A Conceptual Framework for Evaluating Computer-Assisted Language Learning-Dedicated Applications

Osama Mudawe Nurain Mudawe
Department of Foreign Languages, College of Arts and Humanities, Jazan University, Saudi Arabia
Corresponding Author: onurain@jazanu.edu.sa

Jaber Ali Maslamani
Department of Foreign Languages, College of Arts and Humanities, Jazan University, Saudi Arabia
Email: jmaslamani@jazanu.edu.sa

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Abstract
In language teaching and learning domains, evaluation plays a prominent role in visualizing the scope of progress and achievements. Therefore, evaluation occurs constantly in all teaching aspects (materials, content, pedagogical practices, and other related issues). However, evaluating materials remains complex owing to their distinctiveness. This complexity is attributed to the excessive application of Web-based resources in teaching and learning settings to create authentic learning opportunities. Consequently, evaluating materials' suitability requires guidance and practical frameworks that constitute common ground for evaluation. As technology offers a tremendous solution to a particular learning/teaching context, including Computer-Assisted Language Dedicated Apps, the question of how these apps fit into specific teaching/learning contexts remains controversial. However, the evaluation frameworks that Hubbard, Chapelle, Richards, and Rodgers developed have paved the way for more effective evaluation of CALL resources and applications. In light of this, the study attempts to take part in revealing the myth of CDAPPS evaluation by adopting the conceptual research methodology in association with a systematic review of the previous models for evaluating Computer-Assisted Language Learning Dedicated Applications where a conceptual and principled framework entitled Mudawe and Maslamani Framework is proposed. The proposed framework embraces four levels of analysis for evaluation: Learner/user fit, language professional Fit, Technology fit, and institutional administrators Fit. Each consideration contains several criteria associated with the main level of the analysis that can be used through judgmental or empirical evaluation.

Keywords: Computer-Assisted Language Learning, Computer-Assisted Language Learning Dedicated Applications, evaluation framework, material evaluation, framework

Introduction

Throughout the history of Computer-Assisted Language Learning (CALL), many CALL-dedicated Apps (CDAPPS), such as PLATO, appeared in the language profession settings during the 1960s and early 1980s. Since then, CALL has rapidly advanced in language learning applications, especially in the first decades of the 21st century (Hubbard, 2021; Rodgers & Weatherby, 2021; Tao et al., 2020). Tremendous software for language learning and development has emerged in the scene of language development, making learning dynamic, fun, and prolific. CDAPPS have great potential for developing students' overall language proficiency through various interactive activities and practices. (Rosell-Aguilar, 2009; 2018). What becomes stunning about these apps is the integration of Artificial intelligence that adds sophisticated dimensions to what technology might offer for language teaching and learning. Automated Speech Recognition (ASR), Visualization, and intelligent assistants such as SIRI and Alexia have become integral to Technology-Enhanced Language Learning (TELL).

The potential of CDAPPS cannot be tapped. Many studies have explored these capabilities in depth, examining how these apps could contribute to advancing students' language skills in an ever-relaxing environment to enhance self-directed learning and learning autonomy or develop particular areas for language usage. (Vemula, 2020; Worden, 2021). However, the number of Apps is crossing anyone's imagination in terms of quantity as thousands of language Apps have already been launched, giving rise to Mobile learning as the state-of-the-art domain of knowledge. Strangely enough, deciding on what Apps best fit into a particular teaching/learning context remains controversial due to the inadequate theoretical and practical studies examining how these apps are cross-checked for their suitability. Chen (2016) has developed a rubric for evaluating Mobile learning Apps. This contribution has paved the way for further studies to probe into particular evaluation frameworks that assist in exploring in depth the potentials of each app and its association with the intended learning outcomes that someone plans to achieve.

The study strives to explore the myth associated with evaluating CDAPPS to determine their suitability for various teaching contexts (Hubbard, 2012). In this context, the study proposes a systematic evaluation framework with the great hope that it will effectively contribute to exploring the potential and promises of these apps for developing skills. Moreover, the study aims to provide an in-depth analysis of the Mudawe & Maslamani framework components and how each level of analysis could be applied in the evaluation process.

