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Facilitating Literature Instruction through Cloud-based Animation Platforms. Case Study: Generation Z Students of EFL Literature at Chlef University's Department of English.

A Thesis Submitted to the Department of English in Candidacy for the Degree of Doctorate in Literature & Civilization

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Declaration of Originality

I, the undersigned, hereby declare that the doctoral thesis entitled *"Facilitating Literature Instruction through Cloud-based Animation Platforms. Case Study:* Generation *Z Students of EFL Literature at Chlef University's Department of English"* and supervised by Pr. Leila BOUSSENA, is the product of my own research and composition, and that this latter abides by the fundamental rules and standards of responsible referencing.

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Dedications

I dedicate this work to my parents for their lifelong sacrifices, unconditional love, and continuous support. To my significant other; my soon-to-be bride; for her prayers, encouragement, and for believing in me in those times when I couldn't believe in myself. To my best friend for being one of those rare friends one never regrets meeting, and most importantly, to my brother, for being the person I look up to in all aspects of my life.

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May Allah bless them all and grant them eternal peace and prosperity.

Abstract

Student engagement solidified itself as a major precursor for academic growth and success across the past few decades. Indeed, a learner who is behaviorally, cognitively, and emotionally engaged will indisputably prosper academically. Still, the extent to which a learner is engaged is subject to multiple intrinsic and extrinsic factors, including his or her perception of the subject matter being taught, and the manner in which the task in question is performed. Education-wise, the rise of technology and its adoption in all aspects of daily life has caused a gradual deterioration of interest and receptiveness towards the classic modes of instruction among the latest generation of learners, particularly when text-based disciplines such as literary studies are involved. This study assesses the tremors of this phenomenon among generation Z learners of literature. It takes place at Chlef University's department of English through a mixed methods design built upon direct classroom observation, a student questionnaire, and an online questionnaire involving several internal and external teachers of the discipline. The primary results indicate that a majority of the participants manifests little to no signs of interest towards the matter in question. The same results also point towards the existence of a causal relationship between the observed students' digital nature, their perception of literature as a discipline, and their resulting disengagement and negative attitude towards its study. Accordingly, this study proposes the adoption of cloud-based animation platforms as a countermeasure against the observed problem based on the premise that videos have already been proven pedagogically beneficial across multiple studies. It also analyses the extent to which the features offered by these animation platforms could enable teachers to tip the scales in favor of achieving a more engaging and active learning environment with said generation.

Keywords: Algeria, higher education, generation Z, student engagement, literary studies, cloud-based animation platforms

Contents

List of Acronyms & Abbreviations

CBAPs: Cloud-Based Animation Platforms.

CGI: Computer-generated imagery.

DIY: Do-it-yourself.

EFL: English as a Foreign Language.

GIF: Graphics Interchange Format.

ICT: Information and communication technology.

IMRAD: Introduction, methods, results and discussion.

ISP: Internet Service Provider.

LMD: License-Master-Doctorate.

STEAM: Science, Technology, Engineering, Arts and Mathematics.

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"They are bright, innovative, confident in their skills on all manner of digital screens and devices: This is Generation Z, many of whom have little notion that they have begun to short-circuit some of the essential cognitive and affective processes that produced the digital world they inhabit. Furthermore, no small number of these young humans would grimace if asked to read this last sentence with its multiple clauses and syntactical demands."

- MARYANNE WOLF, 2019 -

Chapter I: General Introduction

1.1 Introduction

Student engagement has established itself as a vital determinant of academic growth and success over the years. Accordingly, a learner who is behaviorally, affectively, and cognitively, engaged will undoubtedly succeed in his or her studies while on the contrary, a similarly disengaged learner will fail miserably at any given academic endeavor. This raises the question of whether or not this engagement only emerges from the student's will to study. Although several factors might influence students' levels of engagement, including their own inherent willingness to study, most of the relevant data seems to agree on the fact that this responsibility mostly falls upon the teacher's shoulders, as supported by Grove (2019), "teachers who perceive that it is their responsibility to engage students will find ways to engage and motivate students" (Grove, 2019). This being said, capturing and maintaining learners' attention throughout an entire lecture has recently evolved to become a nearly impossible task for teachers of most disciplines. In higher education for instance, this problem can be predominantly observed across certain reading-based disciplines and fields of interest such as literary studies, and even more so when contemporary students and their shorter attention spans are involved.

Generation Z, also commonly referred to as the iGeneration, is known for being the first fully global and digital generation that hasn't known a world without social media and the internet. Be it through smartphones, personal computers, or even smart televisions, the latest generations of Algerian teenagers and young adults have all been using at least one, if not multiple technological devices on a daily basis and for all manners of purposes, which appears to have tainted on their preferred modes of learning and acquiring new information. Education-wise for instance, this firm reliance on technology and the amount of time they spend on social media and video platforms seems to have implanted a certain inclination towards audio-visual materials within these learners,

making a great majority of them considerably more receptive to this particular type of content at the expense of physical copies of documents and books, which is the main reason behind the emergence of a reading crisis among Generation Z and its successor. Indeed, it is no secret that Generation Z barely reads, and although a few online statistics and articles still seem to point out that specimens belonging to this generational cohort do maintain a few reading habits, most of it is assumably done in accordance with their own terms, i.e., via e-books, audiobooks, and audio-visual adaptations of books, and more often than not by means of skimming and scanning for specific pieces of information rather than in-depth reading. As far as education is concerned, it is also safe to presume that a great portion of this generation's adherents who still read mostly do it for academic purposes rather than pure pleasure, much less for literary appreciation or even linguistic and cultural enrichment. This puts most text-based disciplines such as literary studies at a disadvantage, as contemporary students of literature manifest significantly less signs of compliance and interest in reading literary texts compared to their predecessors, particularly classical ones. This disengagement is also amplified by the traditional approaches in teaching literature which usually consist of a passage-by-passage analysis of inanimate blocks of text often extracted from thematically obsolete literary texts, which might seem counterproductive and inadequate considering the digital nature of modern-day learners and the wide range of technological devices and resources that they have become tightly accustomed to.

It is important to recall that literature has made its proofs as an essential stimulant for language learning and teaching over the years. It represents an opportunity for language learners to transcend time and space and explore anterior and foreign cultures directly in the target language. It has therefore been implemented by most educational institutions around the globe as a fundamental component of their curricula, predominantly in language learning and EFL contexts. This being

said, convincing contemporary language learners of its importance and persuading them to fully invest themselves in its study often turns out to be a dead end, exclusively when these latter are compelled to study blocks of inanimate text involving themes, characters, and circumstances that they perceive as unrelatable, outdated, and no longer relevant to their own lifestyles and futures.

This study is empirical in nature. It primarily peeks into contemporary students' attitude towards the study of literature. More accurately, it represents an attempt to measure the extent to which present-day literature students are behaviorally, emotionally, and cognitively engaged towards literary studies. It is conducted at the University of Chlef within the department of English among literature learners whose age ranges from 19 to 26 and who can be regarded as part of Generation Z. The process of data collection is achieved by means of direct classroom observation and questionnaires. The former assesses students' behavioral engagement by recording their on-task and off-task behaviors throughout the lecture while the latter is composed of a series of structured statements oriented towards students' cognitive and emotional standpoints, their perception of literature as a discipline, and additional factors potentially leading to their disengagement. At a later stage, an additional questionnaire is deployed online among several internal and external teachers of literature in an effort to broaden the scope and increase the generalizability and the validity of the collected data from another, less biased perspective. Considering how it also peeks into the participants' pedagogical practices and their perception of technological supplementation, this online questionnaire serves as a means of building a premise for the introduction of cloud-based animation platforms as a complementary instrument for teachers willing to better cope with the digital nature of Generation Z learners and retaliate against their ensuing disengagement from the study of reding-based disciplines such as literary studies.

1.2 The Background & Significance of the Study

In addition to the globally reported reading crisis and deterioration of interest towards the conventional study of literature among Generation Z teenagers and young adults, personal experience both as a student and a volunteer teacher of literature has driven the researcher to deduce that technological affluence and facility have rendered each generation of higher education students of literature even more prone than their predecessors to relying on quicker and less laborious alternatives to carrying out an in-depth literary reading of the prescribed literary texts, said alternatives beings audiobooks, audio-visual adaptations, and online summaries and analyses. These time-saving tendencies can be correlated to the digital nature of contemporary learners, which is the direct consequence of being born in an era characterized by technological zenith and effortless access to all manners of entertainment and information resources. This latter evidently encourages them to consume audio-visual content on a scale hitherto unseen before across social media and the established video platforms, which can be regarded as the main culprit behind their current unresponsiveness towards traditional modes of knowledge acquisition such as text-based learning and their consequent disengagement from the study of literature since it is built upon reading literary texts. Overall, this study operates under the assumptions that a strong familiarity with technology, which is a proven attribute of Generation Z, can alter and taint upon the learning style of a student, and that there could be something missing in the mainstream modes of literature instruction within foreign language departments across the higher education institutions in Algeria.

1.3 Statement of the Problem

The primary problem addressed by this study is the simple fact that present-day university learners of literature do not read, which makes them significantly less engaged in the study of literature and visibly less responsive to the conventional modes of instruction through which it is

conventionally taught. The secondary problems that this paper examines are the teachers' failure to grasp the digital nature of Generation Z learners and their resulting unwillingness to readapt their instructional approaches in function of the needs and preferences of this specific generation, which currently occupies most higher education institutions across the country.

1.4 The Purpose of the Study

It is equally important to establish that this study does not aim at replacing or enforcing a drastic change on the conventional methods of teaching literature, which are more often than not passive and usually consist of making students take turns in reading and analyzing selected passages from thematically obsolete literary texts. It is rather an attempt to raise awareness on the global and digitally-demanding nature of Generation Z learners and to bridge the gap between traditional instructional approaches and modern learners through the introduction of cloud-based animation platforms. If properly embedded, the audio-visual content created on these platforms could serve as a tide-shifting and motivating agent for teachers of literature and a way for them to vary and readapt the content of their lessons to the distinctive learning styles and shorter attention spans of contemporary higher education students. The animation platforms proposed by this study can also be regarded as a means for teachers of literature to create and animate their own audio-visual aids in function of their needs and the objectives of their lesson instead of relying on partially irrelevant and sometimes unavailable online resources, which is often the case when classic literature is involved. Regardless of their video editing skills, cloud-based animation platforms provide these teachers with a remote access to an arsenal of pre-drawn resources directly on their web browser and allow them to modernize and rejuvenate even the most outmoded of literary texts for the sake of re-engaging Generation Z learners and restoring their interest in the study of literature in general and classical literary texts in particular.

1.5 The Research Questions

This research is framed and guided by the following research questions:

a. Should contemporary Algerian higher education students be regarded as Generation Z? If so, does teaching them imply any pedagogical adjustments?

b. Are Algerian higher education learners actively engaged in the study of literature? If not, can their affiliation with the generational cohort of "Generation Z" be regarded as a contributing factor to their disengagement?

c. To what extent are cloud-based animation platforms relevant to the instruction of literature? Can they be implemented as a pedagogical instrument for re-engaging contemporary students in the study of literature?

1.6 The Research Hypotheses

As a research hypothesis, this research operates under the logical assumption that due to the global and digital nature of Generation Z, the current generation of Algerian higher education students should and must be approached as such both in terms of pedagogical materials and practices. It also presumes that this same digital nature renders them less responsive to traditional modes of language learning and teaching, which in turn makes them deficient in terms of behavioral, affective, and cognitive engagement towards the study of literature. When it comes to adapting to the needs and preferences of Generation Z learners, this study hypothesizes that due to the broad variety of designing tools that they offer, cloud-based animation platforms can be exploited in the instruction of any given discipline and can only be beneficial considering how several studies have already established and demonstrated the extent to which simple videos can improve the learning experience when properly selected and embedded.

1.7 The Thesis Structure

To a great extent, the structure of this paper adheres to the APA-style paper format, which is also commonly referred to as the IMRAD organizational structure and represents a mnemonic whose letters refer to the sections that it involves, namely an introduction, methodology, results, and a discussion section. The only difference in this case is the addition of a self-contained and structurally independent literature review chapter which is usually incorporated within the introduction chapter throughout the mentioned structure.

The first chapter of this paper provides a general introduction of the background and main motives behind the deployment of this study. The next chapter, the literature review, acts as a modest account of the existing research that is relevant to the afore-specified topic and revolves around this latter's central variables. It also takes a look at what has been done so far in terms of literature instruction and paves the way for the introduction of cloud-based animation platforms as a complementary instrument for teachers of this discipline in an effort to adapt to Generation Z learners' digital nature and technology-oriented learning preferences. The third and middle chapter provides further details on how this research has been designed and conducted. It describes the methods, instruments, participants, and procedures involved in this study among other additional points. The penultimate chapter displays and analyzes the major findings of this study while the fifth and final chapter synthesizes them and dives deeper into their significance and implication in the target context. This latter also discloses the limitations that this study might have come across in an effort to set the scene for suggestions on future research, and terminates by drawing the final conclusions that this study has been able to reach in relation to the initially proposed research questions and hypotheses.

Chapter II: Literature Review

2.1 Introduction

It is evident that student engagement is commonly regarded as the extent to which learners are invested into their own studies. This being said, defining it as such would be an oversimplification, especially when considering its multidimensional nature and the extent to which academic success depends on it. The same can be said about the other components involved within this study, which is why this literature review takes a closer and more extensive look at the fundamental constituents that this research stands upon. In other words, this chapter serves as a theoretical framework and an account of the major concepts mentioned within this study. It glances into some of what has been previously tackled in terms of traditional and modern modes of literature instruction. It also clarifies what Generation Z consists of and draws the link between this latter's known features, some of its personality traits, and the way it perceives the study of literature as a discipline in relation to the current methods through which it is taught. Additionally, this review decorticates the concept of animation and introduces cloud-based animation platforms as a corrective to the observed problem. It also explains how these platforms could constitute a tide-turning solution for teachers who have difficulties engaging and coping with the needs of said generation while mentioning the prerequisites and challenges that the process in question entails.

2.2 Student Engagement: A Multidimensional Concept

Due to its fluid and metamorphic nature, the concept of student engagement undertook multiple alterations before reaching its current form. It was initially introduced in the 1980s as "the theory of involvement" by Professor and psychologist Alexander Astin, who proposed it as a means of evaluating the extent to which students are physically and psychologically dedicated to their academic experience (Astin, 1984). Then in 1993, Skinner and Belmont described it as the quality of maintaining "sustained behavioral involvement in learning activities accompanied by

positive emotional tone" (Skinner & Belmont, 1993). Thereafter, student engagement began to be regarded as a tridimensional concept involving a state of cognitive, affective, and behavioral commitment that learners need to adopt in order to thrive academically. Witnessing its growing eminence, Fredricks et al. (2004) reported that over the years, "the concept of student engagement has attracted increasing attention as representing a possible antidote to declining academic motivation and achievement" (Fredricks et al., 2004). Although the concept in question failed to acquire a clear and concise definition over the years, multiple online sources seem to agree with the description provided by The Glossary of Education Reform. This latter defines student engagement as: "the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education". The same source also argues that: "student engagement is predicated on the belief that learning improves when students are inquisitive, interested, or inspired, and that learning tends to suffer when students are bored, dispassionate, disaffected, or otherwise 'disengaged'" (Student Engagement, 2016).

2.2.1 The Dimensions of Student Engagement

As previously hinted, student engagement is a multi-layered concept. It consists of three distinct yet equally important dimensions identified by Fredricks et al. in 2004, namely; behavioral, cognitive, and affective or emotional engagement (Fredricks et al., 2004). Although most of the research found on the subject clearly relies on the previously mentioned tridimensional division of student engagement, a few other classifications also confirm the existence of additional facets such as academic or social engagement. However, these latter are often either intrinsic or consequential to the initial dimensions. For instance, students' social engagement refers to their ability to bond and interact effectively with their peers and the academic staff, which can

assumably be regarded as the manifestation of a successful balance between affective and behavioral engagement.

Figure 1

The Dimensions of Student Engagement

	Positive Engagement	Indirect Engagement	Negative Engagement
Behavior	Attend classes, participate in activities.	Skip classes with reasons.	Disrupt and distract classes.
Emotion	Interest.	Bored	Disapproved
Cognition	Meet or exceed the task requirements.	Absent from class; Late submission of assignments	Question tasks given by teacher

Note. An example of the variables considered by each dimension of student engagement when this latter is at its best and worst state (Ali & Hassan, 2014).

2.2.1.1 Behavioral Engagement

As suggested by its name, students' behavioral engagement is concerned with the physical manifestation of their commitment towards their studies. It encompasses multiple factors related to their physical demeanor within the learning environment including their attendance, attention, active participation, body language, and general behavior throughout the lecture. A behaviorally engaged learner will consider and comply to the mentioned qualities while showing little to no signs of disruptive demeanors within the learning environment. Gonzalez et al., also argue that some of the most visible indicators of students' behavioral engagement in the academic context are "planning, effort, on-task attention, concentration, hard work, persistence, time expended,

attendance, voluntary participation, task involvement, and… [compliance with] classroom rules and norms" (González et al., 2015).

2.2.1.2 Cognitive Engagement

This type of engagement represents the direct consequence of students' psychological devotion towards their academic experience. It is defined as "the extent to which students' are willing and able to take on the learning task at hand. This includes the amount of effort students are willing to invest in working on the task (Corno & Mandinach, 1983), and how long they persist (Richardson and Newby 2006; Walker et al. 2006). In simpler terms, it can be characterized as "a psychological state in which students put in a lot of effort to truly understand a topic and in which students persist studying over a long period of time" (Rotgans & Schmidt, 2011). Multiple online sources also seem to agree on the fact that students' concentrated attention, curiosity, interest, and their perception of the performed academic tasks' relevance to their future and academic growth, also represent essential components and indicators of their cognitive engagement towards their studies.

2.2.1.3 Affective Engagement

Students' affective engagement involves the emotional aspect of their dedication to their studies. It examines and assesses the extent to which a positive sentimental outlook towards their academic experience might influence their perseverance and eventual success. It has been explained by Joel E. Pagán (2018) as the way in which students experience positive feelings such as amusement, happiness, and pride within their respective academic environment. According to the same source, this type of engagement also includes, "students' feelings toward school, expressing interest, reporting fun and excitement, feeling safe, having positive relationships with

teachers and peers, having a supportive family, expressing feelings of belonging, and perceiving school as valuable" (Pagán, 2018). This highlights the existence of a thin line between cognitive and affective engagement which complicates the task of distinguishing between them as both types are known for encompassing a number of slightly similar aspects related to students' mindset and perceptions, which differ in the literature from one source to another in terms of classification and is subject to debate to this day.

2.2.2 Microlearning & the Neuroscience Behind Student Engagement

Broadly speaking, and as previously reinforced by the above sections, student engagement can be regarded as "… the holy grail of any successful learning initiative" by virtue of the fact that it refers to "how much attention your audience is giving to your learning content or programme", as best described by the researchers at Growth Engineering (2021a) while addressing teachers in general. However, a neuroscientific view of this concept dictates that "high learner engagement strengthens the brain's memory and attention circuits" considering how "the prefrontal cortex or the executive function of the brain is at its optimal state when learners are engaged" (Growth Engineering, 2021a). Sportsman (2018) further explains this process as she declares the following:

> Students' engagement triggers neurochemical changes in the brain. Merzenich (2013) notes that when the student is alert and motivated, the brain will release neurochemicals that support brain change during learning. Conversely, when students are disengaged, inattentive, distracted, or doing something that does not require some effort, neurochemicals will not be released. In addition, student engagement becomes observable through physical, emotional, or verbal behavior. Since student engagement is the means by which learning (and brain change) occurs, faculty must consider ways to activate multiple engagement behaviors. (Sportsman, 2018)

This being said, “achieving the highest state of learner engagement isn’t just about activating one area of the brain. Instead, it is a coordinated effort of both our thinking and emotional brain systems. More importantly, it also means addressing psychological and physiological needs” (Growth Engineering, 2021a). Accordingly, Sportsman (2018) also proposes that “presenting material in a way that relates directly to something students already know enhances the building of the neural network” and provokes increased retention of the information involved in the process (Envision, 2015, as cited in Sportsman, 2018). At the same time, the above-cited researchers from Growth Engineering, or learner engagement experts as they choose to refer to themselves, also note that “our brains have a limited capacity when it comes to absorbing a volume of information at any one time” while highlighting the disturbing fact that “when learners face an overwhelming amount of information, the brain produces cortisol (also known as the stress hormone). Unfortunately, high levels of this chemical can disrupt memory retrieval and the ability to absorb information” (Growth Engineering, 2021a). In an attempt to simplify the understanding of the concept in question, the same source identified five symptoms or stages of deep learner engagement as they claim that deeply engaged learners are mentally present, emotionally connected, curious and proactive, socially engaged, and finally, prone to pursuing continuous learning. Needless to mention that these same features can be regarded as key factors in building the perfect learning environment while they also represent the qualities of the perfect student if teachers were asked to describe this latter.

While taking into consideration the fact that “learners struggle to concentrate on such a mass of information” researchers at Growth Engineering (2021b) reached the conclusion that “… another approach that makes information easier to consume and absorb” was highly needed and that microlearning would constitute a suitable alternative for this specific purpose (Growth

Engineering, 2021b). Witnessing the extent to which “microlearning is quickly becoming modern learners’ favorite way to build their knowledge”, they explained this notion by arguing that “microlearning breaks learning content down into bite-sized pieces instead of large chunks. It’s often much more effective to split everything up into small, focused bursts. The length of a typical microlearning intervention is between two and five minutes”. They also highlight its various benefits, one of which is how “it can be completed within just a few minutes and has been found to improve learning efficiency by 17%. Big change often comes in small packages”. Another benefit would be how microlearning allows for the exploitation of “… a variety of different media formats” as nowadays “… learning comes in many forms ranging from video, podcasts, visuals and more” which “… is exactly the kind of content that a modern learner likes to engage with” considering how it “… reduces cognitive overload and increases knowledge retention”. The same experts also examined the concept in question from a neuroplastic point of view as they argue that “the neuroscience behind microlearning helps to explain why it works so well. It uses the cognitive skills learning system in our brain. This system relies on the prefrontal cortex. This is the main system in your brain for learning skills and helping with short-term memory”. In the same sense, they also add that “if microlearning is combined with well-thought-out content, it’s converted from short-term memory in the prefrontal cortex to long-term memory in the hippocampus” hence ensuring a better retention of information among students.

All in all, it of utmost importance to contemplate the fact that “our brains are wired to seek out enjoyable learning experiences. By understanding how and why our brains work, it can help us craft better learning programmes” (Growth Engineering, 2021a). And since “the success of any learning programme is predicated on its ability to engage its audience throughout the whole process” cloud-based animation platforms could accordingly constitute an efficient way of putting

microlearning into practice and supporting it with enjoyable and engaging audio-visual resources that contemporary learners are more familiar with and most importantly, more receptive to.

2.2.3 Phillip Schlechty's Taxonomy of Student Engagement

Education researcher and author Phillip Schlechty had his own perception and categorization of the several ways in which students respond and adapt to their academic experience. In 2002, he identified the five following major levels of student engagement:

- **Authentic Engagement:** Being the highest achievable form of student engagement, this level balances between both high attention and high commitment. In this level, the students fully perceive the importance of the activity and are more than willing to persevere and learn when faced with difficulty.

- **Strategic Compliance:** This level is characterized by both a high attention and a low commitment. In this level, students attribute the value to the compensation (marks, grades) that results from completing the task rather than the task itself while seeking recognition and peer appreciation. If the work does not ensure such tokens, it will be disregarded.

- **Ritual Compliance:** This level involves a low attention with little to no signs of commitment. Students are only willing to perform at the minimum requirements in terms of effort and engagement with the primary objective of avoiding negative consequences such as bad marks and oral punishment.

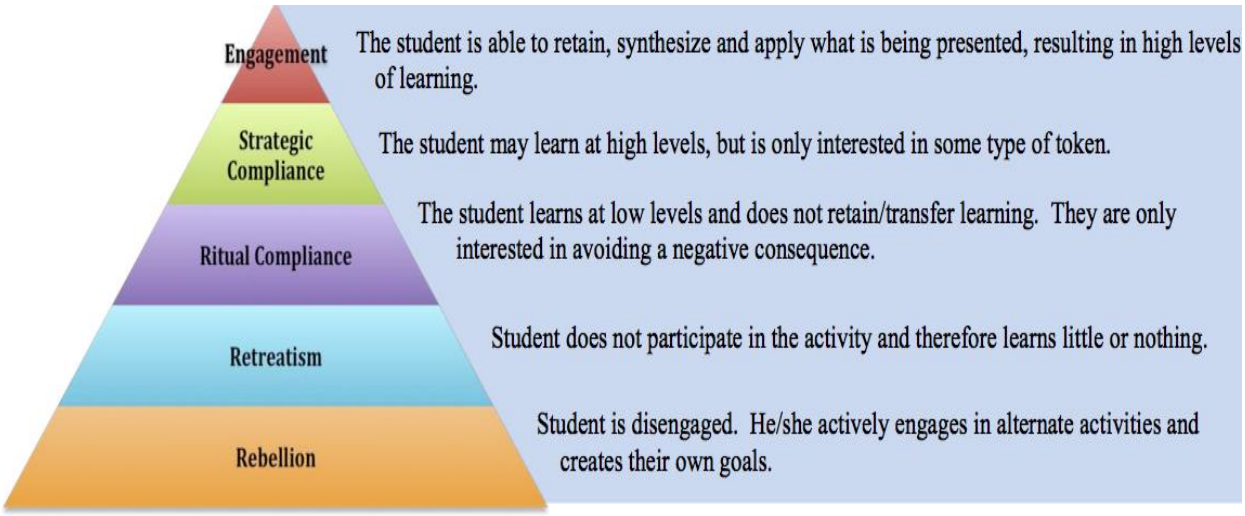
- **Retreatism:** This form of engagement is characterized by a total absence of both attention and commitment. In this level, students fail to perceive the value and relevance of the task at hand and are consequently both emotionally and cognitively disengaged from it. Although they do not

participate in the development of the lesson, they still do not show any signs of disruptive behavior towards it.

- **Rebellion:** As hinted by its name, this level involves a completely diverted attention accompanied by a total absence of commitment towards the task at hand. In this state, the students usually rebel and refuse to comply to what is expected from them while behaving in a way that disrupts their peers and alters the development of the lesson (Schlechty, 2002).

Figure 2

Phillip Schlechty's Taxonomy of Student Engagement



Note. Phillip Schlechty's view on the dimensions of student engagement and the behavior associated with each one of these dimensions.

2.2.4 The Teacher's Role in Student Engagement

Be it online or within a classroom setting, constructing an effective and engaging learning atmosphere can often prove to be an arduous task for teachers of most disciplines. This problem is predominantly observable when certain elements are gathered. For instance, generation Z students

and their perception of reading-based disciplines such as literary studies represent two of the mentioned elements. Indeed, compelling a generation of students who grew up with a smartphone on their hand to read and study classical literary texts and concepts is usually easier said than done. Still, as described by Art Kohn (2014), "teaching is an aerobic sport, and if done well, you can make any material engaging. On the other hand, if… [done] poorly, any material can be made dull" (Kohn, 2014). Grove (2019) shares a similar point of view as she supports that "teachers who perceive that it is their responsibility to engage students will find ways to engage and motivate students" (Grove, 2019). This reinforces the fact that sparking students' interest towards a given discipline is a responsibility that mostly falls upon the teacher's shoulders. If this latter wishes to see his learners flourish in their studies, he or she has to find innovative and relevant ways to engage them behaviorally, cognitively, and affectively.

