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تعلم اللغة عن طريق استخدام الأجهزة المحمولة: ضرورة في ظل جائحة كوفيد -19

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الملخّص:

مع التفشي المفاجئ لوباء كوفيد-19، عملت الحكومات في جميع أنحاء العالم بكل قطاعاتها بلا كلل لمعالجة الأزمة. تم فرض الإغلاق كأحد الاستراتيجيات للحد من سرعة انتشار الفيروس. تأثر مجال التعليم نتيجة لذلك تأثرًا كبيرًا ووُضع على المحك. فقد كشفت الأزمة عن عدم جهوزيته ونقاط الضعف لمواجهة الوضع. وكإجراء علاجي، تم تحويل التعليم جزئيًا أو كليًا ليصبح عبر الإنترنت. ومن ثمّ، سُلّط الضوء على دور التعليم المتنقل أو الجوال هذا في الحفاظ على تجربة الاتصال والتعلم. مع هذا التطبيق الجديد والسريع للتعلم المتنقل يظهر عدد لا يحصى من الفوائد والعوائق والتحديات والآراء المتضاربة على الطريق. يلقي المقال الضوء على كيفية استمرار تدريس اللغة وتعلّمها بشكل خاص في ظل تفشي فايروس كورونا بمساعدة الأجهزة المحمولة.

الكلمات المفتاحية: التعلم بمساعدة الأجهزة المحمولة، كوفيد-19.

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Utilizing Mobile-Assisted Language Learning (MALL): ANecessity in Light of COVID-19 Pandemic

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Abstract

With the sudden outbreak of Covid-19 pandemic, governments worldwide with all its sectors have worked relentlessly to address the crisis. To limit the virus fast spread, closures have been forced as one strategy. Consequently, the education arena has been highly impacted and put at stake. The crisis has revealed the unreadiness and vulnerabilities of educational systems to face the situation. As a remedial procedure, teaching has been shifted partly or completely online. Thus, the role of internet-based mobile learning in maintaining communication and learning experience has been highlighted. However, with the rapidapplication of mobile learning, a myriad of benefits, barriers, challenges and conflicting views come through the way. This article examines in particular how languageteaching and learning can still continue in light of the outbreak of Covid-19 with the help of mobile-assisted language learning.

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Keywords: Mobile-Assisted Language Learning (MALL), Covid-19.

1. Introduction:

Living in an ever-changing world, it is imperative for the wind of change to blow to meet the sets of human needs based on the newborn demands of life. However, with the outbreak of Covid-19 with its alarming speed, many aspects of life have been affected and altered suddenly to varying degrees. This has first brought many human activities to a near-standstill by imposing a battery of precautionary measures like restrictions on movement and social gatherings to reduce the spread of the virus. Varying solutions have been adopted, later, that have slightly or significantly shifted the face and directions of many domains including education.

Being a great medium for the virus to expand, many educational institutions have been impacted. Seeing no end in sight for the virus, different strategies have been followed to ensure the continuity of schooling and learning in a safe way and to prevent physical distancing from turning into social isolation. Several institutions have closed their doors temporarily, reopened with new regulations, blended technology or moved completely online. This, however, has exposed the vulnerabilities in the educational system concurrently with the fear of future deterioration in the academic level worldwide.

Concerning language teaching, technology has long been utilized as an engaging and supporting tool. However, under the sudden restrictions, the importance of implementing wider uses of technology to face the dilemma has been brought under light despite the unreadiness of many academic institutions for this step. Still, by looking at the status-quo with positive lens, integrating technology with its aids especially mobile devices is a necessity to apply to keep updated and to address the new needs of the Net generation and digital addict learners of the 21st century.

This paper has the orientation of discussing the use of mobile-assisted language learning (MALL), as one way to deal with this crisis, and its merits and downsides. In addition, the paper shows the argument about the necessity of adopting mobile devices and the rationale behind their use. Finally, used mobile software and websites on mobile devices for language learning are presented.

