

Using Ubiquitous Learning in EFL Writing Classes The Case of 3rd year Students at Oran 2 University- Algeria

Sara MOUSSEDEK

Department of English Language,
University of Oran2 Mohamed Ben Ahmed, Algeria
moussedek.sara@univ-oran2.dz
moussedek.sara@yahoo.co.uk

Abstract: Since their inception, technologies have revolutionized educational settings in many ways. Thus, a shift in the underpinning methodologies called for the imperative involvement of the learners who become more responsible for their learning. The amount with which those technologies develop creates new chances for the teachers and the students to direct learning inside and outside the classroom, leading to the emergence of a new paradigm: ubiquitous learning. For instance, such a model allows learners to handle their tasks and activities anywhere and anytime in an EFL context. For this, the present paper aims to investigate how ubiquitous learning enables the English language learner to develop practical strategies and thereby improve their writing skill. The descriptive case study research was used to determine the perception of 3rd-year students from Oran 2 University of ubiquity in language education. The data collection procedure employed a questionnaire, an observation, and a document analysis. The result showed that students approved the usefulness of ubiquitous learning in writing classes, for they preferred using hand-handled devices to overcome the stress imposed by time and place constraints. The researcher recommended students' specialized training to employ the ubiquitous language learning approach systematically.

Keywords: technologies, teaching, Ubiquitous learning, EFL context, writing skill.

Utilisation de l'apprentissage ubiquitaire dans les cours de l'écrit en anglais langue étrangère
Le cas des étudiants de 3ème année à l'Université d'Oran 2 – Algérie

Résumé: Depuis leur apparition, les technologies ont révolutionné les environnements éducatifs. Ainsi, un changement dans les méthodologies de base a favorisé l'implication impérative des apprenants qui deviennent responsables et autonomes. La rapidité avec laquelle ces technologies se développent offre aux enseignants et aux étudiants de nouvelles possibilités de diriger l'apprentissage à l'intérieur et à l'extérieur de la salle de classe, ce qui a conduit à l'émergence d'un nouveau paradigme: l'apprentissage omniprésent. Un tel modèle permet aux apprenants de gérer leurs tâches et activités n'importe où et n'importe quand dans un contexte EFL (Anglais Langue Etrangère). A cet égard, cette étude vise à étudier comment l'apprentissage omniprésent permet à l'apprenant de développer des stratégies pratiques et d'améliorer ainsi ses compétences en matière de rédaction. La recherche descriptive par étude de cas a été utilisée pour déterminer la perception de l'ubiquité dans l'enseignement des langues par les étudiants de troisième année de l'Université d'Oran 2. La procédure de collecte des données contient un questionnaire, une observation et une analyse de documents. Les résultats ont

montré que les étudiants approuvent l'utilité de l'apprentissage ubiquitaire dans les cours de l'écrit, car ils préfèrent utiliser des appareils manuels pour surmonter le stress imposé par les contraintes de temps et de lieu. Le chercheur a recommandé une formation spécialisée au profit des étudiants à l'effet d'utiliser systématiquement l'approche de l'apprentissage ubiquitaire des langues.

Mots-clés : technologies, enseignement, apprentissage omniprésent, contexte EFL, compétences rédactionnelles.

Introduction

Technologies revolutionized education in many ways, leading to a shift in the underpinning methodologies. The development and spread of different informational communication aids open up more significant opportunities for teachers and students to direct learning inside and outside the classroom. Working beyond time and space appears as a new paradigm called ubiquitous Learning. Ubiquitous Learning, referred to as U-learning, transforms classes into a natural, determined, and dedicated open space. It imposed itself as an advantageous teaching mode, which affords accessible, immediate, interactive, and permanent context.

Ubiquitous Learning emerges in language education as a creative atmosphere. Language learners can experience new perspectives due to the construction of real-life skills. The real-life practices mitigate anxiety and develop communicative competence within those learners, particularly EFL learners. The anywhere, anytime, assumption draws attention toward communication rather than content, the interactive engagement of students in the educational process, and a shift from focusing on individual learners to more Socially Situated Learning. Endeavoring to bring up the communicative aspects means emphasizing the development of macro language skills. Google, for instance, offers ample applications in favor of the language writer, including Google Drive and Google Docs.

