

# 9 Going beyond words and actions: teaching metacognitive and soft skills to ESP communication students at the dawn of the fourth industrial revolution

Dana Di Pardo Léon-Henri<sup>1</sup>

---

## Abstract

One of the fundamental objectives of education is to teach lifelong learning skills that will help people navigate through their careers and future relationships towards both personal and professional fulfilment. Educators would then not only teach the core subjects and hard skills, but they would also need to focus on teaching soft skills, which are both valuable to and revered by 21st century professionals. Excellent verbal and non-verbal communication skills make up a significant part of these soft skills, which are transversal and take the form of people skills or sociability. The focus of this chapter is to examine the ways in which new technologies can be integrated into reflective English for Specific Purposes (ESP) teaching methods to stimulate student motivation and encourage the development of the aforementioned skills which are not only professional, but also metacognitive in nature, within the context of first year non-specialist English language students in Communication Studies. The chapter begins by presenting the scholarship and theoretical framework for a Student-Centred Learning (SCL) approach and procedures for a collaborative One-Minute Film Project. Finally, it presents some initial positive results based on the data, as well as various observations and potential for further transversal research.

---

1. Université de Franche-Comté, Besançon, France; danaleonhenri@gmail.com; <https://orcid.org/0000-0001-6196-6173>

**How to cite this chapter:** Di Pardo Léon-Henri, D. (2019). Going beyond words and actions: teaching metacognitive and soft skills to ESP communication students at the dawn of the fourth industrial revolution. In S. Papadima-Sophocleous, E. Kakoulli Constantinou & C. N. Giannikas (Eds), *ESP teaching and teacher education: current theories and practices* (pp. 147-161). Research-publishing.net. <https://doi.org/10.14705/rpnet.2019.33.931>

**Keywords:** fourth industrial revolution, ESP, language pedagogy, metacognitive skills, soft skills, student-centred learning, verbal communication, non-verbal communication.

---

## 1. Introduction

We are at the dawn of the Fourth Industrial Revolution (FIR), and as Klaus Schwab (2016), Founder and Executive Chairman of the World Economic Forum stated, we are on the brink of a technological revolution that has already begun to fundamentally alter the way we live, work, and relate to one another. Today's highly mobile and rapidly evolving technology dependent society has created a work force of individuals who have radically changed over the years. This trend will continue as billions of people connected by mobile devices encounter emerging breakthroughs in fields such as artificial intelligence and robotics, for example. Accordingly, the required professional skills and qualities of future job candidates is swiftly evolving since “over one third of skills (35%) that are considered important in today's workforce will have changed [...] by 2020”<sup>2</sup> (Gray, 2016, n.p.).

Schwab (2016) also maintains that “[l]ike the revolutions that preceded it, the Fourth Industrial Revolution has the potential to raise global income levels and improve the quality of life for populations around the world [but at] the same time, [it] could [potentially] yield greater inequality, particularly in its potential to disrupt labour markets[, as] automation [i.e. robotics] substitutes for labour” (n.p.). Understandably, many blue-collar and middle class workers have and will continue to become “disillusioned and fearful that their own [...] incomes and those [perhaps] of their children will continue to stagnate” (Schwab, 2016, n.p.) or dwindle in light of such drastic societal changes. This is especially true if one is a technophobe or does not possess computer or smartphone savvy in the 21st century.

---

2. For more precise information on how these skills have changed, refer to the [supplementary materials](#), Appendix 1, Figure 1 ‘Top Ten Skills: 2020 vs. 2015’ or refer to the report ‘The Future of Jobs’ (pp. 21-22) at the following link [http://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs.pdf](http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf)

## 1.1. The FIR and the ESP Language Classroom

The FIR is inevitably changing

“not only what we do, but also who we are, since it profoundly affects our identity and all the issues associated with it: our sense of privacy, our notions of ownership, our consumption patterns, the time we devote to work and leisure, and how we develop our careers, cultivate our skills, meet people, and nurture relationships” (Schwab, 2016, n.p.).

