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The Future of Teacher-Learner Relationship in a Plugged Context: Case of EFL Teachers and LMD Graduate Students at the University of Oran

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My parents;

My siblings and grandma;

Those who care and truly listen;

Those who explain, enlighten, and offer understanding when things seem meaningless and unfathomable;

The ones who propel patience and courage to let go of belittlement and frivolity, courage to bring out the best in us, to keep moving forward despite fear and apprehension, courage to keep whispering to the self that “fear is a hologram”, courage to not give up, and to recognise what is most important;

The open hearts and open minds who choose to be, do, and give despite all; who go on unstoppable that we learn to be it. I am all grateful.

For better tomorrows…

Sincerely,
Imane Fersaoui

Abstract

The future of education has received considerable attention and interest. It has grown to incorporate many experiments and studies. This one is no exception. It is a study about the open paths for teaching, learning, and the teacher-learner relationship.

Education is a fertile land for innovation and change. Technology, on its side, has always shown a deliberate potential to move language teaching and learning. Integral in the latter is the teacher-learner relationship. The entire study is about the importance of this relationship. It is also about the open paths for it, mainly within contexts that increasingly endorse tech-use. With that, teachers' roles are expected to vary; thus, this work sheds light on how the use of online learning affects those roles.

To fulfill the purpose of this work, data are gathered from a sample of 26 EFL teachers and 100 of their students at the University of Oran, Algeria. Questionnaires were conducted as well as interviews and classroom observation in the Department of English. This triad of instruments allowed for a corpus that fed the investigation. A breadth of attitudes and opinions pertaining to tech-use and the teacher-learner relationship were amassed. They showed that the teacher-learner rapport is fundamental, impactful, and valuable for the studied sample. In addition, respondents 'subverted', with their expressed views, the spread 'fear' and the thought that technology can replace teachers. For the majority of them, no machine can substitute good teachers, i.e. they stuck to face-to-face instruction (57.14%). 47.62% of them opted for blended learning whereas, surprisingly, none of them preferred online instruction.

Based on those percentages, the work demonstrated that, for the investigated case, the future has two main paths instead of three: face-to-face and blended instruction. This also preserves teachers' roles. The sample suggested many roles but the most notable one is the role of guiding. Within online learning environments, teachers will still be present to guide, supervise, and train students for online and auto-learning. As it has been found, teachers will keep doing their job in the best way they can.

This study concludes that change touches methods, tools, means, and materials. The human aspect of teaching and learning will not be withdrawn. Ultimately, the teacher-learner relationship will be held important differently from what has been the custom though.

Abstract in Arabic ملخص

العملية التربوية معرضة للتغيير و التجديد المستمر و هذا لتأثرها بالعوامل الاجتماعية و الاقتصادية و التكنولوجية . هذه الأخيرة لم تتوان في محاولتها مس كل جوانب تعليم و تعلم اللغات.

هذه الدراسة تحاول فهم كيف يؤثر استعمال التكنولوجيا على علاقة الأستاذ بالمتعلم كما أنها أيضا تحاول معرفة الأبواب المفتوحة للتعلم في المستقبل و تتطرق إلى دور المعلم في كل منها.

يضم هذا العمل ثلاث احتمالات لمستقبل التعليم : التعليم الالكتروني و الافتراضي، التعليم المباشر، و التعليم المدمج الذي يضم كليهما. و يتطرق لمستقبل علاقة الأستاذ بالمتعلم (المتعلم بالأستاذ) في كل منها.

تمت الدراسة بجامعة وهران 2، بقسم اللغة الانجليزية. لقد ضمت 26 أستاذا بالقسم و 100 طالب. تم استعمال استبيانين مع كل من الأساتذة و الطلاب، حوارات مع الأساتذة، و ملاحظات دروس.

أظهرت الدراسة أن العينة المدروسة تؤمن بأن العلاقة بين الأستاذ و الطالب علاقة أساسية في العملية التعليمية حيث أنها تؤثر على كل من الطالب و الأستاذ بطرق مختلفة. لقد أكدوا أن المستقبل لا يمكنه الاستغناء عن هذه العلاقة حتى و إن كان التعليم و التعلم من خلال الانترنت. بالنسبة لهم، التكنولوجيا لا يمكنها أن تلغي هذه العلاقة المؤثرة و خاصة بوجود الأستاذ و احتكاكه المباشر مع الطلاب.

تنتهي هذه الدراسة إلى أن التغيير لا يمس بالضرورة أساسيات العملية التربوية بل يمس الوسائل، التقنيات، و الطرق.

Résumé

Le futur de l'éducation reçoit de plus en plus une attention remarquable. Différents chercheurs mènent plusieurs études pour le comprendre. Cette étude en fait parti.

A l'échelle globale, l'enseignement des langues ne cesse pas de changer et de se moderniser en faisant recours au fur et à mesure à plusieurs matériaux. Pour sa part, l'usage de la technologie se montre promettant pour l'apprentissage. D'un autre coin, ça affecte la relation enseignant-apprenant. Alors, cette étude s'intéresse principalement à cette relation, son importance, son futur dans un contexte technologique, et le rôle de l'enseignant. Le dernier se transforme puisque l'opération éducationnelle est influencée par multiples facteurs incluant la technologie.

L'étude suppose trois chemins pour l'apprentissage au futur: l'apprentissage en ligne (électronique et virtuel), l'apprentissage mixte, aussi nommé combiné ou hybride, et l'apprentissage direct là où les apprenants et l'enseignant sont en interaction directe. Par la suite, on tente d'analyser la position de la relation enseignant-apprenant dans chaque option des trois.

L'étude présente s'approche de 26 enseignants et 100 étudiants du Département d'Anglais à l'Université d'Oran 2. On collecte leurs points de vue et pratiques en utilisant deux questionnaires, des interviews avec les enseignants, et l'observation en classe.

L'étude trouve que ces enseignants et étudiants croient à l'importance et la valeur de la relation enseignant-apprenant. Son impact, pour eux, est incontestable. Ils pensent aussi que ça va persister au futur et même avec l'utilisation du digital, du virtuel, et de l'électronique pour apprendre au lieu de joindre, pour le même but, une 'classe', au sens littéral pour ne pas dire traditionnel. De surplus, ils s'enchaînent à la méthode directe d'enseigner et d'apprendre. Ceci signifie qu'ils préfèrent encore le contact direct et la présence des deux agents, enseignant et apprenant.

Pour les rôles de l'enseignant, les participants ont suggéré celui du guide et superviseur. Les enseignants continueront à exercer leur métier ce qui préservera la relation en question.

L'étude conclut que la transformation technologique va effectivement 'révolutionner' le domaine de l'éducation mais non pas éliminer la présence humaine de l'enseignant. Le changement va surtout atteindre les méthodes, les techniques, et les matériaux.

List of Abbreviations

3D: Three Dimensions

3D VLEs: 3D Virtual Learning Environments

C2L: Connect to Learn

CALL: Computer Assisted Language Learning

CMC: Computer Mediated Communication

CMCL: Computer Mediated Communication and Language/Learning

DNL(s): Digital Native Learner(s)

EFL: English as a Foreign Language

ELT: English Language Teaching

ESP: English for Specific Purposes

ICT: Information Communication Technology

ICTs: Information Communication Technologies

L3: Third year Licence

LMD: Licence-Master-Doctorat

M1: First year Master

MCQ(s): Multiple Choice Question(s)

MRQ: Main Research Question

NA: Not asked

Q: Question

SOLE: Self Organised Learning Environments

SRQ1: Sub Research Question One

SRQ2: Sub Research Question Two

SRQ3: Sub Research Question Three

SRL: Self Regulated Learning

T: Teacher

TEFL: Teaching English as a Foreign Language

TEL: Technology Enhanced Learning

VLE: Virtual Learning Environment

VLEs: Virtual Learning Environments

WWW: World Wide Web

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GENERAL INTRODUCTION

General Introduction

The story of education has two pillars that accompanied it most of the time: the teacher and the learner. This story has enlarged and included many other elements later on. But even with that, the process of learning, as Anderson and Garrison (2003: 65) see, has kept its characters.

When it comes to advancement and success, due owe is to that operation of passing on skills, knowledge, ideas, and experience from one person to another. This, being standardised, normalised, and organised, weaves up educational systems as they are known to be today.

So far, one paramount piece to institutionalised education has been the teacher-learner relationship or the presence of the teacher in the learning process, the kind of presence that renders the learning experience and environment more interesting, attractive, and captivating than any other interest for the while-learning time. Such an experience, if achieved, is capable of eradicating many of the current problems. It may, indeed, help face the challenges presented to education such as disengagement, lack of motivation, trouble-making and disturbance, low achievement, failure, and drop-outs.

Following that axis, there was a time when the teacher-learner contact constituted the entire entity of education. No additional material was needed or mandatory for the completion of the mission. Nowadays, however, the more of devices, materials, colours, handouts, visual aids, tapes, and Internet, the better education is judged to be. The less teachers interfere, the more learner-centredness and Information Communication Technology (ICT) are advocated, the more preferable and well-received is the delivery of the course.

In this endeavour to forward learning, a teacher employs an umbrella of tools that show a promise of success. Numerous and creative are the pieces that make the whole teaching-learning puzzle. If their history is tracked, one can observe how the teaching-learning story has been expanding from the needful presence of only teachers and learners to the absence of both and their substitution for recording, e-mails, and simulations. Technology is revamping the world of education in many parts of the world. Virtual holograms, 3D presentations, tactile screens and walls, digital tables, that and more is our era witnessing. YouTube has allowed us to watch videos of schools where these means reign, scaffold, and deliver instruction. It is a reality that teacher-led instruction has already been substituted by auto-learning and online study in many institutions while learners are advised co-operation,

educational platforms, blogs, and software. These are typical criteria that apply to what is dubbed "a world class education" (Khan, 2011; Grainger, 2013: 8). A world class education refers to a class open to everyone like a YouTube channel class, a free website, or a MOOC. Also, it is an educational process that prepares learners for global citizenship and efficacy. It is a response to globalisation and technological advance. Its aim is to promote global knowledge and skills (Stewart, 2012).

As a matter of fact and as lifestyles shift, instruction methods do as well. This age of information and technology is transforming things in many domains. Teaching and learning are in no isolation from that. Man has had to learn novel skills and adapt the way he learns accordingly. Teachers and learners, 'the people' of the sector, are affected by novel techniques and gadgets. The latter two, into the teacher-learner relationship, engender new definitions, perspectives, and roles.

Nonetheless, researchers and teachers have different visions about how to achieve instructional objectives. Some insist on adopting the latest of ICT for better and generalised outcomes whereas others tend to stick to the 'antique' ways.

The quasi-theoretical underpinning for this study lies in these differences and fluctuations. An in-depth understanding of the position of the teacher-learner relationship in the teaching-learning process, in the present and the future, is the impetus and purpose of this work.

The intention of the in-hand presentation is to shed light on this binary of online and face-to-face teaching. How much of both is desired? Can they stand separate? Is blended learning better-advocated? Which factors dictate one over another? And what is the position of the teacher-learner relationship within each? These concerns will be discussed going through the available theory, insights from the foremost authors in the domain, and the expressed wishes of the participant teachers and learners. It also emphasises that ICT means, after all, are but tools whose aim is to enhance and better the teaching-learning practice. One additional paramount element to be stressed is the teacher-learner relationship. Till extra, sophisticated tools were integrated, the physical, mental, and affective presence of the teacher and the learner has been, relatively, a sufficient agent for the success of the teaching-learning process. This brings up unplugged teaching, a concept that is being purposefully promoted by a group of practitioners who believe it is largely efficient.

Furthermore, as novel methods and techniques are applied, teachers' roles metamorphose. Teaching, indeed, is being redefined by dint of the impact that ICT is inducing. In a nutshell, the present work has in purpose to understand the combination of the best from both: ICT and unplugged teaching. Besides, the teacher's roles gained redefinitions that this work ponders and seeks to understand.

To reiterate, emerging inventions applied to education are renovating it towards some perspectives. There are three directions in which teaching can evolve. Therefore, the future of the teacher-learner relationship can be presented in three fabrics: distance or e-learning, the traditional classroom, and blended learning where the two extremes merge into a moderate balance. In each of them, the teacher performs relatively varied and different tasks.

After this introduction, the first chapter will tackle the theoretical background of the study. It will later state the problem and lay forth the questions and the hypotheses as well as the rationale, purpose, scope, and significance of the work, not necessarily in that order though. Then, the keywords will be defined.

The second chapter will revolve around the review of literature. Connected works will be cited. What others have been doing about the future of teaching and learning will be delved into in order to support this work.

The third chapter, Methodology and Data Analysis, will give details about methodology and data collection. It expounds how this investigation is planted in an EFL milieu in order to collect perspectives about tech-use in there, the importance of the teacher-learner rapport, and their futures each. Moreover, it sets forth the findings of the study and their discussion in comparison with the research questions and hypotheses.

The last chapter, called: Pedagogical Implications, encloses implications and recommendations for further research. It also mentions the limitations that this study faced along its development.

The division of chapters in the previous way is due to a limit imposed by volume, time, and the issue of chapter equilibrium and consistency.

By the end, a general conclusion is drawn which does not insinuate or intend any genre of generalisation. In there, research purposes and findings are amalgamated altogether. The synopsis of the whole study is laid. Yet, it remains true mostly to the examined setting and

sample. At their best, the outcomes of this study concern merely the investigated population while other studies may manifest dissimilar or contrasting results.

Even though far from any online instruction experience, this work will go through the present options all in hoping to fetch more options and to come across realistic scenarios.

Chapter One

AN OVERVIEW AND RATIONALE OF THE STUDY

"It is a blessing known to generations of students whose lives have been transformed by people who had the courage to teach–the courage to teach from the most truthful places in the landscape of self and world, the courage to invite students to discover, explore, and inhabit those places in the living of their own lives."

(Palmer, 1998: 183)

*"**WANTED:** Men and women with the wisdom of Solomon, the patience of Job, and the nerves of David before Goliath. Needed to prepare the next generation for productive citizenship in the twenty-first century, often under adverse conditions. Applicants must be willing to fill in gaps left by unfit, absent, or working parents; satisfy demands of local bureaucrats and state politicians; impart healthy self-esteem; and, oh, by the way, teach content!*

Hours: 50 to 60 hours per week
Pay: Growing respectable
Reward: The luxury of always knowing that you are doing something significant with your life"

(Cooper & Ryan, 2010: 428)

1.1. Introduction

This section of the research expounds its substantial points and preliminary guidelines. It begins with its background, the roots of the study, and the status quo of teaching as well as learning. Then, it deals with the new prospects for both teaching and learning. After that, it proceeds to the importance of the teacher-learner relationship and the teacher's role. Later on, it goes through the problematic, its objectives, the research questions, hypotheses, the scope of the study, and its rationale. Also at this part, the research keywords are defined and the framework or thesis organisation is provided.

1.2. Background

In one of my high school second year classes, during a speaking session, students were encouraged to question the teacher about anything they wanted to know. One student started what will be a repeatedly expressed concern by her classmates[1]. She asked: "Do you like me?" I answered assuring it. Contemplating about how almost every other student went on asking about if the teacher liked them after that let me to the observation that it was not only me who wondered whether students appreciated my teaching, for them too it was good and self-strengthening to learn that their teacher liked or even loved them each.

This anecdote is no unique thing. To that, Middleton and Petitt affirm that an existing and fundamental question for a student is: *"Does my teacher like me?"* (Middleton & Petitt, 2010: 47). Nugent (2009: 3) has also stated that same question at the beginning of their doctoral thesis. Numerous others wrote about how learners around the globe wish, more or less, for a teacher who helps them develop, makes them invest in their potentials excessively, emancipates their mindsets, exhausts their intelligence, promulgates the worth of learning, showers them with passion and enthusiasm, and radiates positive energy[2] (Costa, 2001). A teacher-learner rapport that culminates in the latter delineation has to be more than average. It has to be friendly and positive (Rao & Rumnarayan, 2004; Snehansu, 2013), but also demanding, smart, respectful, and businesslike. Harmer said:

> *"We need to establish an appropriate relationship with our students. We need to spend time making sure that teacher-student rapport is positive and useful."* (Harmer, 2007: 113)

[1] From personal experience, a high school teaching time between September 2012 and July 2015.
[2] Siem Tesfaslase, when just a 10th grader at Arlington High School, Indianapolis, Indiana wrote a poem entitled "My Stream of Consciousness" (see Annex One) in which similar concerns were expressed.

This is also true and relevant to learners like Mike, an American second grader. Burnaford and Nikola-Lisa (1994) reported Mike's expression. He said:

> *"A good teacher is a teacher that does stuff that catches your interest. Sometimes you start learning and you don't even realize it. A good teacher is a teacher that does stuff that makes you think."* (Burnaford & Nikola-Lisa in Santrock, 2006: 5)

If we come back to Edward Thorndike[3]'s original principles of learning: readiness, effect, and exercise (1932), we find that the element of effect entails that learning is better when it is pleasantly delivered and when the social learning situation is comfortable to the learner (Christison & Murray, 2011: 146-147). Part of this is that the rapport with the teacher impacts learners and learning. Nevertheless, teachers and their profession seem to be affected by their relationship with learners as well. If *"people learn from people they love"* as Brooks ascertains in his TED talk (2011), *"Good students make good teachers"* (Gorham et al., 2009: 166). Running parallel to that is the concept of reciprocity which *"means that not only do teachers influence students, but students also influence teachers"* (Aultman et al., 2009: 637). A warm classroom atmosphere wherein both the teacher and learners are psychologically safe is of centrality to an effective schooling process. To that, Dörnyei argues:

> *"We need to create a pleasant and supportive classroom atmosphere … The psychological environment of the classroom is made up of a number of different components. One of these, the teacher's rapport with the students…"* (Dörnyei, 2001: 40-41).

Indeed, it is a related observation that triggered this topic, a teaching experience wherein the inception was frustrating. Teaching, some learners, and being frustrated per se took their toll on me. What helped regain balance and go back into class everyday is contact with some learners. While I was that much reluctant to teach, my in-classroom efforts were doubled in order to compensate for and not let learners sense that unwillingness. A very decent bond began to blossom. It was nurtured with a belief that most of them deserved my being kind, responsible, caring, and devoted to their learning. With time, a rewarding classroom climate spread. Students appreciated the English classes, were happy, and I became a relatively happy teacher. Wondering why and how such a metamorphosis from the beginning to the end of the school year culminated in a concern with the essence of the teacher-learner rapport. Language, particularly, as an alive, communicative, social, and

[3] Edward Thorndike (1874-1949) was an American psychologist. He worked a lot on teaching and education.

creative subject matter would require animated communication to teach and learn it which is focal to the famous communicative approach (Widdowson, 1978: ix; Dörnyei, 2001: 15). Moreover, it pertains to enthusiasm, motivation, and modeling *"which is a very effective method of teaching various things by setting an example"* (Dörnyei, 2001: 33). Modeling stems from the work of Albert Bandura[4] (1977), his learning model and social learning theory (Christison & Murray, 2011: 144-145).

This is the way teaching and learning have been taking place: both the teacher and the learner in one room focusing on knowledge transmission, skill development, task doing, problem solving, or project execution. Dror argues:

> *"'Learning' is not new; it has existed for millions of years. In fact, it is a cornerstone characteristic of intelligence and of being human. In contrast, technology, and its application to learning, is a very new endeavour."* (Dror, 2008: 215)

In other words, changes have been introduced to teaching and learning due to the advent of ICT. With that, it is observed that: *"The educational establishment is utterly confused about what to do about the impact of technology on learning"* (Gasser & Palfrey, 2008: 238). The fact is that the world is no longer what it used to be before the online boom. The way things are thought, done, and learnt tailored to meet the contemporary givens; the way we relate to others has moved (Valkenburg, 2011: 27). Gasser and Palfrey think of the upshots and say:

> *"In order for schools to adapt to the habits of Digital Natives and how they are processing information, educators need to accept that the mode of learning is changing rapidly in a digital age."* (Gasser & Palfrey, 2008: 239)

Not only that, but also online belonging, identity, and tech use might have repercussions on human direct contact and interaction (Kurzweil, 1999; Gasser & Palfrey, 2008: 4; Snehansu, 2013; Gordon, 2014: 15). For instance, many researchers in anthropology, sociology, psychology, neurology, communication, and human-computer interaction are already ahead with claims of humans as *"Cyborgs"*[5]. They are under the illusion of being connected while, in fact, they are increasingly disconnected and isolated (Case, 2010; Clark:

[4] Albert Bandura (1925-) is a psychologist and a Professor of Social Science in Psychology, Stanford University.
[5] Anthropologist Amber Case claimed that every time one looks at a cell phone device or a computer screen, s/he is a cyborg which is, "an organism to which exogenous components have been added for the purpose of adapting to new environments." (Case, 2010)

2003). Ralph Waldo Emerson, the American transcendentalist writer and thinker, contemplated it as early as 1850. He put: *"All tools and engines on earth are only extensions of humankind's limbs and senses"* (Emerson in Romano, 2003: 46).

By extension and *"in these times of radically changing educational landscape"* (Handscomb, 2012: 3), fluctuations may reach the teacher-learner relationship. Digitalisation may erase or substitute that learning-constructing relationship at the detriment of all the advantages, inspiration, and commitment that bond has generated along the history of teaching. *"Some educationalists fear this consequence,"* says Clark (2003: 6). Technology is transforming education, and where exactly it is leading teachers and learning is not yet a clear image. In spite of that, it might be understood that this is another attempt or tool to maximise outcomes (Handscomb, 2012: 1; Snehansu, 2013). The icing on the cake, the spread rigour is that hunger for success is calling for more educational high-technology and learning in cyberspace. This being said, amid what is to be missed if online format reigns, is the joy of human contact at learning. Too much innovation and modernisation are sought for in class that the 'the teacher-student dynamic' is more or less shifting (Gilbert, 2010). In contrast, some specialists claim that technology, actually, offers more interactivity, connection, and humanisation of the learning process (Burniske & Monke, 2001: ix; Bransford et al., 2004: 209; Dalton, 2011: 1). This all reformulates the famous dilemma: is technology connecting or disconnecting us?

Another question comes to mind. It is: *"What is the role of teachers and librarians in a world with so many experts opining freely on the Web, to whom Digital Natives are turning for information?"* (Gasser & Palfrey, 2008: 239). In this query lies the main backing concern to this research work. Jacques Ellul, the French sociologist who studied technological societies, said: *"All technical progress has three kinds of effects: the desired, the foreseen, and the unforeseen"* (Ellul, 1990: 61). Following this line of thought, it is not as if only radicalising, tectonic, and undesired changes are expected because even if individual learning and living modes have been making it to technology, educational institutions are still out of that scope (Davidson et al., 2009: 9).

In the Algerian educational setting, be it national or higher education, the technological experience has not yet officially matched the one people are experiencing individually and independently from school. Even if a student is most time online via his smart phone, iPad, tablet, or other device, once in class, he is 'obliged' to disconnect, at least physically

speaking. This is what Romano dubs: *"The Technology Gap in the Classroom"* (Romano, 2003: 9) and what Prensky describes as:

> *"Rather than being empowered to choose what they want ("Two hundred channels! Products made just for you!") and to see what interests them ("Log on! The entire world is at your fingertips!") and to create their own personalized identity ("Download your own ring tone! Fill your iPod with precisely the music you want!")—as they are in the rest of their lives—in school, they must eat what they are served."* (Prensky, 2005: 64)

Nevertheless, new behaviours are being observed[6]. Students and even teachers increasingly refer to their devices for different reasons. They check digital dictionaries, might even log in, 'Google', 'YouTube', or chat in the middle of a lesson. By and large, teachers' roles are metamorphosing while student-centric and responsible learning is getting advanced (Dysthe et al., 2007: 40; Debski et al., 1997: 48). It is, indeed, notable how self-paced, customised learning is tuned into using technology, majorly that the latter seems to facilitate learner-centredness (Harvay et al., 2009: 88). Methods are, as well, modified in order to meet the expectations of digital native learners. Strikingly, one can observe here and there that it is becoming more technology-centred, material-centred broadly noting, rather than learner-centred, and that somehow gadgets are directing our practices if not us (Lanier, 2010). He, being a front runner in virtual reality studies, pointed:

> *"Something started to go wrong with the digital revolution round the turn of the 21st century. The World Wide Web was flooded by a torrent of petty designs sometimes called Web 2.0. This ideology promoted radical freedom on the surface of the web, but that freedom, ironically, is more for machines than people. Nevertheless, it is sometimes referred to as "open culture". Anonymous blog comments, vapid video pranks, and lightweight mash-ups may seem trivial and harmless, but as a whole, this widespread practice of fragmentary, interpersonal, communication has demeaned interpersonal interaction."* (Lanier, 2010: 3-4)

Undeniably, the heightening reliance on educational technology is affecting the teacher-learner relationship (Snehansu, 2013). Accordingly, technology and digitalisation will weaken, erase, or unexpectedly, enhance the interpersonal teacher-learner relation and interaction.

[6] I have noticed thanks to classroom observation at Oran University and some Algerian high schools that teachers and students are including their digital devices in class. As a teacher too, I see and sometimes ask my students to use their devices to search about a certain point, check an e-dictionary, see a video, take a picture, etc.

Grounded in those observations and concerns, this work's fundamental foundation is worry about the teacher-learner relationship while the use of technology in education is growing. Till today, most written books and articles[7] in education still, globally, envision a future of learning guided and escorted by teachers and rooted in 'humanity'. Posthuman educational illustrations wherein the classroom is managed by a 'robot' or programmed computers, all readings are on Internet, and all human contact is absented, are still remote from being fully materialised. Despite the fact that 'post-humanity' is taken into consideration, studied, and even promoted in some areas, both teachers and students remain base units of the process (Anderson & Garrison, 2003: 65; Snehansu, 2013). Online learning, even though it *"represents the next educational leap forward"*, is being criticised for more than one cause (Meier, 2015). On the other hand, many educators[8] believe that 'magic' lies in the teacher-learner relationship and ponder if the next level of it would be purely via screens. Will digitised classrooms take it over the presence of a teacher? And can any material or tool substitute the teacher-learner bond that has been for long doing 'magic' and igniting learning? The previous queries constitute a bedrock pillar for this research.

To synopsise, the cornerstone of the aforementioned emerges from one vital remark. Teachers have been doing essential good to learners and learning. They are central to the educational practice. Meanwhile, a cluster of blossoming conditions is augmenting, that may swing, overthrow, or simply change the position of teachers, their roles, and the place of teaching. If the future is going to uphold teaching sacred, get rid of it, or just adapt it to the then-ruling atmosphere is the preoccupation of this research paper.

1.3. The Classroom Terrain

A classroom is a space where both teachers and learners spend a considerable amount of time in company of each other (Dörnyei, 2001: 13). It is the room where learners develop as individuals and social members (Ibid., p. 13). Teaching and learning, as far as we know, are linked to the classroom terrain. That is the issue of this part.

1.3.1. The Status Quo of Teaching and Learning

Like most research, this one commences with an observation. For here, it is one that many before got hold of: education takes pride of place and it counts. This could be grasped

[7] The books and articles consulted for this work and whose references are at the bibliography section.

[8] Many of the formally or informally interviewed teachers, educators, and even learners showed genuine enthusiasm for the teacher-learner rapport. They also advocated traditional instruction methods wherein the teacher and the students are in direct human contact.

from a glimpse on modern man's lifetime. Since year one, a child is said to be educated which is to be furthered in the coming years by joining kindergarten, primary, or elementary school. In other cases, children get a private instructor, a tutor, or get home-schooled. In many countries[9], like Algeria, education is compulsory, i.e. children are compelled to formal educational institutions of different sorts[10]. All in all, an average person can spend up to fifteen years between school and university[11], in pursuit of education and learning, i.e. knowledge, and skills or just a 'diploma'[12]. Dictionaries, such as Cambridge, Longman, and Oxford, define learning as getting or gaining knowledge or skill in a new subject or activity by experience, by studying it, or by being taught (Brown, 2007: 7). By the same token, teaching is: *"showing or helping someone to learn how to do something, giving instructions, guiding in the study of something, providing with knowledge, causing to know or understand"* (Ibid., p. 8).

Interconnected as they seem to be, the story of education has always centred on the presence of an instructor or tutor hand in hand with apprentices or learners, that is to say, on teaching provoking learning and on learning necessitating some extent of teaching (Ibid., p. 8). This same story has undergone numerous changes along history; yet, it has kept one fixed outcome: it has caused achievement, production, effectiveness, and development up to the current condition. Indeed, when it comes to advancement and betterment, due owe is to that operation of passing on skills, knowledge, ideas, and values from one person to another. Jane Addams[13] and John Dewey[14] believed in the latter. Central to their belief, as expressed in Encyclopedia of Education, was this: *"Education's role, therefore, was to provide the knowledge that would improve the life of all of the participants in the community"* (Zilversmit, 2003). Dewey also said:

> *"Education should create an interest in all persons in furthering the general good, so that they will find their own*

[9] According to (https://en.wikipedia.org/wiki/Compulsory_education), *"Some kind of education is compulsory to all people in most countries."*

[10] According to (https://en.wikipedia.org/wiki/Compulsory_education), *"Compulsory education refers to a period of education that is required of persons, imposed by law."*

[11] In normal conditions, an Algerian person spends five years at primary school, four at middle school, three at high school, and three years for a university bachelor degree -Licence- which all sum up to fifteen years.

[12] It has been generally noticed that the aim of "some" families and persons from getting schooled is to receive a diploma, thus, majorly a job which counters a knowledge-driven pursuit.

[13] Jane Addams (1860-1935) was an American suffragist, educator, and advancer of social equality and betterment. She founded the famous settlement Hull-House.

[14] John Dewey (1859-1952) is a well-known American philosopher, psychologist, and educational reformer who contributed strongly to the sector of education.

> *happiness realized in what they can do to improve the conditions of others."* (Dewey, 1908: 98)

Education, thus, has to do with more than only subject matter content. It prepares the person for all life aspects and for life itself.

Today, in many countries including Algeria, schools are dubbed "educational institutions". They are still as we have known them and as the electronic Cambridge Advanced Learner's Dictionary glosses: *"places where people go to be educated"*. People still join schools to learn, and for that teachers are still hired to do a classroom job whereas the classroom, based on Longman Academic e-Tutor, is still a *"room in a school or college where students are taught"*. Furthermore, it is believed that: *"The traditional classroom context is comprised of a social grouping including a teacher and learners, who are working on a task"* (Lamb & Reinders, 2008: 65). Therefore, the human presence of both teacher and learner at the same place is paramount to the teaching-learning process so far.

To press ahead, universities, as well, stick to their being *"educational institutions where one can study for a degree and where people do research"* as Longman Academic e-Tutor defines. To add to that, universities are still 'buildings' students have to enter to obtain a given outcome.

However, it is noticed that:

> *"… a growing movement is being propelled by the explosive growth in individualized learning technology that could feed it and we're starting to see the outlines of how it could seep into the world of formal education."* (Barseghian, 2011)

Education has been always welcoming newness and modification. Technology, then, happens to fall within that area of change and innovation. Nonetheless, pertaining to foreign language teaching and learning, Tomei describes:

> *"The current philosophy in language instruction, however, is that traditional classroom setting, the one to truly understand it. Typically, in a traditional classroom setting, the teacher calls on a student to respond to some query in the language being studied. For most students, classroom practice provides the sole opportunity to speak the language in the class."* (Tomei, 2003: 183)

Just like back in 2003 when Tomei composed that analysis, the classroom is prevalently held to as the concrete meeting place wherein language learning takes actual place.

From another angle, the age of information, communication, and technology ushered in speed and metamorphosis. It has been since revamping the basics in most fields. Teaching and learning make no exception (Collins & Halverson, 2009). Bena Kallick[15] has shed light on the fact that Man, in contact with new devices like the computer, has had to learn novel skills and that the way he learns and thinks mutates (Costa, 2001: 472). Seemingly, teachers and learners, the two major pillars of the domain, are in no isolation from the induced change. The latter, into the teacher-learner relationship, has been engendering new definitions, perspectives, and roles. In Romano's words:

> *"At the beginning of the twenty-first century, how we live, work, and recreate are being transformed by a powerful, pervasive, global force technology. Teaching and learning is an information-driven process. The teacher's prime responsibility is to manage the information required to meet the objectives of a specific curriculum. Digital Age technology facilitates the storage, transmission, and retrieval of information in multimedia and on an individualized, interactive basis."* (Romano, 2003: 2)

By and large, the contemporary educational realm is being pulled by two forces: its traditional status and the swiftly forming educational technology.

1.3.2. Redefining Teaching

Here is a world where almost everything, from sleeping and water-drinking up to satellites and space-tourism, is turning into a technology. One can come across headings such us 'assistive technology'[16] (Salkind, 2008: 66), 'the technology of the brain' (Ibid., p. 112), 'the technology of happiness', 'educational technology', and others (Figure 1.1). Few are the domains that remain tech-free. The very activities that were taken care of by the mere presence of man and few modest, simple tools or objects in the near past, have been matured and taken beyond sophistication towards complexity and the needlessness of man for their accomplishment (Gasser & Palfrey, 2008: 3).

[15] Bena Kallick is a private educational consultant. She has a doctorate in educational evaluation from Union Graduate School.

[16] *"Assistive technology, including assistive, adaptive, and rehabilitative devices, aids individuals with disabilities in achieving greater independence and self-confidence in their daily lives; specifically, AT enables individuals with a range of cognitive, physical, or sensory impairments to have alternative ways of performing and participating in society."* (Salkind, 2008: 66)

Figure 1.1: Google Suggestions to "The Technology of"[17]

The bottom line is that technology is evolving too swiftly and that may flip classrooms as education tries to adopt and adapt to the evolution. The definition of what a teacher is may be altered by the up-gradation of classroom technology. The teacher-learner relationship may take a different shape and that, in turn, may impact the educational outcomes and desires in an unsolicited direction. The latter can be justified by this: *"One of the biggest challenges of technology integration into classroom tasks is the shift in the role of the teacher"* (Ban et al., 2009: 80). Technology, hence, does affect roles and rapports in the educational process.

In its blog post of Tuesday, June 18th, 2013, the Guardian[18]'s Teacher's Blog[19] has published an article entitled, "How Has Technology Transformed the Role of a Teacher?". The blogger, Britland[20], has put forward:

> *"The best teachers that I have seen using technology to aid independent learning are the ones who have embraced the power that is already in the pockets of students. Most students have powerful devices, primed and ready to go in their pockets – the dreaded mobile phone. If you're lucky like me, your school will see the power that these wonders hold. Allowing students to unholster these weapons is a liberating experience for both teacher and student. Filming a peer assessment or recording a group discussion and uploading to AudioBoo is yet another way of engaging students.*

[17] "The technology of" was typed in the Google bar on October 13th, 2015, then a screenshot was taken, zoomed, and centred so as to highlight the suggestions. This is to show few possible tech-related headings.
[18] A British National Daily Newspaper.
[19] The Professional Development Teacher's blog is an electronic section of the e-form of the Guardian.
[20] Mike Britland is the head of ICT at a comprehensive school in Bournemouth.

> *Allowing yourself the opportunity to do something new and using technology as the tool can open up a cave of treasures that hooks the attention of the student and once you have that it can lead them anywhere."* (Britland, 2013)

These words set the path to a whole repertoire of variables such as best teaching practices, independent learning, engaging students, and getting their attention. Prior to that, it has been years since new tools and phenomena are being added to Man's daily life, reshaping it. Education, as a vital sector, has it managed to adapt to the change?

From what could be extracted out of the previous quote, what a best teacher is is in the process of transformation. Briefly, ICTs have not hesitated in re-authoring, by a diversity of techniques, thinking, teaching, and learning (Halverson & Smith, 2009: 49). Not just that effect, but also as teachers strive to better their practice, they resort to all that could grab students' attention and engage them. Tomei files this within enrichment. He adduces:

> *"Enrichment is the technique of utilizing any device to make learning more vivid and interesting and, therefore, more likely to be retained longer. It goes beyond what is normally offered in the textbook or in class, often enriching a student's understanding of other cultures. There are an almost unlimited number of technological opportunities to enrich the teaching of foreign languages."* (Tomei, 2003:185)

Language teaching, to emphasise, increasingly makes use of available effectiveness-promising "opportunities". It is probably no new fact that intelligence and learning go hand in hand with flexibility and the ability to adapt to new settings. Rogers[21] stressed:

> *"The only man who is educated is the man who has learned how to adapt and change; the man who has realised that no knowledge is secure; that only the process of seeking knowledge gives a basis for security."* (Rogers, 1969: 104)

Therein lies the fact that if technology is said to be transforming teaching, it is because teachers want it to be so. This transformation is one offspring of the educational community's adaptation to the digital epoch (Romano, 2003: 104). Prensky[22], a digital learning expert, sets his argument on a parallel tone. He entitled an article published in *Connected* Magazine: "Use Their Tools! Speak Their Language!" and added: *"If we are smart, the mobile phones and*

[21] Carl Rogers (1902-1987) is an American psychologist and among the founders of the humanistic approach.
[22] Marc Prensky is an internationally acclaimed speaker, writer, consultant, futurist, visionary, and inventor in the areas of education and learning.

games that our students are so comfortable with will soon become their learning tools" (Prensky, 2004: 8). Again, if technology is 'redefining' teaching, it is because learners, adaptation, and flexibility are altogether invoking it. It is, thus, inevitable and relevant to state that:

> *"The adaptation model is one in which "technology is thoroughly integrated into the classroom in support of existing practice." It is an interim stage essential to reaching the transformation model where "technology is a catalyst for significant changes in learning practice; where students and teachers adopt new roles and relationships."* (Romano, 2003: 104)

Eventually, teaching is being re-architected in a way that agrees with what educational technology is dictating.

1.3.3. Learning up-to-Dated

Not just teaching, learning also has had to acquiesce to the modern digital anatomy. The extent to which this is relevant bears on what language is and what its functions and purposes are. Utterly, *"We learn language in order to manage our affairs in the world we find ourselves in"* (Widdowson, 1990: 103). The ultimate aim of language learning, to paraphrase Widdowson, is to develop the ability to survive each in his environment. In the wake of that besides the changing environment, it is thought that:

> *"The profile of the L2 learner, already a complex and diverse one, may undergo fundamental changes as new societal, cultural, political and professional demands are imposed on the individual. Within all these developments the concept of the autonomous language learner may also shift, indeed it is shifting already."* (Lamb & Reinders, 2008: 47)

The present-day language learner is encountering nonstop digital appeals and looking forward to adjustable learning possibilities. This was mentioned in the Horizon Report as: *"People expect to be able to work, learn, and study whenever and wherever they want to"* (Adams et al., 2012: 4). Notably, that aligns with distance learning, online learning as specific to this study. It also hints to learner autonomy which denotes the acts thanks to which a learner shoulders their learning on their own (Brown, 2007: 130). Yet, the notion of autonomous learning is not separate from the teacher. It does not nullify the hitherto well-kept teacher-learner bond. Rather, it is the teacher per se who advocates and instills it as Lamb and Reinders forward:

> *"Learner autonomy is an achievement, attained interrelationally between the learner and the teacher. It depends upon how the teacher and the learner relate to each other: on their capacities to develop their relationship in ways conducive to learner autonomy. Learner autonomy is constantly being negotiated within the teacher-learner relationship."* (Lamb & Reinders, 2008: 65-66)

Not distant from this topic rests the fledgling pole of "personalised learning" and how it is facilitated by ICT which culminate in 'online personalised learning' (De Freitas & Yapp, 2005: 4-31-47). The thesis of personalisation, Banks[23] maintains, is: "*that everyone is different and has different needs*" (Ibid., p. 53). What personalised learning signifies is detailed in Figure 1.2.

