

TEACHING ENGLISH AS A CONTENT SUBJECT AT THE TERTIARY LEVEL

TE-CON3 FRAMEWORK.
GUIDELINES FOR TEACHING
ENGLISH AS MODULAR CONTENT



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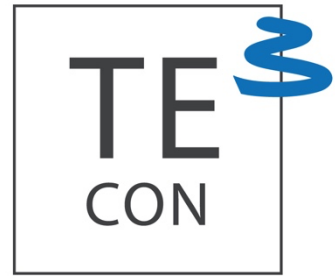


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Teaching English as a Content Subject at the Tertiary Level

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The TE-Con3 Framework

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Chapter 1

Rationale and justification of TE-Con3 Framework

Executive summary

In broad lines, the first chapter is meant to lay a solid foundation of the TE-Con 3 Framework and describe the basic premises that led to it, with four main objectives: 1. to provide general information on the TE-Con 3 project as and its aim of teaching through diversified academic subjects; 2. to present what has been achieved so far in terms of Intellectual Outputs (a comprehensive transnational overview of the current situation of the EHE professionals working in faculties or language centres from the participating countries); 3. to justify the necessity of the TE-Con3 Framework as a high-quality foreign language teaching model, based on the findings from the previous output, and 4. to render a brief outline of the framework by chapters.

1.1. About the TE-Con3 Project

In the current global village, tertiary education has to provide for top-quality language acquisition (knowledge and skills), with the purpose of offering the students the ability to contribute to the implementation of the social ideals promoted by the European Union. Aspects such as students' constant mobility, competitiveness of the global job markets, shaping and promoting of a pan-European economy and strengthening of geo-political cohesion demand that the graduates' chances of mastering a shared communication tool, a contemporary lingua franca, be increased. In order for English to remain a universal communicative and informative system, the teaching goals, techniques and didactic resources need to be submitted to a methodological review.

The TE-Con3 project¹ proposes content-based packages for English for Higher Education (EHE) instruction, prone to lead to the development of “education for citizenship”. Though the project is mainly concentrated on English language tuition, as a response to the most pressing communicative needs of united Europe, it is also applicable to other natural languages and competence levels. This is so because a foreign language is taught through a carefully selected sequence of content units, each reflecting a different academic domain and an appropriately adjusted lexical and grammatical inventory.

The model TE-Con3 project proposes teaching through diversified academic subjects, accessible to non-specialists and controlled for grammatical complexity. Its novelty resides in the fact that it differs from other approaches to foreign language provision, such as CLIL (Content-and-Language-Integrated Learning, whose content is limited to ONE academic subject), ESP (English for Specific Purposes, which mainly focuses on a specialised lexis from ONE academic domain), or EAP (English for Academic Purposes) and general English.

The TE-Con3 model maintains a triple focus on content/cognition, culture/communication and learning skills. The role of grammar in the model is determined (following M. Lewis) by the priority of grammaticalized lexis over lexicalised grammar. Content and language both carry equal weight for assessment purposes; content does not serve as an excuse for practising grammar patterns, it is a major factor contributing to the overall success rate of course participants.

The range of academic topics covered by the project consortium is in accordance with the STEAM paradigm, which constitutes an asset in a European marketplace and a factor promoting active European citizenship. There are five academic domains used in the project to develop sample lesson scenarios for the purpose of testing the model’s applicability, namely: architecture, art and media, automotive engineering, biomedical sciences and health communication, geography.

The fundamental objective of the Framework is to provide a high-quality foreign language teaching model, digitally enhanced with essential information, addressing the needs of all major stakeholders, which will be available as an open-

¹ The TE-Con3 partnership, funded by the Erasmus+ programme of the European Commission, comprises seven Partner Institutions from across Europe: University of Warsaw (Poland) – project coordinator, Tallin University (Estonia), Humboldt-Universität zu Berlin (Germany), Łukasiewicz Research Network – Institute for Sustainable Technologies (Poland), Warsaw University of Technology (Poland), University of Algarve (Portugal) and University of Pitesti (Romania).

access resource on a multimedia platform (MUL-TECON) designed for this project. It aims at teaching students to combine skills in different areas and to think ‘outside the box’ and will be liable to implementation both in distance and blended learning, which, in the light of the coronavirus pandemic, has become a major concern.

The technological component is represented by the use of multimedia and an online educational platform (with a friendly interface and a range of interactive tools) that ensures the increased availability of project materials, as well as adds to the appeal of the resources. Thereby, it positively impacts students' motivation and offers teachers ready-made tasks and methodological guidelines. The digital angle will also be reflected in the types and formats of tasks and activities: some of the tasks will be CALL-based (computer-assisted language learning) and draw on the insights from corpus linguistics (e.g. the use of concordancers to establish word patterns). The MUL-TECON platform will be monitored by the project partners for three years after the completion of the project and will be presented at conferences and seminars, so as to extend the project's lifetime, and reach broader audiences in European academic institutions.

1.2. Previous output

During the first phase of the TE-Con3 project, an extensive desk research has been conducted in order to develop a better understanding of the current situation of the state of English across European Higher Education institutions, specifically those of the partner countries (Estonia, Germany, Poland, Portugal and Romania). In addition, a survey has been developed and distributed online to in-service EHE teachers, which aimed to outline and identify existing teaching and learning practices, needs and wishes of faculty within the academic domain, and perspectives of online teaching and related resources. The results delivered as a result of the transnational desk research, together with the meaningful data collected through the EHE teacher survey, shaped a comprehensive transnational overview of the current situation of the EHE professionals working in faculties or language centres from the participating countries.

Relevant findings regarding English provisions at the tertiary level refer to language policies, pedagogy, labour market and linguistic status. Very importantly, the conclusions reached at by the partner countries reveal that plural language English

provisions mandate establishing national Language Policies within the corresponding national frameworks. Then, the 21st-century student is highly oriented towards the labour market, with expectations and career objectives on both national and international level.

The different EHE teaching and learning contexts examined in the participating countries have revealed both similarities and crucial differences in the European HE and in the way English is being taught within HEIs, starting with the fact that the degree of autonomy allotted to HEIs varies from country to country. Then, in the section devoted to needs and perspectives of EHE professionals, relevant data are provided regarding the participating teachers' degree of satisfaction with core factors in their daily activities, including a variety of resources, tools, training opportunities/staff development which may or may not be readily available to them. An overwhelming majority of the participants in the survey expressed teachers' need for continuous professional development, for further development and continuous improvement of didactic materials, but also for conceptual revision of English. In more specific terms, there is an overall need for pedagogical improvement highlighted in particular by the COVID-19 pandemic – English in HE must have clear objectives, methodologies, appropriate didactic materials, and transparent assessment criteria. This is all the more important since, in the current, post-pandemic world, the use of the Internet and online tools, platforms and applications (ZOOM, Teams, Skype) seems to remain a constant feature of the teaching/learning act, as many teachers are eager to continue using new technologies and try new, non-standard methods in their classrooms. However, teachers do state that there is a need for further support from the institutions for the implementation of the best possible use of these tools. In fact, there are additional aspects of the teaching in which responding teachers wish they could have further teacher training. These include, but are not limited to, specific training for online teaching, classroom management, motivational techniques.

Taking all the above into consideration, it can safely be stated that there is meaningful room for the work that TE-Con3 members intend to perform, in an attempt to contribute in a substantial manner to the pool of high-quality resources available to teachers at the tertiary level.

1.3. TE-Con3 Model - Justification

The objective of this section is to spell out the needs analysis for a content-driven approach resulting from the findings presented in the previous output of the TE-Con3 project. The development of the TE-Con3 model for EHE teaching is based on both theoretical and empirical needs analyses. Our literature review and the survey conducted among HE teachers of English highlighted good practices and areas in need of improvement, which in turn validate the scope and the aim of the TE-Con3 project: teaching tertiary-level English across different academic domains for active European citizenship, language and academic development, and social skills enhancement.

Findings in the published research under review and the teacher survey results powerfully endorse the basic premise for the justification of the TE-Con3 model. A significant number of EHE teachers consider that English tuition based on specialised content (e.g., pertaining to sociology, philosophy, economics, engineering etc.) could be more effective than other methodologies applicable at tertiary level. Since the survey addressed only to teachers, the students' opinions were not under research in the present project, but the literature in the domain argues that students' perspective is similar to teachers' belief that language can be taught effectively through content (cf. Schäfer 2016: 505). Students' interest and acceptance for English increase when, among other things, English-language educational materials are used consistently and the content taught is geared towards concrete communicative situations ("English for Specific Purposes").

Findings in the teacher survey and desk research prove ESP as an established and growing strand in English language teaching and learning (complement by and more vital than EAP), coexisting with General English and English as a Medium of Instruction. However, both our literature review on research and the TE-Con3 teacher survey indicate that teachers perceive a significant lack of consistent didactic concepts. Sing et al. (2014: 4) point out, for example, that teachers are often in need of teaching methods when it comes to teaching language through content.

An increasing interest in CLIL at tertiary level could be noticed in all partner countries, but it further has been highlighted that CLIL in German HE, for example, represents a potential trade-off between language acquisition and academic contents. CLIL-based teaching tends to significantly reduce the intended teaching content in favour of repetitive language elements and linguistic and cultural explanations (cf.

Schäfer 2016: 505). Given this circumstance, didactic concepts such as the TE-Con3 Model are in great demand that integrate quality content and domain-specific language for HE purposes. The survey applied in all partner countries revealed that the majority of respondents would clearly appreciate the development and better accessibility of didactic concepts, teaching methods, and didactic materials specifically designed for content-centred and subject-specific English tuition (e.g., ESP/CLIL).

It can certainly be argued that the proposed modular content-based packages for EHE instruction will very likely resonate positively as they are designed to facilitate the development of social and critical thinking skills, and education for citizenship. The range of academic topics covered in the TE-Con3 model reflects the STEAM paradigm, which can be argued to be an asset in the European labour market and a factor promoting not only employability but also active European citizenship. To the variety of academic domains adds the fact that the proposed teaching units deal with real-world problems that are addressed in modular units based on sequences such as problem-identification — problem understanding/analysis — creative solutions. The modules include authentic, collaborative, competence-oriented, and interactive activities/tasks that facilitate communication and collaboration between students and, therefore, provide ways for them to engage and actively discuss with each other. The TE-Con3 model, thus, is a teaching concept that fits the image of the learner as an active and self-responsible individual, which well aligns with teachers' perspectives on the aims of EHE as the findings from the survey show. A large majority of in-service teachers self-report that both language learning through social interaction and the development of the students' social and communicative skills are essential to their EHE classrooms. Most of the respondents (strongly) recognise the need for facilitating students' social skills and believe that EFLT is best carried out through communication and interaction with classmates. This is consistent with another finding in the survey which shows oral communication (speaking) to be one of the most important aspect in content-centred EHE teaching settings. As a great majority of teachers in the survey state to use authentic materials either often or all the time, it is very likely that the TE-Con3 material will be met with much interest as they enable students to communicate in an engaged, goal-oriented and collaborative way within the framework of authentic situations.

