Multimodal Teaching and Learning in the EFL College Classroom

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|ABSTRACT

Multimodal learning refers to teaching strategies that involve multiple sensory systems simultaneously. Teachers can create materials for students with different learning styles (auditory, visual, kinesthetic reading, and writing). Multimodal learning keeps students engaged, encourages them to apply what they learn in real-life situations, provides more variety, and develops learner autonomy. This study proposes a model for developing listening, speaking, reading, writing, vocabulary and grammar skills in EFL using multimodal language learning activities such as task-based, project-based, problem-solving questions, debates, and student-created podcasts and digital stories. The students can look for videos or photos related to a current global event, summarize the content, write a short paragraph about it, or post their reactions in a class blog. To develop listening and speaking skills, the students may engage in role-playing, dramatization, inviting a guest to class, conducting interviews and giving an oral presentation about a topic. To develop students' vocabulary knowledge, vocabulary flashcards, game-based mobile apps, concordance-based glosses, online dictionaries, picture viewing and picture drawing on tablets, e-portfolios, teaching idioms via multimedia annotations and graphic novels can be used. Technologies such as Vicaroo, Kahoot, Slido and Padlet can be integrated. Multimodal learning tasks can be performed individually, in pairs or in small groups, interactively or collaboratively, synchronously or asynchronously. To engage, motivate and encourage student-student and student-instructor interaction, WhatsApp, ConnectYard, creating a community of inquiry, learning partnership, collaborative writing exchange projects, social interaction, and integrating text-chat and webcam can be used. Further multimodal activities and examples will be given.

| KEYWORDS

multimodality, multimodal learning, EFL classroom, language learning, learning styles, Multimodal learning tasks, multimodal language learning activities.

1. Introduction

According to Massaro (2012) and Jewitt (2012), multimodal learning refers to teaching strategies and learning situations that involve multiple sensory systems simultaneously. Teachers can create materials for students with different learning styles such as auditory, visual, kinesthetic, reading, and writing. Multimodal learning keeps students engaged, encourages them to apply what they learn in real-life situations, provides more variety, and develops learner autonomy. Multimodal language teaching and learning activities, as Massaro (2012) indicated, include text and a variety of visual inputs (graphic organizers, pictures, video, art and film), auditory inputs as spoken language games, text-to-speech synthesizers, musical instruments, singing and, rhyming, tactile inputs as puzzles for fact learning, kinesthetic engagement as motor behavior and gesture, physical engagement of traditional hands-on board games with miniaturization technology, computer-animations and an interactive multimedia environment. In addition, they incorporate visual images and text in vocabulary learning, facilitate learning and improve memory for grammatical structures and target vocabulary. The students are actively engaged in listening to the words, pronouncing, reading and writing them.

A review of the literature revealed numerous studies on multimodal instruction in the EFL classroom context (Kustini, Suherdi & Musthafa, 2018), the design and redesign of a multimodal classroom tasks (Öman & Hashemi, 2015), and implications of multimodal learning models for foreign language teaching and learning (Farías, Obilinovic & Orrego, 2007; Gilakjani, Ismail & Ahmadi, 2011). Other studies focused on applying multimodal strategies in teaching single EFL

skills as listening and speaking (Alvionita, Widyaningrum & Prayogo, 2022), reading comprehension (Pan & Zhang, 2020), reading comprehension and vocabulary retention by Iranian EFL learners (Anari, Aboo Saeedi & Shariati, 2019), learners' literacies (Rincón & Clavijo Olarte, 2016), multimodal composing (Yi, Shin & Cimasko, 2020), multimodal presentations in the retention and transfer of concrete EFL vocabulary (Farías, Obilinovic, Orrego & Gregersen, 2014), and ESP using Islamic learning materials (Djamdjuri, Suseno, Tajuddin, Lustyantie & Chaeruman, 2021).

