Handbook of Flipping Classrooms for Second and Foreign Language Instruction

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For all teachers across the globe, who always seek ways to make learning enjoyable and productive for their learners

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FOREWORD

The flipped classroom model is a new pedagogical approach that it is recognized as a productive teaching/learning model at almost all grade levels and across various disciplines. Many school teachers and university instructors are now flipping their classrooms, drawing on recorded videos, podcasts, digital story narrations, and other multimedia technologies to produce and/or use instructional content to be applied by students prior to the classroom meetings. As an essentially technology-enhanced approach, it gained more prominence parallel with the advances in information and communication technologies (ICTs) and the emergence of highly sophisticated learning management systems (LMSs) and platforms over the past decade. Today, the flipped classroom model has significantly changed learning in different educational settings. Consistent with this growing popularity has grown the number of studies across various educational contexts that offer positive accounts of the productivity of this approach for student learning and knowledge construction.

When it comes to flipping language classrooms, however, the research still remains in its infancy. Research on design considerations and implementation strategies for a productive language learning/teaching experience in the flipped classroom model lags seriously behind the mainstream research about the FCs. It is generally believed that a relevant educational theory that specifically relates to the integration of the flipped classroom model for language instruction is missing. In effect, second and foreign language learning/teaching research has either ignored grounding its design on relevant theories or has made arbitrary use of the available learning theories (Jiang et al. 2020). Given the fact that the FCs are gaining prominence in second and foreign language (SL/FL) settings, it appears essential to determine theoretical groundings, define relevant instructional designs and identify implementation strategies. While the generals of the FC model are applicable to all educational contexts, the particulars and specificities need to be customized and redefined to make the approach applicable to different educational contexts and for teaching different subject matters. In other words, the requirements and peculiarities of flipped language classrooms are different from a flipped math, art or chemistry classroom.

Against this background, the present volume aims at shedding more light into this less traversed area by focusing on the instructional design, the relevant theories of teaching and learning, the learning environments, digital materials development and relevant assessment strategies in flipped language classrooms.

PREFACE

Inverting classroom instruction in an effective way can be challenging for a number of language teachers and educators. Although flipped classrooms have grown in number over the past decade, their efficacy is still not established for many language teachers and learners. This might in part be attributed to the novelty of the pedagogical approach and the paradigm shift it brings about which necessitates redefining teacher and learner roles, proposing instructional plans and models, applying relevant theories of teaching/learning to ground such models and developing appropriate materials and content to satisfy the learning objectives.

The present volume features an attempt to help educators and teachers satisfy these needs by offering a theoretical and practical look into this novel and newly emerged research area. The book focuses on the application of the flipped classroom model for teaching second and foreign languages across different educational contexts along with the underpinning theories, technologies, and pedagogies applicable to these contexts.

I hope this book is used as a reference guide for the effective design of flipped language classrooms in different learning environments and for different language learners. Additionally, it is hoped that the topics covered in this volume appear inspirational for researchers who are interested in the FC model to conduct more systematic research and develop a consolidated picture of flipping instruction for language practice.

The main audience of this book

Language educators, teachers, curriculum designers, materials developers and researchers who are interested in the FC model are the primary audience of this volume. Although the book aims at depicting a more vivid picture of the context of the FC research, theory and practice in second and foreign language teaching, its applicability may not be confined to SL/FL research. Researchers and educators in other fields can also draw on the information presented in this volume for designing their courses and defining relevant instructional materials.

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to Adam Rummes for his cooperation all through the process of developing this volume.

LIST OF ABBREVIATIONS

ADHD = Attention Disorder Hyperactivity Disorder
ASR = Automated Speech Recognition
AR = Augmented Reality
CAF = Complexity, Accuracy and Fluency
CALL = Computer Assisted Language Learning
CLT = Cognitive Load Theory | Communicative Language Teaching
CMS = Course Management System
CSR = Continuous Speech Recognition
CTML = Cognitive Theory of Multimedia Learning
DSR = Discrete Speech Recognition
DST = Digital Storytelling
EAP = English for Academic Purposes
EFL = English as a Foreign Language
ELT = English Language Teaching
ESL = English as a Second Language
ESP = English for Specific Purposes
FC = Flipped Classroom
FCA = Flipped Classroom Approach
F2F = Face-to-Face
FI = Flipped Instruction
FL = Foreign Language
F-L-I-P = Flexible environment, Learning culture, Intentional content, Professional educator
FLIPPED = Flexible environment, Learning culture, Intentional content, Professional educator, Progressive activities, Engaging experiences, Diversified platforms
FLN = Flipped Learning Network
GAFCC = Goal-Access-Feedback-Challenge-Collaboration
GIF = Graphics Interchange Format
HE = Higher Education
ICT = Information and Communication Technology
IELTS = International English Language Testing System
JiTT = Just-in-Time Teaching
K-12 = From kindergarten to the 12th grade
L2 = Second Language