This paper attempts to investigate the students' attitudes toward ubiquitous Learning and the extent to which it enables EFL learners to develop the necessary strategies to help ameliorate their writing skills.

This mixed-method experimental case study tries to answer the following research questions:

What are the attitudes of third-year English (L3) language learners at the University of Oran 2 towards ubiquitous Learning?

To what extent does ubiquitous Learning expand the L3 student's opportunities to develop their writing skills?

1. Ubiquitous Learning

The social, cultural, and technological advances offered unlimited opportunities to promote teaching-learning. Teachers can stimulate students' engagement in and outside the classroom by designing more challenging tasks owing to the affordances of instructional technologies (Boyce et al., 2014). Thinking of what students can do with the technologies is part of their pedagogical practices. Technology should not be regarded as "a magic bullet to solve educational problems, but rather as a powerful tool that can have both positive and negative impact, and that must be carefully exploited" (Warschauer, 2009, p.xx). When using authentic multimodal content, simultaneous interactions for everyone, and more responsive feedback and assessment systems, students easily link and reasonably transfer old learned material to new learning experiences (Kalantis & Cope, 2015).

Ubiquitous Learning, referred to as U-learning, requires five procedures (any more, anytime, anywhere, any device, anything) as suggested by MarkWeiser in 1988. U-learning is a new paradigm introduced by many scholars to create valuable opportunities, including a context-aware language learning system (JAMIOLAS, Tokushing in Japan) and a U-language learning system (Barcelona, Spain) (Wang et al., 2017). The learning process in the ubiquitous environment transforms into a natural, determined, and continuous process (Yahya et al., 2010).

1.1. Characteristics of U-learning

Different scholars identified a set of characteristics of ubiquitous Learning according to their assumptions that it would increase the learning experiences in synchronous and asynchronous environments. Chen et al. (2002) set six main features to the newly invoked: the urgency of learning needs, an initiative of knowledge acquisition, mobility of learning setting, interactivity of the learning process, situating the instructional context, and integration of instructional content. Chiu et al. (2008), on the other hand, provide detailed traits of U-learning, namely, urgency of learning need, initiative of knowledge acquisition, interactivity of learning process, situation of instructional activity, context-awareness, actively provides personalized services, self-regulated Learning, seamless Learning, adapt the subject contents, learning community.

Yahia et al. (2010) summarize all the suggested characteristics that help ensure high levels of embeddedness and mobility in the learning situation. They suggest *permanency*: the students' work can last forever; *accessibility*: easy access to data via the available technological aids; *immediacy*: learners are informed immediately; *interactivity*: effective and tailored interaction among teachers,

Ziglûbitha 161

learners, and experts; and context awareness of the employed systems can identify the personal and environmental situation through location determination.

1.2. Ubiquitous Learning in an EFL Context

The way language learners learn in non-English speaking countries remains a critical issue. English language teaching is a cumulative mechanical process occurring in defined settings, which implies knowledge acquisition rather than developing constructive real-life skills. This demotivating learning situation directs teachers to design efficient learning activities tailored to the learners' requirements involving computer-assisted language learning programs (CALL) (Liu, 2009).