After witnessing that the interviewed instructors had distinct perceptions of what engagement is, and that most of said perceptions were centered on behavioral engagement while discarding the other two dimensions (cognitive and affective), the above cited source also suggests that "the ability to engage and motivate students comprises more than knowledge of the subject matter; [in fact,] teachers should possess affective characteristics that improve their ability to design instruction that engages students.". She then concluded by arguing that "instructional practices should be as varied as the diverse population of students that exists within the classroom. If teachers really care and are committed to their responsibility, instructional strategies will be intentional, which means you have to know something about the children you serve." (Grove, 2019). This supports the fact that generation Z students cannot be taught in the same way their predecessors were. Their expectations and technologically altered learning styles makes them

unresponsive and significantly less engaged towards most reading-based materials or subjects and the conventional pedagogies through which they are taught.

2.3 An Introduction to Generational Theory

Initially introduced and coined by Hungarian Sociologist Karl Mannheim through an essay entitled "The Problem of Generations" and later on popularized and developed into a theory by authors and sociologists William Strauss and Neil Howe in 1991, generational theory sheds light on the "… recurring cycle of age cohorts called 'generations' with specific patterns of behavior that are regarded as intertwined with the history of the United States of America" (Van Eck Duymaer Van Twist & Newcombe, 2021). This theory dictates that "… each of the generations named as Traditionalists, Baby boomers, X, Y and lastly Generation Z (Gen Z), which is the subject of this study, is based on various technological, economic and social changes and is claimed to have different interests, needs and reactions" (Turner, 2015, as cited in Düzenli, 2021) compared to its predecessors. It is however important to mention that generational theory is mainly built upon grand generalizations, as each of the above-mentioned generations is "…typified as an archetype, leaving little room for dissent and diversity within generations. It not only analyses the past but seeks to explain the present and predict how the future is most likely to unfold" (Van Eck Duymaer Van Twist & Newcombe, 2021). This latter fact is particularly practical in educational contexts where generational theory could prove beneficial in designing adequate pedagogical approaches and content while approaching and interacting with a specific generation of learners as hinted by Kuran (2019): "to understand a generation is to understand an era. When you understand an era, you get rid of being stuck in the grip of the paradigm. And you will be able to see those who are not like you, not within your own judgments, but with their own truths" (Kuran, 2019, as cited in Düzenli, 2021).

2.4 Understanding Generation Z Learners

Several studies and reports of all types have firmly established that Generation Z cannot and should not be approached as a mere generational cohort. This section explores the typical traits and attributes embodied by said generation and discusses their significance in the target educational context in relation to the relevant literature.

2.4.1 Generation Z: Who Are They?

Categorizing large groups of people within one single description based on their date of birth would be a blatant act of generalization considering how each individual is unique no matter the generational demographic he or she relates to. Still, additional factors such as historical context, geographical location, and an excessive reliance on technological appendices and social media in this case, often render the majority of these individuals more prone to sharing similar attributes and behavioral patterns. This can be clearly detected among contemporary young adults.

So, who are they? What is this so-called Generation Z? Wolf (2019) describes this generation by emphasizing its main traits and characteristics as she ironically declares:

> They are bright, innovative, confident in their skills on all manner of digital screens and devices: This is Generation Z, many of whom have little notion that they have begun to short-circuit some of the essential cognitive and affective processes that produced the digital world they inhabit. Furthermore, no small number of these young humans would grimace if asked to read this last sentence with its multiple clauses and syntactical demands. (Wolf, 2019)

Commonly referred to as the digital natives, these latter represent what is nowadays denominated as Generation Z; which broadly refers to the children born between 1996 and 2012 according to

most online dictionaries. Zoomers, as some people also refer to them, have never known a world without technology. They grew up within environments comprised of all sorts of technological gadgets such as connected TVs, gaming consoles, computers, and most importantly, the Internet. This makes them considerably more familiarized with technological appendices than their predecessors; the Millennials (Generation Y), as these latter mostly had to embrace and adapt to technology at the latest stage of their adolescence, particularly in the local context.

Among many others, Generation Z students embark all the aforementioned quirks onto their respective educational environments and institutions. The earliest specimens of this generation, who happen to be today's higher education students, are often strangers to the concept of physical copies of books and papers. In the case of EFL literature for instance, most of the needed resources; including novels, poems, dictionaries, and handouts, are brought to their classroom in digital form by means of smartphones, tablets, and laptops. Their familiarity with technology also often makes them accustomed to selecting more pragmatic, time-saving, and cost-effective alternatives (audiobooks, summaries, audio-visual adaptations of literary texts…) to grasp and achieve an understanding of the studied materials and literary concepts. Their visual, mobile, and digital nature often makes them pedagogically necessitous and sometimes incompatible with the conventional ways of knowledge transmission, henceforth the concept of learning styles.

2.4.2 Generation Z: A Western Concept or a Global Generational Cohort?

First things first, what is meant by a generation? Kupperschmidt (2000) defines a generation as "an identifiable group, which shares years of birth and hence significant life events at critical stages of development" (Kupperschmidt, 2000, as cited in Sarraf, 2019). Most of the literature centered around generational studies seems to point towards the existence of several generational classifications or cohorts, each of which has been generated and shaped by historical occurrences

and socio-political factors and events in parallel with a given nation's evolution, making each generation stand out from its preceding and succeeding one in various aspects. Sarraf (2019) also supports this by arguing that "a generational cohort shares historical and social life experiences, which affect the way people in that generation develop and distinguish one generational group from another" (Sarraf, 2019). The most evoked instances of these generational groups are no other than the silent generation, also known as the traditionalists (1928-45); followed by the baby boomers, or the boomers in simpler terms (1946-84); succeeded by Generation X (1965-80); followed by the famous Generation Y, also known as the millennials (1981-96); and paving the way for the emergence of the so called Generation Z (1997-2012), also commonly referred to as zoomers or post-millennials; and their latest successors, Generation Alpha (early 2010s till mid-2020s). However, it is important to specify that the intervals associated with each of these generations should be taken with a grain of salt, as the age brackets provided by the most of the available classifications are quite hypothetical in essence considering how they tend to diverge from one source to another by a variance that ranges from 1 to 5 years in some cases.

It is also worth mentioning that, despite the purely sociological nature of this generational theory, multiple sources still emphasize its psychological dimension by claiming that the involved generations do in fact share similar attributes and personality traits. Smola and Sutton (2002) for instance observed that "the social context in which a generational group develops impacts their personality and a person's feelings towards authority, their values and beliefs about organizations, their work ethic, why and how they work and their goals and aspirations for their work life" (Smola and Sutton, 2002, as cited in Sarraf, 2019). The same source also reports that "…each generation is likely to develop distinct preferences or traits that distinguish their feelings toward work and

what they desire from work (Jurkiewicz and Brown, 1998; Kupperschmidt, 2000, as cited in Sarraf 2019), which, by logical extension, applies to the educational context as well.

In the light of the aforementioned arguments, a question of crucial importance imposes itself: is the previously discussed generational cohort globally relevant? In other terms, is it safe to view the world through the lens of the specified generational classification? Erickson (2011) provides a clear answer to this question by establishing that "geography significantly influences the formation of generational beliefs and behavior. Each country's unique social, political, and economic events shape specific views and attitudes among today's adults. Western generational models cannot be applied broadly to a global workforce." (Erickson, 2011). This declaration clearly implies that the previously provided instances of generational groups are exclusive to the western world; predominantly the USA and certain parts of Europe. This being said, multiple nations across the globe do in fact, to a certain extent, abide by similar generational models due to the simple fact that they were subject to a number of all-encompassing events and historical tragedies such as World War I and II to cite a few, which had equally devastating consequences on people no matter their geographical location.

Another all-encompassing factor which breaks all geographical barriers and rallies the world population under the same generational banner is the rise of technology. Indeed, Generation Z, and even late millennials to a certain extent, can be regarded as the product of the emergence of a world culture, which was made possible thanks to globalization and the intercontinental flow of information that mostly came along with the invention of computers and the world wide web. Sarraf (2019) also reinforces this by acknowledging that, "…with the continuous rise of technology, especially ICT, the trend of globalization has continued to increase, and so different

nationalities are affected by major global events in the same way. For example, Edmunds and Turner (2005) propose the development of the concept of ‘global generations’” (Sarraf, 2019).

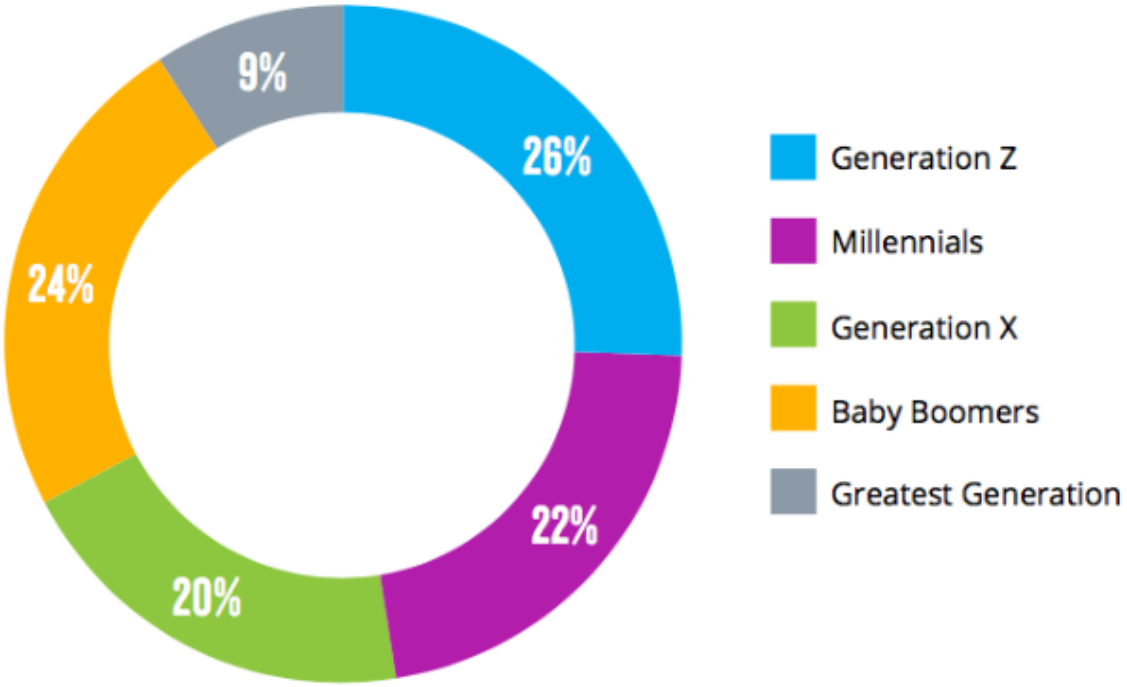
2.4.3 Enter Generation Z: The First Fully Global Generation

If each generation is truly likely to develop distinct traits and preferences that distinguish it from the others as previously hinted, then this distinction should be even more palpable among Generation Z, which, according to most online statistics, constitutes a little more than 2.5 billion individuals and translates to nearly one third of the world population. In today’s highly globalized world, this generation is also commonly referred to as “the digital natives”. As shown by figure 3, this generation was estimated at 26% of the whole world population during the first quarter of 2017. This being said, it is safe to assume that with the rapid growth of technology and the advances in surveying and population measurement tools that are available today, in 2022, the results would probably indicate an even higher percentage.

However, among their most peculiar traits is the way the prefer consuming and acquiring knowledge, which in turn is a crucially relevant variable in this research.

Figure 3

Nielsen's Total Audience Report on Global Generational Composition



Note. Nielsen's report on the worldwide generational composition as reviewed by Greg Sterling from MarTech.com on July 17th, 2017.

2.4.4 Generation Z in the Algerian Context

Although through baby steps, technology and the internet in Algeria have developed to become a fundamental component of the majority of its citizens' lifestyles. Nearly every single neighborhood, home, computer, and smartphone is nowadays connected to the world wide web in one way or another, predominantly in the north portion of the country. Social media platforms became not only means of expression and communication for Generation Z teenagers and young adults, but also a way to instantly witness what is unfolding around them on a global scale, which by extension, slowly shaped their vision of the world and allowed them to quickly catch up to their

foreign contemporaries in terms of behavioral patterns and psychological traits despite any cultural barriers and dissimilarities. Among these common features can be found their shared reluctance towards reading, their unprecedented and substantial reliance on technology for all manners of purposes, and their lower attention spans as demonstrated by the findings of this study.

2.4.5 The Learning Styles & Strategies of Generation Z Learners

Needless to say, peculiar attitudes and personalities call for peculiar approaches in terms of knowledge transmission and acquisition. Indeed, generation Z students are known for being less responsive to the traditional teaching and learning methods, as supported by Iftode (2019): "It is obvious that the "old way" of schooling is no longer effective with the new generation of students. The values of today's students are not congruent with traditional content and methods. Theoretical approaches that merely focus on textbooks are likely to be perceived as boring" (Iftode, 2019). The students in question exploit and rely on unprecedented strategies and resources to support both their academic journey and external learning activities. Mostly dependent on technology, these strategies and resources often allow them to spend the least amount of time and effort possible on their learning activities, which has visibly become the main concern of the majority of contemporary students.

A learning style is commonly regarded as an individual's preferred mode of absorbing and processing new information whereas a learning strategy refers to "an individual's way of organizing and using a particular set of skills in order to learn content or accomplish other tasks more effectively and efficiently in school as well as in non-academic settings" (Schumaker & Deshler, 1992). By being aware of these two variables, teachers can adapt their modus operandi to better cope with their learners' preferences and maximize their chances of reaching the desired

learning outcomes. This type of awareness is all the more needed with the latest generations. Moreover, higher education instructor Priya Thomas (2019) observed that:

> While other generations had to learn new technology as it emerged, Generation Z students are tech natives, meaning technology… has been a part of their lives from day one. They grew up with easy and quick access to information at any time of day in variety of forms, so tools that are accessible are extremely important for this group. (Thomas, 2019)

After to several years of experience among higher education students, she also declared that:

> Learning tools that are visual are a match, too. Generation Z learns best with material that is on-demand, so mixed media (including mobile and video) are their… [priority] for learning. For example, 90% of Generation Z students surveyed in the Generation Z Goes to College study reported their primary platform for new information was YouTube. In addition, these students find digital textbooks to be more engaging and cost-effective tools than traditional textbooks. (Thomas, 2019)

2.4.6 The Reading Crisis Among Generation Z Learners

Throughout the past centuries and thanks to a multitude of studies in the fields of education and pedagogy, it has been clearly established that reading stands as a fundamental component for achieving any kind of knowledge acquisition and literacy, especially when it comes to language learning. This skill consists of interpreting characters and symbols for the sake of deriving meaning from a given text and stands as the basis of all communication, hence its classification as a “macro skill”. Pardede (2020) provides an even better description of its importance as he states that:

> Nobody doubts the essence of reading in education. In addition to its role as the main way to enrich one’s experiences for constructing knowledge, reading is also the most effective

> tool for sharpening analytical and critical thinking, developing creativity, enhancing concentration, enriching vocabulary, improving writing skills, and so on. Without appropriate reading skills, a student will likely fail in learning. (Pardede, 2020)

This being said, reading has taken many forms over the ages while traditional reading recently evolved, not to say devolved, to become partially disregarded in favor of more digitally-oriented modes of learning, hence the reading crisis among today's youth as Wolf (2019) best describes it:

> Changes in the reading performance and reading habits of our young are chronicled in the surprising, just-released results of a series of studies by scholars in Europe… and the United States. The results of research by Jean Twenge and her colleagues on young people's reading habits over the last 50 years is summarized in their subtitle: 'The Rise of Digital Media, the Decline of TV, and the (Near) Demise of Print'. (Wolf, 2019)

Throughout her book *"Tales of Literacy for the 21st Century"*, the above-cited scholar, teacher, and advocate for children and literacy around the world also reaches a rather disturbing conclusion as she declares the following: "The reality is that our young people are changing in ways that are as imperceptible to them as to most adults, particularly in how, what, and why they read—the cornerstone of how most humans think for the last few centuries with the spread of literacy…" (Wolf, 2019). This suggests that Generation Z's reading crisis could also be a matter of perception.

Along with the decreasing attention spans and the radical shift in their preferred modes of learning stands the most notable problem that Generation Z suffers from; their unprecedently poor reading tendencies. Unlike their predecessors, Generation Z learners are reportedly even more impatient when dealing with long, dense, and demanding texts as argued by Wolf (2019): "reports from university and high school instructors like Mark Edmundson describe how many students no

longer have the patience to read denser, more difficult texts like classic literature from the 19th and 20th centuries". She goes further by adding that she is "less concerned with students' cognitive impatience than with their potential inability to read with the sophistication necessary to grasp the complexity of thought and argument found in denser, longer, more demanding texts, whether in literature and science classes or, later, in wills, contracts, and public referenda" (Wolf, 2019). As a teacher of English and thanks to his daily interactions with Generation Z learners, Pardede (2020) also detected this problem and reached the following deduction:

> Compared to the Millenials or Generation Y, Generation Z (Gen Zers) has a bigger problem in reading. They are more impatient to read longer, denser, and more complex texts. Although… [late Millenials] also showed impatience to read long, dense and demanding texts, the Gen Zers' crisis in reading is more severe. (Pardede, 2020)

The same source goes further by associating the reading crisis that Generation Z suffers from to their exposure to technology and their excessive reliance on technological devices, which they consider as an extension of themselves, as he declares:

> In my opinion, Gen Zers' crisis in reading is mainly due to their tight connection with mobile devices, apps, social media and instant messaging facilitated by the information and communication technology (ICT). Born in the mid-1990s to the early 2000s, they grew up in the current ubiquitous mobile communications environment… half of Gen Zers spend 10 hours online every day. It is not [only] because they are addicted to their smartphone but because it is an extension of themselves. (Pardede, 2020)

He also hints that, although Millennials also grew up in the era of technology and the internet, these latter, unlike in Generation Z's case, were not advanced enough to cause any major

problematic behavioral patterns, which is particularly true in the context of developing nations such as Algeria where the emergence of technology was behind the curve and Millennials had to cope with it at a later stage whereas Generation Z was born straight into it. In other words, although today's youth is mainly composed of two generations; namely Millennials and Generation Z, the former is considered as tech-savvy while the latter is regarded as tech-native.

2.4.6.1 Generation Z Learners: Deep Readers or Screen-Based Text Skimmers?

Many proverbs and sayings across different cultures agree on the simple fact that too much of anything can often have the opposite effect. In this case, the surge of information that has been made available nowadays for Generation Z in exchange for pressing a few buttons on their smartphones has made them prone to being selective when reading texts of any sort. In an effort to save time and process less unnecessary information, they generally opt for scanning and skimming for specific keywords rather than reading the totality of the displayed text while sometimes bypassing this latter in favor of audio-visual alternatives such as video tutorials on YouTube for instance. Pardede (2020) also acknowledges this phenomenon as he argues:

> Their extensive [use] of ICT has driven Gen Zers to practice light reading—reading for getting the pieces of information that serve one's agendas—only. Since browsing the information related to any topic on the internet could be done easily and instantaneously, they just skim a text in seconds, move to other texts and skim them to get the information they need. The tendency to skim is then reinforced by the provision of visual contents on the internet, as shown by their inclination to access YouTube rather than texts to get information. When they read a text, they just look at a small portion of the word. (Pardede, 2020)

Similarly, thanks to substantial research in the neurosciences and on how the human brain learns to read, Wolf (2019) deduced that the changes endured by reading in today's digital world is purely neuroplastic as she argues that "learning to read requires the brain to form a new, highly malleable circuit that develops from a basic circuit for simple decoding to an expert reading brain that connects our most sophisticated cognitive and affective tools—what we call "deep reading" processes—to whatever we read" and goes further by indicating that "crucially, the particular processes in the circuit reflect the environment that forms it—e.g., the writing system, the type of education, the characteristics or affordances of the medium" (Wolf, 2019). She then attributes this issue to the excessive usage of digital devices as she reaches the following conclusion:

> Therein lies the cerebral catch that helps explain what is happening to our young. As our youth read ever more on digital devices—which privilege fast processing, skimming and word-spotting, filtering voluminous information, and multi-tasking—their circuits adapt accordingly, often acquiring new, cognitively innovative and visually sophisticated processes. (Wolf, 2019)

Simply put, an excessive reliance on technological assets short-circuits and rewires the brains of their users by making them less able to immerse themselves into deep reading processes and more prone to selecting alternatives that are less costly in terms of effort and time spent on the task. This type of behavior and tendencies can also be observed among most contemporary students of literature for instance, who, instead of doing a full reading of the literary texts that have been prescribed to them by their teachers, often prefer relying on online summaries, analyses, and audio-visual adaptations of those same texts, thus reinforcing the reading crisis among Generation Z learners. Pardede (2020) also shares his point of view on this specific issue as he declares that "the idea that the current students' crisis in reading is caused by their habit of practicing light reading

only using the materials provided by ICT is clarified by Liu (2005) who found that the norm of reading among today's students is skimming", he then elaborates by reporting that:

> Due to the increasing amount of time spent in reading electronic documents, the screen-based reading behavior has emerged. It is characterized by more time spent on browsing and scanning, keyword spotting, one-time reading, non-linear reading, and reading more selectively, while less time is spent on in-depth reading, and concentrated reading. This reading behavior, at the same time, diminishes sustained attention and removes annotating and highlighting, two important activities readers do while reading printed texts. (Liu, 2005, as cite in Pardede, 2020)

2.4.6.2 Audiobooks Among Generation Z

Scanning and skimming are not the only norms among Generation Z when it comes to avoiding deep reading. As previously hinted, this generation is known for its resourcefulness and keen ability to identify the least tiring and time-consuming course of action for any endeavor they undertake. Rowe (2019) supports this by mentioning that "as technology evolves, people have more options available to them, which may explain why the report found younger adults to be more likely to opt for audiobooks and the multi-tasking they enable." Indeed, the constant evolution of technology and the observed reading crisis among this specific cohort has paved the way for the emergence of several time-saving alternatives, hence the popularity and significance of audiobooks among Generation Z students. For instance, as far as literature is concerned, a good portion of students usually finds it more convenient and less physically taxing to have the story that the novel has to offer narrated by somebody else and listen to it on their smartphones rather than performing a full reading of the book themselves. Other than the generational difference between Generation Z and its predecessors, additional factors such as the COVID-19 pandemic

and its resulting quarantine have driven a good portion of adults as well to enjoy audio versions of books and spend hours listening to them due to the multitasking they allow as reported by Rowe (2019):

> The benefits of skipping a physical book in favor of getting the audio version piped into one's ears are twofold: It's an easier way to consume a book while slipping in a household chore or two, and audiobooks are available entirely online via download, a tech-enabled advantage that a print book can never live up to. Well, at least not until Google gets its drone delivery system off the ground. (Rowe, 2019)

This being said, he still insists on the fact that "the generational difference could be attributed to a technology gap, as older book consumers are less likely to either download digital audiobooks or borrow them from their local library through a mobile device" (Rowe, 2019).

2.4.7 Generation Z & The Short Video Frenzy

With worldwide brands competing to acquire their attention for all kinds of purposes, Generation Z's stands nowadays as the central target of all advertisement and entertainment companies. Due to their shorter attention spans and their instinctive reluctance to rely on lengthy sources of information such as texts and long videos, "bite-sized" audio-visual content is currently the norm when it comes to attracting and entertaining the younger generations. As indicated by Boger (2020), "this sense of being pulled in all directions is felt by most of us today, but it is strongest amongst younger generations. Gen Z typically have an attention span of just 8 seconds; a few seconds shorter than millennials, who come in at approximately 12 seconds" (Boger, 2020).

In response to this, the short video format is nowadays being introduced, and even enforced in certain cases, by the most prominent websites and online entertainment entities, making

Generation Z and their successors even more prone to being bombarded with information that they did not necessarily ask for as they swipe their screens on all manners of short video platforms such as YouTube Shorts, Facebook stories, and of course, today's most infamously established video-streaming and sharing application: TikTok. Consequently, needless to mention that their relentless consumption of this type of content makes contemporary learners even less interested in traditional ways of learning and acquiring new information.

2.4.8 A Statistical Analysis of Generation Z's Technology Consumption

In an effort to determine how Generation Z's tastes influence their overall consumption patterns, business researcher and administrative assistant at 99Firms.com; Branka Vuleta, identified 44 paradigm-shifting facts and statistics about Generation Z's internet and social media usage, most of which are relevant and projectable upon the field of education and can be exploited as a reference point for teachers who want to achieve a better understanding of how to approach and interact with this specific class of learners. This section sheds light on some of the most educationally relevant samples from these statistics.

The first and most disturbing of the aforementioned statistics is that 74% of individuals from this specific age group spend the totality of their free time online while 66% of them report simultaneously using more than one device connected to the internet. In other terms, Generation Z spends more than 8 hours online on a daily basis scattered across their connected TVs, smartphones, laptops, desktops, and tablets. This, according to the author, "…not only influences how they obtain information and form opinions but also aspects like emotional well-being and the ability to stay unconnected" (Vuleta, 2022).

Another determining fact about Generation Z is that 95% of the teens from this cohort report owning a smartphone or having at least access to one. Furthermore, 55% of these teens use this device for more than 5 hours a day while almost a quarter (26%) reportedly use it for more than 10 hours a day (Vuleta, 2022). The same author also regards this behavior as "unhealthy" and acknowledges that "…it's not just that Generation Z enjoys early access to smartphones; this also creates a sort of dependence on these devices. 29% of Gen Z are on their phones after midnight every night, and 31% feel uncomfortable if they are without their phone for 30 minutes or less" (Vuleta, 2022).

The third and final noteworthy sample taken from these statistics is that 73% of Generation Z teenagers use the mentioned connected devices primarily for texting and chatting. This, as the author states, "includes much of the time spent on social media" while she adds that:

> "59% mostly use their devices to access entertainment, 58% to play games, 36% to do schoolwork, 28% to learn new things, and only 17% for shopping and browsing. These numbers vary substantially between men and women, though, with far more male members indulging in gaming and many more female Generation Z consumers spending time chatting and texting. (Vuleta, 2022)

Conclusively, it is safe to assume that these statistics can be projected onto the Algerian youth and that this latter could be even more susceptible to developing a dependency on and an irresponsible usage of technological assets given the lack of parental supervision and the limited number of external alternatives and opportunities offered to them compared to their foreign counterparts.

2.5 Technology's Impact on Learners' Attention Spans

Despite the abundance of resources and information that it provides, technology is nowadays regarded as a double-edged sword. Among its many inconveniences can be found the progressive decline of its users' attention spans. American psychologist and computer scientist Herbert Simon diagnosed this problem as early as the 1970s when he argued that "in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention" (Simon, 1971). The Britannica Dictionary defines the attention span as: "the length of time during which someone is able to think about or remain interested in something". It also refers to the amount of time a person can remain concentrated on a task while avoiding distractions.