The lack of content-centred didactic resources also impacts on teacher's everyday workload. Much additional work for teachers originates in particular in the

procurement and adaptation of teaching materials, as it results both from the desk research (Schäfer 2016: 506), and from analysing the results of the survey. This is strongly echoed in the findings of the teacher survey since most of the respondents stated that they often or always design materials themselves or adjust existing materials for their language classes. Such additional preparatory workload would be reduced if didactic concepts and teaching materials as TE-Con3 were at their free disposal.

A large majority of teachers expressed their openness to hybrid teaching and the use of online tools. Respondents almost unanimously indicated that they plan to use internet tools beyond the COVID-19 pandemic. However, our research on online teaching in higher education shows that there is a lack of tools that specifically cater for EHE. TE-Con3 responds to this need insofar as its materials, both for teachers and students, are available as an open-access resource on the project's multimedia platform MUL-TECON. The digital angle of TE-Con3 is also reflected in the types of activities as some of the tasks are CALL-based (computer-assisted language learning) and draw on insights from corpus linguistics (e.g., the use of concordances to establish word patterns).

Taking all of this together, it can be confidently stated that the TE-Con3 model could help to fill a gap in the field of English tuition in European HE. It meets the converging needs as it fills the gap of (digitally enhanced) domain-specific course materials and supports teachers in their efforts to deliver quality content-driven language classes making effective and efficient use of available time and (financial) resources. We therefore very much hope that the TE-Con3 model and the affordances it offers European HE teachers will be an incentive for them to implement content-centred teaching (even more) in the future.

1.4. TE-Con3 Framework - Chapter outline

This framework consists of 4 chapters which are meant to represent, as a whole, a theoretical instrument to be used by teachers of English at tertiary level, the final objective being that of shaping the skills and competencies a 21st-century student needs in order to become a global citizen.

Each chapter in this framework has been designed with a specific purpose in mind, as rendered in what follows.

Chapter 1 contains introductory issues related to the TE-Con3 project as a whole and to the TE-Con3 Framework. As such, it consists of a short project description and of an overview of the results of the previous output which led to a justification of the innovative model this project proposes. Chapter 1 also comprises a succinct presentation of each of the ensuing chapters, for the users of the framework to quickly identify their points of interest.

Chapter 2 contains a comprehensive presentation of the TE-Con3 Model of teaching English and designing language teaching materials for students of higher education institutions, in a context where there is no other unified model of teaching English at the tertiary level, as revealed by desk and field research conducted for the previous intellectual output of the project. There are nine specific features this model proposes, to be listed in what follows: the model is multidisciplinary, content-driven, language sensitive, culture-oriented, glocal, academic, task-based, modular, performative and interactive. This original and innovative model is therefore meant to cover the shortage of comprehensive resources for teaching English at the tertiary level, as indicated by our research.

Chapter 3 includes the results of desk research concerning the theoretical underpinnings of the TE-Con3 Model, including its points of contact with other methodologies: Pluriliteracies, Bloom's (revised) Taxonomy, the Lexical Approach, CLIL, Systemic Functional Grammar and Multiliteracies, Byram's Intercultural Competence, Task-based Language Learning, Moran's Cultural Learning Model, Kumaravadivelu's Postmethod Pedagogy. All these methodologies are presented in such a manner that their relation to the specific features of the TE-Con3 Model is adequately highlighted and justified.

Chapter 4 aims at suggesting ways of translating the theory into cognitively and linguistically engaging learning material at the tertiary level, maintaining a triple focus on content/culture, language and learning skills. In this respect, it includes a pool of sample activities designed according to the TE-Con3 Model, drawn from a large range of academic domains which the present project is supposed to cover: architecture, art and media, automotive engineering, biomedical sciences and health communication, geography.

As such, the TE-Con3 Framework aims to become a resourceful material to be used in everyday practice by teachers in European Higher education institutions.

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Chapter 2

Outlining model foundations

Executive summary

The following paragraphs describe in extension the foundations of the TE-Con3 model of language teaching at the tertiary level. This summary addresses four basic questions:

WHO? Who is TE-Con3 for?

It is a model of teaching English and designing language teaching materials for students of higher education institutions (HEI, e.g., universities, colleges, etc.). It underlines the academic nature of language materials, responds to the demands of future job markets, both global – in terms of skills it is supposed to strengthen – and local – in terms of materials it is to include. The term “glocal” is used here to reflect this dual focus.

WHY? Why is TE-Con3 needed?

The aim of the TE-Con3 partnership is to develop a model of teaching academic English, dedicated to all college/university students across Europe, irrespective of their career choices and professed academic disciplines. As indicated by the preliminary TE-Con3 research carried out in partner countries, later confirmed by the TE-Con3 EHE teacher survey, there is no unified model of teaching English at the tertiary level. Such a model, intended for all European countries, should be flexible enough to allow for local flavour and varied academic interests but stable enough to incorporate common goals, objectives, methodologies and syllabus designs. As such, it should support local and global citizenship, promote active participation in local social life as well as a better understanding of the processes guiding social interactions and the place of language in building individual, national and supranational identities.

HOW? How to teach English through TE-Con3?

In our model, we want to focus on skill building by supplying the student with multiple content (3 or more domains) outside of the students’ expertise and increasingly complex in cognitive and linguistic terms. That way students acquire a plurilateral competence to deal with new, unexpected linguistic situations and contexts.

WHAT? What to teach through TE-Con3?

The model postulates introducing the students to three or more academic disciplines. Linguistic, cultural, and content issues are all addressed in equal measures.

The aim of the following document is to introduce the reader to the TE-Con3 framework, which provides a rationale for course design and classroom planning. The pronoun “we” refers to the members of the TECON3 Consortium, as explained in footnote 1, and is used instead of or alongside the passive construction to stress the collaborative nature of the Framework and the tentative character of the conclusions.

The Framework opens with an overview of nine TE-Con3 premises (points A-I in Chapter 2). These are essential to understand and apply the model in language education. The theoretical underpinnings are then discussed in Chapter 3. The theoretical background, cross-referenced to TE-Con3 premises, helps to connect the key principles of TE-Con3 and the body of primary sources that supports them. While not strictly necessary to appreciate the TE-CON3 principles, chapter 3 offers a broader perspective on how these principles came about and justifies them on methodological grounds.

Finally, chapter 4 provides *sample* TE-Con3 tasks (*fragments* of the TE-Con3 lesson scenarios available as a separate TE-Con3 resource (*cf. teacher guidelines*), cross-referenced to TE-Con3 premises and theoretical underpinnings – to help the reader get a better grasp of how theoretical assumptions feed the practice of FL teaching.

The addressees of this framework are in-service teachers, as well as course designers and teacher trainers, looking to incorporate innovative, cross-disciplinary ideas into their didactic resources. We also believe that the document will be of interest to researchers in the field of foreign language teaching methodology. Needless to say, tertiary-level students are also encouraged to take advantage of the TE-Con materials provided in the Framework for self-study purposes.

Every TE-Con3 lesson will have an accompanying set of notes and guidelines, providing course instructors with the necessary factual information about the relevant content and/or references to sources where such information can be easily and comprehensively obtained. Methodological guidelines will be made available in due course to help teachers implement TE-Con3 ideas in a variety of academic domains.

The review of the theoretical concepts underlying TE-Con3 will be presented below in an order suggested by the typology developed by Punya Mishra (2013). It comprises three interrelated domains to be addressed in 21st-century learning: **humanistic knowledge**, associated with values; **foundational knowledge**, associated, with specific content and tools

for its acquisition; and **meta knowledge**, associated with cognitive and social skills necessary to successfully engage in activities. These domains are illustrated below.

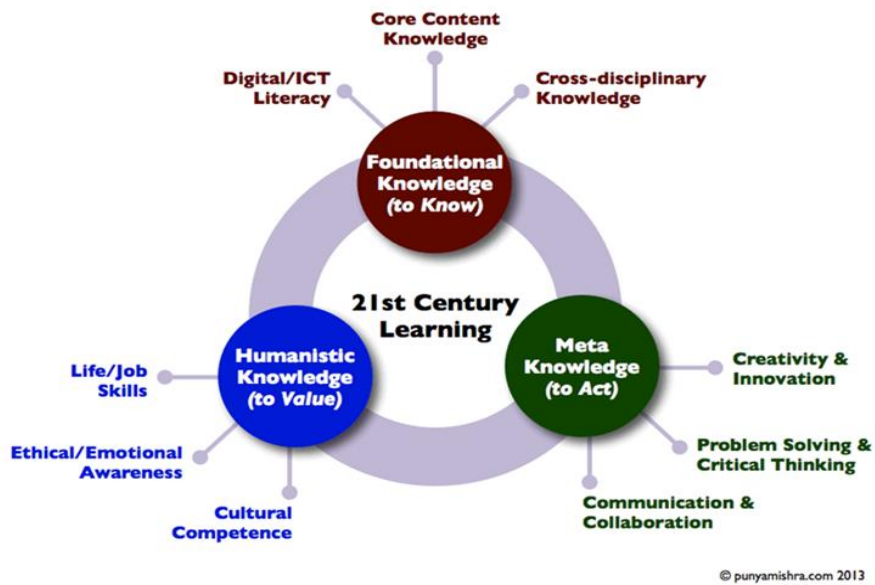


Figure 1. Typology of domains

The TE-Con3 premises are structured as follows:

	TO KNOW	TO VALUE	TO ACT
TE-Con3 is...	A. multidisciplinary	D. culture-oriented	G. task-based
	B. content-driven	E. glocal	H. modular
	C. language-sensitive	F. academic	I. interactive