Connected gadgets are already motivating us to change our habits to respect healthier lifestyles. They assist us in living fuller, longer lives by keeping our health and habits in check. The integration of technology in our everyday lives and education has altered the way we interact and communicate in society from basic skills such as the simple act of talking or choosing to send text messages over using the telephone. This has also had an influence on how or when we choose to take the time to communicate in person in order to reflect on and engage in meaningful conversation.

This mild social aversion can develop into an inhibition or reluctance to speak openly. And this trend has the potential to nudge its way into our classrooms (Ur, 1991), rendering social exchange, even in the context of an easy speaking activity, such as a simple ice-breaker exercise, a real issue. For any language teacher who is confronted with this type of problem in the early stages of their course syllabus, it can result in a really tedious and contagious challenge, as it can often spread from one student to another. An SCL environment can serve as a partial solution to this problem. As Jones (2007) points out, a student-centred approach encourages students to develop a ‘can-do’ attitude which is effective, motivating, and enjoyable for both the students and the teacher. In this way, the autonomous learning setting reinforces the notion of building strong foundations for a lifetime of learning.

In the context of English for academic purposes, Widdowson (1983, p. 41) argues that whether the language use is directly related to the specific disciplines that

students are studying or not, it should make use of fundamental problem-solving methodology which is characteristic of academic study. Hence, an English course that is designed for students of Information and Communication (IC) studies should reflect the IC context in which various communication strategies are implemented to convey a specific message. The teaching of ESP should always reflect the underlying concepts and activities of the broader discipline (Dudley-Evans & St John, 1998). In addition, ESP teaching makes use of a methodology that differs from that used in general purpose English language teaching. Furthermore, Dudley-Evans and St John (1998) posit that the teacher can occasionally behave more like a language consultant, whilst enjoying equal status with the learners who have developed their own expertise in the subject matter. Consequently, as teaching and learning in higher education are part of a shared process (European Commission, 2013), the responsibility is subsequently both on the teacher *and* the student to contribute in order to achieve success. As we will see in this chapter, this shared process can additionally provide a flexible setting for the modification of teaching and learning roles. Inevitably, the use of technology both in the educational setting and outside the classroom, at home also has a fundamental role to play in preparing students for their future careers as professional candidates in the FIR.

## **1.2. An SCL approach to metacognitive skills development**

If one of the fundamental objectives of education is to teach lifelong learning skills that will help people navigate through their careers and future relationships towards both personal and professional fulfilment, educators should then focus on teaching many soft skills, not only the hard skills, which refer to the core subjects that are more theoretical or knowledge-based in nature. Revered by 21st century professionals, these soft skills are characterised by the development of personal attributes (such as sociability, communicativeness, and thoughtfulness) that would enable someone to interact efficiently and harmoniously with other people, whether they be prospective clients or fellow colleagues. As Gray (2016) points out, soft skills as well as critical thinking skills and creativity will be much more valued in the professional workspace by the year 2020, whilst emotional intelligence and cognitive flexibility, which are not currently

featured in the top ten today, will be added to the top skills needed list. The underlying foundation for acquiring these skills is an excellent combination of verbal and non-verbal communication skills, which make up a significant part of the essential soft skills. Transversal in nature and the basis for people skills or sociability, they are part of several competences and significant qualities to possess when considering positions that include negotiation, coordination, and management tasks. For this reason, language teachers should strive to assess both the current *and* future needs of students whilst including activities that place them at the heart of their own learning process. This will assist them in developing transversal metacognitive skills.

Consisting of both metacognitive knowledge and metacognitive experiences, metacognition is higher-order thinking which involves active control over the cognitive processes engaged in learning (Flavell, 1978). It plays a significant role in oral communication of information, persuasion, and comprehension, but also language acquisition, memory, problem-solving, social cognition and various types of self-control and self-instruction (Flavell, 1979). The integration of Flavell's (1978, 1979) theories in language lesson planning can prove to be beneficial for both the language learner and teacher who are in constant evolution, one in terms of learning and the other in terms of teaching. Mehisto, Marsh, and Frigols (2008) explain that thinking (cognition) is the mental faculty of knowing, which makes use of the following skills: perceiving, recognising, judging, reasoning, conceiving, and imagining. They express that cognition is a prerequisite in the engineering of lesson plans, however they also indicate that to heighten the intellectual challenge of a particular task for students, cognition must also be integrated into the task itself, so as to encourage the learners to engage and develop their own critical thinking and problem-solving abilities.