The underlying English Language Teaching (ELT) methodologies have transformed. Students can now become further active and responsible for developing their skills. Innovative instructional technologies harmonize with global educational principles, bringing up interactive, social, and collaborative legacies that transform traditional classes into flexible and motivating settings. In fact,

The proliferation of hand-held devices, such as mobile phones, digital cameras, tablets, mp3 players, and voice recorders, has led to what, for some teachers, is sometimes a bewildering choice of potential activities and resources. Using mobile devices is expected to make language learning more informal and personal. This revolution in mobile Learning is happening both inside and outside the classroom. (Stanly, 2013, p.3)

Fundamental alterations within the educational framework occurred due to technology-enhanced Learning, including the emphasis on communication instead of content, the interactive engagement of students in the educational process, and a shift from the focus on individual learners to more Socially Situated Learning (Conole, 2007). Thinking of the *anywhere anytime* assumption means applying mobile-assisted language learning (MALL) enhanced through handled devices. However, in MALL, students, for instance, use mobile devices in calmer settings and not on the move (while commuting) because the linguistic situation calls for concentration while completing the tasks. (Athanasiou et al, 2017)

Reviewing the social learning theory, a brief overview of the different studies conducted to reveal the exploitation of social networking in learning settings showed that research in the area increased significantly. The effectiveness of context-aware ubiquitous learning systems adopted by Chen and Huang (2012, as cited in Arndt and Guercio, 2013) merges traditional and real-

life learning resources to enable learners to meet their needs (Arndt & Guercio, 2013).

Using Google extends learning opportunities beyond space, the classroom, time, timetabling, and scheduling. To perform the different Learning and pedagogical tasks, students can access, share, and store information using cloud-based systems, including Google (G) applications (Google Drive, Google Docs, Google Meet, and Google Classroom). They enable students to create planned coursework into compiled e-portfolios to be shared among the target group of learners over a whole semester. Gdocs and GDrive, for instance, foster collaborative work amongst students who can cooperatively construct, revise, and correct academic papers whenever and wherever it is possible to access them. These apps allow learners to log into the sessions to integrate and contribute synchronously and asynchronously to edit drafts anytime, anywhere. (Athanasiou et al, 2017)

2. Methodology

2.1. Study design

The researcher uses an experimental case study research to explore the multiple perspectives of the chosen context. The study employs a convergent mixed method approach where quantitative and qualitative data are collected, analyzed, interpreted, compared, and contrasted. This design ensures further controllability of the different variables. It allows the researcher to assess the students' attitudes toward ubiquitous learning and how it enables language learners to improve their writing skills.

2.2. Study Sample

The participants of this study were selected from the Department of English Language at the University of Oran 2 -Algeria. A total number of 40 third-year students were recruited based on the convenience sampling method. The study conducted a test, an observation, and a questionnaire distributed among the University students.

2.3. Data collection and study procedure

For data collection, a questionnaire was designed for the participants. The questionnaire was divided into three main sections to find data related to ubiquitous learning in general, ubiquitous learning in language classes, and ubiquitous learning in writing classes. It was based on nine items ranging from the Likert scale to close-ended and open-ended questions.

Ziglûbitha 163

Moreover, the data was also collected by observing three third-year classes in the first semester, i.e., a period of about five months.

The data collection procedure ends with a summative test to pinpoint the students' level of improvement. The analysis of the students' productions to determine how ubiquitous learning aided the students' writing ability development.

3. Data analysis and discussion

3.1. The questionnaire

a. Ubiquitous Learning

ubiquitous learning

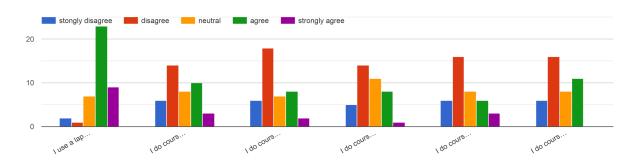


Figure 1. Ubiquitous Learning

b. Ubiquitous Learning and Motivation

As represented in the graph, the respondents strongly agreed upon using mobile devices, including tablets, smartphones, and laptops, for coursework. At the same time, 6% were neutral, and only a tiny minority disagreed strongly with the use of mobile tools. As for the second item, they stated that they did not do their coursework while commuting (listening to lectures in the car, studying on public transportation), and only 23% agreed that they did so due to time constraints. When asked about doing the coursework outdoors or while on the go, the majority of the informants disagreed, and only a few agreed. As for the last item, the majority disagreed on the interdisciplinarity among the different courses, for they did not do tasks for specific courses while attending another course.