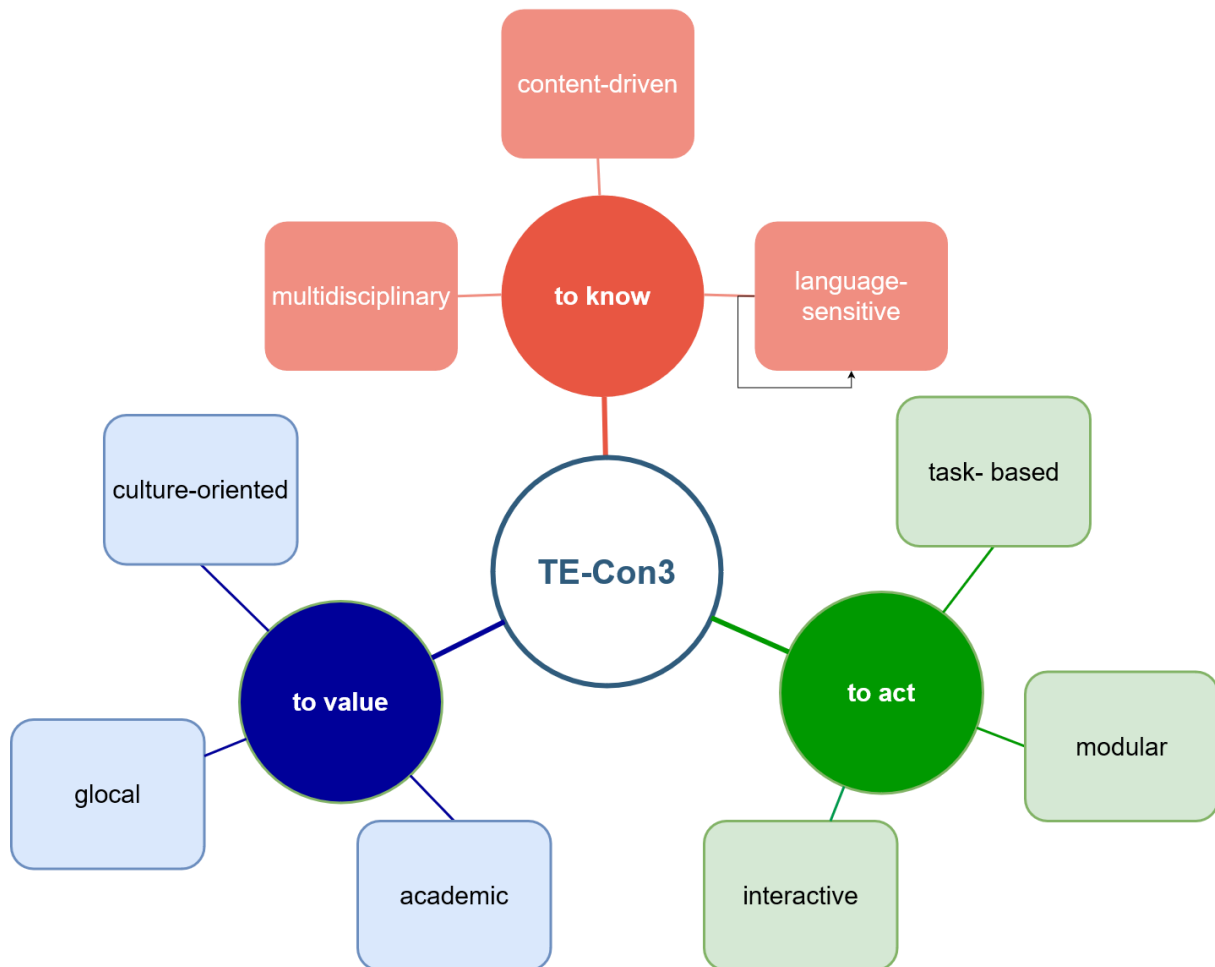


Figure 2. TE-Con3 premises

In respect of the knowledge dimension, TE-Con3 is **multidisciplinary (section A below)**, requiring course participants to come in contact with knowledge of several academic disciplines, giving them a chance to get acquainted with a range of different discourses and enriching their knowledge base, thus reflecting the increasingly unpredictable character of the present-day challenges and the need to constantly learn new knowledge components; **content-driven (B)**, i.e. oriented towards interaction with authentic content, representing true and honest knowledge of real-life situations, and **language-sensitive (C)**, i.e. promoting an awareness of what language consists of, how it can best be learnt and how it impacts our social functioning.

Moving on to humanistic knowledge (“to value”), TE-Con3 is **culture-oriented (D)** to inspire an interest in the cultures of target-language communities as well as to develop efficient negotiation skills; **glocal (E)**, i.e., proposing local solutions to global problems, **academic (F)**, i.e. targeted at tertiary level students wishing to play an

substantial role in the growingly internationalized and versatile academic and/or business world.

The humanistic approach to teaching strongly favours **task-based tuition (G)**, with rigid task-solving routines, where task completion provides a benchmark against which students' success is measured – thus preparing them to perform actively in the world of academia and beyond. **Interactive & performative (H)**, i.e., conscious of the fact that communication is a purposeful and social act. What follows, care should be taken to develop students' social skills, as well as to teach them how to use the language to perform concrete actions in a range of different social/cultural contexts. **Modular (I)**, i.e. TE-Con3 takes advantage of breaking teaching material into sets of separate content modules, which may be adjusted and replaced to reflect specific educational needs, as well as allow for greater autonomy and flexibility of the TE-Con3 users. These premises are discussed in detail in sections (A - I) in the remainder of this chapter.

As already mentioned, Chapter 3 discusses the theoretical underpinnings of the model. These will also be presented with reference to Mishra's tripartite typology, as indicated in table below.

TO KNOW	TO VALUE	TO ACT
Multiliteracies & Pluriliteracies (Revised) Bloom's Taxonomy Systemic Functional Linguistics	Intercultural Communication Patrick Moran's Language for Culture Michael Byram's Intercultural Citizenship Model	Lexical Approach Post-method Approach Task-based Learning

A) TE-Con3 is multi-disciplinary

TE-Con3 courses are intended to be multidisciplinary. It means that course participants are expected to work with content taken from several fields of reference. Their exact number may vary, as it is closely dependent on such organisational criteria as the duration (weeks per term) and intensity (hours per week) of the course and the availability of content experts, whose participation will be indispensable to ensure the

accuracy and relevance of the emerging materials. Still, to achieve the presumed objectives, we suggest that a semester-long TE-Con3 course draws upon no fewer than three academic areas in order to create complex, multilateral relationships, accompanied by a sufficiently broad range of tasks and activities. Given the diversity of contexts in which English is provided to tertiary students *three academic areas* can imply three distinct academic domains as much as three subfields of the same discipline.

The present project delivers teaching resources (addressing content, language, and culture) in five academic domains:

- 1) architecture,
- 2) arts and media,
- 3) automotive engineering,
- 4) biomedical sciences and health communication,
- 5) geography.

This particular selection embodies the STEAM paradigm (see, e.g., Khine and Areepattamannil, 2019, for an introduction to this concept), originally intended to encourage holistic treatment of science, technology, engineering, art and maths. TE-Con3 – because of its multidisciplinary character – supports integrated, multidisciplinary teaching, recently developed in the Pluriliteracies approach (cf. Chapter 3). Needless to say, the TE-Con3 teaching materials (cf. ready-made lesson scenarios in the five academic domains, available as a separate TE-Con3 resource) should serve as a *sample* selection – to be modified and adjusted by prospective teachers to their needs, as well as used as a template for creating new materials. Therefore, the five scenarios do not follow any particular order, nor do they presuppose any progression of content or language from one scenario to another.

In this context, it is important to stress that neither students nor teachers need to be experts in the addressed domains. Whenever appropriate, teachers will be provided with extensive notes and content commentaries. As for students, TE-Con3 encourages them to work with materials outside their area of present or future expertise (cf. New London Group, 1996; and Chapter 3 for a related discussion).

This ties up naturally with one of the model's major educational goals: to increase students' awareness and hone their skills in the use of English in diverse academic (and, possibly, non-academic) contexts (cf. Council Recommendation of 22 May 2018 on key competences for lifelong learning). At the same time, it is expected

that it deepens their understanding of domain-specific knowledge, proficiency in the use of associated skills, and awareness of socio-cultural norms. We believe that the diversity of academic interests in combination with a high level of competence in a contact language (cf. the concept of English as the lingua franca, see, e.g., Seidlhofer, 2005) promotes pan-European integration at the professional (job-related) as well as non-professional (i.e., personal, civic) levels. Such a belief is based on recent research pointing towards the necessity of a multidisciplinary offering, most notably the Pluriliteracies Approach (Meyer et al., 2015, see also chapter 3). We acknowledge the commonality of goals and are pleased to list Pluriliteracies as a major reference source for our project.

But the argument about going multi-disciplinary is not limited to the social and broadly epistemological consequences; in fact, it is directly connected to linguistic concerns. For one thing, in the most profound sense, the majority of human knowledge (and certainly the vast majority of academic knowledge) needs to be verbalised in order to be stored and transmitted. In a sense, it can be said that learning something at the tertiary level is tantamount to learning the language of that discipline. This point has been very accurately made by Neil Postman:

It cannot be said often enough that what we call a subject consists mostly, if not entirely, of its language. If you eliminate all the words of a subject, you have eliminated the subject. Biology is not plants and animals. It is language about plants and animals. History is not events. It is language describing and interpreting events. (1980, p. 35)

A matching observation can also be found in Cummins (1979; 1981), with reference to the iceberg metaphor and with the distinction between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). Therefore, exposure to a variety of professional discourse² types is expected to broaden the linguistic resources of TECON3 course participants, allowing them to fit new linguistic skills and knowledge in a broader, better-founded context, furthermore

² The term 'discourse' helps grasp the fact that in order for communication to occur, interlocutors need to share a certain amount of background knowledge and interest in getting together; furthermore, communication is effectively limited by these factors. Failure to recognise their foundational role may easily threaten communication, even if grammatical rules are apparently followed and lexical units used in accordance with their prescriptive meanings. Importantly, natural communication takes place inside discourses – they are not a special case, but the regular state of affairs. Consequently, a student willing to become proficient in a foreign language has to learn the discourses of that language. This argumentation is in line with systemic functional notions of register, see Chapter 3.

developing strategies for linguistic ‘interpolation’ (filling in the missing points based on extreme cases) and ‘extrapolation’ (working towards the extreme cases based on the progression observed between intermediate cases).

Multi-disciplinary orientation promotes a more holistic perception of an L2 text, allowing for a more unbiased assessment of the input. This trait – we believe – is worthy of promotion in all educational contexts.

B) TE-Con3 is content-driven

It is almost a truism these days that content is an all-important issue in language teaching. Even in inherently “integrated” or “balanced” approaches content is given priority (e.g. Lyster, 2007; Schmidt-Unterberger, 2018). This is a foundational premise of these models (c.f. Meyer and Coyle, 2017), otherwise they would not have come into existence. TE-Con3 subscribes to the idea that content considerations constitute the driving force behind present-day L2 methodologies (Marr and Mahmood, 2021; Crossman, 2018). Focus on content in TECON3 lessons does not presuppose a move away from systematic language tuition. It does require, however, that language issues be tailored to help with content comprehension and production: in order to successfully complete a communicative task, grammatical and lexical skills have to go hand in hand with content expertise (cf. point C below).