Within the framework of SCL, there is an emphasis on student involvement which fosters a classroom culture or mindset that aims at strengthening the learning process through the active participation of the student. As an innovative educational approach which has been shown to empower students, SCL encourages students to gain pragmatic knowledge whilst applying it to achieve specific goals and outcomes, as a European research project, the Peer Assessment

of Student-Centred Learning (PASCL) explains (ESU, 2015). If learners are granted the authority and the freedom to create and make decisions, the process inevitably encourages them to ascertain and widen their creative potential, since they are in control of the various problem-solving stages whilst achieving specific learning outcomes. A recent study (Di Pardo Léon-Henri, 2015) has shown that these types of activities can also assist students in metacognitive skills development.

Whilst “governments are responsible for defining the policy, legal and funding contexts which impact on the motivation and ability of institutions to integrate new modes [of learning] across higher education provision[s]” (ESU, 2015, p. 35), the institutions themselves are responsible for the design of pedagogical approaches and curriculum that better correlate with the diverse needs and demands of today’s students. This is the position of the High Level Group on the Modernisation of Higher Education of the European Commission (2013) which published a report entitled “The New Modes of teaching and learning in higher education” (p. 35). Moreover, as stated by ESU (2015), “the integration of digital technologies and pedagogies should form an integral element of higher education institutions’ strategies for teaching and learning” (p. 35). In their report, the European Commission cites Allan Bloom, American philosopher, essayist, and academic, who critiques contemporary university in his book *The Closing of the American Mind*. Bloom (1987) maintains that the role of education in our times should ideally be to “find whatever there is in students that might yearn for completion and to reconstruct the learning that would enable them autonomously to seek that completion” (p. 63).

This is a founding principal of the SCL framework. Students feel empowered since there is a veritable shift in the classroom dynamic. The functioning of the classroom is flipped since the language teacher places the student at the centre of learning by responding to their needs. In assuming the role of moderator or facilitator, the teacher guides the student towards the defined objectives by favouring more autonomous learning strategies. Therefore, in this ESP setting, the traditional directive style of leading and teaching (‘do as I say’) is replaced by a more consultative approach. Composed of group work (two or more students),

the syllabus in this setting involves clearly defined tasks, activities, and projects which promote learner autonomy in an SCL and ESP setting where students are encouraged to work towards improving and expanding their communication skills whilst exploring and developing learner strategies which can immediately be used to progress in their metacognitive development. Quite remarkably, much of this process is accomplished on a subconscious level and often it is in retrospect that the students are able to quantify and qualify how much they were able to accomplish together (Di Pardo Léon-Henri, 2015). These types of methods and procedures will ultimately serve them afterward in work-related settings (such as internships) and in due course, all throughout their professional career in the FIR.

As the PASCL project (ESU, 2015) demonstrates, students in an SCL setting are increasingly motivated because they are keenly implicated in sharing their knowledge and skills during the planning and implementation process. In addition, they are actively involved independent learners and decision-makers. If they are working within a team, they are also engrossed in the creativity, design, and decision-making process, which are activities that necessitate sharp communication and social skills. And yet, teaching these professional and metacognitive skills to learners requires that the educator must first deconstruct the components of an interaction and then develop an approach that can be implemented to encourage a variety of learners to manage diverse content under different time constraints whilst assisting the learner in developing metacognitive skills, such as self-reflection, in a secure, effective, and innovative learning environment.

## **2. Method**

This qualitative content analysis study was conducted through classroom observation of an SCL environment in an ESP setting, the use of a questionnaire, and video sampling. The study took place over the course of two academic years (in 2016-2017 and 2017-2018) at the University of Franche-Comté. More specifically, it was introduced in the context of a mixed class of first year IC with

language sciences students in the ESP Department of the University of Besançon (UFR SLHS). Both quantitative and qualitative research methods were used to analyse the survey results.