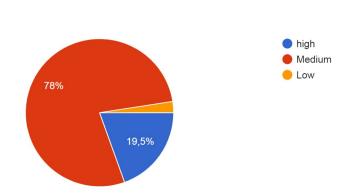


Figure 2. Ubiquitous Learning and Motivation

The second graph portrays the students' level of motivation in a ubiquitous learning environment. The majority, representing 78%, answered that their motivation was medium; more than 19% stated it was high, while only 2% responded that they were less motivated.

c. Tools and Tasks Used in Language Classes

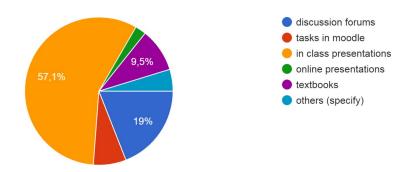


Figure 3. Tools and Tasks Used in Language Classes

The third item represented the frequent tasks and tools used in the classroom. 57% of the informants used in-class presentations, 19% discussed their learning tasks in forums, more than 9% relied on textbooks for knowledge construction, 7% performed their tasks in Moodle, only 2% followed the online presentations, and more than 4% answers differed stating that smartphones, laptops, some of the electronic books and applications downloaded are of significant importance.

Ziglôbitha 165

d. The impact of the employed tasks on the student's communicative competence

The answers differed when asked about the significant impact of the planned activities on improving communication skills. While some believed they motivated them, they urged the students' engagement.

One student reckoned: "The tasks and activities planned help improve communicative competence by providing opportunities to practice and refine language skills. They also help build confidence in language use in different contexts and situations".

Another replied: "Engaging in tasks and activities planned to improve communicative competence can help you a lot! By practicing conversations, listening exercises, and language exchanges, you'll become more confident and skilled in communicating effectively".

One of the informants stated: "The tasks and activities planned have been extremely helpful in improving my communicative competence. They have provided me with opportunities to practice and apply what I have learned in real-life situations. Through these tasks, I have been able to enhance my speaking, listening, and overall communication skills. I feel more confident and capable of effectively expressing myself in English".

e. Classroom Attractive Activities

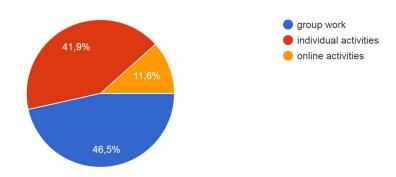


Figure 5. Classroom Attractive Activities

As the chart shows, more than 46% preferred group work, nearly 42% favored individual work, and only 11% admired online activities.

f. Ubiquitous Learning and Language Skills Development

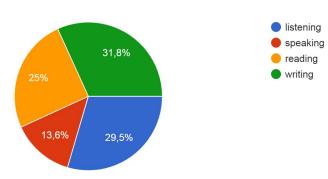


Figure 6. Ubiquitous Learning and Language Skills Development

g. Level of EFL Learners

More than 31% of the informants stated that their writing skills improved in a ubiquitous learning atmosphere, 29% reckoned that their listening skills had been considerably enhanced, and 25% answered that their reading skills had developed. In comparison, only 13% thought their speaking improved.

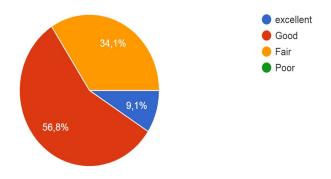


Figure 7. Level of EFL Learners

h. Ubiquitous Learning in Writing Classes

When asked to rate their EFL learning process, nearly 57% believed it was good, 34% said it was fair, and 9% reckoned that it was excellent, especially with the many affordances of technological advancement.