[23] Dr. Bob Banks is a teacher, researcher, and educational consultant. He is interested in educational ICT and was the lead researcher in European research projects such as RENAISSANCE and GESTALT.

Figure 1.2: Personalised Learning

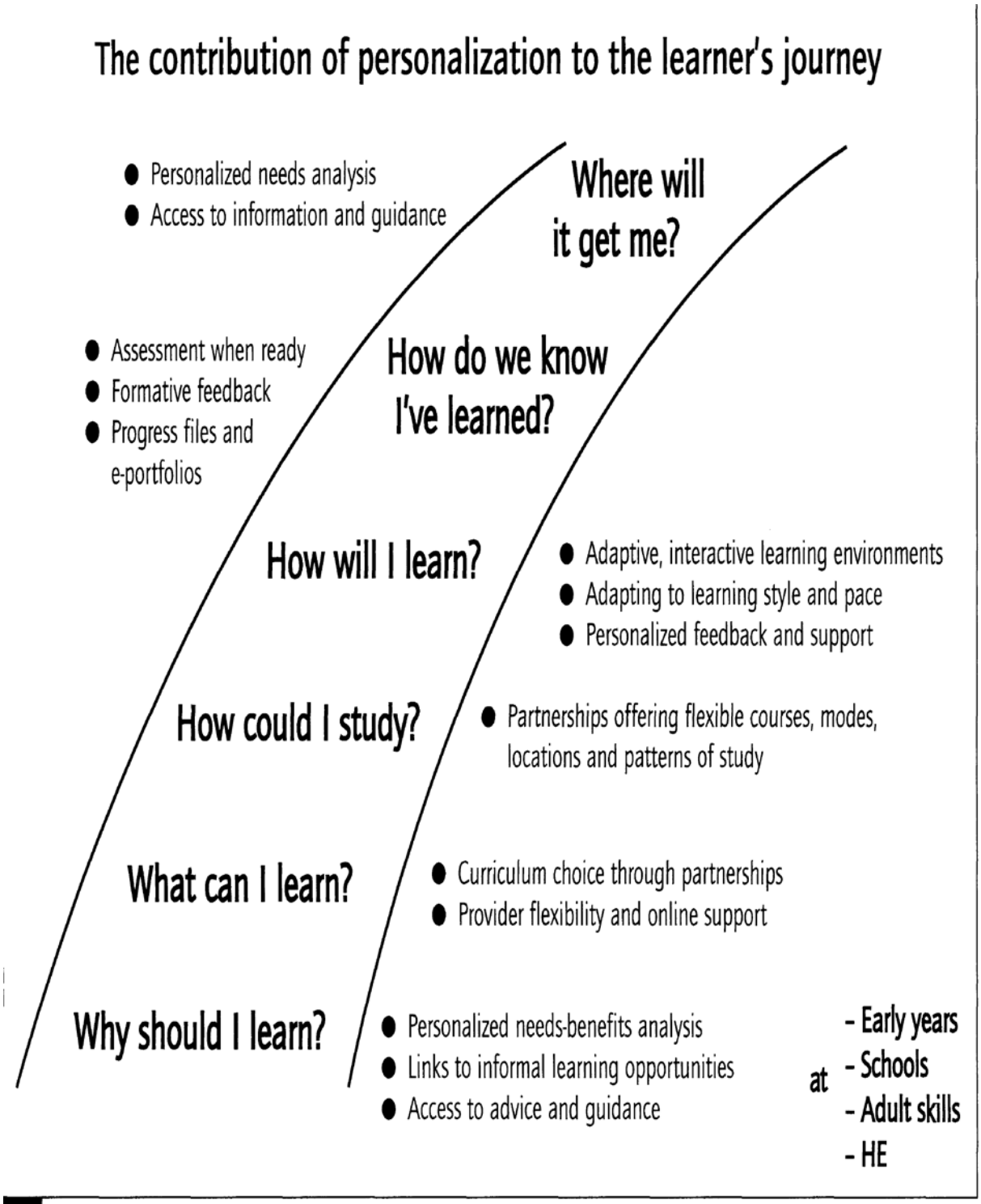


Figure 1.1: Showing different types of personalization as the learner encounters the education system; applicable at any age or stage of education.

(De Freitas & Yapp, 2005: 5)

Drawing from the aforementioned, Prensky notes:

> *"It is now clear that as a result of this ubiquitous environment and the sheer volume of their interaction with it, today's students think and process information fundamentally differently from their predecessors."* (Prensky, 2001, I: 1)

Prensky (Ibid.) insists on the fact that the current educational systems are somehow obsolete for the digital natives and settlers students are now. In some respects, this could imply that the latter *"are not learning"*; however, it is the way they process learning that is distinct from digital immigrants', i.e. their ancestors (Gasser & Palfrey, 2008: 240). Scrolling down, being updated with news instantly, searching, 'Googling', 'YouTubing', clicking on hypertext links, then sharing, commenting on, or even producing new content to react to any other online material is becoming the daily routine of many digital native learners -DNLs- (Ibid., p. 241-244). It would sound normal to tell that this is their learning routine as well, the way they acquire knowledge, and manifest their acquisition. In other terms, Gasser and Palfrey detail:

> *"Digital Natives gather information through a multistep process that involves grazing, a "deep dive," and a feedback loop. They are perfecting the art of grazing through the huge amount of information that comes their way on a daily basis."* (Ibid., p. 241)

Actually, it is not a mere tendency to say that: *"Today's learners are different"* (Prensky, 2001, I: 3). Social psychology and research back up the latter. They validate that people from different societies and cultures think in different ways and about different stuff (Prensky, 2001, II: 3).

The bottom line, from all that preceded, is that how people learn is being coloured by technology. Teaching, thus far, has not stood outside the coloured circle.

1.3.4. The Teacher's Job

A teacher is accountable to learners in a plethora of aspects; it is not the purpose to list them all here. This element deals with the most relevant and dominant roles a language teacher is meant to undertake.

First of all, there is the concept of *mediation*. This is:

> *"Etymologically, 'mediation' and 'media' both refer to being 'in the middle', from the Latin mediare (English 'stand in the middle') and medium (English 'middle'), respectively. The 'media' are 'in the middle' since they are*

> *the means of getting a message from producer to receiver(s). Both 'medium' and 'mediation' have changed their meaning over time, and there is now a variety of ways to understand these terms."* (Hampel & Lamy, 2007: 31)

Part and parcel of the teacher's job is *mediating* which is regarded by Feuerstein as a bedrock role to achieve effective learning (Burden & Williams, 1997: 42). Basically, every teacher is a *mediator* of learning (Ibid., p. 67). S/he stands as the *facilitator* of any entity that needs to be learnt by students (Harmer, 2007: 108; Hampel & Lamy, 2007: 61). Also, a teacher paves the way to autonomy and effectiveness to which Cooper and McIntyre set that:

> *"The most effective teaching strategies and modules of engagement were characterized by the opportunities they created for pupils to make sense of the task in their own terms."* (Cooper & McIntyre, 1996: 155)

If this is to be seen within learning personalisation or differentiation as called by Arends and Kilcher (2010), then while learners are busy trying to figure out learning on their own, in pairs, or in groups, teachers are coaching, monitoring, and getting to know them better for the sake of differentiation (Arends & Kilcher, 2010: 114). Regardless of how that is to be performed or using what channel, elaborating a mental or even a concrete profile for every single learner subscribes to those roles the teacher performs (Languay & Strachan, 2011: 21). In addition, a teacher may act as a "skilled helper" with all sorts of problems that students face in their school, family, or even personal life (Partin, 2009: 51). It is, indeed, no strange point for teachers to be *"compassionate" "counselors"* and *"listeners"* to their students (Ibid., p. 52). A teacher, on top of that, is a "good" relationship builder not only with learners but amongst them too (Harmer, 2007: 107). As this might insinuate, a teacher is responsible for nurturing the making of a pleasant circle, that is, a 'decent' class (Ibid., p. 107).

All into account, the teacher's job is not a secondary one. It happens that the very delicate and worthy of missions are his. To synopsise:

> *"Rather than being peripheral, the teacher is vital in fostering the right climate for learning to take place, for confidence to develop, for people's individuality to be respected, for a sense of belonging to be nurtured, for developing appropriate learning strategies, and for moving towards learner autonomy."* (Burden & Williams, 1997: 207)

Deductively, the teacher's job cannot position afar from learners and learning, and what the teacher is to the learner is, probably, in no accessible metaphor to carry or voice.

1.3.5. The Value of the Teacher-Learner Relationship

Amongst all what impacts the teaching-learning process, human bonds remain most-deciding. Brooks, a New York Times' columnist and the book author of *The Social Animal: The Hidden Sources of Love, Character, and Achievement,* articulated it quite straight-forward:

> *"For 30 years, I've been covering school reform and we've basically reorganized the bureaucratic boxes – charters, private schools, vouchers – but we've had disappointing results year after year. And the fact is, people learn from people they love. And if you're not talking about the individual relationship between a teacher and a student, you're not talking about that reality. But that reality is expunged from our policy-making process."* (Brooks, 2011)

The teacher-learner relationship, to underscore and justify its significance, determines learning in a multitude of styles, or as Giles gathers them together: *"determinants of learning, a set of teacher behaviours designed to raise the effectiveness of the learning process"* (Giles, 2008: 18). Potentially, favourable teacher behaviour rears an efficient relationship between the two which, in turn, *"influences the student's 'head, heart and hands'"* (Ibid., p. 18). Partin points: *"Positive teacher-student relationships provide the foundation for effective instruction and constructive classroom management"* (Partin, 2009: 14). Consistently, teachers leave a powerful mark on their learners whereas the impact of teacher-student interaction on motivation and learning is unquestioned (Burden & Williams, 1997: 133).

If the above-mentioned is the scaffold, then the worth of the teacher-learner relationship will be crystal-clearly grand.

1.4. Statement of Problem

First of all, despite different approaches, this work sticks to the humanist, social constructivist ones and the belief in the human affective and cognitive connection which goes hand in hand with its impact on all activity. Social constructivism[24] and humanistic approaches[25] induce an emphasis on classroom settings wherein learners and teachers interact,

[24] Jean Piaget is the founding father of constructivism, a cognitive approach whose *"main underlying assumption … is that individuals are actively involved right from birth into constructing personal meaning"* (Burden & Williams, 1997: 21). Social constructivism, by extension, is constructing meaning through social interaction.

[25] As explained by Burden and Williams*: "Humanistic approaches emphasize the importance of the inner world of the learner and they place the individual's thoughts, feelings and emotions at the forefront of all human development"* (Ibid., p. 30). *"In addition, education is viewed as involving the whole person, the emotions and feelings; it does not involve merely transmitting pieces of knowledge"* (Ibid., p. 33).

share, and value each other (Meier, 2015). *"Treating the learner as a whole person"* implies human contact by which caring is demonstrated (Burden & Williams, 1997: 37). In fact, it compels the presence of other beings to interact, guide, facilitate, reinforce, and encourage (Ibid., p. 37; Nugent, 2009: 1). This can be carried out in the ordinary, classical classroom context or via the web by which the class is turned out into a digital or virtual room where members interact as on social networks or digital platforms by sharing records, videos, articles, and comments.

Social interaction[26], focal to social constructivism, to not limit it only to the classroom setting, is expanding more and more majorly that among the four Cs for success in the 21st century are **c**ommunication and **c**ollaboration, the two others being **c**ritical thinking and **c**reativity (Kolk, 2011). Inextricably jointed to these notions is Feuerstein[27]'s theory of mediation. As expounded earlier:

> *"Feuerstein suggests that right from birth a child's learning is shaped by the intervention of significant adults. He refers to these important figures in the child's learning as mediators…and the experiences they provide as mediated learning experiences. These adults, at first parents, but later teacher …"* (Burden & Williams, 1997: 67)

If learning is mediated by other members, teachers in here, how is the inclination towards screens and the digital to influence the teacher-learner exchange and mediation?

From the technological angle, information and communication technology (ICT) is defining literacy in the current era (Neuman, 2011). Thus, almost every learner belongs in a social net that is in a state of flux, i.e. on constant growth. Indeed, it is said that:

> *"Web 2.0 and virtual world technologies are here to stay. Today, our students come to our classroom with a presence on Facebook, the latest concert as a podcast on their MP3 player, and experience playing games in virtual worlds. In some respects, students are more tech-savvy than their Information Systems professors."* (Harris & Rea, 2009: 137)

[26] Social interaction here serves social intractionism which is seen as *"a much-needed theoretical underpinning to a communicative approach to language teaching, where it is maintained that we learn a language through using the language to interact meaningfully with other people"* (Burden & Williams, 1997: 39). The major pioneering figures of this approach are Lev Vygotsky and Reuven Feuerstein.

[27] Reuven Feuerstein is an Israeli psychologist and educator, issuer of the concept of dynamic assessment, the Instrumental Enrichment teaching programme (IE), and the Theory of Mediation.

The learning environment, today, is not made up only of teachers and peers. It is rather becoming a 'global community' (Ashburn & Floden, 2006: 27; Harvay et al., 2009: 87). More 'members' are 'joining' including those from TV channels, Internet, social networks, computers, smart phones, and platforms, that is, according to Geral R. Adams, thanks to technology (Salkind, 2008: 313). In fact, one can no longer refer to the learning environment without the interference of digitalisation if only for the use of Wikipedia which fits well within what is called: *"the impact of technical globalization"* (Burniske & Monke, 1997: 59). Harvay et al. opine:

> *"Building community is a challenge especially when implementing new communication technologies because each medium requires different rules of discourse and interaction."* (Harvay et al., 2009: 86).

Briefly, both social and digital environments are affecting the way people learn, think, and bond in both directions: positive and negative.

On the one side, the teacher-learner rapport is a fundamental pillar to effective education. Liberante concluded that:

> *"Within the learning environment, importance needs to be placed on the development of positive teacher–student relationships, as these relationships have immeasurable effects on students' academic outcomes and behaviour."* (Liberante, 2012: 8)

On the other, one of technology's most feared side effects is the suppression of the human bond simply because one cannot dive into a digital world without expecting any change. Thus, the genesis and problem of this work: what is educational technology doing to the teacher-learner relationship? How is the latter going to be impacted in the future when more of technology is installed?

1.5. Purpose of the Study

As a general aim, this research wishes to delve into the general problem statement. In fact, concerns with the future of education, in this work, centre around the way we teach and learn are being remodeled by technology. Technological development is getting ahead of our understanding and every single day, things and tools get more sophisticated and connected (Salkind, 2008: 315; Bruce & Hogan, 1998: 270). New educational apps are marketed every new day and in a nutshell, one can nowadays learn with one click what in a century ago

people used to encounter in a lifetime (Costa, 2001: xv). This autonomy-purporting technological context might radically revamp the teacher's roles, learning methods, and schooling (Cho et al., 2013: 45). Therefore, this work wishes to study, in realism, the impact of technology on the teacher-learner relationship.

This research work is entitled: "The Future of the Teacher-Learner Relationship in a Plugged Context: Case of EFL Teachers and LMD Graduate Students at the University of Oran". This entails that the future of the teacher-learner relationship is the specialising major point to be explored in here. This work intends to investigate how the surging use of technology in teaching and learning practices is transforming the crucial teacher-learner relationship. Prior to all, it aims to find out whether Algerian English teachers and learners are ready for the transformation technology is bringing to the terrain of learning and universities, then if they are updating their teaching and learning methods in tandem, and if so, how this is changing their relationship to each besides their roles in the teaching-learning process.

As much as a researcher or a futurist strives to imagine a fact-grounded reality for the future, what might happen, by large, transcends the vision. Nevertheless, this paper intends to frame and visualise the credible pathways that teaching and learning might take either wholly or partially.

1.6. Research Questions

The genesis of this research lies in one question:

1- Research Question: What is the future of the teacher-learner relationship given the circumstances of increasing digitalisation and autonomy-claiming learning environments?

Other relevant, derivative, and sub research questions are:

2- Sub Research Question One (SRQ1): How much important is the teacher-learner relationship for the success of the teaching-learning practice?
3- Sub Research Question Two (SRQ2): What are the open paths for the future of teaching and learning?
4- Sub Research Question Three (SRQ3): What are the predictable new roles teachers will be performing within online and blended learning environments?

1.7. Hypotheses

The hypothesis to the main question is delivered. After that, respectively to the order of the three sub research questions, the following hypotheses are put forward. Those predictions are to be tested along this work.

- Hypothesis to the Main Research Question: The future of the teacher-learner relationship is dependable. It hangs on what mode is adopted. Yet, this bond will remain impactful and rudimentary if only for those who go for blended or unplugged instruction, where there is face-to-face interaction.
- Hypothesis to Sub Question One: The teacher-learner relationship is a pivotal element and a determinant of success of the teaching-learning practice.
- Hypothesis to Sub Question Two: Three prime paths are open for teaching and learning in the coming years: e-learning, blended learning, or traditional unplugged instruction[28]. Eventually, people will be able to choose their type and means of learning. The learning medium will be optional: online (computer, software, and Internet), in a traditional classroom setting (teacher and peers), or blended (both digital and human).
- Hypothesis to Sub Question Three: The teacher's roles will depend on each of the aforementioned options. According to the opted for kind of instruction, both the teacher and the learner will pursue different tasks. Their contribution to the teaching-learning process will stand in accordance with the form of instruction. Within online instruction, teachers will mostly act as designers of online learning material.

1.8. Scope of the Study

In MacBeath's sentence, *"The future is already incipient in the present"* (MacBeath, 2012: 87). The future can be accurately, reliably, and practically predicted only by means of a factual, statistical, systematic, and a scientifically observatory method grounded on continuity from past to present up to the future. In any 'futuristic' work, time frames need to be fixed. In other words, it has to be said if the scope of expectations is for ten, twenty or a different number of years. In this study, it is the shortest time frame that allows for the teacher-learner relationship to be questioned, i.e. for face-to-face teaching to be an option not a given, and also for the kind of teaching to be a choice: online, blended, or unplugged.

[28] The three, e-learning, blended learning, and unplugged teaching, will be expounded in the operational definitions part.

This work sheds light on one possible pitfall of the current elaborate social and digital environments on English learning and acquisition which is the probable erasure of the notion of 'teacher' and 'human teaching' as they have been known to be. Such a proposition leads to further research directions like differences between human teaching and the digital/virtual one. Hence, it opens in research avenues for how teaching English is influenced by digital technologies, the rationales for or against using a technological approach, and the ways in which this approach changes how students learn.

The teacher-learner association is valued for many reasons some of which are covered within this research. Furthermore, the roles teachers undertake are going to be toured besides the three instruction modes stated earlier. At its best, this work includes insights from university teachers and students pertaining to their views of the teacher-learner connection and the future of teaching and learning.

A summarising description of the scope of this study is provided within Table 1.1.

Table 1.1: Delineation of the Research Title and the Implication of Each Variable

The Future of the Teacher-Learner Relationship in a Plugged Context: Case of EFL Teachers and LMD Graduate Students at the University of Oran			
The Future	The Teacher-Learner Relationship	Plugged	Context
What is next? What will the tech and online revolution bring to teaching and learning?	The human affective and cognitive bond existing between the teacher and the learner (the educational-psychological aspect)	Connected, wired, equipped with materials and digital devices (the material design aspect)	Learning environment
Investigation in an EFL university domain (Is it plugged? What are the teachers' and students' expectations for this topic? And what efforts are spent regarding the future of teaching-learning practice?)			

1.9. Potential Relevance and Significance of the Study

As early as the eighteenth century and the Industrial Revolution, tools were substituting man in many labor sectors. In education and language instruction, virtual displayers are already taking over direct teaching in some schools and colleges from American, European, and even Asian countries. Nonetheless, varied and sometimes opposed conceptualisations are being framed about the future. They range from extreme to extreme, from only high-tech to only teachers and learners as a resource. One of the prime objectives of this research is to go

over the most prevailing ones in an attempt to examine which one is more likely to dominate the future of English language teaching and learning in Algeria.

The outcomes of this study will hopefully benefit teachers, learners, and educational authorities including curriculum designers, syllabus builders, teacher trainers, stakeholders and policymakers.

- The teacher-learner relationship evokes and implies the roles teachers play. Such a study may offer teachers a new perspective about the upcoming years. It may canalise their energy and efforts in order to develop the very skills and knowledge they will need. Moreover, instead of staying stuck in traditional roles that DNLs might not respond to, they may gradually adapt to and adopt the roles that cope with the shaping-up conditions. "Teacherpreneurs"[29] might be one amid other new missions for teachers for the many entrepreneur-like tasks teachers are already undertaking.
- Online learning environments are shifting teachers' places, roles, and learners. As will be explored further in the review of literature, the impact of such a setting on learners is enormous and compels understanding. In fact, research proves that digital learning and virtual teaching is unlike human direct instruction and communication; not only in mode and manner, outcomes and knowledge-construction too may demonstrate different in the two types of instruction. Such a study can help learners see the challenges, benefits, and risks of both styles and the possibility to opt for the one that matches their wishes, needs, and objectives.
- Curriculum designers and syllabus builders, once aware of the potential future of teaching and learning can take the fact into consideration while at work. If the future requires technological curriculums, teaching unplugged, or a personalised method, as research tells and reality imposes, designers can but abide by and adhere to what offers a high-quality teaching and learning.
- Teacher training programmes, also, may be inspired by the study so that to be up-to-dated. This signifies including training-sections on the required knowledge and skills for future teaching. Preparing teachers to do their job, in a future where the expected skills and knowledge are still not totally fathomed, suggests equipping would-be-teachers with the most relevant skills to adapt to whatever the future has to impose.

[29] Teacher entrepreneurism is the concept of the 2013 book: *Teacherpreneurs: Innovative Teachers Who Lead But Don't Leave.*

- Through similar studies, policymakers and stakeholders, picturing what is on the horizon of education, be it online, blended, or unplugged, may erect suitable schools, provision them with convenient tools and furniture, engineer fitting spaces, launch the platforms, decide on fees, options, and approaches. Education authorities may also collaborate with other sectors for the sake of far-reaching achievements like telecommunication and web designing.
- This work hopes also to offer insights to teacher training, curriculum and material design, and the adoption of ICTs.

This study centres on "The Future of the Teacher-Learner Relationship in a Plugged Context". The aim of it is to find out about future scenarios of the learning-teaching process given the quantum leaps technology, material design, and ICT are taking, then to what extent their implementation in the educational operation is going to revamp it. To analyse which direction teaching, learning, and the teacher-learner relationship will follow, mainly in Algeria, is what this research attempts to pursue.

As other research, this one began with high hopes in mind. Yet, its humblest ambitions target predominantly the collection of views and personalised understanding of the investigated sample and reviewed literature.

1.10. Operational Definitions

This study employs the keywords whose purposeful definitions are displayed hereafter.

1.10.1. The Teacher-Learner Relationship

The teacher-learner relationship is defined as:

> *"The caring work of teaching is premised upon having a reciprocal relationship between students and teachers. Reciprocity entails teachers and students continually developing, negotiating, and maintaining a social connection."* (Allen et al., 2004: 483)

In other words: *"Teacher-student relationships are defined as caring and authentic relationships between teachers and the students."* (Knoell, 2012: 5)

1.10.2. The Teacher Role

It is upheld in this work that: *"…the role of the teacher is important at all stages of the motivational process."* (Burden & Williams, 1997: 133)

Also, because learning and education are not identical, *"… the necessity of an educational value for learning experiences"* is maintained as part and parcel of the teacher role (Ibid., p. 204). Besides, to give subject matter learning an educational dimension so as to assist *"the development of the whole person"* is a teaching requirement (Ibid., p. 205).

1.10.3. Human Direct Instruction

It has to do with traditional learning, direct instruction, and active teaching. Indeed, Arends and Kilcher maintain that:

> *"… many view direct instruction as a passive form of learning. As you will see, this does not have to be the case. In an effective direct instruction lesson, students are actively involved in an environment that is brisk-paced and challenging"* (Arends & Kilcher, 2010: 189).

What is majorly meant by human direct instruction in this work is the presence of both teacher and learner in the same setting, in which they interact, carry on tasks, exchange and construct learning and teaching together.

1.10.4. Unplugged Teaching

It stands for material-free teaching. To be more concise and relevant, it denotes technology-free teaching (Meddings & Thornbury, 2009).

1.10.5. Plugged Teaching

As opposed to unplugged, plugged teaching is the one that draws on technological tools, materials, and means.

1.10.6. Educational Technology

"The word technology drives from the Greek tekhnologiā, meaning a systematic treatment of an art or craft (American Heritage Dictionary 2000)." (Anderson & Garrison, 2003: 33)

Educational technology here stands for: *"those tools used in formal educational practice to disseminate, illustrate, communicate, or immerse learners and teachers in activities purposively designed to induce learning"* (Ibid., p. 34). Saul Carliner et al. generalise: *"Educational technology can be thought of as the hardware, software, and ''thinkware'' of learning"* (Salkind, 2008: 313). Simpler put, it signifies the technological means, Information Communication Technologies -ICTs-, ranging from basic overhead projectors to e-learning, utilised for the sake of education and learning.

1.10.7. Blended Learning

Smilanich and Wilson define:

> *"Blended learning generally means the application of two or more methods or solutions to a learning need … Blended learning is the use of the most effective training solutions, applied in a coordinated manner, to achieve learning objectives that will attain the desired business goals."* (Smilanich & Wilson, 2005: 12)

Meanwhile, Boulton et al. see that:

> *"… Blended – sometimes called integrated – learning is defined as a mixture or combination of face-to-face and online teaching and learning activities, resources and methods to create a particular blend of learning."* (Boulton et al., 2007: 7)

1.10.8. E-Learning

E-learning is also referred to as distance education that makes use of distance education technology (Anderson & Garrison, 2003: 34). Bakia et al. say:

> *""Online learning" refers to instructional environments supported by the Internet. Online learning comprises a wide variety of programs that use the Internet within and beyond school walls to provide access to instructional materials as well as facilitate interaction among teachers and students. Online learning can be fully online or blended with face-to-face interactions."* (Bakia et al., 2012: 2)

Meanwhile, Rosenberg states:

> *"E-Learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance. It is based on three fundamental criteria:*
> *1- E-Learning is networked, which makes it capable of instant updating, storage/retrieval, distribution and sharing of instruction or information…*
> 2- *It is delivered to the end-user via a computer using standard Internet technology…*
> 3- *It focuses on the broadest view of learning solutions that go beyond the traditional paradigms of training …"* (Rosenberg, 2001: 28-29)

1.10.9. V-Learning

It is said that:

> *"'Virtual learning' is a term that has begun to be used in schools and education in general to describe an application that enables teachers and learners to do some or all of the following:*
> *. share files;*
> *. download information;*
> *. email;*

> *. use discussion boards;*
> *. undertake tests and surveys;*
> *. share information;*
> *. organise time and resources;*
> *. link teaching and learning applications and activities with management information systems."* (Boulton et al., 2007: 1)

1.10.10. The Flipped Classroom

Flipping means:

> *"Flip your instruction so that students watch and listen to your lectures… for homework, and then use your precious class-time for what previously, often, was done in homework: tackling difficult problems, working in groups, researching, collaborating, crafting and creating. Classrooms become laboratories or studios, and yet content delivery is preserved."* (Martin, 2011)

1.10.11. Digitalisation

The electronic Gartner IT Glossary defines digitalisation as: *"The use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business."* In other words, it is the process by which life aspects make more use of digital means and tools.

1.10.12. Digital Natives

Digital natives are those whom the *"major aspects of their lives—social interactions, friendships, civic activities—are mediated by digital technologies. And they've never known any other way of life"* (Gasser & Palfrey, 2008: 2). They are also characterised as:

> *"The young people becoming university students and new entrants in the workforce, while living much of their lives online, are different from us along many dimensions. Unlike those of us just a shade older, this new generation didn't have to relearn anything to live lives of digital immersion. They learned in digital the first time around; they only know a world that is digital."* (Ibid., p. 4)

For digital natives, learning is mediated by technological tools. Gasser and Palfrey adduce:

> *"For these young people, new digital technologies—computers, cell phones, sidekicks—are primary mediators of human-to-human connections. They have created a 24/7*

> *network that blends the human with the technical…"* (Ibid., p. 4)

1.10.13. Digital Settlers and Digital Immigrants

Gasser and Palfrey illustrate:

> *"… "Digital Settlers"—though not native to the digital environment, because they grew up in an analog-only world—have helped to shape its contours. These older people are online, too, and often quite sophisticated in their use of these technologies, but they also continue to rely heavily on traditional, analog forms of interaction. Others less familiar with this environment, "Digital Immigrants," learned how to e-mail and use social networks late in life."* (Ibid., p. 3-4)

1.10.14. A Future Scenario

Sparrow (2000) depicts that:

> *"A scenario is less a strategy and more a coherently structured speculation. While the distinction is not always recognized (e.g. Godet and Roubelat, 1996), this … meaning forms the basis for much of the interest of scenarios for education."* (Sparrow in OECD, 2006: 70)

Meanwhile, Philip van Notten (2005) defines:

> *"Scenarios are consistent and coherent descriptions of alternative hypothetical futures that reflect different perspectives on past, present, and future developments, which can serve as a basis for action."* (Notten in OECD, 2006: 70)

The previous definitions of future scenarios are adopted in this work.

1.11. The Organisation of the Work

In the present work, investigating the future of teacher-learner relationship in a plugged context will be carried in four major chapters.

Chapter One: An Overview and Rationale for the Study

This being the current part, it sets the tone of and for the whole work. Its major purpose is to unveil the opening prospectus of the research. The research scope and background are tackled in here. Also, it deals with the research questions, hypotheses, and purposes.

Chapter Two: Literature Review

A review and analysis of academic literature relating to the research questions are displayed at this level. The literary review of the work will study, analyse, compare, and draw from previous research on the digital learning culture of the 21st century. The scaffold for that will be previous studies carried by many researchers as well as already launched programmes or learning platforms that may maintain a growth pace enough to prolong to the future, inspire replications and cleverer experiments, and extend to other areas in the world. The three central paths hypothetically envisioned for the future are expounded. Few instances of online learning are given like the SOLE project that began with a hole in the wall as early as 1999 and wherein researcher Sugata Mitra implanted an internet-connected computer in a slum-wall in New Delhi. Another instance is the *Coursera.org* free online learning platform and the *Khan Academy*. On a second hand, *teaching unplugged* is one of the vogue claims. It believes that the best resource a teacher can have is learners themselves and put the teacher-learner tie in the spotlight emphasising their interaction. Luke Meddings and Scott Thornbury expounded the synopsis of it in their *Teaching Unplugged: Dogme in English Language Teaching*. Also, the third option for teaching in the future, the fusion of both extremes famously coined as 'blended learning', is to be tackled. That is to say, teachers employ technology in their practice for half the time while the other half is all about them and learners mingling and interacting directly. At the end, a probable evaluation is forwarded. All in all, this chapter will address the aforementioned points and seek answers by investigating in existing theory.

Chapter Three: Methodology and Data Analysis

The practical side will build up on English teachers' and students' views and contributions, at the University of Oran. The participants will be both interviewed and questioned. The case will be further studied thanks to classroom observation which will be carried in order to maximise the validity and reliability of the work. There is one major question that this part is to attempt answering: What is the future of teaching in Algeria? Investigation, in here, will be directed into practice and given an Algerian context. The practical methodology of this research will be clarified and the method of data analysis will be administered. At this stage, also, the gathered data will be presented and analysed through tables and lists, then discussed in relation to the research questions and hypotheses.

Chapter Four: Pedagogical Implications

Three units constitute this chapter:

- Implications: Based on the scrutiny of the findings, implications are to be handed.
- Future Research Directions: Dwelling on the issue of the future of teaching and the 'fate' of the teacher-learner relationship is already opening up into correlational themes and offering insights for future research. Such insights and themes will be amassed under the above heading.
- Limitations: This study encountered a couple of limitations. They will be presented at this section.

1.12. Conclusion

To start with this chapter was pivotal to the illumination of this research's core. Within the margins of this chapter, where from this work stems, its terrain, aims, queries, hypotheses, its scope, significance, and organisation were provided. Besides, the applicable understandings of the key concepts were set. Next chapter will attempt to explore some of the prevailing pertinent literature and review previous research about the teacher-learner relationship, educational technology, plus the future of the teaching-learning practice.

Chapter Two

LITERATURE REVIEW

2.1. Introduction

This chapter encloses the theoretical modules underpinning this study and looks into the accessible texts wherein related material resides. It embarks on the open paths for the future of teaching and learning be them online, blended, or unplugged. Each of the three will be detailed so as to reach an approximate evaluation. It is hoped that by the end, this chapter will grant some of the predominant perspectives for the future of teacher roles and the probable impacts of digitalisation on education mostly its upshots pertaining to the teacher-learner relationship and each one's roles.

2.2. Potential / Probable Future Scenarios

To depart with, John Richards predicted that it takes time and money for technology to be integrated (Costa, 2001: 484). Earlier than the time expected albeit, technology is affiliating with language instruction. Tomei illustrates:

> *"Today, there are numerous products on the market that support language labs, computers, and distance learning methodologies. Entire language acquisition programs are available through distance learning and computer-assisted instruction. It is possible to learn a host of new languages using such resources as satellite programming and CDROM technology. Contemporary publishers of textbooks, computer programs, online curriculum sites, and distance learning providers routinely provide ancillary computer disks. The impact of these technologies has been that most schools now claim verifiable increases in the effectiveness of their foreign language instruction."* (Tomei, 2003: 184)

Despite this, different prospects are looming on the horizon for education not only the technological one. The to-come subsections of this one contend with three chief visions: online learning, blended learning, and unplugged teaching. Yet, there are other scenarios that are not within the scope of this work.

2.2.1. Online Learning / E-Learning

The Internet and e-learning are nowadays receiving notable regards for educational purposes (Anderson & Garrison, 2003: 32). The preface to online learning is Computer Mediated Communication and Language/Learning, also known as, CMCL which popped in the 1990s (Hampel & Lamy, 2007: 7). To date, online learning and CMCL have been interchanged with a collection of other acronyms (Table 2.1).

Table 2.1: Acronyms in Computer-Assisted Language Learning

CALI Computer-Assisted Language Instruction **CALL** Computer-Assisted Language Learning **CELL** Computer-Enhanced Language Learning **CBLT** Computer-Based Language Teaching **CMC** Computer-Mediated Communication **ICALL** Intelligent CALL **MALL** Mobile technology-Assisted Language Learning **NBLT** Network-Based Language Learning **TELL** Technology-Enhanced Language Learning **WELL** Web-Enhanced Language Learning

(Hampel & Lamy, 2007: 8)

To give online learning a contextualised definition, A. and Poe edited that:

> *"The term online learning (or, as it is sometimes called, distance learning) includes a number of computer-assisted instruction methods … Online teaching and learning is faculty-delivered instruction via the Internet. Online instruction includes real-time (synchronous) and anytime, anywhere (asynchronous) interactions."* (A. & Poe, 2002: 5)

Apparently, within an online learning experience, all modes of communication -written, oral, gestural, or pictorial- are conveyed via the computer, a medium that opens up for glowing avenues but also imposes its own constraints (Hampel & Lamy, 2007: 34). To allude to a couple of those avenues, e-learning unfolds in collaborative learning (Anderson & Garrison, 2003: 48). Second, it is a "*catalyst for communicative creativity and cognitive freedom"* (Ibid., p. 117). Last but not least, Maor says that: *"Online teaching has created innovative and effective ways of teacher-student and student-student interactions"* (Maor, 2008: 628).

Therefore, in response to the increasing propensity for online education, designers attempt to answer with, for example, e-books, virtual simulations and 3D holograms, podcasts, wikis, blogs, MOOCs, smart-mobile devices, applications, etc (Bonk & Kim, 2006: 22). Some of these will be reviewed along the line of the forthcoming subtitles.

2.2.1.1. Virtual Schools

Distance education, also referred to as distributed learning, is given the following definition:

> *"The communication over distance between teacher and student mediated by print or some form of technology designed to bridge the separation between teacher and student in space or time."* (Salkind, 2008: 261)

This brand of education is not a new phenomenon (Anderson & Garrison, 2003: 35). Its evolution has been occurring from tribal learning customs, to correspondence classes, and up to the World Wide Web (Annetta et al., 2010: 1). Actually, the first generation of distance learning is the one that is indebted to the printing industry, textbooks, course guides, and other paper materials (Anderson & Garrison, 2003: 35). *"A defining feature of first-generation technology is the maximization of freedom and independence for students."* (Ibid., p. 36)

The second generation gained ground around the combination of cognitivism and mass media technologies, and it too promoted independent learning (Ibid., p. 36). Later on, the advent and advance of the computer with its sizeable allowance of "*asynchronous and synchronous human interaction"* bred the third generation of distance learning (Ibid., p. 37). In effect, this could be twinned with "*technology-enhanced distance learning"* (Salkind, 2008: 261).

Today, the steps are towards an outright online system (Preston, 2004: 30). "*Going from distance to digital"* (Ross & Davis in Preston, 2004: 29) has given birth to Virtual Learning Environments -VLE- and 3D Virtual Learning Environments (Annetta et al., 2010: 20-51). Annetta et al. define:

> *"Virtual worlds are places where people come to socialize, play, conduct business, and even learn. They give the person a sense of face-to-face communication, even when in reality people may be thousands of miles apart."* (Ibid., p. 154)

By extension, a virtual school makes use of the latter to electronically yet pedagogically deliver curriculums and content to homeschooled learners (Salkind, 2008: 1002). In 2008, the estimates counted above a million of American students who were into virtual schools (Ibid., p. 1002). Commonly, when a student enrolls in a virtual school, a teacher will be allotted the job of online tutoring and keeping track of the learner's achievement (Ibid., p. 1002).

Besides VLEs or part of them, some platforms have surfaced that allow for individual proactive learning. Three of the most appealing 3D VLEs are Second Life©, Active Worlds©, and There© (Annetta et al., 2010: 155) but most of the time, the buzz is about the VLEs abbreviated as MOOCs. They are not always and totally viewed as virtual, though.