LA = Learner Autonomy
LMS = Learning Management System
MANOVA = Multivariate Analysis of Variance
MC = Multiple Choice
MOOC = Massive Open Online Course
NA = Needs Analysis
PBL = Problem Based Learning
PD = Professional Development
PI = Peer Instruction
SCORM = Sharable Content Object Reference Model
SDT = Self-Determination Theory
SL = Second Language
SNS = Social Networking Site
SRL = Self-Regulated Learning
SRT = Speech Recognition Technology
STEM = Science, Technology, Engineering and Mathematics
TD = Transactional Distance
TEFL = Teaching English as a Foreign Language
TPACK = Technological, Pedagogical and Content Knowledge
URL = Uniform Resource Locator
VR = Virtual Reality
ZPD = Zone of Proximal Development

CHAPTER ONE

THE SCOPE OF THE VOLUME

Introduction

The growing popularity of online education across different disciplines over the past decade has triggered the development of highly sophisticated web-based platforms and paved the way for the emergence of new pedagogical strategies and designs (Stöhr et al. 2020). The availability of content authoring and multimedia generation technologies along with learning management systems (LMSs) capable of user tracking and content sharing has enabled educators and teachers to move beyond the confines of conventional classrooms. Educational materials and instructional content can be easily generated and shared with students prior to actual classroom meetings. This flipping, in principle, enables learners with different learning preferences and styles to use materials and study at their own pace at the time they find convenient.

Since its first emergence as a teaching model or pedagogical approach, there has been a growing interest in the idea of flipped learning among educators, scholars and researchers in different disciplines including second and foreign language (SL/FL) teaching and learning. As Wu et al. (2020: 1) put it, "to keep leaners motivated and engaged, innovative pedagogies have been proposed, among which flipped learning… [and] instruction have received extra attention". The success and failure of any pedagogical approach rely on the interplay of different factors. These factors usually range from teacher/learner characteristics and readiness (i.e., the human factor) to relevant instructional design, adequate infrastructure, environmental factors, theoretical groundings and required technologies.

Against this background has increased the consensus about the need for appropriate flipped course or program design to satisfy the teaching/learning needs in different subject areas. Considering the infancy of the flipped classroom (FC) model, research on inverted classroom design has been mainly confined to studies that report positive accounts of the efficacy of this approach for student learning. These studies have been surging over the past decade. However, there is still a paucity of research that focuses on

relevant theories, instructional designs, assessment strategies, learner/teacher roles and pedagogical implications for effective flipped instruction and learning. A similar observation can be made in the context of SL/FL teaching in which the FC has only recently started to capture attentions. While sharing language learning materials, content and activities with students prior to classroom meetings may not be a new practice for many teachers and practitioners, developing relevant instructional design with careful attention to the impact of context-specific factors that might facilitate or impede the process of integration are important areas which are less commonly addressed in published works.

The essence and rationale of the book

Considering the affordances of flipping classrooms for language learning and learner engagement and achievement, more comprehensive and sophisticated research (both in theory and practice) is required. The present volume is conceived as a way to address this demand in research and the reality of language classrooms for more productive teaching approaches. *Handbook of Flipping Classrooms for Second and Foreign Language* provides a comprehensive look into the theory and practice of flipped learning in the context of second and foreign language classrooms. The book showcases how the advances in educational technologies have presented new opportunities for inverted course design and delivery in the field of SL/FL instruction to promote critical thinking, problem-solving, interaction and knowledge transmission and construction. It also offers a critical look at the concept of flipped classrooms, the essence of redefining teacher and learner roles, the application of the FC model for language skills development, learner contribution assessment and the future of FC research.