2. Technology integration to support language learning:

As every period in history is marked by its own technology, education and language teaching have always made use of the latest advancements of each age starting from low-tech pencils, blackboards, Skinner's teaching machine to high-tech microcomputers that have represented a paradigm shift in teaching known as computer- assisted language learning (CALL), video tapes, tape recordings, projectors, to more convenient and digital tools like the internet and mobile devices by the early 2000s. (Barakat,1997, Dudeney & Hockly, 2007, Gaber, 2015, McQuiggan et al, 2015, Roblyer ,2016). Despite the advantages of all, the latter has put not just language learning but education as a whole "on the threshold of a profound change." (Kacetl & Klímová, 2019, p.5).

It is a normal scene, nowadays, to see learners using their mobile devices that they use on a daily basis in class for a variety of goals. They can record or capture the presented information to be revisited later privately. This practice gives learners an opportunity to pay focused undistracted attention which is sometimes missed in class and to move based on their pace. Educators can also use them to support, facilitate class work and encourage their learners' independence to practice privately. Instructors can hand e-copies of textbooks, recordings and wealth of resources, use the devices synchronically in class to engage learners more, for asynchronous communication through social networking, to upload class materials online with extra practice and assign quizzes. Thus, mobile devices have dissolved the boundaries between in and out class walls to some extent in many aspects. Their use has started to grow leading the term MALL (Mobile-Assisted Language Learning) to emerge which is no longer a novelty now.

Despite the prevalence of mobile devices and easiness of use, some educators have kept their teaching ways alienated from them. However, presented with a new condition as the aftermath of the pandemic, mobile learning has become "a need not a want" (Dias & Victor, 2017). Thus, the educational assumptions regarding their integration are reconsidered. Total or supporting online learning has been adopted through mobile medium devices as one way to ensure teaching continuity in an up-to-date and safe environment. This shift, however, does not sound easy as it seems. Teachers and learners have been asked to shift to another digital home-based medium. Knowing how to use these devices does not mean knowing how to use productively even for tech-savvy teachers and students. Moreover, moving to a new arena has a new set of rules, requirements and obstacles. Being the spearhead of the process, adequate teachers training is needed (Nuraeni, 2021). Special friendly-use internet-based applications or software, content, instructional tasks, methods and time management are reconsidered. This is to guarantee users' participation, pay attention to psychological and social factors and make learning more interesting.

3. Mobile-assisted language learning:

Setting a clear and one definition for mobile learning is somehow problematic as the word "mobility" has to do with learners, learning process and devices (Andujar, 2020, Hockly, 2013). This is what differentiates CALL from its subset MALL which expands e-learning in terms of wide and easier use and asserts continuity or spontaneity of access and interaction across different contexts (Metruk, 2019).

To start with today's mobile learners, many are known as “digital natives” or “tech-savvy” who are, to borrow Prensky's words (2001, p.1),"no longer the people our educational system was designed to teach." or as McQuiggan et al (2015, p.120) say that “since students today seem to be born with a device in their hand, it is easy to assume learning with technology would be instinctive”. Many learners increasingly expect their schools to integrate technology since they are exposed and immersed in it since birth. Armed with these new devices, education must be reconsidered to meet 21st century learners' new needs and what they do beyond classrooms, amuse them and capitalize on this.

As for the learning process, it is no longer fixed in class time and within the four walls of the classroom or in a predetermined location of computer devices or schools (O’Malley et al., 2005). A mobile device can allow students to experience learning wherever they happen to be. Currently, mobile territories for personalized, self-learning, online resources and practice are extended. Also, deploying mobile devices shifts the center of learning from teachers to learners. This is why the term "mobile learning" is used instead of "mobile teaching" (Dias & Victor, 2017, Kukulska- Hulme & Traxler, 2005, Kukulska-Hulme et al., 2015,Munday,2016).