Other studies integrated technology in multimodal instruction as audio-visual media (Widiatmoko, & Endarto, 2018), digital multimodal composing in EFL (Jiang, 2017; Yi, Shin & Cimasko, 2020); digitally-mediated multimodal project-based learning in listening and speaking (Alvionita, Widyaningrum & Prayogo, 2022), and meanings, practices and discourses in multimodal teaching and learning with technology (Papageorgiou & Lameras, 2017).

A third group of studies focused on assessment of multimodal teaching and learning in EFL such as students' achievements and perceptions of the integration of multimodal technologies and VARK strategies (visual, aural, read/write, and kinesthetic) in teaching and learning EFL presentation (Lee, 2019), teachers' practice and perception of 21st century multimodal EFL classrooms in Thailand (Sakulprasertsri, 2020), pedagogical challenges and opportunities in the multimodal classroom (Ryan, Scott & Walsh, 2010), multimodal teaching practices for EFL teacher education (Yunus, Ritonga & Kumar, 2022), and supporting multimodal student learning preferences during the COVID-19 pandemic (Ally, Pillay& Govender, 2022).

Despite the importance of multimodal teaching and learning, there is a lack of studies in Saudi Arabia that utilize multimodal approaches in teaching EFL to college students. Therefore, this study aims to propose a model for developing listening, speaking, reading, writing, vocabulary and grammar skills in EFL using multimodal language teaching and learning activities. Unlike prior studies, the current study proposes a comprehensive model that covers all EFL skills and many language learning technologies. This model serves as a guide for EFL college instructors. They can choose which activities and which technologies they would like to apply depending on their teaching competence, time available for them and students' proficiency level.

2. Context

Students majoring in translations at the College of Language Sciences (CLS), King Saud University, Riyadh, Saudi Arabia take 46 hours of language course as follows: 2 Listening & Speaking courses, 3 Reading courses, 3 Writing, 2 Academic Writing, Editing and Revising, 2 Vocabulary, 2 Grammar, Syntax, Morphology, 4 hours of Language and Culture courses, and one course on the Use of Dictionaries in Translation. All the students are native speakers of Arabic, with English as their target language (L2). The following textbooks are used in teaching the aforementioned courses:

- Hanreddy, J. & Whalley, E. (2012). *Mosaic 1 & 2: Listening/Speaking*. 6th Edition. McGraw-Hill
- Wegmann, B. & Knezevic, M.(2001). *Mosaic 1 & 2: Reading.* 6th edition. McGraw-Hill.
- Savage, A. (2012). *Effective academic writing intro: Developing ideas*. Oxford University Press.
- Savage, A. & Shafiei, M. (2012). *Effective academic writing 1: The paragraphs*. 2nd edition, Oxford University Press.
- Savage, A. & Mayer, P. (2006). *Effective academic writing 2: The short essay*. 2nd edition, Oxford University Press.
- Camp, S. C. (2004). *Developing proofreading and editing skills*. McGraw-Hill Irwin.
- Lebedev, J. R. (2008). *Vocabulary power I: Practicing essential words*. Pearson.
- Dingle, K. & Lebedev, J. (2008). *Vocabulary power 2: Practicing essential words*. Pearson
- Azar, B. & Hagen, S. (2017). *Understanding and using English grammar*. 5th edition. Pearson.
- Underhill, A. (1980). *Use your dictionary: A practice book for users of Oxford Advanced Learner's Dictionary of Current English*. Oxford University Press.

It is noteworthy to say that the textbooks used are a bit old and are not keeping abreast of the latest theories and developments in foreign language teaching and learning. The material contained in the textbooks is not sufficient for developing students' EFL skills as two to three hours a week are allocated to each course. Therefore, students at CLS need supplementary multimodal activities to help them practice and master the different skills since they are trained to be translators and interpreters, in which case they need to acquire a high proficiency level in listening, speaking, reading, writing, vocabulary and grammar to be able to handle the translation and interpreting tasks easily and efficiently.

2. The Proposed Model

Based on the literature review and various studies by the author on the development of EFL skills, this study proposes a model for developing listening, speaking, reading, writing, vocabulary and grammar skills in EFL using multimodal language learning activities together with some technologies that can be integrated in the teaching and learning of each skill. The model is described in the following sections.

