



Digital Language Teaching and Learning: A Case Study

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Abstract

Digital learning is reshaping education in unprecedented ways. However, as far as language learning is concerned, the burden of innovation has mostly relied on the good will of individual teachers who have decided – sometimes in perfect isolation – to take advantage of the new technologies made available. Although institutions have increasingly offered their support so that language teachers could incorporate new technologies into their syllabi in a more organic way, e.g. by making use of either open-source or proprietary platforms installed in the institution's systems, the "interaction" between the "container" and the "content" has been left to the individual teacher's expertise until recently. Language textbook publishers have previously been reluctant to join the digitization of the learning experience, providing only a limited set of online tools (e.g. flashcards and tests) linked to their own textbooks, and waited until numbers would justify their complete involvement in the business. Some of them have now made up for their delay or absence, offering language teachers an integrated set of tools capable of relieving them from the most demanding and time-consuming tasks. This paper draws on the English classes taught to BA students in Economics in the past two years, and analyses the fully-fledged platform provided by the publisher of the adopted textbook, investigating its research-based design, ready-to-go activities and customizable content, and evaluating its impact on the development of digital learning and teaching skills.

Keywords: *Digital learning, online learning, language learning platform, language learning innovation, technology-enhanced language teaching and learning, CLIL*

1. Introduction

In the context of digital language teaching and learning, greater emphasis has been placed on the learning half of the process. Recent developments in the field of computer-assisted language learning proved the positive effects of technology used in promoting learning [1] [2]. An open argument, though, relates to the significant difference in the way learners and teachers have access to technology in educational settings. Learners' access may take place in either or both of these two ways: "learning from" and "learning with" technology – where the former underlines the instrumental use of technology and the learner's relative passivity in the process, while the latter hints at a more active participation or interaction from the learners [3]. Quite the opposite is the case with teachers: "teaching with" technology generally implies an instrumental approach to the use of technology in language classes, while "teaching from" technology reflects the interactive, immersive experience of teaching from within a learning environment [4].

Whether using online, blended, or class-based learning, teachers are faced with the challenge of combining a more informal learner-centered approach – giving learners control over their learning process – with the prevalent practices of teacher-centered modes – based on set goals and standard forms of assessment. In order to balance learner autonomy, personal choice and the affordances of LMS tools, teachers (as all the stakeholders in the learning process) need to master the complex triangulation of the pedagogical, methodological and technological levels [5].

In this setting, moreover, we have recently witnessed the digital shift of educational publishers, who have sort of re-invented themselves as educational technology providers. The shift from hard copies to software solutions has opened new possibilities, facilitating tech-savvy teachers' work while moving the most technophobic teachers out of their comfort zone.

The purpose of this paper is to analyze the interrelationships arising from these dimensions of innovation in language learning in order to contribute to the conceptual understandings that underpin university teaching approaches to technology integration [6].

2. The role of educational publishers in technology integration

Introducing change is not easy, especially in rather traditional systems such as the educational publishing industry. Language textbook publishers have taken their time to implement the digital transition of the learning experience. From the limited set of online tools (e.g. flashcards and tests)



linked to their own textbooks, they now offer language teachers an integrated set of tools capable of relieving them from the most demanding and time-consuming tasks.

This digital shift is, however, of greater significance than it appears at first sight. As far as language learning is concerned, the burden of innovation has mostly relied on the good will of individual teachers who have decided – sometimes in perfect isolation – to take advantage of the new technologies made available. Although institutions have increasingly offered their support so that language teachers could incorporate new technologies into their syllabi in a more organic way, e.g. by making use of either open-source or proprietary platforms installed in the institution’s systems, the “interaction” between the “container” and the “content” has been left to the individual teacher’s expertise until recently. The result is some sort of dissociative experience that can be placed on a continuum from *total disconnection* between the two – e.g. resulting from time scarcity due to increasing administrative burdens on teaching staff – to *perfect integration* at the cost of long hours and time-consuming activities that sometimes do not simply pay back, for a number of reasons. Quite obviously, there are 256 shades of grey in between the two extremes, but all seem to be flawed by the same basic defect: design inconsistency. The issue needs to be addressed from a theoretical perspective first.