The infancy of the topic in second and foreign language learning/teaching research and the diversity of integration approaches (Green et al. 2017) necessitate publications that address both the theory and practice of the FC model. The application of the FC model in different educational contexts has been explored in a number of publications, most of which are edited volumes. Young and Moran (2017), for instance, focused on the affordances of the FC model for language literature education in their edited volume, *Applying the Flipped Classroom Model to English Language Arts Education.*

Mehring and Leis's (2018) *Innovations in Flipping the Language Classroom* is the only available volume that directly focuses on the flipped approach in language classrooms. The instructional orientation of the authors in different chapters is useful and handy for novice teachers who

wish to flip their classrooms. However, the larger picture or the discussion of theoretical underpinnings and pedagogical implications in the FC model for second and foreign language instruction and learning is missing.

To address this gap, this volume—as a reference book—focuses on flipped learning in the context of second and foreign language teaching. This work is different from previous publications in the comprehensive look it offers at theoretical underpinnings, the background and history of flipped language classrooms, relevant technologies, assessment strategies and the redefinition of teacher/learner roles and responsibilities. A special attention is dedicated to research gaps, pedagogical implications and future research directions of the FC model in 21st century language classrooms. The application of flipped learning in different language learning environments (i.e., online, hybrid and face-to-face) is also explored.

The structure of the book

This book comprises nine chapters. Establishing the rationale behind developing this volume, the first chapter reviews the overall structure of the book. Chapter Two, *Flipped Classroom: Demystifying the Concept*, reviews the emergence of the term and different terminologies proposed for the flipped classroom approach. The review reveals that despite their diversity, the proposed terms largely refer to the same pedagogical approach. The pedagogical affordances of the FC model are also discussed. The chapter ends with a discussion of how *flipped classroom* and *blended learning* are related. The overall rationale is demystifying these concepts to avoid their misuse. There is also a review of the problems that can flop attempts for flipping instruction. These challenges are approached from different perspectives (e.g., teachers, learners, the transactional distance, the dominant learning culture and user perceptions).

Chapter Three, *Effective Flipping: The Models of Instructional Design*, addresses the essence of considering universality when designing flipped classrooms to increase the applicability of pedagogical plans for all learners regardless of their physical, cognitive and technological abilities. Key requirements for a universal design are discussed from two directions. These include the accessibility and inclusiveness of (a) the content and (b) the pedagogical approach. This is followed by a review of teaching/learning theories (e.g., cognitive load theory, social constructivism, the socio-cultural theories of learning, self-determination theory and the theory of transactional distance) and pedagogical approaches (e.g., student-centred learning, mastery learning, self-regulated learning, active learning and inquiry-based learning) that support inverted classroom designs. The

models of instructional design are focused on with a reference to flipped instruction/learning. Highlighting the key factors and inadequacies in these models, effective instructional design requirements are discussed under eight categories. These include instructional content planning, digital technology specification, pedagogical approach specification, activity planning, assessment strategy planning, flexible and engaging programme structure, professional educators and autonomous learner preparedness.

Chapter Four, *Redefining Teacher Responsibilities and Learner Roles*, concentrates on the essence of redefining teacher and learner responsibilities in flipped classroom contexts. It is suggested that, in addition to the presence of different environmental and contextual factors, professional educators are required to effectively manage instruction and promote student learning. A professional educator has the knowledge of pedagogical design, directly transmits that knowledge, scaffolds learners, evaluates and tracks their performance and engagement and develops relevant instructional materials and learning activities. It should be borne in mind that preparing teachers to effectively accomplish these responsibilities is an intricate task and largely depends on an interplay of different factors, namely teachers' perception of technology and the FC model, their workload, learner diversity and teachers' professional knowledge of instruction in inverted classroom designs.

Similar to teachers, learners need relevant skills to effectively regulate their learning in student-centred contexts. However, in practice, many students lack such knowledge. This can be attributed to (a) the existing preference for transmissive pedagogies in some educational contexts, (b) the absence of adequate knowledge/skills for self-regulated learning (SRL), (c) high workload and time demands and (d) the absence of required technological knowledge and positive perceptions toward technology. These problems, while making the process of learner acculturation to the FC model a difficult task, highlight its essence.