Listening

For listening practice, EFL students at CLS may listen to the news, YouTube videos, podcasts, TED Talks and text-to-speech software such as Natural Readers. They can practice phonics, grapheme-phoneme correspondences, stress, intonation, assimilation and elision, pause and juncture in the flow of speech. They can summarize the content and answer auditory comprehension questions. The students can use supplementary mobile listening apps such as mobile audiobooks to develop students' listening comprehension and literary appreciation skills as comprehending the main idea, supporting details, the characters, theme, setting, plot, point of view, style, tone, figurative language, imagery, and/or symbolism in the novel, short story, or play. They can guess the meaning of difficult words from contextual and structural clues in the spoken text; make predictions from the main title (heading), understand anaphoric relationships in the spoken discourse, connect information in the spoken discourse with the students' background knowledge, understand the organizational structure of the spoken discourse (enumeration, chronology, classification, compare/contrast, cause effect, whole/part, process, analogy), and identify transitional words and organizational clues, focus on content words, dates, figures, statistics, and other details, fill out an outline of the main topics and sub-topics in the text that they have listened to or parts of it. The instructor may combine listening comprehension, decoding skills and spelling, listening comprehension and vocabulary, listening and reading activities, and/or listening and writing activities. The students can practice listening skills in a multimedia language lab (Al-Jarf, 2021d; Al-Jarf, 2021g; Al-Jarf, 2021k; Al-Jarf, 2022m; Al-Jarf, 2022n; Al-Jarf, 2012a; Al-Jarf, 2012b).

Speaking

For pronunciation practice, the instructor may select YouTube videos for practicing English consonants, vowels, allophones, diphthongs, phoneme-graphemes correspondences, homophones, homographs, contractions, words with silent letters, minimal pairs, British and American /r/, flap t, the glottal stop /?/ and vanishing /t/ in American English, the past tense suffix -ed, the plural suffixes -s and -es, words ending in suffixes as *-tion and -sion, -ure, -ture, -cher*, and *-sure*, gemination, assimilation, elision, stress, intonation, pause and juncture, intrusion and linking, chunking in English, pronunciation of proper nouns, British and American accent training and/or accent reduction (Al-Jarf, 2022z; Al-Jarf, 2022t).

For speaking practice, students at CLS may engage in role-playing, dramatization, inviting a guest to class, and conducting interviews. The students research and prepare a topic at home and give a presentation about it in front of their classmates, whether face to face or online. They may engage in task-based and project-based speaking activities, answer problem-solving questions, participate in debates about certain topics, or create their own podcasts and digital stories on topics of interest to them and publish them in their online Speaking Center on Twitter. The instructor can combine listening and speaking activities, speaking and writing or reading and speaking activities. Conversations and presentations can be created and recorded by Kahoot or Vicaroo, a free online audio recording. Mobile speaking apps such as TALKEnlgish can be used for listening and speaking practice as well (Al-Jarf, 2021a; Al-Jarf, 2012a).

Reading

Reading instructors at CLS may assign articles on any topic of interest for the students to read. The students can also read multicultural children's short stories, fiction, inspirational quotes and linguistic landscapes to enhance their reading and appreciations skills (Al-Jarf, 2015b; Al-Jarf, 2022h; Al-Jarf, 2021c; Al-Jarf, 2021j). They can read articles from websites about a variety of topics as in the examples below:
- https://www.bbc.com/reel/video/p08h49pb/the-top-five-most-nutritious-foods
- https://us.cnn.com/2020/06/08/cnn-underscored/how-to-clean-face-mask/index.html
- https://www.bbc.com/news/av/world-us-canada-53881885
- https://www.bbc.com/news/world-53870798 (article)
- https://www.bbc.com/news/av/uk-england-leicestershire-53822323

Following the reading, the students answer reading comprehension questions, summarize the text or make an outline of the main ideas and supporting details in the form of a graph, chart, Venn diagram or mindmap. Collaborative mobile ebook reading can be used. The students can read mobile ebooks or fiction apps of their choice, answer comprehension questions, summarize or make an outline of the content of the material they have read (Al-Jarf, 2021d; Al-Jarf, 2021i; Al-Jarf, 2009b).