For the academic year 2016-2017, there were six classes composed of 123 students. The majority of the students (76% or 94 out of 123 students) were enrolled in IC studies. The language sciences students represented 24% (or 30 out of 123 students). During 2017-2018, there were approximately 140 students divided into five classes. The majority of the classes (74% or 104 out of 140 students) were composed of IC students, whilst language sciences students represented only 26% (or 36 out of 140 students) of the class. These statistics show that in terms of the number of students per domain, the two years are quite similar. In all, a total of 32 films were produced in this study for the academic year 2016-2017 and 35 films were produced for 2017-2018.

## **2.1. Setting and procedure**

At the outset of their three-year Bachelor's programme, students must possess many different professional, interpersonal, and domain specific skills. For instance, they must be at ease with the use of modern modes of communication (from business software to various types of technology). They are required to not only work efficiently and independently, but at the same time they must be capable of using their soft skills to communicate within a culturally diverse team. The development of metacognitive and verbal as well as non-verbal communication skills is also required so as to facilitate professional interaction in particularly challenging situations, such as negotiation. And finally, they must acquire strong written, oral, and professional skills in English.

The project was given to the students during the second half of their first year of studies. On the first day of class, the students were encouraged to reflect on their verbal and non-verbal communication skills in order to go beyond their words and actions with the objective of motivating and inspiring others, but also arousing emotion and awareness on the topic of their choice. Since each class was composed of approximately 30 students from two different yet similar



domains, the majority of the students did not know each other at the onset. This setting served as a real opportunity since all of the students faced the same social challenge of having to overcome fears whilst taking the risks associated with meeting new people.

After a few quick ice-breaker exercises, based on the notion of verbal and non-verbal communication, the students formed their groups of four, five, or six individuals, at the most. They were then invited to watch, analyse, and critique two award-winning videos entitled *Colors 2015* (Harikrishnan, 2015) and *The Wall 2016* (Naderi, 2016). After a few viewings, the students were asked to first consider the message, then the direction, and all aspects and qualities relating to the films. Many of the group members were in possession of tablets, laptops or smartphones, and they were invited to review the film as many times as they wished. After preparing a summary of their observations (which was collected as an initial written evaluation), each group briefly presented their observations. An open discussion and informal debate on the effectiveness of film techniques (such as the choice of verbal or non-verbal communication, the absence or use of emotional music) ensued.

The five year running Toronto Short Film Festival (<http://www.torontoshort.com/>), which in fact served as the inspiration for this pedagogical approach, was also explained to the students. And finally, the One-Minute Film Project, which would be spread over the course of the semester in the form of different tasks and workshops, was fully presented to the students. All of the above was done during the first class of the semester, which was composed of twelve two-hour sessions.

## **2.2. The One-Minute Film Project: make a message that counts**

Simply stated, the students were asked to produce a one-minute film with a poignant message. Even though the students in these domains are not film students per se, they are part of a very visually inclined generation which loves to use technology, photographs or film, and to be photographed and filmed. In this SCL setting, the students were given *carte blanche* and the freedom to choose any theme they wanted. In addition, they were encouraged to use a variety of film

techniques. They could choose to use verbal or non-verbal communication or a combination of both. Deadlines were rapidly set for the scenario (which needed to be approved by the teacher in the second week) and dialogue submission (a few weeks later). The evaluation grid<sup>3</sup> and links to additional films (this should include many different styles from the first historical films, such as Charlie Chaplin style or modern day creations) were made available on Moodle with the course syllabus, so that students could find inspiration and be creative. Since the students were encouraged to meet often outside the classroom, to prepare, rehearse, and shoot their film, this project needed to be presented very early on in the semester.

During the semester, the teacher provided an introductory course on several communication and linguistic subjects, such as: verbal and non-verbal cues, intercultural communication, cultural *faux pas*, English language history, linguistics, and sociolinguistics, as well as dialects and the psychology of dialects. Many of the associated exercises involved the observation, analysis, and critique of oral presentation skills and particularly the role and impact of body language (in advertisements for example) and the importance of voice projection. This often led to self-reflection on ways to learn new strategies in order to improve these communication skills.