At its apogee, technology has recently made the above discussed problem particularly observable among the latest generations of young adults. For instance, most of the studies and statistics found online agree on the fact that generation Z has an average attention span of 8 seconds, hence the emergence of video platforms such as TikTok and YouTube Shorts. These latter adjusted to this phenomenon by limiting the length of their audio-visual content and adopting a short video format which consists of videos that generally do not exceed a minute or two. Consequently, both platforms achieved immense success among both Generation Z and its successor (Generation Alpha), with the former representing more than 64% of their daily users according to online statistics.

One might ask, what does the above have to do with education? In reality, when considering the fact that higher education institutions are nowadays mostly populated by the generation in question, students' attention is, as described by Art Kohn (2014), "an important variable since

people with longer attention spans are able to be more creative, make fewer errors, and are more likely to achieve their goals" (Kohn, 2014). For instance, in 2012 a survey conducted on British grounds concluded that children's attention spans are rapidly decreasing. The study involved 410 teachers of English and 2000 parents of children aging from 2 to 11. The survey reported that 91% of the involved teachers drew a direct link between children's decreasing attention spans and the fact that they usually they opt for screen-based activities over conventional reading, which stands as the first proof of an existing connection between shorter attention spans and technology exposure according to neuroscientist Susan Greenfield, who firmly believes that "the use of digital technologies is reshaping human brains and the impact on young people [,who grew up knowing nothing else,] must be considered by their parents and educators" (Brech, 2020). Furthermore, another study conducted by the British unit of advertising discovered that the average person shifts their attention between their smartphone, tablet and laptop at least 21 times within a single hour. This might reinforce the extent to which these gadgets influence present-day students' behavior.

2.6 Established Patterns in Teaching Literature

The growing disinterest towards the study of literature and the activity of reading in general has become even more visible from one generation of students to the next. Each generation reportedly reads less than its preceding one and presents an even bigger challenge to the instructors of disciplines that primarily rely on the skills of reading and literacy such as literary studies, especially in ESL and EFL contexts. To retaliate against this, scholars united on a global scale, giving birth to various theories, approaches, and models that have, to a certain extent, helped spark the youth's interest towards reading and studying literary texts. This section takes a shallow look into what has been previously applied in terms of approaches and modes of teaching literature.

2.6.1 Literature Teaching Models

It goes without saying that, across the second half of the previous century, teaching literature took many forms. Several models were put forward by scholars and researchers from all around the world in an effort to facilitate this process and counteract the problem of illiteracy and lack of reading in modern society. Among them, three renowned approaches saw the light and began to be incorporated in EFL literature curricula; namely "the language model, the cultural model and the personal growth model" (Carter & Long, 1991, as cited in Padurean, 2015).

The language model inspired and paved the way for the emergence of the paraphrastic approach, the stylistic approach, and the language-based approach. "It integrates language and literature as a source to improve student's language proficiency while learning the language. It [also] uses literature in teaching different functions of language like grammar, vocabulary, and language structures from the literary texts to students" (Hwang & Embi, 2007, Aydin, 2013, as cited in Mee Ling & Sew Eng, 2016). Alina N. Padurean (2015); a professor at the department of modern languages at the University of Arad; also provides a detailed description of the language model and its implications by claiming that:

> The Language Model relies on the development of students` knowledge by working with familiar grammar, lexical and discourse categories. It focuses on the way language is used in literary texts. It does not encourage creative thinking but the acquisition of information related to the target text. This approach is considered too mechanistic and it demotivates the pleasure of reading literature. Texts are approached in a systematic and methodological manner and the techniques used in working with these texts are typical for a EFL classroom: prediction exercises, jumbled sentences, summaries, role-play, etc. (Padurean, 2015)

The above source also argues that the second approach, the cultural model, incites both the teachers and their students to approach a literary work in direct relation to the target language as she claims that “it is also a transdisciplinary approach to teaching as it does not focus on mere language acquisition but also on the knowledge of a country`s culture and ideologies. Similarly, Hwang et al. also argued that “literature is a source of facts or information to be put across to students by the teacher. It stresses the role of literature in condensing values, ideas and wisdom that have accumulated within a culture over historical periods” (Hwang & Embi, 2007, Aydin, 2013, as cited in Mee Ling & Sew Eng, 2016). “It [also] helps students go beyond the lexis to other components of a nation. Students are asked to explore and interpret the social, political, literary and historical context of a text” (Yimwilai, 2015, as cited in Padurean, 2015).

The personal growth model involves both the personal-response and the moral philosophical approach. As Mee Ling and Sew Eng (2016) reported, “it enables students to develop their language, character and emotions by connecting and responding the issues and themes to their lives. It encourages students to love and enjoy reading literature for personal development as well as to relate their relationships to the environment” (Hwang & Embi, 2007, Aydin, 2013, as cited in Mee Ling & Sew Eng, 2016). According to Carter and Long (1991), the personal growth model represents an attempt to:

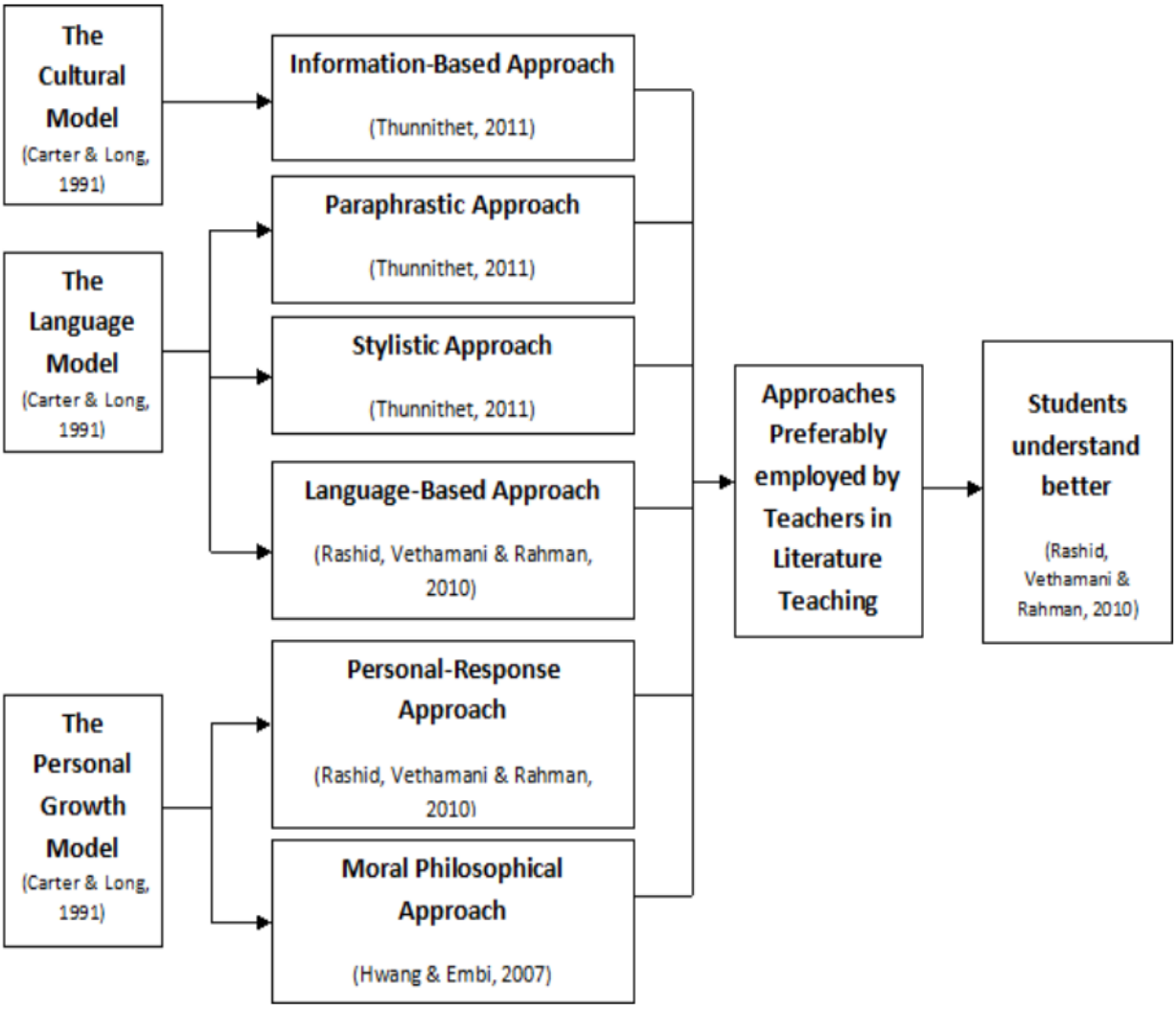
> …create a link between the language model and the cultural model [in which] the focus is placed on the use of language but used in a specific cultural context. Students are not only passive receivers of teacher given interpretations but they have to be intellectually and emotionally engaged in the lesson and especially in the reading activity. Literature is used as a resource and not just a study subject. In other words, students develop their knowledge of and their knowledge about literature. During this approach to literature, students are

> encouraged to express their opinions and beliefs, to make connections between their own experiences and the text and use critical thinking. (Carter & Long, 1991, as cited in Padurean, 2015)

It is also important to reinstate the fact that the cultural model, the language model, and the personal growth model, represent the stem of most of the known approaches in teaching literature while as they "…correlate to each other as a value and resource for literature study purpose, personal response development as well as exposure to language skills" (Bottiko, 1999, as cited in Mee Ling & Sew Eng, 2016).

Figure 4

Conventional Models & Approaches in Teaching Literature



Note. An illustration of the established approaches in teaching literature synthesized and introduced by Mee Ling and Sew Eng (2016).

2.6.2 Widespread Approaches in Teaching Literature

More recent studies have come to acknowledge the efficiency of a multitude of methods when it comes to teaching literature. The ones conducted by Mustakim et al. (2014), in addition to Mee

Ling and Sew Eng (2016), review and analyze the six established and most commonly adopted approaches by teachers of literature around the globe, each of which is derived from one the above-mentioned models, and emphasizes and develops particular skillsets among students. These approaches are namely; the information-based approach, the personal-response approach, the language-based approach, the paraphrastic approach, the moral-philosophical approach, and finally, the stylistic approach.

2.6.2.1 The Information-Based Approach

Being part of the cultural model, the information-based approach in teaching literature is perhaps the most favoured and prevalent approach among teachers of this discipline. According to Mee Ling & Sew Eng, (2016) "it is teacher-centred and demands a lot of teacher's input in giving students various contents of literary text like on historical, political, cultural and social background" (Mee Ling & Sew Eng, 2016). Similarly, it also consists of inviting students to examine details on the historical background of the studied literary text and the characteristics of the literary movement that it belongs to. Teachers who opt for this method are encouraged to extort information about the text from their students and also ask questions to evaluate their knowledge and comprehension of what they have read before providing any kind of explanation (Mustakim et al. 2014).

2.6.2.2 The Personal Response Approach

As its name suggests, this method encourages students to study the literary text by establishing an emotional link with the themes and subjects treated within and relating these latter to personal experiences. It also encourages students to openly express their feelings and opinions towards the issues treated within these same texts (Mustakim et al., 2014). Mee Ling and Sew Eng (2016) also

support this by arguing that this particular approach "…encourages students to make sense of their experiences and personal lives with text themes. It also promotes students to associate the subject matters of the reading texts with personal life experiences (Rashid, Vethamani & Rahman, 2010, as cited in Mee Ling & Sew Eng, 2016). Thus, teachers are invited to take these variables into consideration while selecting texts and designing their lectures. For instance, "brainstorming, small group discussions, journal writing, interpreting opinions, and generating views from a text are [commonly] practised in this approach" (Hwang & Embi, 2007, as cited in Mee Ling & Sew Eng, 2016).

2.6.2.3 The Language-Based Approach

Through this approach, the main focus is put on the study of the language of the literary text itself. Teachers are encouraged to generate a series of stimulating language-practice activities directly from the studied text and incite their students to actively participate in the process of understanding these texts and providing their own analysis of their meaning for the sake of enhancing their interpretation skills and rendering them familiar with various styles and registers (Mustakim et al. 2014).

2.6.2.4 The Paraphrastic Approach

As implied by its name, this mode of teaching is solely based on the technique known as paraphrasing. It encourages students to draw the superficial meaning of the text even if they don't have a full understanding of the language of the language involved. It invites literature teachers to retell the story using simple terms in order to help their students understand it and encourage them to recount the story the way they understood it (Mustakim et al. 2014). This method is rarely

adopted in higher education contexts as it is generally applied in classrooms that involve children or beginner language students.

2.6.2.5 The Moral-Philosophical Approach

This approach emphasizes the instructive dimension of literary studies. It gives full priority to the values and the message that is conveyed by the literary text. As argued by Mustakim et al. (2014), this method encourages teachers to incorporate moral values into their lessons and invite their students to identify and explain them for the sake of raising their standards and developing their moral compass (Mustakim et al. 2014). Lee Ling and Sew Eng (2016) also acknowledge that, thanks to this particular approach, "teachers are able to direct students to achieve self-realization as well as self-understanding while interpreting literary works [and go beyond these texts for moral and philosophical inferences]" (Lim & Omar, 2007, as cited in Lee Ling & Sew Eng, 2014).

2.6.2.6 The Stylistic Approach

Though partially similar to the language-based approach, the stylistics approach in teaching literature is mostly based on discourse analysis and applied linguistics. According to Mustakim et al., teachers of literature should "encourage [their] students to discuss beyond the surface meaning of the text [and] guide … [them] to interpret … [it] by looking at the language used by the author". They should also "get students to mark any linguistic features from the text that are significant to their reading" (Mustakim et al. 2014).

2.6.3 What They Have in Common

As far as teaching literature is concerned, the above-discussed models and approaches have proved quite useful over the past decades. When properly implanted, these methods have the potential to significantly enrich the experience for both the students and their teacher. This being

said, these approaches share a common problem: they appear to be built on the premise that all students learn best via discussion, while they also operate under the assumption that the provided guidelines are relevant and applicable in all times and academic contexts. They also seem to presume that the involved students would initially be interested and eagerly willing to read and study literary texts that they hardly relate to, which might have previously been the case due to the lack of alternatives, but is no longer as applicable and relevant to recent times and generations. Indeed, considering how the very first step of any pedagogical endeavor would be to redirect students' undivided attention towards the upcoming lesson and then manage to maintain it throughout the whole lecture, this task has nowadays become even more challenging with Generation Z learners and their shorter attention spans no matter how strong their teacher's presence might be. All in all, although the mentioned approaches have already proved to be beneficial, implementing them through the traditional "chalk and talk" mode of delivery while also failing to prioritize age-appropriate case studies and literary texts would be counterproductive, even more so when Generation Z learners are involved.

2.6.3.1 The "Chalk & Talk" Delivery Mode

It is quite self-evident that the "chalk and talk" in teaching has taught and successfully educated several generations across the past centuries. This being said, several studies and reports have found it to be less efficient in recent times, especially when Generation Z learners are involved. Bodhankar reinforces this by declaring that "Any progressive school will agree that confining Gen Z to regimented classroom and chalk-and-talk teaching will lead to futile learning. To keep up with the present generation's learning style, schools have to leverage on technology". He carries on by arguing that "Technology has trained their brain to a different pattern of thinking

and educators need to comply to this new way in order to deliver effective learning" (Bodhankar, 2019). The same scholar also draws attention to the fact that research confirms that:

> …as much 65 % of students in a classroom are visual learners. Our brain processes visual information 60,000 times faster than text. Statistics point to the fact that the visual mode of teaching is far more effective. It would be great if teachers can create more lessons that use graphs, charts, pictures, simulations, models and videos to teach Gen Z.

He consequently deduces that "In times when children are readily using gadgets and apps for interacting and searching information, conventional classrooms will not be able to engage students" as "Digital age students need digital stimulus to learn and retain knowledge".

The common adage stating that "a picture is worth a thousand words" takes a whole new dimension when Generation Z is involved. As discussed above, the main problem with the conventional approaches in teaching literature is often not the approach itself, but the mode of delivery through which it is put into practice. Indeed, all the mentioned approaches usually go along with the "chalk and talk" style of delivery, which is efficient enough provided the right materials are supplied, but does not do anything to cope with the shorter attention spans and the digital nature of Generation Z students, who consume all kinds of random and unnecessary knowledge through audiovisual resources on a daily basis.

2.6.3.2 The Issue of Text-Selection in Teaching Literature

Another disengaging factor for students of literature is their exclusion from the selection of literary texts that should be studied. The above-cited scholars also seem to agree on the fact that when selecting their teaching resources, teachers must always take into consideration the fact that texts should be interesting and relevant to the students' age and interests while they should

facilitate and contribute to their personal growth, personal discovery, and involvement. They also insist on the fact that the "lessons should be student centered… and teachers… [must only act as] coordinators of certain activities" (Mustakim et al., 2014). Padurean (2015) also suggests that these latter should "use activities that encourage students` communication and relate to their personal life… [and also] use pre-reading, while-reading and after reading activities and explore all resources that a text offers" while also considering that "activities such as prediction making, jigsaw reading, matching or gap-filling, reading comprehension, debates and creative writings are common activities for work with literary texts in an interactive manner" (Padurean, 2015). These scholars also share a common opinion on the fact that literary texts should prioritize literary and linguistic development and should not be approached as mere assessment materials in the light of the fact that, "if students feel the stress of examination when working with literature, they see literature just a subject that needs to be passed at the end of the course" (Carter and Long, 1991).

According to Moody (1981), the primary aim of literature is to give pleasure and to entertain those who voluntarily attend to it. The writer also mentions that the greatest pleasure and satisfaction to be found in literature occurs where it brings us back to the realities of human situations, problems, feelings and relationships (Moody, 1981, as cite in El-Helou, 2010). Pardede (2020) also highlights the importance of text-selection and projects this argument on contemporary learners as he argues:

> Lecturers need to provide learning texts that are more Gen-Z…-friendly. Typically, such texts should facilitate the students' visual orientation and fondness of interesting styles. Thus, the texts need to be written in a bit more popular style and include big colorful images and pictures. To prevent the texts too "heavy" for the students, they should merely provide the required contents. Further or extra details can be integratively provided using hyperlinks to online content. (Pardede, 2020)

2.7 Technology's Role in Education

Education stands among the many fields that flourished thanks to the emergence of information and communication technologies. Ever since the introduction of computers and the Internet, scholars and instructors of different disciplines started imagining and experimenting various ways of implementing said technologies into their curriculum, giving birth to a myriad of technology-assisted and technology-based teaching and learning approaches. Correspondingly, Kruse (n.d.) suggests:

> While the increasing number of new tools and technologies may seem overwhelming at first, educators [need to] understand the benefits of instruction led by this new technology. Older teaching traditions are being left behind or supplemented with new teaching practices, allowing students and teachers to become better equipped for the emerging, interconnected, and technologically-influenced world around us. (Kruse, n.d.)

Technology acts as a powerful facilitating agent when properly embedded into any educational context, especially when considering the decisive fact that technology has nowadays become an essential part of contemporary students' lives. Consequently, it is only natural for instructors to embark on the same ship and exploit the pedagogical benefits that technology has to offer by understanding the relevance and importance of educational technologies in today's world and gradually start to adopt them for the sake of maintaining efficiency and sustainability with their usual modus operandi and providing compatible and lucrative learning experiences that modern learners can enjoy and relate to.

2.8 Technology in Teaching Literature

It is an irrefutable fact that for the past few decades, technology has gradually revolutionized all the facets of modern-day society, education included. When compared to the conventional teaching approaches for instance, technologically-enriched lectures have often proven to turn the tides when it comes to contemporary students' involvement and their understanding of the content of the lesson no matter its nature. They make it possible for teachers of different disciplines to vary the content of their lectures and adjust them to the needs and various learning styles of present-day students, among other benefits, through the introduction of computer-generated imagery and audio-visual resources for instance. However, harvesting the assets of these technology-assisted teaching approaches compels teachers, and sometimes even their students, to have a decent grasp on a number of prerequisite skills and competences such as digital literacy. This section provides various instances of these technology-based teaching methods whilst assessing their efficiency and compatibility with the process of teaching literature to Algerian EFL Generation Z students. It also sheds light on the main challenges that teachers and learners might stumble upon throughout the process, as well as the potential benefits and drawbacks that may result from the use of the approaches in question. It also investigates the different factors and variables that have to be taken into consideration in order to fully exploit the potential of said methods, and then concludes by explaining what the proposed teaching method consists of and providing further details on its implications in the context of teaching literature to Generation Z university students in Algerian Higher Education.

2.9 Established Patterns in Technology-Based Instruction

Through the various forms that it has taken, technology has paved the way for the emergence of numerous instructional approaches over the years. Most researchers and online resources seem

to agree on the existence of eight major technology-based learning approaches, in addition to a few others in which technology only assists the process as a complementary asset and is less vital. This being said, most of these approaches seem to fall under the umbrella term that is "blended learning", which is why this section takes a closer look at what this type of learning entails in addition to its major benefits and the potential challenges that its supporters might come across.

2.9.1 Blended Learning

Blended Learning, also commonly referred to as hybrid learning, or mixed-mode instruction, is by far one of the 21st century's most well-established and widely adopted technology-assisted instructional strategies that rely on technology to a considerable extent. To this day, there hasn't been any precise and official definition of the concept. Thus, this "…lack of a single accepted definition for the term blended learning causes teachers to understand blended learning in different ways and then design their courses according to their own understanding of the concept" (Sheard et al, 2014). Yet, a good majority of scholars and "…researchers agree that blended learning is an integrated learning experience that is controlled and guided by the instructor whether in the form of face-to-face communication or his virtual presence" (Bryan & Volchenkova, 2016). To put it simply, blended learning is a harmoniously balanced combination of the traditional face-to-face classroom interaction and online learning. It has taken many forms over the last decade, each more creative than the previous one in parallel with technological advancements and the emergence of new digital apparatuses.

Blended learning can be regarded as an umbrella term encompassing a series of techniques and instructional approaches that differ from one another in the extent to which they rely on technology. Some of these approaches are completely dependent on technological means and cannot function without them, whereas some others simply regard these means as complementary

resources. In higher education for instance, Alammary et al. (2014) identified three distinct levels of designing blended learning courses, namely the low-impact blend, the medium-impact blend, and the high-impact blend. Each one of these designs implies a series of advantages and challenges, and differs from the others in both the extent to which technology is involved and the number of online activities that are implemented within the course as hinted by said researchers: "Classifying these approaches as low-impact, medium-impact and high-impact blends has been made according to the potential changes to the existing teaching program and student learning experience" (Alammary et al., 2014).

2.10 Common Advantages of Technology-Assisted Teaching & Learning

The classroom application of the earliest digital technologies has marked a turning point and the beginning of an era in terms of knowledge transmission and teaching efficiency. "The benefits that technology provides [in the educational context] are plentiful: innovation in learning, ease of creation, embracing international social context, providing new resources and understanding, and increased access to information." (Kruse, n.d.). When properly exploited, technology-assisted instruction merges between the motivation, personalization, feedback, fluency and listening, relevance, and discipline that are ensured by the physical presence of the instructor, with the mobility, structure, tracking and control, self-study, reduced costs, and global reach offered by technology and e-learning (Raghava, 2019). However, due to the extensive amount of assets ensured by the proper use of educational technologies, this section only sheds light on a few instances of the major benefits that result from the adoption of the above-mentioned approaches as well as most technology-assisted instruction strategies in general.

2.10.1 Learning Style Accommodation

Learning styles are regarded as "…a distinctive and habitual manner of acquiring knowledge, skills or attitudes through study or experience" (Sadler-Smith, 1996, as cited in Popescu, 2010). They provide a clear idea on "… how learners perceive, process, and recall information in the learning environment." (Moussa, 2018). The globally acknowledged VARK model supports the existence of four major categories of learners; namely visual, auditory, reading/writing, and kinesthetic. It is also important to mention that these latter do not represent an officially fixed criteria to differentiate learners; some of them might be prone towards one particular type of information delivery methods whereas the others might be perfectly comfortable with and responsive towards multiple types of information. This being said, even for the most experienced instructors, ensuring an equally efficient learning experience for all their students often proves to be a physically and mentally taxing endeavor, especially in crowded classrooms, which are common in the Algerian context. This stands as a direct consequence of the afore-discussed diversity of learning styles, competences, and learning preferences among learners. Technology remedies this problem by introducing flexibility of content. Thanks to its versatility and the wide variety of tools provided by educational technology, technology-enhanced instruction has been able to adapt and respond to the preferences and diverse learning styles of modern-day learners. It makes it possible for teachers of any discipline to design courses with diversified content that is compatible with visual, auditory, kinesthetic, and multiple subtypes of learning styles, thus increasing the likelihood of students' involvement, receptiveness, and interest towards the lesson, which in turn facilitates the process of knowledge transmission and acquisition while maximizing the learning outcomes.

2.10.2 Collaborative Learning & Student-Created Content

Thanks to technology, learning can be undertaken everywhere. Nowadays, online learning platforms can be accessed from anywhere at any given time and, thanks to innovations such as Skype and FaceTime, simple international communication is possible. Collaborative learning is enabled through these technological communication systems, as well as through LMS systems and multi modal learning environments. Learning approaches that are collaborative go beyond the classroom walls, which aids in catering to different learner preferences and strengthening areas such as intercultural understanding. If this is what's possible now, just imagine what the near future can likely provide: the class itself can be taken into virtual realities! This could facilitate collaboration with people across the globe which would broaden views, raise awareness, and motivate students to explore and explain new cultures, different habits and global themes.

Another one of the major positive sides of educational technology integration is that it allows students to contribute to the development of the lesson by providing them with e-creation tools and platforms which allow them to generate digital content that is relevant to their lesson. Student-created content is initially proposed by F. Kruse (n.d.) within a set of ways to embrace technology-based learning approaches, but it can also be regarded as one of the major advantages offered by educational technology, as she argues:

> Many technology-based approaches increasingly offer opportunities for students to create content that may be shared within the classroom, throughout schools, and on online learning platforms and LMS (Learning Management Systems). Luckily, the number of web-based tools that support the idea of self-creation and learning from one another is steadily increasing. (Kruse, n.d.)

Following her proposal, the same scholar also suggests that in order for such digitally-created content to be understood by all learners, it has to be reexamined and evaluated by their instructor, and then turned into group activities in which students are encouraged to recap and discuss what they learned throughout the process allowing them to recycle the accumulated information while formulating and sharing their own personal viewpoints on the subject matter.

2.10.3 Accessibility & Time Management

Educational technologies provide modern-day learners and instructors with the privilege of being a few clicks or voice commands away from an abundant source of data and information on demand regardless of when and where they request them. The same can be said about most technology-enhanced teaching approaches, which make it possible for learners to record or save their lessons and all sorts of data and documents on their computers and phones for posterior review and scrutiny at home way after they have been delivered.

Educational technologies are also appreciated for their time-saving nature. Depending on the nature of the used tools and the task at hand, they can minimize the workload and simplify the process of knowledge transmission and acquisition. For instance, instead of carrying a cluster of print documents and books, teachers can simply download or bookmark all sorts of data and audiovisual resources on mere portable computer or smartphone and still exploit their full potential throughout a classroom environment.