Both simplified and original versions can be used depending on the students' proficiency level, and the length and difficulty level of the text, article or novell. A story/novel video, app or e-book may be used online or offline. Pre-questions that require the students to identify the main theme, characters, plot, setting, point of view, style, symbolism, imagery and tone of the narrative. The students infer the meanings of unfamiliar words and figurative language in the story from context. Questions and students' answers, summaries, and comments on each other's responses can be posted in an online course as Blackboard, a blog, a social media page or videoconferencing software as Elluminate (Al-Jarf, 2014a). The instructor may combine reading and listening, reading and speaking, reading and vocabulary and reading and grammar activities.
Mobile reading apps and blended learning can be used to practice reading long texts or practicing single reading skills (Al-Jarf, 2012c; Al-Jarf, 2020c; Al-Jarf, 2007a).

Writing
To enhance the writing skills of EFL college students at CLS, a variety of tasks can be integrated in writing courses such as tasks that focus on specific writing skills, tasks that provide free writing activities, writing a daily journal or a story, tasks that require students' comments or reflective thinking, remedial tasks, self-improvement tasks and writing assessment tasks (Al-Jarf, 2014c).
The students can look for videos or photos related to a current global event, summarize the content, write a short paragraph about it, or post their reaction in a class blog. They can write about topics related to current local and global political, social, educational, health, and/or technological issues that are familiar to the students. The instructor may integrate participation goals that require students' involvement in a social or civic issue in writing activities. The students can describe the problem, its causes and propose solutions to it. They can write an academic essay, a term paper, work on group projects, prepare reports, write a summary, and so on. The instructor can combine listening and writing, reading and writing, vocabulary and grammar in writing activities (Al-Jarf, 2022b; Al-Jarf, 2021f; Al-Jarf, 2010).

Writing can be practiced in an online course, a class blog, or a social media page. The students brainstorm ideas using mind-maps. Writing tasks can be performed in or out of class, individually, in small groups or in pairs; synchronously or asynchronously; independently, interactively or collaboratively (Al-Jarf, 2004; Al-Jarf, 2022b; Al-Jarf, 2014b; Al-Jarf, 2009a; Al-Jarf, 2007b).

The instructor encourages the students to write for communication and not to worry about grammatical, spelling, punctuation or capitalization errors. Students work on written assignments or part of them in class. While doing the written exercises and writing their paragraphs, the teacher monitors the students' work and provides individual help. She gives communicative feedback that focuses on meaning and ideas. Only errors related to rules or skills under study in a particular chapter are highlighted. The instructor gives feedback on the location of errors, without giving the correct forms. She encourages self-editing and peer-editing. Every time the students write a paragraph or an essay in the class, the instructor gives extra credit for good paragraphs (Al-Jarf, 2021).

Vocabulary
In teaching vocabulary, the instructors should make multiple associations and connections that include connecting the printed form of the new word with its pronunciation (double letters, silent letters, hidden sounds, and homophones), with its part of speech, singular or plural form, component parts (prefixes, roots, suffixes), synonym or antonym, English and Arabic meanings, usage, previously-encountered words. Categorization, association, and visualization skills and mnemonic devices should be emphasized.

Mind maps can be used to connect words under study. Out of class, extensive listening and reading activities can be also encouraged. Mobile-based applications as Quizlet, Quizizz, Vocup, Duolingo, Kahoot, vocabulary flashcards, online dictionaries, game-based mobile apps, picture viewing and picture drawing on tablets, concordance-based glosses, e-portfolios, videos, teaching idioms via graphic novels, social networks, teaching idioms via multimedia annotations and

graphic novels, and online dictionaries. Technologies such as Vicaroo, Kahoot, Slido and Padlet can be integrated. Online vocabulary tasks can be performed individually, in pairs or in small groups, synchronously or asynchronously, collaboratively or interactively (Al-Jarf, 2022a; Al-Jarf, 2022g; Al-Jarf, 2022i; Al-Jarf, 2021h; Al-Jarf, 2015a; Al-Jarf, 2011; Al-Jarf, 2009; Al-Jarf, 2007c; Al-Jarf, 2006).

