourse structure awareness, strategic reading, reading fluency, and reading motivation (17).
Language teaching strategies play an important role in teaching English as a foreign language, especially in specific professional environments like healthcare and medicine. Although this review covered the majority of contemporary teaching strategies for English as a foreign language in healthcare studies, there is no easy solution to language teaching and learning challenges faced by both teachers and students. They are faced with learning two new languages simultaneously: medical terminology and the English language.

Educators need to be willing to expand their teaching perspective and incorporate strategies into the classroom that will enhance the learning effectiveness for students (26). Numerous studies were devoted to language teaching strategies, covering a wider and more general area of research. This study conducts a small-scale review of studies concerning language teaching strategies for English in healthcare studies and generally divides them into several perspectives; concerned with improving students’ language learning performance and examining specific instruction strategies and their effects on students’ knowledge. Further it gives an outline of four general English language skills and most commonly used teaching strategies.

REFERENCES
8. Suliman WA, Tadros A. Nursing students coping with English as a foreign language


SAŽETAK

Predavači engleskog kao stranog jezika suočeni su s poteškoćama pri odabiru odgovarajuće strategije poučavanja za učenike koji uče engleski u akademske i profesionalne svrhe. Petnaest istraživanja uključeno je u ovu preglednu studiju o strategijama poučavanja engleskog kao stranog jezikom na zdravstvenim studijima. Cilj je utvrditi najkorisnije i najučinkovitije strategije poučavanja za studente zdravstvenih studija koji uče engleski kao strani jezik. Pregledna studija provedena je koristeći Noblit i Hare meta-sintezu i Dearholt i Dang Johns Hopkins modela prakse temeljene na dokazima u sestrinstva za evaluaciju, odabir i analizu odabranih istraživanja. Strategije poučavanja jezika igraju važnu ulogu u poučavanju engleskog kao stranog jezika, posebno u profesionalnim okruženjima kao što su zdravstvo i medicina. Ovo istraživanje strategije poučavanja engleskog jezika u zdravstvu svrstava u dvije perspektive: one koje se bave poboljšanjem uspješnosti studenata u učenju stranog jezika i one koje ispituju posebne strategije poučavanja i njihove učinke na znanje studenata. Nadalje daje pregled četiriju općih vještina engleskog jezika i najčešće korištenih strategija poučavanja. Rezultate istraživanja mogu koristiti predavači engleskog jezika i tvorci sadržaja za razvoj novih nastavnih materijala i tečajeva u navedenom polju. Budućnost s novo obrazovanim stručnjacima koji poznaju engleski i druge strane jezike bit će korisna za zdravstvo kao profesiju i njihovu ciljanu populaciju.

Ključne riječi: strategije poučavanja, zdravstveni studiji, EFL, sestrinstvo, medicinski engleski

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