Chapter Five, *Digital Materials Development and Activity Design for FCs*, begins with a review of different types of educational materials and their application in flipped classrooms. It is noted that educational materials can range in sophistication from non-interactive uni, bi and multimodal files to highly interactive and adaptive courseware and system applications. Depending on the language focus of the course, its mode of delivery and the human factor (i.e., the teacher and learners), different decisions can be made about the types of materials that should be used in inverted classroom designs. The second part of the chapter is dedicated to learning activities. Activities are distinguished from instructional materials in that they are not designed merely for transmitting knowledge but for engaging learners in

different types of cognitive processing to (a) enable them understand and remember the presented content and (b) identify the possible gaps in their knowledge. These qualities are particularly essential for learning activities which are shared prior to classroom meetings. It is noted that a comprehensive instructional plan encompasses three groups of activities for pre-, in- and post-classroom practice. Contrary to out-of-classroom activities which are worked on prior to or after the classroom meetings, the in-class ones mainly aim at engaging learners in higher-order thinking skills, problem-solving and interaction to promote deep learning and knowledge construction.

In addition to a review of the design and focus of learning activities and instructional materials in flipped language classrooms, the chapter concentrates on the required technology-types for their development. Factors affecting teachers' technology selection for inverted classroom instruction are reviewed. The final part of the chapter is dedicated to the discussion of important design considerations for digital materials and activity development in FCs, namely the ease-of-use, usefulness, accessibility and engaging nature of materials.

Chapter Six, *Flipped Classroom Environments*, explores delivery modes in flipped language classrooms. Placing the learning environment across a scale, different possibilities can be assumed for a flipped classroom. At the one end are the courses and programs that rely almost exclusively on face-to-face classroom sessions. As we move toward the other end (i.e., fully online FCs), the application of online learning spaces, either for holding real-time classroom sessions or for sharing teaching/learning packages, increases.

Different learning environments have different peculiarities and features that might contribute to or impede the process of effective learning. Grounded on the theory of transactional distance (Moore 2013), it is argued that careful attention should be dedicated to the design of learning environments, their overall structure and the extent to which they enable flexible learning. A learning environment with limited flexibility in its structure largely increases the transactional distance. This directly impacts the instructional dialogue and learner autonomy.

Chapter Seven, *Flipped Classrooms and Language Skills Development*, concentrates on the affordances of inverting instruction and practice for language skill and sub-skill development. The chapter reviews possible application scenarios for developing learners' knowledge of speaking, listening, reading, writing, grammar and vocabulary. It is also suggested that while the flipped classroom model is generally considered to be a productive strategy for second and foreign language knowledge development, it might not be applicable to all SL/FL teaching and learning contexts. It is the teacher,

educator or course designer who should make a sound decision about the integration of the FC model depending on the language focus of the course, learner characteristics, the nature and type of the required technology infrastructures and users' perception. It is also noted that more empirical data is needed to explore the contribution of particular treatments to language skill and sub-skill development in inverted classroom designs.

In Chapter Eight, *Assessment Strategies and Considerations in Flipped Classrooms*, different possibilities for assessing learner performance in flipped classrooms are reviewed. Assessment can be partly accomplished by language teachers. Learners can also be involved in this process through the application of relevant self-assessment activities. Building on the discussions in the previous chapters, it is argued that well-defined pre- and post-classroom activities are particularly helpful for enhancing leaners' understanding of instructional materials and identifying the gaps in their knowledge-base. As such activities are usually shared via LMSs and considering the fact that today's learning management systems are capable of generating automated feedback for users based on their performance, learners can evaluate their responses and spot the gaps in their understanding.

Technology plays a facilitating role in learner assessment in the flipped classroom model. Drawing on different types of user performance logs which are generated by LMSs, the teacher can track learners' contributions in terms of the time spent viewing the content, the degree of learner progression and the number of times each file has been accessed. These information categories are particularly fruitful for monitoring and assessing learners' out-of-classroom performance. In-class contributions can be easily monitored by the teacher using session recordings or extracting the chat-box content for each session. In addition to technology-assisted summative and formative assessment techniques, teachers can draw on real-time documentation strategies such as field notes and journals to document learners' performance. The chapter reviews these assessment possibilities for evaluating language learners' performance and progress in flipped language classrooms.

The final Chapter, *Flipped Classrooms: Research Gaps and Pedagogical Implications*, is dedicated to the main FC research strands in second and foreign language teaching. Highlighting the main research foci and gaps in this relatively young field of study, suggestions for future research are proposed. This is followed by the discussion of the pedagogical implications of FCs for language teaching and learning.