Vocabulary quizzes and tests should require the students to make the aforementioned multiple associations. The vocabulary test items should require the students to perform tasks at the phoneme, grapheme, prefix, suffix, root, word, phrase, sentence and paragraph levels. The questions should not test mere recall. They should test the students' ability to apply, think, infer, connect and synthesize information. They should not use exact sentences and examples from the textbook. They should cover all kinds of skills, tasks and exercises covered in the textbook and the classroom. It should contain as many production questions as possible, should be reliable and valid, should be a power and a speed test and should have adequate discrimination power (Al-Jarf, 2023b).

Grammar

English grammatical structures such as tenses, complex sentences, passive voice, articles, prepositions, verb conjugations, phrasal verbs, prefixes and suffixes, singular and plural forms, and others should be taught in context. A variety of online tasks can be integrated in grammar courses such as self-assessment tasks, tasks that require practice of grammatical structures in context, production tasks, error correction tasks, remedial tasks, awareness-raising tasks, metcognitive tasks, self-improvement and others. The grammar websites and videos selected should include pre- and post-instruction self-assessment, should provide definitions, explanations, examples, and supplementary exercises for extra practice, and should provide the students with instant feedback. The online grammar tasks are selected from online grammar websites related to the grammatical structure covered in class and online exercises that focus on a single grammatical structure. (Al-Jarf, 2017).

The students can use grammar podcasts that include a daily grammar lesson, a lesson script, exercises, a Quiz Center that contain quizzes with an answer key, grammatical references and English grammar help where students ask questions about their problematic grammatical points and receive answers. The grammar podcasts selected should match the students' needs and proficiency level. The students can download a podcast, print the script, do the exercises and score their answers themselves. Discussions on a grammar podcast can be performed in pairs, small groups or even whole class (Al-Jarf, 2023a).

For practice, an online course, a blog, a social media page, or a web-conferencing tool, as Elluminate, can be used for posting answers to exercises, discussions and feedback. mind maps can be used to connect verb conjugations, words with the same prefixes and suffixes or roots, singular and plural forms. (Al-Jarf, 2013; Al-Jarf, 2011; Al-Jarf, 2005).

For best results, grammar and writing tasks should be practiced together and should be taught by the same instructor. A study by Al-Jarf (2022j) found that grammatical knowledge affects writing skill development and writing instruction affects grammatical competence and performance. Performance of students who received a combination of grammar and writing instruction by the same instructor was higher than that of students who received grammar and writing instruction from different instructors. When grammar and writing are taught by the same instructor, she/he can make the right connections between what is taught in both courses, and which specific structures and skills should be emphasized.

Interaction, Motivation and Engagement

Since multimodal instruction is student-centered, the following types of interaction should be taken into consideration in planning the multimodal learning environment: (i) learner-learner, (ii) instructor-learner, (iii) learner-content, and (iv) instructor-instructor (Farajollahi, Zare, Hormozi, Sarmadi & Zarifsanaee, 2021). To engage, motivate and encourage student-student and student-instructor interaction, instructors can use WhatsApp, Facebook, Telegram, or ConnectYard to create a community of inquiry, create learning partnership, collaborative writing exchange projects, student collaboration, social interaction, integrate text-chat and webcam, and utilize technology-mediated task-based language teaching.

To enhance students' intrinsic motivation, instructors need to focus on two basic psychological needs: Competence and relatedness (Alkhudiry & Alahdal, 2021). To enhance student's self-efficacy, interest, interaction, and engagement, the

instructors should help the students become happy and relaxed learners and capable of overcoming their anxieties by integrating the principles of positive psychology to develop positive attitudes and positive thinking, build students' resilience and teach them how to cope with and manage challenging learning situations. These can be achieved by setting clear teaching and learning goals and standards for passing the language courses. The instructor sends positive and motivational messages, gives positive feedback, provides moral support, encourages the students to read success stories, self-help books, and watch self-improvement videos (Al-Jarf, 2022e; Al-Jarf, 2022f; Al-Jarf, 2021e; Al-Jarf, 2020a).