As an initial step to arrive at a better understanding and interpretation of the Mudawe and Maslamani framework practicality in investigating the nature of CDAPPS in terms of technology and pedagogy, two questions have been formed to evoke the best ways that might assist in proper interpretation and understanding of its main components. Hence, the study sought to provide answers to the following questions:

1) What is the nature of the levels of analysis included in the Mudawe & Maslamani framework?
2) To what extent does Mudawe and Maslamani's framework contribute to the evaluation of CDAPPS?

Literature Review

Advancement of technology

The language profession has been deeply influenced by the advancement of technology for enhancing languages. Using technology to support teaching and learning has become a trend. Since the 1960s, technology has been implemented to develop students' language skills. As technology
evolves dramatically, new approaches, strategies, and techniques have already been implemented, making learning more flexible, productive, and engaging. These vibrant pedagogical sound practices have accelerated the process of knowledge construction, sharing, and development through various communication possibilities. Computer-Mediated Communication (CMC) has effectively facilitated communication and interaction through Asynchronous and Synchronous modes.

Tracing the historical development of CALL, the real revolution in CALL history started when Web 2.0 was developed. Web 2.0 technology has spawned social media applications that are considered the real spark of Apps in human history. Hence, social media apps have evoked and stirred up the notion of having dedicated Apps for language learning. However, some social apps have been used to support some aspects of learning. As mentioned earlier, the 21st century witnessed a great revolution in mobile apps for language learning to enhance students' learning of languages.

**CALL-Dedicated Apps (CDAPPS)**

According to Reinders and Pegrum (2016), Applications are categorized into two types: generic apps designed to serve general purposes, such as dictionaries, encyclopedias, and Google packages. In contrast, Dedicated apps represent particular apps for a specific group, such as AutoCAD for engineers and Duolingo for learning languages. These apps can be directly accessed and downloaded from the App Store (Google Play for Android and Apple Store for IOS). In language teaching and learning contexts, Apps are defined as software or programs designed for language learners to develop overall language proficiency. According to Hubbard & Bradin Siskin (2004, p. 457), "CALL software." It is used here to refer to computer programs and accompanying content with a recognizable instructional purpose or a "teaching presence." Recently, enormous apps have been designed and launched to make language learning and language development a motivational journey. The merits of these apps are beyond anyone's expectations. Students are given opportunities to enhance their language skills, increase their cultural awareness, and practice the language in authentic social contexts. (Rosell-Aguilar, 2009; Sweeney & Moore, 2012; Burston, 2014). The potential of these apps has been extended to include learning a new language. It has been observed that many students are inspired to learn new languages at their own pace, such as Chinese, Spanish, and Italian, for instance. Using language learning apps has crossed the traditional language learning methods, where the tedious learning environment brings more anxiety among students. Using CDAPPS in language teaching and learning settings combines three learning environments, traditional, online, and mobile, most flexibly, adding significant variation to learning modes.

**Why Evaluating CALL Apps?**

Technology has offered language learners, practitioners, and teachers a plethora of resources in various formats. Language learning apps have gained prominent popularity among learners. However, the abundance of CALL apps has puzzled end-users and learners as they are still determining which app meets their expectations, preferences, and needs. Generally speaking, it has been stated that students and learners pass their learning experiences to others by recommending particular apps. Therefore, there is an urgent need to develop a framework for evaluating CDAPPS. A systematic evaluation module is necessary to determine which app is appropriate for students in a specific context. Usually, most CALL apps are evaluated based on
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the suitability of the content, technology, pedagogy in association with learning theories, and language appropriateness, to name but a few. Many endeavors have been made by the most notable scholars in the field (Hubbard, 2010; Chapelle, 2010; Beatty, 2010; Burston, 2003; Leakey, 2011). These scholars have proposed evaluation frameworks to establish a systematic model that comprehensively examines various CDAPPs components. The primary purpose of these frameworks is to assist learners and teachers in selecting the best app that fits into their learning/teaching contexts. Moreover, the framework consolidates the three considerations: 1) Learner fit, 2) Teacher fit, and 3) operational description developed by the Richards and Rodgers framework: development, evaluation, and implementation.