CHAPTER TWO

FLIPPED CLASSROOM: DEMYSTIFYING THE CONCEPT

Introduction

The growing popularity of online, blended, interactive and cooperative learning experiences has increased interests in more flexible pedagogical approaches that grant learners different degrees of control over the process of learning (Warner and Palmer 2015). Learners in the 21st century favour the educational plans that use the affordances of digital technologies to make the course and content delivery more personalized. This way, the teaching/learning preferences of a more diverse population of learners can be addressed. The inverted or flipped classroom model is believed to have the potential to satisfy these needs.

Given the fact that the entire instructional/learning paradigm is reversed, the flipped classroom design is commonly referred to as a model (Ouda and Ahmed 2016). The act of reversing instruction through delivering all or some parts of the instructional content out of the classroom settings to preserve more classroom time for activities and discussions is not a new phenomenon. Many teachers across the globe and in different educational contexts have utilized this approach over the past few decades as a possible strategy to better manage the classroom time.

Today and years after the first introduction of the flipped classroom model, the FC is recognized as a productive teaching/learning model for almost all grade levels and across various disciplines including SL/FL teaching and learning. More and more school teachers and university instructors are turning to the flipped classroom model as a solution to address the temporal and spatial confines of the physical face-to-face and online classrooms. As the flipped classroom model is becoming more widely known and welcomed in educational contexts, it is systematically changing conventional classrooms.

While flipping instruction has been with us for quite a long time, its popularity has specifically increased over the past decade. During this

period, different terms are coined to refer to the concept. In some cases, the proposed terminologies and the corresponding conceptualizations overlap. Reviewing the available research on flipped classrooms, one can spot confusions in conceptualizations and different applications of the term.

To address this issue, the present chapter is dedicated to a detailed discussion of the flipped classroom model and its different definitions. The concept of blended learning and the extent to which the flipped classroom model can be considered synonymous with or a sub-category of blended learning are also reviewed. The chapter also offers a detailed account of the affordances and challenges that accompany flipped instruction and learning to set the ground for the review of the instructional design models and theories in Chapter Three.

The emergence and overview of the term

First coined by J. Wesley Baker in 2000, the term *flipped classroom* is typically applied to refer to the use of instructional videos or recorded lectures prior to classroom meetings to enable students to watch and reflect on the content at the time they find convenient. This is usually followed by in-class interaction and discussions to help learners internalize the information acquired during the personal learning phase. In the same year, Lage and Platt coined the term *inverted classroom*. Inversion, here, suggests that the process and events which "have traditionally taken place inside the classroom now take place outside the classroom and vice versa" (Lage, Platt and Treglia 2000: 32).

However, it was more than a decade later, in 2012, that the concept of flipped classroom as a *pedagogical approach* (Uzunboylu and Karagozlu 2015), or instructional methodology in Tecedor and Perez's (2019) terms, came under the spotlight by Jonathan Bergmann and Aaron Sams' work at Woodland Park. Bergmann and Sams have been given the credit for introducing the idea of *flipped classrooms* to the world of education. To help two of their students catch up with the instructional content covered during the sessions they missed, Bergmann and Sams video recorded their lectures for each session. Soon the video lectures became widely famous and were used by the students who missed real-time classroom sessions and other learners as useful resources to better understand course concepts when working on their assignments. Even the teachers and students from other schools/districts eagerly used the teaching materials developed by Bergmann and Sams. Observing the educational affordances of recorded video lectures, Bergmann and Sams concluded that reversing or flipping the conventional teaching tradition can save classroom time as it lets students

watch instructional videos beforehand. This way, more classroom time can be dedicated to practice and student-teacher and student-student interaction. Following this success, they applied the same instructional strategy in other classes and courses (Bergmann and Sams 2012).