As we have seen, within the framework of SCL, students gain pragmatic knowledge whilst applying it to achieve specific goals and outcomes. When they are granted the authority and the freedom to create and make decisions during the creative process, they have the freedom to make decisions based on the various problem-solving stages. For this reason, the teacher only intervened during the initial film validation process and scenario approval early on in the semester. Then, two one-hour in-class workshops were scheduled (at Week 2 and Week 6) for the students to independently plan and work on the project, whilst solving and exchanging their ideas in their film groups. During these workshops, the teacher was available to guide the students in their research and review their communication strategies. The role of the teacher was to mediate and facilitate

---

3. Refer to [supplementary materials](#), Appendix 2 “Evaluation Criteria and Scoring for One-Minute Short Films”.

by only answering questions, if necessary. One of the most important points here is for the teacher to adopt a passive approach and avoid influencing or inhibiting the student's creativity flow.

The films were then sent to the teacher (via We Transfer) before Week 9, so that a film viewing workshop could be organised for Week 10. During this workshop, the students were able to view their films and analyse the techniques and messages, as well as the reactions of their classmates. The observation of this exercise was also a significant moment for the teacher in terms of research since the feedback was not only verbal but also non-verbal. It was clearly stated that the spoken critiques needed to be tactful, supportive, and of a creative nature. In their groups, the students were asked for written feedback. They had to decipher the main message and provide their honest feelings for the teacher to read. They were given the freedom to explicitly express their opinions, by writing down their thoughts, perhaps by sharing something they would not have said in open class discussion.

### **3. Results and discussion**

This study ultimately serves to determine if it is possible to adopt an innovative student-centred pedagogical approach that combines new technologies with teaching methods that stimulate student motivation, whilst encouraging the development of professional and metacognitive skills within the context of non-specialist English language students. At the same time, the study investigates the students' impressions on the pedagogical intervention through the use of a questionnaire<sup>4</sup>. This questionnaire was originally conceived and created by closely examining and decomposing the various stages and activities involved in preparing the final one-minute film task.

For the year 2016-2017, n=114 students out of a total of 123 students responded to the questionnaire online. A swift analysis of the responses reveals that the vast majority 78% (or 89 out of 114 students) strongly agreed or somewhat agreed

---

4. The survey (see [supplementary materials](#), Appendix 3: "One-Minute Film Project Questionnaire") was uploaded to Google Drive.

(37 of the 123 students or 33%) with the statement that all of the group members worked actively together on the scenario. The results were similar when asked about the realisation phase. A total of n=45 students (or 40%) strongly agreed that all of the group members worked actively together on the filmmaking process, whilst n=44 students (or 39%) somewhat agreed. The number of students who indicated that they strongly agreed and enjoyed working on a group project was n=48 (or 42%) and n=41 students (or 36%) somewhat agreed. A total of n=11 (or 9% of the) students expressed that they did not like working in groups for reasons related to scheduling problems, differences of opinions, and lack of motivation on behalf of some of the group members. However, at the same time n=64 students (or 56%) strongly agreed that working in groups (peer collaborative work) is an effective way to learn language/communication skills. Furthermore, in terms of metacognitive skills development, n=53 students (or 47%) strongly agreed that this project encourages creativity, critical thinking, and the development of collaboration skills, whilst n=46 students (or 41%) somewhat agree with this statement. When asked if this project is more challenging and interesting than the traditional oral presentation, the vast majority, n=65 students (or 57%), expressed that they strongly agree and n=30 students (or 26%) somewhat agreed. N=59 students (or 52%) strongly agreed that an active approach or learning by doing is the best method for learning, whilst n=34 (or 30%) somewhat agreed on this point. A very large majority, n=88 students (or 77%) strongly agreed that the One-Minute Film Project should become an annual contest open to all university students at the UFR SLHS, whilst only n=23 students (or 20%) disagreed. Concerning the recurrent themes chosen by the students, they were mainly based on topics which are central to the lives of undergraduates, for instance: peer pressure, alcoholism, homelessness, xenophobia, intercultural awareness, technology abuse, and harassment.