In addition to reaping the benefit of time and place flexibility, mobile learning is the type of learning that is supported and accessed through movable and portable electronic tools. The fact that they are easily carried and used facilitates accessibility more than desktops and laptops.

Thus, MALL through smartphones, PDAs, smart pens, tablets (e.g., iPads), and mobile applications, websites and social networking, allows mobile participants to have mobile learning experiences whenever and wherever they are through their moving devices in formal and informal settings.

4. Merits of MALL:

As well as the mobility and time and place flexibility of handheld mobile devices, different educational institutions, from primary to higher education, are turned into 24/7 open institutions or like private teachers (Kacetl & Klímová, 2019, Metruk, 2019). Being more conveniently accessible than computers and textbooks, the devices can fulfill several educational objectives. Learners can follow up practice, automatize some skills, revisit knowledge, and access their performance data. They can be socially connected with others and the teacher beyond the constraints of being seated at a given time and place and cultivate relevant skills for the future like autonomy and technological skills (Nuraeni, 2021). Moreover, parental involvement and social interaction have increased as well along with the easy track of learners’ data. Various language skills like listening or reading can be practiced interactively in multisensory spaces where mistakes are kept private in safe environments. They proved to be most effective in retraining new vocabulary, boosting confidence and interest, and increasing motivation, engagement and self-assessment with their multimedia features (Klimova, 2015, McQuiggan etal,2015, Pitler et. al 2007).

These devices are the exact real tools that learners already carry, use
and are familiar with in the real world. Like desktops, mobile devices appeal to auditory and visual senses. Unlike them, several mobile devices can additionally support touch sense and are more personal than computers which are sometimes shared between more than one member of the family (McQuiggan et al,2015). Blending mobile devices in learning can help instructors communicate and reach every learner distantly anytime and anywhere. Also, MALL allows learners, especially working adults and those who travel, to compensate for cutting classes and lack of prolonged study time. They can review content on commute as the devices are always on their pockets and get feedback on their progress. Thus, this cultivates a sense of autonomy and independence from the main teacher in seeking improvement which will be discussed next.

4.1 Feedback through MALL

Upon inserting answers, mobile software or programs provide feedback quickly in response to the answers. It can range from simple praising for correct answers to more corrective, formative and elaborative ones for wrong answers. This enables more reflection and realization of more practice or clarification in case of wrong answers. Thus, portable devices encourage learners to be more independent from the teacher by providing the benefits of formative assessment available ‘on demand’ for each individual student. This is

not always possible in classes, especially large ones, which are no longer a preference during the pandemic or online meetings where it is hard to allocate time to each one to ask on spot.

4.2 Fostering Autonomy through MALL

The pandemic has shown how human condition in all its aspects is rapidly changing. There has been a shift towards personalized world as teachers and learners are working individually from home. Herein is highlighted the importance of investing in life-long learning to keep updated and able to cope with these changes and challenges. Therefore, learners should be encouraged to cultivate autonomy and remain open to continuous learning by recasting traditional roles, redistributing power and responsibilities, and promoting the new trend in education towards "learner-centeredness". Studies maintained that MALL is turning learning into more individualized, ubiquitous and learner-centered (Çelik, & Yavuz, 2017), and autonomous (Zhang, 2016).

Concerning language learning, using mobile-technology-driven devices is one way to cultivate and support self-directed learners. They can take responsibilities of their own learning, control the pace on the road to mastery by deciding when to study, pause, go over the content again, identify their own strengths and weaknesses, and check their performance progress. A study by Leis et al. (2015) on Japanese university students upon two groups shows increasing levels of autonomy and more tendency to study among the group which used their smartphones to practice. However, the level of autonomy required for online students is necessarily higher than for those that are studying face-to-face.

To foster autonomy, appealing, professional and easy to use websites and content design, tasks, and interactivity that keep learners engaged should be used. Also, Nunan (1997) has proposed five-level model for autonomy. The first level is awareness about pedagogical goals and content of the materials they are using. The second is involvement in selecting their own goals. The third is intervention; learners are involved in modifying and adapting the goals. The fourth is creation; learners create their own goals and objectives. And finally, transcendence; learners go beyond the classroom and make links between the content of classroom learning and the world beyond. This all apply to MALL as learners can move from basic learning to creating, innovating and sharing with others.