In other words, **language practice is also content practice**, in that “the learning of the disciplinary content *is* [emphasis added] the learning of the language of the discipline” (Kong and Hoare, 2011, p. 308). This echoes Lyster’s (2007) appeal for counter-balanced CLIL teaching, where he acknowledges the far-reaching potential of content-based approaches, yet stresses the need to focus on language, or else they might fall short of reaching their full potential (cf. also Dalton-Puffer, 2007, Tedick & Cammarata, 2012). It has been recently stressed that the same interdependence applies to higher education, whereby it remains difficult, if not impossible, to separate academic content from academic language (Marr & Mahmood, 2021; Schmidt-Unterberger, 2018).

Content-driven teaching is **discourse-based** – which naturally follows from the fact that it merges content *and* language competences. In other words, if the development of content literacy depends on the ability to use language to address and make sense of that content, (Meyer and Coyle 2017, p. 199), a mastery of individual lexical items is a necessary but insufficient condition for successful learning. Students

should be trained to recognize and apply a full range of cognitive discourse functions (e.g. describing, exploring, evaluating, reporting) (cf. Dalton-Puffer, 2016; Meyer and Coyle; see also point E below). In this way, they will be able to successfully “externalize cognitive processes” related to content knowledge (Dalton-Puffer, 2016, p. 32).

Content-driven teaching also **restricts or refines assessment options**. Given the importance of content, we would tentatively propose, as a rule of thumb, that a division of labour between successful task completion and linguistic criteria for assessment purposes be slightly skewed in favour of content (e.g. a 6:4 ratio), but course instructors need to work it out on their own, in keeping with course syllabi.

Content considerations are also a **primary indicator for syllabus design**, i.e., organisation of material, progression of difficulty, etc. and while, again, a lot depends on the specifics of a given higher education institution, some general guidelines may be discerned – such as a natural linguistic progression, content progression or circularity (see also section I below).

C) TE-Con3 is language-sensitive

Language issues for TE-Con3 purposes fall into two broad categories: lexis (vocabulary, including pronunciation guidelines, whenever relevant) and grammar (morpho-syntax).³

The two are seen as inseparably connected with the teaching of content: any task that has a specific grammar focus or a lexical focus should at the same time offer an opportunity to recycle important content data. In doing so, we draw on Michael Lewis’s Lexical Approach, Systemic Functional Linguistics (for details see Chapter 3).

For illustrative purposes, consider an example of a task focused on the formation of passive-voice sentences.

Based on a text on the causes and long-term effects of high blood pressure students are asked to put the verbs in brackets in their passive form.

Hypertension (cause) obstructive sleep apnoea.

Angina (cause) hypertension.

The reason we find the example objectionable (apart from the unimaginatively mechanistic pattern) is the role of content-specific vocabulary. The specialised

³ The functional aspects of language use (e.g. language functions: contrasting, hypothesizing, apologising, etc.) are covered in section D, as instances of cultural appropriacy.

terminology is but an excuse for a *cause* → *be caused by* transformation. No *a priori* understanding of the relation between angina, apnoea and hypertension is required to complete the task, indeed no knowledge of what these terms mean is relevant, as all examples follow the same pattern. In contrast, content-driven grammar exercises make the ultimate success (task completion) dependent on the simultaneous appreciation of both content entanglements and grammatical signals.

With reference to the simplified example above it would mean leaving the students with a **grammatical** choice to use active **or** passive constructions, as determined by **factual information**.

Make true sentences, by modifying the verbs in brackets in any way you believe necessary.

Hypertension (cause) obstructive sleep apnoea.

Hypertension (cause) angina.

For good measure, we might throw in sentences like (1) below, where both passive and active versions are admissible, under different circumstances, which may open up an interesting content-related discussion sparked off by a grammar trigger.

(1) *Hypertension (cause) kidney disease.*

Despite the simplistic nature of the example itself, the underlying message should ring clear – grammar choices are codetermined by content, practising grammar means practising content. Incidentally, please note that in this way, content gets an extra round of practice, as it is an inherent part of a “grammar task”.

Helping students realize how grammar and content interrelate is a way of implementing in actual teaching an important insight from the early writings of Michael Lewis, the creator of the Lexical Approach: language is not lexicalised grammar, language is grammaticalised lexis. This is in turn reminiscent of Do Coyle’s language triptych (3A’s: the language OF learning, the language FOR learning and the language THROUGH learning. (cf. Chapter 3, [section 3.6](#))

Aside from lexis and grammar, TE-Con3 also focuses on language pragmatics – seeing language as a structurally organised device for carrying out social tasks, the latter function captured in the systemic functional linguistics view language (for details see chapter 3, section...)

D) TE-Con3 is culture-oriented

Looking for a way to capture the role of culture in TE-Con3, let us start with two observations:

- a) content and language are inseparable (cf. section B above),
- b) language and culture are inseparable, cf. the term languaculture (cf. Chapter 3, p. 45).

To support further the link between the three categories, consider a recent definition of culture from Kovacs 2017, also The New Encyclopaedia Britannica, p. 784:

Culture is the integrated pattern of human knowledge, belief and behaviour. Culture thus defined consists of language, ideas, beliefs, customs, taboos, codes, institutions, tools, techniques, works of art, rituals, ceremonies, and other related components; and the development of culture depends upon man's capacity to learn and to transmit knowledge to succeeding generations.

This definition legitimizes the assumption that content (say our expertise in the field of biology) is a manifestation of culture. Consequently, TE-Con3 or any dual-focus approach (e.g. CLIL) turns into a single-focus approach, an exploration of languaculture, where content, language and culture merge into a huge body of data that needs to be addressed in a course, but not necessarily fully decomposed.

The teaching of cultural elements has a well-established place in any L2 pedagogy (Kramersch, 1995; Risager, 2007, 2018, 2021). TE-Con3 task design draws inspiration from a specific model, though the idea is well grounded in the theory of language teaching (e.g., cf. Kumaravadivelu, 2006) proposed by Patrick Moran (2006). His model is presented graphically below.

Figure 2.4: The Experiential Learning Cycle

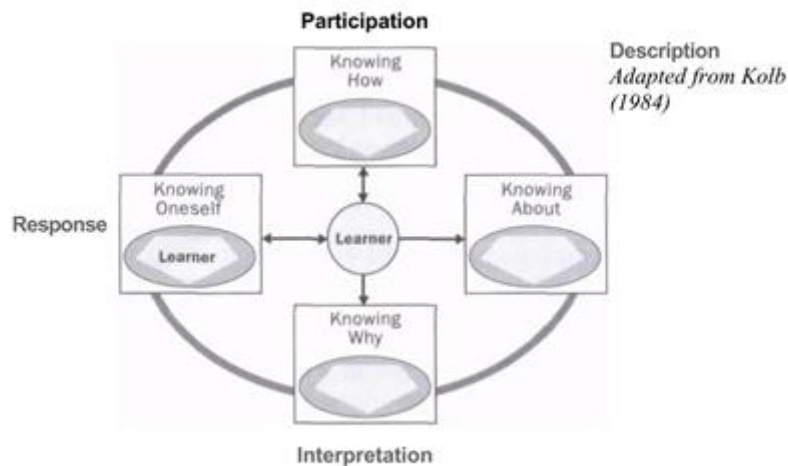


Figure 3: The Experiential Learning Cycle (Moran, 2001, p. 19)

This modular approach to culture learning allows model of culture learning allows for a natural and methodologically desirable recycling (= reiteration and expansion) of information at four stages within a task: description (knowing about), participation (knowing how), interpretation (knowing why) and response (knowing oneself). Incremental advances in knowledge, linguistic patterns and social skills reflected in this model closely correspond to what Byram calls tertiary socialisation – a process of acquiring a new competence to deal with a foreign culture in a multicultural environment (Byram 2008).

There are valid arguments supporting the claim that language is so closely related to social activities that it virtually cannot be conceived without reference to them (Halliday, 1978; Halliday and Mathiessen, 2014; see Chapter 3 for a more detailed description). This means that social activities in fact shape language; consequently, it is impossible to truly master a language without getting to know the specific activities which it helps its users to achieve. For this reason, it is crucial to provide students with authentic materials⁴, reflecting precisely the ways in which any language is used in professional discourse to complete specific tasks. Additionally, when exploring various

⁴ By 'authentic materials' we mean, first and foremost, materials created by language users in real-life contexts to achieve some goals (this corresponds closely to the systemic functional notion of 'text'). An opposing notion would be materials prepared especially for the purpose of language learning. Importantly, we do not discard materials created by non-native speakers of English. This is because in reality English is often used as a *lingua franca*, inside the European Union as well as outside it. It will, however, be ensured that the language of the teaching resources enables effective exchange of ideas, according to the accepted academic standards.

jargons and discourses, students will likely be confronted with a range of naturally appearing supplementary materials, such as visual aids, audio - and video-recordings, etc.; their use in recent years has grown significantly (driven, among other things, by the increase of the use of graphic interfaces and the simplification of the designing technologies; cf. Kress, 2003).

E) TE-Con3 is glocal

As mentioned in point D above, language teaching at the university level is part of a broader process of tertiary socialisation of the academic community (Byram, 2008

tertiary education + language = tertiary socialisation

Tertiary socialisation is used here to emphasise the ways in which learning a foreign language can take learners beyond their cultural comfort zone and allows them to experience otherness, or other cultural beliefs, values and behaviours. It is in line with the principle of subsidiarity, which stipulate that powers be exercised as close to the citizen as possible (Article 5(3) Of Treaty on European Union). Pairing the idea that the solutions and resources should be as close to the student and as scalable as possible leads us to the following conclusions:

1. We should provide students with skills scalable to various situations that will support critical thinking.
2. In practice, learning cycles allow for all levels of content to be paired with all levels of cognitive challenge, thus enabling teachers to adjust course content to the needs, expectations and preferences of students and other stakeholders.

Tertiary socialisation implies intercultural communication. TE-Con provision is multidisciplinary and unfettered by country boundaries. It offers a possibility to experience other cultures, discourses and points of view.

This is ensured by the cyclical character of the course, which allows students to experience all levels of form-content difficulty and complexity (cf. Cummins's framework for evaluating language demand in content activities). Choosing between easy and "difficult" content (i.e. cognitively demanding/undemanding) on the one hand and "easy" and difficult language, on the other hand, both in term of lexical choices and availability of context (context-embedded vs. context reduced) illustrates our approach to glocality. Teaching materials will illustrate general, domain-level generalisations (applicable globally) with reference to familiar (local) context, important for a particular group of students.

F) TE-Con3 is academic

The TE-Con3 model is a response to recent changes in the L2 learning-and-teaching scene, specifically in the academic setting. This academic focus is significant: quality language provision (knowledge and skills) for university students is a *sine qua non* for the implementation of social ideals, espoused by the European Union and indispensable in the global village. Student mobility, competitive job markets, development of pan-European economy and geo-political cohesion all require that university graduates be offered every possible chance to master a shared communication tool. As Archila & Truscott de Mejía (2017, p. 2) note: “English is *the* global language of science, in written as well as oral communication.”