Since then, the flipped classroom approach has grown in popularity across different disciplines and educational contexts. Parallel with this growth, the conceptualizations offered for the term have become more detailed and varied. These include *inverted learning* (Davis 2013), *24/7 classroom* (Ng 2018), *inverted classroom* (He et al. 2018; Lage and Platt 2000; Shih and Huang 2020), *flipped learning* (Hsieh et al. 2017), *reversed instruction, flipped classroom* (Bergmann and Sams 2012; Ng 2018), *flip teaching* (Hung 2015), *flipped classroom approach* (FCA) (Jiang et al. 2020) and *just-in-time teaching* (Novak 2011). However, a careful review of related studies reveals that the *flipped classroom model* is perhaps the most commonly used terminology. This leads us to two important questions. First, *can these terms be used interchangeably*? Second, *how should the flipped classroom model be conceptualized?*

From the perspective of a number of researchers, the response to the first question is a definite 'Yes'. It is generally believed that, despite the diversity of terminologies which are applied to refer to this approach, they indicate a similar teaching or pedagogical strategy (e.g., Lai, Hsiao and Hsieh 2018; Ng 2018; Ouda and Ahmed 2016). There are researchers and authors who prefer particular terminologies, suggesting that different terms address the concept from different directions and should not be used interchangeably (e.g., Hwang et al. 2015).

It should be noted that when the proposed terms are merely applied to refer to a particular instruction phase or the physical act of inverting conventional classrooms, it may be difficult to use them interchangeably. Conceptualizing the approach this way makes it hard to achieve a consensus about what it comprises. As Warner and Palmer (2015: 358) state, "despite the current hype about the flipped classroom as a new approach to improve student engagement and deeper learning, there is no general consensus on what exactly the flipped classroom is."

For instance, the FC is conventionally conceptualized as an approach in which direct classroom instruction is moved out of the classroom and is replaced by discussions. In this definition, the focus is mainly on the in-class phase of the flipped approach (Webb and Doman 2020). Conceptualized this way, the FC reflects the physical inversion of the conventional classroom by moving classroom instruction to learners' *personal learning space.* As a result of this inversion, conventional in-class activities become out-of-class homework (Akçayır and Akçayır 2018).

Grounded on this definition, the FC may not be synonymous with flipped learning/teaching as it only presents a phase in the process of inversion (Hwang et al. 2015). As Blau and Shamir-Inbal (2017) put it, such conceptualizations are somewhat shallow as they merely focus on the physical components of the classroom rather than the qualities that essentially result in successful learning.

When definitions move beyond the process of inversion to highlight the peculiarities of the pedagogical approach, they become more related. Addressing the process and particulars of the inversion, Flipped Learning Network's (FLN) (2014) proposed conceptualization is one of the most commonly referenced definitions for the FC approach in the literature. The flipped classroom is defined as a pedagogical approach

> in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter. (FLN)

Applying the term *flipped learning*, Bishop and Verleger (2013) similarly consider the process as a two-phase educational approach comprised of in-class interactive activities and out-of-class technology-enhanced instruction which is delivered individually to each learner (see also Chang and Lin 2019; Mohamed and Lamia 2018; Zou et al. 2022). The authors and researchers who place more emphasis on the inverted nature of the teaching process commonly apply the term *flipped teaching* (e.g., Lai et al. 2018). For instance, Hung (2015: 15) uses *flip teaching* to refer to "a pedagogical approach to blended learning in which the typical activities of classroom lectures followed by homework in traditional teaching procedures are reversed in order, and often supplemented or integrated with instructional videos" (see also Murillo-Zamorano et al. 2019). This way, learning extends beyond the temporal and spatial confines of physical classrooms (Turan and Akdag-Cimen 2020).

Warner and Palmer (2015) apply the term *flipped classroom* to refer to the process of delivering content and practice-related materials prior to classroom meetings to dedicate classroom time to problem-solving and key concepts. For Lai and Hwang (2016), the flipped classroom features a learning approach in which knowledge delivery and application are reversed (Fathi and Rahimi 2020) as students receive direct instruction out of the classroom context (i.e., knowledge delivery) by being exposed to the content (see also Tecedor and Perez 2019) and the in-class time is dedicated to assignments (i.e., knowledge application).

Moving beyond the reversed nature of instruction and practice, Ouda and Ahmed (2016: 418) nicely define *flipped education* as "any kind of exploitation of internet technology to leverage the learning in a classroom, so that a teacher can devote more time interacting and communicating with students rather than teaching". Awidi and Paynter (2019) use FC to refer to a pedagogical approach in which the conventional way of content delivery and instruction is redefined and reversed.