2.11 The Challenges & Prerequisites of Technology-Assisted Teaching & Learning

Despite all the benefits that may result from the use of technology-assisted teaching and learning strategies, claiming that they only have positive sides would be too idealistic. Indeed, no matter the context in which these approaches are put to practice, and considering the fact that these

latter are rather recent and still evolving, teachers and learners will most likely stumble upon a series of challenges that could either slow down the instruction process or simply put an end to it. For instance, as observed by Laurillard & Masterman (2010): "A critical factor in the successful implementation of … [educational technology] in … [higher education] has been identified as the competence of the teachers to know why, when and how best to implement educational technologies" (Laurillard & Masterman, 2010). Furthermore, the same source also observes that "The adoption of … [educational technologies] by teachers is … a complex process influenced by many factors both extrinsic and intrinsic". This section explores the fundamental factors and conditions that need to be met for a successful technology-assisted lecture, as well as the most common challenges that both teachers and their learners might come across throughout the process.

2.11.1 Digital Literacy

Given its importance in the proper exploitation of educational technologies, this section chooses to dive deeper into the concept of digital literacy. The European Framework for Digital Literacy (EFDL) defines this latter as: "…the awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyze and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process." (Martin & Grudziecki, 2015)

For most of the previously mentioned technology-assisted teaching and learning approaches to be successful, there is a need for students, in addition to their teacher, to be digitally literate. Before planning or delivering a blended learning course, teachers; provided they are digitally literate; need to take their students' levels of digital literacy into consideration. This being said,

being digitally literate is not limited to knowing how to operate information and communication technologies; it also involves information management skills, critical thinking skills, and proper online behaviors, depending on the selected approach and the objectives of the lesson.

2.11.1.1 The Dimensions of Digital Literacy

Digital literacy is a tri-dimensional competence. It comprises three different facets; namely a cognitive, a technical, and a social-emotional dimension. The cognitive dimension involves the set of skills that is needed to search, evaluate, and effectively synthesize digital information. The technical dimension deals with the aptitudes needed to operate and exploit information and communication technologies. The third and final dimension; the social-emotional dimension, entails the skills required to socialize and exhibit proper behavior in an online learning environment.

2.11.1.2 The Constructs of Digital Literacy

According to Bawden (2008), in order for effective learning to be achieved in a blended learning environment, students and their instructor need to consider the four major constructs of digital literacy; namely underpinnings, background knowledge, central competencies, and attitudes and perspectives (Bawden, 2008). In other words, the ability to read and write as well as to use software packages and computers is required, in addition to a clear understanding of how digital and non-digital information is created from various forms of resources and communicated. The aptitude to assemble knowledge from multiple sources is also compulsory, as well as the ability to learn independently and exhibit good behavior in a digital environment

2.11.2 Instructional Inertia & Budgetary Constraints

Inertia, commonly known as resistance to change, is a psychological phenomenon that prevents teachers, often of a certain age, from accepting and transitioning towards more modern pedagogical equipment and modes of instruction mostly out of fear of threatening their established routines and disrupting the traditional teaching methodologies that they have become tightly accustomed to throughout their decades of experience. It can also be observed among young teachers often as the direct consequence of the misconception that students' engagement is not the responsibility of their teachers. This common belief has been debunked by Grove (2019) as she declares: "Teachers who perceive that they are responsible will adjust and improve instruction to facilitate student learning" while "teachers who perceive that it is not their responsibility to engage students have marginalized the scope of their responsibility to teach" (Grove, 2019).

Lack of budget can also be regarded as one of the major causes that discourage teachers from implementing and exploiting tools and content which are more relevant to modern-day students' preferences. At the African level for instance, including Algeria to a certain extent, teachers have often reported finding themselves compelled to invest money from their own revenue for the simple sake of being able to deliver their lesson in good terms and circumstances, let alone updating their whole delivery methods and pedagogical content to better cope with the needs and preferences of contemporary students, which is hardly sustainable on the long-term considering the costly nature of most modern instructional hardware and software apparatuses. Lishan (2003) confirmed this issue almost two decades ago by stating that:

> Universities in Africa seldom plan or budget for ICTs, since most of their investments come through donations. Ongoing cuts of government budgets; competition from other equally deserving sectors of the economy, like health and social development; and

> economic stagnation have all contributed to the limited foresight shown by universities regarding ICTs. Except for the end of the year, when universities have some residual budget funds left over, ICTs do not feature on the list of institutional investment priorities or considerations". (Lishan, 2003)

He also comments on budget allocations at the level of higher education entities across most African nations, including Algeria, by observing that: "ICTs in most universities in Africa have remained clutters of computers and networks that have either worked badly or are islands of low bandwidth connections with frequent breakdowns". He also makes a few exceptions and argues that "although universities in Algeria, Botswana, Côte d'Ivoire, Egypt … [etc.] have made some progress in applying ICTs, their venture to effective use of ICTs in higher education has proved rather complex" (Lishan, 2003).

In addition to the absence of teacher training programs, the lack of hardware maintenance, labs, and adequate software plays a major role in dissuading teachers from making the effort of converting to more technology-oriented teaching strategies.

Among the various decisive impediments that may hinder the deployment of any technology-enhanced teaching strategy is teachers' lack of training and relevant technical skills. This can be particularly observed at the level of higher education for instance, where teachers tend to be of a certain age and can in some cases be categorized as technophobic and computer illiterate. The lack of budget can also interfere with this phenomenon as most institutions do not prioritize or allocate enough if not any budget to provide technical training for their teaching staff. However, this observable digital illiteracy at the level of most higher education teachers results more often than not from their own lack of interest and willingness to implement technology in their curricula, sometimes out of fear of disrupting the methods that they deemed "sufficient", and sometimes out

of mere laziness and inertia as previously discussed. Alammary, Carbone, and Sheard (2014) also observed this anomaly and argued that: "With a large number of blended learning designs, selecting the most appropriate design approach is becoming a major challenge, especially for teachers who lack the necessary theoretical preparation and experimental experience with blended learning, which is the case of the majority of teachers in higher education" (Alammary, et al, 2014)

2.12 A Brief Look into the Literature-Teaching Practices in Algerian Higher Education

Although the approach might slightly differ from one university to another, most of the available data seems to suggest that the modes of instruction adopted by nearly all teachers of literature in Algerian higher education institutions can more often than not be classified under the "chalk & talk" mode of delivery. If not lecture-based, the teacher-student exchange usually takes the form of a discussion and is often centered around a straight to the point oral analysis of literary concepts and selected passages extracted from specific literary texts, which is mainly influenced and amplified by the short amount of time allocated to the study of literature and does not do much to restore students' interest towards literary reading considering how they merely get the chance to establish a genuine connection with the prescribed literary texts. While referring to both British and American literature, Kheladi (2013) confirms this phenomenon as he observes that, at the University of Tlemcen for instance:

> Literature syllabus seems very ambitious in terms of content in the sense that it aims to offer the students the opportunity to taste major masterpieces in both literatures, the recurrent practice, on the ground, is that almost no literary text of any literary genre is read and studied as an entity. Instead, teachers due mainly to time constraints frequently resort to some selected excerpts. (Kheladi, 2013)

It is also important to mention that even with a limited number of literary case studies, the allocated amount of time has reportedly never been sufficient for a critical and extensive coverage of the literary text and all the involved literary concepts for most teachers of the discipline. Hence, each literary genre is nowadays taught by separate teachers in the form of modules in an effort to split the pedagogical load between these teachers. However, the cognitive load remains the same for the involved students who often find themselves compelled to study fiction, poetry, and even drama consecutively on the same day, which puts their teachers in a state of dilemma, as the above source best describes it while referring to the same department:

> Time constitutes a major issue to be raised while describing the literature teaching / learning situation at the Department. In this very specific context, it is worth noting that the time allotted to literature is estimated to one hour and a half per week for first and second year students. This, however, would usually put teachers in a dilemma: whether to teach literature with the knowledge, proficiency and expertise it entails or simply brew some kind of bird's eye view on major literary genres and famous historical movements.

Being a former postgraduate student of literature and civilization between 2012 and 2017, the author of this paper further attests that the above-described issues and modes of instruction are also common practice within the EFL departments of the university of Blida. In most cases, the lectures mainly consisted of discussing literary concepts and analyzing literary excerpts without prior familiarity with the selected texts. A majority of the involved learners preferred relying on online summaries and audio-visual adaptations of those same texts for the sake of ensuring a fairly satisfying performance during the exams. This behavior was also influenced and amplified by the multiplicity of the prescribed case studies and the resulting cognitive load. Consequently, the

overall levels of engagement and genuine interest towards the study of literature were significantly low among millennials, although still higher than the ones reported by their successors' teachers.

It is hence safe to assume that this enforced selectivity experienced by the teachers in question and students' ensuing failure to establish a connection with and develop an interest for the selected literary texts can also be regarded as influential factors in their current negative attitudes and disengagement from the study of literature. In this sense, Kheladi (2013) also notes the following:

> Having an evaluative aspect, attitude is not static as it can be changed by marking the direct sources of negative attitudes and, therefore, improving them. This is the idea of Choy (2002) who reckons that factors like suitable materials, better teaching strategies and classroom supportive social environment may enormously help lessen negative attitudes.

Enter cloud-based animation platforms. Considering how altering Generation Z learners' digital nature is far out of the question, the remaining option for their teachers would be to readapt and cope with their learning preferences both in terms of pedagogical content and practices. Provided they are properly handled and exploited, CBAPs facilitate this by ensuring at least two, if not all of the above-cited factors which contribute to the reduction of negative attitudes. These platforms can also minimize the time spend on the clarification of literary concepts and language by introducing audio-visual context through animation, which would accelerate and promote a better understanding of such notions among contemporary learners of literature.

On the whole, considering the initially-described demanding nature of contemporary learners, the complexity of student engagement, and the currently-applied practices in teaching literature, it is logical to assume that although still beneficial to a considerable extent, the traditional modes of

instruction as far as literary studies are concerned can no longer keep pace with the digital nature of Generation Z, and that the prevailing methodology lacks a modern (technological) component.

2.13 A Matter of Compatibility: Technology in Coping with the Digital Natives

All the above considered, it is safe to deduce that the relationship between Generation Z's digital nativity and their currently reported unresponsiveness towards traditional modes of instruction and learning materials is of a causal nature. It is also important to understand that Generation Z learners' digital inclinations are not a controllable or reversible occurence, as supported and explained by Pardede (2020):

> on the one hand, on-screen reading habit provided by ICT has caused a reading crisis among Gen Zers, and it is very disadvantageous. On the other hand, technology use cannot be avoided because technology is necessary for us to connect to the whole world and to get certain information quickly. What is more, to Gen Zers it has been an extension of themselves. (Pardede, 2020)

As Dr Ray Clifford put it in 1983, "technology will not replace teachers, but teachers who do not use technology will be replaced by those who do" (Clifford, 1983, as cited in Piña, 2017). Though technology has, since many decades, infiltrated and earned its place within the domains of language teaching and learning, many teachers, especially veterans, still find it difficult or even threatening to disrupt the teaching methods that they have been accustomed to. This attitude is broadly referred to as "inertia" or "resistance to change", and stands as one of the strongest barriers that prevent these teachers from responding to the changing needs and interests of today's students. Millner (2008) illustrates this by declaring the following:

> …our job [, as literature teachers, is] to take digital natives -- teens saturated with images in video games and on YouTube -- and get them to strike up a relationship with pictureless chains of black print and focus on the decidedly internal rewards of classical literature. More and more, this mission feels like blind idealism. (Millner, 2008)

Jackson (2012) also emphasizes the gradual irrelevance of traditional instruction by stating that:

> The traditional "chalk and talk" method of teaching … is now acquiring inferior results when compared with the more modern and revolutionary teaching methods that are available for use in schools today. Greater student interaction is encouraged, the boundaries of authority are being broken down, and a focus on enjoyment over grades is emphasized. (Jackson, 2012)

It has been clearly established that modern students rarely read. Technology is often accused of altering their interests towards multimedia and audio-visual resources such as movies and all types of animation. Back in 1971, Neal Resnikoff made it known that:

> unless highly motivated by prior love of literature, many students become prematurely and even permanently turned away from literature by being forced to deal with Shakespeare or Tender is the Night. Teachers cannot … influence students for literature by telling them to endure being bored for a great length of time because they will gain enjoyment in the end; suppose the promises are unfulfilled?". (Resnikoff, 2012)

2.13.1 A Complement Rather than a Substitute

Denying the benefits and relevance of technological facilities in the educational context would most likely be pedagogically counterproductive, especially when contemplating the fact that "…information and communications technology has become nearly as essential as oxygen

when we consider how younger generations learn and the types of jobs they will have in the future. It is a part of their personal identities, and supports current learning because they can relate to it." (Kruse, n.d.). This being said, opting for fully technology-driven approaches while discarding the criteria and proven benefits of the already established ones would be equally counterproductive and would most likely further nourish the existing reading crisis among Generation Z learners, predominantly when textual disciplines such as literature are involved. Instead, what teachers could do to counteract Generation Z students' lack of reading and engagement is to achieve a balance between the traditional and modern methods as Wright (2016) argues: "as with most things, it's all about balance. We need to understand when a traditional method works best and when it's right to try new and innovative approaches" (Wright, 2016). In other words, it is however important to understand that "technology does not replace traditional learning approaches; it simply supports different learning approaches and is a part of modern teaching" (Kruse, n.d.).

2.14 Why Should We Bother? Reinforcing the Relevance of Literature in the 21st Century

From what has been discussed throughout the previous sections of this literature review, it is clearly inferable the current generation of learners ought to be dealt with more carefully than their predecessors. They visibly require special treatment through innovative measures when it comes to engaging them and sparking their interest towards literary studies. This being said, the growing controversy towards the practicality of studying and majoring in literature incites students and teachers alike to ask themselves the following questions: why should we bother? Is literature still relevant in the 21st century? Indeed, it only takes a few clicks and a quick look into the threads of famous forums and student platforms such as thestudentroom.com to see that many learners, and even teachers in some cases, have developed quite antagonistic perceptions and opinions towards literature as a discipline and a field of study. Some of these students, while answering freshmen

who were wandering whether specializing in literature would be worthwhile, often described it as “an absolutely pointless degree” and a complete waste of time, effort, and money. Conversely, multiple other respondents who seemed assured of its significance encouraged them to pursue this academic path without any second thought.

Several critics and thinkers have also been debating the importance of studying literature as a discipline in higher education across the past few decades. Some of them even went to the extent of qualifying it as “useless” and “futile” while some others still seem to consider it as a major constituent of any valuable education. Still, despite the animosity and the abundance of arguments presented by both its supporters and detractors, it still seems logical to assume that, in an EFL context, it can only be beneficial. Indeed, for learners who are not native speakers of English, the benefits of studying literary works in the target language and culture far outweigh its potential drawbacks. Hence, this section serves as a means of highlighting and reinforcing the importance of studying literature for higher education learners in the EFL context that Algeria constitutes.

2.14.1 Literature as a Catalyst for Foreign Language Learning & Proficiency

Among the plethora of benefits that can be harvested from the implementation a literary component into EFL curricula is its ability to facilitate and accelerate the acquisition of the target foreign language. In higher education for instance the variety of literary texts that literature students are exposed to throughout their lectures gives them the opportunity to examine the target language being used in different contexts and situations and for various purposes directly by its natives, which in turn facilitates their quest for proficiency and mastery of the target foreign language provided they are fully invested in the study of the texts in question. Therefore, literature should be regarded as a fundamental component by any foreign language institutions who truly seeks make it easier for its student to achieve foreign language learning and proficiency. Its

importance is further reinforced by El-Helou as he observes that in the light of the extent to which literature brims with "…precious human experiences and values, it should have a unique position in the language classroom curriculum" (El-Helou, 2010). The same source also emphasizes the fact that "…literature and language complement each other. Since language and literature are inseparable, their teaching should be complementary to each other".

2.14.2 Literature: A Stimulant for Intercultural Competence

Through the various forms that it takes, literature represents a chance for learners to transcend time and space and explore foreign cultures and environments directly through the words of the author. Equally, "Literature helps students understand and appreciate cultures and beliefs different from their own. (El-Helou,2010) which by extension promotes intercultural competence among them. Kramsch (1993) highlights the intertwined nature of literature and culture and provides a more extensive description of the exploratory aspect of literature as she declares that:

> By constructing with the literary text a reality different from that of texts of information, students are given access to a world of attitudes, and values, collective imaginings and historical frames of reference that constitute the memory of a people or speech community. Thus, literature and culture are inseparable. (Kramsch, 1993).

Keshta (2000) similarly believes literature to be "… a microcosm of an entire society, a little window that permits us to look into the cultural values, traditions, and lifestyles of people and as a person's word reflects character, literature reflects the unique character of a group of people who share a language" (Keshta, 2000, as cited in El-Hellou, 2010). Amer (2012) also firmly recognizes the role of literature in stimulating intercultural competence among learners as he argues:

> …exposure to literature stimulates learners to reflect on concepts, recognize real life problems, explore causes and solutions, and compare their values and life styles with other cultures. This can provide teachers and learners, in the language classroom, with an authentic and rich context for discussion about their cultural values and traditions in contrast with other cultures. This, in turn, may encourage learners to avoid ethnocentrism and develop intercultural competence. (Amer, 2012)

2.14.3 Literature as a Source of Authentic Reading Materials

Another noteworthy benefit of studying literature is the ability to do it by means of authentic literary texts. As far as EFL literary studies are concerned, the authenticity of these texts resides in the fact that they were initially written in the target language but not for the sake of being used in educational contexts, meaning they involve idioms and peculiar expressions that students are usually unfamiliar with and therefore provide them with the opportunity to significantly enlarge their vocabulary while polishing their reading skills. In addition to these benefits, learner autonomy is also promoted by such texts as suggested by Daskalovska and Dimova (2012):

> In a foreign language context reading authentic texts is one of the best options for language improvement. Therefore, offering learners opportunities to develop the necessary reading skills will equip them for autonomous and self-directed learning. In Barnett's words, 'authentic texts are vital; they motivate students, offer a real context, transmit the target language culture, and prepare students to read outside the classroom'. (Barnett, 1989, as cited in Daskalovska & Dimova, 2012)

The same source also draws attention to the important fact that:

> by discussing linguistic choices, syntactic structures, rhetorical organization, tone and so on, students are trained to think not only about what the text means but also how the meaning is achieved, which leads to 'a heightened awareness of how language can mean, how its resources can be exploited to express different perspectives on familiar reality'. (Widowson, 1992, as cited in Daskalovska & Dimova, 2012)

In relation to the above arguments, the same scholars also note that "reading authentic literary texts outside the classroom is highly desirable for foreign language learners" considering the extent to which "it increases the exposure to the target language, reveals unusual and unexpected uses of the language, stimulates language acquisition and provides a motivating and enjoyable way of learning the language". Ultimately, they reached the following conclusion:

> Using literary texts in the language classroom can make the students more aware of the language they are learning, help them develop skills and strategies they can apply in many different situations and contexts, increase their interest and motivation, and make the learning of the language a more enjoyable and worthwhile experience (Daskalovska & Dimova, 2012).

2.15 An Introduction to the Concept of Animation

A brief look at the lifelike and extremely realistic content that modern animation is able to produce makes it hard to believe that the concept of animation originally sprouted from the use of paper and cardboard, which gave birth to the very first forms of animation known as flipbook animation and paper cut animation. The term "animation" originates from the Latin "animātiō", which translates as the process of bringing something to life (definify.com). Computer animation consists of combining a number of images; also referred to as frames, for the sake of producing

what the viewer's eye would perceive as continuous motion. Britannica Encyclopedia defines it as a "form of animated graphics using computers that replaced both 'stop-motion' animation of scale-model puppets and hand-drawn animation of drawings" (Encyclopedia Britannica, n.d.) and describes its development as the product of an effort to lessen the labor and the costs of the previous forms of animation. IT experts at Techopedia.com also support this by declaring that "modern computer animation can achieve dazzling results with three-dimensional figures acting against a three-dimensional background." thus, revolutionizing the film industry by substantially decreasing the time and expenses required for building film sets, hiring actors, and acquiring the necessary objects and properties (Techopedia, 2017).

2.15.1 Common Types of Animation

Animation has evolved and taken many forms since the dawn of civilization. It's first form "… dates back to the ancient world. From the pottery of the ancient Greeks to the ocular toys of the seventeenth century to the computer-generated imagery (CGI) of the twenty-first century, animation has existed in many forms, evolving into the technological feat we see today" (Masterclass, 2021). Indeed, it has been practiced long before the dawn of the age of technology. This section does not trace back the history and development of animation, it rather explores and gives insight on the three most established and widely adopted forms of modern animation.

2.15.1.1 Traditional Animation

Commonly referred to as 2D animation, or cel animation, this procedure applies the classic concept of aligning a succession of hand-drawn images involving flat characters or objects onto static background environments to create motion, which has nowadays been drastically accelerated and simplified through the use of even moderate computers and free software such as Synfig and

Pencil 2D. This type of animation software allows users to produce simple yet efficient audio-visual content which is engaging and entertaining enough to be exploited for various presentational purposes. For instance, while reviewing the established types of animation styles, animation specialists at CreativeHumans.com argued that:

> 2D animation … doesn't need much of an explanation. It's used to create flat, 2D characters and environments. While this is one of the oldest animation styles, its flexibility makes it a prominent choice for a variety of applications, including cartoons, promotional videos, explainer videos, and more. In traditional animation, each frame was meticulously hand drawn, which can be very time-consuming. Today, animators have access to digital tools and techniques that help to streamline the 2D animation process. (Creative humans, 2021)

In other words, this particular type of animation, as argued by Nusair (2019), "… allows for the illusion of animated movement due to the frame-by-frame manipulation of drawings and illustrations" (Nusair, 2019). The same source also points out the fact that "although computer technology has assisted animators in their efforts over the years, the basic means by which an animated film comes to life has essentially remained the same—by drawing frames one by one".

2.15.1.2 Three-Dimensional Animation

Usually referred to as 3D animation or CGI, this technique represents a revolutionary and more sophisticated technology which allows for the creation of a highly realistic and lifelike content. It is mostly used in cinema and advertisement in order to reduce the budgets and risks involved in the performance of dangerous stunts by paid actors for instance, as well as traveling to specific environments and natural landscapes for the sake of filming and producing movie scenes. Unlike traditional animation, it is time-consuming and generally depends on the use of capable

computers and complex software such as Cinema 4D and Autodesk Maya, which are often overly costly for the average user. This type of animation also requires its users to be highly familiar with graphic software and possess an acute set of computer skills and graphic design aptitudes. Beegel (2017) provides a simplified explanation of what 3D animation consists of by stating:

> 3D animation is when computer generated objects appear to move through three-dimensional space. In 3D animation, objects can be moved and rotated following the same principles as in real life. Computer animation makes use of 3D computer graphics to create a two-dimensional moving picture that depicts three dimensions. 3D animation is used in industries as diverse as gaming and medicine, and they are commonly used for presentations and marketing across all industries. (Beegel, 2021)

It is rather evident that simple look at the above definition hints that this type of animation would be too costly and time-consuming if used for pedagogical purposes, which leads to the next type of animation and the main concern of this study: cloud-based animation.

2.16 Cloud-Based Animation Platforms

It is quite evident that this last decade has witnessed unparalleled advancements in most technology-related sectors, cloud-based technology included. This latter has grown to become the norm when it comes to accelerating and facilitating access to all sorts of software and services directly on the internet and via any given web browser. This bypasses the compatibility issues that usually emerge when personal computers fail to meet the hardware requirements that are specified by most software and circumvents the manual installation procedures which are generally time-consuming and often involve providing several complementary programs to ensure a proper functioning of the main one. Hence the use of the term “cloud-based”, which “is a broad term for

anything that involves the delivery of hosted services via the internet" (Marielle, 2022) and represents a technology that makes it possible for people to "…use programs and information that are stored on the internet rather than on… [their] own computer" (Collins Dictionary, n.d.).

The animation industry represents another sector that undertook paradigm-shifting changes thanks to the emergence of cloud-based technology. This latter transformed the notoriously difficult task of producing audio-visual content into a matter of a few clicks on any given cloud-based animation platform, which represents a quicker and a more user-friendly alternative to the established animation software. These platforms are essentially websites that emerged thanks to the digitalization and computerization of traditional animation and its ensuing transition towards a purely online or cloud-based existence, i.e., via remotely hosted websites and online platforms. These latter represent an ever better and easier counterpart to installable animation software, as they allow their wielders to create quality content directly on the platform regardless of their editing skills by providing them with an abundant database of pre-drawn resources and templates suitable for all manners of scenarios and purposes, pedagogical ones included.

2.16.1 Instances of Cloud-Based Animation Platforms

Saying that cloud-based technology improved traditional animation procedures would be an understatement. In fact, the rise of the earliest established online animation platforms and their purely online existence marked a turning point for the animation industry, which consequently gave birth to a plethora of cloud-based animation platforms each of which gradually introduced its own innovative features and narrowed the gap that separated them from achieving similar results as the ones obtained via the leading figures of conventional computer animation software. This section takes a look at a few selected instances of today's most stable and user-friendly cloud-based animation platforms based on efficiency and potential applicability in educational contexts.

2.16.1.1 Vyond Studio: The Leading Figure

Vyond is undoubtedly one of the most exhaustive and well-established cloud-based animation platforms available on the internet. The distinct features and the variety and abundant supply of quality tools and resources offered by this platform make it nearly unrivaled as far as online animation is concerned. This same exhaustiveness allows it to be compatible with and profitable in any presentational or motivational endeavor, particularly in teaching, as its creators argue on the official website that "Vyond enables eLearning professionals to create relevant, engaging videos that hold the attention of today's overloaded and distracted stakeholders", while emphasizing the fact that "today's learners need more than printouts and PowerPoint presentations. They need active, multimodal, and dynamic content that keeps them engaged. And the medium to use is video" (Vyond, 2022). Although this declaration might be promotional in nature, it still perfectly highlights the digital nature of contemporary learners, namely Generation Z and their successors. Another relevant argument provided by the designers of Vyond is the simple fact that "today's learners need more than printouts and PowerPoint presentations. They need active, multimodal, and dynamic content that keeps them engaged. And the medium to use is video". In the same sense, these creators firmly believe that "video content gives learners the freedom to learn whenever they want and at their own pace" and that this specific type of content is "without a doubt … an impressive catalyst for engagement in training and eLearning… as studies have shown that adding video to … [any] content can improve the [learner's] ability to remember concepts and details, with effects that even increase over time". This can only be beneficial in coping with Generation Z learners' inattentiveness or shorter attention spans, which is another typical quirk that Vyond's founders seem to be well aware as they argue: "driven by an always-on mobile

culture, learners today have an instant-gratification mindset and are easily distracted. This means every second counts when fighting for attention, focus, and retention" (Vyond, 2022).

Additionally, Vyond's designers invite all sorts of instructors to "allow… [their students] to see the world through the eyes of accessible characters that evoke familiarity and belonging" instead of merely lecturing them. These designers also ensure a full customizability of content as well as external additions while addressing these teachers as follows:

> You have complete creative control over your Vyond training and eLearning videos. We provide thousands of colors, characters, and movements that allow you to make your content unique to every situation. You can also Import music, images, sound effects, and even other video files to add depth and drive engagement. (Vyond, 2022)

In the same sense they also let these teachers and their potential customers know that "with Vyond, …[they] can also create custom characters and add dialogue, lip-sync, and realistic movements to speed learners' immersion in the content" (Vyond, 2022).