5. Downside of MALL

Despite the benefits, popularity and widespread of MALL, there is no guarantee for easy application in all cases or lack of flaws as other supportive factors should exist as well. First, many digital-immigrant educators, teachers, learners and caregivers, who are not fully experienced in using technology, still do not completely welcome MALL.

They see it as an "intruder" for not being able fully to understand it. This goes back to the inexperienced teachers, staff, learners, parents and infrastructure unreadiness which are all costly to have, lack of training courses to cultivate this competency and rapid and sudden application of MALL. This can impede its application.

Other flaws are representedin the digital divide and the accessibility gap that have been further exposed by the instant leap during Covid-19. This entails inequalities in getting accessed to classes and learning materials either due to lack of reliable devices, lack of electricity or bad internet connection between rural and urban or poor and rich areas for example. Also, there are various disparities among learners who lag behind because of their poor economic backgrounds. Mobile devices have short battery life and small screens. It is also challenging to sustain the "wow" or motivation factor that these devices can bring which ensures using them in the long run especially when not paying attention to the psychological and social factors of the learning process. It is easily for users to get distracted by receiving notifications from other application that drift their attention. Finally, mobile devices are not designed in the first place for teaching and learning purposes which cause the paradox discussed next.

6. MALL: between supplementary and an unavoidable alternative

Divided between the pros and cons of MALL, in light of the pandemic, a controversy raised. Some educators see that simply integrating mobile technologyto fill class time, support class work or as homework will be an add-on if it is not outcomes-driven and pedagogically-woven. To draw on James Paul Gee's metaphor (as cited in McQuiggan et al, 2015, p.7) of mobile devices as "crayons", "they are just tools that can make and do good things (e.g., art) or make a mess". Some researchers (Dudeney & Hockly, 2007, Kukulska-Hulme et al., 2015, Kukulska-Hulme & Traxler, 2005, McQuiggan et al,2015, Osheim, 2013, Roblyer, 2016) claim that using mobile technology is not

meant to be a standalone recourse that can replace experiential learning of human values and roles as

teachers or face-to-face instruction. It rather serves as an additional and supplementary recourse to be blend, enforce certain skills and scaffold lessons.

On the other hand, other researchers (Cherian & Williams, 2008) showed no barriers in using MALL as a substitution to traditional materials. This view is highlighted again with the outbreak of Coronavirus as an unavoidable solution that keeps the educational door opened. However, although research is still ongoing, it should be mentioned that it has been shown so far that students are not taking online classes or learning seriously on mobile technology not because they see mobile devices as a strange tool to use, but they are rather not motivated enough to continuously use them, economically disadvantaged to own a mobile device or lack reliable internet connection (Hall & Batty, 2020). Although it has always been the case, the unprecedented h e a v y reliance and application on a large-scale after the outbreak of Covid-19, might be the cause behind these outcomes. Future research will find out.

7. The rational underpinning using MALL

The most popular learning theories in relation to mobile learning include behaviorism, cognitivism and constructivism (Roblyer, 2016). These theories are also reflected in the software types and design used in language mobile apps or platforms. The first two theories follow the instructional design in which learners, basically, practice and learn particular skills and concepts. Examples are drill and practice, tutorial and simulation software. Constructivism, on the other hand, follows the productive- oriented software which provides the learners with the means to generate, plan and produce (Barakat, 1997, Roblyer, 2016). Each has its own benefits and limitations.