In the present volume, the term *the flipped classroom model* is applied with reference to a pedagogical approach which preserves the classroom time for learner-learner and learner-teacher interaction, discussion, reflection and problem-solving (i.e., knowledge internalization and application) through engaging learners in different individual and group activities. The out-of-classroom time is divided into pre- and post-classroom phases during which instructional content delivery and self-practice exercises are shared and used for knowledge transmission and construction. In other words, the FC model features a three-phase pedagogical approach encompassing (a) preparation that requires learner engagement, exploration and self-practice (the pre-class phase), (b) practice (the in-class phase) and (c) knowledge processing (the post-class phase). Although engagement is an essential component all through the three phases, it plays a more determining role in the self-study period during which students do not have real-time access to the teacher. See the infographic design in Figure 2.1.

It is worth noting that, without a sound design, the mere act of reversing the instruction and practice may not necessarily result in knowledge application or internalization. If inversion remains at the physical level, it may not have any particular pedagogical value. The flipped instruction or learning should extend beyond reversing the instruction and practice sequence in ordinary classrooms (Tseng, Lin and Chen, 2018). For this to happen, teacher and learner responsibilities and roles should be redefined (Bergmann and Sams 2012). Such an inversion can turn the classroom space into an interactive and dynamic learning environment in which students actively engage in activities and classroom practices. See Chapters Four and Five for more details.

In practice, to achieve real flipped learning, instruction, classroom or pedagogy, particular qualities should be defined in the design of a course. The most crucial ones include (a) shifting direct classroom instruction to learners' individual learning space out of the classroom setting, (b) engaging learners in a process of self-regulated learning in and out of the classroom setting, (c) designing activities and lesson plans to promote self-paced learning out of the classroom setting and interactive knowledge construction in the classroom and (d) developing, selecting or adapting the

instructional and learning content for pre-, in- and post-classroom language learning and practice.

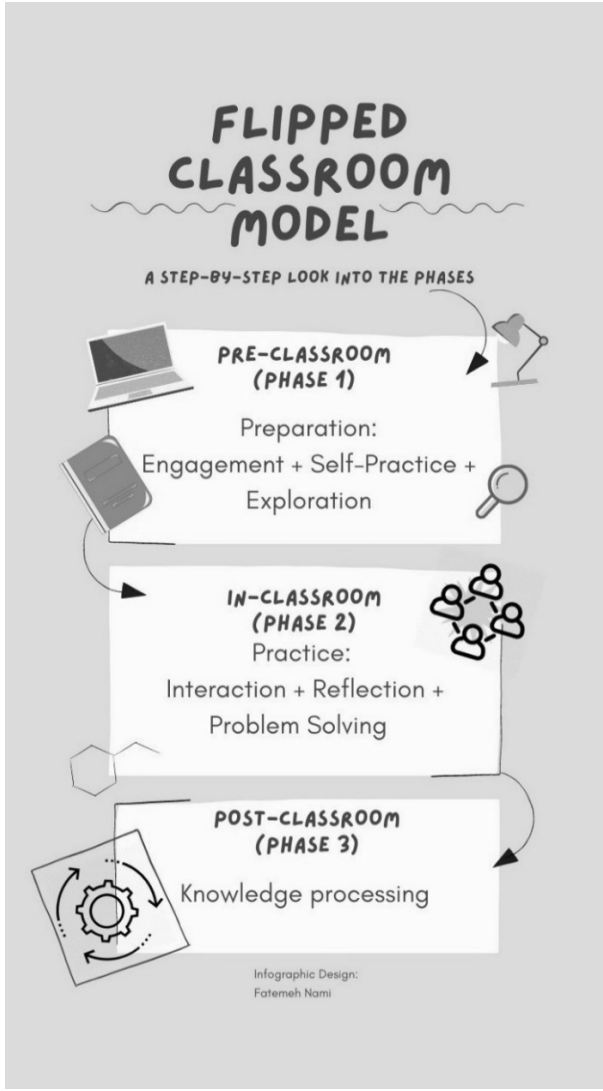

Figure 2.1: The three-phased FC model design

Flipped classroom: The affordances

It may be impossible to find a pedagogical approach that satisfies every learner's needs. The flipped classroom model is not without its own challenges. However, it entails enough affordances to be considered as a productive pedagogical approach. In this section, I review the main affordances associated with the flipped classroom model which have increased its applicability for second and foreign language classrooms.