A preliminary analysis of the results has shown that this pedagogical intervention provides many beneficial outcomes associated with an SCL environment. The rationale behind choosing the film as the medium is that although role play lies at the heart of this project, the small groups of students must define and deconstruct the messages they are striving to communicate in their film. In this way, the students are placed at the centre of their learning whilst using a

medium that clearly appeals to them, as the survey results have shown. Whilst being empowered with the ability to create something that does not exist, they are fully in control of the steps and stages of the project. The teacher adopts a secondary role of consultant and simply accompanies them throughout the stages. In the end, all of the decision-making process is shared and negotiated by the team, which must consider and respect the various needs and demands of their individual team members. Problem-solving, for example, on topics such as how to shoot and edit a film on a smartphone requires a group effort and, in some cases, additional independent research. As challenging as it maybe, the teacher does not provide all of the answers to their questions and in this particular case, merely encourages the students to adopt a more curious or autonomous stance and actively search for tutorials online. The scenario, dialogue, spoken critiques, and written feedback all serve as evaluators and indicators of linguistic competency in terms of formative and summative assessment. All of the different collaborative stages encourage discussion, debate, and conversations, as well as proofreading to ensure that the grammatical errors and spelling mistakes are kept to a minimum. The ultimate objective of the approach is to encourage soft skills development and better equip students who must face competitive technophile candidates in a job market which has substantially been modified and transformed by artificial intelligence during the FIR.

#### **4. Conclusion and future directions**

It is our position that exploring this type of pedagogical approach which could be adapted to suit any language class (within an ESP context or not), will assist students in improving their soft skills and preparing for the job market in a highly competitive FIR. In addition, it could also serve as the basis of a future transversal study, which could include specialists in sociology and psychology to lead a more in depth analysis of the chosen themes, the intentions behind those themes, and the ways in which the students choose to construct and weave their message into their films. Furthermore, the integration of artificial intelligence use (in the form of robotics, for example) in the course syllabus at the higher education level could prove to be instructive and revealing for both

the students and the researching educator, thus contributing new insights for our field of study.

And finally, there is increasing interest in using this type of short film and photography as a form of expression since the European Commission (<https://europa.eu/euandme/en/yfc/>) has also announced a young filmmaker's competition entitled #EUandME. Perhaps the ultimate objective of this film project could be to submit a few of the best films to this type of competition, with the approval of the directors, authors, and actors, of course.

## Acknowledgements

I would like to thank all of the students who participated in this two-year study for their creativity, personal investment, and high level of motivation. These poignant films are a reflection of who you are, what you believe, and what is happening in your world. Even during this small-scale study, you have taken many risks and produced a lasting universal message in the form of film. You have successfully gone way beyond your words and actions.

## Supplementary materials

<https://research-publishing.box.com/s/ba0z0ihs0ihazy0xgr9mqk5sykt6qq3s>

## References

- Bloom, A. (1987). *The closing of the American mind: how higher education has failed democracy and impoverished the souls of today's students*. Simon & Schuster.
- Di Pardo Léon-Henri, D. (2015). CLIL in the business english classroom: from language learning to the development of professional communication and metacognitive skills. *ELTWorldOnline*, April, Special Issue on CLIL. [https://blog.nus.edu.sg/eltwo/files/2015/04/CLIL-in-the-Business-English-Classroom\\_editforpdf-2da6nlw.pdf](https://blog.nus.edu.sg/eltwo/files/2015/04/CLIL-in-the-Business-English-Classroom_editforpdf-2da6nlw.pdf)

- Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for specific purposes*. Cambridge University Press.
- ESU. (2015). *Overview on student-centred learning in higher education: research study*. European Students' Union. <https://www.esu-online.org/wp-content/uploads/2016/07/Overview-on-Student-Centred-Learning-in-Higher-Education-in-Europe.pdf>
- European Commission. (2013). *High level group on the modernisation of higher education. Report to the European Commission on improving the quality of teaching and learning in Europe's higher education institutions*. Publications Office of the European Union. <https://publications.europa.eu/en/publication-detail/-/publication/fbd4c2aa-aeb7-41ac-ab4c-a94feca9eb1f>
- Flavell, J. H. (1978, August). Metacognition. In E. Langer (Chair), *Current perspectives on awareness and cognitive processes*. Symposium presented at the meeting of the American Psychological Association, Toronto, Canada.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: a new area of cognitive developmental inquiry. *American Psychologist*, 34(10), 906-911. <https://doi.org/10.1037/0003-066x.34.10.906>
- Gray, A. (2016, Jan 19). The 10 skills you need to thrive in the fourth industrial revolution. *World Economic Forum*. <https://www.weforum.org/agenda/2016/01/the-10-skills-you-need-to-thrive-in-the-fourth-industrial-revolution/>
- Harikrishnan, G. (2015). *Colors* [Yatna Films, India]. <https://www.youtube.com/watch?v=D2MJh5Av16w>
- Jones, L. (2007). *The student-centred classroom*. Cambridge University Press.
- Mehisto, P., Marsh, D., & Frigols, M.-J. (2008). *Uncovering CLIL: content and language integrated learning in bilingual and multilingual education*. Macmillan Publishing.
- Naderi, F. (2016). *The Wall* [Sanandaj, Iran]. <http://www.torontourbanfilmfestival.com/films/wall-1>
- Schwab, K. (2016, Jan 14). The fourth industrial revolution: what it means, how to respond. *World Economic Forum*. <https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>
- Ur, P. (1991). *A course in language. Teaching: practice and theory*. Cambridge University Press.
- Widdowson, H. G. (1983). *Learning purpose and language use*. Oxford University Press.



Published by Research-publishing.net, a not-for-profit association  
Voillans, France, [info@research-publishing.net](mailto:info@research-publishing.net)

© 2019 by Editors (collective work)  
© 2019 by Authors (individual work)

**ESP teaching and teacher education: current theories and practices**  
**Edited by Salomi Papadima-Sophocleous, Elis Kakoulli Constantinou, and Christina Nicole Giannikas**

**Publication date:** 2019/06/22

**Rights:** the whole volume is published under the Attribution-NonCommercial-NoDerivatives International (CC BY-NC-ND) licence; **individual articles may have a different licence.** Under the CC BY-NC-ND licence, the volume is freely available online (<https://doi.org/10.14705/rpnet.2019.33.9782490057450>) for anybody to read, download, copy, and redistribute provided that the author(s), editorial team, and publisher are properly cited. Commercial use and derivative works are, however, not permitted.

**Disclaimer:** Research-publishing.net does not take any responsibility for the content of the pages written by the authors of this book. The authors have recognised that the work described was not published before, or that it was not under consideration for publication elsewhere. While the information in this book is believed to be true and accurate on the date of its going to press, neither the editorial team nor the publisher can accept any legal responsibility for any errors or omissions. The publisher makes no warranty, expressed or implied, with respect to the material contained herein. While Research-publishing.net is committed to publishing works of integrity, the words are the authors' alone.

**Trademark notice:** product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

**Copyrighted material:** every effort has been made by the editorial team to trace copyright holders and to obtain their permission for the use of copyrighted material in this book. In the event of errors or omissions, please notify the publisher of any corrections that will need to be incorporated in future editions of this book.

Typeset by Research-publishing.net  
Cover layout by © 2019 Raphaël Savina ([raphael@savina.net](mailto:raphael@savina.net))

ISBN13: 978-2-490057-45-0 (Ebook, PDF, colour)  
ISBN13: 978-2-490057-46-7 (Ebook, EPUB, colour)  
ISBN13: 978-2-490057-44-3 (Paperback - Print on demand, black and white)  
Print on demand technology is a high-quality, innovative and ecological printing method; with which the book is never 'out of stock' or 'out of print'.

British Library Cataloguing-in-Publication Data.  
A cataloguing record for this book is available from the British Library.

**Legal deposit, UK:** British Library.  
**Legal deposit, France:** Bibliothèque Nationale de France - Dépôt légal: juin 2019.

---