Changing practices require thorough reconsideration of the nodes involved in the triangulation of pedagogy, methodology, and technology. For technology to be fully integrated in the teaching and learning system, it needs to be the mediating instrument for cognitive simulation, skills development, ad-hoc learning and knowledge construction/co-construction, i.e. it should take full account of the pedagogical and methodological instances, and translate and incorporate them into the learning environment so as to achieve a seamless whole. In order to do that, drivers and enablers should be used that can trigger or facilitate a process of change intended to introduce a positive outcome in the system – in this case, technology integration in language classes. The drivers and enablers that educational publishers were used to employ until recently took only partial account of the pedagogical and methodological instances, and, in the case of language textbook publishers, were mostly focused on technological tools (e.g. CDs/DVDs, online quizzes, flashcards) that could serve as “nice-to-have additions to the core paper offering” [7].

The digital turn forced many educational publishers to reinvent themselves as digital solutions providers: some remodeled their portfolio of textbooks creating personal online products to provide top-notch, 21st-century education for specific targets of learners: e.g. Macmillan Education’s English language courses for young learners are accompanied by Navio, a new digital platform that provides teachers with a seamless transition between the coursebook and digital teaching activities, and makes learning more engaging with game-based language activities for young learners.

A case study [8] on tertiary education [9] is discussed in details in the next section.

3. A case study

As a result of the regular annual screening of useful, updated resources for use in my courses, after reviewing and evaluating a number of textbooks, including their digital “add-ons”, I selected for adoption in my courses for BA students in Economics a textbook that particularly impressed me for being based on the latest research on business communication.

3.1 Resource details

The title of the selected resource is “Business Communication: in person, in print and online” – 10th edition, authored by Amy Newman and published by Cengage Learning in 2016.

The resource uses a realistic approach to communication – with examples and situations demonstrating how principles work in the real world [10] – and covers the most important business communication concepts in detail – from traditional channels to technology-based media, from verbal to non-verbal communication, from oral to written communication, from ethical issues to intercultural communication – to help learners navigate complex relationships and use current, sophisticated technologies to manage their online reputation, engage customers using social media, lead web meetings and conference calls, and more. Self-reflection questions throughout the book help learners develop a deeper understanding of what they are learning through making new connections and relating different ideas [11].

3.1.1 Pedagogical framework and methodological foundations

The pedagogical design of the resource relies on constructivist and socio-cultural theories, as declined in the learning goals that are spelt out at the beginning of each chapter and – throughout its sections – next to the corresponding learning focus.



3.1.2 Learning and teaching management platform

To some extent, the virtual platform connected to the resource (formerly MindTap, now simply Cengage) is supported by the theories posited in 21st century learning. It covers the gap between the way in which students engage with new media and technologies in their daily lives and the way in which learning practices rely mainly on print media. Cengage platform is far from being just a simple digital version of the textbook. It is specifically designed to be actively used and bring measurable teaching and learning results. It can also be used as a blended learning tool that can easily integrate with course materials, and its educational materials are accessible to users of all abilities. The available content authoring tools provide ready-made interactive activities while the revision resources provide teachers with the support needed, allowing them to focus on student development. Teachers can personalize learning with instant feedback and bookmarking/commenting tools, and save time with the automated scoring, gradebook and data reporting to check progress quickly and easily.

3.1.3 LMS Integration and Mobile App

Another type of integration that can be achieved is with Blackboard or Canvas courses on which links to the Cengage activities can be added. This provides learners with a seamless learning experience while they carry out their tasks on their institution's LMS.

Cengage is also available for iOS and Android devices. While learners can use Cengage Mobile to view activity statuses and details, read the textbook, view grades, review flashcards, and take practice quizzes for their Cengage courses, teachers can use Cengage Mobile also to take students' attendance, view their grades, and create class polls to fuel learners' interaction and engagement.

3.2 Course description

Reference is made here to two courses given to BA students in Economics in 2017-18 (LIN113) and 2018-19 (LIN115). Each was attended by more than 100 students (LIN113 totaled 110, while LIN115 reached 109 registered students), which required extra effort on my part in order to meet the students' and my own expectations, considering that classes met for a total of 10 weeks (40 hours) for each course, and that the relevant syllabi also included short modules on English grammar and collocations. This paper will only reflect the module on business communication, in which the resource under consideration was used.