Having two or three language lessons, face-to-face or online meetings each week to cover the syllabus, content, develop and practice the four skills is a hard task for teachers. Therefore, some teachers tend to skip some parts, especially writing or listening, or focus on delivery with poor practice despite its importance. Based on cognitive and information processing theories, practice is essential to master the basic decoding process for further higher skills. Moreover, the Coronavirus has disrupted the normal function of instruction. Thus, ready-made or specially developed mobile application can take the burden off the teachers' shoulders in fulfilling various pedagogical and instructional goals like helping learners to automatize language skills, compensating for physical contact and maintaining communication beyond the constraints of time and place of classroom at home in a safe environment.

8. Types and software used in MALL

Four types of MALL are suggested by Pegrum (2014) which are content, tutorial, creation and communication in an effort to ensure that the Mobile-Learning platforms deliver various learning objectives. Embracing one type sets the direction towards implementing a certain software. By definition, software is the instructions and codes inserted on computers by programmers to carry out specific tasks. It is critical to choose a piece of software that aligns with the defined objectives as Preece (2000) concludes that effective software usability is so critical to support rapid learning, high skill retention, low error rates and high productivity. Basic software types can be classified into four categories; drill-and- practice, tutorial, simulation and instructional game. Instructors must analyze each carefully to determine which supports their specific teaching needs and know the integration strategies (Barakat, 1997, Hockly, 2013, Roblyer, 2016). Also, applications that run primarily on handheld devices have the same instructional software types.

9. Benefits and limits of some software types

9.1 Drill- and- practice

Designed to help students practice and test their grasp of the material, well-designed drill-and-practice software can meet several goals. This type helps in retaining and supporting class instruction rather than directing instruction in addition to moving predefined items to the long-term memory through extensive practice outside classroom. To reach high-order skills, students need to achieve mastery and automation of lower-order prerequisites skills first. Thus, the software gives additional practice in using new words or grammar encountered in course books in various skills. Users can control the presentation rate by simply pressing a key to show readiness to move to the next task. Also, as old and not frequently used acquired pieces of information are buried by newly ones over time, many, it becomes difficult to retrieve them. However, learners can refresh their memories with spaced practice and the ability to go back to the material anytime to review. Applications that follow this software type is “Duolingo, Busuu, Kahoot & Gimkit”. According to Robyler (2016), drill-and-practice software was found to yield equivalent or better effect results compared to paper-and pencil practice and worksheets with more motivating, appealing, non-judgmental and endlessly patient context.

On the other hand, some teachers were criticized for misusing the software to introduce new points rather than practicing and enriching the classwork. Also, tasks integrated into the software can be decontextualized and focus on the word or individual sentence levels only. Finally, not all possible correct answers are accepted in some cases.

9.2 Tutorial

As the name suggests, tutorial software takes the role of teachers in introducing and instructing new topics in a manageable and linear sequence with the help of various media tools like videos, audios or photos. "Tutor-like" programs are relied upon when instructors are not available all time or where physical instruction is not possible like the case during Covid-19 like "Khan Academy & Nearpod". Also, with the complex branching capability of this software, learners follow different learning paths based on analyzing their answers and comprehension levels leading to more self-instructional, adaptive and personalized learning. Users also have control over the speed of instruction. Like drill-and practice, learners can again revisit the content anytime they need.

The downside of this software is sometimes represented in poor instructional, aesthetic, or graphic design and presentation. It is costly and time-consuming regard design. Moreover, demonstration of information alone with no practice is not guarantee of mastery. Thus, practice, feedback and generating knowledge on hands-on projects are required to add learning value (Barakat, 1997, Robyler ,2016).

10. Conclusion

MALL is an umbrella term for a collection of useful applications that help learners connect with the outside world in real time. The rapid expansion of Covid-19 has changed the face of learning and forced taking remedial actions by moving online and investing in mobile learning. This step is supposed to be taken naturally in educational sector as a way to keep up with the newest advancement of the age and to engage its generation of learners. However, with the new crisis, it has become a necessity rather than an option. Also, the immediate application and transformation outside classrooms walls urge careful planning, training, designing, to avoid hurdles and reach policy decisions taking into consideration that these devices were not firstly designed for educational purposes.

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