2.2.1.2. MOOCs

The today so-much-popular three Ws were firstly used to browse in 1991 (Gasser & Palfrey, 2008: 3). The World Wide Web is home for a myriad of platforms that not only enhance e-learning but also completely take charge of it like Massive Open Online Courses (MOOCs) (Grainger, 2013: 4). MOOCs also stand for Massive Open Online Communities (Meier, 2015). According to Grainer's findings, the principle of a MOOC is often downloading and viewing documents such as e-books, audios, and videos (Grainger, 2013: 36).

The scope in this study does not expand to an ample detailing. Yet, MOOCs have proved as a *"potential game changer for education"* as they exert a premise of choice in times of personalised desires and mass education with their *"current offerings of free content, with some form of supported provision"* (Gordon, 2014: 17). In real fact, Gordon carries on that MOOCs are offering many an *"experiment with learning in new ways"* (Ibid., p. 17).

Two models of MOOCs are forwarded here-below: one for educators' professional development and a second for students all over the world.

2.2.1.2.1. Connect to Learn

Neuman says: *"… the ability to access, evaluate, and use all types of … information is the key to twenty-first-century learning"* (Neuman, 2011: 85). Thus, 'Connect to Learn -C2L-' is one learning platform amid many. It is a ready prototype for online collaborative learning (Harris & Jones, 2012: 17). C2L is rather destined for teachers' *"professional learning"* or professional development (Ibid., p. 18). It operates by connecting educational professionals from different schools in order to collaboratively improve teaching practices and school performance (Ibid., p. 17).

This being said, the for-educator *C2L.org* has many equivalents and parallels for both educators and learners.

2.2.1.2.2. Coursera

Coursera.org is another ready model of online learning. It is a platform, a MOOC that partners with a range of renowned universities (Grainger, 2013: 7). Two Stanford academics from the Department of Computer Science, Professor Daphne Koller and Professor Andrew Ng., first launched Coursera in April 2012 (Ibid., p. 7). Its function could be reported as:

> *"To provide massive open online courses (MOOCs), short online courses that have the following distinguishing features:*
> *1. Open access – anyone can participate, for free; and*
> *2. Massive – the learning platform is scalable and courses are designed to support an indefinite number of participants. Within a few months of launch, Coursera had attracted over 1 million global users, and at the time of writing [September 2013] the platform caters to over 5 million learners offering 400+ MOOCs with academic content from over 90 university partners."*(Ibid., p. 7)

As a massive education company offering to millions of students, Coursera aims to insure *"access to a world-class education"* to its associates such as the University of London International Programmes. The latter stated in their *MOOC Report* that: "*The Coursera platform presented an opportunity to trial new pedagogical models and delivery techniques"* (Ibid., p. 8). In June 2013, the University of London International Programmes co-worked with Coursera to establish four six-week MOOCs (Ibid., p. 4). Around 90,000 students were actively participating, downloading materials, and communicating with MOOC mates besides the people behind the course. By its closure, the course reached exactly 8,843 'Statements of Accomplishment' (Ibid., p. 4).

True to a MOOC format are basically: video lectures (pictures, slides, etc), assessment (automatically-graded multiple choice questions -MCQs-, auto-graded programming assignments, or peer review assessment), and forums thanks to which subscribers approach and relay to each other about the course content and feedback as well as to their 'instructors' (Ibid., p. 13). Other materials could be used as well like live video sessions, reading materials, activities, and additional video resources (Ibid., p. 14). A MOOC, indeed, employs teachers who design content, upload it to the platform, and interact with students (Ibid., p. 13). Besides, they provide a syllabus and its requirements for interested students to be informed beforehand about the course (Ibid., p. 21). This implies that even within a MOOC, an instructor's presence is relied on, if only from behind the screen.

Here is an inclusive model of a MOOC (English Common Law)[1] structural data.

[1] English Common Law is one of the four MOOCs by The University of London International Programmes and Coursera.

Table 2.2: MOOC Structure of English Common Law: Structure & Principles

MOOC title	**English Common Law: Structure & Principles**
Start date 24	June 2013
Length of MOOC (weeks)	6
Learning hours/week	5-10
Teaching staff (including lecturers)	4
Video lecturers	2
Teaching assistants	0
MOOC format	Video lectures divided into weekly topics, with multiple choice quizzes and peer assessment based on lecture content and additional resources at the end of each week. Additional videoed topic introductions, live Q&A sessions, scripted student discussions, and student feedback session offered. Twitter chats provided. Students encouraged to discuss lecturer-led topics in the forums with guidance provided by teaching staff; un-moderated social media discussions. 50% pass mark, 70% distinction.
Total number of videos	76
Total length of videos (hrs:mins)	9:38
Avg. weekly length of videos (hrs:mins)	1:36
Avg. video length (mins:secs)	9:44
Assessment type(s) used	Multiple choice quizzes, peer assessment, formative assessment
Forum moderation	Teaching staff
Social media platforms used	Twitter, Facebook, Google+

(Grainger, 2013: 17)

Grainger concluded his report calculating that 91% of those who took the University of London's Coursera MOOCs expressed their satisfaction and judged the course as good, very good, and even excellent whereas only 2% evaluated it as poor (Ibid., p. 31).

On a larger scale, MOOCs are but one face to independent learning which, advisedly, welds to self regulated learning.

2.2.1.3. SOLE and Self Regulated Learning

Ifenthaler predicts that if the technological evolution keeps its current pace, in the near future learners will be actively constructing their own learning (Ifenthaler et al., 2010: 3). This

binds both constructivism and Self Regulated Learning, also called Independent Learning (Faraday et al., 2008). This is:

> *"A process that assists students in managing their thoughts, behaviors, and emotions in order to successfully navigate their learning experiences. This process occurs when a student's purposeful actions and processes are directed towards the acquisition of information or skills."* (Roberts et al., 2011: 4)

As such, self-regulated learners are characterised by proactive goal-setting, planning, self-motivation, attention-control, flexibility in their use of learning strategies, and self-monitoring (Ibid., p. 9-11). They own their learning and know when seeking help is necessary (Ibid., p. 12). Also, they self-evaluate (Ibid., p. 13).

Indeed, education is not to be equated with schooling (Kenning, 2007: 104). Education can take place outside the school walls and timings (Rajasingham & Tiffin, 1995: 49), whereas *"good learners need to become resourceful, in the particular sense of making good use of external resources"* (Claxton, 1999: 225). All in all, education can make use of multiple resources and include more than subject matter content.

Lackney mentioned *"the impact of technology on school design"* (Salkind, 2008: 874), Davidson et al. wondered: *"The classroom or the World Wide Web?"* (Davidson et al., 2009: 8), while MacBeath asked the question: *"Do schools have a future?"* (MacBeath, 2012: 78). Amongst the possible scenarios he presented, on behalf of OECD -Organisation for Economic Co-operation and Development- (2001), is *"deschooling"*, encouraged by the latest emergent ICT (Ibid., p. 79). This might shoulder SRL and SOLE.

Speaking to ELT, it is no new fact that: *"now … [CALL] programs have been developed that seek to teach all four skills as communicatively as possible"* (Christison & Murray, 2001: 61). Yet, the foreseen vision of the *"computer as a tutor"* (Athanasiou et al., 2000: 132; Taylor, 1980) is what is perplexing the minds of many educational researchers. Some of them, however, are enticed away from this stand by the motive of the obsoleteness of the present educational systems (Rajasingham & Tiffin, 1995: 71).

This needs to be read in conjunction with SOLE. Not to be confused with "Spoken Online Learning Events" (Hampel & Lamy, 2007: 223), SOLE represents Self-Organised Learning Environments. Sugata Mitra, an Indian computer scientist, a professor of educational technology at Newcastle University, and a 2013 TED Prize winner, is the issuer

of the SOLE project that he presented in TED[2] (2013). According to his talk, he started the first *"Hole in the Wall"* in 1999 with other colleagues. He, then, installed a computer in a slum wall at New Delhi and let the children there play with it; a camera was hidden around so that to record the experiment (Figure 2.1).

Figure 2.1: "Hole in the Wall" Experiment in New Delhi Slum

(Cary et al., 2014: 2)

Having repeated this experiment in other poor Indian villages then other countries showed that children can learn just by themselves without formal training (Figure 2.2). The groups of children, besides their curiosity and collaboration, were encouraged by elders. According to the talk content and Mr. Mitra (2013), SOLE is basically the following formula:

SOLE = broadband + collaboration + encouragement
+
admiration

[2] TED stands for: Technology, Entertainment, Design. This is a nonprofit organisation/foundation committed to spreading "ideas worth sharing" in the form of talks or else. It covers all issues not just TED. It started in 1984 as a conference. Their website, *TED.com*, is home for their talks, discussions, and ideas. There are even forums on which people share their views, create questions, and spark conversation. The idea has spread to many parts of the world, and today there is a series of independently organised TED local events: TEDx. For example, there is TEDx Sydney, TEDx Paris, TEDx Tizi Ouzou (in Algeria), etc.

While the whole TED talk transcript can be read in Annex One, here are some of Mitra's words, the most relevant to this study:

> *"Could it be that we don't need to go to school at all? … We need to look at learning as the product of educational self-organization. If you allow the educational process to self-organize, then learning emerges… It is not about making learning happen. It is about letting it happen. The teacher sets the process in motion and then stands back in awe and watches… The teacher only raises the question… and… School in the Cloud… a school where children go on these intellectual adventures driven by the big questions which their mediators put in."* (Mitra, 2013)

Commenting on that, Buncombe (2014) wrote in the Independent: *"Sugata … believes that while a human teacher can never be replaced, they can be supplemented."* In other words, the teacher is an integral character of a SOLE context, by yielding questions, fuelling students' 'will to learn' (Covington, 1998), and cheering their achievements.

Figure 2.2: Sugata Mitra and a Group of Children Next to Wall Computers in India

(Cary et al., 2014: 22)

Laurence Peters sums it up: *"Mitra now refers to his experiment as "Minimally Invasive Education," as compared to traditional classroom learning"* (Willoughby & Wood, 2008: 109). He, additionally, thinks that this "Hole in the Wall" was a "startling" experiment because it moves from the ordinary educational contexts we are accustomed to (Ibid., p. 110-111). It is also surprising because it managed to win the first TED Prize award of $1 million.

2.2.1.4. The Promise of Educational Technology Designs

Technology comes with promises. First of all, *"The wide world of technology"* (Chubb & Moe, 2009: 66) and Computer-mediated communication -CMC-, let us not forget, are *"being implemented to ''bridge'' opportunities for the disadvantaged"* (Harvay et al., 2009: 83). Second, Carliner et al. confirm that educational technology investigates *"the models and processes used to analyze, design, develop, deliver, implement, and evaluate instruction; the technology used to support these processes—both analogue and computer-based—in order to deliver learning materials, facilitate communication, and provide assessment and feedback…"* (Salkind, 2008: 314). Third, it being tied to learning, educational psychology, communication studies, and a couple of other disciplines (Ibid., p. 314), educational technology reengineers learning and teaching with gadgets to pursue tasks and solve problems for learners (Bransford et al., 2004: 213), and with aids to give students feedback for teachers (Ibid., p. 216).

To not standardise in one aspect, Salkind classifies technologies in four groups:

> *"• Technologies for teaching and learning*
> *• Technologies for facilitating communication among participants in the learning process*
> *• Technologies for facilitating evaluation*
> *• Technologies for managing learning activities"*
> (Salkind, 2008: 315)

As could be grasped from what he explains, a teaching-learning technology can basically support any teaching task. As an example, technologies for managing classroom activities gave way to "Learning Management Systems-LMSs-" that, either online or in a classroom setting, do all the upcoming:

> *"• Registration*
> *• Tracking of participation (classroom attendance, sign-ons and sign-offs of online courses)*
> *• Tracking of completions (including final scores or grades)*
> *• Testing*

> *• Providing aggregated reports, such as the numbers of people registered for particular courses*
> *• Sharing information with other systems, such as human resource information systems*
> *• Suggesting curricula for learners*
> *• Tracking skills of individuals and groups of people within an organization*
> *• Providing learners with a one-stop shop for their learning needs (especially online programs) and personalized information, such as a customized learning page that includes recommended paths through learning material."* (Ibid., p. 317-318)

Implemented in those tasks are the teacher's common practices. Technology, thus, could not be far from entirely-delivered online courses and SRL principally that there is a heightening run on choice and flexibility in education as Arrington and Lowe contemplate (Ibid., p. 606). An online learning experience affords for some operations that are counterpart to the ones in the classroom. For instance, posting comments is a counterpart for participation, electronic delivery of assignments for homework, and chats for face-to-face interaction. Even with that, e-learning's capacity to succeed at accomplishing the objectives of education is under the microscope (Ibid., p. 606).

Flexibility and choice may set in propositions of a technological or a *"flexible e-learning approach"* (Gordon, 2014: 9). McCrory suggests:

> *"Teachers themselves provide evidence that what they need is not technological expertise, but rather a useful portfolio of technology resources."* (Ashburn & Floden, 2006: 142)

Such a useful portfolio may come within or in the form of a course, a syllabus, a curriculum, or a whole approach. In practice, technology affects curriculum design and sets learning in active motion through learner-individualised problem solving, i.e. learning (Bransford et al., 2004: 207).

Another promise of technological designs is held to language acquisition and instruction. The Web, in actual fact, offers language exposure and immersion said to be necessary for foreign language acquisition (Chapelle, 2003: 35-36); whereas CALL activities *"might promote second language learning"* (Ibid., p. 38). To exemplify, Computer Assisted Language Learning resides in those web pages said to be home for learning and teaching English as a foreign language although their efficiency is not taken for granted by all. Chapelle wonders:

> *"Is there any reason to think that anyone is really learning English from these? Can a secretary in Korea, a manager in Italy, or a college student in Saudi Arabia really learn English by working on electronic learning materials on the Web? Do English language teachers and researchers have opinions and advice for such learners? The answers to these questions are not as simple as one may be led to believe by the current rhetoric on electronic learning."* (Ibid., p. 35)

In synopsis, technology proponents staunchly run their campaigns, but the adoption of technology does not need to be thorough for it to be fruitful and there is where blended learning manifests itself.

2.2.2. Blended Learning

The use of technology in education does not necessarily have to be holistically online. There are other ways by dint of which technology can be employed to meet a certain learning activity or objective. This summons blended learning. The latter is: *"a combination of different approaches to learning. Normally, it encompasses both classroom sessions and technology resources"* (Annetta et al., 2010: 153). It is also known as 'hybrid learning' wherein instruction stands halfway from both face-to-face and online, i.e. the two modes are juxtaposed and alternatively used (Bakia et al., 2012: 2).

This dichotomy of face-to-face/online can be epitomised through a traditional classroom setting that has built its own website (generally the teacher does) to post the syllabus, relevant data, lessons, assignments, resources, and exam results (Annetta et al., 2010: 153). The class can meet directly on a given number of days per week then proceed to online for the rest of days. Annetta et al. say that this has enabled:

> *"… teachers and students to communicate on a number of levels that previously were not available with classroom-only sessions. In many ways, the teacher is now more accessible to the student with the help of forums and e-mail than he or she was before using only scheduled classes and office hours. In addition, blended learning offers the benefits of classroom instruction with the advantages of individualized learning, which helps to reach a broader range of student needs. Today, blended learning is not only common in school settings, but is also popular for workplace training and continuing education."* (Ibid., p. 153)

Simply put, blended learning is the integration of online and traditional learning (Thorne, 2003: 31), and it allows for differentiation or personalisation. In a differentiated

classroom, the role of the student includes liability for his own learning. It remains no teacher-only role to pass on knowledge (Arends & Kilcher, 2010: 114). Arises again the notion of learning facilitation and that in-vogue teacher role: a facilitator, a coach; a parallel upshot of that is the learner as an 'active participant' which is interpreted as:

> *"Students make choices based on their interests and learning preferences; they learn alone, tutor each other in pairs, and work in small groups. Over time, students become increasingly self-directed and independent. The goal for each student is to maximize growth from their current learning position. The goal for us, as teachers, is to understand more and more about each student so that learning activities can be designed to match learner needs. Goals for both students and teachers are to increase skills for independent work."* (Ibid., p. 114)

Systematically, blended learning resonates with that citation as it packs together ICT and human presence for learners to adjustably adapt and prosper in a versatile, complementary learning environment (Boulton et al., 2007: 7). Lastly, the synchronisation and balance of face-to-face/online in an EFL class, on its side, has been cementing language instruction with novel means ranging from CD-ROM software, to Internet, up to the pre-cited distance learning programmes (Tomei, 2003:184).

In short, if the aim of technological material use is to facilitate and enhance learning, any form of blending will be justifiably welcome (Salkind, 2008: 313-314).

2.2.2.1. Social Media

In one personal high-school classroom situation, students were asked how they acquire and improve their English outside classroom. One student answered: "social networks". It is a general observation and a recurrent talk that today's teens, but not just them, spend long hours on social networks like Facebook, Twitter, Instagram, and Tumblr and sometimes on all of them simultaneously. Danah Boyd, an American researcher in this specialism, has produced some books that survey extensively this issue. In her book: *It's Complicated: The Social Lives of Networked Teens*, she points out: *"As a cultural phenomenon, social media has reshaped the information and communication ecosystem"* (Boyd, 2014: 6).

Following the trend, Brown and Duguid perceive that higher education institutions' *"core competency"* is to construct and advance knowledge not handing it down *"and that's done within intricate and robust networks and communities"* (Brown & Duguid, 1996: 13). A generic understanding of social media networks is in terms of them being robustly increasing communities. At the same time, Harris and Rea clarify:

> *"A social network is a social structure made of notes, generally individuals or organizations, which are connected by one or more specific types of interdependency."* (Harris & Rea, 2009: 138)

The intersection of social media communities with language acquisition is borne in the subsequent explanation. *"The systematic study of language **ACQUISITION** outside formal learning situations such as the classroom"* is what *Routledge Encyclopedia of Language Teaching and Learning* puts as *"Untutored Language Acquisition"* (Byram, 2000: 649). Hence, by analysis, it could be said that any type of interaction via social media could be comprised within untutored language acquisition. To spotlight this in broad, Baggio and Beldarrain consider that:

> *"The increased connectivity and sharing capabilities afforded by social networking Web 2.0 tools have added new dimensions and challenges to different sectors of society, including businesses and educational systems alike."* (Baggio & Beldarrain, 2011: 39)

For example, the aforementioned University of London International Programmes made use of social media within their Coursera MOOC (Grainger, 2013: 14). It enclosed Twitter, Facebook, and Google+ chats (See Table 2.2). Students and their instructors discussed course content, asked, and answered questions via those networks (Ibid., p. 14). In short, it is said that: *"Communication platforms like Twitter, Facebook, or Tumblr enable dynamic communication with students"* (Snehansu, 2013).

In a teaching-learning state of affairs, the use of social networks hand in hand with face-to-face workings sounds like another version of blending or flipping the classroom.

2.2.2.2. Flipped Classrooms

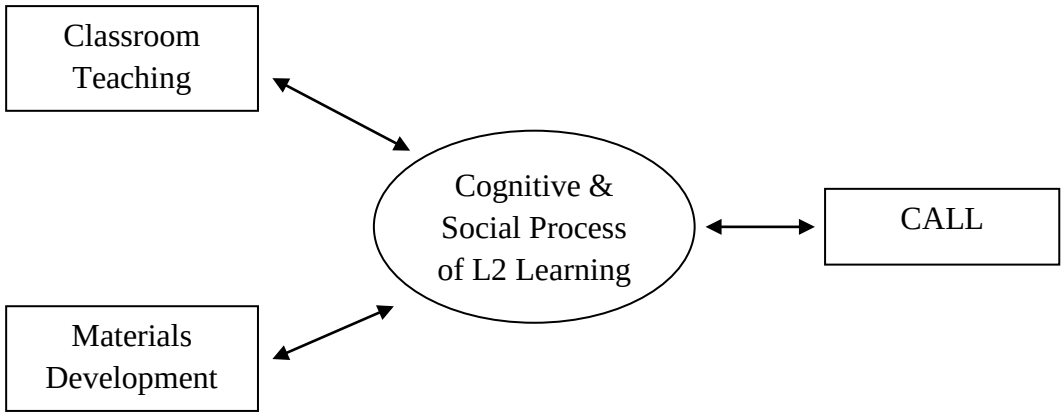
If anything, the prevalence of technology is said to be flipping the classroom. Technology Enhanced Learning (TEL) (Capuano et al., 2008: vii) changes not just learning and teaching but also those relationships engrained in them. J. Strobel and H. Tillberg-Webb claim that the merging of both human and digital allows for relationship enhancement (Harvay et al., 2009: 87). Meanwhile, Darcy Miller probes:

> *"Although there are many new developments emerging from research on teaching strategies, such as brain studies and culturally responsive teaching, technology has recently had the greatest impact on how instructors teach and students learn. Better and more effective computer*

> *software programs designed to facilitate critical thinking, problem solving, and decision making, as well as provide practice on basic skills, are being developed. Projectors in the classroom, the Internet, personal response systems, online learning, blogging, Web-based learning, and electronic portfolios are all affecting instruction and new teaching strategies are being designed using technology applications."* (Salkind, 2008: 968)

Flipped classrooms go back to earlier than the 21st century. Salkind dubs them as: *"Technologies for replicating the classroom through technology"* like the radio, phone conferences, and television, by which students could take part of the class even if their physical condition, time or geographic constraints did not qualify them to do (Ibid., p. 317). Another aspect for early classroom flipping is 'Scantron': a twentieth century automatic grading system for MCQs and other objective questions like true/false (Ibid., p. 317). Overall, a flipped class is the meeting point of more than one type of knowledge and strategy (Figure 2.3).

Figure 2.3: The Relationship between Knowledge of Classroom Teaching and Knowledge of CALL



(Chapelle, 2003: 39)

The flipped classroom is one example of blended learning. It is a teaching strategy that flips face-to-face instruction by employing online coursing: students take part of online lectures, attend teleconferences, and engage in collaborative discussion and e-learning, whereas the direct meeting handles basically homework and few other issues (Abeysekera et al., 2015).

As inverted as it sounds, the flipped classroom finds a relevant milieu to proliferate in under the *Khan Academy*. Salman Khan gave a TED talk in 2011 where he explained the

project that commenced with the simple idea of uploading his mathematics teaching videos to YouTube. So as learners can watch at *"their own time, their own pace"* (Khan, 2011) and review what they missed in class, Salman ended up *"turning his classroom on its head"* (knewton.com, 2015) which literally signifies: *"I assign the lectures for homework and what used to be homework, I now have the students doing it in the classroom"* (Khan, 2011). After that, the project got adopted by other teachers who shared approximately the same vision as Khan who states:

> *"Our goal is to use technology to humanize … what is happening in education… the relevant metric is student-to-valuable human time with the teacher ratio."* (Ibid.)

Technology, factually here, humanises the classroom as it allows for more peer instruction, whose importance Mazur, a Harvard Professor, expanded in his book: *Peer Instruction: A User's Manual Series in Educational Innovation* (1997). The procedure is that lectures are recorded and students get them electronically, at home (Khan, 2011). In class, homework is discussed, teachers get to move around and personalise learning for every learner or group of them, while learners interact and learn in collaboration (Ibid.). By approaching them, sitting next to them, *"working with them instead of lecturing from the front"* (Ibid.), teachers mentor and tutor students who per se tutor one another. This materialises King's image of the teacher as a *"Guide on the Side"* instead of a *"Sage on the Stage"* (King, 1993: 30).

Not only to technology, but flipping can sometimes be towards 'unplugging' from technology. Throwing away the screen in these *"screen times"* (Bauerlein, 2008: 71) would be an upside-down deed for the digital natives.

2.2.3. Unplugged Teaching

The overwhelming body of technology, its potential, and delimitations have albeit led some educators to switch off and rebalance the equation. The technological boom, for some, provoked a thought of regaining the basics of education. True that not everyone manages to have access to ICT for their education, but to not let it to oblivion, many teachers and learners around the world have minimal, if any, textbooks or other materials available and some do with only a blackboard and some chalk (Christison & Murray, 2001: 63). In some cases, the only resource to rely on comes from real life, from learners themselves, or from the teacher together known as 'realia' (Ibid., p. 63; Harmer, 2007: 177).

After all, was not this the way people always taught and learnt, via mere discussion? Gorham et al. substantiate: *"Teaching and learning is a communicative process"* (Gorham et al., 2009: 117). Freire bears extra witness that: *"Without dialogue there is no communication, and without communication there can be no true education"* (Freire, 1997: 73-74). Research on how people learn shows that: *"Learning through direct, open-minded immersion in experience -the natural learning ability of the brain- remains the foundation of learning throughout life"* (Claxton, 1999: 334). Eventually, Gorham et al. insist that:

> *"Teaching is about establishing effective and affective communication relationships with your students. Effective teachers are effective communicators. They are those who understand communication and learning are interdependent and the knowledge and attitudes students take with them from the classroom are selectively drawn from a complex assortment of verbal and nonverbal messages about the subject, the teacher, and themselves. They are those who are more concerned with what the students have learned than with what they have taught, recognizing those two things are not necessarily synonymous. They are those who consciously and strategically make decisions about both what is communicated and how it is communicated…*
> *Teaching is about relationships with students and about achievements of students. If you ask most teachers why they chose teaching as a career, or why they continue to work in the schools, they will tell you it is because of the children. If you ask them what can most effectively turn a bad day into a good one, they will tell you it is the moment when the "light bulb" goes on, when everything comes together and a student's face lights up with the realization that he or she understands."* (Gorham et al., 2009: 1)

Through these deep words leaks a real meaning for teaching. Besides other features, teaching is about caring and purposeful communication that gives a model and allows learning. In their book *Teaching Unplugged: Dogme in English Language Teaching*, Meddings and Thornbury pinpoint the centrality of discussion to foreign language teaching and learning. They highlight conversation as a crucial ELT strategy because it is *"language at work … discourse … interactive, dialogic, and communicative … It scaffolds learning … promotes socialisation"* (Meddings & Thornbury, 2009: 8). The authors, also, administer an explanation of 'Dogme ELT'. They say:

> *"A teaching movement set up by a group of English teachers who challenge what they consider to be an over-reliance on materials and technical wizardry in current language teaching. The emphasis on the here-and-now*

> *requires the teacher to focus on the actual learners and the content that is relevant to them."* (Ibid., p. 6)

When ICT flourished and material-use skyrocketed, The Dogme ELT approach appeared responding to those teachers who wish to 'unplug' their practice, unleash from too many materials, and employ just the 'raw materials', that is, the teacher and the learners (Ibid., p. 7). It is an interactive and engaging approach besides other features that Meddings and Thornbury enumerate (Ibid., p. 7-8). All of them put together, Dogme is characterised by:

> *"•…teaching that is conversation-driven.*
> *•…teaching that is materials-light.*
> *•…teaching that focuses on emergent language."* (Ibid., p. 8)

Yet, *"Dogme approach is not anti-materials nor anti-technology per se"* (Ibid., p. 12); rather, it vetoes aids that are disengaging, conversation-blocking, or material-overloaded (Ibid., p. 12). From their angle, advocates of unplugged teaching swell and overemphasise the tenet that the learners, their interests, lives, and whatever they bring to the class should be the resource. Meddings and Thornbury believe that:

> *"Traditionally, learners come to class to be 'given' a lesson that has been prepared in advance by the teacher. In the Dogme classroom, it's the other way round: learners bring the lesson with them - in the 'rough form' of their language and lives - and the teacher helps them to shape it into a learning experience."* (Ibid., p. 24)

As put by its editors, the book suggests *"a bank of activities"* to 'unplug' ELT (Ibid., p. 103). Those activities model an unplugged teaching based on unaided classroom discussions. Ultimately, in unplugged teaching, two prime strategies could be distinguished: instructor-centred and student-centred (Salkind, 2008: 964). The former manifests an active all-doing teacher role whereas the latter bolsters learner-centredness which compels the teacher to be an observer, a guide, a facilitator, or a mediator (Ibid., p. 964-965).

On the whole, a communication oriented approach to language instruction, as is learner-centred unplugged teaching, displays interest in the individual learner (Gorham et al., 2009: 112-113). This is the first step towards the establishment of a 'good' teacher-learner relationship. A second cradle for the last is *"a teacher with a good communicative style"* for this bestows favourable reverberations on students' affect, cognition, self-concept, classroom behaviour, and achievement (Ibid., p. 173).

To sum up, unplugged teaching prefers less materials and more teacher-learner direct interaction hoping and believing in richer results.

2.2.3.1. "Less Is More"

J. Strobel and H. Tillberg-Webb have questioned the influence of bringing ICT into education (Harvay et al., 2009: 80-81). They have also sought for an *"Abandon of the "Technological Fix""* (Ibid., p. 82). Meanwhile, Valkenburg (2010) argued for less technology in his article "Against the Grain: An Argument for Using Less Technology in Education". This 'minimalist view' is applicable to unplugged teaching as the latter advocates material-lighted lessons that thrive in classroom discussion and interaction (Meddings & Thornbury, 2009: 8).

"Less is more" is the crux of two 2015 electronic articles: "In Finland's Schools, Less is More" and "11 Ways Finland's Education System Shows Us that "Less is More"". In the former, the author submitted:

> *"Despite fewer class hours, almost no standardized testing and teachers with free rein, the Finnish school system has risen to the top internationally."* (Biggam, 2015)

She mentioned how the Finnish educational system mounted to premier positions as a *"flexible noncompetitive… relaxed"* teaching-learning model wherein "*… teachers believe it is their job to nurture and emotionally support their students, much like a parent. Interestingly, the Finnish word kasvatus*[3] *describes both the process of raising a child and the skill and knowledge of the adult contributing to their upbringing"* (Ibid.).

In the second article, the author speaks of how teachers keep trying to *"do more and More and MORE"* (J. Kelly, 2015) and how she found the opposite in Finland. She wrote:

> *"When I arrived in Finland I did not find big flashy innovative thought provoking math lessons … The instruction and classroom structure of a … classroom in Finland follows the basic formula that has been performed by … teachers for centuries: The teachers go over homework, they present a lesson (some of the kids listen and some don't), and then they assign homework."* (Ibid.)

[3] *Kasvatus* in Finnish translates to *education* and *upbringing* in English.

She attributes the Finnish success to the "less is more" philosophy and "*national mantra*". Meanwhile, she, an American, criticises the American "more is more" and continual amendment and transition to new methods and techniques be them educational or else.

"Less is more" could also be understood in terms of less teacher interference which emanates from the oft-cited student-centredness. The teacher can, at times, perform nothing more than observing students at task, constructing their own learning via discussion and peer interaction or experimentation (Salkind, 2008: 966). When Bartolomé wrote her article: "Beyond the Methods Fetish: Toward a Humanizing Pedagogy" (1994), she illuminated the talk about best methods to teach language. She suggested a "*humanizing pedagogy*" that focuses on the nourishment of the teacher-student rapport by getting to know the learners, using classroom cooperation, writing, and reciprocal teaching (Bartolomé, 1994). Interestingly, she resolved to no materials or aids to chronicle that practice and she insisted on rejecting "*uncritical appropriation of methods, materials, curricula, etc*" (Ibid., p. 176-177). Gorham et al. also figured out that: "*… students develop a greater affect for subjects taught via class discussion than by those taught strictly by lecture*" (Gorham et al., 2009: 31). However, they held that resourceful instruction can succeed when tools and resources are conceived as just what they are, i.e. as mere tools (Ibid., p. 38).

One more dimension, less content and materials find space within mastery learning. The latter is a "*communication-oriented approach to instruction*" (Gorham et al., 2009: 11) that targets the mastery of a given point. This approach allows teachers to *"cover"* less material and students to accomplish more (Ibid., p. 115). To close with, Gorham et al. evaluate: "*It seems we always have the option of sending more, but having receivers who receive less; or sending less and having receivers who receive more of it*" (Ibid., p. 115). Indeed, it is a relative issue. The lesson that is least material-aided can be received by students better than the one teachers spend hours creating materials to make it good enough.

Yet, all of it happens in a direct interactive milieu.

2.2.3.2. Direct Human Instruction

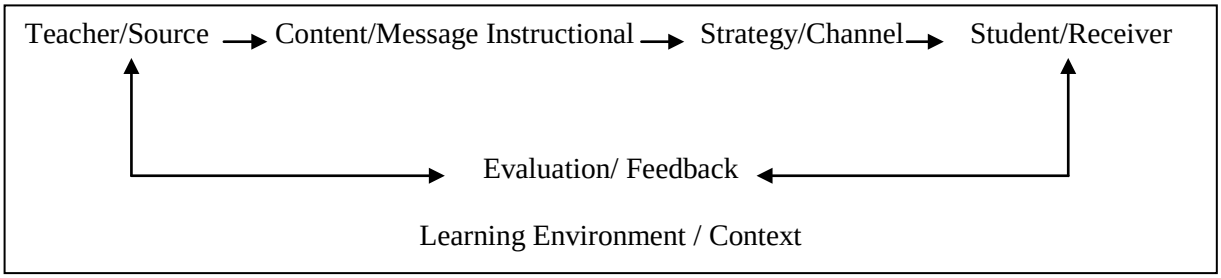
Human direct instruction is not just a question of tradition. Its weight transcends the concrete presence of the teacher and the learner in one room together. Actually, it concerns the affective side which is attributed to education. Pflaum expresses: "*I love these kids. That*

box doesn't love these kids" (Pflaum, 2004: 113). In one factual sense, the box, i.e. the computer is emotionless while human beings cannot do without emotions. Brown approves:

> *"Human beings are emotional creatures. At the heart of all thought and meaning and action is emotion. As "intellectual" as we would like to think we are, we are influenced by our emotions."* (Brown, 2007: 68)

Brown's conviction reinforces 'less is more' and unplugged teaching and feeds faith in the teacher-learner relationship. Human direct instruction is how, along the long past time, people taught and learnt, all at once and together (Arends & Kilcher, 2010: 110). The learning context comprehended the teacher and the learner both relying on direct interaction as a learning strategy, mode, or channel (Figure 2.4).

Figure 2.4: The Instructional Communication Process



(Gorham et al., 2009: 4)

This, direct classroom instruction, is premised upon a binary of structures: teacher-centred and student-centred. The former is where the teacher does and says it all (Riley, 1998: 31). Learner-centred, however, is where the classroom is differentiated, where the learner is at the centre, and instruction is underpinned by his preferences and needs (Arends & Kilcher, 2010: 110). Both ways, Spector affirms:

> *"The goal of instruction is to facilitate learning – to help people. The goal of learning, especially learning that is associated with schools, colleges, and formal training, is to help people by helping them to improve performance and understanding. The goal of improving performance and understanding is to enjoy better lives in some way."* (Harvay et al., 2009: 11)

Speaking to that, the teacher's role branches off to directing instruction and eliciting communication which, in turn, affects learners (Gorham et al., 2009: 4). Galvin prioritises communication, it being the focal point to manage and steer classroom roles (Daly et al.,

1990: 197). Moreover, providing socialisation is a role Galvin attributes to teachers. She wrote: *"Classrooms are the settings for academic socialization to an entire field and to ways of thinking"* (Ibid., p. 202). As well, diverse ancillary teacher roles may serve learning facilitation like embodying the speaker, the moderator, the trainer, the manager, and the coordinator (Gorham et al., 2009: 38).

To go the extra mile, human direct instruction and interaction, plain and unplugged as it may seem, have fared well under many circumstances. Teaching and learning following that method, even with the technological bonus, seem to be able to perpetuate as has been found so far in this review of literature.

2.3. A Provisional Evaluation (Less or More?)

It flies in the face of everything we know how technology is metamorphosing methods, interaction, connection, costs, and the norms of life in general and education in particular (Anderson & Garrison, 2003: 32). Those *"information-rich environments"* like the Internet have mutated our ideas of learning and even if learning per se did not alter, its ways have multiplied and broadened (Neuman, 2011: 59). As a matter of fact, the digital world is now part and parcel of students' lives. The time they spend surfing the net is not little, and their smart phones, kindles, or iPads are appurtenances of their lives. This technological immersion is, however, not as deep and efficient as it might look. Bauerlein illustrates:

> *"…, for all their adroitness with technology, students don't seek, find, and manage information very well. They play complex games and hit the social networking sites for hours, the educators said, but they don't always cite pertinent sources and compose organized responses to complete class assignments. They're comfortable with the tools, but indiscriminate in their applications."* (Bauerlein, 2008: 113)

Consequently, one can wonder whether technology is serving education or it is education that is following new mechanics and tools. Straightforwardly, technology is but a single constituent of the teaching-learning environment (Anderson & Garrison, 2003: 32). Technology-enabled learning is but one face amid many learning can take and, as Bill Gates recognises, technology is not a master, but a tool in the serving hands of teachers and learners (Gates in Gomes, 2014: 91). These alternative sayings of the same concept burgeon from the enterprise of history that has given us more than one reason to believe that technology is but

another *"new normal"* as Dennis[4] coined it. In an electronic article: "Welcome the New Normal", he analysed:

> *"By re-adapting to change and flux we propel ourselves forward – it is a force of momentum within our lives. The new re-balancing is not about going back to the old – it is about finding new positions and definitions. We have to re-define for ourselves what is the new normal*." (Dennis, 2015)

Maturing from that is technology. Technology is the 'new normal' based on all the literature and actual observation. Beare[5], in his book *Creating the Future School*, says that there are *"new patterns of interactions across the world"* (Beare, 2001: 2) and forecasts that the teaching profession will change from what was known in the bygone century (Ibid., p. 7).

To say more, technological resources within *"content-based instruction"* (Murray & McPherson, 2004: 45) do fulfill and support the delivery of content. In spite of that, Kim and Sugrue (2004) spoke of a study conducted by the American Society for Training and Development (ASTD). Its outcomes demonstrated that blending classroom strategies did not affect direct instruction which is still *"the most popular"* training method (Kim & Surgue in Smilanich & Wilson, 2005: 11-12).

Ellis (1999), on another side, conducted a study about the importance of classroom interaction and examined it within three different theories. Chapelle (2003) summarised the study as in Table 2.3.

Table 2.3: Benefits of the Three Types of Interaction from Three Perspectives

Basic types of interaction		Perspectives on the value of interaction		
		Interaction hypothesis	Sociocultural theory	Depth of processing theory
Inter-	between people	Negotiation of meaning	Co-constructing meaning	Prompting attention to language
	between person and computer	*Obtaining enhanced input*	*Obtaining help for using language*	*Prompting attention to language*
Intra-	within the person's mind	Attending to linguistic form	Stimulating internal mental voice	Cognitive processing of input

(Chapelle, 2003: 56)

[4] Kingsley L. Dennis, Ph.D, is a sociologist and researcher. He is the author of several critically acclaimed books including *The Phoenix Generation*; *New Consciousness for a New World*; *Struggle for Your Mind*; *After the Car*; and the celebrated *Dawn of the Akashic Age* (with Ervin Laszlo). He previously worked in the Sociology Department at Lancaster University, UK.