What follows is that the teaching goals, techniques and didactic resources intended for tertiary education need to undergo a methodological overhaul. What may already be observed in this regard is the gradual shift toward content-based teaching in higher, reflected in the growing popularity of *English-medium Instruction* (EMI) or *Integrating Content and Language in Higher Education* (ICLHE) programs. The TE-Con3 Framework recognizes the importance of the ongoing socio-linguistic process, whereby English is gradually losing its “subject *itself* [emphasis added]” status and adopting the “vehicular function,” becoming a “tool to communicate subject *matter* [emphasis added]” (Järvinen, 2008, p. 78. Consequently, the content-language integration, much as it is needed, should also be – as already highlighted in point C above – *content-driven*.

Given the above, we believe that our offer is much more than a fancy name for an old concept, with mere reshuffling of key tenets. It is a teaching model in its own right, intended for tertiary education, and perceiving English as a vehicle of international communication, information exchange and dissemination of academic knowledge. It addresses some of the most pressing concerns identified in the Higher Education sector (see the discussion above), as well as the EHE teachers concerns revealed by the Teacher Survey, which constituted an essential part of the EHE Report and is referred to in Section A of the current Framework.

As already stressed, in a TE-Con3-based course a foreign language is taught through a carefully selected sequence of *content* units, each reflecting a different academic domain and an appropriately adjusted lexico-grammatical inventory. In this sense it is unlike any other approach to foreign language provision predominant on the

European educational scene. In a CLIL (Content-and-Language-Integrated Learning) course content is limited to ONE academic subject. In a similar vein, ESP (English for Specific Purposes) tuition, along with most other bespoke FL (Foreign Language) courses, gives as much focus as possible to a specialised lexis from ONE academic domain, EAP (English for Academic Purposes) is genre-specific without a domain focus, while general English courses by definition lack a specific academic angle, as they are skill-oriented. The TE-Con3-based course, on the other hand, teaches language register, genre and lexico-grammar, drawing upon a *range* of different academic disciplines – thus equipping higher education graduates with a variety of discourses (cf. point C above) in order to become global citizens of 21st century Europe.

G) TE-Con3 is task-based

Tasks are understood broadly to include pair work, group work and project work. For the purposes of this presentation let us adopt a user-friendly definition of a task from Lee 2000:

“A task is (1) a classroom activity or exercise that has (a) an objective attainable only by the interaction among participants, (b) a mechanism for structuring and sequencing interaction, and (c) a focus on meaning exchange; (2) a language learning endeavour that requires learners to comprehend, manipulate, and/or produce the target language as they perform some set of workplans.” (Lee 2000:32)

Tasks are by their very nature group endeavours. It is important to keep in mind that at some point the students will be required to pool the results of their work together. The teacher is responsible for providing the relevant language frames that enable successful and culturally appropriate interaction among task participants. These ‘language frames’, similar to the concept of ‘scaffolding’ in CLIL, encompass all sorts of aids which are provided to the student to allow them to achieve linguistic performance which otherwise would not be attainable. What is important, given TE-Con3’s acknowledgement of the social and content-based nature of language, the language frames can include such diverse instances as overt explanations, hints, adjusted text fragments, accompanying multimodal materials, etc. Furthermore, they can target lexis, grammar, pragmatic functions or social considerations important for the attainment of a valid interpretation of language.

Learning is paced in terms of tasks, where task completion is the overriding criterion for measuring the success rate and assessing students' performance. Care must be taken to diversify the goals that students are asked and expected to achieve. In keeping with the multiple objectives of the TE-Con3 model, getting something done in a structured way, language – or culture-wise, also constitute viable goals of a lesson. The cognitive range of expected content-related task outcomes is based on Bloom's modified taxonomy pyramid (see Krathwohl and Anderson, Churches...). This relates to the dynamics of group work, diversified social roles, the use of functional language adequately to task and respecting interlocutors' integrity, working effectively in a cross-cultural environment, etc. (cf. Byram's distinction between linguistic and cultural education for *Bildung and citizenship* and the accompanying concept of a student as an *acteur social* and as a *gebildeter Mensch*). Therefore, techniques such as parallel (=collaborative) writing will be encouraged (with a diversification of roles performed by students, reflecting their interests, skills, linguistic sophistication, etc.); more examples can be found in Chapter 4, which presents sample tasks with additional explanations.

H) TE-Con3 is performative and interactive

The TE-Con3 modules promote the development of learners' **performative** and **interactive** skills as they become engaged in real-world problems and project-like activities. The process in which the students deal with and work on tasks is characterised by performativity and interaction. Performativity can be understood in the first instance as the learners' active and cognitive engagement in problem-solving tasks. Performativity also refers to rendering and exploring meaning in different modes of (symbolic) expression and textual genres. Such a view follows a constructivist notion that knowledge and understanding of any subject content, for example, are tested for viability through articulation and interaction (see Chapter 3, sections 3.2 [Pluriliteracies Approach](#) and 3.1 [Pedagogy of Multiliteracies and Systemic Functional Grammar](#)). In TE-Con3, learners are encouraged to engage in meaning making that goes beyond the exclusively linguistic (or verbal) and to also perform communicative acts through other modes available to them (e.g. visual, bodily, gestural, spacial) in order to create meaning, or put simply: by showing what they know using all their linguistic and non-linguistic resources (Jewitt, 2009).

Articulating thoughts to mediate meaning also serves a social purpose in partner, group, or whole-class work, in that group members can follow each other's

thoughts, are able to refine ideas together, and can come to a new or deeper understanding of the concept at hand (Swain et al. 2015). Language, thus, fulfils its role as a semiotic tool that facilitates and promotes creative thinking and encourages learners to build upon each other's contributions and, therefore, to participate in a co-construction of knowledge and meaning-making (Piccardo & North, 2019: 76-77). This, at the same time, highlights that learners' knowledge is elaborated and expanded as a result of social interaction. Learning, as put forward in socio-constructivist thinking, is embedded in social interaction and social-cultural perspectives of learning (e.g., Vygotsky, 1981; Lantolf and Poehner 2011) and can, therefore, be seen as a process of knowledge generation where meaning is actively constructed and may be modified in the light of new experiences and knowledge (Farrell & Jacobs, 2010: 60). Learners, thus, can construct their own meaning from interaction with peers, teachers, as well as texts, problems, materials, and other features of the learning environment (Powell and Caseau, 2004: 8). Interactive learning includes 'traditional' set-ups such as collaborative tasks, role plays and group projects as well as online modalities for ICT-mediated learning. One more key-aspect of interactive learning – as opposed to one-way instruction aiming for simple knowledge reproduction – is that it encourages students' critical thinking and their desire for discovery and agency. Learning products, which are cumulative and culminating events resulting from engagement with complex real-life tasks, play a key role in helping learners to make their learning visible. Hence, learning outcomes can also be performed in the form of communicative events, e.g. in the context of a panel discussion, a play, etc.

I) TE-Con3 is modular

A foreign language at each level of attainment (B1 through C2) is taught through a sequence of content modules, reflecting a range of different academic domains.

Each module contains a number of teaching units, based on one general academic topic and arranged according to *content requirements* (easier content preceding more demanding content), *lexical density* (increasing relative percentage of technical, non-transparent vocabulary, indispensable for comprehension purposes) and *lexico-grammatical inventory* (increasing system complexity). If a conflict between the criteria arises, we suggest that content considerations should prevail.

Two types of relations are stipulated to exist between modules:

- progression from an M1 (=module 1) to an M2 (=module 2) in terms of lexis and grammar, with a recommended (and inevitable) degree of overlap between the modules
- progression from an M1 (=module 1) to an M2 (=module 2), determined by content demands, e.g., cognitive complexity, in case lexical and grammatical resources remain comparable

Modularity also entails a degree of repetitiveness (circularity) in task design, for example problem-solving class assignments will include an identification stage, a solution-seeking stage and a final presentation of ideas, with due focus, whenever appropriate, on lexical, grammatical and socio-cultural issues. At the same time the modular, segmental structure of TE-Con3-based language provision allows for more flexibility, adjusting, replacing individual modules to reflect the current needs and preferences of all stakeholders.

In more general terms, modularity entails broad coverage of a whole range of academic domains, with opportunities for learners to dig deeper into a problem, according to their own interests and needs (cf. chapter 3 for the concept of autonomy in the Post-method Approach,). That approach helps our students to keep abreast of important developments at the local or global scenes and to foster their inquisitiveness, thus giving substance to the English-for-citizenship tenet of the European language policy. The variety of teaching materials (see discussion in point G above and Chapter 4 below for illustration) reflects the rich and unpredictable character of every-day information exchanges, news feeds, and cross-disciplinary academic discourse.

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Chapter 3

Theoretical underpinnings of the TE-Con3 Framework

Executive summary

Chapter 3 discusses the scientific underpinnings the TE-Con3 Framework is based on. Cross-referenced to TE-Con3 premises, the theoretical background helps to connect the key principles of TE-Con3 with the body of primary sources that supports them. Overall, Chapter 3 offers a broader perspective on how these key principles of TE-Con3 came about and justifies them on methodological grounds.

For the sake of consistency, the theoretical underpinnings will follow Mishra's tripartite typology, as detailed in Chapter 2 and indicated in the table below:

TO KNOW	TO VALUE	TO ACT
Multiliteracies & Pluriliteracies	Intercultural Communication	Lexical Approach
(Revised) Bloom's Taxonomy	Patrick Moran's Language for Culture	Post-method Approach
Systemic Functional Linguistics	Michael Byram's Intercultural Citizenship Model	Task-based Learning

3.1. Pedagogy of Multiliteracies and Systemic Functional Grammar

Systemic Functional Grammar (henceforth, SFG, sometimes also called Systemic Functional Linguistics – SFL) originates from the works of M.A.K. Halliday, a British-Australian scholar who put forward a complex theory of language (most recently made available in 2013 as *Halliday's Introduction to Functional Grammar*, co-authored by C.M.I.M. Mathiessen); importantly, these views are embedded in a broader semiotic context, which was set out comprehensively in a 1978 collection of papers entitled *Language as social semiotic*. An extensive body of publications by Halliday, collaborators and other scholars working independently also has seen the light of day since the theory got established (Eggs, 2004; Halliday and Webster, 2009; Fontaine, 2013; Thompson, 2013, to name just a few). While the original works addressed mainly the native speaker context, some efforts have been made to apply this argumentation to foreign language pedagogy (e.g. Schleppegrell and O'Hallaron, 2011; Schleppegrell, 2016). There have also been successful attempts at applying the systemic functional paradigm to address issues of multi-modality (e.g. Kress and Van

Leeuwen, 1996; Martinec and Salway, 2005; Royce, 2007). Given the growing awareness of the importance of other semiotic modes in language pedagogy as well as social issues becoming more pressing in a growing number of Western countries, a revision of the views of M.A.K. Halliday seems worthwhile and promising.