3.2.1 Course activities

Cengage (former MindTap) courses are structured as a hierarchical sequence of activities – readings, media, homework, assessments, and other activity types – and have many ready-made activities available to students (See figure 1), which teachers may want to rearrange, hide, or select to count toward grades in order to support the course they are teaching: I have decided to stick to the publisher's suggestions during the first year of adoption of the textbook/LMS, then opted to hide a couple of written activities the next year as they were particularly difficult to administer to such huge cohorts of students.

Altogether, Cengage/MindTap offered – for each chapter – three (sometimes four) types of activities (but also various tools to create more): 1) a Practice Quiz consisting of 15 multiple choice questions to get a quick check of students' understanding of chapter concepts; 2) an Assignment consisting of a varying number of more complex multiple choice questions based on micro-cases that required a longer decision-making process; 3) a Video Activity, generally linking to external resources, that required students to analyze the situation at issue and respond to it by video-recording themselves answering the questions, either directly on the Cengage platform or uploading the recorded file. A couple of chapters also included a Writing Activity requiring students to write different types of documents. I was able to grade and give feedback on spoken and written activities, quickly and discreetly, online. While assessment for the first two types of activities is automatically provided online, Video Activities have been graded according to their individual rubric, provided by the system. When needed, I was able to change the due date or give extra time for individual students, based on pedagogical, methodological, technological and psychological grounds.



Chapter 1: Understanding Business Communication

<p>Chapter 1 Self-Assessment: Communication Skills PRACTICE</p> <p>Complete this self-assessment to evaluate how you feel about your communication skills. Understanding how you feel about your communication skills at the beginning of this class ...</p>	93% submitted	100% avg score	3 points
<p>Chapter 1 Reading: Understanding Business Communication</p> <p>Highlight and take notes throughout this chapter's reading to create a custom study guide accessible in the StudyHub app. Estimated time on task: 30-45 minutes.</p>			
<p>Chapter 1 Assignment COUNTS TOWARDS GRADE</p> <p>In this problem set, developed for Newman, Business Communication, 10e, Chapter 1, you will learn about the components of communication, the major verbal and nonverbal barrier...</p>	83% submitted	56.7% avg score	31 points
<p>Chapter 1 Video Activity: Introducing Yourself to the Class PRACTICE</p> <p>In an individual video, introduce yourself to the class. In less than two minutes., share your name, hometown, and some other relevant information about yourself. Estimated time on...</p>	68% submitted	80.8% avg score	10 points
<p>Chapter 1 Video Activity: Identify Communication Components In A Current News Story COUNTS TOWARDS GRADE</p> <p>In an individual video, discuss a current story from www.bizcominthenews.com.</p>	68% submitted	63.9% avg score	15 points
<p>Chapter 1 Study Tools</p>			
<p>Chapter 1 Flashcards</p> <p>Study with existing flashcards and make your own.</p>			
<p>Chapter 1 Lecture Slides</p> <p>Walk through these slides to review the key concepts covered in this chapter. Estimated time on task: 15 minutes.</p>			
<p>Chapter 1 Practice Quiz COUNTS TOWARDS GRADE</p> <p>Take this quiz to get a quick check of your understanding of chapter concepts. Estimated time on task: 15 minutes.</p>	78% submitted	83.1% avg score	15 points

Fig.1. Extract from the learning path of the digital course "Business Communication: in person, in print and online"

3.2.2 Course records

The gradebook was automatically populated with data from Practice Quizzes and Assignments, or any other closed-answer activity, while open-answer activities were tagged as pending for assessment after students had submitted their answers. The gradebook system made students aware of their learning and kept them motivated.

Progress

Home Analytics **Gradebook** Settings Roster

CLASS AVERAGE: 73.1% Edit Scores Gradebook Actions

Filter by Jump To: Display Settings

	Chapter 1: Und...	Chapter 2: Tea...	Chapter 2: Team and Intercultura...
<p>Name (Show Student ID) ↑ <input type="text"/></p> <p>Calculation by Average Percentage Overall Performance ↑↓ <input type="text"/></p>	<p>Chapter 1 Video Activity: Introducing</p> <p>MANUALLY GRADED</p> <p>10</p>	<p>Chapter 2 Self-Assessment: Your Outlook On</p> <p>3</p>	<p>Chapter 2 Assignment</p> <p>26</p>
<p>C [redacted] L [redacted]</p> <p>95.4% 424.6 of 455.0</p>	<p>10.0</p>	<p>3.0</p>	<p>23.3</p>

Fig.2. Extract from the gradebook of the digital course "Business Communication: in person, in print and online"



At the beginning of each class I used to set a time limit for students to check in on their devices so that I could take their attendance effortlessly until the timer ran out.