To nurture the learning environment, the instructor needs to be respectful and friendly and have a sense of humor. The learning environment should be fun, interactive, supportive, and secure for making errors. The instructor should ensure students' engagement and their active role in learning. She can give extra credit and contact the students through Facebook Messenger, Whats App, Telegram, email, or any other technology.

The instructor should give communicative feedback on the type and location of errors. The students can work on one type of error at a time such as tenses. They correct their own errors (self-feedback) as well as correct each other. In addition, descriptive feedback with detailed, and specific information about improving their learning is given. The instructor corrects errors indirectly and gives individualized feedback in private. She gives positive reinforcement and recognizes the slightest improvement (Al-Jarf, 2021b).

3.   Instructional Phases
Instruction with multimodal activities goes through three instructional phases. In the Pre-task Phase, the instructor tells the students about the task they will be working on, and which technology will be used. She posts a sample on any LMS (Learning Management System) such as Blackboard, Zoom or Microsoft Teams, a blog, Facebook, WhatsApp, Telegram, X platform, or online discussion forum. She states the objective of the task, i.e., what the students are going to do, study or practice. She tells them how they are going to perform the task (individually, in pairs or in small groups, at home or in class, synchronously or asynchronously. She gives clear, specific, and detailed instructions on how to perform the task. The students are told what is expected of them.
In the Task Phase, the students work on the activity as specified by the instructor, in class or at home. They work, in pairs or small groups. They post queries, comments and discussions on an LMS or a social media page. The instructor responds to her students' questions, helps with difficulties and provides guidance.

In the Post Task Phase, the instructor gives comments and feedback on the students' performance. She encourages the students to use specific technologies and gives credit for using them. The students comment on each other's performance and correct their classmates. Each student keeps a log of the activities and technologies she has utilized with her evaluation of and comments on each.

The instructor serves as a facilitator. She selects or designs the multimodal activities for each skill. She helps the students brainstorm, meet their needs and purposes. She matches the students' proficiency level with the difficulty level of the activity and material to be used. She encourages the students to fully engage in the multimodal activities. She provides guidance and support, gives feedback and encourages the students to try, interact and be active. She responds to the students' questions and problems. She follows the students up to make sure they are making the best use of the activity or technology. She gives extra credit for participating in the activity and completing the exercises and assignments. The supplementary material taught, and skills practiced can be included on tests to motivate the students to take the tasks and activities seriously. She shares and collaborates with colleagues.

4.   Effect of Multimodal Learning Activities on EFL Skill Development
The author used the multimodal instructional approach described herein with several groups of college students enrolled in EFL listening, speaking, reading, writing, vocabulary and grammar courses at the CLS, King Saud University and it proved to be effective in enhancing EFL college students' skills in those courses. T-test results showed significant differences between the experimental and control groups' posttest means scores. Achievement (skill development and proficiency level) in the experimental group was higher as a result of using the multimodal approach as shown in the author's studies cited in the current study. For example, the integration of fiction Apps showed improved reading comprehension, literary appreciation and text analysis skills among participating students and increased their engagement in reading and literary analysis.

Finally, to help the students make further improvements in EFL, they can be interviewed in small groups in which they examine and discuss details of the multimodal strategy use when practicing EFL language skills inside and outside the classroom. Group interviews will raise students' awareness of the multimodal teaching and learning strategies and provide them with an important opportunity to focus on their strengths and weaknesses in the language learning process. End-of-semester tests can be given to find out improvements in the students' listening, speaking, reading, writing, vocabulary and grammar skills, knowledge, achievement as a result of integrating multimodal activities in EFL college courses.

Finally, the familiarity and application of multimodal teaching and learning activities in EFL at colleges and departments of languages and translation at Saudi Universities is still open for further investigation by researchers in the future.

Conflicts of Interest: The author declares no conflict of interest.

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