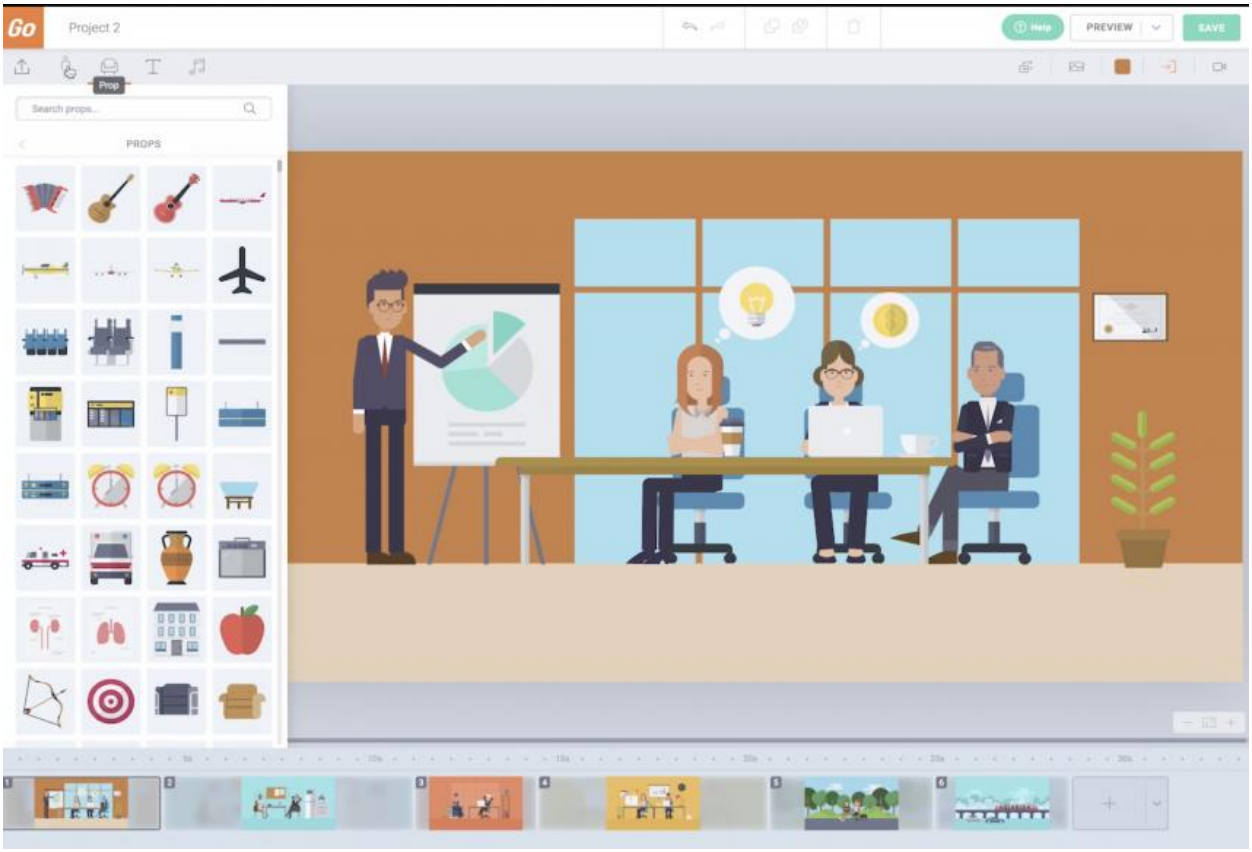
Overall, the efficiency and universality of Vyond as an online animation platform are seemingly guaranteed by its creators as they confidently claim that it "puts the power of video in the hands of everyone, allowing people of all skill levels and in all industries to create dynamic and powerful media.". They also pledge that it allows its users to "promote, present, train, explain, … entertain [, and] create detailed animated videos in a matter of minutes with… |Vyond's] quick and easy web video tools", and "… to create complex, customizable characters [as they] make memorable videos for fun, school or work without having to film, program, or draw" (Vyond, 2022). Naturally, all the above is built upon the recently established fact that:

> learning through video, or video-based learning is effective because it can supplement or entirely substitute traditional learning methods. The key is attention-grabbing media that leads to multimodal learning and therefore higher retention. Ultimately, interactive and engaging videos are valuable tools to improve the effectiveness of eLearning [and even traditional face-to-face] courses. (Vyond, 2022)

This is particularly relevant with Generation Z, their shorter attention spans, their tendency to disengage during traditionally-orchestrated lectures, and their inability to retain concepts that they can barely relate to or simply perceive as boring and outmoded. Accordingly, video-based learning has the potential to achieve balance with said generation as it "… is a type of eLearning that mainly consists of short videos" and whose "…benefits include increased engagement and retention while reducing cognitive fatigue" (Vyond, 2022).

Figure 5

Vyond's Multipurpose Story Creation Templates & Props



Note. A screenshot of Vyond's (previously known as GoAnimate) scene creation interface provided by Roux (2020) on videoivy.com and edited to fit this paper's size and proportions.

2.16.1.2 Doodly: The Epitome of Whiteboard Animation

On its official website, Doodly is presented as one of the easiest and most user-friendly animation platforms, as argued by its creators: "Doodly is the first and only doodle video creation software to allow anyone, regardless of technical or design skills to create professional, realistic doodle videos in minutes" (doodly.com). They also claim that this animation platform is the perfect choice for all kinds of activities and professions, including teaching, as they argue that:

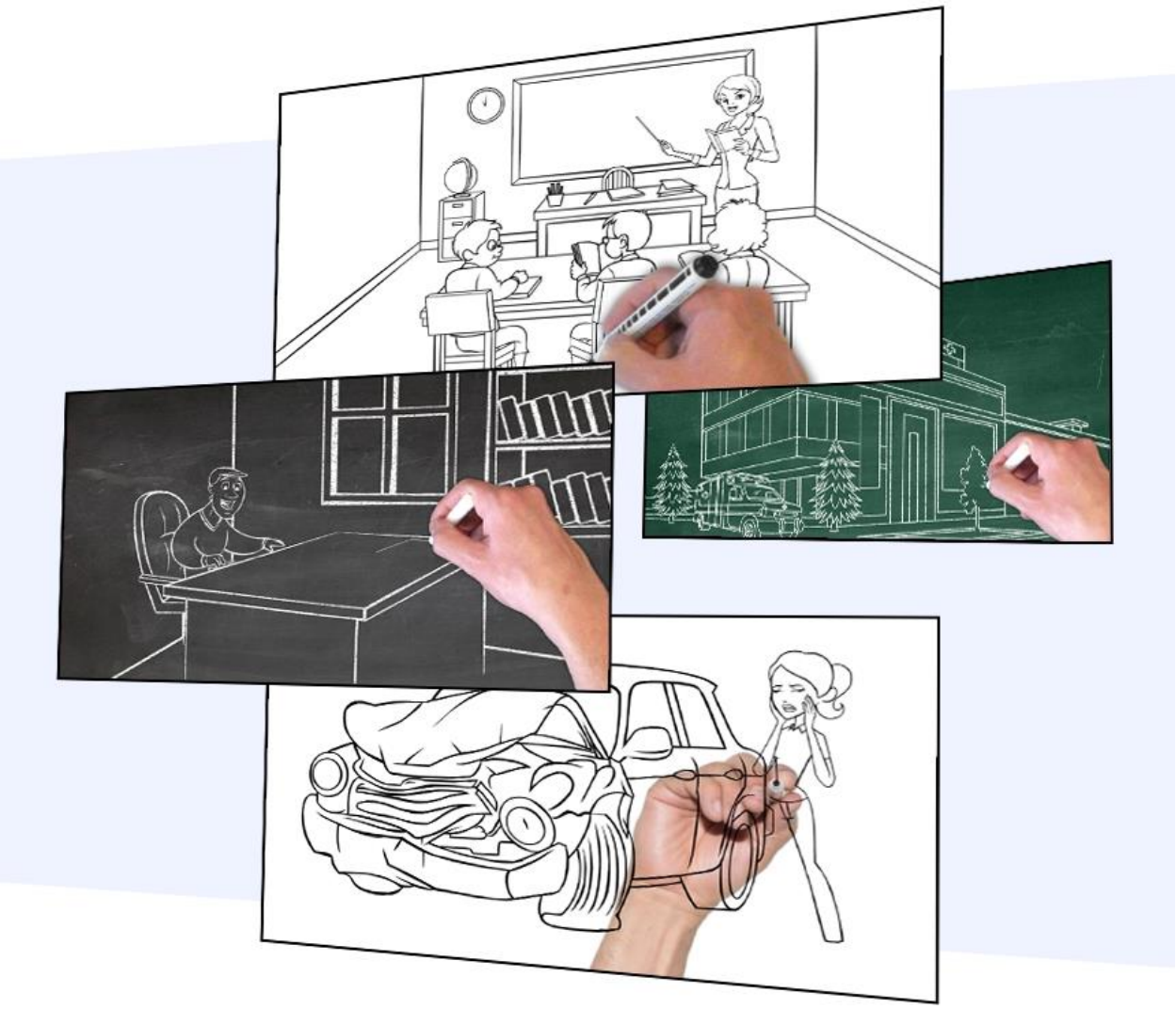
> by adding a visual representation of what you're teaching, via a doodle sketch video, you'll find that your presentations will not only be much more engaging, but your viewers will retain more of what you're teaching because they're not only listening and reading, but they are also able to learn by watching. By using all 3 modalities at once, the end result is exponentially better for everyone involved. (Doodly.com)

And since a better retention of information and a higher academic engagement are the exact same qualities that teachers are nowadays struggling to instill within Generation Z learners, this makes Doodly a perfect match and a valuable asset for the instructors who would like to readapt their lessons and delivery methods to better cope with the digital nature of said generation.

Through the 4 types of animation shown on figure 5, Doodly makes it possible for its users to retaliate against the above-mentioned issue by providing them with thousands of pre-drawn vectors and templates of all kinds of characters, scenes, and objects and grant them motion regardless of the user's lack of skillfulness in computer skills, drawing, or animation. Depending on the selected subscription plan, which comes in exchange for a monthly subscription fee, Doodly also grants its users an exclusive access to additional features and an abundance of fonts and royalty-free (already paid for) music tracks and sound effects to choose from in order to further embellish and amplify the quality and applicability of the resulting animated content.

Figure 6

The 4 Types of Animation Allowed by Doodly



Note. A screenshot taken directly from Doodly.com showing examples of the 4 types of animation allowed by the platform; namely, whiteboard, blackboard, glassboard, and green screen animation.

2.16.1.3 Animaker: An Equally Efficient & Low-Cost Substitute

Voted as the 4th best design product in the world (Animaker, n.d.), Animaker has established itself as one of the most efficient yet user-friendly DIY online animation platforms. Its name is quite self-explanatory, as it merges between the two key terms “animation” and “maker”. Similar to most could-based animation platforms, Animaker makes it possible for its users to create animated videos by means of pre-built characters, templates, props, and scenes. As far as education is involved, Rogowski (2019) describes this platform as a valuable companion for:

> …creating and assigning a variety of animated media and presentations. Users can create videos (traditional, vertical, and video-infographic), infographics, posters, presentations, and voice-to-text presentations. Easily editable templates guide creation, enabling users to take what's there and modify it according to the assignment. It's also possible to start from scratch (though that'll be more time-consuming). Teachers can assign work and send files and messages to individuals, groups, or entire classes. (Rogowski, 2019)

This same reviewer goes further and reinforces this animation platform’s applicability and efficiency in pedagogical contexts as she argues that “for teachers, Animaker would make a great utility for crafting customized classroom content that engages students as they learn -- especially if teachers personalize the content to reflect their classes”. She also provides a good example of its various pedagogical applications as she proposes that “a teacher could create an infographic about a topic, like the core principles of digital citizenship, and use a screen-casting tool like Loom to record an accompanying video for… [their] traditional or flipped classroom” (Rogowski, 2019).

Through the various types of animation that it provides, mainly 2D and live-action animation, Animaker stands, as described by its creators, as “the ultimate classroom solution to build and tell

stories anyone can understand" by virtue of its "super powerful character builder" which "comes pre-loaded with hundreds of pre-built characters" and is "so diverse… [that its users] can create billions of unique characters", allowing them, after a quick familiarization with its basic features, to "make super appealing onboarding, orientation, and compliance videos" instantaneously and without the usual "… need to depend on professional video creators anymore" (Animaker, n.d.). While reviewing this animation platform, Rogowski (2019) also points out these assets and projects them onto the educational context as she clarifies:

> because of its versatility, there are so many ways teachers can enhance student learning with Animaker. It facilitates creative learning that encourages creativity, collaboration, making media, storytelling, and STEAM concepts. However, because it offers a lot of possibilities -- each with their own learning curve -- students will have to spend some time figuring out how to create the different types of content. But with this process come opportunities for skill building, and, more importantly, investing in these learning experiences can pay off over a year as students return to Animaker to demonstrate their learning and craft presentations. (Rogowski, 2019)

Another noteworthy asset ensured by Animaker is the fact that gives access to a series of interconnected complementary platforms and content creation tools such as Gif Maker, Screen Recorder, and Photo Editor, whose content can be used interchangeably to further customize and bolster the one produced on the main platform. For instance, "with Animaker Voice Generator… [users] can create human-like voices from the text for all of… [their] videos" (Animaker, n.d.) which would be quite useful in a storytelling scenario where the teacher or the learner is not willing to add his or her own voice into the project. Overall, Animaker could prove to be an indispensable

companion for teachers who struggle to motivate and engage their students towards a given subject matter, especially if they usually perceive this latter as boring and monotonous.

Figure 7

Animaker's Creational Interface

Note. A screenshot displaying Animaker's character creation interface provided by M. Rogowski (2019) from Common Sense Education as part of her review of the platform. The image has been edited and resized to fit this paper's size and proportions.

2.16.1.4 PowToon Studio: A Cost-Effective Alternative

PowToon represents one of the most economical and pedagogically suitable animation facilitation software. It has established itself as a "web-based animation software that allows… [its users] to quickly and easily create animated presentations… by manipulating pre-created objects, imported images, provided music and user created voice-overs" (Mersand, 2014). Education-wise, this web-based animation platform "… has the potential to be a powerful animated presentation tool. Whether teacher- or student-created presentations are the plan, the slide-based format allows presenters some control over how they present their information" (Rogowski, 2018). By virtue of the myriad of resources and the thousands of templates that it provides access to, its users are empowered to "create diverse characters [and] customize hair, clothing, and animated gestures to represent everyone in… [their] audience"; which reinforces its multipurpose nature and its relevance across multiple domains and sectors of activity, including education teachers of different disciplines are, based on the review provided by Rogowski (2018), enabled to "liven up… [their] own instruction and grab students' attention by creating animations on an unlimited number of topics -- perhaps including some fun stickers, backgrounds, and borders to keep viewers engaged" (Rogowski, 2018). This same source also considers that "while many of PowToon's resources and tutorials focus on business and marketing presentations, the ability to spice up the traditional slideshow presentation enhances its potential as a classroom tool" for teachers and students alike, and that consequently, "students can become teachers, and teachers can increase their tech cred with students by moving beyond the slideshow". After a critical examination of its various features, she also notes that in case teachers would be willing to encourage their students to take advantage of this specific platform, "… [they] should be prepared to spend a class period or two letting… [them] figure out how to use PowToon and its many features, and it will help if teachers

know something about the tool in order to guide students". This being said, the accessibility and user-friendliness of these platforms generally allow for a quick understanding of the way they function. The only prerequisite is usually the subscription and account creation procedure. In the case of PowToon for instance, Rogowski (2018) explains this as follows:

> Once signed in on the website or Chrome app, users can design presentations using ready-made templates or start from scratch. Both options allow users to add text, images, simple animations, short videos, stickers, transition effects, borders, and more. Users can search for images and videos on PowToon, or they can upload or import their own. Free, Basic, and Elite versions come with different customization options and time limits. (Rogowski, 2018)

She also reports that after finalizing the project and polishing the final details of the content they created on PowToon, "users have several sharing options: download presentations as PowerPoint, PDF, or MP4 (Basic and Elite) files; upload or share to a variety of social media platforms; email or embed presentations", as they can also "send to the teacher account for review; or keep them in their personal PowToon dashboard" for future modifications. She also mentions that "other features, such as professional voice-over narration, are available for a fee" (Rogowski, 2018).

As hinted above, PowToon is initially free, but still proposes additional membership plans that give access to premium features, templates, and resources which help the most demanding of its users in reaching their desired outcomes. It also proposes a special offer for teachers, namely the PowToon EDU package, which gives an unlimited access to "easy-to-use" content in exchange for a symbolic annual subscription fee and allows them to "choose from a huge selection of school-friendly footage, scenes, animations, characters, fonts, and music to create videos and presentations that keep… [their] students on the edge of their seats" (PowToon, n.d.) as claimed

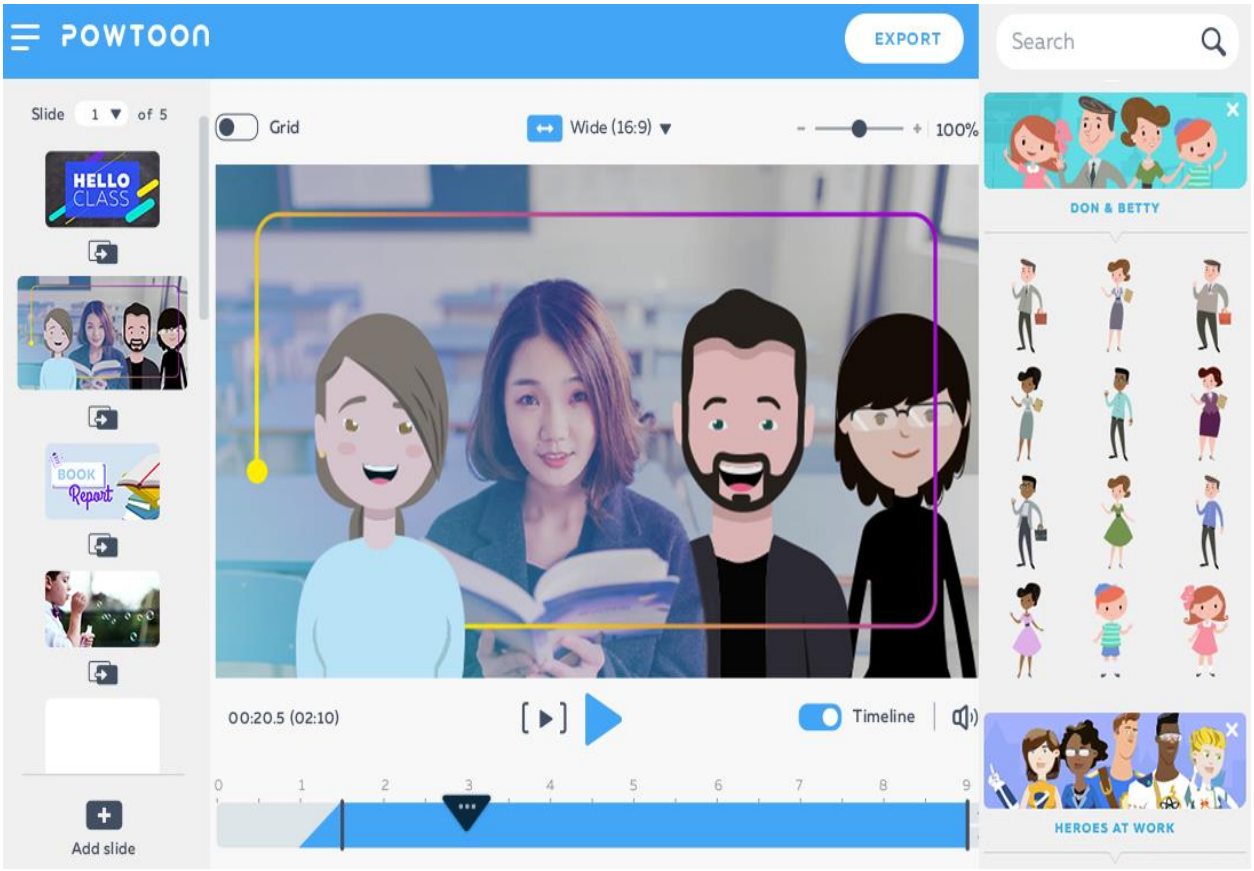
by its creators. This same pack also makes it possible for these teachers to extend their access to either 60 or 90 of their students depending on the selected subscription plan by means of a single yearly membership and across the same account while granting its owner full supervision and sharing capabilities, in addition to a 24/7 guaranteed priority support, and live access to webinars, training centers and tutorials. Finally, the designing team ensures a full compatibility of the platform and the possibility to coordinate with trusted partners, namely video platforms, electronic presentation software and classroom management tools such as "…Google Classroom, SlideShare, PowerPoint, Wistia, Facebook, Instagram, and YouTube" (PowToon, n.d.).

Overall, PowToon has for long been a valuable asset for "… companies, Ivy League universities, leading… [small to medium-sized businesses], agencies, and entrepreneurs" according to the statistics presented on its Google Workspace Marketplace page (PowToon, n.d.). It "…empowers everyone to create professional-looking videos and presentations with endless versatility and an intuitive drag-and-drop interface". As far as education is concerned, it allows teachers to "create short videos for courses, virtual lectures, or introductions, and turn complex subjects into engaging learning materials". Ultimately, it represents a means for teachers to "… seamlessly engage students, … [and] replace old-school slides with visual learning experiences that make a lasting impact" (PowToon, n.d.), which has become a necessity in the management of today's inattentive and academically disengaged generation of learners considering how this platform allows for creativity and flexibility, as "teachers and students alike are able to creatively express their message to the intended audience with no previous experience in animation" while "even with the library of pre-created objects, the ability to import images and music, add text and create voiceovers…" is still included and entails that PowToon can be exploited across a wide variety of academic disciplines and purposes (Mersand, 2014).

Conclusively, teachers who struggle to keep their students engaged and interested in what they have to offer might find PowToon to be "… the answer to boring, text filled presentations that lose audience attention after just a few slides. With the ability to create voiceovers, add text, images, characters, props and music, users are able to create engaging, entertaining, professional quality animations. Students will be excited to express themselves in new ways, and teachers will reach more students" (Mersand, 2014). For teachers who are willing make a change, this platform could prove suitable for creating Generation Z-friendly content and turning dull and monotonous lectures into interactive and engaging exchanges with the students.

Figure 8

A Screenshot of PowToon's Character Creation Interface



Note. A screenshot provided by the PowToon app's official page on Google Workspace Marketplace. It gives an idea on the types of animation allowed by the platform and shows a glimpse of this latte's character creation interface. The image has been resized and edited to conform with this paper's size and proportions.

2.16.2 Advantages, Shared Features, & Potential Barriers

In brief, depending on the selected membership, the above-reviewed cloud-based animation platforms share a considerable number of benefits and similar features. For instance, the versatile nature and the abundance of pre-drawn resources offered by these platforms ensure their quality as perhaps the best tools for presentational and motivational purposes, which by extension makes them invaluable pedagogical instruments for the instruction of almost any discipline. This is further amplified by the ability to import and embed external resources into the content created directly on the platform, hence, promoting creativity and allowing r users to further personalize the resulting audio-visual materials. Another distinguished feature which is particularly relevant to literary studies and is enabled by virtue of the ability to import external resources is voice addition. This latter can ensure the preservation of the narrative aspect of literature while simultaneously making the experience more enjoyable for learners by means of animation. An additional feature which further supports voice addition is automatic lip-syncing. This latter makes it possible for the animated characters to synchronize the movement of their lips in function of the narrated lines for a more realistic touch, which can only be appreciated by the digital natives.

One the most notable and beneficial aspects of using cloud-based animation platforms resides in their simplicity. Their ergonomic interfaces and self-explanatory features, in addition to the tutorials provided on each and every single one of these platforms makes them exploitable even for the least technically-gifted teachers. In addition to this, the cloud-based nature and online existence of these platforms multiplies their practicality by allowing users to access them directly on their web browsers and without the need to provide any expensive hardware and sophisticated software, which is usually the basis of conventional animation and video-creation procedures. Hence, the whole process is simplified for the users who would like to take advantage of these

platforms for pedagogical purposes, allowing teachers of literature for instance to ensure relevant quality materials which would promote a better retention of information among learners by serving as a more engaging substitute and a visual context to the usual blocks of inanimate text and intricate literary language that they often complain from and fail to develop an interest for, particularly contemporary ones.

In consideration of the above and despite their simple nature, taking full advantage of cloud-based animation platforms still entails a number of challenges and potential barriers. For instance, a proper use of these platforms will not be possible unless a decently fair level of digital literacy is ensured. In the same sense, a full familiarization with the multitude of features provided by these platforms will not take place unless several navigations and attempts have been made across them, which evidently still entails a basic knowledge of how web pages and online navigation function (clicking, scrolling, dragging and dropping). The cloud-based nature of these platforms makes it equally important to mention another prerequisite for the proper exploitation of these platforms; a stable internet connection, which is not the best quality of the local ISP here in Algeria. This being said, having frequent disconnections does not imply losing progress across these platforms as most of them include an auto-saving feature or simply allow for further modification even when disconnected provided the user is not navigating through templates, which are hosted online. The last and potentially most discouraging barrier that users might come across when considering CBAPs is the monthly subscription fees, which range from 25$ to 83$ in the cast of Vyond for instance and depending on the selected membership. Accordingly, cost-effective and almost equally efficient alternatives such as PowToon and Animaker do offer free limited memberships that still allow for the creation of relevant quality materials provided they are well-handled.

Chapter III: Methods & Procedures

3.1 Introduction

The abstract nature of this study's variables imposes the selection of a compatible research design and adequate data collection and analysis methods. This section provides an overview of the fundamental components relevant to and the modus operandi adopted by this research.

3.2 The Research Design

Descriptive in nature, this study is built upon an explanatory sequential mixed-methods design in which "… the quantitative phase of data collection and analysis follows the qualitative phase of data collection and analysis" (Fetters, Curry, & Creswell, 2013, as cited in Shiyanbola et al., 2021) and serves as a numerical confirmation of the observed phenomenon. Mixed method approaches are known for providing "… opportunities to study contextual factors such as culture, perceptions, beliefs qualitatively and develop quantitative measures" (Shiyanbola, 2021) which is particularly relevant to the context and aims of this study. Considering how the data has been collected from different sources and via distinct approaches whose qualitative and quantitative results happen to be both complementary and convergent with one another, the use of the term "triangulation" has been discarded from this section due to the simple fact that this latter reportedly "…has multiple meanings and lacks sufficient clarity and precision" (Fetters & Molina-Azorin, 2017, as cited in Morgan, 2019). The safest alternative would be to describe how this research rotates, not to say triangulates, between multiple data sources and data collection and analysis methods for the sake of confirming the results from various perspectives and reducing research bias.