To begin with, SFG sees language as a structurally organised device which is used for the completion of social tasks; in simpler words, it allows people to run their affairs without resorting to physical means all the time. Consequently, to offer a valid account of language, one cannot abstract from the specific social context in which it gets instantiated; adopting this particular focus, it differs from the theories and paradigms which aim at modelling the speaker's internalised knowledge. Reflecting this choice is the adoption of 'text' as the key unit of analysis; text is defined as language put to use, without any limitation as to the length, spelling or clause structure. The SFG take on language is conceptualised through three metafunctions:

- 1) representational, i.e. the capacity of language to refer to language-external and internal entities; from the recipient's side, it corresponds to the field of discourse (the context as delimiting the range of possible things to refer to);
- 2) interpersonal, i.e. the capacity of language to instantiate a social exchange between society members; from the recipient's side, it corresponds to the tenor of discourse (the context as delimiting the range of possible social criteria to reflect in communication);
- 3) textual, i.e. the capacity of language to carry meanings through its spatial/temporal organisation; from the recipient's side, it corresponds to the mode of discourse (the context as delimiting the range of possible means of expression in the given physical circumstances).

These three metafunctions offer a comprehensive framework to investigate language. The original formulation of SFG featured also a very detailed account of the properties of English grammar realising these metafunctions. Inspiring as this description is, it also contains some problems (see, e.g. Bache's 2008 critical appraisal of the SFG account of the English tense system); this level of complexity is also irrelevant to the immediate TE-Con3 needs, so it is not further discussed here.

In the context of the TE-Con3 effort, it should be stressed that this conceptualisation restores the link between language and content – indeed, there can be very little language, when removed from the context in which it gets instantiated; or, to put it more strongly, the SFG view exposes the artificiality of those pedagogical

materials which abstract from authentic communicative needs of the involved society in the given material conditions. The three metafunctions inspire the formulations of the TE-Con3 principles:

- representational metafunction → **TE-Con3 is content-based,**
- interpersonal metafunction → **TE-Con3 is culture-embedded,**
- textual metafunction → **TE-Con3 is language-sensitive.**

As indicated above, the SFG approach has been successfully applied to visual communication (Kress and Van Leeuwen, 1996; see also Kress, 2003 as an independent, yet clearly related, piece of argumentation); apparently, the same three metafunctions can be meaningfully traced in visual messages as well. This offers substantiation to the claim about there being some universals guiding both linguistic and non-linguistic communication; given the obvious increase in the amount of multi-modal content used nowadays, this should not be ignored in the L2 pedagogy context. If graduates are to use English in real-life situations, they will, most likely, be using it in multi-modal contexts as well.

Now, with a sound linguistically proclaimed reason to investigate the dynamics of the society speaking the target language, let us briefly recapitulate on the diagnosis presented by the New London Group (1996). This group comprised experts from various fields who undertook the task of re-conceptualising the linguistic aspect of education to ensure that future graduates are as fully prepared for the future challenges as possible. In their seminal manifesto *A Pedagogy of Multiliteracies: Designing Social Futures*, they identified a few factors which they saw as crucial to the understanding of the evolution of social life together with the language in which it is getting expressed and by which it is being driven. Reporting on their work here is useful for a couple of reasons: a) it refers to the English language, which is the explicit goal of tuition in the present project; b) it refers to the social dimension, which – given the tendencies to globalize activities and unify experiences (also taken into consideration in the present project) – is likely to apply to students/graduates/future global citizens as well.

The argument proposed by the New London Group was ordered in three main fields:

1. professional life,
2. civic life and,
3. private life.

When it comes to jobs (1), the main change currently taking place – according to the authors – is the transition from a stable, life-long employment at a position in a fixed hierarchy and with a strictly defined set of responsibilities to be mastered slowly in one’s lifetime to a job of decreasing stability and increasing complexity, requiring ever more flexibility, ability to learn quickly and move across many specialisation fields, to communicate in more vague hierarchies and using a variety of tools requiring mastery of other semiotic modes (e.g. computer interfaces, which are vastly graphic). In the field of civic life (2), the New London Group experts noted a shift from a homogeneous, national identity, reinforced by the state and tested via loyalty to the state, to an array of lower-level identities, such as subcultural, ethnic, religious, hobby-related, etc. Individuals, much more than ever before, are themselves responsible for deciding who they are – which requires them to be able to use a growing number of sources – and for managing their affairs in cooperation with those who have defined themselves otherwise – which requires greater negotiation skills. Perhaps failure in this respect can be seen in the increasingly tense political conflicts raging in many European countries. In terms of private life (3), the change entails the invasion of the private space with discourse of expertise, ranging from scientists dictating ways to optimize country politics and everyday affairs to breakfast televisions sharing curious facts and pieces of advice on all matters, including most intimate ones. While there are clear advantages to experts being involved in social decision-making, one potential drawback is the loss of agency by laymen, whose personal choices are increasingly put under the pressure of expert judgements with their objective efficiency criteria.

Clearly, the argumentation of the New London Group is concerned with language as the vehicle and driver of these changes, as it is language which expresses the various know-hows of different professional contexts (1 above), it is language which marks identity differences and allows individuals to overcome them in processes of cultural negotiation and mediation (2 above), and it is language which allows them to acquire knowledges of new fields to defend their autonomy against the expansive discourse of expertise (3 above). Once again, these formulations stress how important it is to get away from the understanding of language as vocabulary items filling in slots in grammatical structures, perhaps especially in the L2 context, where such simplistic views constituted the norm for a long time (if only for practical reasons). This argumentation supports the TE-Con3 guiding principles: **TE-Con3 is academic** and **TE-Con3 is glocal**.

Having recognised this need, the New London Group outlined another framework to conceptualise the resources they would like future graduates to possess. They operated with the following terms:

- available designs,
- the designing, and
- the redesigned.

One thing which is clear from the start is that language is treated here as one of many semiotic resources a society member has at their disposal. In the course of education, available designs are acquired, i.e. students are familiarised with successful past usage of linguistic (and other communicative) resources. The designing involves the adjustment of items from the pool of available resources to new contexts at hand. As a consequence of another communicative event, the speaker's repertoire of designs gets enriched by the information about another use of an adjusted pattern – this constitutes the redesigned. Clearly, in this view language-learning is a continuous process, without a fixed end. Moreover, the 'meaning' of a word is also subject to change – both in time and across individuals, as each of them knows and shapes a different history of usage of the given item. This slightly unsettling proposition seems to agree well with the present communicative context, however, as we are clearly witnessing both very rapid shifts of meaning of lexical items and increasing idiosyncrasy of speech (in individuals, in professional/social/sub-cultural groups, etc.), requiring better negotiation skills. From this argument, we derive another TE-Con3 principle: **TE-Con3 is multidisciplinary**, because we believe that by exposing students to an array of domain-specific discourses, we can arouse their interest in various fields and encourage them to join them and live them – which is the only way to actually acquire a competence in the semiotic resources characteristic of that domain, including the English language.

Summary and relation to TE-Con3

Summarising the key points in the arguments founded in the SFG paradigm as well as the Multiliteracies approach, we would like to note the following:

1) mastering the necessary vocabulary items and grammatical structures offers the 'skeleton' of communication and it is indispensable that students master these to be able to understand how they refer to the reality around them; grammatical knowledge can be useful to help adjust previously learnt resources to new contexts;

2) as language is always instantiated among humans, it is equally indispensable that students perceive the social relationships behind linguistic acts and are ready to consciously enter them (e.g. by meeting the politeness requirements) or challenge them (e.g. by identifying oppressive language); it is also important that students have means and strategies to operate in a world of not-exactly-fixed (e.g. heavily context-dependent: irony, parody) meanings;

3) furthermore, as language always has to get physically instantiated, students should have a variety of strategies at their disposal to ensure that their message gets across in different circumstances (e.g. public speech, private conversation, official letter, forum comment); it is especially important that they can use contemporary multi-modal communications, which use a variety of other semiotic modes in addition to language (some of them more transparent than others, e.g. memes, social media posts); importantly, it normally forms a part of the social competence to know which forms are considered typical or neutral for the given physical circumstances.

The argumentation offered by Systemic Functional Grammar and the Multiliteracies approach directly supports the formulation of the following principles of TE-Con3:

- TE-Con3 is multidisciplinary
- TE-Con3 is content-based
- TE-Con3 is culture-embedded
- TE-Con3 is language-sensitive
- TE-Con3 is academic
- TE-Con3 is glocal.

3.2 The Pluriliteracies approach

Pluriliteracies teaching focuses on developing what is called 21st century skills. It aims to engage students in meaningful classroom activities modelled on real-world problems that require learners to build linguistic and other symbolic skills needed for effective and independent interaction in domain-specific contexts (cf. premise “[Performative/Interactive](#)”). Based on various strands of linguistic and semiotic thinking and a sociocultural understanding of learning, the pluriliteracies approach follows the cultural-turn in the humanities in general and in linguistics and educational psychology in particular. It has gained wider recognition in the wake of the *Language of Schooling* initiative by the Council of Europe (Beacco et al. 2015).

The pluriliteracies approach has met with wide-spread acceptance in various fields of language education. Meanwhile, it has become part of contemporary thinking about the conceptualisation of Content and Language Integrated Learning (CLIL). The Graz Group in particular, a collaboration of researchers in a project funded by the European Centre for Modern Languages in Graz, Austria⁵, propose a holistic and inclusive approach to CLIL classroom pedagogy based on the notion of pluriliteracies (The Graz Group 2015). Literacy, in a broad sense, can be defined as control of ‘secondary discourses’ (Gee 1989) (i.e., the academic discourse in school) and can therefore be understood as the ability to “think about and analyse texts critically, master sophisticated language and convey appropriate content and recognise how meanings are made within a wide range of texts ... and discourse communities” (Crane 2002: 67, as cited in Coyle 2015: 96). Pluriliterate learners, therefore, have the ability to engage in critical thinking and in cross-cultural, linguistic, and disciplinary literacy practices and social interactions in meaningful ways, thereby drawing on different modes and channels of communication and semiotic systems (Meyer et al. 2015). This key point aligns with further TE-Con3 premises such as an orientation towards culture(s) (premise F), supporting learners’ participation in active citizenship (premise H), and, prominently, with the multidisciplinary nature of the **TE-Con3** modular approach (premise B).