Ziglûbitha 167

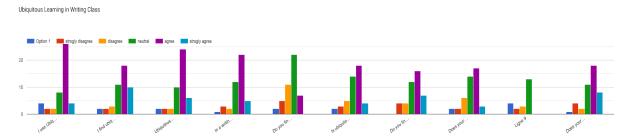


Figure 8. Ubiquitous Learning in Writing Classes

As the figure shows, most (around 50%) students agreed that ubiquitous learning was essential to performing written expression tasks. They believed ubiquitous learning offered satisfying settings to develop their writing skills, especially regarding topic choice and data collection. As for the fifth item, the majority were neutral when asked whether they found ubiquitous learning stress-out yet easy to proceed with when doing the writing assignments.

When asked about using ubiquitous learning as a productive and timesaving method, around 45% agreed that their teacher recommended its use in making the assignments. They replied that their writing skill improved from using ubiquitous learning.

3.2. The Semi Structured Observation

The semi-structured observation protocol included three sections.

a. The Classroom Context

The students are at varying developmental levels. They range from the low to the advanced gifted. The writing classroom environment is designed according to the learning opportunities. The writing assignments are first prepared, and the students can use the available technological tools in the traditional classroom setting where a context-aware ubiquitous learning system encourages interdisciplinarity and mental association.

b. The Classroom Activities

The tasks are devised and completed in groups to foster a student-centered learning atmosphere and collaborative work. The appointed group leaders use Google Docs or the word processor to generate the final draft to be stored and shared via mail. This strategy helps relieve the students' anxiety and develops a sense of responsibility to improve their autonomy.

c. The Teacher Student Interactions

Due to time and space constraints, the teacher uses various teaching methods to meet the learners' needs and achieve the intended objectives. The teacher-student interaction is reciprocal, where all work collaboratively to assess the writing process. The teachers' feedback is handled via mail.

The students showed a progressive learning situation reflected in the continuous practice. Each week, the students must write a defined assignment of about a five-paragraph academic essay. They use the necessary techniques, including paraphrasing, summarizing, analysis, and interpretation, to defend the thesis statement being developed.

3.3. The Analysis of the Students Drafts.

A traditional summative test of about one hour and a half was designed to evaluate individual achievements for continuous evaluation using group work. Forty students (40) were asked to write a short academic essay about either electronic feedback in writing classes, the COVID-19 impact on education, or technology inclusion in an EFL context. The result showed that 10% of the respondents scored high grades, 25% achieved medium scores, 47% of the informants obtained average grades, and around 18% achieved low grades.

4. Discussion of the Findings

Comparing and contrasting the different findings collected from the three research tools,

- The students prefer collaborative work using essential tools, including smartphones and Google Docs, in context-aware ubiquitous learning.
- The result approved the efficiency of ubiquitous learning in general language classes and writing classes.
- This experiment uncovered the necessity of implementing such an approach in language education.
- The L3 students can control and improve their learning performance.
- The student's experience develops a sense of sensibility as they become more self-determined to observe different things using this system.
- The students need specialized training in the i-cloud systems to manipulate methodically context-aware ubiquitous learning.

5. Recommendations and suggestions

With the development of wireless connections, mobile learning has become a trend in education. Being portable, low-budget and accessible, mlearning reshaped the educational settings and students' language acquisition. It gives chances to both teachers and students to positively engage in mutual social

Ziglôbitha 169

tasks to create a near-like native atmosphere, which reasonably provokes real-life communicative context. Many studies have revealed the effectiveness of the wireless network and the synchronous tools in ubiquitous learning in improving learners' language skills. The practical solution offered by ubiquity developed strategies that helped many underachievers who find collaborative and self-directed practices strengthen their abilities to cope in complex situations. (*Altınışık* and *Adıgüzel*, 2016)

Such a learning mode leverages the learners' validity and multimodality for the possible usage of the available technological aids to involve them in authentic, multimodel, receptive, and productive contexts. It further improves a reflective, controllable environment where the learners can manage space and time with more developed learning motivation.

Wong et al. (2012) suggested a set of activities language teachers use to enhance a ubiquitous learning environment.

Activity 1: In-class or on-campus contextual idiom learning (formal setting; physical and social learning space) is mainly used to establish the preparatory stage to motivate and prepare the students to perform the out-of-class activities. The teacher facilitates group formation and contextualized collaborative work.