It is equally important to mention that this research takes the form of a descriptive and partially analytical cross-sectional study, which is defined as "…a type of observational study

design" in which "…the investigator measures the outcome and the exposures in the study participants at the same time" and the participants are "… selected based on the inclusion and exclusion criteria set for the study" (Setia, 2016). In other words, "cross-sectional studies are observational in nature and are known as descriptive research" involving participants who are "selected based on particular variables of interest" and researchers who examine the "… prevailing characteristics in a given population" without the ability to manipulate variables (Cherry, 2022). Unlike longitudinal studies, which generally follow the exact same participants over an extended period of time, cross-sectional studies involve new participants with each study and evaluates the target variables at a single point in time. Another noteworthy fact mentioned by the same source is that "while this type of study cannot demonstrate cause and effect, it can [still] provide a quick look at correlations that may exist at a particular point", which is basically what the initial phase of this research represents, as it correlates the participants' behavioral patterns and lack of engagement towards literature and the way it is taught with their digital nature and belonging to the generational cohort known as "Generation Z". "Multiple variables and outcomes can be researched and compared at once" as "researchers are able to look at numerous characteristics (i.e.: age, gender, ethnicity, education level) in one study. "The data can be a starting point for future research" as "the information obtained from cross-sectional studies enables researchers to conduct further data analyses to explore any causal relationships in more depth." (Simkus, 2021)

This study comprises two major stages. Through a sequential mixed-methods design, the first stage, which represents the observational phase of this study, investigates the extent to which the studied groups of Algerian literature learners adhere to the generational demographic known as "Generation Z" in terms of behavioral patterns and generic standpoint towards the study of

literature and the manner in which it is taught. It also evaluates these latter's levels of behavioral, cognitive, and affective engagement towards the discipline in question by means of a structured, naturalistic, and overt non-participant observation followed by the distribution of a structured Likert scale student questionnaire across multiple sessions and groups of learners scattered over a duration of three weeks. Despite the overt aspect of the observation, it is important to specify that the participating learners were not given any details concerning the nature of the research, the motive behind the researcher's presence, or the examined variables in an effort to reduce the risk of influencing their behavior. The second phase of this study consists of the deployment of an online structured Likert scale questionnaire involving several internal and external teachers of literature for the sake of amplifying the initial results and confirming them from another perspective for the sake of increasing the credibility and generalizability of this study's findings.

3.3 The Participants

For the sake of increasing the credibility and generalizability of its findings, this study has chosen to collect data from students and teachers alike. This section provides more details on the participants that have been involved into this research.

3.3.1 Sample Groups of Generation Z Students of Literature

As implied by the main title, this study primarily examines students who are members of Generation Z, whose age ranges from 19 to 25, and who happen to be the primary constituent of today's higher education in Algeria. Still, the selected age spectrum involves an overly extensive number of participants, which is why four sample groups of Algerian EFL literature learners have been selected regardless of their level and gender. Upon a thorough investigation of schedule and availability, two groups of bachelor's students, in addition to two other groups of Masters students

were nominated for the deployment of the study. The former were examined throughout a general literature session whereas the latter were studied while having a lecture in comparative literature.

3.3.2 Internal & External Teachers of EFL Literature

For the sake of providing additional perspectives on the observed variables, a total number of 10 teachers of literature were invited to testify and share their viewpoints on their pedagogical practices and the current generation of higher education learners. Some of these latter are part of the teaching staff within the target department while the others are external teachers who have been involved for the sake of widening the scope of the study and ensuring the generalizability of this study's findings and conclusions. Their testimony can also be regarded as a means of paving the way and building a premise for the introduction of cloud-based animation platforms as a pedagogical complement for coping with the digital nature of Generation Z students.

3.4 Instrumentation & Data Collection Methods

Both qualitative and quantitative data collection instruments were exploited throughout the two phases of this study. A research instrument represents a tool used by researchers to collect, assess, and analyze data related to a set of predefined variables and research interests. This section serves as a detailed review of all the research tools that were adopted throughout the data collection and analysis procedures upon which this paper builds its conclusions.

3.4.1 The Observational Phase

As previously alluded to, the initial problem identification and confirmation stage of this study takes the form of a structured and naturalistic observation. "Structured observation is a qualitative research methodology that has been used by the social sciences for several years. It is a methodology in which an event or series of events is observed in its natural setting and recorded

by an independent researcher" (Glazier, 1985). Its naturalistic aspect resides in the fact that the target population is observed in its natural environment, i.e., inside a classroom within a higher education institution and during a lecture centered around literature. It is also overt and non-participant. The former attribute implies that the participants were aware of the fact that they were being monitored while the latter "… involves observing participants without actively participating. This option is used to understand a phenomenon by entering the community or social system involved, while staying separate from the activities being observed" (Macfarlan, 2020). It should also be noted that despite the overt aspect of this observation, the participants were not briefed on the nature of the research and the variables that were being monitored by the researcher, which was done for the sake of minimizing any potential change of behavior that their awareness of such details might induce. Overall, in a structured observation, a total of three fundamental guidelines has to be respected, i.e., "researchers (a) select which behaviors are of interest and which are not, (b) clearly define the characteristics of each behavior so that observers all agree on the classification, and (c) note the occurrence and frequency of these targeted behaviors in the situation under analysis" (APA, n.d.). As far as behavioral engagement is concerned, these guidelines are respected and ensured to a great extent by the data collection method selected for this initial stage as demonstrated through the below-described behavioral engagement observation tool.

3.4.1.1 The Behavioral Engagement Observation Tool

In an attempt to evaluate the levels of behavioral engagement displayed by the target participants, the observation phase of this study relied on a behavioral engagement observation tool inspired and readapted from a relevant doctoral dissertation (Grove, 2019). As shown on appendix (A), this tool makes it possible to report students' on-task and off-task behaviors as the lecture progresses. It pays particular attention to positive demeanors such as listening, asking

questions, and notetaking, in addition to negative ones such as daydreaming, sleeping, skipping class, chatting, and other disruptive behaviors. However, simultaneously observing and recording such behaviors within a classroom of twenty-five or more students goes far beyond the capabilities of a single observer, no matter how attentive he or she might be. Consequently, the selected observation tool has been readapted to shed light on selected specimens from the front, middle and back row of each examined sample group, thus, expanding the study across the whole room while still sustaining the feasibility and diversification of the results. The observed participants are ordered horizontally and assigned an alphabetical letter from left to right (A, B, C, D) for the sake of anonymity. The selected tool also includes a second optional middle row section in case the other rows fail to bestow the minimal requirements in terms of number of participants.

3.4.2 The Student Questionnaire

Unlike behavioral engagement, cognitive and emotional engagement were measured by means of a reconditioned version of the student course engagement questionnaire due to their impalpable nature. As shown on appendix (B), the used SCEQ involves a total of thirteen assertions; which include behaviors, thoughts, and feelings upon which students commented by means of five Likert-type scale responses ranging from 1 (not at all characteristic of me) to 5 (very characteristic of me). The questionnaire also incorporates additional items aimed at investigating students' reading habits, technology usage, perception of the studied subject, and the way they are usually taught literature. For the sake of transparency, the survey collected anonymous responses. The only personal information the participants are asked to provide within the questionnaire are their group and age. This latter was requested to confirm their adherence to the generational demographic known as "generation Z".

3.4.3 The Online Teacher Questionnaire

Similar to the student questionnaire, the teacher questionnaire adopts a Likert-type scale answering format with the exception that this one proposes a standard level of agreement scale ranging from “strongly disagree” to “strongly agree” with a neutral option in between. The more flagrant difference however would be the fact that this questionnaire unlike the former one is cloud-based. It has been produced on Google Forms considering how it initially aimed at involving internal and external teachers of literature who are easier to reach online than in-person. As shown on appendix (C), this questionnaire is composed of a total of 10 statements oriented towards the participants usual modes of instruction, their perception of technological supplementation and video creation, and their students’ attitudes and engagement towards the study of literature. The purpose behind the deployment of this questionnaire is two-fold as it was meant both to amplify the results of the initial stage and to build a premise for the introduction of cloud-based animation platforms as a means of counteracting the observed phenomena. It is also important to mention that the hosting platforms proposed a feature that collects the participants’ email addresses, which was enabled in an attempt to increase the transparency and credibility of the obtained results.

3.5 The Procedure

Following the obtention of the administration’s approval, the field study of this research paper was deployed upon the department of English within Hassiba Benbouali’s University of Chlef. It solicited the cooperation of two literature instructors, each of whom was in charge of one undergraduate and one masters group of learners, amassing a total of four sample groups of approximately twenty specimens for the investigation, two of which were enrolled within the course of general literature (BA) while the other two specialized in comparative literature (MA).

Upon agreeing to cooperate, the volunteering instructors allowed the researcher to attend their lectures as a passive observer. This latter sat at the back of the room; often one or two rows in the middle behind the back benchers of the group, for a wider view of the room. Then, using the behavioral engagement observation tool, he observed the selected specimens across fractions of five to ten minutes throughout a two-hour long lecture while reporting the students' on-task and off-task behavior in relation to the task performed by their teacher.

The volunteering teachers also initially agreed to spare the last ten minutes of their sessions for the distribution and completion of the questionnaire. This latter was consequently administered to the students by the researcher right before the lecture reached its conclusion following the completion of the observational phase. However, unlike the behavioral engagement observation tool, this questionnaire did not limit the number of its respondents to the front, middle and back row students. It rather sought and collected the testimony of the whole group by virtue of its feasibility and convenience to allow for the diversity and generalization of the final results.

Chapter IV: Results & Data Analysis

4.1 Introduction

After an eventful observational phase and a thorough examination of the results collected via all three data collection methods, namely the behavioral engagement observation tool and both the teacher and student questionnaires, this study came across a number of thought-provoking occurrences and declarations among the involved participants. This section reviews the main findings and implications that can be drawn from the collected data.

4.2 The Results of the Behavioral Engagement Observation Tool

As initially anticipated, the first ten to fifteen minutes of each session were spent in a somewhat positive learning atmosphere characterized by students' undivided attention towards their teachers and what they had to offer, predominantly from the front and middle rows. Active participation and note-taking were also at their peak, with little to no sign of disruptive behaviors shown by students. These latter, at the exception of a few specimens at the furthest back, were quietly listening, responding to questions, sharing ideas, and reading when prompted. However, past the fifteen minutes point, disinterest and indifference began to be more and more palpable across the back half of the classroom. Although the two front rows seemed to sustain their attention forward for slightly longer, a gradual manifestation of detached behaviors was witnessed predominantly among students sitting at the middle and the back rows. This is also amplified by the fact that the middle and back rows are mostly occupied by latecomers and often undedicated students whereas the front ones are initially taken by the hardworking students.

Sitting at the far back of the classroom has allowed the researcher to detect a number of quite unusual behavioral patterns. Indeed, past half an hour to forty minutes, the majority of students started displaying severely irrelevant and often disruptive demeanor. Laughing and discussing

unrelated topics became more frequent, even at the front rows. The students who were occupying the side seats and who happened to be adjacent to the windows were occasionally caught looking outside and contemplating the surrounding environment for several consecutive minutes. The male students sitting at the back were either sleeping, doodling, or chatting emphatically. Some of them were even seen clipping their fingernails and passing the nail clippers to their classmates. Meals and snacks were also shared between the tables. The female students who sat at the back were no exception. Some of these latter were spotted watching YouTube videos, communicating on social media platforms, taking selfies, fixing their scarves, and even renewing their makeup on several occasions. Notetaking took a halt among most of these students while a few of them still maneuvered their pens on paper pretending to be noting down what their teachers were explaining and dictating in an effort to avoid showing blatant signs of disinterest.

Although the gender factor has been discarded from this study, it is worth noting that the female participants, particularly the ones sitting at the middle and back rows, have proved to be substantially more prone to specific behavioral patterns such as smartphone usage, social media consultation, and self-examination by means of taking selfies compared to their male counterparts who instead frequently displayed slightly more technologically-detached demeanors such as doodling, daydreaming, or simply sleeping. Another noteworthy detail is that the studied groups which involved a considerably lower number of students performed significantly better than their counterparts in terms of sustained attention and general conduct with little to no disruptive behavior. This is visibly due to the fact that a less crowded group is evidently more manageable and usually incites its students to occupy the frontmost seats, which makes them more exposed and less prone to exhibit disruptive behavior in plain sight. This being said, these same students

still manifested obvious signs of indifference and disengagement past a certain point across the session despite the fact that it took place in a quieter and significantly less disruptive fashion.

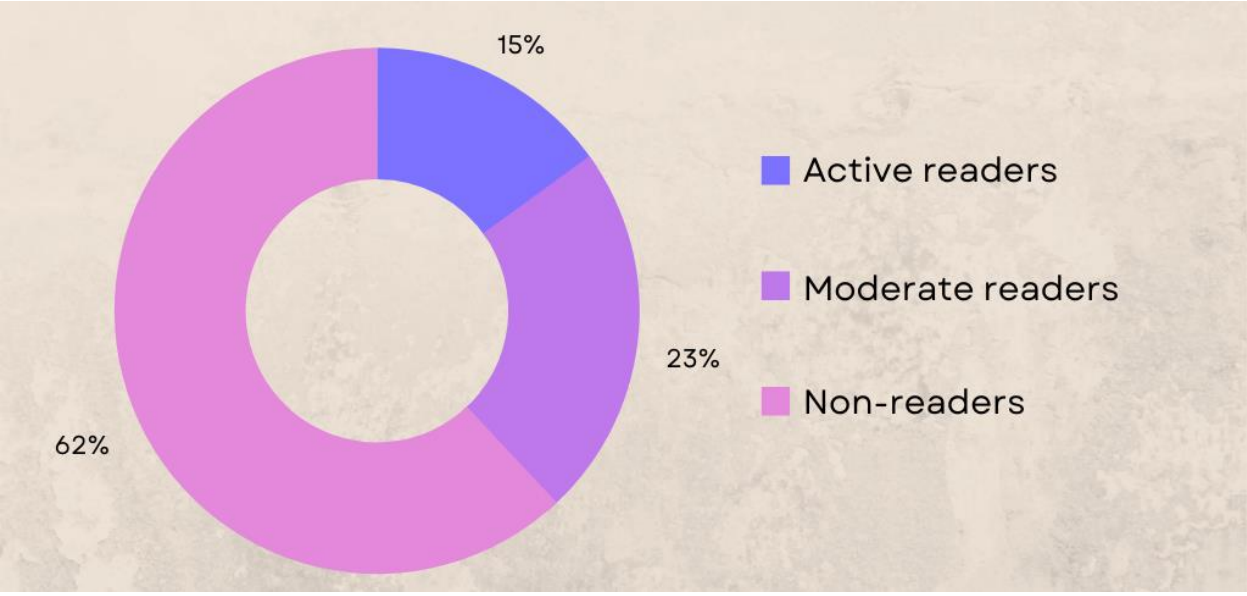
4.3 The Results of the Student Questionnaire

Similar to the observational tool, the student questionnaire attained fairly conclusive results in terms of students' reading habits, technology usage, and their cognitive and emotional standpoint towards literary studies. This section reviews and comments on the data obtained from the participants via this survey.

4.3.1 The Participants' External Reading Habits

Figure 9

The Participants' Reading Habits



Note. This donut chart displays the participating students' reading habits based on the answers they provided on the student questionnaire which was deployed following the observation phase.

Surprisingly enough, more than one third of the involved participants described themselves as occasional readers although most of them answered “moderately characteristic of me” to the statement “I read books on my free time”. Still, some of these latter’s declarations happen to be inconsistent with the rest of their testimony when considering the fact that most of them also declared relying on online summaries and audio-visual adaptations instead of reading the full text for the sake of understanding the involved literary text. This suggests that most of their external reading activities are based upon texts and books which are assumably unrelated to their academic curriculum, which raises the issue of text selection within the EFL literature curriculum.

4.3.2 The Participants’ Perception of Literary Studies

From an affective perspective, nearly one third of the involved participants described literature as useful and interesting and deemed the study of literary texts as an amusing and enjoyable task, whereas the majority simply failed to grasp its utility and even declared occasionally experiencing feelings of frustration and anxiety throughout the process. Similarly, this same majority also acknowledged perceiving the studied texts as boring, outdated, and incompatible with their tastes while describing the involved literary language as discouraging and often difficult to understand.

Cognitively speaking, more than half of the respondents reported not being able to perceive the relevance and applicability of the notions they learn while studying literature to their own future and daily lives, which also reflects their inability to relate to the story and the characters who unfold it. This same portion of the participants also disclosed the difficulty they often face when trying to remain focused and attentive for the total duration of the session, thus intermittently losing focus and getting distracted by external and unrelated thoughts whilst studying literary texts. It is also important to mention that these same students reported that their sessions usually consist

of reading and analyzing selected passages taken from literary texts, which was occasionally witnessed during the observational stage of the field study.

Another conclusive fact reflected by the data collected through the student questionnaire is how interconnected students' familiarity with technology and the way they approach literary studies are. Statistically speaking, more than 85% of the studied respondents have declared spending a substantial amount of time using technology and social media platforms on a daily basis for both entertainment and external learning activities. The exact same respondents also acknowledged relying on online summaries, analyses, and audio-visual adaptations of the studied literary texts before taking the exam as an alternative of reading the full text. This reinforces Generation Z learners' digital nature and highlights their natural tendency to opt for the least physically taxing and time-consuming alternatives that would still guarantee the obtention of a decent grade. These same statistics make it safe to assume that this generation's digital nature and strong familiarity with technological facilities is a contributing factor in their observed lack of interest and genuine engagement towards the reading-based discipline that literature represents, which is amplified by the conventional approaches through which this latter is taught considering how the participants also tend to lose focus past a certain point in time as a result of their lower attention spans as reported by the relevant literature and psychological reports.

4.4 The Findings of the Teacher Questionnaire

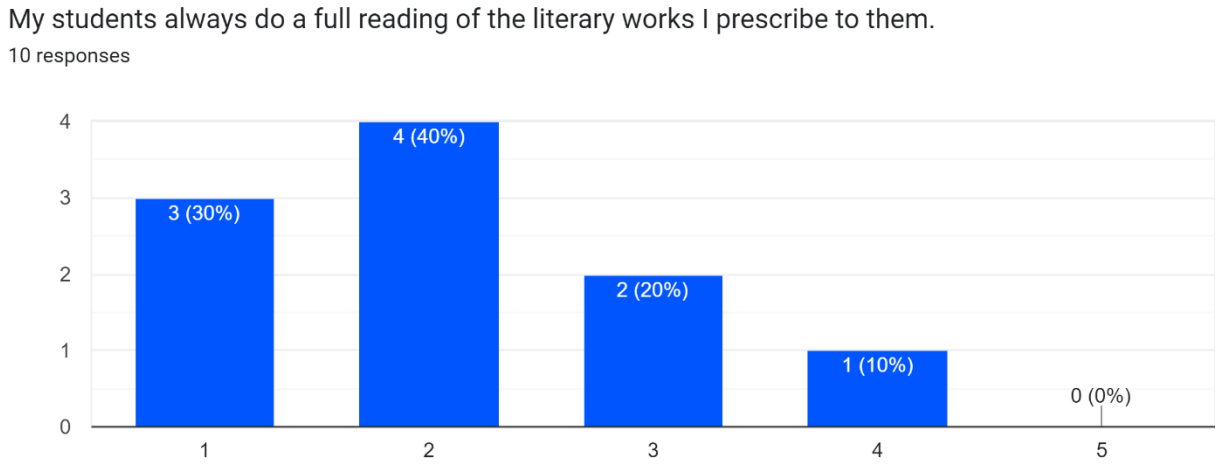
As shown in appendix (C), this questionnaire shares and investigates a few similar variables with the one initially designed for students and deployed during the observation phase. This being said, it mainly differs in terms of perspective as this one focuses on the teachers' perspective instead and considers additional components that are mostly centered around their pedagogical practices, the way they perceive their students' attitude towards the study of literature, and their

personal outlook on the exploitation of technology for instructional purposes. This latter was included for the sake of building a premise for the introduction of cloud-based animation platforms, which is highlighted by the teachers' awareness of the simple fact that videos and audio-visual content are indeed beneficial.

4.4.1 The Teachers' Viewpoint on Contemporary Students' Attitudes Towards Literature

Figure 10

Students' Compliance with their Reading Assignments



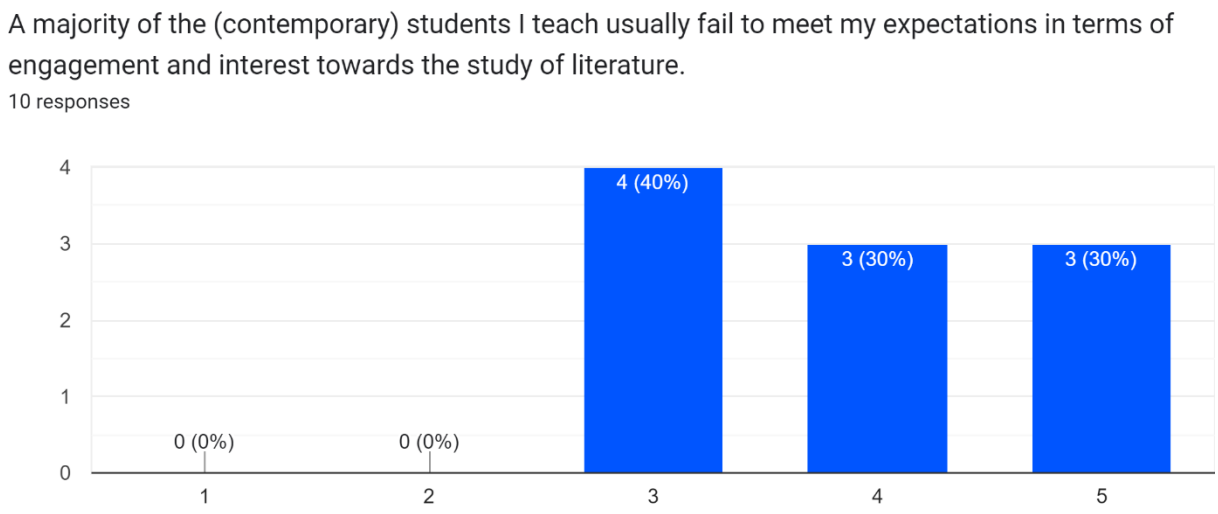
Note. An excerpt from the online survey showing the participating teachers' testimony on their students' compliance when it comes to reading the literary texts that are prescribed to them.

The very first statement of the online teacher questionnaire is centered around assessing contemporary students' abidance to the reading assignments that are expected from them. As demonstrated by figure 7, 70% of the participating teachers either disagree or strongly disagree that their students do in fact fully read the literary texts that they initially ask them to prepare, while 20% of these participants remain neutral and only 10% of them seem to agree. This gives a

clear idea on the level of engagement that Algerian higher education students nowadays manifest towards reading literary texts (which is the essence of studying literature) considering how this questionnaire involved participants from multiple universities across the country. This lack of enthusiasm towards reading also reinforces the existence of a reading crisis among Generation Z and confirms to a limited extent the Algerian youth's belonging to this generational cohort.

Figure 11

Teachers' Assessment of Contemporary Students' Engagement Towards Literary Studies



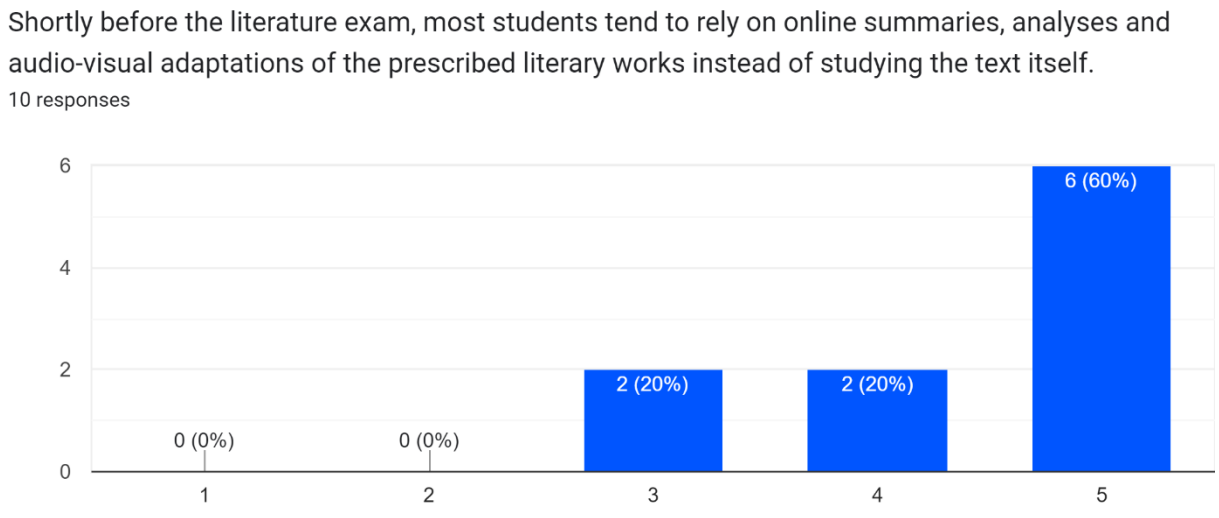
Note. An excerpt from the online survey portraying the involved literature teachers' perception of their students' level of engagement towards the discipline.

As decisive as it might be, the above-demonstrated reading crisis among Generation Z and their lack of enthusiasm towards reading in general represents only one sample of a long list of traits that characterize the current generation of higher education learners. When it comes to studying literature as a discipline, teachers around the world have often reported a significant

deficiency in terms of behavioral, cognitive, and affective engagement towards the process in question. Figure 8 clearly demonstrates this phenomenon on a domestic scale, as 60% of the teachers who took part in this survey have either agreed or strongly agreed that a majority of the students that they teach usually fail to meet their expectations when it comes to showing engagement and keen interest towards the study of literature. It is also important to mention that the remaining 40% of the participants abstained and chose neutrality, which makes it safe to presume that at least some of them would still be inclined to agree if the description provided by the statement were cast on a less important number of their students instead of the majority.

Figure 12

Generation Z Students' Substitution of Deep Reading



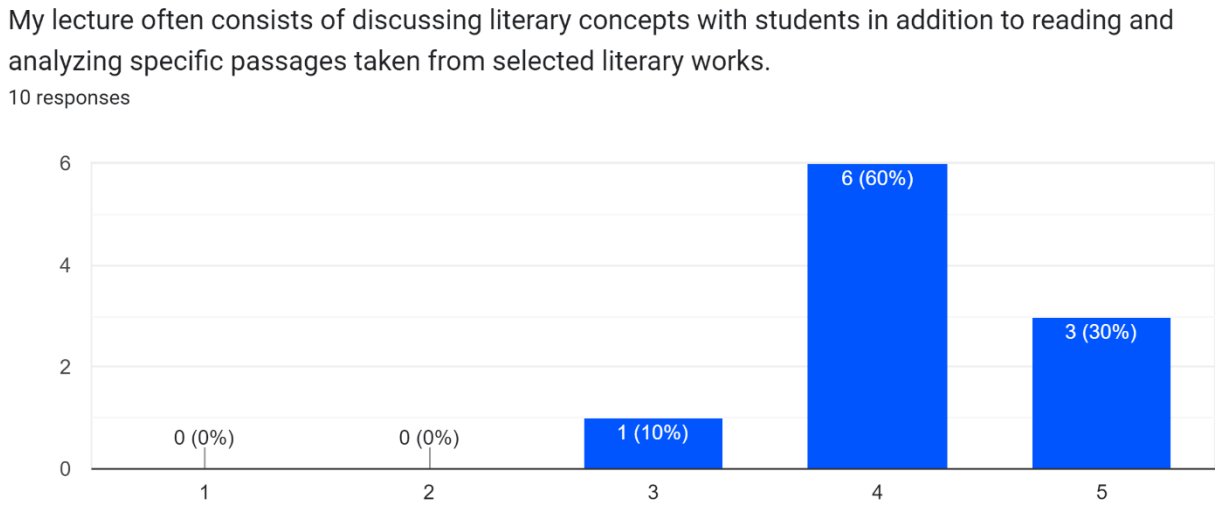
Note. An excerpt from the teacher survey showing the number of teachers who testified that their students rely on external resources and less time-consuming alternatives to in-depth reading.