Approaches for Evaluating CALL Applications

Many scholars in the field have proposed various approaches for evaluating CALL applications. For instance, Hubbard (1988):

The framework approach to courseware evaluation is different from others. … A framework in this context means an integrated description of the components of something—in this case CALL materials—with respect to a particular goal—in this case evaluation. Rather than asking a specific set of questions, a framework provides a tool through which an evaluator can create his or her own questions or develop some other evaluation scheme. (p. 52)

Methodology

The research utilized a conceptual research methodology, examining and scrutinizing the current CALL evaluation frameworks developed by Hubbard, Richard and Rogers, and Martin Philip, which contributed significantly to evaluating CDAPPs. Based on the fingerprint of the previous work, an innovative framework draws upon the insights steamed of earlier theories and frameworks. The Mudawe and Maslamani framework is built upon using an appropriate level of analysis that facilitates the interpretation and understanding of its potential benefits for evaluating CDAPPs.

Reflection on CALL Evaluation Frameworks

In educational settings, evaluation is identified as a well-organized procedure that seeks to determine the values, worth, and effectiveness of materials, instructional strategies, and activities. Johnson (1992) defined evaluation as; "The purpose of an evaluation study is to assess the quality, effectiveness or general value of a program or other entity." (p. 192). CDAPPs have provided purposes, materials, instructional sound practices, and context for learning. Hence, evaluating the potential of CDAPPs for language teaching and learning has become one of the procedures carried out by language interest groups. Consequently, evaluating materials, instructional strategies, and assessment scales is crucial. The evaluation of materials provides insights into the suitability and aptness of a particular teaching content. Hence, materials evaluation has been carried out for decades to make sure that the existing materials fit into students' needs and participate in generating success among them. Their effectiveness should be measured whether the materials and resources are printed-based or web-based. Therefore, the evaluation of CDAPPs has become crucial in teaching and learning contexts. Throughout the history of CALL, many frameworks have been implemented to assess CALL applications and resources. The most popular frameworks are Hubbard's and Cheaplle's, based on Phillip (1985) and Richard and Rodgers (1982). These provide criteria and considerations that
contribute to revealing the myth of CALL evaluation applications. McMurry et al. (2016) deeply analyze Hubbard and Chapple's frameworks regarding strengths and weaknesses. Hubbard identifies three approaches to evaluate CALL applications and resources: 1) checklists, 2) methodological frameworks, and 3) SLA research. (Hubbard, 1988).

On the other hand, Chapple (2001) has identified six criteria. These criteria are language learning potential, meaning focus, Learner fit, authenticity, impact, and practicality. Despite the practicality of the Hubbard and Chapple frameworks, Levey (1997) hardly criticized their suitability in judging all CALL applications and resources. He disputes that "Hubbard's framework for CALL materials development, which assumes that all CALL is tutorial in nature, is not generally applicable to the computer as a tool. Similarly, the Richards and Rodgers model ... only has limited application for the computer as a tool." (p. 211). However, Hubbard and Chapelle remain the most popular CALL evaluation frameworks that tend to be customized for various types of evaluation.

Over the past years, and as mentioned in this study, the existing frameworks for evaluating CDAPPS might serve the purpose of evaluation through various levels of analysis. However, tremendous factors might affect the effectiveness of the existing evaluation frameworks within the ever-changing nature of technology, teachers' expertise, knowledge, and students' needs. The most critical issue in arriving at a comprehensive framework is to address the issue of technological advancement that shapes the design of CDAPPS, especially within the existing reality of Artificial Intelligence (AI), underpinning pedagogical principles of the framework that constitute the instructional practices, the challenges associated with teachers' expertise in understanding the vibrant role of technology in fostering language development, and the learners who are experiencing massive exposure to various language resources through social networking and learning Apps, for instance. Therefore, the study tries to identify the gap by illustrating the core efficiencies and deficiencies related to evaluation by adopting existing frameworks' strengths and applying recent technological enhancements and sound pedagogical practices to develop a new one. According to these changes, the evaluation of CDAPPA based on the existing framework calls for instant action, taking into account the ever-changing needs of students, the possibility of developing a framework that addresses the contribution of AI-driven tools and resources to the language teaching and learning and investigating the attitudes and perceptions of language teachers to cope with the wild influx of technology that brings ideas, strategies, methods to the profession at a stunning rate.