[5] Headley Beare is Professor Emeritus of Education at the University of Melbourne.

Within the trio of perspectives, interaction, obviously, is integral and rudimentary to language learning and acquisition and to meaning construction.

Strikingly opposite to Beare's prediction, Spector thinks that even with the advent of all that technology, not a big deal has varied and that we are just starting to learn how to employ technology to the benefit of education (Harvay et al., 2009: 11-12). For the future, nevertheless, Spector underscores that:

> *"Perhaps our students will be able to go where we and others have failed to go – into the hearts and minds of people who need to learn to share limited resources, tolerate different perspectives, and become better neighbors. Perhaps our students will turn our bold adventures into sustainable advances."* (Ibid., p. 12)

This, properly, intersects with the *"humanize the course"* catchphrase. To that, A. L. Martha and Poe remind that even though online, teaching still deals with human beings (A. & Poe, 2002: 32).

Teachers and educators, with all, are still swinging between direct interaction and online teaching weighing their advantages and drawbacks each. Less or more of technology, seemingly, is not yet a settled issue.

2.3.1. Teachers in the Cloud of the Digital Click (Where Are They?)

Even in its heyday, educational technology could not shake the fact that learning, a language particularly, is a social interactive process. It is also still viable that teachers have to remain alert to the nature and repercussions of classroom communicative exchanges as the latter can decide the language learning caliber, promote a *"sense of belonging"*, and spur rewarding results (Burden & Williams, 1997: 206). Yet indeed, what a teacher does is reshuffled to meet the requirements of the evolving paradigms.

As a *"reflective practitioner"* (Hampel & Lamy, 2007: 73), the teacher for instance, exploits e-mail for its merits as a *"reflective dialogue"* prospective of ameliorating university instruction (Cohen & Russell, 1997: 137). Furthermore, Morrison and Lowther identify the teacher as a digital-material designer within the *"integration approach"* and assign him two additional roles to play in an integrated -blended- classroom: a facilitator plus a manager of the classroom (Costa, 2001: 482). Meanwhile, the student, as a dynamic player in the learning operation, becomes a 'researcher' and a designer himself of learning and lessons (Ibid., p.

482; Harvay et al., 2009: 89). In the run, the teacher's practice is especially animated by indicating to learners how to search and learn autonomously, by organising time, and controlling tech-use (Costa, 2001: 482).

To recapitulate, excellence in both teaching and learning is enthused over variation in teaching methods and techniques which charts its roots to blended learning or the integration approach (Salkind, 2008: 315). Seen from this perspective, one cannot stick to total unplugged teaching nor to thorough digitised instruction if the goal is the maximisation of gains.

2.3.2. The New Teacher Role or "The Teacher of the Future"

The role of the teacher in a plugged classroom differs from that in an unplugged one (Hampel & Lamy, 2007: 61). A corollary to that is a blend of four roles that seem to be milestones to any teaching-learning context. These are: *"being a subject matter expert, an educational designer, a social facilitator, and a teacher"* (Anderson & Garrison, 2003: 65). Anderson and Garrison are in favour of a better conversion of roles due to e-learning. They persist that those roles and duties fundamental to traditional instruction are compatible and *"translatable"* to an online version of learning, i.e. the online fabric remodels them (Ibid., p. 65).

Pesce[6], in his electronic article: "Another Click in the Wall", explained:

> *"Suddenly, with the smartphone, the classroom is everywhere, in every palm and purse. The classroom is not a place, it's an attitude. Anything we want to learn is now within our power to master. That's true for an 11-year-old or a 51-year-old.*
> *Just as the Web heralded the end of the gatekeepers in journalism and broadcasting, it's ploughed through the schoolhouse walls. Once we get over our obsession with meaningless assessments that do little beyond convincing parents the education they received 30 years ago is somehow still relevant, we can reshape the role of the teacher into a facilitator who guides students into their passions and turns them loose."* (Pesce, 2014)

Pesce's words suggest that the classroom is not necessarily that one room; it is not even a place. The class, with a novel definition, is an 'everywhere'. This being said, the near or far future will put at stake the very component that has always made the educational process what it is: the classroom, thus, positions. The future is for co-operative and collaborative

[6]Mark Pesce is an Australian inventor, writer, entrepreneur, educator, and broadcaster.

mechanisms that place the teacher in a guide, mentor, and role model positions (Davies & Fitzpatrick, 2003: 4).

Back to the mediator and facilitator roles, Hampel and Lamy shed the light on the certainty of interaction-mediated human learning, within sociocultural postulates (Hampel & Lamy, 2007: 32). Learning, according to them, occurs via *mediational tools* amongst which are discussion, the computer, and Internet (Ibid., p. 34). Facilitating the process of learning involves helping groups of students as they learn collaboratively (Richards & Rogers, 2001: 199) which might take place in class or online. More to the body of new teacher roles are: *"adviser-counsellor, assessor, researcher, content facilitator, technologist designer, manager-administrator"* (Goodyear et al., 2001).

For all these roles and others, teachers are more of *teacherpreneurs* who entrepreneur and arrange different tasks and roles in a multifaceted context (Berry et al., 2013). Or, from Edutopia interview with Berry Barnett:

> *"Teacherpreneurs are classroom experts who teach students regularly, but also have time, space, and reward to incubate and execute their own ideas -- just like entrepreneurs!"* (Wolpert-Gawron, 2015)

To sum up, a teacher plays more than one role and when necessary, s/he makes up an entity, innovates, and creates. This bestows entrepreneurship on the teachers' role.

2.3.3. Impacts of Being Connected or "The Learner of the Future"

In a study by Bonk and Kim about the future of online teaching and learning in higher education, participants' predictions hovered over an accretion of technology and multimedia use to interact and e-learn (Bonk & Kim, 2006: 25). It is not really debatable that technology is impacting education and few would oppose that (Salkind, 2008:1002). Not just that, but it is claimed that: *"Knowledge has become a commodity and schools are organized along factory lines"* (Durrant et al., 2000: 5).

Verging on the mid-second decade of the twenty first century, knowledge or information literacy is the *"general ability to access, evaluate, and use information"* (Neuman, 2011: 85). Even if students surf social media and other sites all the time, one might mull over: how much ICT literate are they, the kind that would be beneficial to their learning? In a chapter named: "Online Learning and Non-Learning", Bauerlein communicated that Educational Testing Service surveyed high school and college students in November 2006 to

hear about their technological skills. It came across the conclusion that their technological study skills are not as sophisticated as their diving in social media and video-gaming let think (Bauerlein, 2008: 113).

In part of their online survey entitled "The Future of Online Teaching and Learning in Higher Education: The Survey Says…", Bonk and Kim (2006) enquired about the online pedagogical techniques to be in practice in the current decade. Their assembled data are as in Table 2.4.

Table 2.4: Pedagogical Techniques to Be Used More Widely Online in the Coming Decade

Response Options	Number of Respondents	Response Rate (%)
Group problem-solving and collaborative tasks	356	65.4
Problem-based learning	316	58.1
Discussion	237	43.6
Case-based strategies	228	41.2
Simulations or role play	198	36.4
Student-generated content	190	34.9
Coaching or mentoring	162	29.8
Guided learning	155	28.5
Exploratory or discovery	147	27.0
Lecturing or teacher-directed activities	60	11.0
Modeling of the solution process	49	9.0
Socratic questioning	47	8.6
Subtotal	544	98.0
No response	18	2.0
Total	562	100.0

(Bonk & Kim, 2006: 28)

The highest percentages, it is remarked, are for those strategies that proclaim and foster autonomy, life-long learning, and information literacy. Autonomy and choice are underlying compartments of the modern learning patterns; however, they demand being informed so as to get on their conditions (Kaye & Mason, 1989: 25). Neuman adds that:

> *"To be efficient and effective learners in the information age, individuals must be skilled managers of all the information-rich environments that surround them. Whether "digital natives" or "digital immigrants," they must be able to access, evaluate, and use various kinds of information as the basis for learning across the full spectrum of human knowledge. In other words, they must be information literate."* (Neuman, 2011: 85)

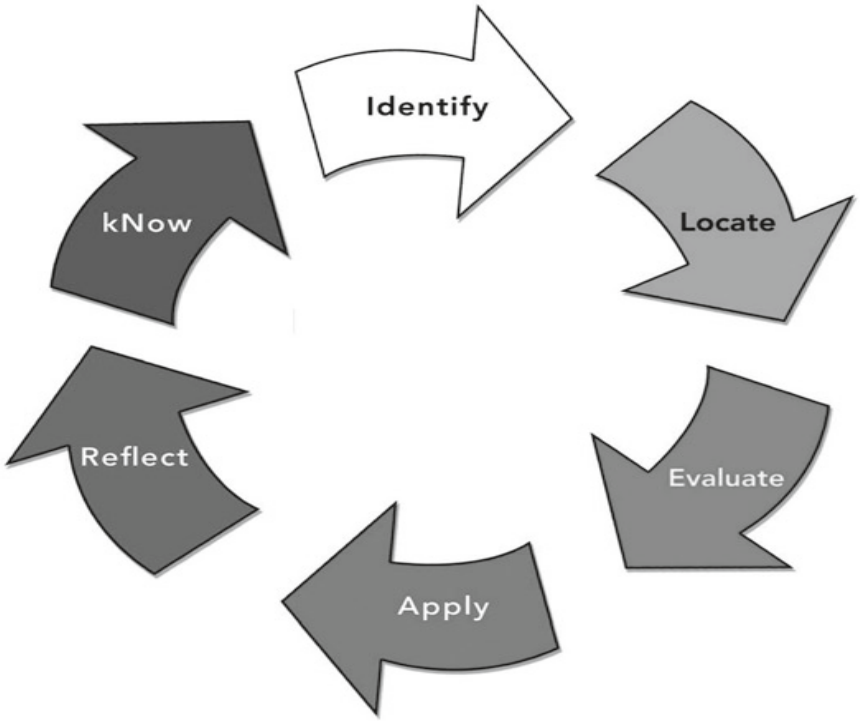
To learn to lifelong-learn is essential in an information-rich, knowledge-based, perpetually-changing society (ACOL, 2001: iv). Besides information literacy and autonomy, lifelong learning is a skill that the learner of the future would need in order to survive the data avalanche.

2.3.3.1. I-LEARN

To reset the tone, technology was never given an assuring licence of effective learning; instead, its misuse might inhibit or disorientate learning especially with ICT illiteracy (Bransford et al., 2004: 206). Thus, the I-LEARN model saw the light. I-LEARN is an acronym for: Identify, Locate, Evaluate, Apply, Reflect, kNow. It *"offers a way to make explicit the essential link between information use and learning both within and beyond current instructional practices… the model focuses directly on learning with information"* (Neuman, 2011: 87). At its hub is the interrelation between learning and information literacy (Ibid., p. 93).

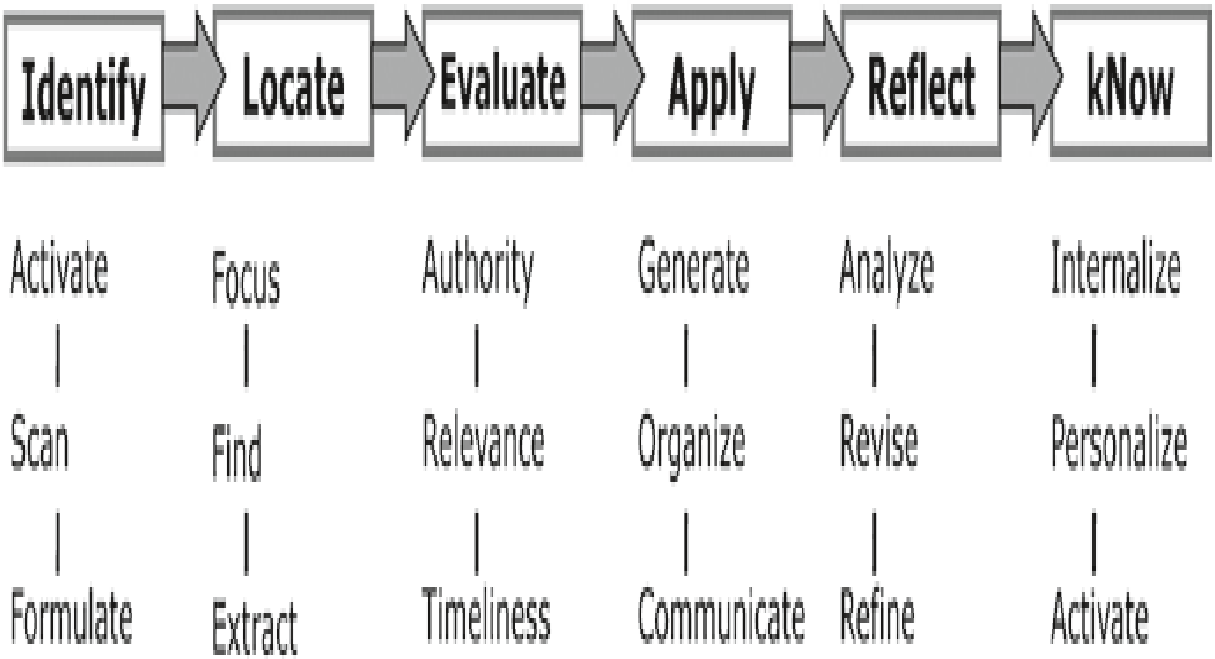
Neuman deciphered I-LEARN, scheming that it amalgamates six stages and eighteen sub-stages (elements) that are *"recursive rather than linear"* for they interweave and twist (Ibid., p. 85) as in Figure 2.5 and Figure 2.6.

Figure 2.5: The I-LEARN Model



(Neuman, 2011: 88)

Figure 2.6: I-LEARN Stages and Elements



(Neuman, 2011: 97)

The I-LEARN model sounds like a *"framework for designing instruction"* similar to Bloom's Taxonomy (1956) (Ibid., p. 90). It launches with identifying the information, locating it mentally, then evaluating its source, validity, and relevance. After that comes the application stage going through the three elements as in Figure 2.6; next is reflecting, and last but not least knowing and re-activating (Ibid., p. 87-88-89). Neuman perceives that:

> *"It is not coincidental that the "**I**" in the initial stage suggests several concepts in addition to "**I**dentify": the dependence on **I**nformation as the building block for learning is clearly implied, as is the personal responsibility for one's own learning assumed by constructivist learning theory ("**I** create my own understanding of the world").*" (Ibid., p. 97).

She additionally notes that the "k**N**ow" stage's last element happens to be the first sub-stage of the first "**I**dentify": "activate". This entails that what we find will probably ignite more enquiries and intrigue us to I-LEARN often and again (Ibid., p. 97).

Indulging more about it, I-LEARN is believed to:

> *"… help learners to develop a habit of mind that sees the world as an all-encompassing source of information that human beings can access, evaluate, and use to solve problems and improve lives. That habit is the cornerstone of independent, lifelong learning in a world brimming with information and with possibilities."* (Ibid., p. 114).

I-LEARN is a skill that learners would need to practice and master before going into a digital milieu. Central to that is the teacher's role of training on similar skills.

2.3.3.2. Potential Dangers of Digitalisation

All these possibilities, technological upheavals, tools, new roles, information, resources, and questions are captivating our attention, driving us wild, and testing education (Johnson et al., 2012: 4). *"In such a world,"* they reflect, *"sense-making and the ability to assess the credibility of information are paramount"*, whereas preparing learners for such challenges sounds like a wise agenda to underscore (Ibid., p. 4).

People conceptualise universities as: *"the gold standard for educational credentialing"*, and yet, the development of new measures and other certification programmes is undermining universities' roles and worth (Ibid., p. 4). Other certification programmes can include online courses, MOOCs, or even virtual institutions. Inextricably, technology is not danger-free. It is accentuated that:

> *"Where technology is being integrated without consideration of the social and cultural aspects of the teaching process, there is a real danger of failure to engage and assist learners in the development of critical thinking skills."* (Harvay et al., 2009: 88)

A plunge into the digital world unarmed with the appropriate skills such as I-LEARN and ICT literacy will be like a dive in an ocean with no flippers and perhaps mostly no oxygenation. The freedom and abundance of the digital environment is learner-empowering but strictly 'illusive' and risky to the teaching-learning process in more than one dimension. All noticed, Anderson and Garrison advance:

> *"Education is a unified process where teachers and students have important, complementary responsibilities. This relationship is at the heart of an educational experience. The focus is on learning, but not just whatever the learner capriciously decides. An educational experience is intended to focus on learning outcomes that have value for society as well as the learner. A learner-centred approach risks marginalizing the teacher and the essential value of the transaction in creating a critical community of inquiry."* (Anderson & Garrison, 2003: 64)

The teacher remains an authority mostly that the digital learning environment and technology are not danger-free.

2.3.3.3. Dehumanisation of Teaching (Take It Seriously?)

One hazard of technology is dehumanisation. If not holistic, the effect will be partial. John Richards conjures up: *"The transformation from analog to digital will have implications for human knowledge and even deeper implications for human communication and relationships …"* (Costa, 2001: 484). Baofu (2011) writes about a *"Post-Human Education"* and Giles ventures into a quite-harsh-but-realistic simile that of *"education as a business"* (Giles, 2008: 30). These materialistic views, that apparently are eroding the human being from the educational equation, are embedded in the move from having a computing teacher in the previous three decades to the prospect of having a *"teacher computer"* in the coming decades (Ashburn & Floden, 2006: 27). In effect, some researchers and educators tend to think of technology and the computer as their substitute (Clare, 2002; Zophy, 1998). Both Clare and Zophy wondered if technology can replace teachers. Nonetheless, some voices sustain and recommend: *"…reduce the risk of falling prey to the fallacies of determinism and utopianism at the expense of the humans participating in the educational process"* (Harvay et al., 2009: 80).

J. Strobel and H. Tillberg-Webb urge educators, teachers, and curriculum designers to debrief and cross-examine technology before it flips the teacher-learner relationship and interaction (Ibid., p. 81). ICTs, in actual fact, influence classroom communication; however, in no measure does this imply their banning (Ibid., p. 82).

On another side, even with their integration being a difficult task to assume, ICT and TEL have granted education more choice and chance (Anderson & Garrison, 2003: 64). In abridgement, Anderson and Garrison think that:

> *"The frame of e-learning extends interaction, choice, and movement, and this has a liberating and transformational effect on approaches to teaching"* (Ibid., p. 64).

The transformation technology causes in education can be dehumanisation. Yet, the transformation can be positive. It can guarantee choice, enrichment, and betterment to the teaching-learning practice.

2.4. A Curriculum of Choice and Prospects

Educational innovation and e-learning open in a prolific vista of choices (Ibid., p. 64). Numerous models could be designed by juxtaposing plugged and unplugged practices in different probabilities. Manuel Ramirez observed:

> *"To succeed in preparing students for success and good psychological adjustment in a complex and technological society, we must get away from the one-size-fits- all mentality that is presently so much a part of the American educational system. A focus on individualizing instruction and utilizing technology can make this possible."* (Salkind, 2008: 157)

In an indirect way, Ramirez is calling for a *hybrid* curriculum which joins the call for a technology-enhanced curriculum (Romano, 2003: 103). Ample and redundant is the point that education is a field that is most tailored by technology (American Psychological Association, 2009: 455). As a counter tactic, Fewkes and McCabe require to use Web 2.0 technologies purposefully not merely because they are in hand (Fewkes & McCabe, 2012: 92). Plus, whatever the label of the educational context, virtual, online, blended, or unplugged, the teacher remains the leader and controller of goal-setting, condition-orchestrating, and interaction-regulating (Anderson & Garrison, 2003: 117).

Now, there is a magnitude of guesses. *"What will the schools of the future look like?"* is a question that Chubb and Moe ask (2009: 172). Then, they endeavour to reply:

> *"No one can know the details, of course, as that is the beauty of innovation: it opens up possibilities that can't be anticipated. In general, however, there is good reason to think that certain basic properties will tend to emerge—if slowly at first—in the coming decades. The system will not be perfect. But it will be significantly different than it is now, and in our judgment significantly better. Here is what we expect, in broad outline:*
> ***Most schools will be hybrids of the traditional and the hightech**. There will be many schools in which teaching and learning occur at a distance and follow the pure cyber model—some educating the whole student as cyber charters do now, some enrolling part of the student as state-level virtual schools now do, and some doing both…*
> ***Schools will be more customized to students**. Technology will do away with the standardized, "one size fits all" approach to education…*
> ***Schools will provide more effective instruction**. Partly this will happen because schools will have more effective teachers. But technology itself will enhance instruction, promoting learning in ways that teachers in traditional classrooms never could…*
> ***Schools will be more beneficial to teachers**. Teachers will have a greater variety of schools to choose from, and a greater variety of roles they might play…*
> ***Schools will be more autonomous**. The advance of technology makes it increasingly possible for new schools to rise up and survive on their own as autonomous entities, for it allows schools to attract students and hire teachers without respect to geographic boundaries and without the expense of new buildings…*
> ***Schools will be more competitive and offer more choice**.*
> ***Schools will continue to socialize students**. No one is required to put their children into schools that conduct all their work at a distance and offer little or no face-to-face interaction…"* (Chubb & Moe, 2009: 172-177)

To elucidate hybridism here, let us take a closer glance at *tri-hybrid learning* which resembles the pre-mentioned blended or integrated learning. Tri-hybrid learning is the mixture of face-to-face instruction, an online fragment like a website, a forum, or social media, and a virtual or a 3D VLE experience (Annetta et al., 2010: 154). This multi-inclusive, eclectic approach is concerned with the improvement of teacher-learner and learner-learner dependent or independent interaction; it also incites learner-engagement (Ibid., p. 167).

Hybrid comports, relatively, with flexible learning as it offers freedom to its members (Ibid., p. 155). Depending on Gordon's ideas, flexible learning (Figure 2.7) allows students to decide their learning attributes like where, when and how, to which technology, e-learning especially, largely contributes (Gordon, 2014: 4). To quote him:

> *"The flexible pedagogies and technology may be considered natural patterns – flexible learning can be provided by and supported through technology, while conversely, technology can encourage flexible approaches to the delivery and assessment of learning."* (Ibid., p. 4)

Flexible learning builds on the pace, place, and mode of learning which are interpreted each as:

> *"- Pace: … part-time, accelerated or decelerated…*
> *- Place: … work based or at home, on public transport while commuting, or abroad when travelling…*
> *- Mode: covers learning technologies, and blended learning or distance learning."* (Ibid., p. 4)

Therefore, this flexibility in pace, mode, and place might authorise and unfold in a curriculum of choice to the future of education (Figure 2.7).

Figure 2.7: A Wordcloud (Wordle) Developed from Abstracts of Papers on Flexible Pedagogy and Flexible Learning

(Gordon, 2014: 6)

Perhaps in the future, the tri-hybrid approach would take it over. Perhaps education would integrate more online classes, resign from lecturing, resolve to simulations, and strengthen autonomy, personalisation, collaborative meaning construction, and interaction (Anderson & Garrison, 2003: 117). Perhaps the teacher would guide and monitor all in a communicative frame (Ibid., p. 117), and perhaps the learning scheme would let it to learners to take control of their educational transaction *"resulting in wonderfully diverse learning outcomes…This is the uniqueness of e-learning"* (Ibid., p. 117). Perhaps the Internet of Things, the alternative term for Web 3.0[7] and the Semantic Web (Capuano et al., 2008: 3; Markoff, 2006; Spivack, 2007), would connect us all electronically and pedagogically. Perhaps, as interactive communicative curricula are re-blossoming, unplugged teaching, it being a learner-centred design, would prosper (Davies, 2011: 11). Perhaps face-to-face interaction would underlie education for more to-come years (Berry et al., 2013). Perhaps, teachers would stay a firm grounding force for all teaching and nothing can modify that (Clare, 2002; Snehansu, 2013). Perhaps, education would cater to the *"global one world classroom"* (Khan, 2011). Perhaps none of these would solely exist. For once surely, the future is open to many flexible bends and blends.

2.5. Conclusion

This chapter has handled the existing research on teaching, learning, and their interaction in both plugged and unplugged contexts, today and in the possibly-envisioned future. In every element, ricocheting between digital and face-to-face instruction, it sought the position of the teacher-learner relationship and of direct human instruction and interaction. It also attempted to explore the promises and potential shortcomings within the three learning modes: face-to-face, blended, and online. Besides, it dealt with integration and hybrid approaches, and sought an answer within the reviewed literature to this-research questions and concerns. Next chapter will delve into the research design and practical phase that accompanied this work all along.

[7]Web 3.0, also known as the Semantic Web, the Internet of Things, or the Intelligent Web, is the third generation of Internet that stretches from 2010 to 2020 (Spivack, 2007).

Chapter Three

METHODOLOGY AND DATA ANALYSIS

3.1. Introduction

Aligning symmetrically with the previous two chapters, this one orientates further the actual design of the present work. It is divided into two parts. The first one is concerned with methodology. It practically sets the framework of the study. It is the prism to reflect and show the followed procedures to elicit data and record them. Between its ends are the contextualised questions, the population and sample, the setting and the instruments. It profiles in detail the employed methods for both data collection and their analysis. Next, it addresses informed consent and ethical issues.

The second part, Data Analysis, unveils findings from the three sources of data. Data are classified and sorted in tables and lists. They are later to be discussed in concordance with the research questions and hypotheses.

PART ONE: Methodology

3.2. Research Design

This section aims to find out the views of the sample pertaining to the future of the teacher-learner relationship in a technological context. The banking of the primary source for this research has begun around January 2014 with general observation, classroom observation, informal discussions, and personal teaching and learning experience. It spanned till June 2015 with questionnaires, both formal and informal interviews, and more classroom observation. The amassed notes ushered in the underpinning inquiry of the investigation and its findings.

Three questions surfaced. They direct and canalise the efforts of this research.

3.2.1. Research Questions

This chapter surrounds and is oriented by the following questions.

1- Are Algerian English teachers and learners updating their teaching and learning methods according to the current technological transformation brought to the terrain of learning and universities?

2- How is technology changing the teacher-learner relationship and their roles each in the teaching-learning process?

3- What are their percepts of the future of the teacher-learner relationship and of educational technology in their context?

3.2.2. The Population, Sample, and Setting

In order to get perspectives from both pillars of education, the target population for this study includes university teachers and students from Algeria. EFL teachers from the Department of English at the University of Oran contributed to the study. It also hears from their LMD graduate and undergraduate students. The students are from different groups and years. These details were settled after piloting and classroom observation.

The same setting was home for all data collection: the Department of English at the University of Oran, Algeria. It was selected mainly for easy accessibility.

As part of this study, twenty-one teachers replied to the questionnaire, eight were observed at teaching, seven were interviewed and two of these interviews were voice-recorded. Hence, the overall sample encompasses twenty-six teachers as some of them participated to all: were questioned, interviewed, and observed, or to two: questioned and interviewed, questioned and observed at teaching, or observed and interviewed. The teacher sample covers three male and twenty-three female teachers whose ages range from twenty-six to sixty-nine. By and large, their experience stretches from two to forty-three years at teaching English and the same span for teaching at the University of Oran. Twelve of them major in intercultural studies, i.e. civilisation or literature, whereas fourteen specialise in didactics with its different branches like TEFL, ESP, sociolinguistics, applied linguistics, and phonetics. Eleven of these teachers have already occupied authoritative positions at the University of Oran.

With this, a hundred students participated in the study. Fifty-eight of them are third year students, finishing their sixth semester and about to graduate. The other forty-two are first year Master students. Demographically speaking, their ages are between twenty and fifty years old. The group enveloped seventeen male and eighty three female students. Fifteen of these are working besides studying, thirty three have already taken a teaching job, and forty-two do have a university diploma, all being Master students who already have their “Licence” degree. The sample also encompassed, as part of classroom observation, first and second year LMD students.

All in all, the demographic information of the participants, their way of participation in the study, and their numbers are assembled in Table 3.1.

Sampling was random in order for it to be as representative and reliable as possible. Except for the choice of the setting, the rest was left to availability, access, and the agreement of participants.

Table 3.1: Demographic Information of the Participants and Their Way of Participation

Teachers/Participants	Total number	26
	Age	[26 - 69]
	Male / Female	- Male: 3 - Female: 23
	Specialisation	- Intercultural studies: 12 - Didactics: 14
	Authoritative positions	11
	Teaching experience years	[2 - 43]
	Way of participation	- Questionnaire: 21 teachers - Interview: 7 - Classroom observation: 8
Students/Participants	Total number	100
	Age	[20 - 50]
	Male / Female	- Male: 17 - Female: 83
	Academic year	- 3rd year (L3): 58 - Master 1 (M1): 42
	Having a job	15
	Ever taught	33
	Having a diploma	42 (Master students)
	Way of participation	- Questionnaire: 100

3.3. Data Collection Procedures

Even though it was possible to experiment with this work by attempting a technological online course or a blended one, the nature of variables, typical to most humanities, accepts a non-experimental study. Hence, this research is a qualitative one with a quantitative aspect. In other words, it is going to be an exploratory study of one EFL teaching-learning context. It is the case of 26 teachers and a hundred of their students. Therefore, the objective of this study is to probe, first, to which extent technology is used in that setting, second, to examine if those learners and teachers consider their academic and cognitive rapport vital to their performance, then to investigate their visions of the future of teaching and learning with technology. After that, it aims shortly at finding out what new teaching and learning roles and skills will be needed in a technological context.

The corpus of this work was developed in the presence of a sample representative of a population that was not very specifically selected. The university, the department, and the

students' academic year have been selected after classroom observation and piloting. Nevertheless, it is majorly the availability, willingness, and easy access to the setting and sample that dictated their picking for the study. Moreover, practicing in this setting is due to the accessibility provided.

The procedures of data gathering began with general and classroom observation in January 2014. More classroom observation was done till April 2015. In May 2015, a questionnaire was conducted with students on two separate days. It was carried with the help of a teacher who allowed it to take place during her classes. The questionnaires with teachers, on the other hand, took a longer period of time to be fulfilled. In general, they were all administered in May and June 2015. Along the same period, the interviews were held, formally, informally, recorded, or just noted.

3.4. Methods of Data Collection

The corpus of this study is gathered by means of a triad of research tools. First, a questionnaire was conducted with a hundred LMD graduate English students from Oran University. They are from L3 and M1 so that to accumulate, relatively, varied visions. Besides, as the envisioning of the future requires being informed, the case study was held with university teachers and didactics. EFL teachers belonging to the same university were interviewed and questioned. Furthermore, taking place in Oran University, classroom observation is the third complementary tool to get extra data.

The questionnaires and interviews were built based on obtained remarks from classroom observation, discussion with field specialists, and the literature review outcomes. Thus, data collection methods were complementary and symbiotic not only in their purposes but also in their conduct. These tools culminate in an exploratory method that wishes to obtain both qualitative and quantitative outcomes in regards to the study's questions and hypotheses.

3.5. Research Instruments

As mentioned earlier, three main instruments were utilised along this study: the questionnaire instrument, the interview, and classroom observation. Their adequacy to the study lies in their capacity to bring about a richness of both qualitative and quantitative data, their reliability, and validity.

3.5.1. Piloting

A pretest questionnaire was conducted with forty-five students who belong to the same population but not the same sample. Yet, their demography is similar to that of the sample.

The pilot stage also reached six teachers who replied to the primary questionnaire and interview questions and who later on were part of the sample. This helped revise the questionnaires and interview and assess the clarity and relevance of the questions. After refinement, the employed questionnaires and interview questions topped (see Appendices).

The pilot stage, also, included a student's mini questionnaire (Appendix Three). It has two main purposes. The first one was to see if students preferred an online questionnaire or a hard copy of it. The second one was to deepen the understanding of classroom observation outcomes as the latter took place before the conduct of questionnaires and interviews.

3.5.2. The Questionnaires

Two questionnaires were conducted, one with teachers and the second with students. Both of them were divided into five sections. They are:

- Demographic Information about the Informant
- The Teacher-Student Relationship
- The Teacher's Roles
- Methods, the Use of ICT and Educational Technology
- The Future of the Teacher-Learner Relationship

Respondents were requested to complete and return the questionnaires in different conditions that will be explained in the coming sections.

The questionnaire tool was chosen for its well-known features of reliability and validity. Besides, they allow individuals to express their opinions anonymously and confidentially. So, it is likely for them to be honest in their replies. They were, indeed, designed to elicit views of the sample regarding to the teacher-learner relationship, teacher's roles, use of technology, and the future of the teacher-learner rapport.

3.5.2.1. The Teachers' Questionnaire

35 questionnaires were distributed to teachers. However, only 21 of them brought them back despite the fact that non-respondents were constantly reminded, either directly or via e-mail. More than once, re-handing the same questionnaire to the same teacher was needed either because they lost or forgot it. Time limits and deadlines did not allow for more than the time allotted, which extended to two months, waiting for some teachers and reminding them to respond. Their non-response rate is owed to work load, being busy with exams,

invigilation, and correction, perhaps also the moderately long questionnaire. However, other teachers did not take more than fifteen minutes to answer all of it.

On another hand, in a study about technological education, no technology was employed for data collection. The questionnaire was not delivered online based on the sample's preferences. 22 teachers out of 35 opted for a paper format questionnaire. This was known as most teachers were approached before them being handed the questionnaire. Their agreement to participate was obtained. In addition, they were asked whether they preferred an online form or a hard-copy questionnaire. The major choice was respected and the final questionnaire appeared as it might be found at Appendix One.

3.5.2.2. The Students' Questionnaire

Two questionnaires have been conducted with students. The first one was a mini questionnaire (Appendix Three). Its purpose was to find out (1) if students prefer a paper format questionnaire or an online one, and (2) why students use their digital devices inside the classroom.

For students, after piloting, it has been found that they too (76%) go for an in-hand questionnaire as 43% of them do not have home access to Internet (see Table 3.11). So, a paper format questionnaire was circulated to all of them.

The main students' questionnaire was held as they all gathered for a lecture they were supposed to have. Their teacher accepted and devoted all the time meant for the lecture so as students may fulfill the questionnaire in calm, ease, and under no pressure. The questionnaire's purpose was explained to both cohorts of students: L3 and M1.

On the day of its distribution, students were invited to ask any question if they wished to. Their misunderstandings were clarified to a certain extent, and what they did not understand was explained be it vocabulary or whole questions.

Just as with the teachers' one, after revision, consolidation, and improvement, the questionnaire at Appendix Two was finally settled to.

3.5.3. The Interview

Seven formal interviews were held with seven EFL teachers who belong to the sample of this study. They all took place between May and June 2015. Two of them were vocally

recorded whereas the others took place rapidly and in open space that only notes were taken. Recording was used with the teachers' permission. The longest interview took exactly an hour; the shortest one needed only five minutes. Most of them were semi-structured interviews even though globally speaking many of the questions were asked to more than one interviewee teacher (Appendix Four). Relying on semi-structure was more of a meanwhile decision, i.e. some questions were meticulously prepared beforehand; yet, it was preferred to let it to the flow of talk and the emerging line of thought to lead the interview. Sometimes, this was done because what was brought forth by the interviewee was gauged to be more valuable, relevant, novel, or interesting. The purpose of the interview was explained beforehand to teachers.

Interviews were basically employed for the wealth of information and views they breed.

3.5.4. Classroom Observation

Questionnaires and interviews were reinforced by classroom observation to validate and examine students' and teachers' practices. Hence, twenty seven sessions of an hour and a half each were observed which makes about forty hours and a half of classroom observation with eight different teachers. During this time, some specific aspects have been spotlighted. These, in fact, were ranked by use of a mixture of a checklist and a rubric that together make up a report form (see Appendix Five). The report form was designed based on some already existing and used classroom observation reports with some modifications.

Most of the times, during the session, notes were taken and the observer participated as a student either voluntarily or at the teacher's request. Most teachers knew beforehand about the purpose of observation. Some of the participant teachers received a classroom observation report. All teachers expressed their acceptance and understanding. Observation with some teachers was, primarily, more of a student attending than a participant observing. However, this could later serve as database for classroom observation. Before it being used, teachers were informed and their consent was obtained. This unplanned classroom observation helped with validity, reliability, and authenticity. Nonetheless, honesty and ethics imposed bringing it to teachers' notice, either pre- or post-hand, that attendance outcomes are to feed this study. When the teacher refused, his/her wish was respected.

The following table shows all the sessions, their timing, dates, and classes. It is ordered by teacher then by date. Every bold line is the beginning of the sessions of a different teacher.

Table 3.2: Classroom Observation Dates, Hours, and Levels

Dates	Number of Students Present	Timing	Level
14/04/2014	**Not counted**	**13:00-14:30**	**Master 1**
21/04/2014	Not counted	13:00-14:30	Master 1
13/01/2015	23	11:30-13:00	2nd year LMD
20/01/2015	25	11:30-13:00	2nd year LMD
14/01/2014	**73**	**10:00-11:30**	**3rd year LMD**
16/01/2014	**92**	**08:30-10:00**	**3rd year LMD**
30/01/2014	94	08:30-10:00	3rd year LMD
12/01/2014	**102**	**08:30-10:00**	**3rd year LMD**
19/01/2014	91	08:30-10:00	3rd year LMD
02/11/2014	97	08:30-10:00	Master 1
07/12/2014	107	08:30-11:30	Master 1
07/12/2014	**24**	**11:30-13:00**	**1st year LMD**
16/04/2014	**Not counted**	**08:30-10:00**	**3rd year LMD**
16/04/2014	Not counted	10:00-11:30	2nd year LMD
16/12/2014	Not counted	11:30-13:00	3rd year LMD
04/11/2014	**about 60**	**8:30-10:00**	**2nd year LMD**
04/11/2014	about 50	10:00-11:30	2nd year LMD
11/11/2014	40	10:00-11:30	2nd year LMD
18/11/2014	53	10:00-11:30	2nd year LMD
09/12/2014	33	10:00-11:30	2nd year LMD
16/12/2014	35	10:00-11:30	2nd year LMD
06/01/2015	71	10:00-11:30	2nd year LMD
13/01/2015	63	10:00-11:30	2nd year LMD
20/01/2015	57	10:00-11:30	2nd year LMD

21/04/2015	59	10:00-11:30	2nd year LMD
04/11/2014	**20**	**11:30-13:00**	**1st year LMD**
13/01/2015	23	13:00-14:30	1st year LMD

Almost the same report form (Appendix Five) was produced for every classroom observation, i.e. a report for every teacher. However, focus was not on all sections. Only some parts of it were used for the sake of this study. The remainder contributed to better understanding of teaching and learning in general and of the teacher-learner relationship in particular.