As initially hypothesized, most participants confirmed their students' tendency to substitute in-depth reading with external alternatives. Precisely 80% of the involved teachers, as shown through figure 9, either agreed or strongly agreed that prior to the specialty exam, their students do in fact often rely on online summaries, analyses, and audio-visual adaptations of the literary texts they are asked to read and prepare instead of performing an actual reading of the literary text itself. This clearly reflects Generation Z's inclination to consider the quickest and most effective alternative that allows them to approach the exam while being decently equipped in terms of knowledge and preparation, which in turn highlights their disengagement from the study of literature as it should really be conducted, i.e., through a literary and critical reading of the prescribed literary texts aimed at achieving intercultural and literary competences along others. It is also noteworthy that only 20% of the participants remained neutral while none of them disagreed and denied their students' reluctance to dive deeper into the targeted novels, poems, or plays.

4.4.2 The Teachers' Routines in Teaching Literature

Figure 13

The Participants' Routines in Teaching Literature

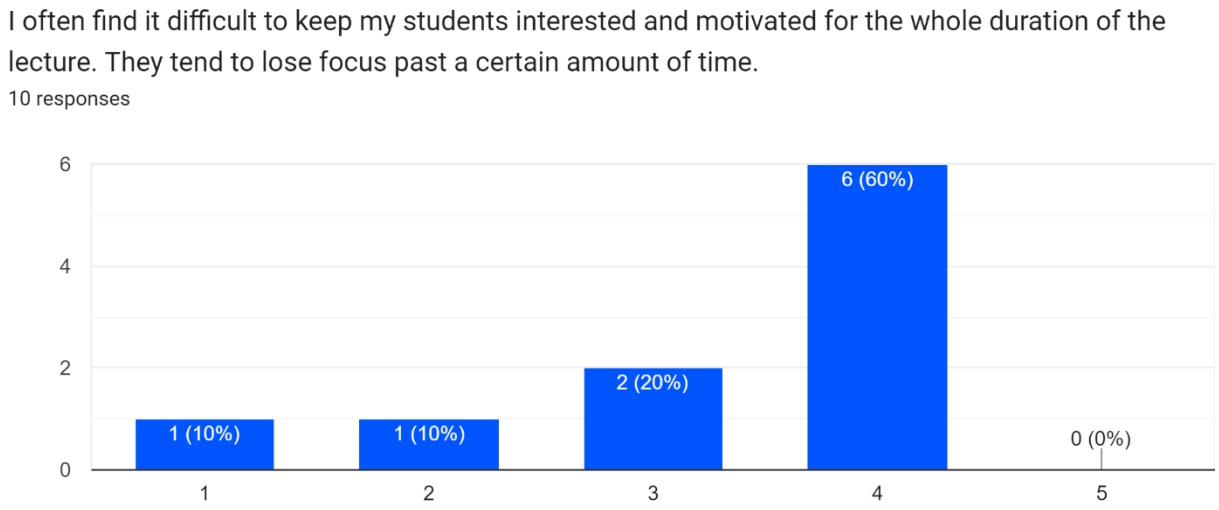


Note. An excerpt from the online survey which reflects the involved teachers' customary practices and preferred procedures while teaching literature.

The statement portrayed by figure 10 involves one of the most commonly adopted approaches by teachers of literature across the past decades. It reflects the strong persistence of the "chalk & talk" mode of instruction throughout the discipline in question, as exactly 90% of the participating teachers declared that their lecture usually consists of discussing literary concepts and only analyzing selected passages extracted from the addressed literary works with their students, which doesn't do much to retaliate against the reading crisis among Generation Z learners and adapt to their lack of engagement and shorter attention spans.

Figure 14

The Participants' Outlook on their Students' Attention Spans



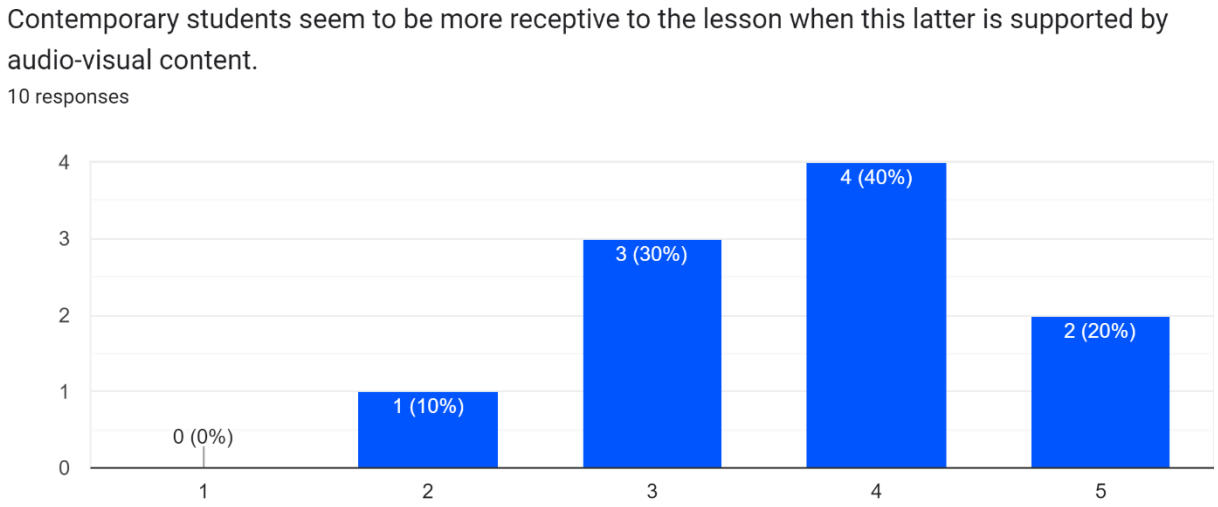
Note. An excerpt from the online survey portraying the teachers' perception of their students' attention spans and how difficult it is to retain their attention and interest throughout the lecture.

As previously established, teaching Generation Z is a challenging task which requires age-appropriate measures as this generation's nature makes them less receptive and enthusiastic towards the conventional modes of learning. As shown by figure 11 for instance, 60% of the participating teachers have reported facing difficulty when it comes to capturing and maintaining their students' attention and interest throughout the lecture as these latter tend to disengage after a given amount of time and directed attention. This sheds light on Generation Z's shorter attention spans and highlights their limited ability to learn under traditional modes of instruction, which becomes even more evident when considering the fact that most of the participants who declared facing such difficulties have also disclosed that their lecture often consists of discussing literary concepts and analyzing excerpts from literary texts.

4.4.3 The Teachers' Viewpoints on Audio-Visual Supplementation

Figure 15

The Participants' Evaluation of their Students' Responsiveness to Audio-Visual Aids



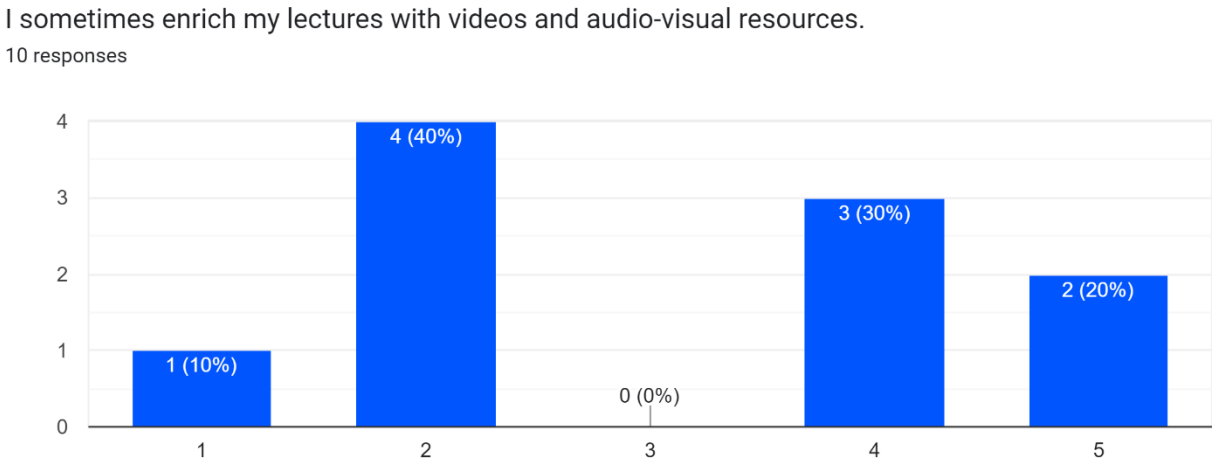
Note. An excerpt from the teacher survey showing whether the participating teachers validate the fact that contemporary students are more receptive to audio-visually enhanced lectures.

The very first step of solving any given problem is often as simple as recognizing that there is one. As demonstrated by figure 12, 60% of the participating teachers acknowledged that the current generation of higher education learners seem to be more responsive to the lesson when this latter is delivered via means that they are more attracted and accustomed to, i.e., through an audio-visually enhanced mode of instruction which accommodates their digital nature and diverse learning styles. It is also important to mention that 30% of the participants abstained and provided a neutral answer, which could be regarded as evidence of their reluctance to exploit and embed audio-visual resources into their lessons, while only 10% of the participants disagreed and seem

to believe that the resources in question do not bring any kind of improvement compared to traditional modes of instruction as far as students' responsiveness is concerned. This latter could also be looked upon as a direct result of failing to recognize the peculiar nature of Generation Z and the embodiment of one of the previously discussed challenges that hinder the rise of modern education, i.e., instructional inertia.

Figure 16

The Participants' Perspectives on the Use of Audio-Visual Aids



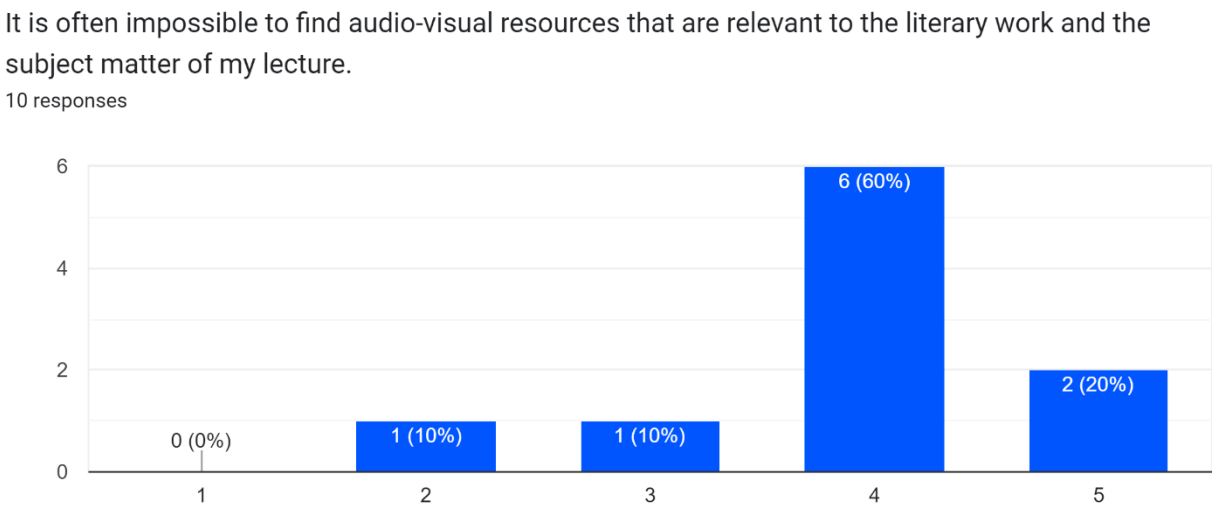
Note. An excerpt from the online survey showing the participants' openness or reticence towards the implementation of audio-visual aids into their lessons.

Another flagrant symptom of the above-mentioned instructional inertia is the teachers' reluctance to exploit contemporary resources that are more compatible with their Generation Z students' learning styles and preferences. When it comes to the exploitation of audio-visual aids for instructional purposes, the testimony in this next statement is torn between 50% proponents and 50% detractors as demonstrated by figure 13. Although the majority of the participants

previously declared having witnessed and being aware of contemporary students' tendency to be more receptive to the lecture when this one is supported by audiovisual aids, figure 13 clearly comprises a contradiction as it shows that 50% of the participants acknowledge never enriching their lectures with videos and audio-visual resources. This confirms the presence of a resistance to change among certain teachers of literature, which could be regarded as one of the leading factors behind contemporary students' disengagement and failure to develop an interest towards the study of literature considering their digital nature and the fact that the information is transmitted to them via means that they deem as monotonous and boring. Needless to mention that the issue expands when these same students find themselves compelled to study inanimate blocks of text with complicated language and unfamiliar themes that they can rarely relate to. This being said, several additional factors could also stimulate this type of behavior among teachers. To name a few, a deficiency in terms of digital literacy in addition to a lack audio-visual aids that are relevant to their lesson can often constitute a discouraging barrier for these teachers to opt for such resources.

Figure 17

The Participants' Outlook on the Availability of Relevant Audio-Visual Aids



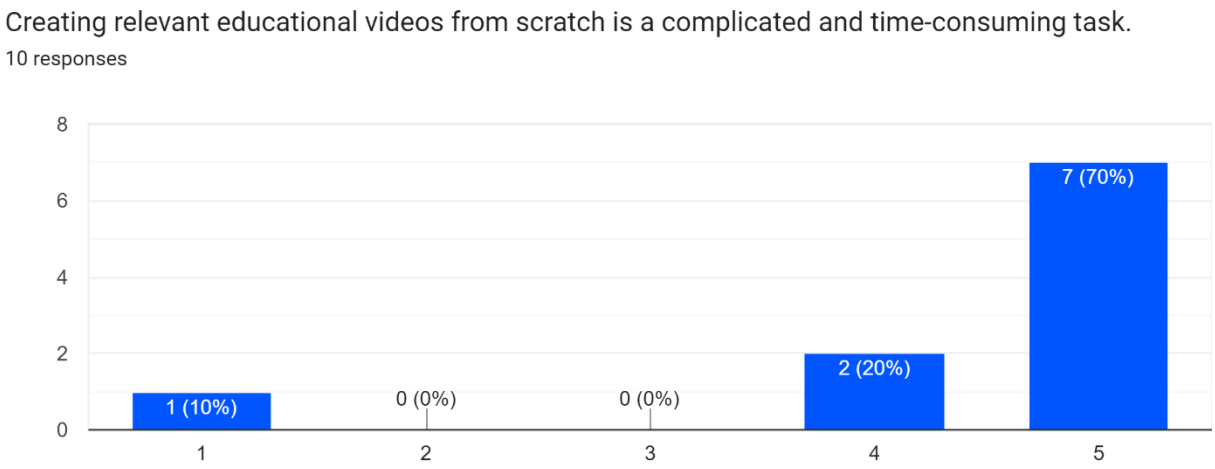
Note. An excerpt from the online survey showing the participants' opinion on one of the discouraging factors that prevent them from implementing audio-visual aids into their lectures.

Among the many barriers that can discourage teachers of literature from exploiting audio-visual aids for pedagogical purposes is how difficult it can sometimes be to find resources that serve the purpose of the lesson and are relevant to the literary texts being studied. As easy as it can often be to get lost in the sea of resources that the internet offers, finding the right materials that go along with a lesson in literature is more often than not an impossible task, especially when traditional and less established literary texts are involved. The majority of the survey participants have confirmed this issue, as a total of 80% of them either agree or strongly agree that it is often impossible to find audio-visual resources that are relevant to the literary work and the subject matter being treated by their lesson. Still, the same sea of resources that sometimes fails to provide

the needed materials also provides a plethora of ways to bypass this issue depending on their wielder's level of digital literacy and video editing skills.

Figure 18

The Participants' Viewpoint on Creating & Editing Videos

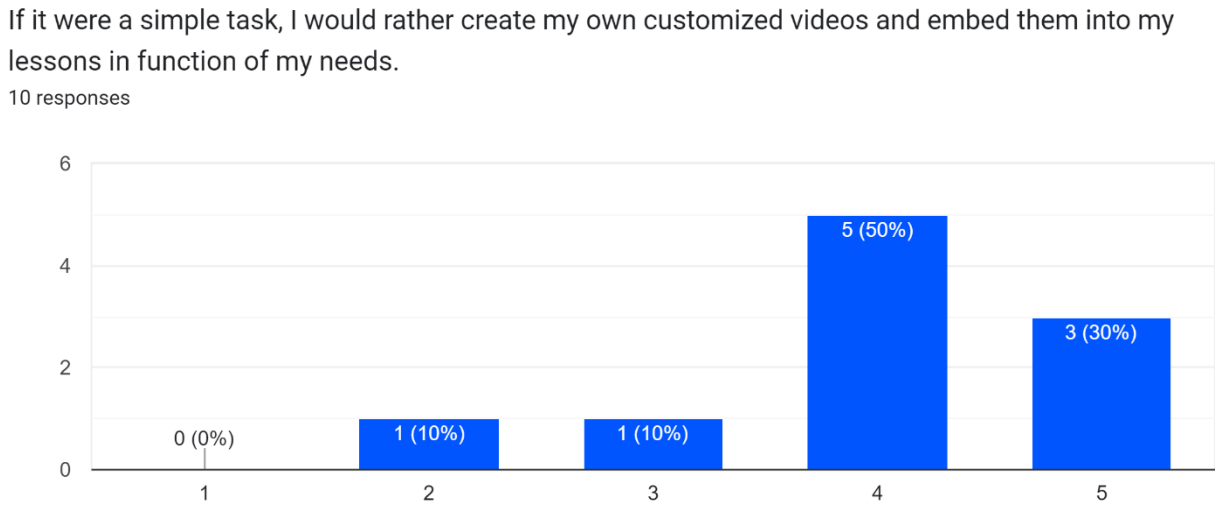


Note. An excerpt from the online survey assessing the participating teachers' perception of the process of creating educational videos for pedagogical purposes.

It is quite evident that the established professional methods of creating any kind of videos involve a substantial amount of time, effort, and resources in addition to the prerequisite skillsets, computer hardware, and software that accompany the process. The majority of the teachers involved in this survey validate this simple fact as precisely 90% of them firmly agreed and confirmed that creating relevant educational videos ex nihilo is usually a complex and time-consuming task. Nevertheless, if technology is known for one thing, it is for its continuous advancement and the resulting simplification of activities that were initially regarded as difficult or even impossible provided the adequate standards of digital literacy and computer skills are met.

Figure 19

The Participants' Willingness to Produce Their Own Audio-Visual Aids



Note. An excerpt of the online survey's last statement showing the participants' willingness to generate their own audio-visual aids if the process were simplified for them.

Considering the participant's initial perception of how difficult the creation of audio-visual content can be, this next and final statement assesses their openness to do so if the process could be made less complicated. Indeed, as demonstrated through figure 16, exactly 80% of the participating teachers claim that they would rather produce and customize their own videos in function of their needs and implement them into throughout the lecture rather than rely on partially irrelevant and sometimes unavailable online resources for lack of better alternatives. This issue can be averted via the adoption of cloud-based animation platforms, which make it possible for their wielders to quickly and easily produce audio-visual materials while taking into consideration even the smallest details in terms of characters, scenery, and different types of commodities.

Chapter V: Discussion & Conclusion

5.1 Overview

Through its various stages, this study strives to raise awareness on the intricate relationship between contemporary students' digital nativity and their ensuing behavioral, affective, and cognitive disengagement from reading- and text-based disciplines such as literature and the conventional modes through which it is taught. It also discusses Generation Z learners' lack of responsiveness and incompatibility with such modes while highlighting the contributing factors behind their failure to establish a genuine connection with the studied literary texts and lack of motivation throughout the process. As a countermeasure, this study proposes the adoption of cloud-based animation platforms as an engaging strategy and a complementary instrument for teachers of literature who would be willing to accept change and remodel their approach to better cope with the digital nature and learning preferences of Algerian Generation Z learners. This chapter reiterates the main findings of this research and further analyses their implications and significance within the target context. It also acknowledges the limitations that might have altered the final results of the study and describes how this latter could serve as a potential benchmark and a starting point for future research centered around achieving a better understanding of Generation Z. It terminates by drawing the final conclusions that this study has been able to reach while taking into account the initially proposed research questions and hypotheses.

Before proceeding to the recapitulation of the main findings and their implications, it is convenient to recall and restate the initially proposed research questions, which go as follows:

a. Should contemporary Algerian higher education students be regarded as Generation Z? If so, does teaching them imply any pedagogical adjustments?

b. Are Algerian higher education learners actively engaged in the study of literature? If not, can their affiliation with the generational cohort of "Generation Z" be regarded as a contributing factor to their disengagement?

c. To what extent are cloud-based animation platforms relevant to the instruction of literature? Can they be implemented as a pedagogical instrument for re-engaging contemporary students in the study of literature?

In an attempt to address these research questions and to verify the validity of the formerly proposed research hypotheses, the deployed data collection procedures in addition to the reviewed literature have allowed this study to reach significantly conclusive results, which are synthesized and presented through the below-proposed sections.

5.2 Discussion & Practical Suggestions

As suggested by its title, this section revisits the main findings of this study and discusses their implications as far as the study of literature and Algerian higher education learners are concerned. It also involves a set of pedagogical suggestions centered around the exploitation of cloud-based animation platforms for the sake of bridging the gap between the conventional instruction of literature and the needs of Generation Z learners in an effort to motivate them and stimulate their interest towards the study of literature. It finally considers the limitations experienced by this study and provides suggestions for further similarly-oriented research.

5.2.1 Generation Z: A Transcontinental Digital Generation

As can be inferred from the reviewed literature and the results obtained throughout this study, Generation Z stands as more than a mere western concept. The ascent and omnipresence of technology and the cultural dissemination it endorses through social media platforms has made

individuals who are culturally distinct and geographically distant considerably more prone to sharing similar behavioral patterns and psychological traits. Being avid consumers of technology through its various forms, the latest generation of Algerian higher education students is no exception, as these latter manifest the same symptoms and mannerisms that are being reported by psychologists and instructors from all the corners of the world, which makes them legitimate adherents of the generational cohort in question, namely “Generation Z”.

Similar to their foreign counterparts, generation Z students in Algeria have a strong tendency for relying on technology and online resources for the sake of complementing their academic journey and growth. In the case of literature students for instance, the studied participants visibly opt for simpler, quicker and more accessible and appealing alternatives to performing a full-scale reading of a prescribed literary text, which can, to a limited extent, be regarded as a form of self-regulated learning. This was particularly more discernible among the youngest participants of this study, as bachelor students provided an even more technology-oriented testimony and exhibited a stronger reluctance towards the conventional study of literature compared to their older, though similarly classified comrades, whose answers often manifested a slight hesitation. Consequently, it is safe to assume that the more technology progresses and expands, the less relevant certain disciplines and modes of delivery are going to become, i.e., the more a student is immersed into technology, the less responsive he or she is going to be to the conventional methods of knowledge transmission and acquisition, which seems inevitable unless appropriate countermeasures are provided.

5.2.2 A Reading Crisis Among Contemporary Algerian Learners

Another typical Generation Z feature that can be observed among contemporary Algerian learners is their reluctance to consider traditional means of learning and knowledge acquisition,

such means being books and print materials. This phenomenon is reflected by the participants involved in both questionnaires, as most of the participating students declared having little to no external reading habits while also acknowledging that they would rather rely on online summaries, analyses and audio-visual adaptations of the prescribed literary works for the sole sake of passing the specialty exam instead of studying the text itself, thus, renouncing the benefits of literary reading which is the essence of studying literature. This latter is also confirmed by the teachers' testimony, as almost three quarters of the participants completely negate the fact that their students usually comply when asked to perform a full reading of the prescribed literary texts. Consequently, their lack of dedication towards literary studies and their substitution of deep reading in favor of quicker yet still efficient alternatives can be approached as additional evidence proving Algerian higher education learners' adherence to the generational cohort that is Generation Z. By extension, this latter fact highlights the necessity for transitioning towards a more motivation-oriented pedagogical reform in stimulating students' interest in literature and coping with the digital nature of said generation.

5.2.3 Generation Z's Attitudes Towards Literary Studies in Algerian Higher Education

As initially hypothesized, the data collected via the observation and student questionnaire has demonstrated the extent to which the examined Algerian higher education learners currently manifest little to no signs of genuine interest towards the study of literature. More accurately, the results of the observation phase have made it possible to confirm contemporary students' lack of behavioral engagement throughout the lecture while the results of the student questionnaire give a clear idea of their deficiency in terms of cognitive and emotional engagement, which was further validated by the testimony provided by the teachers via the online questionnaire. Overall, the entirety of the collected data points towards the fact that Generation Z higher education learners

are currently disengaged on a three-dimensional level (behaviorally, emotionally, and cognitively) from the study of literature and that the currently adopted methodology in teaching this discipline is not keeping pace as it instead appears to be a contributing factor in this phenomenon.

If seen through Phillip Schlechty's lenses and his engagement taxonomy, the majority of the observed participants seemed to have adopted a stance of ritual compliance with more than one third manifesting signs of strategic compliance. Though rarely, learners who were fully engaged were still existent among the observed sample groups. Equally rare were the ones who showed signs of rebellion, as most of the disengaged students adopted a stance of retreatism instead, showing no signs of attention or commitment while refraining from disturbing their peers. To reiterate, the studied literature learners were indeed deficient in terms of affective, cognitive, and behavioral engagement towards the study of literature.

5.2.4 Instructional Inertia: A Perception-Based Issue

After conducting an extensive study centered around the teacher's role in student engagement, Grove (2019) reached the conclusion that "teachers who perceive that they are responsible will adjust and improve instruction to facilitate student learning" while "teachers who perceive that it is not their responsibility to engage students have marginalized the scope of their responsibility to teach" (Grove, 2019). A strong conviction in the latter argument is often a contributing factor in teachers' reluctance to accept any form of change that could disrupt their usual instructional approach and the modus operandi that they have become accustomed to, which translates into a form of instructional inertia. This is reinforced by the findings of this study, precisely through the online teacher questionnaire, which demonstrates how more than half of the participating teachers report that their students fail to meet their expectations in terms of engagement and interest towards the study of literature while simultaneously acknowledging the fact that their lecture takes the form

of a discussion and analysis of literary excerpts and notions. The exact same portion of participants further highlights this by declaring that they rarely exploit audio-visual resources for pedagogical purposes despite being fully aware of the fact that contemporary students, namely Generation Z, are more receptive to lessons supported by this particular type of content. Based on these same results, it is safe to assume that, be it the result of having different perceptions of how learning should take place, digital illiteracy, or mere instructional inertia, a negative perception of educational technology and technological supplementation has prevailed among teachers of literature at the level of Algerian higher education.