I was able to view, edit, and export or sync students' activity scores and calculated overall grades, as well as attendance records, which I exported as a .CSV file.

Although the student response system in Cengage Mobile is available for teachers to create and customize their own questions and answers, including polls, multiple choice, or true/false, and results can be made to count towards students' grades if they are imported as an activity, I preferred not to take this option, because managing classes and performance assessment is much faster on a computer or laptop than it is on a smart phone.

In Cengage Mobile students were able to view activity statuses and details, read the textbook, view grades, review flashcards, and take practice quizzes for their Cengage course, while I used Cengage Mobile to view activity details, read the textbook, view students' grades, and take their attendance. Furthermore, I could use at a glance data and statistical reports to get a quick and easy overview of how the platform was being used.

4. Conclusion

Based on current practices in the application of information and communication technology (ICT) in language education [13], we can now draw some conclusions out of the discussion and case study presented above.

Firstly, the motivation for research and development around the concept of PLEs must be primarily pedagogical, rather than technological, even though much of what it encompasses is related to or results from the development of ICTs [2]. Combining the triangulation poles of pedagogy, methodology and technology is a good premise for effective digital teaching and learning.

Secondly, "teaching from" technology confirms itself as making the difference in improving student learning skills as it provides learners with a virtual leaning environment which departs from the formal teacher-centered approach and gives way to a more informal learner-centered approach.

Thirdly, educational publishers need to rebuild their model of thinking from creating books to creating eCourses [7]. Students need to focus and practise specific areas of challenge identified by formative assessment and reflection. This is what Cengage Learning has successfully achieved through their fully integrated virtual platform that facilitates task-based communication and interaction, and that also provides students with a flexible and convenient mobile learning and practice tool while relieving teachers from many of the most time-consuming activities allowing them to focus on student development, and bringing measurable teaching and learning results [14].

References

- [1] Conole, G. & Oliver, M. *Contemporary perspectives in e-learning research: themes, methods and impact on practice*. Routledge, 2007.
- [2] Thouëсны, S., & Bradley, L. "Introduction on views of emergent researchers in L2 teaching and learning with technology", in S. Thouëсны & L. Bradley (Eds.), *Second language teaching and learning with technology: views of emergent researchers*, Dublin, Research-publishing.net, 2011, 1-8.
- [3] Hill, J. R., Wiley, D., Miller Nelson, L., & Han, S. "Exploring research on Internet-based learning: from infrastructure to interactions", in D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology*, New Jersey, Lawrence Erlbaum associates, 2004, 433-460.
- [4] Gaballo, V. "e-Collaborative language and translation classes: Motivation, Metacognition, Empowerment" in Landolfi, L. (Ed.), *E-Factor: English Education, Empowerment & Emotivation*, Napoli, Liguori Editore, 2017, 101-112.
- [5] Gaballo, V. "New challenges in designing second/foreign language programs in a networked world" in Gómez Chova L., López Martínez A., Candel Torres I., *Technology, Education and Development*. Barcelona, IATED, 2014, 4384-4391.
- [6] Laurillard, D., *Rethinking university teaching*, Routledge, 2002.
- [7] Grochola, L., "The future of educational publishers", 2018, <https://elearningindustry.com/future-of-educational-publishers>
- [8] Yin, R. *Case study research: design and methods* 4th ed., London: Sage, 2009.
- [9] Cohen, L., Manion, L. & Morrison, K. *Research methods in education*, Routledge, 2007.
- [10] Kolb, D. *Experiential learning as the science of learning and development*. Englewood Cliffs, NJ: Prentice Hall, 1984.
- [11] Moon, J. *Reflection in learning & professional development*. London and New York: Routledge, 1999.



- [12] Pegrum, M. *Mobile learning: Languages, literacies, and cultures*. London, UK: Palgrave Macmillan, 2014.
- [13] Zhao, Y. "Recent developments in technology and language learning: Literature review and meta-analysis", *CALICO Journal*, 21(1), (2013), 7-27.
- [14] Stanley, G. *Language learning with technology: Ideas for integrating technology in the classroom*. Cambridge, UK: Cambridge University Press, 2013.