3.6. Methods of Data Analysis

Data acquired by dint of the three instruments were analysed manually. Every question's reply was examined and put together with other respondents' replies to the same question. Recorded interviews were listened and re-listened to for hours in order to fully or partially transcribe them. Notes from unrecorded interviews and classroom observation reports were classified together. A database was developed, numbers were aggregated, and percentages counted. The close-ended questions (MCQs, yes/no) were stocked quantitatively whereas replies to open-ended questions, where participants had to provide their own views and practices, were treated qualitatively. All replies, akin and distinct, were collected, numbered, and counted. Even incomplete replies were included.

Quantitative and descriptive statistics were achieved. Therefore, the findings will be presented in tabular forms mostly. Lists are used in data demonstration, too. All of the statistical data are delivered in tables. Some of the collected descriptive data are classifiable, so they will be displayed in a tabular form. The unclassifiable descriptive data, however, will be filed in lists.

3.7. Ethical Issues

It was optional for all teachers and students to take part in the study. With that, confidentiality and anonymity have been agreed upon with all sample members. Mostly, teachers and students asked for letting their participation anonymous which will be adhered to along this study.

Consent was obtained from the department's authorities before the study was administered. The purpose of the study was explained to all participants before any conduct. This was done with integrity in mind. Yet, this research had to abide by the duty and ethics of informed consent and participants' privacy.

Along this work, it has been kept in mind that data have to be presented and interpreted with no bias, altering, or concealing. So, they are stored and displayed as they have been entrusted to the researcher. Concerns of accountability, accuracy, and reliability were not discarded. Also, it was kept in mind to avoid inaccuracy, plagiarism, and unverifiable results. Thus, the work strived to remain objective while outside assistance was maintained in order for the findings to be as reliable as allowed by the nature of this research.

3.8. Participants' Consent

Participants' permission and acceptance were sought before the conduct of the questionnaire and the interview. Concerning the classroom observation, they have all been notified, before or after, that attendance in their classes will serve this study to which they expressed approval. Informed consent before recording, interviewing, handing out questionnaires, and classroom observation was obligatory. Every time, the intended objective of the action was communicated to the informants.

PART TWO: Data Analysis

3.9. Findings of the Study

3.9.1. Findings from the Teachers' Questionnaire

The teachers' questionnaire incorporates both close-ended and open-ended questions (Appendix One). Replies to both types are going to be forwarded in here. First, the close-ended questions are processed (Table 3.3). Then, answers to open-ended questions are advanced.

3.9.1.1. Replies to Close-ended Questions

Replies to close-ended questions from the teachers' questionnaire are all inserted within the following table.

Table 3.3: Teachers' Replies to Close-ended Questions by Means of the Questionnaire

Questions	All Teachers	Percentage
1. Do you like teaching?		
Yes	**20**	**95.23%**
No	0	0%
No reply	1	4.77%
2. Teaching to you is: (you can choose more than one		

answer)		
a. A passion	11	52.38%
b. A profession	**14**	**66.66%**
c. An art	9	42.85%
d. A mission	9	42.85%
e. A science	9	42.85%
f. A money-making job	2	9.52%
g. Other	4	19.04%
3. The teacher-learner relationship is important and affects the teaching-learning process.		
0. Strongly disagree	0	0%
1. Disagree	1	4.76%
2. Neither agree nor disagree	0	0%
3. Agree	**7**	**33.33%**
4. Strongly agree	**13**	**61.90%**
5. The quality of the teacher-learner relationship affects teaching-learning outcomes.		
0. Strongly disagree	1	4.76%
1. Disagree	0	0%
2. Neither agree nor disagree	0	0%
3. Agree	**11**	**52.38%**
4. Strongly agree	**9**	**42.86%**
6. It is the teacher's task to ignite students' curiosity and interest.		
0. Strongly disagree	0	0%
1. Disagree	0	0%
2. Neither agree nor disagree	2	9.52%
3. Agree	**15**	**71.43%**
4. Strongly agree	**4**	**19.05%**
7. Which teacher role do you think is most important?		
a. Knowledge giver and provider	11	52.38%
b. Facilitator	**15**	**71.43%**
c. Prompter	4	19.05%

d. Guide	**14**	**66.67%**
e. Trainer	6	28.57%
f. Awareness riser	**11**	**52.38%**
g. Organiser	8	38.10%
h. Other	3	14.29%
8. These roles (this role) may:		
a. Be sustained even with the implementation of online instruction and ICT	**12**	**57.14%**
b. Disappear because of the implementation of online instruction and ICT	2	9.52%
c. Be modified by the implementation of online instruction and ICT	7	33.33%
d. No reply	1	4.76%
11. Do students ask for online contact with you?		
Yes	**14**	**66.67%**
No	7	33.33%
12. Are you on any digital study group with your students?		
Yes	4	19.05%
No	**17**	**80.95%**
13. Whose idea is it to launch the digital study group?		
a. Yours	4	19.05%
b. Some of your students'	3	14.28%
c. The administration's	0	0%
d. Other teachers	1	4.76%
14. On which social network are the study groups created		
a. Facebook	7	33.33%
b. Twitter	0	0%
c. LinkedIn	0	0%
d. Others	5	23.86%
16. If you are using online contact with your students, what is it for?		
a. Lesson and material delivery	5	23.81%
b. Homework and project delivery	7	33.33%

c. Reception of assigned homework and projects	5	23.81%
d. Asking and answering questions	5	23.81%
e. I am not using it	7	33.33%
f. Others	5	23.81%
17. Are there any active learning platforms for the English Department at your university?		
Yes	0	0%
No	**17**	**80.95%**
No reply	4	19.05%
18. Have you ever bought a technological device for your classroom use, by your own means?		
Yes	9	42.86%
No	**11**	**52.38%**
No reply	1	4.76%
19. Are you using technological (ICT) means within your course?		
Yes	8	38.10%
No	**12**	**57.14%**
No reply	1	4.76%
20. If yes, what for?		
a. It makes the course more interesting, rich, and engaging	8	38.10%
b. Students prefer it that way	3	14.29%
c. Teaching needs to be updated to follow the current trends	5	23.81%
d. It makes my job easier	4	19.05%
e. Others (for conferences)	1	4.76%
21. If no, why?		
a. Even a technology-free lesson is important	1	4.76%
b. Content is more important than materials	2	9.52%
c. It takes a lot of time, energy, and means to prepare an up-to-date equipped lesson	2	9.52%
d. I need more training on the use of technology in teaching	0	0%
e. The university does not provide any means	**10**	**47.62%**
f. Others	2	9.52%

22. Do you have any objection to online delivery of lessons?		
Yes	6	28.57%
No	**15**	**71.43%**
24. Do you prefer …?		
a. The traditional way of teaching where the student and teacher are face-to-face	**12**	**57.14%**
b. Blending face-to-face instruction with the online instruction	**10**	**47.62%**
c. Thorough online instruction	**0**	**0%**
25. Would you like to have …?		
a. A blackboard	5	23.81%
b. An interactive whiteboard	13	61.90%
c. An overhead projector	10	47.62%
No reply	1	4.76%
26. Is there an overhead projector available for teachers' or students' use?		
Yes	0	0%
No	21	100%
27. Should university authorities equip classrooms and amphitheatres with ICT devices like data shows, computers, access to Internet, etc?		
Yes	21	100%
No	0	0%
28. The use of ICT is necessary in today's teaching and learning.		
0. Strongly disagree	0	0%
1. Disagree	3	14.29%
2. Neither agree nor disagree	3	14.29%
3. Agree	**10**	**47.62%**
4. Strongly agree	**5**	**23.81%**
29. Even with online instruction, the teacher-learner relationship will remain important and influential.		

0. Strongly disagree	0	0%
1. Disagree	1	4.76%
2. Neither agree nor disagree	4	19.05%
3. Agree	**8**	**38.09%**
4. Strongly agree	**8**	**38.09%**
30. Online instruction can replace teachers.		
0. Strongly disagree	**6**	**28.57%**
1. Disagree	**12**	**57.14%**
2. Neither agree nor disagree	2	9.52%
3. Agree	1	4.76%
4. Strongly agree	0	0%
31. Online instruction can replace face-to-face instruction.		
0. Strongly disagree	**9**	**42.86%**
1. Disagree	**9**	**42.86%**
2. Neither agree nor disagree	3	14.29%
3. Agree	0	0%
4. Strongly agree	0	0%
33. Are you aware of the dangers and disadvantages of technology pertaining to teaching, learning, and thinking?		
Yes	19	90.48%
No	2	9.52%

3.9.1.2. Replies to Open-ended Questions

Open-ended questions, on the other hand, have generated a breadth of data some of which are alike, different, or opposite, and all of which are stated hereafter. Similar views are presented only once with the number of their re-occurrence times between parentheses next to them. If no number is stated, it means that the view was mentioned only by one informant.

Every open-ended question is filed below. Questions that depend on previous replies are treated each based on the informant's previous replies. For example, if the respondent chose "strongly agree", then s/he explained why s/he replied so, her/his answer is not going to be categorised with "agree", "neither agree nor disagree", "disagree", or "strongly disagree". Every group of these is studied on its own as is the case for question 3 and 4 in the teachers'

questionnaire unless answers are similar or serve the same purpose. When an open-ended question is unmentioned in the list, it means that no answers were provided to it.

The following lists and tables include both open-ended questions and teachers' replies to them. Questions in what comes are numbered as they were originally numbered in the handed questionnaire not as they are ordered here below.

2. Teaching for you is: (You can choose more than one answer)

g. Other:

- Teaching is resourceful; it arouses my curiosity and keeps my interests in constant intellectual agitation.

-Peace education, i.e. to promote understanding and tolerance.

- A source of creation

- A vocation

4. In which ways? (The teacher-learner relationship is important and affects the teaching-learning process.)

All answers to question three ranged between disagree, agree, or strongly agree. Thus, answers to this explanatory question (4) are organised accordingly as in Table 3.4.

Table 3.4: Teachers' Explanation of the Teacher-Learner Relationship Importance and Its Effects on the Learning Process

Disagree	- The student's task is to listen to the lecture. I do not think students need to build a relation with the teacher.
Agree & Strongly agree	- It is important to a climate (atmosphere) of confidence in the classroom between the teacher and the student. - It enhances learning motivation. - When their rapport is good. - After all, students can never get pieces of information as pedagogically as with the teacher. - Human contact promotes communication. - There is a "human" mission in teaching. - Increasing students' motivation and lowering learning anxiety. - The teacher remains a great support, a great motivator, someone who inspires his students. ICT is a tool to achieve greater success. - Make my students feel relaxed. - Contact and communication are of great importance. - Any lousy relationship may ruin the teaching process and the reverse is true. - It helps to bridge the gap between the student and his teacher. - Communication is the key to success. Students are involved and motivated when they feel at ease. They can express themselves.

7. Which teacher role do you think is most important? (You can select more than one)

h. Other: Advisor, manager, controller, helper, role model / The language teacher should promote peace education within a country's borders and outside them.

9. If everything is on Internet, as it is said, what does the teacher have to do in class?

- Teach new comprehension strategies.
- Give the tools for understanding.
- Evaluate sources and verify them. (3)
- Interact and converse.
- Train his students on how to study online.
- Blend his strategies.
- Convince learners of the necessity of books.
- The teacher is a facilitator.
- To explain and guide learners. (4 times)
- A support, a motivator.
- Not all what is on Internet is "true" or explained in the right way. The teacher has to guide students to have their own opinions.
- Internet is just a means of research. The teacher will always be a source of knowledge and a guide. (2 times)
- It depends on the age of learners. The fact of having everything on Internet is not an end in itself. A teacher is always necessary for young learners to explain to them and guide them.
- To evaluate learners, reinforce them, and build courses.
- The Internet remains a virtual means that will never replace the teacher in the field of teaching.
- Establish a "human" relationship.
- Nothing is on Internet for the time being.
- This is why I am not fond of online teaching. What is the role of the teacher then? How should s/he be called?
- Nonsense.

10. With digitalisation, how will the role of the teacher change?

- It will facilitate the teaching process. (3 times)
- He will be freed. (2 times)

- He will have less "donkey work" to do and will be able to concentrate on more important issues. He will change from a knowledge giver and provider to a thought provoking agent of change.
- It becomes more pertinent.
- New study skills will need to be engaged such as selecting, prioritising, eliminating unnecessary material.
- A guide and a supervisor.
- An intermediate between technology and students.
- Teachers as students: they will be learning from Internet, from what students bring. They will adapt to new comprehension skills and strategies.
- S/he will be a spectator rather than a knowledge giver and provider.
- He will guide students to use the best sources and sites.
- He will help students to interpret the information they have from the net in the best way.
- Motivate.
- He will update digitally. (2 times)
- The teacher will have to adapt his way by using the myriad technological means.
- The machine will take over and alleviate teachers' functions. (2 times)
- He will become lazy and lose most of his talents.
- May be laziness, too much of digitalisation may destroy teaching.
- No change
- No idea (May be it will be more effective).
- No idea until it happens.

15. What academic activities do you carry on the digital group?

- Research
- Submission of homework by email (4 times / 19.05 %)
- Sharing books
- Assignments and tasks (4 times / 19.05 %)
- Posting marks
- Written expression exercises
- Receiving questions, comments, feedback
- Seminar information

16. If you are using online contact with your students, what is it for?

f. Others: -Sharing books / -Feedback, comments / -Marks / -Exams time table / -Remedial work for academic writing (Only some students) / -Students can contact me when and if they wish to do so.

23. Can you please justify? (Do you have any objection to online delivery of lessons?)

Table 3.5: Teachers' Justification for Having or Not Having an Objection to Online Delivery of Lessons

No objection	- It is the right of students as it exists in universities abroad. - It can be a source of motivation for the students. - Online delivery of lessons can enrich the transmission of information. It is fun for students. - Most teachers wish it could be possible, only if we have a good Internet connection. - Online lessons should be a remedial work. - It may attract students' attention. We may save time. - I encourage anything that can help my students. - In an "ideal" world, online education is complementary to face-to-face education. - As younger generations are used to ICT, the introduction of online courses (together with face-to-face teaching -to start with) will become necessary in Algeria. - It can be useful for absent students and those who could not follow at 100%.
Yes, objection	- Other teachers' experience has proved ineffective. - We should not use it as a "film projection". It should cover only 40% of the course delivery. - Teachers ought to be physically present to deliver lectures efficiently. - I have an objection to the lessons which are not checked and verified. - Communication needs human interaction. - It cannot replace teachers.

32. Can you justify your choice, please? (Online instruction can replace face-to-face instruction.)

Table 3.6: Teachers' Justifications for Face-to-Face Instruction Being Replaceable or Irreplaceable by Online Instruction

Strongly disagree 42.86%	- The use of ICT is necessary but will definitely not replace teachers. - It only helps. - One can never do without the book, the blackboard, and the teacher. - Teaching is an art as well as a science. Online instruction will not replace the face-to-face instruction. Students cannot be guided and oriented without the help of the instructor! - Online instruction is an artificial process and lacks the human dimension of instructing learners.

	- Nothing can replace human interaction. - No machine, however sophisticated, can replace face-to-face interaction! - A waste of time. - A teacher remains a teacher if s/he knows why s/he chose this job. If s/he did it with passion and that a learner is more than just a learner, s/he is a partner of a mission held together.
Disagree 42.86%	- It is necessary but not to the extent of replacing the teacher. - I still appraise the role of the teacher. - Neither students nor teachers are familiar with modern technology except for calls or chats. Both need initiations to the new purpose. Whether it works or not, we should by no means abandon the old good traditional methods. - During the face-to-face instruction, the student is more involved. - We are human beings not machines. - On the contrary, it may reinforce their relationship. Yet, it depends on the teacher's method in managing the situation. - Human relationships and contact are important. Non virtual interaction is also essential in that it encourages effort making and the teacher's monitoring of the learning process. - Has the cinema industry put an end to theatrical creation, drama, writing, literary production?
Neither agree nor disagree 14.29%	- It depends on the aims and objectives of the online course and on the types of learners. Traditional young learners (who are still at school) need face-to-face instruction together with online courses. However, adults of the types (life fulfillment learners / corporate learners / professional enhancement learners) can do with online courses only. - In some cases, the student has no choice except online instruction. It is an open door to some students. (2 times)

34. What are the most serious ones according to you? (Dangers and disadvantages of technology)

- Technology is attractive in many ways, so studies will have a secondary role.
- Wrong and inadequate information (6 times)
- Plagiarism (6 times)
- Copy and paste
- Reduction of creativity and genuine ideas
- The power of image will facilitate or stop the "effort after meaning" process.
- "Formatting minds". We may all end up thinking the same way, i.e. the way the providers of this technology want us to think!! Free thinking may disappear if we are not careful!!
- Lack of reflection
- Automatisation of learning
- Laziness (4 times)
- Dependence/lack of autonomy: some may tend to rely utterly on technology. (2 times)
- Loss of desire and willingness to read

- Not knowing how to use online
- Misuse of technology
- Vague instructions of online course
- Lack of communication
- Human relationship will disappear / Loss of human relationship. (3 times)
- May be even dehumanisation for some extreme versions of ICT. (2 times)
- Ignoring the teacher and the classroom
- I do not think there is a threat somewhere.

3.9.2. Findings from the Students' Questionnaire

3.9.2.1. Replies to Close-ended Questions

Table 3.7: Students' Replies to Close-ended Questions by Means of the Questionnaire

Questions	All Students	Percentage
1. Do you attend your lectures regularly?		
Yes	88	88%
No	12	12%
2. If yes, why?		
a. It is always interesting to be in a class	34	34%
b. The teacher is very resourceful and their material is interesting	26	26%
c. I am a motivated student, even if it's boring I will join my class	40	40%
d. Nothing can replace what the teacher gives	**43**	**43%**
e. To avoid the administrative consequences of absence	18	18%
f. Others	15	15%
3. If no, why?		
a. I have a job or I study something else	4	4%
b. I can learn more in the library	3	3%
c. Everything is on Internet	**3**	**3%**
d. My classmates share the lesson's content on our Facebook group	**3**	**3%**
e. The lesson is boring	**4**	**4%**

f. Others	3	3%
4. My relationship with my teachers is important and affects my learning process.		
0. Strongly disagree	1	1%
1. Disagree	7	7%
2. Neither agree nor disagree	23	23%
3. Agree	**38**	**38%**
4. Strongly agree	**31**	**31%**
8. Do you need your teacher's e-mail address?		
Yes	78	78%
No	21	21%
No reply	1	1%
9. Do you e-mail your teachers about study matters?		
Yes	**50**	**50%**
No	**48**	**48%**
No reply	2	2%
10. Have you ever been in a Facebook study group?		
Yes	**69**	**69%**
No	31	31%
11. Who creates the digital study group for your class?		
a. You	4	4%
b. Some of your classmates	**64**	**64%**
c. Your teacher	**12**	**12%**
d. The administration	0	0%
12. On which social network are your study groups created?		
a. Facebook	69	69%
b. Twitter	1	1%
c. LinkedIn	0	0%
d. Others (Skype, Viber, Chat Rooms, E-mail)	4	4%
13. How many teachers do you have this year?		
10 Teachers	42	42%
9 Teachers	58	58%

14. How many of your teachers use ICT devices in the classroom?		
ONE Teacher	58	58%
TWO Teachers	42	42%
15. It is fine for me to receive technology-free lessons regularly.		
0. Strongly disagree	5	5%
1. Disagree	13	13%
2. Neither agree nor disagree	**18**	**18%**
3. Agree	**46**	**46%**
4. Strongly agree	**10**	**10%**
No reply	8	8%
16. The lesson is better when it is delivered with more tools and materials.		
0. Strongly disagree	3	3%
1. Disagree	1	1%
2. Neither agree nor disagree	7	7%
3. Agree	**45**	**45%**
4. Strongly agree	**43**	**43%**
No reply	1	1%
17. Do you care more about…?		
a. The content of the lesson, no matter how it is delivered	9	9%
b. How the lesson is delivered, because it impacts the content	33	33%
c. Both	**53**	**53%**
d. Others	2	2%
No reply	3	3%
18. Should university authorities equip classrooms and amphitheatres with ICT devices like data shows, computers, access to Internet, etc?		
Yes	**89**	**89%**
No	10	10%
No reply	1	1%
19. The use of ICT is necessary in today's teaching and		

learning.		
0. Strongly disagree	1	1%
1. Disagree	5	5%
2. Neither agree nor disagree	14	14%
3. Agree	**58**	**58%**
4. Strongly agree	**18**	**18%**
No reply	4	4%
20. Even with online instruction, the teacher-learner relationship will remain important and influential.		
0. Strongly disagree	3	3%
1. Disagree	1	1%
2. Neither agree nor disagree	15	15%
3. Agree	**53**	**53%**
4. Strongly agree	**23**	**23%**
No reply	5	5%
21. Online instruction can replace teachers and face-to-face instruction.		
0. Strongly disagree	**30**	**30%**
1. Disagree	**41**	**41%**
2. Neither agree nor disagree	**12**	**12%**
3. Agree	**11**	**11%**
4. Strongly agree	2	2%
No reply	4	4%
23. Are you aware of the dangers and disadvantages of technology?		
Yes	**91**	**91%**
No	6	6%
No reply	3	3%

3.9.2.2. Replies to Open-ended Questions

Students' replies to open ended questions have been processed in the same manner as teachers'. Here below they are.

2. If yes, why? (Do you attend your lectures regularly?)

f. Others:

- If I want to succeed, I have to. (3 times)
- To not feel you are lost in your studies. (8 times)
- Because of some teachers that I like.

3. If no, why? (Do you attend your lectures regularly?)

- Illness
- Distance
- The conditions are terrible; poor teaching methods.

5. Can you justify your choice? (My relationship with my teacher is important and affects my learning process)

Table 3.8: Students' Justifications for the Importance of the Teacher-Learner Relationship and Its Impact on the Learning Process

Strongly disagree 1%	- No justification
Disagree 7%	- No relationship between me and my teachers. - If neither do I like the module nor the teacher, it would be even more of boredom and hassle to attend. (3 times) - I do not think that it is important to have a strong relationship with my teacher. All that matters is good marks at the end of the year. (2 times)
Neither agree nor disagree 23%	- All that matters is respect. (2 times) - Good relationships do not always mean good understanding and fruitful results and vice versa. (2 times) - The majority of students do not have a relation with teachers. Our teachers do not even know our names because of our huge number. (3 times) - It depends on the teacher's and students' attitudes. (2 times) - Teachers at university always try to avoid contact with students and also they tend to have an aggressive attitude towards students. (2 times) - A lot of teachers do not value communication with their students. A good relationship is necessary only with good teachers. - My motivation could be the only thing that can affect my learning.
Agree 38%	- When I like the teacher, I like studying. I feel at ease, whereas if you hate him, you will lose the motivation to learn. (7 times) - A teacher is more than an instructor in the classroom. S/he is an ideal. - We cannot study and attend without having a relationship with our teacher. - The teacher is the best means of transforming information. - There are some teachers who are very severe and make you feel no comfortable at all. They put you in a very stressing situation, so you will be only thinking of going out. Being comfortable in class makes you a better learner. (3 times)

	- A good teacher-learner relationship makes the learner pleased, interested and motivated. (4 times) - It is the teacher who makes you decide whether you want to attend or not. - The teacher should know who he is teaching. - It allows better communication; therefore, better learning. (2 times) - The impression that we have about the teacher is very important not just for students, but for the teacher too.
Strongly agree 31%	- A good relationship with the teacher creates a good classroom atmosphere. (3 times) - If there is a good relationship, you will feel comfortable to study and make efforts. (3 times) - Ethically and pedagogically, i.e. it is ethical and pedagogical. (2 times) - When your relationship is good, it gives you the desire to study. (4 times) - It motivates, guides, and inspires you. - It is important to build good relationships with teachers. This makes them more motivated and makes them do their best. - If I hate some teacher, I decide not to attend his or her lectures. (3 times) - If there is no contact between teachers and students, it is not interesting to learn from a stranger.

6. With online learning possible, how will the role of the teacher change?

Answers to this question could be put in four main blocs as shown in Table 3.9.

Table 3.9: Students' Views of How Online Learning Changes the Teachers' Roles

The teacher's role will not change	- Nothing will change. It remains the same. (14 times) - The role will not change because those who make information and lessons available for you online are also considered as teachers.
It depends	- It depends on the dynamicity, character, and nature of the teacher. (3 times) - It may change to better or worse. - He will be no more the centre of learning. He will not be the only instructor.(4 times) [This can be seen as either positive or negative] - Less formal and authoritarian. (2 times) [This can be seen as either positive or negative]
The teacher's role will change negatively	- It will change completely. (2 times) - We will not need teachers. There will be no roles for them. (3 times) - It will be more difficult. (2 times) - Less involved, less important, more passive. Teachers will be ultimately neglected. (6 times) - Not important. (4 times) - Less effective and gradually resembles his materials. (2 times)
The teacher's role will remain important	- Specific, very clear, meticulous. - The teacher will be more available. He will deliver more than before. (2 times) - He will be teaching online and face-to-face. (2 times)

	- S/he will help us understand. - It will change from the inside to the outside of the classroom. - The teacher will post the course to us. - A guide, not a lesson deliverer, not a source of information. (10 times) - He will show us how to learn online. (3 times) - A facilitator of the learning process. - A motivator. (2 times) - An advisor - The role of the teacher will always remain important. Just the way he organises his ideas while speaking plays a great role in the process of learning. - It will be facilitated. Their mission will be lighter mainly if they have large groups. (9 times)

7. If everything is on Internet, as it is said, what does the teacher have to do in class?

- Nothing. (7 times)
- Guidance. (27 times)
- The teacher may go further, teach things that are not mentioned on Internet.
- He motivates. (8 times)
- He teaches you how to select your ideas, how to organise them. He impresses you. You look at him explaining the lesson in a very intelligent way and say: “I want to be like him.”
- On Internet, there are a lot of information. Sometimes, you will be confused. The teacher guides and gives you the right information. (3 time)
- Everything means right and not right, good and bad, beneficial and not. There comes the irreplaceable role of the teacher: to teach the right, good, and beneficial. (2 times)
- With the huge amount of information accessible through Internet, the need for a supervisor arises and this is exactly what teachers can do: supervise us.
- He checks the authenticity of information. (6 times)
- On Internet, students are likely to lose their focus. So, they are in need of teachers to keep them focused.
- He facilitates, simplifies, and eases. (8 times)
- He keeps the learner interested, attracts, and motivates him. (3 times)
- He advises and assists. (3 times)
- He evaluates.
- He instructs, orientates, and interacts with learners. (5 times)
- He establishes direct contact and discussion in class. (2 times)
- He knows his students and explains to them in a way they understand. (7 times)

- Eye contact has a strong impact on learning. Tune of voice, facial gestures are all non-verbal communication that helps in learning and remembering the information.
- The teacher examines the student's ability to express what he learned in a personal specific style.
- He transmits some of his personal experience. (4 times)
- He remains important for more classroom clarification and for his own opinion.
- We learn more from the teacher's attitude, his devotion, his person, and his own way of thinking.
- He is a role model.
- He shows us what is important to learn.
- He filters the huge content and information.
- He keeps doing his job in the best way. (6 times)
- Not everything is online. Some teachers give us information which are not online. (6 times)
- I do not know. (2 times)
- His role is useless, better for him to retire or adopt the new way of teaching.
- He sits and watches. He will not be needed. (2 times)

17. Do you care more about…?

d. Others: -The teacher / - The content through the teacher himself

22. Can you justify your choice, please? (Online instruction can replace teachers and face-to-face instruction.)

Replies to this question are classified in Table 3.10.

Table 3.10: Students' Justifications for Face-to-face Instruction Being Replaceable or Irreplaceable by Online Instruction

Strongly agree 2%	- If we can study online, there will be no need to attend lectures. - We will study at home.
Agree 11%	- It is possible to study in other ways. - Why come and attend if I can sit at home and learn? - Some students never come to class and they succeed. - As long as the teacher-students interaction is held even online.
Neither agree nor disagree 12%	- It depends on the instruction. (2 times) - Some of it can be replaced. - Sometimes, online is better. Other times, it is better to follow the teacher. - If the teacher adds to online instruction. - Online is just a tool for the teacher to give us better lessons.

	- Online instruction is so useful, but the teacher's presence has a great impact, too. (3 times)
Disagree 41%	- Online is just a machine, a tool. (2 times) - Nothing can replace the teacher, a real teacher. (8 times) - The teacher is an authority that cannot be denied. - The teacher's instruction is more helpful, useful, and easier to grasp than online instruction. (2 times) - Online instruction should be used with the presence of the teacher. - There is an exchange between the teacher and the student which online can never replace. - A teacher makes us learn with passion, but technology is learning cold information. - A learner needs a guide. - The teacher uses face expressions and gestures to transmit the message to the learner, whereas online, we do not get the point sometimes because it is digital. - There is a lack in the teaching methodology online. For instance, if a student does not understand, the teacher will facilitate and explain in varied ways, but online, you have to take it as it is. - The teacher knows his students and chooses the best methods. - ICT cannot motivate students. (3 times) - We can learn from them both. A teacher needs not be replaced. (2 times) - The teacher instructs with regards to the culture and background of his students. What seems simple to a British student is not to an Algerian. - There are students who cannot afford online learning.
Strongly disagree 30%	- A human being cannot be replaced by a machine. Good teachers, mostly, cannot be replaced. (6 times) - The teacher's experience is irreplaceable. No matter how the Internet provides knowledge, the teacher is always one step forward. - Being in the atmosphere of the class prepares the students psychologically to learn which online does not do. - If anything, you can directly ask your teacher. You cannot ask a website to be clearer whereas a teacher gives you an instant response. (3 times) - A Teacher is an inspiration. - Teachers give experience, the thing that technology may lack. - We are human and we need direct contact. - The teacher-learner relation is so important to be reduced to just online instruction. (2 times) - Online instruction cannot make sure whether or not the learner has learned properly. It cannot provide feedback to better the learner's performance. - There is no place to replace the classroom because when you sit and open the net, you cannot concentrate; you will chat, watch videos, but not study. - A teacher is a human being like students. He has emotions, feelings, and he can understand the students thanks to his experience. This emotional state between them is irreplaceable. (2 times)

24. According to you, what are the most dangerous effects of technology on teaching and learning?

- Wrong information and fallacies. (14 times)
- Learning through unreliable websites.
- False interpretation, out of norms, sourceless, a great step back from social life.
- Electronic plagiarism, copy and paste, taking everything without using our minds. (10 times)
- Confusion (too many sources)
- Not focusing: instead of studying, you find yourself doing other things like chatting. (4 times)
- Laziness: it would make us lazier than we already are. (19 times)
- Loss of motivation to learn. (6 times)
- Addiction and relying on technology. (3 times)
- Lack of students' presence in class. (2 times)
- Ignoring teachers, books, reading, and personal work. (8 times)
- Losing the real sense of acquiring knowledge.
- Disappearance of teacher-learner relationship. (5 times)
- No contact between teacher and learner: losing human contact which is the most important thing in the process of learning. (3 times)
- Importance of teacher will decrease. (7 times)
- It makes a gap between the teacher and the learner.
- Neglect of live research. (3 times)
- Waste of time. (4 times)
- As an Arab intellectual said: "The more technological devices, the more stupid minds rise."
- I do not think that it has a negative impact. If we as students are smart enough to take what we need from it.
- No danger. (3 times)

3.9.3. Findings from the Students' Mini Questionnaire

Findings from the mini questionnaire are profiled in Table 3.11.

Table 3.11: Findings from Students' Mini Questionnaire

Questions	All Students	Percentage
1. Do you have home access to Internet?		
Yes	57	57%
No	43	43%
2. Do you prefer …?		

a. A paper format questionnaire	76	76%
b. An online questionnaire	24	24%
3. Do you use your digital device (phone, tablet, laptop, etc) during the lesson?		
Yes	21	21%
No	66	66%
No reply	13	13%
4. What do you use it for?		
a. Check time	19	19%
b. Check up the meaning of a word	13	13%
c. Take notes	1	1%
d. Go on Internet	7	7%
e. Search about an idea that the teacher mentioned	7	7%
f. Chat	3	3%
g. Go on social networks	7	7%
h. Others	0	0%

3.9.4. Findings from the Interviews with Teachers

Findings acquired by dint of interviews are not going to be delivered in totality, i.e. even though the interviews have been transcribed fully, mainly the recorded ones, only an abridged version of the relevant and most necessary data from them are posted here (Table 3.12).

Table 3.12: Summary of Findings from Interviews with Teachers

Numbers	Teacher 1	T 2	T 3	T 4	T 5	T 6	T 7
Question 1	Believing in the capacities of others	Not asked (NA)	Not asked	Not asked	Not asked	Not asked	Not asked
Q 2	Yes	Yes	NA	NA	NA	NA	NA
Q 3	Inevitable	Fundamental	Yes	Yes	Yes	Yes	Yes
Q 4	NA	Transmitting knowledge	Facilitating learning	NA	NA	Guiding	NA
Q 5	Not at all	Yes	Yes	Yes	NA	Yes	NA
Q 6	Surely not	Why not? Two systems are better than one.	NA	NA	Not sure	Why not?	No
Q7	No, you cannot do that: "No	NA	NA	NA	NA	NA	NA

	methodologist has the whole answer."						
Q 8	Never	Not asked	Yes	Yes	NA	NA	Yes
Q 9	No	No, except for a data show device	Yes	No	Yes	No	No
Q 10	Yes	Yes	NA	NA	Yes	Yes	NA
Q 11	No	NA	Yes	NA	No	NA	Yes. But it is up to the teacher.
Q 12	Technology is as good as your use of it.	It helps mainly distance learning.	It reinforces traditional ways.	NA	NA	NA	NA
Q 13	Yes, in all cases we have drawbacks.	No, it will only help.	Yes, mis-guidance of students.	NA	Yes	NA	NA
Q 14	Somehow, yes.	It is certainly.	NA	NA	NA	NA	Yes
Q 15	Quantity and the "10/20".	Focusing on quantity.	NA	NA	NA	NA	NA
Q 16	I hope.	Yes, things are positive from my point of view.	NA	NA	Yes	NA	NA

3.9.5. Findings from Classroom Observation

As a first remark, one can clearly see that the classrooms and amphitheatres have no infrastructure that supports tech use. This is mainly true if we take into consideration the *"Technology Infrastructure Conditions"* enumerated by Jody Clarke and Chris Dede as:

> *"-Access to educational materials:*
> *-Location of technology (lab outside classroom, lab in classroom, computer cart brought in, students' school laptops)*
> *-Reliability and quality of technology (machine level, network/server connection reliability)*
> *-Access to technology equipment*
> *-Type of technology used (personal computers, networked laboratories, multimedia, and others)"* (Harvay et al., 2009: 32)

None of those is materialised in the setting of observation. Also, even when teachers and students were aware of the technological revolution, and personally used websites, blogs,

MOOCs (Moodle, Coursera)[1], technology was not part of their teaching practice. In fact, observation showed that out of eight teachers, three teachers use technology. The first teacher's lessons are all equipped with data show presentations, she has a website on which she delivers her syllabuses, results, and documents, and she communicates with students via e-mail besides face-to-face interaction. The second teacher also uses data show representations along his classes, while the third one is on a Facebook group with his students. They share schedules, organise sessions, learn about absence and presence of the teacher, post timetables, results, and some taken pictures for lesson documents, handouts most of all.

Out of 27 observed sessions, 12 witnessed the use of technology by two teachers (a laptop or an overhead projector) (Table 3.13). However, during the complete number of sessions, some students were observed referring to their smart phones, devices in general, from time to time checking a dictionary, "Googling" what the teacher said, or for other purposes (even chatting)[2] (see Table 3.11).

The remainder of observation outcomes is brought in Table 3.13. It incorporates the factors that contribute to strengthening the teacher-learner relationship[3] and other elements.

Rating/Scale: **Excellent (5) Very good (4) Good (3) Average (2) Poor (1) Not applicable (0)**

[1] Two teachers respectively mentioned their participation in a Moodle and Coursera. The first teacher avowed that she has taken a special training course using Moodle and that she is preparing an online course now. The second one said that she took a Coursera course. A third teacher spoke about her personal website and how it is used in the teaching-learning process of students. Syllabuses are delivered on it plus documents, books, marks, and other things.

[2] This was known thanks to observation, sometimes the student reading from his/her device and informing the whole group about his/her activity of searching. In other cases, the observer asked the students (during the session, after it, or by use of the mini questionnaire) about the type of activity they were doing on their device during the session. Some students openly replied while others refused to say even with the purpose of the question, i.e. the research being explained to them.

[3] The factors that help build a good teacher learner relationship were mostly extracted from Dörnyei's book *Motivational Strategies in the Language Classroom* (2001) and from some available, ready-made classroom observation reports downloadable at (https://www1.umn.edu/ohr/prod/groups/ohr/@pub/@ohr/documents/asset/ohr_46459.pdf, http://uwf.edu/media/university-of-west-florida/offices/cutla/documents/Classroom-Observation-Report-Scaled.pdf, and http://www.islandtrees.org/appr/appr-ot-09-20-11.pdf).

Table 3.13: Findings from Classroom Observation

Numbers / Observed element	Teacher 8	T 9	T 10	T 11	T 12	T 13	T 14	T 15
Eye contact with students	(5)	(4)	(3)	(3)	(3)	(3)	(3)	(5)
Listened to students	(5)	(4)	(4)	(3)	(5)	(3)	(3)	(5)
Nonverbal gestures consistent with intended meaning	(3)	(5)	(3)	(4)	(2)	(3)	(1)	(5)
Varied explanations of difficult material	(5)	(5)	(4)	(5)	(3)	(4)	(1)	(5)
Smiled	(5)	(4)	(3)	(3)	(3)	(3)	(3)	(5)
Motivated students	(2)	(3)	(2)	(2)	(2)	(2)	(1)	(4)
Used humour appropriately to strengthen retention and interest	(3)	(3)	(2)	(2)	(1)	(3)	(1)	(4)
Encouraged students' questions	(2)	(3)	(4)	(2)	(1)	(1)	(1)	(4)
Encouraged students' discussion	(1)	(1)	(1)	(1)	(3)	(1)	(1)	(2)
Maintained students' attention	(4)	(5)	(5)	(4)	(3)	(3)	(3)	(4)
Asked questions to monitor students' progress	(3)	(2)	(2)	(1)	(1)	(1)	(3)	(2)
Gave satisfactory answers to students' questions	(5)	(5)	(5)	(5)	(3)	(3)	(3)	(5)
Paced lesson to allow for note taking	(5)	(5)	(5)	(2)	(4)	(5)	(5)	(4)
Re-explained when necessary	(5)	(5)	(4)	(5)	(3)	(4)	(4)	(5)
Gave positive and constructive feedback	(3)	(2)	(1)	(3)	(3)	(1)	(2)	(4)
Showed enthusiasm for teaching	(4)	(5)	(2)	(4)	(2)	(1)	(1)	(4)
Showed passion of subject matter	(4)	(5)	(1)	(4)	(1)	(1)	(1)	(4)
Good rapport with students	(5)	(5)	(2)	(3)	(3)	(2)	(2)	(5)
Presented helpful audiovisual materials	(5)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
Overhead projector content clear and organised	(4)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
Instructor provided outlines/handouts	(5)	(2)	(0)	(0)	(0)	(0)	(0)	(5)
Students liking of the course[4]	(5)	(5)	(2)	(3)	(3)	(2)	(2)	(5)

3.10. Discussion

3.10.1. Discussion in Relation to Sub Question One

To start with, SRQ1 was about the importance of the teacher-learner relationship. An interviewee viewed the latter as a *"partnership"* and said to it: *"We cannot talk of educating people without having some kind of partnership"*. He also spoke of how it is important to carry on using that humane aspect in teaching and how many students and teachers still prefer direct contact. Meanwhile, a student considered it an incomparable exchange between the two

[4] Some brief informal interviews with students allowed for these data.