**A proposed framework for evaluating CDAPPS**

By examining various CALL evaluation frameworks and following the fingerprints of Hubbard (2011)) and Chapelle (2001), the researchers decided to propose a framework entitled the Mudawe and Maslamani framework that can be used to evaluate various CALL apps. The model addresses four elements that are very crucial in any evaluation framework. These elements are Learner fit, Language Professionals Fit, Technology Fit, and Institutional Administrators Fit. (See Figure 1). Each element has a set of criteria that can be used for judgmental or empirical evaluation (Chapelle, 2001) of CALL-dedicated Apps to determine to what extent these apps are suitable for learning/teaching contexts.
Figure 1: Mudawe & Maslamani Framework for the Evaluation of CALL-Dedicated Apps

Discussion

This part of the study examines the components of the proposed framework for evaluating CALL applications in terms of interpretation, analysis, and explanation. Therefore, the discussion parts manifest a possible interpretation of the study's questions, allowing for a meticulous understanding of the possibility of integrating the framework in evaluating endeavors.

Q#1) What is the nature of the levels of analysis included in the Mudawe & Maslamani framework?

Based on the previous work of Hubbard (1998) and Chaeppele (2001), the Mudawe & Maslamani framework for evaluating CALL applications identifies four levels of analysis or consideration. These levels include 1) Learner/ user Fit, 2) Language Practitioners, 3) technology Fit, and 4) Administrators Fit. Each level of the analysis entails several criteria for evaluation. The levels of the analysis are described below in more detail:

1. Learners/ End-user Fit

Learners/ end-user fit: accommodates various criteria that should be useful when learners participate in the evaluation process based on their experience dealing with particular apps. These criteria include but are not limited to the following:
Affordability: Most CD apps are free. However, sometimes, we may come across an app that provides only limited features for free and asks for a subscription or a premium subscription to access the full features.

Navigation of the CDAPPS refers to how learners interact with the apps, moving back and forth between the content, materials, and activities smoothly without any technical complexity. Apps allow self-guidance within different interfaces of the apps and are considered user-friendly.
Learning flexibility: Flexible learning has become one of the most prominent concepts in higher education. According to Huang et al. (2020), flexibility is "offering choices in the educational environment, as well as customizing a given course to meet the needs of individual learners." (p. 2). Hence, CDAPPS must provide students with a flexible learning space where they can control their learning.

Learning modes: In educational settings, assuming that the same techniques or procedures used in teaching may not suit all students based on their intellectual diversity. Hence, a one-size-fits-all approach only works for some students as there is a need to include the various students' needs across multiple learning modes. Therefore, examining where the apps adopted differentiated instruction modes to suit students with an assortment of learning objectives, interests, preferences, and readiness is necessary. Moreover, other modes, such as self-directed learning and learning autonomy, blended learning, and hybrid learning, must be considered when apps are implemented.

Suitability of the content: Learners and end-users will benefit more if the content is designed to expose them to real-life situations through various meaning-enhanced scenarios. Hence, the content must be comprehensive, authentic, and appropriate for practical use. Additionally, it must cover all skill areas and competencies required to empower students' overall language proficiency.

Customized Learning: Learners and end-users have different needs while learning a language. Hence, the apps must address individual needs and learning plans by allowing students to generate learning paths based on their language learning objectives.

Language Suitability: Students and end-users involved in the evaluation process can report the degree of language difficulty to their administration and how it affects their understanding of the content and activities.