The design of FCs turns them into apt environments for teaching and learning different subject matters including second and foreign languages. The affordances associated with the FC are discussed in the present section from two interrelated directions i.e., the potentials of the FC model for (a) managing the learning time in a more systematic way and (b) enhancing the flexibility of the learning environment.

Moving instructional materials and learning activities to the pre-classroom phase, teachers find more opportunities for the systematic management of the learning time (Lai and Hwang 2016), or *quality time* in Haghighi et al.'s (2019) terms, during classroom meetings. in the in-class time is freed for systematic subject matter practice (Bergmann and Sams 2012; Mohamed and Lamia 2018), interaction and group work (Huang and Hew 2018) which can facilitate learners' cognitive processing. The reversed order of instruction and practice in FCs (Hsieh et al. 2017) allows teachers to engage students in more focused learner-learner and learner-teacher interactions (Adnan 2017; Bakla 2018; Lai et al. 2018) and increase their motivation. These, in effect, promote active and deep learning (Silberman 1996). More engaged and motivated learners are likely to demonstrate quality performance (Tsai 2019) and nurture positive attitudes toward learning (Lai and Hwang 2016).

Additionally, the pre-class availability of the instructional content in the FC model enables learners to review and re-study the materials as many times as they find convenient; an opportunity which may not be available during the classroom meetings and teacher lectures. Focusing on topics that may have not been completely understood or those that require more attention (Blau and Shamir-Inbal 2017), learners can spot the gaps in their knowledge and address them (Bergmann and Sams 2012). This way, knowledge transmission moves to the pre-classroom phase and active knowledge construction or internalization extends beyond the confines of the brick-and-mortar classrooms (Wang 2019). Access to teaching/learning materials prior to classroom meetings paves the way for better knowledge internalization (Kong 2014; Lai and Hwang 2016; Shih and Huang 2020) higher-order thinking skills (Gilboy et al. 2015) and learner achievement

(Mohamed and Lamia 2018).

Generally speaking, the reversed order of flipped classrooms increases learners' chance to experience quality interactions, active learning, collaborative learning, focused discussions, project work, problem-solving and hands-on tasks. They can also receive on-the-spot peer/teacher feedback and scaffolding (Blau and Shamir-Inbal 2017; Bond 2020; Chang and Hwang 2018; Huang and Hew 2018; Kong 2015; Kvashnina and Martynko 2016; Lo et al. 2018; Mohamed and Lamia 2018; Turan and Akdag-Cimen 2020; Wang 2019; Yoshida 2016). This is largely attributed to the segmentation of learning to different phases (i.e., pre-, in- and post-class periods) in FCs.

Grounded on Bloom's (1964) Taxonomy of Educational Objectives and its revised version (Anderson and Krathwohl 2021, see Figure 2.2), it is suggested that, in inverted classroom designs, the development of lower level cognitive skills (i.e., acquiring, understanding and remembering the previously acquired knowledge) is moved to learners' personal learning time (Lee and Martin 2020) by engaging them in a process of self-study. This is largely accomplished by sharing the instructional content prior to classroom meetings. Learners have the chance to know the highlight of each session and study that portion of the instructional materials which will be focused on in the following session (Fathi and Rahimi 2020: 25). This way, they are expected to better prepare themselves for classroom activities and discussions as they can "closely connect the pre- and in-class activities… to learn whenever and wherever they like" (Thai et al. 2017: 117). The fact that students have the opportunity to study the instructional content at their own pace (Murillo-Zamorano et al. 2019) prepares them to take the responsibility of their own learning. In other words, the inverted pedagogical design facilitates out-of-classroom engagement with the instructional content allowing learners to spend as much time as they feel needed (Kong 2015) for understanding materials and preparing themselves for classroom discussions (Thai et al. 2017).

In conventional classrooms, the in-class time is mainly dedicated to remembering and understanding the subject matter content (Jiang et al. 2020). The classroom time is spent for teacher lectures and time restrictions usually limit extensive interaction. Activities are assigned as homework for which students usually receive delayed feedback.

In flipped classrooms, the portion of the classroom time which is commonly preserved for teacher lectures in conventional language courses can be dedicated to more focused and systematic language learning practice such as problem-solving, hands-on tasks, group work and discussions (Akçayır and Akçayır 2018). There would be more opportunities for