(Table 3.10). This exchange is apparently valued by both teachers and learners in different ways.

The value of the teacher-learner rapport can be found in several responses; for instance, 95.23% ticking a yes to "do you like teaching?", 66.66% considering teaching as a profession and 52.38% as a passion while only 2% regard it as a money-making job. This can factually hint to the idea that teachers value the humane dimension of teaching mainly that a whole of 95.23% agreed and strongly agreed that the quality of the teacher-learner relationship affects teaching-learning outcomes. Also, a group of 99.48% agreed and strongly agreed that it is to the teacher to ignite his students' curiosity and keep them interested. Not only that, 76.18% of teachers, too, agreed and strongly agreed that this relationship will remain important even within online instruction, whereas 85.71% disagreed and strongly disagreed with "online instruction can replace teachers" (Table 3.3). For them, how this rapport is important and what it brings to the learner and to learning can be read in Table 3.4.

Students on their side justified this importance and its impact on their learning process by a set of points that are all included in Table 3.8. To mention a few, some students tend to skip a class more because it is boring (4%) than because Internet can provide them with diverse learning materials (3%). 43% of students went for: "I attend because nothing replaces what the teacher gives" (Table 3.7). If it were only data that a teacher provides, it would be easy to study online without a big loss of any sort. Yet, a teacher affects learning with more than mere information. The nature of knowledge s/he transmits transcends the limits of mere factual data which can be grasped from the detailed replies to question 7 in the students' questionnaire (see also Table 3.10). Explicitly, 69 amongst 100 students agreed and strongly agreed on the statement: "My relationship with my teacher is important and affects my learning process." 76 agreed and strongly agreed with: "Even with online instruction, the teacher-learner relationship will remain important and influential."

The analysis of classroom observation rubrics demonstrated that the most liked courses (T8, T9, and T15) happen to be also courses with teachers who have good/excellent rapport with students (Table 3.13). This can be attributed to other factors. For example, these teachers are good, very good, or excellent at purposeful humour use, smiling with students, respecting them, revealing enthusiasm for teaching, and reflecting passion for the module.

One of the interviewed teachers synopsised the importance of that rapport. He said: "*If there is no teacher-learner relationship, the teacher does not teach and the learner does not*

learn." This say was, indeed, exemplified in a student's words: *"I attend because of some teachers that I like."* Thus, as hypothesised in chapter one, the teacher-learner relationship is pivotal to the teaching-learning process.

3.10.2. Discussion in Relation to Sub Question Two

SRQ2 dealt with the open paths for the future of teaching and learning. Three choices were suggested: online (also referred to as distance or e-learning), blended, and unplugged instruction. In Table 3.3, numbers tell that 66.67% of teachers have been asked by their students to establish an online contact with them. At the same time, 78 students expressed their need for that type of contact with teachers. 50% do email their teachers and 69% have been on a digital study group created by them or their classmates (Table 3.7). 80.95% of teachers, too, have been on similar digital groups with their students and colleagues. If anything, this insinuates that online instruction is burgeoning in the setting of the study; this is being said with high reserves, keeping in mind how much far from that the reality and readiness are. Indeed, 0% of teachers opted for online learning in their replies to question 24. Yet, paradoxically, 71.43% of teachers have no objection for online learning while 71.43% of teachers and 76 students agree and strongly agree that the use of ICT is necessary in today's teaching and learning.

On another hand, although 89 students and all teachers would like their working milieu to be tech-equipped (overhead projector, computers, Internet), no equipment of the kind is provided. Classroom observation showed that the teachers who use any form of technology within their course do it independently, by their own means and initiative. 52.38% of teachers confessed that they have never bought a tech device for their classroom use. In fact, 57.14% of teachers are not using technology because, as 47.62% of these indicated, there are no available facilities. This sustains unplugged/face-to-face instruction which is still preferred by 57.14% of teachers (Table 3.3) and 56 students (Table 3.8). As a matter of fact, 71% of students and about 85.72% of teachers disagreed and strongly disagreed with face-to-face instruction being replaceable by online instruction. None of the teachers approved the latter statement. One student said in support of the classroom: *"Being in the atmosphere of the class prepares the students psychologically to learn which online does not do"* (Table 3.10).

Interestingly, there is no active digital learning platform for EFL teachers and students. A platform may be a MOOC or an interactive website on which students and teachers may come together for the sake of a same finality: teaching and learning. This might subscribe

within tele-conferencing or otherwise, tele-learning which: *"offers the possibility of classes of common interest and compatible range of competence which is attractive for cognitive learning while conventional classrooms offer the possibility of developing social skills and communities ties and values"* (Rajasingham & Tiffin, 1995: 78). Ultimately, it reinforces the face-to-face practice and ends in blended instruction. Furthermore, 88% of the student sample agreed and strongly agreed that the lesson is better when delivered with more tools and materials. In other words, Kenning illustrates: *"It may be that … the way forward lies in blending virtual and conventional classes so as to exploit their complementary potentials"* (Kenning, 2007: 134).

Tying findings to literature, *"In an "ideal" world, online education is complementary to face-to-face education,"* said one teacher (Table 3.5). Therefore, it is not a question of replacement, rather of completion and perhaps choice for *"as younger generations are used to ICT, the introduction of online courses (together with face-to-face teaching-to start with) will become necessary in Algeria"* (Table 3.5). Digital natives will demand educational technology.

In a nutshell, the three paths indeed are open for teaching and learning, not in the same proportions though. Face-to-face instruction still dominates the view of teachers and students as they prefer it to other untried methods. On the horizon, however, emerge the two other prospects of blended and online instruction, weakly and limitedly as could be understood from all the potential dangers and fears associated with online instruction and cited by both teachers and students (see findings to question 34 in the teachers' questionnaire and question 24 in the students').

3.10.3. Discussion in Relation to Sub Question Three

SRQ3 enquired about the new teacher's roles within online learning environments. To go straight to the point, teachers thought that the most important teacher's roles are: facilitator, guide, knowledge transmitter, and awareness raiser which received in that order percentages of 71.43%, 66.67%, 52.38%, and 52.38%. 57.14% of teachers opined that these roles may be sustained even with the implementation of online learning and only 33.33% that these roles may be modified. The complete set of roles suggested by teachers can be read within replies to question 9 and question 10 stated previously.

In their replies to question 6 about teachers' roles, students' input was inclusive and extensive (Table 3.9). 15 students believed nothing will change whereas 27 pointed "guidance" as a prime role. Some named it supervising or showing. Teachers, too, shared this conviction. *"On Internet,"* wrote a student, *"there are a lot of information. Sometimes you will be confused. The teacher guides and gives you the right information."* A second student contemplated: *"Everything means right and not right, good and bad, beneficial and not. There comes the irreplaceable role of the teacher: to teach the right, good, and beneficial."* More of that can be scanned within replies to question 7 in the students' questionnaire. It can be seen how the teacher's role is upheld in multiple manners including I-LEARN (see Chapter Two) and what an informant teacher called *"filtering"*. The teacher explained this as: *"New study skills will need to be engaged such as selecting, prioritizing, eliminating unnecessary material."* Relationally, one teacher said that: *"the teacher will help students to interpret the information they have from the net in the best way"*. What is on the net has to be Identified, Located, Evaluated, Applied, Reflected, and kNown. The teacher either performs this and directs students to the I-LEARNed material or s/he trains students to I-LEARN, a line that matches with what an informant student put in as: *"He [The teacher] will show us how to learn online"* (Table 3.9).

In *"an age of open source and anonymity"* (Baggio & Beldarrain, 2011: 39), dangers of digitalisation are to be faced by teachers. Learners cannot be thrown in that wide web unarmed. If schools and universities are transformed online, teachers' tasks would be, plausibly, different from the ones they kept in their toolkits for decades. Gorham et al. say that:

> *"Some of the most common roles teachers are expected to perform are: controller, pedagogical manager, supporter, evaluator, facilitator, disciplinarian, formal and informal authority, expert, socializing agent, change agent, arbitrator, and primary communicator."* (Gorham et al., 2009: 203).

In a way or another, all these roles have been proposed by the respondents. Yet, except for one student who said that those who put material online are teachers, the role of material designer was not explicitly stated. Regardless of all that, some students and teachers saw that the teacher will be needless. S/he will have no role to play; thus, s/he *"sits and watches"*.

In regard to the hypothesis set in the first chapter, only one informant teacher's reply clearly included "course design". However, the majority listed guiding and facilitating as the

two predominant roles. Lastly, *"The teacher is the best means for transmitting knowledge,"* said a student which invokes the mediator role discussed in the first two chapters of this work.

In the view point of one informant student, he synthesised that: *"Teachers' roles depend on their dynamicity"*. Additionally, one informant teacher predicted that: *"A teacher remains a teacher if s/he knows why s/he chose this job. If s/he did it with passion and that a learner is more than just a learner, s/he is a partner of a mission held together."* It is a truth that even within traditional instruction, it is every individual teacher's choice to undertake the roles his/her character, personality, and moral responsibility dictate. To close, *"the teacher keeps doing his job in the best way,"* one student put it. The teacher keeps doing the teaching job for it is not this essence that will change; change is only in terms of materials and tools. The latter needs a user, an organiser, and a manager, someone to make the best out of them and to guide others, i.e. learners, to do as well.

3.10.4. Discussion in Relation to Main Research Question

This investigation and the discussion of the three sub questions culminate in quite an intricate attempt to answer the question about the future of the teacher-learner relationship in a plugged context.

First of all, Jonathan A. Plucker and Ronald A. Beghetto's put a resounding phrase: *"the infancy of the technology"* (Salkind, 2008: 198). Within the studied case, there is an *"infancy of technology"*, it represents only its own specimen and time though. An interviewee confessed: *"Technology use in education in Algeria amounts to nothing"*. In both different times and places, the outcomes could show 'growing' from *"infancy"* to older experiences and tech-adoption. It could also remain as it has been found. For the while, *"Neither students nor teachers are familiar with modern technology except for calls or chats. Both need initiations to the new purpose. Whether it works or not, we should by no means abandon the old good traditional methods,"* jotted an informant teacher. Still, any option will depend on the objectives of the course, of possibility, and facility. It should not be forgotten that online instruction is *"an open door to some students"* (Table 3.6). At the same time, there are students who cannot afford it.

In Bonk and Kim's survey, respondents indicated and predicted that the future is for blended learning rather than whole online education (Bonk & Kim, 2006: 25-26). The same study found that: *"Sixty percent of respondents expected that the quality of online courses*

would be identical to traditional instruction by the year 2006" (Ibid., p. 26). If the three paths give promises of equal results, then any of them might be adopted depending on the teacher, learner, and availability of facilities.

In Amy Benson Brown's metaphor, this study is in no measure attempting to offer *"the secret to keeping all the balls aloft in the juggling act"* (Brown, 2010). The three learning trends that have been dealt with come with promises and side effects. Yet, it is perhaps the fact that there is more than one answer. One interviewee approves: *"There is no one answer: one may have part of the answer not all of it."* Similarly, there is more than one way at hand. The same interviewee carries: *"We cannot stick only to one"* (Table 3.12). It is the idea of eclecticism, the integration approach, and of blending per se. It is also the crux of individualisation that generally strives to satisfy and fit learners' needs and context. This point was mentioned by one interviewee and was tackled previously in the second chapter.

The teacher-learner relationship, from all those findings, is not just a component of the face-to-face instruction or the blended one where the teacher and the learner are in direct contact during all the time or part of it. There are still "*humans behind the technology*", the ones Baggio and Beldarrain call *"cyber educators"* (Baggio & Beldarrain, 2011: 1). If the teacher keeps assisting learning even from behind the screen, no matter the how and how much, this must preserve some sort of *"exchange"* and *"partnership"* between the learner and the teacher which is the heart of the relationship in question. Now, what kind of rapport it will be is not within the scope of this study. Nevertheless, it could be grasped from students' and teachers replies to the questionnaires and interviews that it is an influential, fundamental, and inevitable link. Then, one can go back to Table 3.6 to read: *"Has the cinema industry put an end to theatrical creation, drama, writing, literary production?"*. There is an analogy to be drawn here with direct/online instruction. It helps to fathom that online instruction will not get rid of the teacher-learner relationship just like the cinema industry did not delete theatre.

After all, in one teacher's voice: *"It depends on the teacher's method in managing the situation."* It is still a matter of choice, may be not for learners as much as for teachers. For some learners and teachers, the teacher is a believer: *"someone who believes in the capacities of others"* (Table 3.12). S/he is the best mediator of learning for the atmosphere, motivation, comfort, and learning pleasure s/he establishes (Table 3.8). A teacher is an inspiration: *"He impresses you. You look at him explaining the lesson in a very intelligent way and say I want to be like him"*. S/he is a guide, *"an authority that cannot be denied"* (Table 3.10) and that is

symbolic of ethical and pedagogical value. There lies the core of the teacher-learner relationship. Having said that, it is not the purpose to build generalisations. The goal is only to discuss the findings as they have manifested themselves.

To tie it all together, it is a generality beyond dispute that teaching is rudimentary to learning and will remain so; teachers will be performing new roles, though. Rather than a content-source, teachers will direct, guide, design, facilitate, and train for special skills and with technology per se. All in all, it is only the way they affect learning, the way they teach, and the roles they play that are altering. Their centrality to the practice will remain intact. The ambient focus on digital learning, autonomy, and self-organised learning environments, however, will just reinforce the educational practice as Case said:

> *"It is still a human connection; it is just done in a different way. We are just increasing humanness and our ability to connect with each other, regardless of geography."* (Case, 2010)

Hence, the teacher-learner relationship will perpetuate in the future within the studied setting where things are seemingly not yet plugged, where people still believe in the power of human interaction, and where the amphitheatre is still the meeting place for the teacher and the student to face each other, partner, and exchange.

3.11. Conclusion

This chapter tackled the practical side of the study. It delineated the research framework and reminded of its guiding questions. It, then, referred in detail to the target population, sample, and setting. The data collection procedures and the research instruments were exhibited. Besides, the chapter expressed how data are managed and examined. By the end of the first part, the confronted ethical dilemmas were forwarded and informed consent was submitted.

This chapter was also about the findings of research. It presented them all in tables and lists then went on discussing them in relation to the research questions and hypotheses set in the first chapter.

Next chapter will principally abound with pedagogical implications and recommendations.

Chapter Four

PEDAGOGICAL IMPLICATIONS

4.1. Introduction

The investigation of the use of technology and the teacher-learner relationship has allowed for some implications to be extracted. Eventually, this final chapter dives in the emerging pedagogical implications. It also suggests recommendations for further research and emphasis. Furthermore, it explains the encountered limitations. To close the chapter, a summary of it all is formed.

4.2. Implications

To start with, an inclusive mindset is Annetta's reflection. He says at the beginning of his book: *"Regardless of how you learn, it is the learning that will always stay with you"* (Annetta et al., 2010). Thus, in this maze of new educational models and speculated scenarios, what matters most should remain the benefit of learners, the interest of education, and the effective outcomes of any form of curriculum, method, or technique.

Learning in the future will have to do with more than technology (Figure 4.1). In other words, technology implies its own pedagogy, new teaching and learning strategies, matching skills, relevant material design, and tech-based curriculums (Figure 4.1). With that, a large repertoire of implications can be drawn. They are going to be organised within four sections:

1- Implications in Relation to the Teacher-Learner Relationship
2- Implications in Relation to Roles
3- Implications in Relation to Methods and the Use of Educational Technology
4- Implications in Relation to the Future of Teaching and Learning

Figure 4.1: Experts' Views on Changes over the Next 10-20 Years

(Gijsbers et al., 2011: 34)

4.2.1. Implications in Relation to the Teacher-Learner Relationship

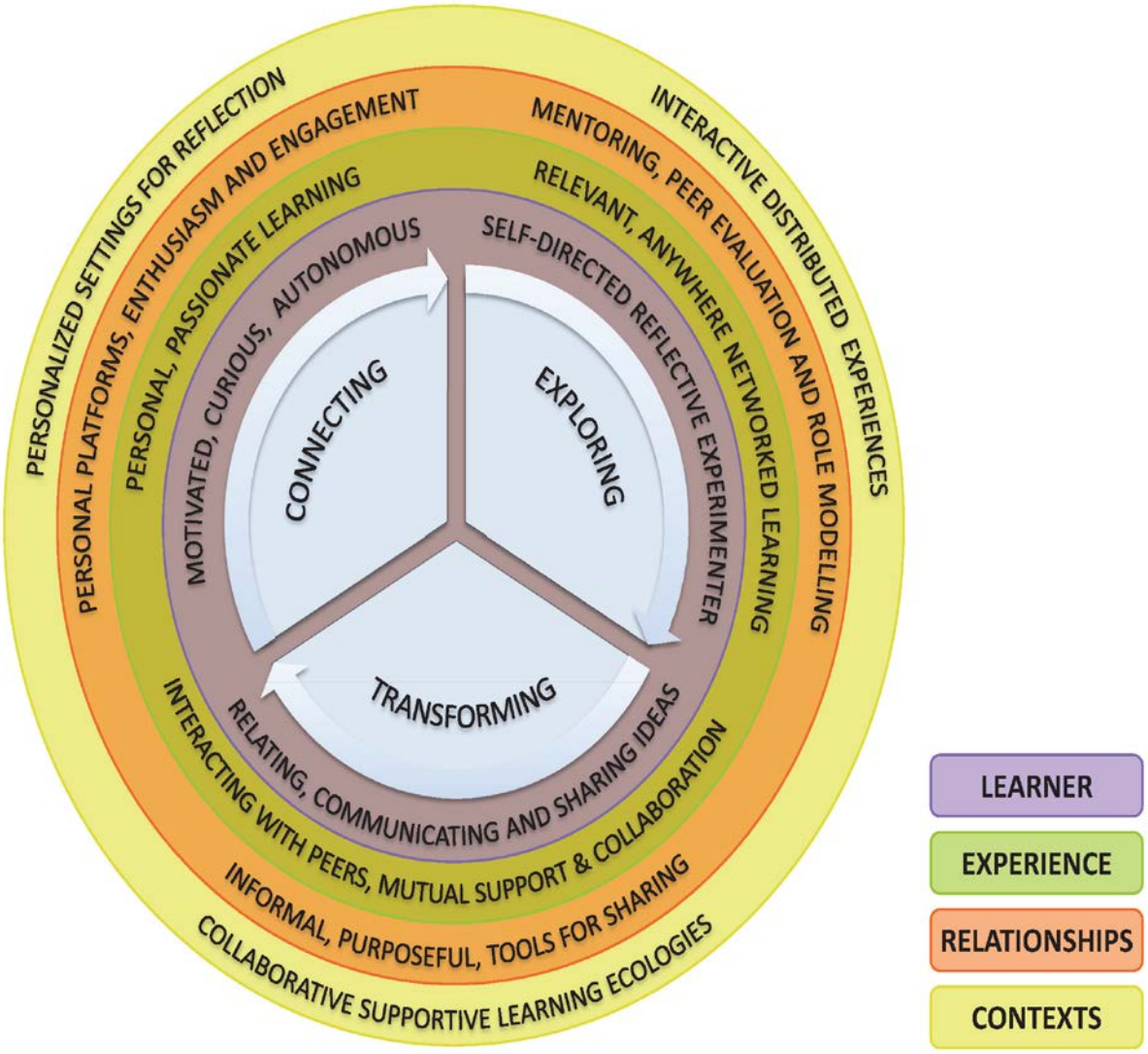
Teaching is about connection: intellectual, cognitive, and affective. The teacher-learner relationship is a primordial factor in the educational process. Languay and Strachan (2011: 21) sum it all by stating that: *"Teachers matter"*. After their 1993 study, Belmont and Skinner concluded that learning is positively impacted when the teacher-learner rapport is positive and good (Tisome, 2009: 3). Not only that, classroom management is completely affected by that rapport (Marzano & Marzano, 2008: 1). This implies a solution to classroom management. Today, many teachers complain about students being unmanageable, noisy, and disrespectful in different ways. A typical and long-term solution for the latter is establishing good rapport with students.

It is now clear that: *"the most active ingredients in improving schools are the knowledge and skills of our teachers"* (Lucas, 2001). The mastery of subject matter content is not a sufficient condition to be a teacher. It is also rudimentary that would-be teachers get prepared in order to *"understand the social and emotional needs of students"* (Ibid.). That is to say, teacher-preparation programmes have to include training on aspects like educational psychology and pedagogy. It has to do with perceiving that: *"… students' attitudes and emotions need nurturing in the learning process. It's about their hearts, as well as their minds"* (Ibid.). Indeed, teachers are mostly educators who ought to be aware of how they influence and affect their students. Tisome thinks:

> *"Teachers have to ensure that they are meeting student needs, both academically and emotionally. Creating classroom environments that promote positive cultures with healthy interactions can motivate students to channel their energies and desires to reach their goals."* (Tisome, 2009: 1)

Clearly, this is referring to motivation and engagement. The teacher should motivate his students which is supposed to engage them. There is more than one tip teachers can use so as to motivate learners. For instance, teachers can show enthusiasm for teaching. A passionate teacher inspires passion for learning and models it; students relating to enthusiastic teachers end up transforming themselves into engaged learners (Figure 4.2). Therefore, teachers have to demonstrate enthusiasm and passion for teaching if they would like their learners to get motivated and engaged.

Figure 4.2: The Full Model for the Future of Learning



(Ackermann et al., 2011: 87)

Figure 4.2 leads to another implication. It shows that learning is collaborative and will remain so. Supportive learning ecologies require the presence of the teacher and the learner. It also implies that learners have to be supported in order for them to learn. Thus, support, it seems, is not a luxury in teaching and learning. It is a student's right, and it has to be provided by the teacher. Moreover, learning is collaborative and human-guided. Romano adduces: *"Human beings have always been conditioned to learn under the guidance of other humans"* (Romano, 2003: 9). That is, teachers have to set a collaborative environment and to provide guidance in order to adequately fulfill learning.

A class is a 'society' of its own and as Toynbee said: *"Society is the total network of*

relations between human beings. The components of society are thus not human beings but relations between them" (Toynbee[1], 1961: 271). This talk implies that teachers should reinforce their rapport with students. One way to do that is: "*open communication, as well as emotional and academic support that exist between students and teachers"* (Pianta, 1999). Communication with students allows for better understanding. It shows that the teacher cares about students and their views whereas authoritarian teaching, where students are only expected to listen and obey, destroys the teacher-learner relationship. Gorham et al. illustrate:

> *"Establishing an affective communication relationship means focusing on how teachers and students feel about each other, about the communication process, and about what is being taught and learned."* (Gorham et al., 2009: 2)

It is, hence, necessary to establish relationships that are based on affect and communication. Effective learning does not just happen. It emerges from a combination of keystones one of which is a communicative, affective learning process. Gorham et al. state:

> *"The teacher directs the instructional communication process. Her or his affective orientation toward the content, the instructional strategies, the students, and simply being a teacher influences the effectiveness of the process -- and the effectiveness of the process, in turn, affects the teacher's affective orientation. Teachers will probably not be effective if they do not have sufficient knowledge of the subject areas in which they teach or of the appropriate methods for teaching those subjects; however, they also need to like what they are doing. Their ability to communicate effectively contributes to the frequency with which they see those light bulbs come on in students' eyes, which, in turn, contributes to job satisfaction. Teachers -- and the content, strategy, and evaluation/feedback decisions they make -- are a primary influence on students' affect toward a subject."* (Ibid., p. 4)

This insinuates that teachers ought to manifest an affective orientation that serves their learners and models every desired objective and outcome. Teachers, indeed, need to like teaching. It is a fact that impacts learning with all its aspects.

Teaching is not only about content. Being a teacher involves giving, otherness, and believing. Palmer explains:

[1] Arnold Toynbee.v.v (1861-1941) is a British economic and historian.

> *"In its original meaning, a "professor" was not someone with esoteric knowledge and technique. Instead, the word referred to a person able to make a profession of faith in the midst of a dangerous world. It comes from a soul-deep sense of being at home in the world despite its dangers. This is the gift that good teachers pass on to their students."* (Palmer, 1998)

It is rudimentary to be an expert in subject matter. Yet, it is more essential to keep that faith in others, in learning, and in the value of teaching. In a world that grows materialistic and focuses on monetary benefits, teachers should remain faithful to the core of education. Their conviction that they are doing a job of merit must be upheld. Moreover, teaching must keep its humane and affective sides.

Another implication has to do with engagement. A teacher should think about what engages his/her students then do it. To give an example, lecturing for some is boring while for others is the best form of learning. Pletka expounds:

> *"Some students characterized lectures as damaging to the learning process and their level of self-efficacy. One student wrote about the experience this way: "Day in, day out; student[s] tread on these fallacies as they sit-out a lecture. They begin to question themselves, their abilities and potentials."*(Pletka, 2007: 67)

Instead of always lecturing, teachers may vary their activities between group work, project presentation, serious games, purposeful shows, and field trips. They may also employ technology as it shows a promise of engaging learners. Learners today can mentally dismiss from a lesson just to get in touch with their digits and devices (Figure 4.3).

Figure 4.3: A Student Disengages from Learning while Listening to His iPod

(Pletka, 2007: 69)

It is disturbing for teachers to see some students interested in other materials that are not related to the lesson. However, if teachers are using no engaging materials, then the student appearing in Figure 4.3 will not be the only one with buds in his ears. Pletka believes that educational technology is powerfully-instrumental as a way to engage learners and heighten participation, collaboration, and interaction (Ibid., p. 79). It offers students more than one context in which they can learn. Thus, teachers ought to make use of it in order to engage those students who get engaged only when the course is tech-rich or else 'modern'.

One more repercussion is learning individualisation. Every group of learners, in other cases, every individual learner has particular needs and preferences. A curriculum should allow for their fulfillment, and a teacher should attempt to meet them adequately. The teacher-learner relationship is generally built around those needs and around individualisation. Therefore, maintaining the former in decency will lead to the accomplishment of the latter.

Consequently, this might reinforce the rapport in question. The role of the teacher in maintaining that rapport entails and necessitates leaning individualisation.

For all its merits, the teacher-student rapport has to be strengthened. This can be done by meeting learners' needs, respecting them, respecting teaching per se, and showing passion for both teaching and learning. A teacher does not teach a lesson; s/he teaches individual students with different backgrounds and personalities. All in all, the teacher should attempt to meet the needs of every learner even if this seems tough given large numbers of students and limited facilities.

In all cases, even when their resources are limited, teachers shaped lives. Lucas entitled his article: "The Power of Teachers: The Opportunity to Shape Lives" (2001). This title reflects that teachers are powerful. No matter materials and tools, what makes teachers powerful is the bond they build with students. Once it is well-established, a good teacher-learner rapport opens the door to passionate effective learning. After all, Jung writes:

> *"One looks back with appreciation to the brilliant teachers, but with gratitude to those who touched our human feelings. The curriculum is so much necessary raw material, but warmth is the vital element for the growing plant and for the soul of the child."* (Jung[2], 1954: 144)

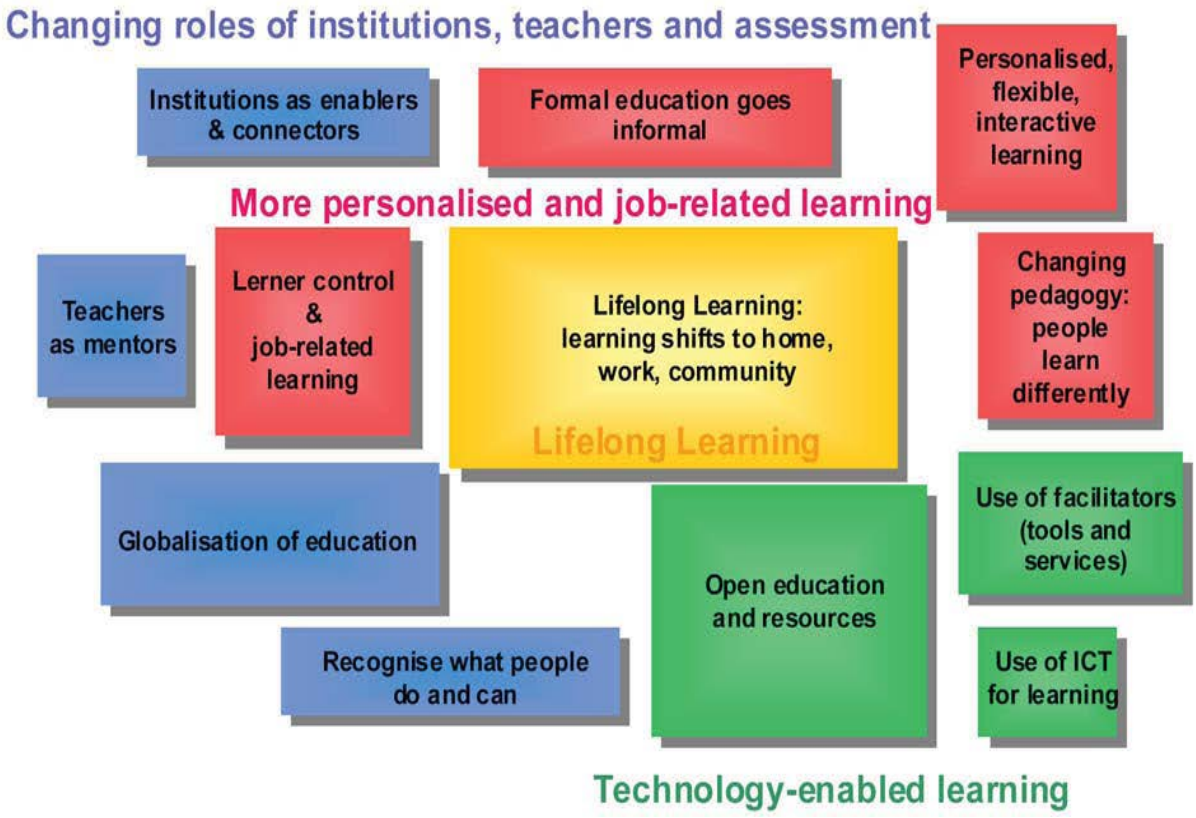
Even students, seemingly, do not remember the tools and the techniques. They keep in mind the memory of a relationship with a teacher who believes and tells them: 'I have faith in you and your potential'. They remember the one teacher who cared about them and their learning. Consequently, it is this kind of rapport that teachers have to nurture with their students.

4.2.2. Implications in Relation to Roles

There is an inventory of roles to be drawn for teachers, learners, and educational institutions (Figure 4.4).

[2] Carl Jung is a Swiss psychiatrist and psychotherapist who founded analytical psychology.

Figure 4.4: The Changing Roles of Institutions, Teachers, and Assessment



(Gijsbers et al., 2011: 40)

4.2.2.1. Teachers' Roles

First of all, a teacher ought to be an educator. This takes us to the original definition of education. Catoneaug puts:

> *"The word education, after all, comes from the Latin educare, which means, "to lead out." I.e., think Socrates. Anyone can absorb information from a book or video, but good teachers will always be necessary to draw out that knowledge and help students develop the skills needed to think critically about the information they consume. In other words, online learning tools are just like any other tools in a teacher's bag of tricks:* ***what matters is how they're applied****."* (Catoneaug, 2009)

Within technology-enabled learning environments (Figure 4.4), education is mostly necessary for more than one reason. Educating entails the wisdom to choose and decide on what is relevant and most important for a given group of students. More options and tools require informed decision making in order to personalise learning, meet learners' needs, and engage them. Indeed, technology does not always facilitate the job. Teachers, therefore,

should be able to choose or design materials that are relevant to their students. They should personalise learning and train learners on the required skills (Figure 4.5).

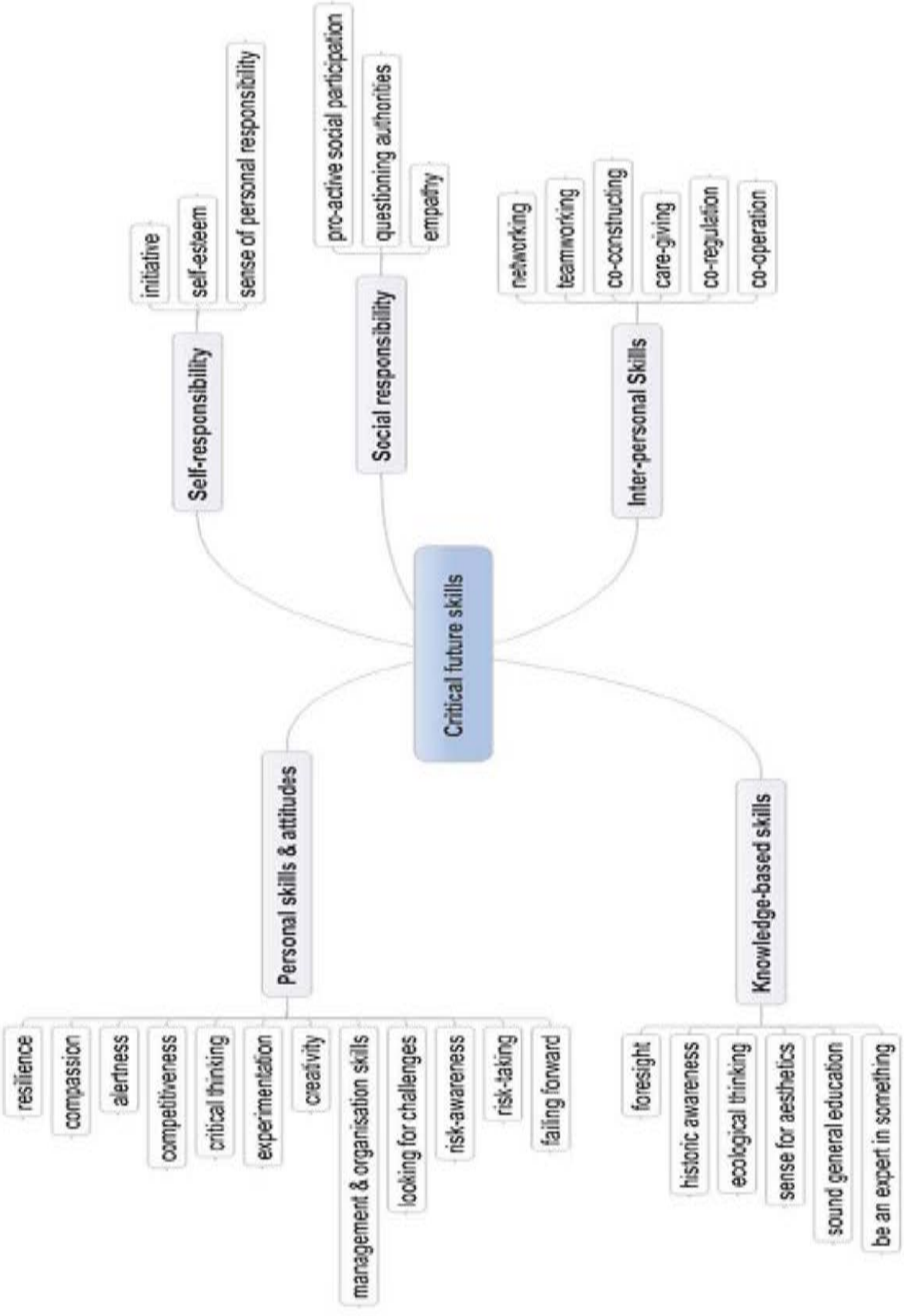
Being an educator encompasses being a mentor (Figure 4.4). Dictionaries say that a mentor is someone who gives help and advice. Besides teaching, a mentor guides. It is true that online environments seem all-sufficient with the abundance of data and learning activities that they provide. However, the teacher should accompany the online learning process and offer guidance all along it. Adams and Rose believe that without online instructors, the online course may be ineffective (Adams & Rose, 2014). Thus, the teacher should make the course coherent, interactive, and supportive for learners (Ibid.).

Teachers' roles imply knowledge of online course design. Jones et al. illustrate:

> *"When designing an online course, one needs to keep in mind that the most important element is not the content but the interaction among course participants (Simmons, Jones & Silver, 2004)."* (Jones et al. in Bolliger et al., 2014: 184)

A teacher's role to be grasped from the latter quotation is designing materials that are interactive not only within online courses but also within face-to-face instructional situations.

Figure 4.5: Experts' Views on Future Skills Requirements



(Gijsbers et al., 2011: 36)

Inextricably, there is a list of roles that teachers should undertake. Many of them are included within Bonk and Kim's findings in relation to would-be-needed teacher skills and roles (Table 4.1).

Table 4.1: Skills Needed to Teach Online in 2010

Response Options	Number of Respondents	Response Rate (%)
Course developer	355	66.4
Facilitator or moderator	352	65.8
Subject-matter expert	298	55.7
Instructor or lecturer	273	51.0
Student counselor or advisor	193	36.1
Technology trainer	162	30.3
Program coordinator or developer	153	28.6
Other	17	3.2
Subtotal	535	96.4
No response	27	3.6
Total	562	100.0

(Bonk & Kim, 2006: 27)

An implication here is for teacher-training programmes to take those roles in consideration (Table 4.1). Teachers, on their side, have to improve their teaching skills and to auto-train on the aforementioned roles and skills.

Teachers' roles are, indeed, all-inclusive. One can even think that most of the educational operation is dependent on teachers. Pauline Perry states:

> *"You can fiddle around with examinations; you can introduce targets and all the rest of it, but they're not at the real heart of the thing. When a teacher gets into the classroom and shuts the door, that's between you and the kids."* (Perry in Bangs et al., 2010: 47)

Consequently, teachers have to do their job holistically, i.e. they have to take care of all its sides on their own. If no facilities are available and the teaching-learning conditions are poor, teachers should still attempt to offer their students a good learning experience. The latter does not have to be material-loaded but it has to be engaging, care-rich, and benefit-loaded.