Aiming to develop learners' pluriliterate repertoires, the pluriliteracies approach describes pathways for enabling deeper learning and promoting transferable and problem-solving skills that lie at the intersection of linguistic and other symbolic forms and cognitive operations. Deeper learning takes place in “the successful internalisation of conceptual knowledge and increasing mastery or automatisisation of the skills and strategies needed to construct and communicate that knowledge” (The Graz Group 2015). Learning is, therefore, considered not only as the transmission of factual knowledge (i.e., surface and rote learning), but as a central contribution to developing and deepening transferable skills and conceptual knowledge. Learning of this kind is significantly facilitated through subject-specific problem-solving strategies and methods (National Research Council 2012). This means that deeper learning is inextricably linked to subject-specific culture(s), methods, and disciplinary content (Meyer et al. 2015). TE-Con3 works towards this stance in that it

⁵ cf. <https://pluriliteracies.ecml.at/Home/tabid/4231/language/en-GB/Default.aspx>

acknowledges the important role of content and subject-specific literacies in (language) learning and teaching, which is echoed in the project's premise that **TE-Con3 is content-driven** (premise C). Placing content at the heart of learning, by implication means putting language as a tool for communication and as a tool for thinking at the centre of attention. This is because content and language are seen as interdependent and reciprocal, rather than distinctly separated from each other. Learners will, therefore, become enabled to master subject-specific competences if they are given sufficient opportunity to actively construct (subject-related) knowledge through language, i.e., by using language as a means of meaning-making (Meyer & Coyle 2017). This type of reasoning is reflected in project's tenet that **TE-Con3 is language-sensitive** (premise D). The pluriliteracies approach promotes language learning as the learners' capacity to build and expand their meaning-making potential in specific contexts (Mohan et al. 2010) (cf. 3.3 Systemic Functional Linguistics).

Understanding language as a cognitive tool, Swain (2006) coined the verb 'to language' to refer to the use of language to mediate and create knowledge. Within the pluriliteracies approach, languaging is the key activity for constructing and internalising conceptual knowledge. Whilst 'learning' is sometimes (mis-)understood as a receptive activity (in the sense of learners *receiving* knowledge), 'languaging' is clearly pro-active and productive and required learners to express themselves and their understanding, receive, accept and to respond to their communication partners' feedback. Using language as a cognitive tool moves learners to actively engage with cognitive discourse functions (CDFs), which are "speech acts that verbalise thought processes" (Dalton Puffer 2017: 172) as, for example, describing, explaining, comparing, evaluating, or assessing. CDFs play a central role in deepening understanding as they lie at the interface between processes of knowledge construction (i.e., cognition) and the external/social processes of expressing knowledge. For meaning-making processes to be successful, much depends on developing learners' skilful use of CDFs in their communication. Enabling learners to understand *how* they can realise the verbalisation of the corresponding discourse function is, therefore, key. Educators thus need to provide appropriate language work which goes beyond vocabulary lists, glossaries of terminology and grammar practice in order to ensure that the CDFs can be performed successfully and at an appropriate level (Graz Group 2015). Rather, generic forms of communication (i.e. subject-related pragmatics and text forms) will be at the centre of language study

(premise [Lexical Approach](#)). The TE-Con3 modules, tasks and activities provide guidance for students steering them towards the use of discourse functions and subject-related thinking skills (see section [3.3 Bloom's \(Revised\) Taxonomy](#)) in order to ensure deeper learning in the respective subject or disciplinary field.

In conceptualising the interaction between the students' knowledge development and its reflection in the students' text productions, the pluriliteracies approach highlights that deeper learning emerges as learners' progress in both dimensions. Figure 1 shows the interplay of knowledge and communicative

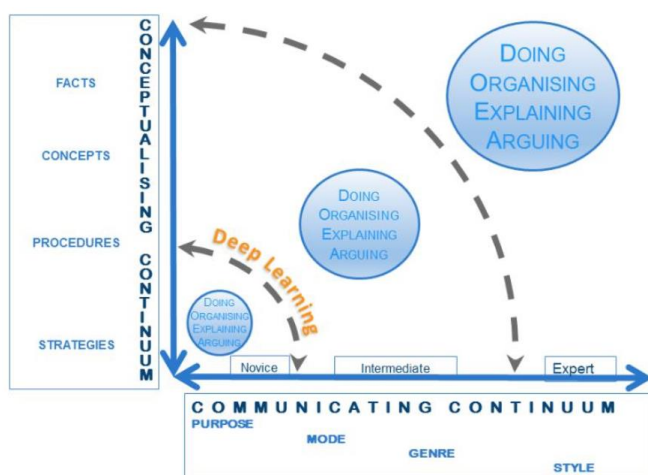


Figure 4. The Pluriliteracies Model (Meyer et al. 2015)

processes at the centre. The model charts learners' progression in the development of pluriliterate skills as they move along the conceptual-communication continua, evolving from 'novice' to 'intermediate' and eventually to 'expert' literacy users. The conceptualising continuum comprises facts, concepts, procedures, and strategies, while the communication continuum charts

subject-related ways of expressing purpose, mode (written/spoken), genre(s) and style(s). The learners' pluriliterate development becomes visible in their growing ability to use context-specific language which is appropriate to the communicative purpose, as well as to adequately demonstrate or verbalise subject-specific knowledge by means of different modes, styles, and genres (Meyer et al. 2015). Promoting deeper learning in content-driven language classrooms thus means empowering students to become increasingly independent in their languaging by strengthening the connection between the conceptual and the communication continuum of learning. In other words, the students' progress in learning about a subject or content needs to be accompanied by increasing progress in disciplinary literacy and discourse in order for effective learning to occur. In this way, learners can increasingly become experts in all dimensions (or activity domains) of subject learning, which encompass 'doing', 'organising', 'explaining', and 'arguing' (Coffin 2006, Polias 2016). For assessment and scaffolding purposes, it is important to consider how progression in learning becomes. Successful learners

- increase their ability to extract relevant information from increasingly complex texts in different, subject-relevant forms of presentation;
- have a broadening repertoire of subject-specific text types and genres;
- draw on expanding means to express a deeper understanding of subject content and concepts within these genres;
- are able to communicate in an increasingly addressee-oriented way, taking into account the communicative purpose, and to adapt their communication style accordingly;
- can present and communicate their disciplinary knowledge using an expanding range of subject modes (oral and written) and forms of representation (maps, diagrams, formulae, etc.) in analogue, digital, and hybrid form;
- are aware of and are able to reflect and verbalise their strategic knowledge about procedures and self-regulation.

(List extracted and adapted from Meyer & Imhof 2017 n.p.; authors' translation)

The pluriliteracies approach constitutes an important point of reference for the TE-Con3 model as it links with other important key points reflected in our framework. The approach underscores the need for multidisciplinary provision to foster learners' pluriliterate competence (=> TE-Con3 is multidisciplinary), which includes the ability to adequately verbalise one's knowledge through different modes across cultures, languages and disciplines (=> TE-Con3 is culture-sensitive and supports active citizenship). It further highlights the interrelationship between knowledge building (i.e., content) and knowledge communication (i.e., language) as deeper disciplinary understanding and sustainable learning emerges from progress in both dimensions (=> TE-Con3 is language sensitive and content-driven). The overarching aim is to eventually promote learners' development to become independent learners, critical thinkers and successful meaning-makers within an overall perspective of global citizenship.

3.3. Bloom's (Revised) Taxonomy

The cognitive spectrum of the TE-Con3 learning tasks/activities is based on the cognitive domains of **Bloom's (Revised) Taxonomy**. *Bloom's Taxonomy* (1956), often depicted as a multi-tiered pyramid (see Figure 2), has become an influential model in education as a general classification system that differentiates six different key levels of human cognition. The cognitive activities are ordered in a hierarchical fashion, going from **lower-order thinking skills** (i.e., knowledge, comprehension, and application) to **higher-order thinking skills** (i.e., analysis, synthesis, and evaluation). Anderson and Krathwohl (2001) put forth a modified and extended version of the framework and replaced (inter alia) Bloom's noun-based model with a verb-based structure, deliberately highlighting the role of students as active agents in the learning process. They further changed the order of the two stages at the top so that in the new model, *create* features as the qualitatively highest cognitive activity, followed by *evaluate*. Another major addition to the original model is that Anderson and Krathwohl distinguish types of knowledge and cognitive processes as two dimensions in their model.

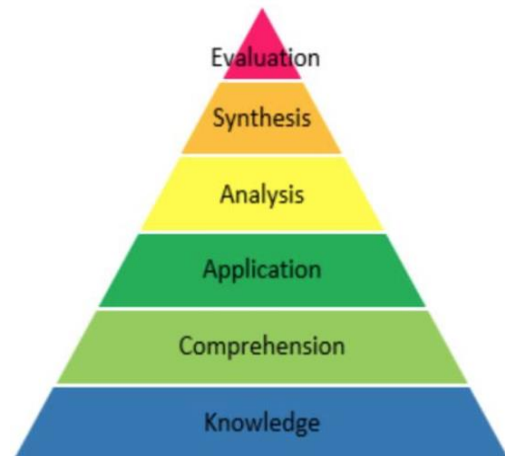


Figure 5. Bloom's Taxonomy (1956)

The **Knowledge Dimension** comprises four distinct types of knowledge, which range from the concrete to the abstract: *Factual*, *Conceptual*, *Procedural*, and *Metacognitive*. **Factual knowledge** deals with the basic knowledge, e.g. of an academic discipline or school subject. This includes, for example, definitions, terminology, and specific facts. **Conceptual knowledge** focuses on information systems such as classifications and categories, while **procedural knowledge** refers to means and processes that are applied to create knowledge. This includes algorithms, techniques, and methods of inquiry, as well as knowledge of how and when to apply them. Finally, **metacognitive knowledge** is about organising one's own thinking and ways of generating knowledge.

The **Cognitive Process Dimension** comprises the six thinking skills established previously by Bloom. The degree of complexity increases with each level: *Remember*, *Understand*, *Apply*, *Analyse*, *Evaluate*, and *Create*. **Remember** refers to recalling information from long-term memory, while **understand** means constructing

meaning from various types of input material, whether in written, oral, graphic or any other form. **Apply** refers to the use of a learned procedure in a familiar or new situation, whereas **analyse** involves the ability to break down knowledge into its constituents and examine how the individual parts are interrelated. The penultimate cognitive category, **evaluate**, denotes the ability to judge on the basis of set standards and criteria through checking and critiquing. **Create**, being the top-level category of this dimension, relates to the skill of generating or (re-)organising elements into something new.