Gamification: Most educators believe students' learning productivity can be maximized in an ever-relaxing environment. When it is fun, students will learn. Based on that context, CDAPPS has to evoke students' motivation, desires, and attitudes to learning by making games a part of learning.

Immediate Feedback: Feedback has become crucial in students' learning journey as it provides insights into student progress. Whether the feedback is given in the corrective form, explanatory form, reflective form, or any other form, CDAPPS has to be designed to provide instant feedback on all the activities they have already done. According to Hubbard (2006), feedback can be either implicit (as when an incorrect answer simply disappears as a choice when it is selected) or explicit. For a typical quiz or practice exercise, feedback can simply indicate a correct or incorrect response, or it can provide additional information in the form of hints or explanations. (p.12)

2. Language Practitioners Fit

In Chappelle and Hubbard's frameworks, the term teacher fit has been used to refer to the role of language teachers in the evaluation process of CDAPPS. However, Mudawe & Maslamani's evaluation module addresses the role of teachers in a comprehensive manner. It includes all language practitioners directly and indirectly involved in the evaluation process. The best example of a well-known company that provides a solution to language learning is Rosetta Stone, which hires the most notable language experts to provide consultancy services on content and pedagogical sound practices to design powerful applications.

Content-area Instruction: language content represents the core of the teaching process. Therefore, language professionals have a significant role in evaluating the content used in various
teaching settings. Evaluating what to teach should align with the teaching/learning objectives, teaching strategies, and methodological supports and facilitate curriculum enhancement regarding flexibility, authenticity, validity, and reliability. Moreover, every language professional must evaluate how much the content engages students in learning, promotes thinking skills, enhances productivity, and develops a student-centered approach.

Philosophy of teaching: Language teachers have been focusing mainly on integrating CDAPPA in their teaching practices to enhance their teaching philosophies associated with attitudes, ethics, and beliefs and how CDAAPS's pedagogical aspect enriches teachers' experiences in handling various instructional situations encountered in various teaching contexts.

Teaching pedagogy: Evaluating the teaching pedagogy of CDAPPS is a comprehensive procedure that entails various elements such as teaching methods, activities, and the assessment of students' progress. It has been observed that some learning apps adopted various teaching pedagogies represented in memorizing simple grammatical rules and teaching vocabulary in isolation. (Behavioristic learning) while other apps tend to enhance students' communicative skills. (Communicative Teaching Approach). Some apps are based on contextualized learning, where learners and end-users are exposed to a meaningful context to enhance their abilities to construct meaning in a real-life situation. (Socio-cognitive approach).

Learning theories: Most CDAPPS are connected to one or more Second Language Acquisition (SLA) theories. The basic idea of evaluating language learning apps associated with SLA is to understand the implementation of particular instructional strategies adopted in designing activities. For example, if a particular app relies on repetition, memorization, and imitation, it probably adopts behavioristic Learning Theory. Likewise, the apps that require students to use their cognitive skills as they use their existing knowledge to develop a new understanding through language analysis are related to Cognitivism. The same is true for other SLA theories, such as Interactionism and Socio-Constructivism, where language is constructed through social interaction.

Tracking Students' Performance: Tracking students' performance is one of the most critical procedures that provide insights into students' growth, progress, and achievements. Teachers, parents, and administrators depend on teaching reports to evaluate the whole teaching and learning process. Hence, the essential function of language learning apps is to include a report-generator function in various file formats (word, Excel, PDF) ready to be shared with stakeholders, teachers, parents, and administrators.

Planning the teaching-learning process: In language teaching and learning, planning represents the standard procedure for teachers and a roadmap for success. Successful planning requires carefully delineating objectives, pre-determined content, strategies, activities, and assessment. Hence, teachers are required to build their teaching plans based on the attributes of a particular CDAPPS.

3. Technology Fit

Technology Fit is the third consideration in the Mudawe & Maslamani model, and it is associated with gathering data to assist in the evaluation process. These data are technical and address some aspects of CDAPPS. Evaluators may examine the following criteria when evaluating software from a technological perspective.