Activity 2: Out-of-class, contextual, independent sentence making (informal setting; physical, individual and productive learning space): the students use the available technological aids, including smartphones, to formulate class wikis where the students can post comments to allow constructive interactions.

Activity 3: Out-of-class, online peer learning (informal setting; cyber- and social learning space): students can use the created wikis to comment on, correct or improve their friend's ideas formulated in the posted sentences and paragraphs.

Activity 4: In-class consolidation (formal setting; social and receptive learning space): the teacher now facilitates contextual in-class interactions among the students to develop a motivating learning situation.

Conclusion

The research concludes that L3 learners favor ubiquitous learning but still need clarification about using such a learning mode. They indeed affirm the efficiency of hand-handled devices in promoting language acquisition, especially in listening tasks. Conversely, the experiment proved the positive impact of

writing practices outside of the scheduled classes through the humble implementation of Google Docs, Google Drive, and emails to enhance productivity and collaboration. However, the systematized implementation of ubiquitous language learning remains an uncontrolled aspect. An intensive training in implementing the synchronous and asynchronous tools would have the desired outcomes. The English language learning situation would transform into interactive real-life practices among the learners.

Bibliographical References

- Altınışık, H. and Adıgüzel, T. (2016). A Brief Review of Ubiquitous Learning. Ardahan Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, Sayı: 3, ss. 121-130.
- Athanasiou, A. Neophytou, M. Burston, J. 2017. Achieving Independent Language Learning through the Mobilization of Ubiquitous Instructional Technology Resources in Languages 2 (3) DO-10.3390/languages2030016
- Arndt, T and Guercio, A. (2013). Evaluating student attitudes on ubiquitous elearning. Accessed from https://personales.upv.es/thinkmind/dl/conferences/ubicomm/ubicomm_2013/ubicomm_2013_5_30_10082.pdf
- Chen, Y.S., Kao, T.C., Sheu, J.P. & Chiang, C.Y. (2002). A Mobile Scaffolding-Aid-Based Bird-Watching Learning System, *Proceedings of IEEE International Workshop on Wireless and Mobile Technologies in Education (WMTE'02)*, pp.15–22.
- Chiu, P.S., Kuo, Y., Huang, Y. & Chen. T. (2008). A Meaningful Learning based u Learning Evaluation Model, Eighth IEEE International Conference on Advanced Learning
- Conole, G. (2007). Describing Learning Activities: Rethinking pedagogy for a digital age. Designing and Delivering E-learning 81-91
- Creswell, J.W., & Creswell, J.D. (2018). Mixed methods procedures. In, Research design: Qualitative, quantitative, and mixed methods approaches (5th ed., pp. 213-246). Los Angeles, CA: SAGE Publications, Inc.
- Kalantzis, M. & Cope, B. (2015). Learning and New Media. In Scott, D; & Hargreaves (ed.). The Sage Handbook of Learning. London: SAGE

Ziglôbitha 171

- Liu, T.Y. (2009). A context-aware ubiquitous learning environment for language listening and speaking. Department of Multimedia and Game Science, Lunghwa University of Science and Technology, Taoyuan County, Taiwan doi: 10.1111/j.1365-2729.2009.00329.
- Saadiah Yahya, Erny Arniza Ahmad & Kamarularifin Abd Jalil, (2010). The definition and characteristics of ubiquitous learning: A discussion. International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2010, Vol. 6, Issue 1, pp. 117-127.
- Stanley, G. (2013). Language Learning with Technology: Ideas for Integrating technology in the classroom. Cambridge: CU Technologies, pp. 77 81.
- Warschauer, M. (2009). 'Foreword'. In Thomas, M. (ed.). Handbook of research on Web 2.0 and second language learning (pp. xix-xx). IGI Global
- Wong, L. Chai. C, chin, C. Hsieh. Y, & Liu, M. (2012). Int. J. Mobile Learning and Organisation, Vol. 6, No. 2.