5.2.5 Bridging the Gap Between Traditional Teaching & Modern Learners

Considering the above, approaching generation Z students in the same fashion as their predecessors would be a pedagogical failure, especially when handling often ill-perceived and text-based disciplines such as literature. Thus, sparking the interest of Algerian literature learners who have been diagnosed as emotionally, cognitively, and behaviorally deficient in terms of engagement towards literary studies may require a special treatment based on the common approach of "fighting fire with fire". Indeed, though technology is a primary culprit behind altering modern students' learning styles and preferences, its numerous positive assets cannot simply be disregarded. More importantly, it is of utmost importance for teachers to contemplate the fact that contemporary students' digital nativity is not a reversible phenomenon, not by any stretch of the imagination. Only then can and will instructors achieve balance between their preferred modes of instruction and the needs and preferences of today's students, which is a prerequisite in building a healthy and engaging learning environment involving contemporary learners. In this sense, technological supplementation stands as the most suitable and only remaining option in coping with the digital nature of Generation Z learners as supported by Barua et al. (2018): "… using

modern technologies may improve students' perception by catching their attention, especially on the 'connected' student generation, through the use of technological resources that support their learning" (Barua et al., 2018).

5.2.6 A Necessary Adjustment

In the light of the above, it is safe to deduce that the current practices in teaching EFL literature in Algerian higher education lack a modern (technological) component. Considering how "digital technology is able to change the value of a literary work and [students'] interest in reading, especially in Generation Z, who are already accustomed to social media, technological advances, and trends that are being discussed on social media" (Haryoto et al., 2022), a necessary adjustment imposes itself as the conventional methods no longer capture contemporary students' interest and undivided attention throughout the process in question. This is also supported by the testimony of more than half of the participating teachers who opt for such practices and who acknowledge no longer being able to keep their students interested and motivated for the whole duration of their lecture. Therefore, cloud-based animation platforms such as PowToon or Vyond for instance represent a potential tide-shifting instrument for teachers of literature in terms of promoting student engagement. Provided they are digitally literate and willing to embrace change, this tool allows them to rejuvenate their lessons by recreating scenes taken from literary texts and transforming them into audio-visual animations involving the exact same characters, settings, and interactions described within the original work. This, in addition to the selection of literary texts that are more thematically relevant, could prove to be a potential solution to the observed phenomenon of contemporary students' distaste for reading and their resulting affective, cognitive, and behavioral disengagement from the study of literature.

5.2.7 Cloud-Based Animation: A Tonic Complement to the "Chalk & Talk" Mode of Instruction

As demonstrated by the relevant literature, the "chalk and talk" mode of delivery and instruction has started acquiring considerably fewer results as soon as Generation Z teenagers and young adults enrolled into higher education institutions. As previously discussed, literature usually represents a dull and discouraging field of interest for most learners, particularly for Generation Z students who rarely have an inherent interest in reading books and usually fail to perceive its relevance and benefits. Resnikoff (1971) identified this problem several decades ago and deduced that "unless highly motivated by prior love of literature, many students become prematurely and even permanently turned away from literature". Based on this declaration, it is safe and logical to assume that due to their digital nature, contemporary learners are significantly more prone to losing interest in the study of literature, let alone if it is taught through passive methods that fail to provide visual contexts and disregard the use of audio-visual resources. Enter cloud-based animation platforms. As indicated above, CBAPs can fill this gap by acting as a complementary instrument to the "chalk and talk" and lecture-based modes of instruction.

5.2.7.1 Benefits & Potential Uses in Literature Instruction

The data collected via the online teacher questionnaire points towards the existence of a shared consensus among the vast majority of the participating teachers of literature. This consensus involves a firm belief in the fact that it is often impossible for them to find audio-visual resources that are relevant to the literary work and the subject matter of their lectures, that creating relevant educational videos from scratch is a complicated and time-consuming task, and that they would rather create their own customized videos and embed them into the lesson if it were a simple task. Accordingly, cloud-based animation platforms such as PowToon and Animaker remedy

this problem by simplifying the process of animation and video creation. By means of templates and pre-drawn resources of all sorts, these platforms make it possible for teachers of literature regardless of their video editing skills to recreate and animate audio-visual content and resources that are relevant and loyal to even the smallest details related to the original literary works including character traits, scenery, weather effects, props, and even action and movements. And since the conventional method usually consists of examining and discussing literary excerpts and concepts, these latter could be transformed into animated segments involving video and sound by virtue of cloud-based animation technology and in tandem with a microlearning-based approach, henceforth providing a significantly more approachable and enjoyable type of content for Generation Z learners. Equivalently, this practice can also be regarded as a means of rejuvenating classical literary texts, which are generally perceived as outmoded, unrelatable, and thematically obsolete by the digital natives.

The substantial amount of time that Generation Z teenagers and young adults spend on social media and video platforms, as shown by the relevant literature and supported by the collected data, evidently taints onto their learning styles and preferences, making them more prone to better absorb information by the familiar means of entertaining and concise audio-visual materials while simultaneously reducing their responsiveness to traditional text-based learning and the similarly oriented instructional approaches. By projection, the same characterization applies to Algerian higher education learners considering their distaste for reading, their digital nature, and how they substitute literary reading with simpler technology-oriented alternatives. The behavioral data collected through the observation phase also points towards this, which is why the above-described animated content which results from the proper use of CBAPs can also be regarded as a means of redirecting students' interest and engagement towards the genuine study of literature by allowing

them to establish a direct connection with the selected literary texts by exploiting their favorite type of content, i.e., colorful and visually appealing videos rather than inanimate blocks of text.

As clarified by the relevant literature, the neuroscientific view of the concept of student engagement dictates that adding visual context to inanimate blocks of text improves their memorability. Similarly, combining microlearning with properly selected materials ensures a better relocation of the information from the short-term memory to the long-term memory. Therefore, introducing a visual component by transforming the same excerpts and literary concepts that are passively discussed throughout the conventional methods of teaching literature into animated sequences can promote a better retention of information among the involved learners. Additionally, providing visual context can also help remedy one of the most discouraging, disengaging, and commonly encountered problems by learners while studying literature; the complex nature of literary language, which is predominantly reported when classical literature is involved. Overall, it is safe to assume that supplementing literary case studies with a visual context produced by virtue of CBAPs can ensure the simplification and facilitate the understanding of literary language, which by extension promotes a superior retention of information and higher levels of engagement towards the study of literature among Generation Z learners of literature.

In addition to simplifying the process of creation educational videos from scratch, another notable benefit from the use of cloud-based animation platforms is the fact that they allow their wielders to circumvent the usual resources, time, and effort involved in the creation of videos. Indeed, the cloud-based nature and online existence of these platforms makes it possible for teachers to create their own videos directly on their web browser and without the need to provide expensive hardware and master complex and equally expensive software. Combined with their user-friendly and self-explanatory interfaces, the animation tutorials that are usually provided

directly onto these platforms allow their users to become familiarized with most of their features in a matter of minutes, which represents a highly convenient and more suitable alternative for teachers who struggle to find audio-visual resources that align with their interests and the aims of their lessons and find it difficult and time-consuming to create their own.

On the whole, the abundance of pedagogically beneficial features and resources offered by cloud-based animation platforms makes it impossible to enumerate the entirety of their assets and various implications in educational contexts. This being said, it is important to note the most notable ones among these features include the ability to introduce external materials for further customization and personalization purposes. This feature makes CBAPs even more advantageous as far as literary studies are concerned by virtue of the possibility to embed speech and voice recordings, which allows for further enhancement of the resulting animated literary content through the introduction of narration. This latter task could also be entrusted to the learners in an effort to include them in the process considering how the inclusion of student-created content is one of the main purposes and benefits ensured by the use of educational technology.

5.2.8 The Limitations of the Study

As most research usually is, this study has been subject to a number of limitations which hindered its full-scale deployment and prevented it from reaching even more conclusive results, the first limitation being the pandemic (COVID-19) and the ensuing preventive measures enforced by the ministry of health and undertaken by the department of English. These measures imposed a biweekly intermittence schedule upon which each EFL literature specialty was given two weeks of study followed by two weeks of inactivity, which limited the duration of the study to the last three weeks (a total of five weeks) prior to the official holidays. Another safety measure that partially hindered the results was social distancing and the group division that resulted from it, as

each group has been consequently split into two subgroups, thus halving the number of volunteering instructors and participants that could have been potentially involved. This study also considers that the resulting seating arrangements might as well have altered the results of the observational phase, as pairs of students sitting together are usually even more prone to exhibiting signs of disruptive behavior and earlier disengagement.

Considering the involved circumstances and out of respect for students' confidentiality and moral code, it should be mentioned that video recording was discarded from the field study. This instrument, in tandem with the behavioral observation tool, could have significantly facilitated the process of evaluating the participant's levels of behavioral engagement on a more individual level. Consequently, the absence of recorded footage makes it impossible to track the same participant across multiple sessions due to the simple fact that students constantly change seats, which is reflected by the anonymous manner through which they are referred to on the observation tool. All the above, in addition to the cross-sectional nature of this study, contributed to the fact that each sample group has only been observed throughout the duration of a single session.

It is also important to specify that the above-mentioned limitations in combination with the nature of the research and the involved time and budgetary constraints have prevented the deployment of an experimental stage in which the proposed type of content would have been experimented with directly into the target context. Instead, the researcher chose to introduce cloud-based animation platforms based on the verified premise that videos have already proved beneficial across multiple studies when exploited for pedagogical purposes. This being said, it is equally important to specify that these platforms are also presented as a means for teachers of literature to create their own videos based on the objectives of their lessons for the sake of complementing their

usual approach and transforming the study of literature into a more engaging and enjoyable endeavor for Generation Z learners of literature in Algerian higher education.

5.3 Disclaimer

In the light of all the above, it is important to establish that this study does not claim to bring any drastic change or revolutionary alternatives to the conventional approaches of teaching literature. It rather introduces cloud-based animation platforms as a simple yet efficient complementary instrument for teachers of the discipline who struggle to maintain their students' attention and interest throughout the lecture. This instrument is also introduced as a means of achieving balance between traditional instruction and modern learners via facilitating the process of coping with the digital nature and technology-oriented learning styles of Generation Z, as best described by Wright (2016): "as with most things, it's all about balance. We need to understand when a traditional method works best and when it's right to try new and innovative approaches" (Wright, 2016).

5.4 Suggestions for Further Research

Considering how it partially calls for the categorization of contemporary Algerian learners as part of the generational cohort known as Generation Z and how it raises awareness towards their digital nature, this study paves the way for the conduction of further research centered around coping with the learning styles and preferences of said generation and developing adequate pedagogical reforms to serve this specific purpose. It can also serve as a benchmark for further similarly-oriented research as well as a starting point in confirming the same findings on an even larger scale, i.e., involving significantly more participants across multiple higher education

institutions on a national scale and without the limitations and safety measures imposed by the pandemic for the sake of reaching even more conclusive results.

The versatile and multipurpose nature of cloud-based animation platforms in addition to the abundance of pre-drawn resources that they offer also make it possible for teachers and students alike to exploit them for all kinds of presentational and motivational purposes and throughout various fields of interest, which is highly needed in light of the fact that videos have become a primary source of knowledge acquisition among Generation Z who consequently shows less signs of engagement towards traditional instruction and happens to be today's higher education learners. Given the fact that this study is cross-sectional in nature and does not involve an experimental stage, another possible niche for further attitudinal research would be the creation of pedagogical content via cloud-based animation platforms and its implementation into similar circumstances with the addition of both a control and an experimental group whose levels of engagement would be evaluated in relation to the absence or presence of cloud-based animated materials.

5.5 General Conclusion

Overall, this study reached the general conclusion that Algerian higher education learners can and should be regarded as genuine adherents of "Generation Z". Equivalently, their global and digital nature has to be taken into consideration while designing pedagogical content. Considering how the learners who were observed throughout this study were proven deficient in terms of interest and engagement towards the study of literature, equal measures have to be considered while selecting instructional approaches, as this specific generation is notoriously known for being less receptive to the conventional modes of instruction, predominantly when traditional text-based learning and reading-based disciplines are involved. Accordingly, cloud-based animation platforms are introduced by this study as part of these mentioned measures. By virtue of their

versatility and the various pedagogically relevant features that they offer, these platforms make it possible for teachers of literature to counteract contemporary students' disengagement and lack of interest towards literary studies by allowing them to easily transform the content of their lessons into audiovisual segments; henceforth introducing the same type of content that this generation is tightly accustomed to and eagerly consumes on a daily, if not hourly basis. This same task can be performed in a matter of minutes and directly onto their web browsers thanks to the cloud-based nature and online existence of these platforms, which completely circumvents the complex and costly hardware and software that are usually involved in the process of producing videos.

In the light of the data collected throughout both stages of this research and in consideration of the testimony provided by both internal and external teachers of literature, it is safe to generalize that Algerian higher education learners are indeed disengaged from the study of literature on a three-dimensional level, i.e., behaviorally, affectively, and cognitively. It is equally safe to deduce that the failure to grasp their digital nature in tandem with the currently adopted methodology in literature instruction are major contributing factors in this phenomenon as supported by the data and further discussed in the above chapters. To reiterate, this study has reasonably addressed the initially stated research questions. It has also verified the validity of the proposed hypotheses to a considerable extent. The only exception in this case would be the efficiency of cloud-based animation platforms in the target context considering how they are introduced under the verified premise that videos and audio-visual materials are indeed beneficial when properly exploited.

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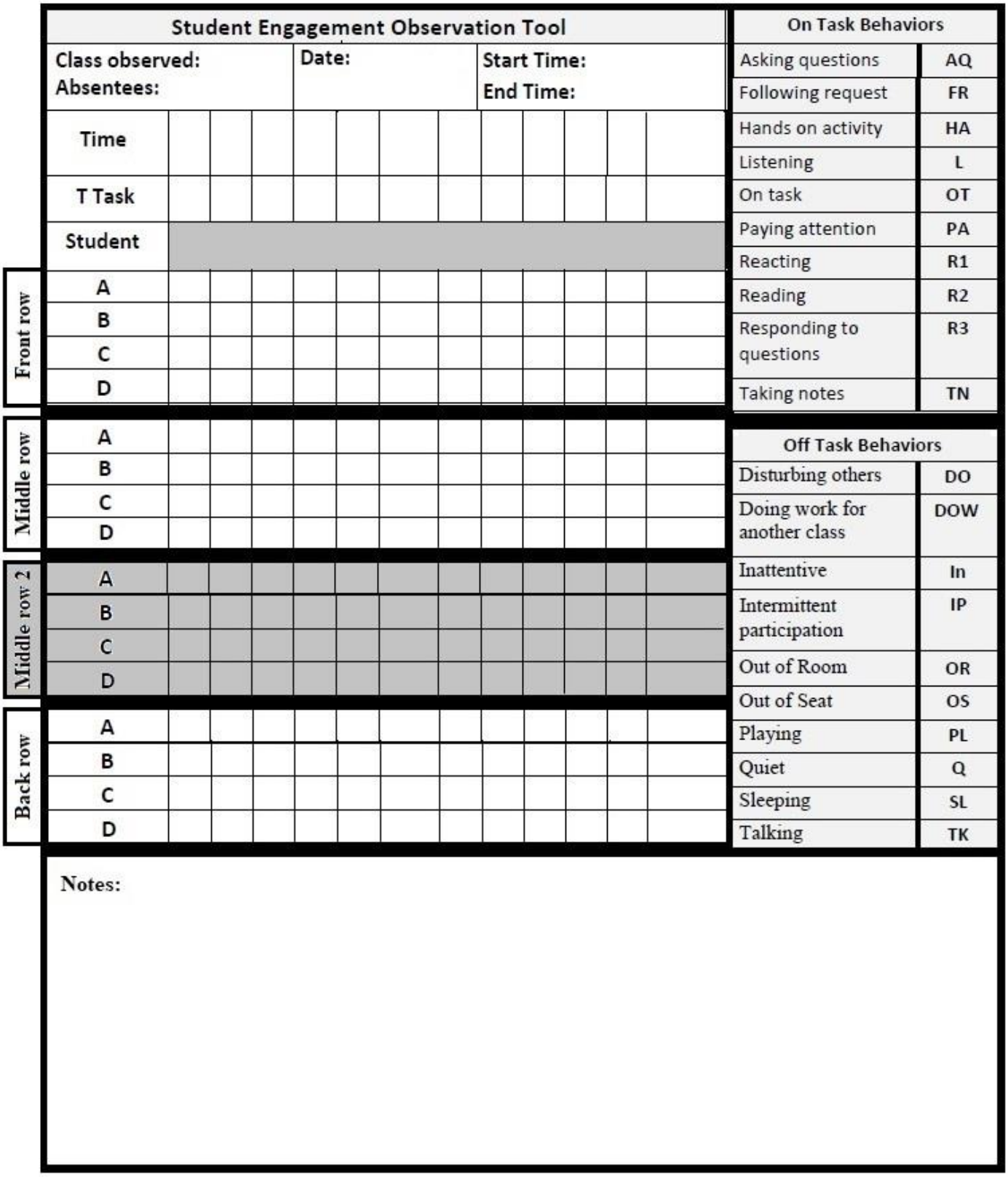
Appendices

Appendices

Appendix A: Behavioral Engagement Observation Tool



Student Engagement Observation Tool

Class observed: Absentees: | Date: | Start Time: End Time:

Time												
T Task												
Student												
Front row A												
Front row B												
Front row C												
Front row D												
Middle row A												
Middle row B												
Middle row C												
Middle row D												
Middle row 2 A												
Middle row 2 B												
Middle row 2 C												
Middle row 2 D												
Back row A												
Back row B												
Back row C												
Back row D												

On Task Behaviors	
Asking questions	AQ
Following request	FR
Hands on activity	HA
Listening	L
On task	OT
Paying attention	PA
Reacting	R1
Reading	R2
Responding to questions	R3
Taking notes	TN

Off Task Behaviors	
Disturbing others	DO
Doing work for another class	DOW
Inattentive	In
Intermittent participation	IP
Out of Room	OR
Out of Seat	OS
Playing	PL
Quiet	Q
Sleeping	SL
Talking	TK

Notes:

Appendix B: The Student Questionnaire

Date: **Group:** **Age:**

To what extent do the following behaviors, thoughts, and feelings describe you? Rate each utterance using the following scale:

5 = very characteristic of me
4 = characteristic of me
3 = moderately characteristic of me
2 = not really characteristic of me
1 = not at all characteristic of me

a. _____ I read books on my free time.

b. _____ I consider studying literature as an amusing and enjoyable task.

c. _____ We usually study literature by analyzing selected passages from literary texts.

d. _____ Studying literature is useful and interesting.

e. _____ Studying literature makes me frustrated and anxious sometimes.

f. _____ I spend a considerable amount of time using technological devices and social media for both entertainment and external learning activities.

g. _____ I find it difficult to remain focused and attentive for the whole session while studying literature.

h. _____ I find the language used within the studied texts discouraging and difficult to understand.

i. _____ I perceive the novels that we study as outdated, boring, and incompatible with my taste.

j. _____ The notions I learn while studying such novels are applicable and relevant to my own future and lifestyle.

k. _____ I usually lose focus and get distracted by external thoughts while studying literature.

l. _____ In order to understand the story, I sometimes rely on the movie/cartoon version of the studied novel instead of reading the whole text.

m. _____ I rely on online summaries and analyses of literary texts shortly before taking the exam.

Appendix C: The Online Teacher Questionnaire (Google forms)

Generation Z's Attitude Towards the Study of Literature

This questionnaire investigates the extent to which the current generation of Algerian higher education students (Generation Z) is interested and invested into the study of literature from their teachers' perspective.
[2 = disagree, 3 = neutral, 4= agree]

Email *

Valid email address

This form is collecting email addresses. Change settings

My students always do a full reading of the literary works I prescribe to them.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

My lecture often consists of discussing literary concepts with students in addition to reading and analyzing specific passages taken from selected literary works.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

A majority of the (contemporary) students I teach usually fail to meet my expectations in terms of engagement and interest towards the study of literature.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

Shortly before the literature exam, most students tend to rely on online summaries, analyses and audio-visual adaptations of the prescribed literary works instead of studying the text itself.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

I often find it difficult to keep my students interested and motivated for the whole duration of the lecture. They tend to lose focus past a certain amount of time.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

I sometimes enrich my lectures with videos and audio-visual resources.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

Contemporary students seem to be more receptive to the lesson when this latter is supported by audio-visual content.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

It is often impossible to find audio-visual resources that are relevant to the literary work and the subject matter of my lecture.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

Creating relevant educational videos from scratch is a complicated and time-consuming task.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

If it were a simple task, I would rather create my own customized videos and embed them into my lessons in function of my needs.

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

Submit

Page 1 of 1

Clear form

Thesis: Facilitating Literature Instruction through Cloud-based Animation Platforms. Case Study: Generation Z Students of Literature at Chlef University's Department of English.

Author: Belkacem Billel SADOUNI **Supervisor:** Leila KARA MOSTEFA BOUSSENA

Abstract

Student engagement solidified itself as a major precursor for academic growth and success across the past few decades. Indeed, a learner who is behaviorally, cognitively, and emotionally engaged will indisputably prosper academically. Still, the extent to which a learner is engaged is subject to multiple intrinsic and extrinsic factors, including his or her perception of the subject matter being taught, and the manner in which the task in question is performed. Education-wise, the rise of technology and its adoption in all aspects of daily life has caused a gradual deterioration of interest and receptiveness towards the classic modes of instruction among the latest generation of learners, particularly when text-based disciplines such as literary studies are involved. This study assesses the tremors of this phenomenon among generation Z learners of literature. It takes place at Chlef University's department of English through a mixed methods design built upon direct classroom observation, a student questionnaire, and an online questionnaire involving several internal and external teachers of the discipline. The primary results indicate that a majority of the participants manifests little to no signs of interest towards the matter in question. The same results also point towards the existence of a causal relationship between the observed students' digital nature, their perception of literature as a discipline, and their resulting disengagement and negative attitude towards its study. Accordingly, this study proposes the adoption of cloud-based animation platforms as a countermeasure against the observed problem based on the premise that videos have already been proven pedagogically beneficial across multiple studies. It also analyses the extent to which the features offered by these animation platforms could enable teachers to tip the scales in favor of achieving a more engaging and active learning environment with said generation.

Keywords: Algeria, Generation Z, higher education, student engagement, literary studies, Cloud-based animation platforms

Thèse : Faciliter l'enseignement de la littérature via les plateformes d'animation basées sur le cloud. Étude de cas : Les étudiants en littérature de la génération Z au département d'anglais de l'université de Chlef

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Résumé

Au cours des dernières décennies, l'engagement des étudiants s'est imposé comme un précurseur majeur de la croissance et de la réussite scolaires. En effet, un apprenant qui est engagé sur le plan comportemental, cognitif et émotionnel prospérera incontestablement sur le plan scolaire. Toutefois, le degré d'engagement d'un apprenant dépend de multiples facteurs intrinsèques et extrinsèques, notamment sa perception de la matière enseignée et la manière dont la tâche en question est exécutée. Dans le domaine de l'éducation, l'essor de la technologie et son adoption dans tous les aspects de la vie quotidienne ont entraîné une détérioration progressive de l'intérêt et de la réceptivité à l'égard des modes d'enseignement classiques parmi la dernière génération d'apprenants, en particulier lorsqu'il s'agit de disciplines basées sur le texte telles que les études littéraires. Cette étude évalue les secousses de ce phénomène chez les apprenants de la génération Z en littérature. Elle se déroule au département d'anglais de l'université de Chlef par le biais d'une conception de méthodes mixtes construites sur l'observation directe en classe, un questionnaire pour les étudiants et un questionnaire en ligne impliquant plusieurs enseignants internes et externes de la discipline. Les premiers résultats indiquent qu'une majorité des participants ne manifestent que peu ou pas de signes d'intérêt pour le sujet en question. Les mêmes résultats indiquent également l'existence d'une relation de cause à effet entre la nature numérique des étudiants observés, leur perception de la littérature en tant que discipline, et le désengagement et l'attitude négative qui en résultent vis-à-vis de son étude. En conséquence, cette étude propose l'adoption de plateformes d'animation basées sur le cloud comme contre-mesure au problème observé, en partant du principe que les vidéos ont déjà été prouvées pédagogiquement bénéfiques dans de multiples études. Elle analyse également dans quelle mesure les fonctionnalités offertes par ces plates-formes d'animation pourraient permettre aux enseignants de faire pencher la balance en faveur de la création d'un environnement d'apprentissage plus engageant et actif avec ladite génération.

Mots clés : Algérie**,** génération Z, enseignement supérieur, engagement des étudiants, études littéraires, plateformes d'animation basées sur le cloud

<u>عنوان الأطروحة :</u> تسهيل تدريس الأدب من خلال منصات التحريك القائمة على السحابة. دراسة حالة: طلاب الآداب من الجيل زد في قسم اللغة الإنجليزية بجامعة الشلف

المؤلف: بلقاسم بلال سعدوني **المؤطرة: ليلى قارة مصطفى بوسنة**

ملخص

عززت تفاعل الطلاب نفسه كمؤشر رئيسي للنمو الأكاديمي والنجاح عبر العقود القليلة الماضية. في الواقع ، المتعلم المنخرط سلوكًا و ذهنياً وعاطفيًا سوف يزدهر أكاديميًا بلا منازع. ومع ذلك ، فإن مدى تفاعل الطلاب يخضع لعدة عوامل داخلية وخارجية ، بما في ذلك إدراكهم للموضوع الذي يتم تدريسه ، والطريقة التي يتم بها ذلك. من ناحية التعليم ، أدى ظهور التكنولوجيا واعتمادها في جميع جوانب الحياة اليومية إلى تدهور تدريجي في الاهتمام والاستجابة لأساليب التدريس الكلاسيكية بين أحدث جيل من المتعلمين ، لا سيما عندما يتضمن ذلك التخصصات المستندة إلى النصوص مثل الدراسات الأدبية. تقيم هذه الدراسة هزات هذه الظاهرة بين متعلمي الأدب من الجيل زد. يتم ذلك في قسم اللغة الإنجليزية بجامعة الشلف من خلال تصميم أساليب مختلطة مبني على الملاحظة المباشرة ، واستبيان الطالب ، واستبيان عبر الإنترنت يضم العديد من المعلمين الداخليين والخارجيين للتخصص. تشير النتائج الأولية إلى أن غالبية المشاركين يظهرون القليل من علامات الاهتمام بالمسألة المعنية أو لا تظهر على الإطلاق. تشير النتائج نفسها أيضًا إلى وجود علاقة سببية بين الطبيعة الرقمية للطلاب الذين تمت ملاحظتهم ، وإدراكهم للأدب كنظام ، وفك ارتباطهم الناتج عن ذلك وموقفهم السلبي تجاه دراسته. وفقًا لذلك ، تقترح هذه الدراسة اعتماد منصات الرسوم المتحركة القائمة على السحابة كإجراء مضاد للمشكلة الملحوظة استنادًا إلى فرضية أن مقاطع الفيديو قد أثبتت بالفعل أنها مفيدة من الناحية التربوية عبر دراسات متعددة. كما يحلل مدى قدرة الميزات التي توفرها منصات الرسوم المتحركة هذه على تمكين المعلمين من قلب الموازين لصالح تحقيق بيئة تعليمية أكثر جاذبية ونشاطًا مع الجيل المذكور.

كلمات مفتاحية: الجزائر ، الجيل زد ، التعليم العالي ، تفاعل الطلاب ، الدراسات الأدبية ، منصات التحريك القائمة على السحابة