The design of the app: The initial steps any evaluators have to consider are whether or not the app is technically designed with appealing (especially if it is targeting young learners),
intuitive, and user-friendly interfaces. Moreover, how the design promotes students' navigation while going back and forth is another critical dimension.

Compatibility: What are the app's technical requirements? The answer involves the technical specifications required for operating the software.

Multi-server availability: Sometimes learners, teachers, and other users experience technical glitches while surfing or navigating a particular software. These difficulties are associated with traffic jams and slow navigation, bandwidth, and speed. Technically speaking, any app equipped with multi-server availability tends to reduce the time wasted waiting for accessibility.

Software developers and instructional designers: The designation of CDAPPS through a technology perspective has to accommodate essential factors such as a rich database, accessibility (login credentials), social media integration for sharing, advertising, integration of Speech Recognition Technology (SRT), and visualization, and dashboard, support contents in various formats. Hence, software developers and instructional designers must ensure the apps’ essential characteristics are sophisticatedly designed.

4. Institutional Administrators Fit

This part of the evaluation framework is very much concerned with the role of administrators, stakeholders, and teachers in valuing the role of the apps in the whole learning outcomes. Therefore, the criteria included revolve around the following points:

Institutional Needs analysis: Any institution, school, or university planning to integrate particular apps should conduct a needs analysis to determine the steps to take. Healy (2009) set essential questions to be answered by any administrator body. These questions are as follows: 1) Who are your target users? 2) What are the goals of the students you are targeting? 3) What setting will the software be used in: an independent study lab with no teacher available, a lab associated with a class, or a teacher-led class with one or a few computers? 4) How much do the teachers/lab assistants who will work with the students know? 5) What do you have now regarding hardware and technical assistance? , and 6) How much money do you have to spend?

For the proper adoption of any CDAPPS, it is fundamental for any school, institution, university, or any other related body to conduct a SWOT analysis to recognize the potential of the CALL software they are planning to adopt. This stage comes after completing the needs analysis conducted by these institutions. In particular, the CALL software license is expensive to activate and requires careful selection.

Infrastructure: The concept of application infrastructure is crucial in ensuring that the application features function within a particular infrastructure framework. Usually, infrastructure is associated with establishing dedicated labs, networks, Wi-Fi configuration, cloud infrastructure (having access to Google Cloud and Microsoft One Drive), and computer centers.

Integrating CALL dedicated apps with the curriculum: Administrators must decide the usage portion to support the curriculum in advance. This could be attributed to using CALL courseware as a complete learning package, supplementary materials, or part of an existing course (Hubbard, 2021).

A mechanism for integrating CDAPPS: There should be a mechanism for integrating any CALL-dedicated Apps with the curriculum. Setting up a mechanism is crucial in determining how and where the app will be used. Moreover, the mode of teaching has to be specified as well.
Tracking and Reporting on Students' Progress: This criterion is a significant part of the data-driven mechanism, which enables institutes, schools, and universities to have valuable insights into the achievement of initiatives based on visions, missions, and objectives. The analysis of students' performance reports is essential for administrators to carry out an overall evaluation of all elements of the learning and teaching process and institution efficacy.

License activation: Based on the reports generated, administrators, along with the stakeholders, have to decide the continuity of using the apps based on performance reports.

Q# 2) To what extent does Mudawe and Maslamani's framework contribute to the evaluation of CDAPPS?