Teachers are the most important element in the educational process because they are the ones who are in direct contact and touch with learners (Shephard in Bangs et al, 2010: 47). This, in fact, makes teaching "*the most complex, most challenging, and most demanding, subtle, nuanced, and frightening activity that our species has ever invented"* (Shulman & Wilson, 2004: 504). Teachers know that confronting a group of students and taking the responsibility to 'teach' are difficult because teaching has to do with more than knowledge transmission. Gorham et al. ascertain:

> *"A teacher's job is multifaceted. A teacher's job is never done. A teacher's job is difficult. A teacher's job is rewarding. A teacher's job is grueling. A teacher's job is demanding. A teacher's job is enjoyable. A teacher's job is arduous. A teacher's job is playing many roles."* (Gorham et al., 2009: 202)

The repercussions of these words can be synopsised in awareness and teacher engagement. Teachers have to be aware of the responsibility that comes with teaching. Moreover, we perpetually talk about learners being engaged but rarely about engaged teachers. At this stage, an implication is for teachers to be engaged in their job and all its ensuing roles. This is because an engaged teacher inspires and induces engagement in learners. Indeed, nothing can replace the learning and effects that blossom from the direct meeting of two minds, two beings that are passionate about learning.

4.2.2.2. Learners' Roles

To allude to students' roles, Cornelius-White found that learner-centred-teacher relationships have "*above-average*" impact on good learner outcomes (Cornelius-White, 2007: 134). Correspondently, more than one informant of this research spoke of the learner becoming more active and taking responsibility of his own learning while the teacher will be a 'spectator', a fact that invokes learner-centredness and autonomy. This, also, refers to the learner as an active participant. An implication from the latter is for students to actively participate in the making of their learning. They have to be aware of knowledge construction which is the keystone of constructivism (Vygotsky, 1978). Bransford et al. argue that:

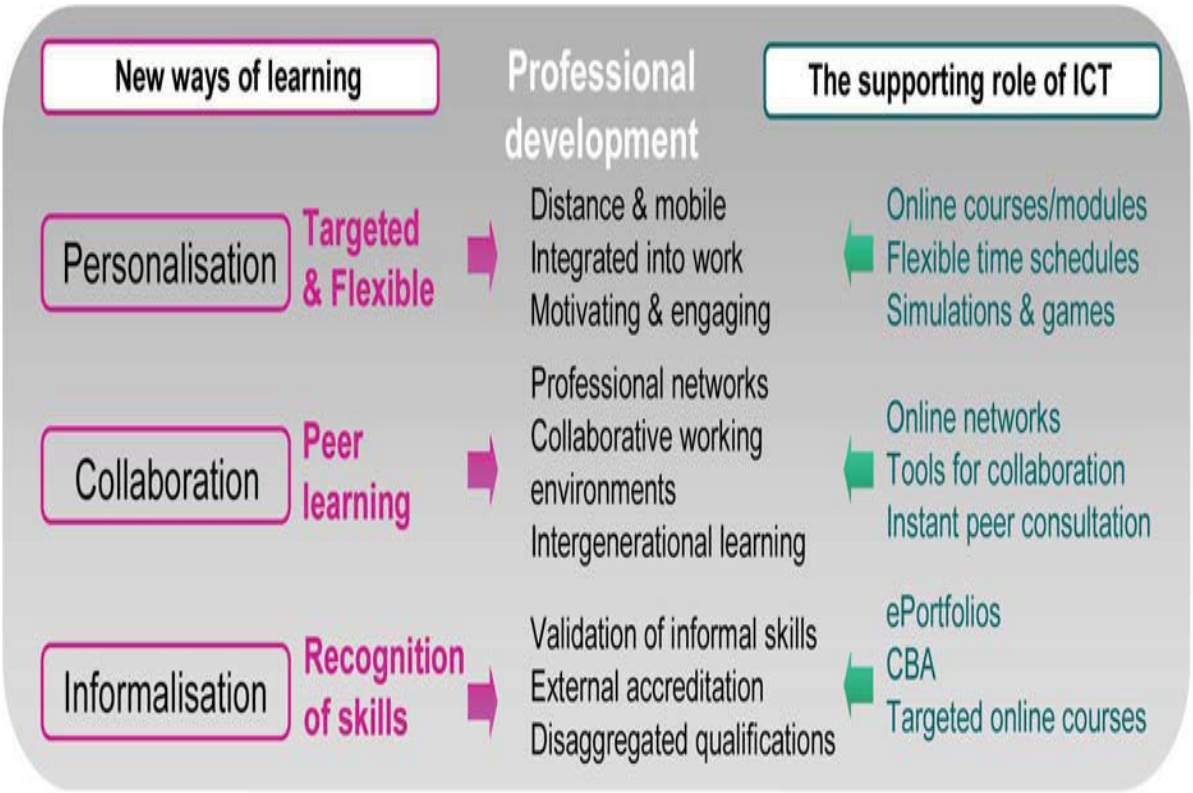
> *"… new science of learning is beginning to provide knowledge to improve significantly people's abilities to become active learners who seek to understand complex subject matter and are better prepared to transfer what they have learned to new problems and settings."* (Bransford et al., 2004: 13)

As a result, learners are driven towards autonomous learning construction. Not only that, they are also required to develop the skill of lifelong learning. Lifelong learning is becoming a necessary skill to acquire. Pusey describes this as:

> *"We live in a time of such rapid change and growth of knowledge that only he who is in a fundamental sense a scholar -that is, a person who continues to learn and inquire- can hope to keep pace, let alone play the role of guide."* (Pusey, 1963)

If learners like to keep track of knowledge, they have to grow as lifelong learners; and if teachers wish their learners to develop this skill of continuous learning, they should guide them in adequate ways.

Figure 4.6: A Conceptual Map of Future Lifelong Learning Strategies



(Gijsbers et al., 2011: 75)

To clarify more, lifelong learning embraces three main strategies (Figure 4.6). The three are tied to knowledge construction. Independent construction of learning personalises it whereas peer learning helps with knowledge building. Group work is a great technique that social constructivism has relied on since its burgeoning (Vygotsky, 1978). ICT, then, comes

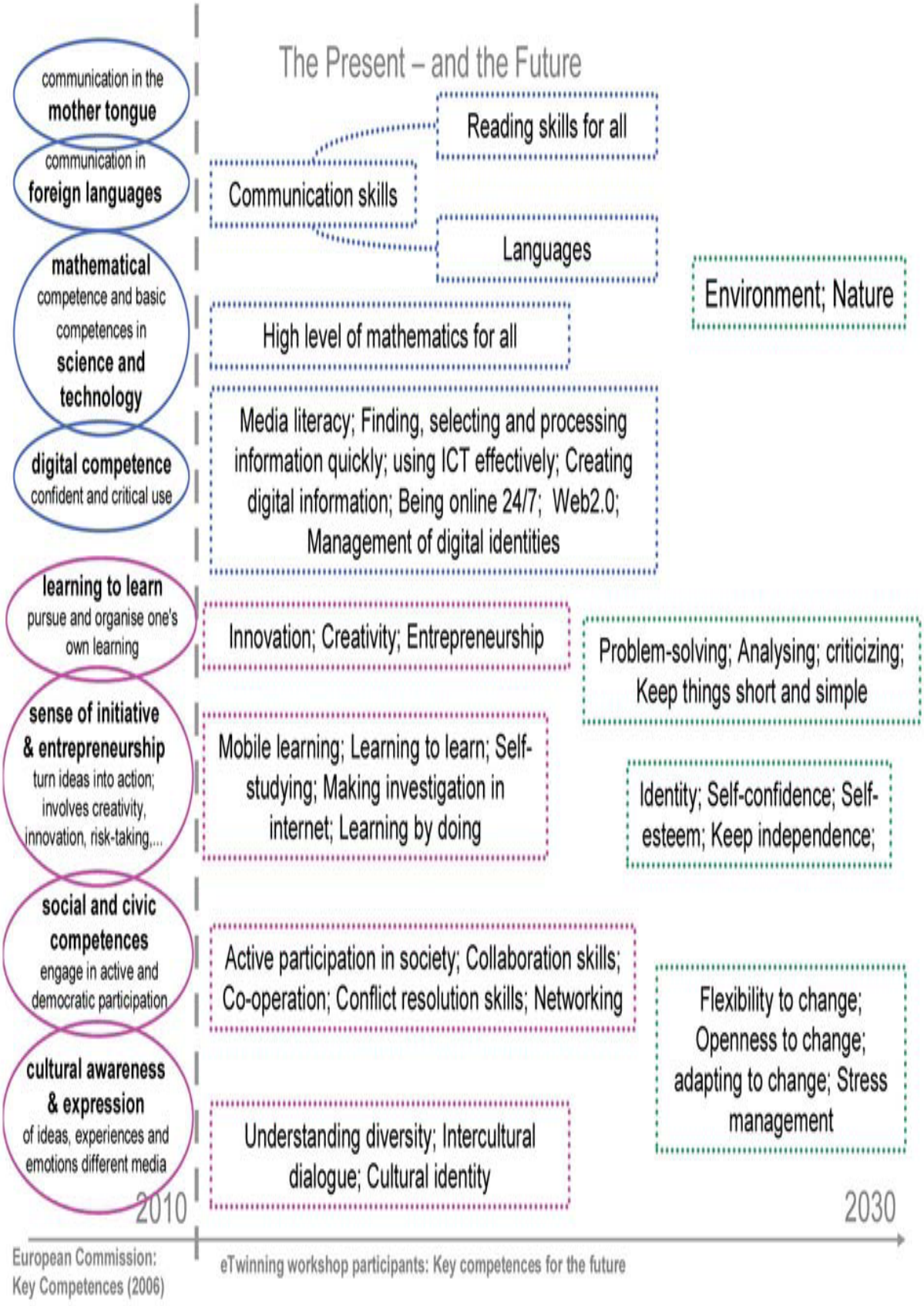
as another technique to reinforce and enhance knowledge construction. Social networks and e-platforms, as a matter of fact, are generally interactive open resources for learners' use. In other words, they are new ways of learning as long as they are purposefully employed. The ramifications of the latter are that learners have to work autonomously both individually and in groups. This is true for both the classroom setting and the online world. Learners have to use their connected devices smartly with the intention of learning instead of just socialising and chatting. Simply, they have to lifelong learn and to learn everywhere. Learners should no longer think of learning as typical to the classroom and lectures. Teachers themselves should encourage learners to learn autonomously, collaboratively, and ceaselessly.

4.2.2.3. The Roles of Institutions

Educational institutions will have to go from formal to informal as education is increasingly being available at open resources like private schools, online courses, and software. Education, thus, will have to use ICT while institutions grow as enablers and connectors (Figure 4.4). They should enable educating people and training them on the key competences needed for the future (Figure 4.7).

Institutions should ensure flexible, personalised, and interactive learning as the latter is getting out of the classroom to fields, professional domains, society, and Internet. Furthermore, they should be adaptable to change and to mobile learning (Figure 4.7). This means that learning should not be associated unilaterally with formal institutions. Institutions themselves should promote collaboration and networking. They should participate actively in society and forward entrepreneurship. They should support learning by doing, problem solving, and effective use of ICT. Briefly, educational institutions should provide opportunities for all the latter and train people on digital competences and media literacy (Figure 4.7).

Figure 4.7: Key Competences as Defined Now and as Suggested by the Audience for the Future



(Gijsbers et al., 2011: 33)

There is a bloc of skills that institutions should include within their programmes. They are together known as "21st century skills needed to succeed". These are:

> *"1. Basic Literacy—Proficiency in English and numeracy.*
> *2. Scientific Literacy—Knowledge, comprehension, and application of scientific concepts and processes.*
> *3. Economic Literacy—Ability to identify and analyze economic problems, incentives, and policies, as well as collect, organize and synthesize evidence.*
> *4. Technological Literacy—Knowledge of technology, application of how it works, and purpose it serves.*
> *5. Visual Literacy—Ability to interpret, use, appreciate, and create images and video using conventional 21st-century media in order to learn, make decisions, and communicate.*
> *6. Information Literacy—Ability to evaluate information from a variety of media sources and synthesize information effectively using digital information and communication networks.*
> *7. Multicultural Literacy—Ability to understand and appreciate similarities and differences in the customs, values, and beliefs of various cultures.*
> *8. Global Awareness—Ability to recognize relationships among international organizations, sociocultural groups, and nations."* (North Central Regional Education Laboratory in Pletka, 2007: 47)

Educational institutions, as they are today, focus on basic and scientific literacy. In some cases, they deal with economic, multicultural, and global awareness. Information, digital, and technological literacy do not yet have renown positions within contemporary institutions. They should tackle all of them, though. They should build all those types of literacy besides the aforementioned skills needed. Curriculums, hence, should include sections that handle those skills and forms of literacy.

4.2.3. Implications in Relation to Methods and the Use of Educational Technology

This work was about the effect of technology on the teacher-learner relationship. It showed that the studied sample still sticks to face-to-face instruction and considers the in-question relationship as a momentous requisite of education now and in the future. Nevertheless, McLuhan views: *"We shape our tools, and thereafter our tools shape us"* (McLuhan, 1995: ix). Educational technology, whether we see it or not, imposes changes and affects the educational process in a multitude of ways.

ICTs are *"driving forces for socio-economic change"* (Gijsbers et al., 2011: 42). Thus, they will make a way, if not yet, into education. Teachers, learners, and institutions will have

to get along with those tools. Teachers should also be aware of the fact that: *"ICT not only affects what people need to learn, but also how they will learn"* (Gijsbers et al., 2011: 43). ICTs, as discussed earlier, add to the list of skills and competences that need to be learned. Additionally, they modify methods and techniques.

Today, with more people being immersed in a digitally networked environment, education and training are receiving new opportunities, tools, and prospects (Figure 4.8). ICT has a role in shaping education, teaching, and learning (Figure 4.8). Teachers, consequently, have to adapt their practice pertinently. Teachers, pedagogues, and curriculum designers should enquire: will a networked generation of learners respond to a disconnected school or university? For those digital natives, a non-technological learning experience is out of scope and probably even useless.

Teachers and other stakeholders have to question and evaluate their practice. They should also look at the promise of educational technology. Salkind illustrates:

> *"There is an increased emphasis on independent learning, on developing social skills and teamwork, on adapting to change, and on developing thinking and problem-solving skills. As the volume of available information expands, it has become increasingly important to develop systems that can help people get at and process this information. Educational technologists are active in all these various areas."* (Salkind, 2008: 315)

Educational technology is a domain that needs deeper understanding and analysis not just due to its newness but also for its potential, requirements, and roles (Figure 4.8).

Figure 4.8: The Role of ICT for Future Learning Strategies

(Gijsbers et al., 2011: 42)

Concerning the requirements of educational technology, it is not only fluent tech-use that is required from teachers. Instructors should possess the knowledge and skills of exploiting technology so as to engage students in learning and knowledge construction (Meier, 2015). Gijsbers et al. assert:

> *"… to become e-mature. Teachers and trainers need to receive targeted training, enabling them to align pedagogy and technology to the benefit of their learners. Guidance is needed for educators, learners and parents alike on how to best use technology."* (Gijsbers et al., 2011: 81)

Teachers have to develop an e-maturity that frames educational technology within a pedagogical context of guidance, help, and fruitfulness.

In the light of the latter, educators may draw on the interactivity of Web 2.0 and Web 3.0 technologies in order to design courses that include learning by doing and knowledge building (Bransford et al., 2004: 206-207). They have also to evaluate their course design. Meier (2015) suggests *"three critical questions"* to be asked while engineering online courses. They are:

> *"1. Is the course based on learning theories that reflect developments in our understanding of learning?*
> *2. Does the course design reflect these underlying theories to address the needs of a range of learners?*
> 3. *Are instructors adequately prepared for teaching and facilitating in new learning environments?"* (Meier, 2015)

"Academic online learning", Meier (2015) thinks, is a sector with its own learning theories, expectations, and terms. He expresses:

> *"Online programs that miss the opportunity to re-imagine online environments run the risk of codifying past educational practice in a digital form — merely digitizing the status quo."* (Ibid.)

This, however, does not insinuate abandoning the classic theories of learning. Education encompasses all beliefs for its numerous members and their differences. For instance, besides knowledge transmission, education is constructivist and social (Vygotsky, 1978; Bereiter & Scardamalia, 1994). Bereiter and Scardamalia set learning in three stages: Knowledge acquisition, knowledge-building, and knowledge refinement (Bereiter & Scardamalia, 1994). To execute and install the latter within a technological environment, both teachers and learners should tailor their methods. Learners, mostly, are regarded as *"active participants"* who use technology to build learning *"communities"* while teachers are required to foster and reinforce students' active knowledge creation (Ibid.).

Technology has also been applied to other learning theories. For example, Meier studied the work of Chris Dede (2008) in relation to behaviourism, cognitivism, and constructivism. About behaviourism, he wrote:

> *"Behaviorist approaches assume a reality that is objective and external: learning is achieved through experience. Dede (2008) notes that, from a behaviorist*

> *perspective, the purpose of education is for students to learn to discriminate, generalize, associate, and automatically perform a specific procedure (p. 46), often through some sort of reinforcement. He identifies computer-assisted instruction (CAI), and learning management systems (LMSs) as closely associated with this behaviorist approach."* (Meier, 2015)

This analogy between computer-assisted instruction and behaviourism is not the only one. A second one is drawn between cognitivism and "intelligent tutoring systems". Meier synthesises:

> *"Cognitivist approaches, according to Dabbagh (2006) and Dede (2008), while also based on the assumption that there is an objective reality, assume that students acquire knowledge by building on "preexisting relationships among content and skills" (Dede, p. 48). Instructors present knowledge in ways that help students to retrieve and apply information, and to set their own learning goals and monitor their personal progress. Intelligent tutoring systems are an example of technology based on this cognitivist approach (Dede, 2008, p. 49)."* (Meier, 2015)

Seemingly, technology use is not a random pursuit. It must be backed by learning theories and by pedagogy. Constructivist approaches where *"activities are authentic and the teacher serves as a guide"* (Ibid.), too, give support to many technological tools and activities (Ibid.).

Technology has even led to the proposition and submission of a new learning theory: Connectivism. Many attribute this fourth theory to Bereiter and Scardamalia (Ibid.). Later on, others have brought additions to connectivism like Siemens (2004). The latter explains that the basic tenets of this theory are knowledge fluidity through online learning environments and collaboration (Siemens, 2004). *"Online Collaborative Learning"* is viewed by Harasim (2012) as an extension of connectivism. All in all, connectivism is *"a learning theory for the digital age"* (Hill & Kop, 2008: 1).

The implication from all the previous is that educators have to frame and arrange tech-use within learning theories. They have also to learn about emerging theories so as to lead their practice towards better outcomes. The employment of any tool, strategy, or technique should be done purposefully and thoughtfully rather than randomly and separately.

From another perspective, Salkind argues:

> *"The profession is now more concerned with the application of a variety of instructional techniques, ranging from traditional lecture approaches to open-ended distance learning environments."* (Salkind, 2008: 315)

This summons eclecticism, blending, and not sticking to one frame. Every one of the explored paths in the previous chapters: distance, blended, and unplugged instruction has benefits and drawbacks. Every one of them could be used for certain purposes but not necessarily in isolation. They might, indeed, converge all in one course which will actually create an eclectic, blended method that aims at the best possible results.

Yet, it should be kept in mind that:

> *"Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is much more important than the tool."* (Gates in Gomes, 2014: 91)

Teachers should not disregard the effect they personally have on students. They should realise that the material-richness of a lesson does not guarantee its success, and that the most interesting lesson can be the one that has used nothing more than interaction, discussion, pleasure, and fun. That is, focus should rather be on how to increase reception not delivery which finds grounds within "less is more" (See Chapter Two). Hence, educators have to ameliorate the manner of delivery which will nurture the teacher-learner rapport. They should employ materials and methods that model excellence and studiousness. Teachers should use techniques that motivate learners to work on their own. They should do more to push and inspire learners to work hard, to learn more, and to do more.

The use of technology, as a remarkable matter of fact, facilitates teaching and motivates learners. Nonetheless, it does not *"provide a map for its use… teachers in effect become curriculum makers"* (Wallace, 2004: 451). Teachers should make the best of technology in a calculated manner and accompany it with *"an ethic of online pedagogical care"* (Adams & Rose, 2014). Technology, to sum up, should be used pedagogically, educationally, and methodically.

4.2.4. Implications in Relation to the Future of Teaching and Learning

Perhaps the one most important implication of this study is that the future does not happen by itself. If educators wish to have a better future for teaching, learning, and the teacher-learner relationship, they have to make it happen. Numerous authors subscribe to this view. For example, Marshall says:

> *"Let us not be content to wait and see what will happen, but give us the determination to make the right things happen."* (Marshall in Johnson II, 2004: 25)

Others take it even further and link the future to today's passions. Borduas[3] believes that: *"Passions shape the future spontaneously, unpredictably, necessarily"* (Borduas, 1948). Alternatively, today's conscious efforts cause tomorrow's reality. This is no new idea but what is notable is that teaching itself touches the future (McAulif[4] in Hohler, 1986). Teachers prepare people for the future. Meanwhile, at getting an education, people aim at a better future.

A second implication emerges from Wheeler's observation. He notes: *"Technology won't replace teachers, but teachers who use technology will probably replace teachers who don't"* (Wheeler[5], 2013). In Borduas' tone, the current passion for technology will shape the future of education. However, this does not entail that technology will replace teachers. Still, the latter have to make good use of ICT. It is this good use that will answer questions such as: *"What are people for in a world that does not need their labor, and where only a minority are needed to guide the 'bot-base economy?"* (Stowe Boyd[6], 2014). People, including teachers, are for making conscious studied use of machines and technology.

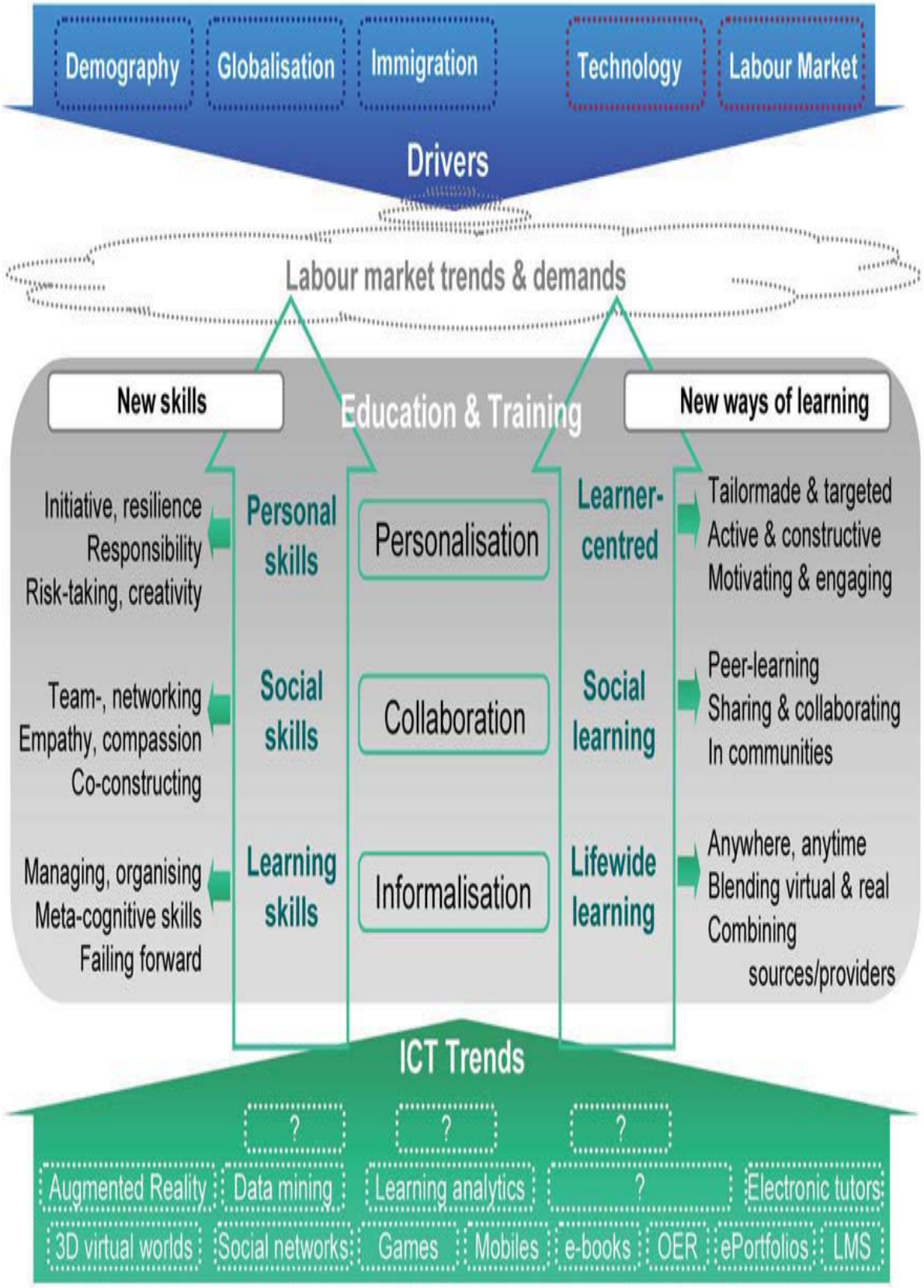
Teachers and learners have to adapt to new concepts and ways of learning such as lifelong learning. Kolb explains:

> *"Learning is the major process of human adaptation. This concept is much broader than that commonly associated with the school classroom. It occurs in all human settings, from schools to the workplace, from the research laboratory to the management boardroom, in personal relationships and the aisles of the local grocery. It encompasses all life stages, from childhood to adolescence, to middle and old age. Therefore it encompasses other, more limited adaptive concepts such as creativity, problem solving, decision making, and attitude change that focus heavily on one or another of the basic concepts of adaptation."* (Kolb, 2006)

Besides ICT trends, electronic tutors, virtual worlds, and lifelong learning, the map of the future of learning incorporates a collection of other factors (Figure 4.9).

[3] Paul-Émile Borduas is a Québec painter known for his abstract paintings.
[4] Christa McAuliffe (1948-1986) is an American educator and astronaut.
[5] Steve Wheeler is an Associate Professor in learning technology in the Plymouth Institute of Education at Plymouth University.
[6] Stowe Boyd is a futurist and research director at GigaOM Research which is a leader in emerging technology research founded in 2006 whose *"purpose is to humanize the impact of technology"* (gigaom.com, 2015).

Figure 4.9: A Conceptual Map of the Future of Learning



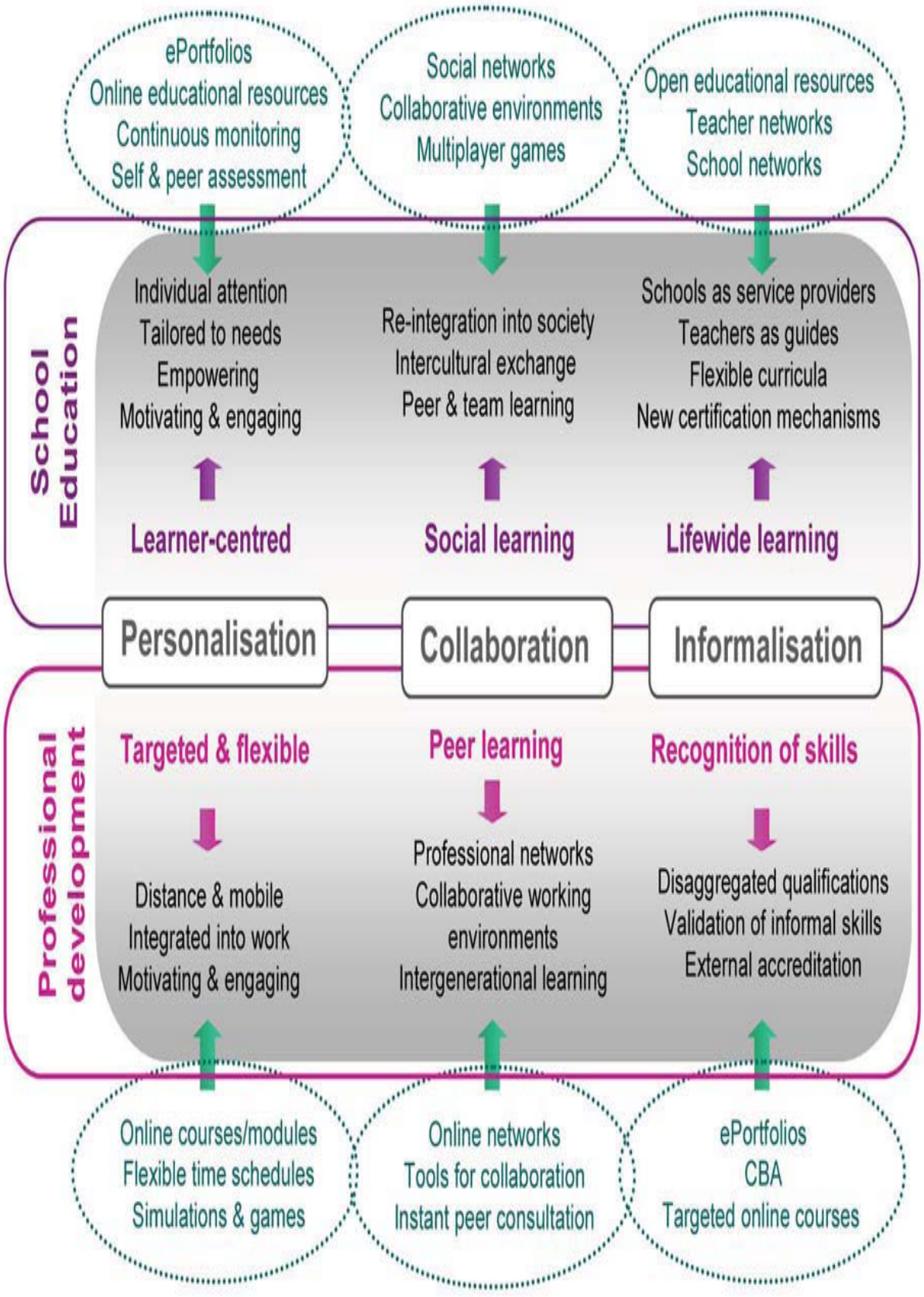
(Gijsbers et al., 2011: 9)

The future of learning is directed by globalisation and technology. Thus, an implication might be the design of a curriculum for the future, one that takes into consideration those components plus the needs of digital natives. Educational technology is in a latent state till the infrastructure matches the wishes of teachers and students. Decision makers should invest in education so as to induce an educational future that is up-to-dated, promising, and mostly engaging. Teacher training programmes should cater to that vision (Figure 4.9) so as to include training on the skills that are sought for within a digital age.

Would-be teachers should be prepared to design language learning materials not only for classroom use but also for online courses. Because *"educators need to be strong facilitators, coaches, and guides"* (Harvay et al., 2009: 88), teacher training programmes might consider the fact that circumstances are changing and that teachers will be in need of more and specific skills to facilitate, coach, guide, and teach today's and tomorrow's students. Teachers might even be helping students with auto-learning which is unlike lecturing.

Teachers and learners have to recognise that technology opens and frees learning. This will put an end to the *"schooling era"* and leads to *"the lifelong learning era"* (Collins & Halverson, 2010). This culminates in full learner-centredness as people of all ages will be able to learn *anything, anywhere, anytime* (Figure 4.9) (Figure 4.10).

Figure 4.10: An Overview of Future Lifelong Learning Strategies

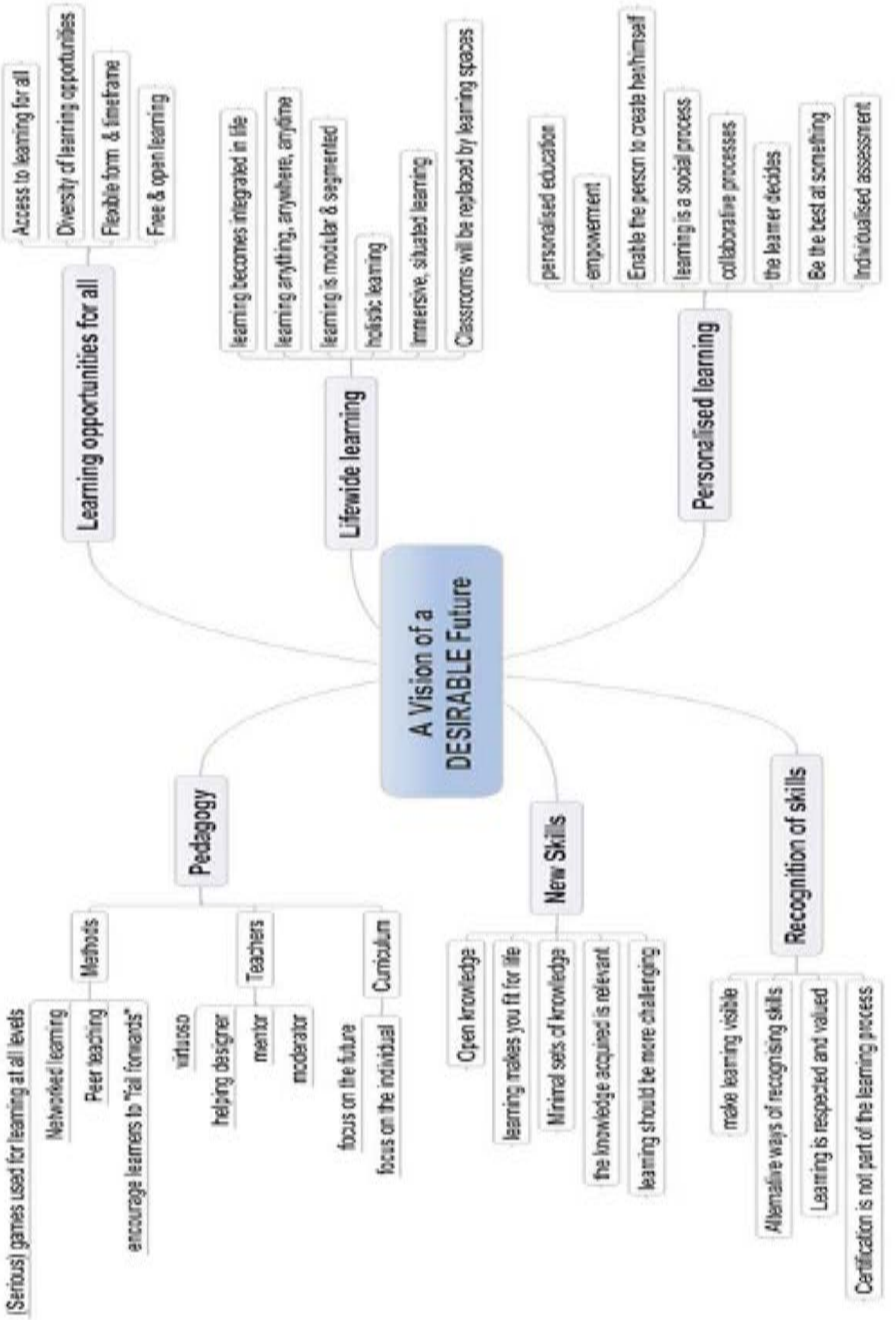


(Gijsbers et al., 2011: 12)

Figure 4.10 demonstrates social learning via social networks and collaboration. Moreover, lifelong learning is *integrated in life* and *learning spaces* replace the classroom (Figure 4.11). This should make education flexible, accessible, and personalised. The *desirable future* (Figure 4.11) of education is based on the pedagogy of self-making, serious games, and peer teaching. Teachers, in the future, should undertake the roles of designing, mentoring, and moderating, i.e. mediating which is to preserve the teacher-learner relationship. As long as teachers' roles are kept, the teacher-student relationship is maintained. Because individualisation is the heart of the teacher-learner rapport, the future should even improve that rapport as it focuses on the individual.

In addition, the future wishes the *recognition of skills* (Figure 4.11). That is, learning will be respected and valued (Figure 4.11) which is a paramount element in a good teacher-learner rapport. Respecting learners and learning should enhance the teacher-learner relationship. Briefly, educational technology should allow for all the latter as well as *"meaningful learning using technology" "MLT"* (Ashburn & Floden, 2006). Technology should not be used in education *"because it is in vogue"* in the opinion of one interviewee teacher. Instead, efforts should strive to raise the desired vision presented in Figure 4.11 or even better than it.

Figure 4.11: Experts' Vision of a Desirable Future



(Gijsbers et al., 2011: 35)

Education is worth investment. The Algerian curriculum has to cater to the best of these curriculum designs and visions so as to offer more opportunities to learners and to support good teaching.

To draw one last dichotomy, *"the myth of unchanging school"* (Beare, 2001: 1) versus *"the myth of technology"* thought up by an interviewee teacher could be an issue to raise and a summary of all that has been said so far. Some still stick to the conventional form of schooling and refuse to believe that change can occur. Meanwhile, others adhere to adopting every bit of modern technology unquestionably and even if neither the context nor the facilities support it. Between the two, there is the balance of making use of the available, of accepting beneficial modifications, of perpetuating old good methods, and of guarding the precious, irreplaceable from each. An inevitable implication is to remain open to change all in preserving the valuable elements of education. It is, thus, crucial to value educators' and learners' will to bring a better future to education and to sustain the present effective points. Part of this is the teacher-learner relationship, the humane aspect of all educational operation.

4.3. Recommendations and Further Research Directions

This research attempted to explore the open possibilities for the future of teaching and learning and with it the teacher-learner rapport. There is an abundance of data in this realm of study and a large array of possible ways to handle it. It can be approached in different manners. In addition, there seems to be more than three possibilities for the future. More of them could be investigated in further studies. Besides, every element put at the literature review could be elaborated in a study of its own. Further research could handle comparative studies between online and face-to-face learning, i.e. between direct human teaching and digital instruction. It could also experiment with online instruction or blended learning then study the outcomes and further compare them. Skills for online language teaching and learning would be an interesting area of research to complete the one about online instruction. For instance, ICT literacy and *"what do teachers need to know to use technology—particularly computers and the Internet"* (Ashburn & Floden, 2006: 141) can be probed. Another issue could be virtual platforms and their contribution to university instruction. Research could even arise to the design of a 'Curriculum of Choice', a university EFL syllabus, an online course, a website, or even an e-platform depending on possibility. It can suggest to experiment with one of them and analyse the outcomes.

Eclecticism is also an interesting topic to tackle mainly with the emergence of more new tools and techniques. Meanwhile, connectivism constitutes a large field to search about. Its growth, ramifications, and applications to teaching and learning make up stimulating variables for further research.

Furthermore, a study about lifelong learning is recommended. Other twenty-first skills, strategies, and forms of literacy are, as well, advocated. These studies can handle aspects like how these skills are needed and how they can be developed in learners.

On a wider scale, further studies can visit authorities and seek answers about their plans for the future. It can enquire about technology implementation, ICT equipment, facility provision, planned structures, strategies, and underlying policies to supplement educational techniques and means. Simply, it can delve in the future of learning as it is being drafted and designed by those in charge. It can collect views from them so as to complete or compare with the present study.