As mentioned earlier, the proposed CALL evaluation framework has four levels of analysis. Each consideration has several criteria representing a particular area for evaluation. Based on the judgmental evaluation, which is summative, generating checklists with all criteria facilitates the implementation of the framework on a large scale. In the judgmental evaluation, checklists are "a series of questions or statements to be checked off 'yes/no' or marked 1-5 on a Likert scale, or has blanks to be filled in". (Susser, 2001, p. 262). Nevertheless, the criteria included in the proposed framework, and despite their relevance to the scope of the evaluation, some of them might be behind in the scope of reliability of perseverance and contexts due to a conflict of purpose and interests. Therefore, the checklists should be arranged to include the proper criteria for evaluation adopted by a particular organization or individuals. On the other hand, empirical evaluation has been used for decades to measure the effectiveness of CDAPPS in various teaching and learning contexts. The main task is to find out the potential of these programs by empirical methods. It might include both experimental or quasi-experimental methods. However, Chapelle (2003) believes the process-oriented approach seems more convenient for evaluating CALL-dedicated Apps than comparative approaches. Based on that, the level of the analysis as proposed in the Mudawe & Maslamani Evaluation framework is subject to empirical investigation through quantitative and qualitative data collection methods. Each criterion should be empirically tested. For instance, language-learning potentials can be empirically tested through a wide range of investigations into the linguistic aspects of the Apps and how students' linguistic skills developed as a result of interactivity with the CDAPPS. Moreover, behavioral interaction with the software that represents technology fit can be empirically measured through various data collection tools: observation, surveys, and tracking, for instance. Similarly, formative assessment tends to be more appropriate in examining the correlation between students' performance within the learning process and CDAPPS. Pre- and post-tests prove to be more effective in testing two variables: Non-CALL materials against CDAPPS.

Consequently, the researcher plans to propose general guidelines for applying the Mudawe and Maslamani framework for evaluation. These steps are: 1) identifying the purpose of the evaluation as an initial stage in the process, 2) identifying the relevance of the apps with students' and institutions' needs, 3) setting clear evaluation objectives, 4) identifying the type of evaluation they would like to apply (judgmental, empirical, or formal evaluation), 5) identify which methodological approaches they are going to follow, especially when conducting the empirical evaluation, 6), data should be collected, systematically analyzed, and interpreted, and 7), the findings of the evaluation should be arranged in various formats in an accessible and tangible manner. These steps can be applied to each level of the analysis included in the Mudawe & Maslamani evaluation Module.
Conclusion

The evaluation of CDAPPS remains a complex procedure due to the purpose of the evaluation itself, which brings a wide variety of results. The reason why a particular institute decides to implement one specific software may be different from other institutions based on the distinction of comprehensive initiatives of one specific educational institution. These complexities and uncertainties stimulate CALL practitioners and experts in the field to conduct extensive research to arrive at the best approaches and frameworks to examine the suitability of CDAPPS for particular learning/teaching contexts. As an extension to these efforts, this study focuses on the evaluation of CDAPPS by proposing a framework built around the most recognized CALL evaluation frameworks developed by Hubbard and Chapelle and extended from the work of Martin Philip and Richards and Rodgers frameworks. The whole evaluation process is very complicated and entails a distinct procedural approach. However, applying the previously mentioned frameworks has paved the way for more convenient and efficient evaluation. Hence, considering the three approaches proposed by Hubbard (2006), checklists, methodological frameworks, and SLA research-based approaches, one can see they have great potential to evaluate various aspects of CDAPPS. In the same regard, the Mudawe & Maslamani framework addresses various criteria under each consideration that can be used to develop checklists for evaluation. The proposed framework must be analyzed thoroughly to examine its capability to contribute to the myth of CALL evaluation frameworks.

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About the Authors
Dr. Osama Mudawe Nurain Mudawe is an assistant professor at Jazan University in the Department of Foreign Languages. He teaches postgraduate and graduate courses related to applied linguistics and linguistics. His main research interests include using technology to enhance language development, Technology and Second language Acquisition, and Technology-Aided Translation (CAT). ORCID ID: https://orcid.org/0000-0001-7008-1019

Dr. Jaber Ali Maslamani is a faculty member of Applied Linguistics in the Department of Foreign Languages, Faculty of Arts & Humanities, Jazan University, Saudi Arabia. He got his PhD in Educational & Applied Linguistics from Newcastle University, UK. His research interests
include Computer-Assisted Language Learning and language acquisition, discourse analysis, and pragmatics. ORCID ID: https://orcid.org/0009-0008-8077-9144

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