On another hand, the teacher-learner rapport may welcome extra studies mainly concerning how the latter is maintained nowadays. After all, teaching is not just about content. TEFL is not just about English. Sometimes, teaching is giving a role model which brings in other factors. Affective, psychological, cognitive, and *whole person* teaching elements are primordial. Therefore, research could study these factors in relation to the new learning contexts be them virtual, online, or blended.

Additional studies hope to deal with learner engagement. Enquiries such as: (1) How to engage students in general and digital natives in particular? And (2) How to reinforce the teacher-learner relationship? represent the geneses for further research. Moreover, how a good teacher-learner rapport can be created and maintained should be further studied. This can help teachers and learners and improve the quantitative and qualitative outcomes of the educational domain which is the hoped-for end of all efforts.

One last recommendation is a study about how to motivate teachers and engage them. This is necessary as teachers are role models whose affective attitude to teaching impacts students.

4.4. Limitations of the Study

Conducting this research with its three tools was a source of joy. Nonetheless, some interfering impediments disturbed its decent running. They also represented obstacles to its

objectives and initial hopes. Time, predominantly, was obstructive. The scarcity of time on one hand and the abundance of findings on the other was an actual constraint. In fact, extra-findings required more time than what was allocated to this study. Also, the correlation between teaching, learning, and technology is increasingly multi-dimensional, and research in this domain seemed to be endlessly abundant.

A second limitation is perhaps the small group of informant teachers. Although the participation of twenty-six teachers is finely considerable, more teachers could have been approached with more time. Thirdly, ethical pursuits could have limited the integrity and authenticity of findings.

This study wished to include an online course in order to study the teacher-learner relationship more profoundly. Yet, impossibility was imposed by online inaccessibility to the sample, absence of facilities, and time limits. In fact, the limited use of educational technology in the setting of this study was a limitation per se. It hindered the examination of the teacher-learner rapport in a technological and online context.

Yet, this work attempted all possible ways to end up with realistic findings.

4.5. Conclusion

To reconfigure, this last chapter placed emphasis on repercussions from the findings and their scrutiny. They were delivered under the heading of implications. At the end, some suggestions or recommendations for further investigation were determined. This study faced some limitations that this chapter hinted to as well.

This being the last chapter, the coming section is the general conclusion of the work.

GENERAL CONCLUSION

General Conclusion

> *"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us."* (Dickens, 1970: 1)

This work oscillated between three scenarios (three tales), new opportunities for teaching and learning, and their effect on the teacher-learner relationship. The "*speculative flavour"* (Hamper & Lamy, 2007: 57) in this work is no more than what research, both theoretical and practical, demonstrated. This work was not much of a futuristic one, as the title might have given impression. Instead, it aimed at finding out, if possible, whether the actual world's technological fact and its appliance to a department of English within an Algerian university are compatible.

To bring the research full circle, this study aimed to explore the open paths for the teacher-learner relationship in an increasingly plugged milieu. With that, it investigated the use of technology in EFL teaching and learning in Algeria, the roles teachers are expected to undertake in the future, and the envisioned future scenarios.

The study touched a sample of 26 EFL teachers and a hundred of their students at the University of Oran. The purpose was to collect their views in regard to the teacher-learner rapport, to the use of educational technology, and to the future of teaching and learning in general.

Despite technology offering a collection of virtues, it has been found that its use in the surveyed setting is limited to teachers' and students' individual initiative. Several teachers do not resort to it either because of the absence of facilities at the level of their working space or for personal beliefs concerning the use of technology versus that of unplugged instruction. Most teachers revealed no objection to tech use; yet, most of them, too, avowed not applying it to their practice.

This study began with a hypothesis about a future of choice. It expected that learners would be able to opt for the type of instruction that suits their conditions of time and distance. Interestingly, the results indicated the persistence of one dominant path. In spite of the fact that three routes are open to the future, the informants pressed on face-to-face instruction as a scenario to perpetuate in the future. Some of them (47.62%), however, bespoke blended

instruction as a would-be prevailing scenario. Unexpectedly, none of them opted for online instruction to which the majority associated uncertainty plus numerous dangers and drawbacks.

The teacher-learner relationship was defended by the sample. Participants saw that it is fundamentally integral to teaching and learning regardless of the form of instruction. That is to say, the teacher is present within online instruction, too. This presence per se implies the occurrence of an exchange between the teacher and the learner. The latter induces a partnership, i.e. a relationship.

The future of this rapport, it has been ascertained, depends on the roles the teacher will be performing themselves relative to the type of instruction and on the teacher's dynamicity. Within online contexts, where data are abundant and learning software is available, the teacher is needed to guide, direct, and train. There is a plethora of skills that teachers need to inculcate into learners before them being let to delve in 'safe' online learning. Indeed, auto-learning is not total independence from teachers; instead, it is being primarily trained and guided by the teacher to end up as an instructed and efficiently-autonomous learner. Not only that, the extent to which a teacher influences learning goes beyond guiding and training to designing material and inspiring to other roles. Not all of them have been scrutinised in this study though.

Further research may target extra teacher roles in a plugged context. Moreover, there are, logically, some ways and techniques thanks to which the human teacher-learner relationship can be born then cemented, nurtured, and preserved. How this can be done is a recommendation for further research. One more thing: how to determine a good teacher-learner rapport? To speak to this research hole, how to judge a good rapport as so, what traits, standards, and yardsticks allow to determine a good relationship is to be probed in additional research.

Coming to the end, more things remain for further research. Many things could not be put within the borders of this manuscript for a shade of delimitations like time and volume. After all, if what is taking place and what is coming in the domain of teaching and learning are to be understood, ongoing energy has to be put in studying it. It is not the mere concern of one piece of research. Change does not stop; so should remain our attempt to fathom out and comprehend it.

APPENDICES

Appendix One

The Teachers' Questionnaire

The distributed teachers' questionnaire appeared as follows.

Dear EFL teachers at the University of Oran,

Your participation in this Magister research project is highly appreciated. The study centres on "The Future of the Teacher-Learner Relationship in a Plugged Context". The aim of it is to find out about future scenarios of the learning-teaching process given the huge leaps technology, material design, and ICT -Information and Communication Technology- are taking, then to what extent their implementation in the educational operation is going to revamp it. To analyse which direction teaching, learning, and the teacher-learner relationship will follow, mainly in Algeria, is what this research attempts to pursue.

Your answer to this questionnaire will offer the study useful realistic views and enrich it with authentically expressed hopes, needs, and views which will be taken into very serious consideration and analysis. You are also asked to suggest some ideas and practices which all in all requires about 20 minutes.

Instructions: Kindly please, tick the answers that suit you and complete the space where necessary. In multiple choice questions (MCQs), you can choose more than one answer.

Demographic Information about the Teacher

a. Age: …….
b. Sex: ☐ male ☐ female
c. Specialty/Major: ……..
d. I have been teaching for _____ years.
e. I have been teaching for _____ years at the University of Oran.
f. Have you ever taken an authoritative position at the University? ☐ yes ☐ no

The Teacher-Student Relationship

1. Do you like teaching? ☐ yes ☐ no
2. Teaching for you is: (you can choose more than one answer)
   a. A passion ☐

b. A profession ☐
c. An art ☐
d. A mission ☐
e. A science ☐
f. A money-making job ☐
g. Other:

……

……..……...

……

3. The teacher-learner relationship is important and affects the teaching-learning process.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

4. In which ways?

……..

...……

……..

……

5. The quality of the teacher-learner relationship affects teaching-learning outcomes.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

The Teacher's Roles

6. It is the teacher's task to ignite students' curiosity and interest.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

7. Which teacher role do you think is most important? (You can select more than one)

a. Knowledge giver and provider ☐
b. Facilitator ☐
c. Prompter ☐
d. Guide ☐
e. Trainer ☐
f. Awareness riser ☐
g. Organiser ☐

h. Other :

……

……..……

……

8. These roles (this role) may:

a. Be sustained even with the implementation of online instruction and ICT. ☐

b. Disappear because of the implementation of online instruction and ICT. ☐

c. Be modified by the implementation of online instruction and ICT. ☐

d. Other:

……....

……

……

9. If everything is on Internet, as it is said, what does the teacher have to do in class?

……..……

……..……

……...……...

……..

……..

10. With digitalisation, how will the role of the teacher change?

……...……

…….....

……...

……..……..

……..……..

Methods, the Use of ICT and Educational Technology

11. Do students ask for online contact with you? ☐ yes ☐ no

12. Are you on any digital study group with your students? ☐ yes ☐ no

13. Whose idea is it to launch the digital study group?

a. Yours ☐

b. Some of your students' ☐

c. The administration's ☐

14. On which social network are the study groups created?

a. Facebook ☐

b. Twitter ☐

c. LinkedIn ☐

d. Others (please, specify)

……

15. What academic activities do you carry on the digital study group?

……..…….

……..

..…….

16. If you are using online contact with your students, what is it for?

a. Lesson and material delivery ☐

b. Homework and project delivery ☐

c. Reception of assigned homework and projects ☐

d. Asking and answering questions ☐

e. I am not using it ☐

f. Others (please specify)

……

……

……

17. Are there any active digital learning platforms for the English Department at your university? ☐ yes ☐ no

18. Have you ever bought a technological device for your classroom use, by your own means?

☐ yes ☐ no

19. Are you using technological (ICT) means within your course? ☐ yes ☐ no

20. If yes, what for?

a. It makes the course more interesting, rich, and engaging ☐

b. Students prefer it that way ☐

c. Teaching needs to be updated to follow the current trends ☐

d. It makes my job easier ☐

e. Others (please explain)

……..……..

……

……

…….....

21. If no, why?

a. Even a technology-free lesson is important ☐

b. Content is more important than materials ☐

c. It takes a lot of time, energy, and means to prepare an up-to-date equipped lesson ☐

d. I need more training on the use of technology in teaching ☐

e. The university does not provide any means ☐

f. Others (please explain)

……..……..

……...……

…….....……

.....

22. Do you have any objection to online delivery of lessons? ☐ yes ☐ no

23. Can you please justify your answer?

…….……...……..

……...…….

…….....

.....

24. Do you prefer … ?

a. The traditional way of teaching where the student and teacher are face-to-face ☐

b. Blending face-to-face instruction with the online instruction ☐

c. Thorough online instruction ☐

25. Would you like to have …?

☐ a blackboard ☐ an interactive whiteboard ☐ an overhead projector

26. Is there an overhead projector available for teachers' or students' use? ☐ yes ☐ no

27. Should university authorities equip classrooms and amphitheatres with ICT devices like data shows, computers, access to Internet, etc? ☐ yes ☐ no

28. The use of ICT is necessary in today's teaching and learning.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

The Future of the Teacher-Learner Relationship

29. Even with online instruction, the teacher-learner relationship will remain important and influential.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

30. Online instruction can replace teachers.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

31. Online instruction can replace face-to-face instruction.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

32. Can you justify your choice, please?

...……...……....
……..
….....……
.....……
……..…….
……...……..……..

33. Are you aware of the dangers and disadvantages of technology pertaining to teaching, learning, and thinking? ☐ yes ☐ no

34. What are the most serious ones according to you?

……..…….
……...……
…….....
...……

Thank you immensely for your precious time and participation

Appendix Two

The Students' Questionnaire

Dear LMD Graduate student at the University of Oran,

Your participation in this Magister research project is highly appreciated. The study centers on "The Future of the Teacher-Learner Relationship in a Plugged Context". The aim of it is to find out about future scenarios of the learning-teaching process given the huge leaps technology, material design, and ICT -Information and Communication Technology- are taking, then to what extent their implementation in the educational operation is going to revamp it. To analyse which direction teaching, learning, and the teacher-learner relationship will follow, mainly in Algeria, is what this research attempts to pursue.

Your answer to this questionnaire will offer the study useful realistic views and enrich it with authentically expressed hopes, needs, and views which will be taken into very serious consideration and analysis. You are also asked to suggest some ideas and practices which all in all requires about 20 minutes.

Instructions: Kindly please, tick the answers that suit you and complete the space where necessary. In multiple choice questions (MCQs), you can choose more than one answer.

N.B. You are not obliged to answer all questions. Feel free to ask questions if any.

Demographic Information about the Student

a. Age: …….
b. Sex: ☐ male ☐ female
c. Academic LMD Year: ☐ **1st** ☐ **2nd** ☐ **3rd** ☐ **Master 1**
d. Do you have a job? ☐ yes ☐ no
e. Have you ever taught? ☐ yes ☐ no
f. Do you already have a university diploma? ☐ yes ☐ no

The Teacher-Student Relationship

1. Do you attend your lectures regularly? ☐ yes ☐ no
2. If yes, why?
   a. It is always interesting to be in a class ☐
   b. The teacher is very resourceful and their material is interesting ☐

c. I am a motivated student, even if it is boring I will join my class ☐

d. Nothing can replace what the teacher gives ☐

e. To avoid the administrative consequences of absence ☐

f. Others: ……..

3. If no, why?

a. I have a job or I study something else ☐

b. I can learn more in the library ☐

c. Everything is on Internet ☐

d. My classmates share the lesson's content on our facebook group ☐

e. The lesson is boring ☐

f. Others: ……..

4. My relationship with my teachers is important and affects my learning process.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

5. Can you justify your choice?

……

……...……

……

……

The Teacher's Roles

6. With online learning possible, how will the role of the teacher change?

……

… ……...…….

…….....

7. If everything is on Internet, as it is said, what does the teacher have to do in class?

…….…….

……..……

……..

Methods, the Use of ICT and Educational Technology

8. Do you need your teacher's e-mail address? ☐ yes ☐ no

9. Do you e-mail your teachers about study matters? ☐ yes ☐ no

10. Have you ever been in a Facebook study group? ☐ yes ☐ no

11. Who creates the digital study group for your class?

a. You ☐

b. Some of your classmates ☐

c. Your teacher ☐

d. The administration ☐

12. On which social network are your study groups created?

a. Facebook ☐

b. Twitter ☐

c. LinkedIn ☐

d. Others (please, specify) ……..

13. How many teachers do you have this year? (Write a number, please) ……

14. How many of your teachers use ICT devices in the classroom? (Write a number, please) …….

15. It is fine for me to receive technology-free lessons regularly.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

16. The lesson is better when it is delivered with more tools and materials.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

17. Do you care more about…?

a. The content of the lesson, no matter how it is delivered ☐

b. How the lesson is delivered, because it impacts the content ☐

c. Both ☐

d. Others (please specify)…….

18. Should university authorities equip classrooms and amphitheatres with ICT devices like data shows, computers, access to Internet, etc? ☐ yes ☐ no

19. The use of ICT is necessary in today's teaching and learning.

☐ strongly disagree ☐ disagree ☐ neither agree nor disagree ☐ agree ☐ strongly agree

0 1 2 3 4

The Future of the Teacher-Learner Relationship

20. Even with online instruction, the teacher-learner relationship will remain important and influential.

☐ strongly disagree ☐disagree ☐ neither agree nor disagree ☐ agree ☐strongly agree

0 1 2 3 4

21. Online instruction can replace teachers and face-to-face instruction.

☐ strongly disagree ☐disagree ☐ neither agree nor disagree ☐ agree ☐strongly agree

0 1 2 3 4

22. Can you justify your choice, please?

...……..

…….

…….

…….....

23. Are you aware of the dangers and disadvantages of technology? ☐ yes ☐ no

24. According to you, what are the most dangerous effects of tech on teaching and learning?

……..……...…

……...……

……..

Thank you loads

Appendix Three

The Students' Mini Questionnaire

Dear LMD Graduate students at the University of Oran,

Your participation in this Magister research project is highly appreciated. The study centers on "The Future of the Teacher-Learner Relationship in a Plugged Context". The aim of this mini-questionnaire is to find out about students' use of digital devices during lessons, their access to Internet, and their preferences in regards to paper/online questionnaires.

Instructions: Kindly please, tick the answers that suit you. In multiple choice questions (MCQs), you can choose more than one answer.

1. Do you have home access to Internet?

☐ yes ☐ no

2. Do you prefer …?
   a. A paper format questionnaire ☐
   b. An online questionnaire ☐
3. Do you use your digital device (phone, tablet, laptop, etc) during the lesson?

☐ yes ☐ no

4. What do you use it for?
   a. Check time ☐
   b. Check up the meaning of a word ☐
   c. Take notes ☐
   d. Go on Internet ☐
   e. Search about an idea that the teacher mentioned ☐
   f. Chat ☐
   g. Go on social networks ☐
   h. Others: ……..

Appendix Four

The Teachers' Interview Questions

Several questions were asked along the seven interviews. Overall, these are:

1. What is teaching to you? What do you think of teaching?
2. Do you sense some seeds which are being implemented in order to bring a better future to teaching and learning?
3. Do you think the teacher-learner relationship is important?
4. According to you, so far, what is the most important role of the teacher inside the classroom?
5. Are you happy and satisfied with face-to-face teaching and learning?
6. Do you advocate online instruction and e-learning?
7. There are some researchers who are convinced that learners can learn only with a digital device and some encouragement, as in self-directed learning and SOLE. What is your comment on that?
8. Have students ever asked for online contact with you?
9. Do you use ICT devices in your lectures?
10. Is it up to the teacher to decide which method to follow, which technique to use based on what suits his/her students?
11. If Internet is making it easier to learn and get data, is that changing the teacher's role? Is the student's perception of what a teacher is changing?
12. What do you think the use of technology will bring into/add to teaching and learning?
13. Do you think the use of technology will damage anything in teaching and learning?
14. Do you think technology is changing the way people think, learn, teach, and communicate?
15. What is, according to you, the biggest problem education is facing here in Algeria?
16. Do you think things will change in the future?

Thank you for your cooperation

Appendix Five

Below is the model/form of the classroom observation report.

The Classroom Observation Report Form

Instructor : ……. Course : ……..

Observer : ……

Purpose: The purpose of this classroom observation is, first, to provide data base for an MA thesis. Second, it is to improve the observer's teaching skills and performance. Third, it is to provide the instructor with a report on his/her performance.

Rating: Excellent (5) Very good (4) Good (3) Average (2) Poor (1) Not Applicable (0)

__ **rating** __ 1. Defines objectives for the class presentation.

_____ 2. Effectively organises learning situations to meet the objectives of the class presentation.

_____ 3. Uses instructional methods encouraging relevant student participation in the learning process.

_____ 4. Uses class time effectively.

_____ 5. Demonstrates enthusiasm for the subject matter.

_____ 6. Communicates clearly and effectively to the level of the students.

_____ 7. Explains important ideas simply and clearly.

_____ 8. Demonstrates command of subject matter.

_____ 9. Responds appropriately to student questions and comments.

_____ 10. Encourages critical thinking and analysis.

_____ 11. Considering the previous items, how would you rate this instructor in comparison to others in the department?

_____ 12. Overall rating

- What specific suggestions would you make concerning how this particular class could have been improved?

Content Organisation

1. Made clear statement of the purpose of the lesson **(rating)**

2. Defined relationship of the lesson to previous lessons **( )**

3. Presented overview of the lesson **( )**

4. Presented topics with a logical sequence **( )**

5. Paced lesson appropriately **( )**

6. Summarised major points of lesson **( )**

7. Responded to problems raised during lesson **( )**

8. Related today's lesson to future lessons **( )**

Presentation

9. Projected voice so easily heard **( )**

10. Used intonation to vary emphasis **( )**

11. Explained ideas with clarity **( )**

12. Maintained eye contact with students **( )**

13. Listened to students' questions and comments **( )**

14. Projected nonverbal gestures consistent with intentions **( )**

15. Defined unfamiliar terms, concepts, and principles **( )**

16. Presented examples to clarify points **( )**

17. Related new ideas to familiar concepts **( )**

18. Restated important ideas at appropriate times **( )**

19. Varied explanations for complex and difficult material **( )**

20. Used humour appropriately to strengthen retention and interest **( )**

21. Limited use of repetitive phrases and hanging articles **( )**

Instructor-Student Interactions

22. Encouraged students' questions **( )**

23. Encouraged students' discussion **( )**

24. Maintained students' attention **( )**

25. Asked questions to monitor students' progress **( )**

26. Gave satisfactory answers to students' questions **( )**

27. Responded to nonverbal cues of confusion, boredom, and curiosity **( )**

28. Paced lesson to allow time for note taking **( )**

29. Encouraged students to answer difficult questions **( )**

30. Asked probing questions when student's answer was incomplete **( )**

31. Restated questions and answers when necessary **( )**

32. Suggested questions of limited interest to be handled outside of class **( )**

Comments: ……

Instructional Materials and Environment

33. Maintained adequate classroom facilities **( )**

34. Prepared students for the lesson with appropriate assigned readings **( )**

35. Supported the lesson with useful classroom discussions and exercises **( )**

36. Presented helpful audiovisual materials to support lesson organisation and major points **( )**

37. Provided relevant written assignments

Comments: Additional related comments, if any, are included here.

Content Knowledge and Relevance

38. Presented material worth knowing **( )**

39. Presented material appropriate to students' knowledge and background **( )**

40. Cited authorities to support statements **( )**

41. Presented material appropriate to stated purpose of the course **( )**

42. Made distinctions between fact and opinion **( )**

43. Presented divergent view-points when appropriate **( )**

44. Demonstrated command of subject matter **( )**

45. What overall impressions do you think students left this lesson with in terms of content or style?

46. What were the instructor's major strengths as demonstrated in this observation?

General Atmosphere:

1. Discipline

- Students arrive on time and get down to business **( )**

- Students appear prepared for class **( )**

- Students are attentive during class scene presentations **( )**

- Class begins and ends on time **( )**

2. Instructor's rapport with the class is VERY CLEAR **( )**

3. Objectives for the class session are GIVEN **( )**

4. Assignment for next class is GIVEN **( )**

___ provided in a handout ___ on board ___ not written down

Students being active:

1. Students presenting to class **( )**

Comments:

Instructor's Critique

1. Instructor's use of positive feedback **( )**

2. Instructor's use of constructive criticism was **( )**

3. Instructor's encouragement of criticism/comments by other students was **( )**

4. Instructor's ability to include the entire class in her/his comments was **( )**

Discussion Process

1. Ability of students to critique concisely was **( )**

2. Instructor's use of questions to prompt discussion **( )**

3. Instructor's ability to state questions clearly was **( )**

4. Instructor's insistence on/and use of objectivity in the critiques was **( )**

Comments: …….

Rating: Excellent (5) Very good (4) Good (3) Average (2) Poor (1)

NA = not applicable

Content

1-Main ideas are clear and specific **( )**

2-Sufficient variety in supporting information **( )**

3-Relevancy of main ideas was clear **( )**

4-Higher order thinking was required **( )**

5-Instructor related ideas to prior knowledge **( )**

6-Definitions were given for vocabulary **( )**

Organisation

1-The introduction captured attention **( )**

2-The introduction stated the organisation of lecture **( )**

3-Effective transitions (clear summaries) **( )**

4-Clear organisational plan **( )**

5-Concluded by summarising the main ideas **( )**

6-Reviewed by connecting to previous classes **( )**

7-Previewed by connecting to future classes **( )**

Interaction

1-The instructor questions at different level **( )**

2-Sufficient wait time for students to answer **( )**

3-Students asked questions **( )**

4-The instructor's feedback was informative **( )**

5-The instructor incorporated students' responses **( )**

6-Good rapport with students **( )**

Verbal/Non-verbal

1-Language was understandable **( )**

2-Articulation and pronunciation clear **( )**

3-Absence of verbalised pauses (er, ah, etc.) **( )**

4-The instructor spoke extemporaneously **( )**

5-The accent was not distracting **( )**

6-Effective voice quality **( )**

7-Volume sufficient to be heard **( )**

8-Rate of delivery was appropriate **( )**

9-Effective body movement and gestures **( )**

10-Confident and enthusiastic **( )**

Use of Media

1-Overheads/Chalkboard content clear **( )**

2-and well-organised **( )**

3-Visual aids can be easily read **( )**

4-Instructor provided outlines/handouts **( )**

5-Computerised instruction effective **( )**

Conclusion:

A general conclusion about the teacher's and students' performance and the classroom atmosphere is drawn.

ANNEXES

Annex One

Extra Texts

My Stream of Consciousness

You think that I don't know that you think

I got an F because I'm lazy and indifferent.

But maybe I'm just underchallenged and underappreciated.

Deep down I'm begging you to teach me

To learn and create-not just to memorize and regurgitate.

I'm asking you to help me find my own truth.

I'm asking you to help me find my own beauty.

I'm asking you to help me see my own unique truth.

We need a miracle

One for every kid who subconsciously wants

To be pushed to the edge/taken to the most extreme limits.

I want you to make my brain work in a hundred different

ways every day.

I'm asking you to make my head ache with knowledge-

spin with ideas.

I want you to make my mind my most powerful asset.

-Siem Tesfaslase, 10th grade, Arlington High School,
Indianapolis, Indiana

(in Costa, 2001: 222)

Sugata Mitra's Talk Written Transcript

0:12What is going to be the future of learning?

0:17I do have a plan, but in order for me to tell you what that plan is, I need to tell you a little story, which kind of sets the stage.

0:28I tried to look at where did the kind of learning we do in schools, where did it come from? And you can look far back into the past, but if you look at present-day schooling the way it is, it's quite easy to figure out where it came from. It came from about 300 years ago, and it came from the last and the biggest of the empires on this planet. ["The British Empire"] Imagine trying to run the show, trying to run the entire planet, without computers, without telephones, with data handwritten on pieces of paper, and traveling by ships. But the Victorians actually did it. What they did was amazing. They created a global computer made up of people. It's still with us today. It's called the bureaucratic administrative machine. In order to have that machine running, you need lots and lots of people. They made another machine to produce those people: the school. The schools would produce the people who would then become parts of the bureaucratic administrative machine. They must be identical to each other. They must know three things: They must have good handwriting, because the data is handwritten; they must be able to read; and they must be able to do multiplication, division, addition and subtraction in their head. They must be so identical that you could pick one up from New Zealand and ship them to Canada and he would be instantly functional. The Victorians were great engineers. They engineered a system that was so robust that it's still with us today, continuously producing identical people for a machine that no longer exists. The empire is gone, so what are we doing with that design that produces these identical people, and what are we going to do next if we ever are going to do anything else with it?

2:55["Schools as we know them are obsolete"]

2:56So that's a pretty strong comment there. I said schools as we know them now, they're obsolete. I'm not saying they're broken. It's quite fashionable to say that the education system's broken. It's not broken. It's wonderfully constructed. It's just that we don't need it anymore. It's outdated. What are the kind of jobs that we have today? Well, the clerks are the computers. They're there in thousands in every office. And you have people who guide those computers to do their clerical jobs. Those people don't need to be able to write beautifully by

hand. They don't need to be able to multiply numbers in their heads. They do need to be able to read. In fact, they need to be able to read discerningly.

3:42Well, that's today, but we don't even know what the jobs of the future are going to look like. We know that people will work from wherever they want, whenever they want, in whatever way they want. How is present-day schooling going to prepare them for that world?

4:00Well, I bumped into this whole thing completely by accident. I used to teach people how to write computer programs in New Delhi, 14 years ago. And right next to where I used to work, there was a slum. And I used to think, how on Earth are those kids ever going to learn to write computer programs? Or should they not? At the same time, we also had lots of parents, rich people, who had computers, and who used to tell me, "You know, my son, I think he's gifted, because he does wonderful things with computers. And my daughter -- oh, surely she is extra-intelligent." And so on. So I suddenly figured that, how come all the rich people are having these extraordinarily gifted children? (Laughter) What did the poor do wrong? I made a hole in the boundary wall of the slum next to my office, and stuck a computer inside it just to see what would happen if I gave a computer to children who never would have one, didn't know any English, didn't know what the Internet was.

5:05The children came running in. It was three feet off the ground, and they said, "What is this?"

5:08And I said, "Yeah, it's, I don't know." (Laughter)

5:13They said, "Why have you put it there?"

5:15I said, "Just like that."

5:17And they said, "Can we touch it?"I said, "If you wish to."

5:20And I went away. About eight hours later, we found them browsing and teaching each other how to browse. So I said, "Well that's impossible, because -- How is it possible? They don't know anything."

5:33My colleagues said, "No, it's a simple solution. One of your students must have been passing by, showed them how to use the mouse."

5:41So I said, "Yeah, that's possible."

5:42So I repeated the experiment. I went 300 miles out of Delhi into a really remote village where the chance of a passing software development engineer was very little. (Laughter) I repeated the experiment there. There was no place to stay, so I stuck my computer in, I went away, came back after a couple of months, found kids playing games on it.

6:04When they saw me, they said, "We want a faster processor and a better mouse."

6:08(Laughter)

6:12So I said, "How on Earth do you know all this?"

6:15And they said something very interesting to me. In an irritated voice, they said, "You've given us a machine that works only in English, so we had to teach ourselves English in order to use it." (Laughter) That's the first time, as a teacher, that I had heard the word "teach ourselves" said so casually.

6:35Here's a short glimpse from those years. That's the first day at the Hole in the Wall. On your right is an eight-year-old. To his left is his student. She's six. And he's teaching her how to browse. Then onto other parts of the country, I repeated this over and over again, getting exactly the same results that we were. ["Hole in the wall film - 1999"] An eight-year-old telling his elder sister what to do. And finally a girl explaining in Marathi what it is, and said, "There's a processor inside."

7:25So I started publishing. I published everywhere. I wrote down and measured everything, and I said, in nine months, a group of children left alone with a computer in any language will reach the same standard as an office secretary in the West. I'd seen it happen over and over and over again.

7:44But I was curious to know, what else would they do if they could do this much? I started experimenting with other subjects, among them, for example, pronunciation. There's one community of children in southern India whose English pronunciation is really bad, and they needed good pronunciation because that would improve their jobs. I gave them a speech-to-text engine in a computer, and I said, "Keep talking into it until it types what you say." (Laughter) They did that, and watch a little bit of this.

8:20Computer: Nice to meet you. Child: Nice to meet you.

8:26Sugata Mitra: The reason I ended with the face of this young lady over there is because I suspect many of you know her. She has now joined a call center in Hyderabad and may have tortured you about your credit card bills in a very clear English accent.

8:45So then people said, well, how far will it go? Where does it stop? I decided I would destroy my own argument by creating an absurd proposition. I made a hypothesis, a ridiculous hypothesis. Tamil is a south Indian language, and I said, can Tamil-speaking children in a south Indian village learn the biotechnology of DNA replication in English from a street side computer? And I said, I'll measure them. They'll get a zero. I'll spend a couple of months, I'll leave it for a couple of months, I'll go back, they will get another zero. I'll go back to the lab and say, we need teachers. I found a village. It was called Kallikuppam in southern India. I put in Hole in the Wall computers there, downloaded all kinds of stuff from the Internet about DNA replication, most of which I didn't understand.

9:36The children came rushing, said, "What's all this?"

9:39So I said, "It's very topical, very important. But it's all in English."

9:44So they said, "How can we understand such big English words and diagrams and chemistry?"

9:50So by now, I had developed a new pedagogical method, so I applied that. I said, "I haven't the foggiest idea." (Laughter) "And anyway, I am going away." (Laughter)

10:06So I left them for a couple of months. They'd got a zero. I gave them a test. I came back after two months and the children trooped in and said, "We've understood nothing."

10:17So I said, "Well, what did I expect?" So I said, "Okay, but how long did it take you before you decided that you can't understand anything?"

10:26So they said, "We haven't given up. We look at it every single day."

10:30So I said, "What? You don't understand these screens and you keep staring at it for two months? What for?"

10:35So a little girl who you see just now, she raised her hand, and she says to me in broken Tamil and English, she said, "Well, apart from the fact that improper replication of the DNA molecule causes disease, we haven't understood anything else."

10:48(Laughter) (Applause)

10:54So I tested them. I got an educational impossibility, zero to 30 percent in two months in the tropical heat with a computer under the tree in a language they didn't know doing something that's a decade ahead of their time. Absurd. But I had to follow the Victorian norm. Thirty percent is a fail. How do I get them to pass? I have to get them 20 more marks. I couldn't find a teacher. What I did find was a friend that they had, a 22-year-old girl who was an accountant and she played with them all the time.

11:31So I asked this girl, "Can you help them?"

11:33So she says, "Absolutely not. I didn't have science in school. I have no idea what they're doing under that tree all day long. I can't help you."

11:43I said, "I'll tell you what. Use the method of the grandmother."

11:48So she says, "What's that?"

11:49I said, "Stand behind them. Whenever they do anything, you just say, 'Well, wow, I mean, how did you do that? What's the next page? Gosh, when I was your age, I could have never done that.' You know what grannies do."

12:01So she did that for two more months. The scores jumped to 50 percent. Kallikuppam had caught up with my control school in New Delhi, a rich private school with a trained biotechnology teacher. When I saw that graph I knew there is a way to level the playing field.

12:19Here's Kallikuppam.

12:21(Children speaking) Neurons ... communication.

12:29I got the camera angle wrong. That one is just amateur stuff, but what she was saying, as you could make out, was about neurons, with her hands were like that, and she was saying neurons communicate. At 12.

12:44So what are jobs going to be like? Well, we know what they're like today. What's learning going to be like? We know what it's like today, children pouring over with their mobile phones on the one hand and then reluctantly going to school to pick up their books with their other hand.

12:59What will it be tomorrow? Could it be that we don't need to go to school at all? Could it be that, at the point in time when you need to know something, you can find out in two minutes? Could it be -- a devastating question, a question that was framed for me by Nicholas Negroponte -- could it be that we are heading towards or maybe in a future where knowing is obsolete? But that's terrible. We are homo sapiens. Knowing, that's what distinguishes us from the apes. But look at it this way. It took nature 100 million years to make the ape stand up and become Homo sapiens. It took us only 10,000 to make knowing obsolete. What an achievement that is. But we have to integrate that into our own future.

13:53Encouragement seems to be the key. If you look at Kuppam, if you look at all of the experiments that I did, it was simply saying, "Wow," saluting learning.

14:07There is evidence from neuroscience. The reptilian part of our brain, which sits in the center of our brain, when it's threatened, it shuts down everything else, it shuts down the prefrontal cortex, the parts which learn, it shuts all of that down. Punishment and examinations are seen as threats. We take our children, we make them shut their brains down, and then we say, "Perform." Why did they create a system like that? Because it was needed. There was an age in the Age of Empires when you needed those people who can survive under threat. When you're standing in a trench all alone, if you could have survived, you're okay, you've passed. If you didn't, you failed. But the Age of Empires is gone. What happens to creativity in our age? We need to shift that balance back from threat to pleasure.

15:07I came back to England looking for British grandmothers. I put out notices in papers saying, if you are a British grandmother, if you have broadband and a web camera, can you give me one hour of your time per week for free? I got 200 in the first two weeks. I know more British grandmothers than anyone in the universe. (Laughter)They're called the Granny Cloud. The Granny Cloud sits on the Internet. If there's a child in trouble, we beam a Gran. She goes on over Skype and she sorts things out. I've seen them do it from a village called Diggles in northwestern England, deep inside a village in Tamil Nadu, India, 6,000 miles away. She does it with only one age-old gesture. "Shhh." Okay?

16:01Watch this.

16:02Grandmother: You can't catch me. You say it. You can't catch me.

16:10Children: You can't catch me.

16:13Grandmother: I'm the Gingerbread Man. Children: I'm the Gingerbread Man.

16:19Grandmother: Well done! Very good.

16:23SM: So what's happening here? I think what we need to look at is we need to look at learning as the product of educational self-organization. If you allow the educational process to self-organize, then learning emerges. It's not about making learning happen. It's about letting it happen. The teacher sets the process in motion and then she stands back in awe and watches as learning happens. I think that's what all this is pointing at.

16:56But how will we know? How will we come to know? Well, I intend to build these Self-Organized Learning Environments. They are basically broadband, collaboration and encouragement put together. I've tried this in many, many schools.

17:12It's been tried all over the world, and teachers sort of stand back and say, "It just happens by itself?"

17:18And I said, "Yeah, it happens by itself.""How did you know that?"

17:21I said, "You won't believe the children who told me and where they're from."

17:27Here's a SOLE in action.

17:30(Children talking)

17:36This one is in England. He maintains law and order, because remember, there's no teacher around.

17:57Girl: The total number of electrons is not equal to the total number of protons -- SM: Australia Girl: -- giving it a net positive or negative electrical charge. The net charge on an ion is equal to the number of protons in the ion minus the number of electrons.

18:14SM: A decade ahead of her time.

18:17So SOLEs, I think we need a curriculum of big questions. You already heard about that. You know what that means. There was a time when Stone Age men and women used to sit and look up at the sky and say, "What are those twinkling lights?" They built the first curriculum, but we've lost sight of those wondrous questions. We've brought it down to the tangent of an angle. But that's not sexy enough. The way you would put it to a nine-year-old is to say, "If a meteorite was coming to hit the Earth, how would you figure out if it was going

to or not?" And if he says, "Well, what? how?" you say, "There's a magic word. It's called the tangent of an angle," and leave him alone. He'll figure it out.

19:02So here are a couple of images from SOLEs. I've tried incredible, incredible questions -- "When did the world begin? How will it end?" — to nine-year-olds. This one is about what happens to the air we breathe. This is done by children without the help of any teacher. The teacher only raises the question, and then stands back and admires the answer.

19:32So what's my wish? My wish is that we design the future of learning. We don't want to be spare parts for a great human computer, do we? So we need to design a future for learning. And I've got to -- hang on, I've got to get this wording exactly right, because, you know, it's very important. My wish is to help design a future of learning by supporting children all over the world to tap into their wonder and their ability to work together. Help me build this school. It will be called the School in the Cloud. It will be a school where children go on these intellectual adventures driven by the big questions which their mediators put in. The way I want to do this is to build a facility where I can study this. It's a facility which is practically unmanned. There's only one granny who manages health and safety. The rest of it's from the cloud. The lights are turned on and off by the cloud, etc., etc., everything's done from the cloud.

20:38But I want you for another purpose. You can do Self-Organized Learning Environments at home, in the school, outside of school, in clubs. It's very easy to do. There's a great document produced by TED which tells you how to do it. If you would please, please do it across all five continents and send me the data, then I'll put it all together, move it into the School of Clouds, and create the future of learning. That's my wish.

21:10And just one last thing. I'll take you to the top of the Himalayas. At 12,000 feet, where the air is thin, I once built two Hole in the Wall computers, and the children flocked there. And there was this little girl who was following me around.

21:24And I said to her, "You know, I want to give a computer to everybody, every child. I don't know, what should I do?" And I was trying to take a picture of her quietly.

21:35She suddenly raised her hand like this, and said to me, "Get on with it."

21:41(Laughter) (Applause)

21:53I think it was good advice. I'll follow her advice. I'll stop talking. Thank you. Thank you very much. (Applause) Thank you. Thank you. (Applause) Thank you very much. Wow. (Applause)

Source

Sugata Mitra. “The Future of Learning”. Feb. 2013. *TED.com*. 1 Jun. 2014 <http://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud/transcript>.

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