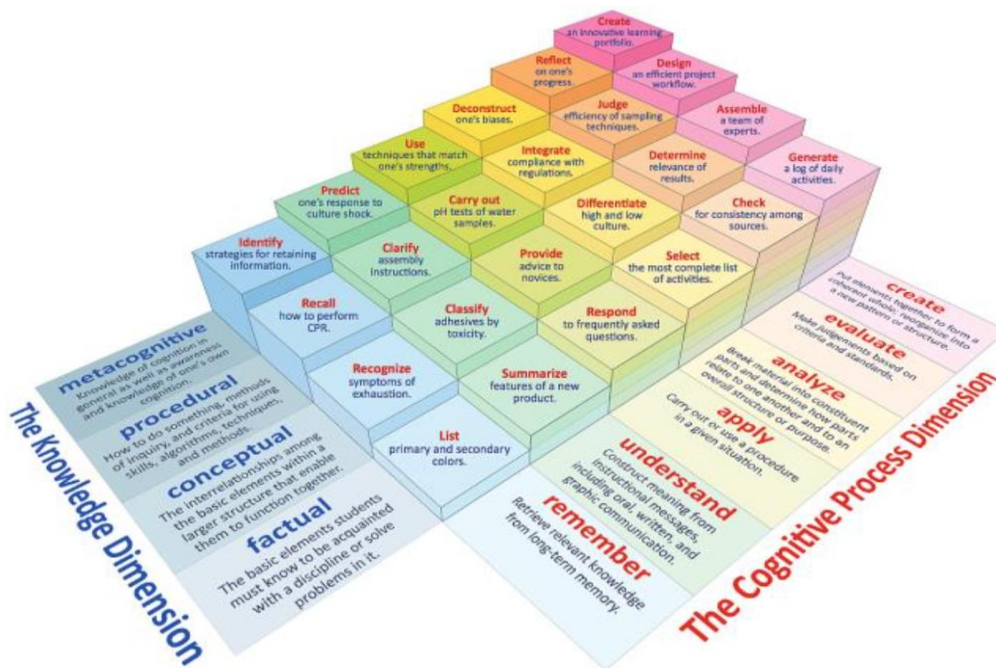


Figure 6. Anderson & Krathwohl’s Taxonomy (created by R. Heer; University of Iowa 2012)

Anderson and Krathwohl’s taxonomy (see Figure 6) produces a matrix for mapping all knowledge categories on any of the above-mentioned cognitive operations. The intersections of the two continua form 24 ‘cells’ of learning objectives that range from lower to higher complexity. For example, the combination of the cognitive operation “Remembering” and the knowledge subgroup “Conceptual Knowledge” can result in the less demanding learning objective “Recognising symptoms of exhaustion”, while the combination of the thinking skill “Analysing” and the knowledge type “Metacognitive” can result in the more complex learning goal “Deconstructing one’s own prejudices”. By using the taxonomy for planning lessons and teaching units, teachers can design tasks of varying complexity that are respond to their learners’ needs and capacity.

The taxonomy provides an important source of orientation for task design in TE-Con3. It offers the full **range** of different cognitive activities and knowledge types that can be addressed in learning tasks. Also, it allows for learning activities to be mapped on a **progression**, i.e., from lower-order to higher-order cognitive operations, so that learners can navigate safely towards deeper disciplinary understanding in contexts of increasing complexity (see also section 3.1 The Pluriliteracies Approach). The taxonomy is, therefore, an important reference point to be consulted when it comes to creating challenging and meaningful learning objectives that span the whole spectrum of cognitive engagement with content material in the classroom.

3.4. Patrick Moran's model of cultural learning

As commonly understood, foreign language instruction is primarily designed to facilitate language learning; whilst doing so, the conclusion has been reached that language learning is inseparable from its cultural context. The degree of interrelation between language and culture is so obvious that terms such as “linguaculture” (Paul Friedrich) and “languaculture” (Michael Agar) have been coined to express the symbiosis between the two entities. Scarcella and Oxford (1992) noted that language is a “vehicle for explaining or expressing culture” (183). As Cunningsworth states, “A study of language solely as an abstract system would not equip learners to use it in the real world” (86). In the same fashion, Seelye (1990) notices that “Knowledge of linguistic structure alone does not carry with it any special insight into the political, social, religious, or economic system” (10). Consequently, students should be taught the cultural aspects of language and how to become effective intercultural communicators.

A fundamental understanding of the organic relation between the cultural component and foreign language instruction was demonstrated by Patrick R. Moran (2001), according to whom “language (...) is a window to the culture” (35); further on, “language, as a product of culture, is infused with culture” (47). To say that culture has a variety of meanings is without doubt an understatement, which is why, for the purpose of a coherent approach under this section, we will rely on Moran's perspective on culture: “culture is the evolving way of life of a group of persons, consisting of a shared group of practices associated with a shared set of products, based upon a shared set of perspectives on the world, and set within specific social contexts” (24). Individuals need language to be able to handle cultural products, to efficiently

participate in cultural practices and, in turn, need to know how a specific culture functions.

The transition from the experience of culture to language learning may be facilitated by the model of cultural learning that Moran proposes “as a lived experience, as a personal encounter with another way of life” (3). This model basically entails interactions between three constituent elements, i.e. the cultural experience, the cultural knowings framework and an experiential learning cycle. If the cultural experience is “the encounter with another way of life” (13) and may include such components as cultural content or teacher-student relationship, the cultural knowings framework distinguishes four meaningful ways of knowing culture:

- culture as “*knowing about*”, relating to cultural information – facts about products, practices and perspectives of the target culture as well as students’ own;
 - culture as “*knowing how*”, relating to cultural practices in the everyday life of the people of the target culture;
 - culture as “*knowing why*”, constituting an understanding of fundamental cultural perspectives – beliefs, attitudes and values;
 - culture as “*knowing oneself*”, concerning the individual learners’ self-awareness.
- Thus, students need to understand themselves and their own culture as a means to comprehending the target language culture. (Moran 2001:15-18)

If the first interaction, culture as “knowing about,” deals with those aspects that can be learnt about a particular culture (e.g. facts about history, customs or geography), the second interaction, culture as “knowing how,” leads teacher and students toward more experiential and interactive involvement in cultural practices. Then, culture as “knowing why” is the stage in which learners begin to develop an understanding of the underlying values and attitudes of the culture and, while doing so, it encourages developing critical thinking skills. In the last stage, culture as “knowing oneself,” students enter a world of self-discovery based on learning about another culture and comparing it to their own culture. The rationale for this stage is that if learners have a strong sense of themselves as members of a culture and understand their own personal and cultural values, they may be better able to adapt to or accept another culture to the extent to which they choose.

The experiential learning cycle is what provides a model for acquiring the four cultural knowings through cultural experience. In order to reach its purpose, it is divided in four stages –participation (knowing how) – description (knowing about) –

interpretation (knowing why) – response (knowing oneself). “From participation in the experience to reflection on what happened to developing explanations or theories to devising strategies consistent with personal learning goals, the nature of the content and the form of the experience, learners finish the experiential learning cycle and no doubt get a complete mastery of the subject and a better awareness of the target culture and themselves.” (Youhzen 2006:34)

To synthesize the basic ideas of the cultural learning cycle that Moran shaped, (cultural) learning is grounded in experience and the use of experience favours the meaningful creation of knowledge while affording the opportunity for different cultural views to be expressed and valued. This leads, in turn, to the development of the learners’ critical thinking skills, which may be identified as one of the objectives of the TE-Con3 framework.

Relation to the TE-Con3 Framework

Language cannot be separated from **culture** – this is the common foundation on which both **Moran’s cultural learning cycle** and the **TE-Con3 framework** rest. Culture is without doubt a critical component of any learning environment, with cultural elements prevailing through all components of such an environment. Learning starts from or is enriched by getting familiar with culture as this translates into complex mental processes that enable students to become more culturally aware and better functioning in a 21st-century, globalized world.

Moran’s *cultural knowings* framework as a vehicle of cultural learning distinguishes **4 meaningful ways** of knowing culture (knowing about, knowing how, knowing why, knowing oneself – which could be further on decomposed into products, persons, practices, perspectives). Its complexity and comprehensive character basically feeds into the TE-Con3 framework through the fact that the latter can be described as **modular, language and content-oriented** (dual purpose of acquiring linguistic knowledge and content knowledge, where language becomes the instrument for learning about culture) **and culturally-sensitive** (various cultural elements as a learning tool).

3.5. Michael Byram's Intercultural Competence

As the modern world has increasingly become multicultural and multilingual, the need to prepare students, at the various stages of education, to manoeuvre the existing diversity has increased. The aim is to train students into becoming fully functioning, participating citizens of the world.

It is insufficient to teach the grammar of a foreign language (FL), or to use communicative language teaching (CLT) as a methodology in the FL classroom, nor is it enough to teach history, or any other subject, without considering the cultural baggage and possible contributions of all students in the classroom. In other words, “Language education needs to play a leading role in the development of our students’ intercultural communicative competence, i.e., combining language skills with the knowledge, skills, and attitudes that help them become ‘intercultural citizens’ (Byram, 2008). Consequently, Michael Byram (and his contemporaries) have focused their research on keywords such as, teacher training, foreign language teaching, intercultural communication, and intercultural competence.

In 1997 Byram introduced the model of Intercultural Communicative Competence (ICC), which sought to question the principles behind communicative competence (CC). The aim was to acquaint all students, in and out of the FL classroom with the concept of “otherness” (Byram, 1997). The qualities considered necessary for the competent intercultural speaker in Byram’s 1997 model included various types of *savoir*: *savoir*, *savoir être*, *savoir comprendre*, *savoir apprendre/faire*, *savoir s’engager* (Hoff, 2020).

Not only did Byram question the competences/skills that need to be taught, that need to be acquired, but also the idea of the native speaker, which the language learner is so often “measured” against. Suggested levelled assessment grids of the CEFR, especially those of the first edition, and those of certain language exams available on the market, are examples of such questionable but often desirable competence benchmarks and measurements. In fact, according to Byram (2001), despite the fact that language teaching has theoretically included the teaching of culture, such practice may be questioned since language educators continue to focus on the structure of the language, on grammar, rather than on language and culture. Thus, intercultural competence, as defined by Deardorff (2006) is, “the ability to develop targeted knowledge, skills and attitudes that lead to visible behaviour and communication that are both effective and appropriate in intercultural interactions.”

Byram's ICC model was not free from criticism, especially when it came to the singular concepts of culture and identity. Nevertheless, as Hoff (2020) explains, the model, "incorporates some recognition of the fact that present-day societies are increasingly pluralistic and multicultural", including the consideration of regional cultures and sub-cultures, which must not be ignored. Moreover, Byram and Wagner suggest that "language educators need to pay attention to how students' identities are shaped by how their existing languages and associated experiences are fostered or denied through language education." (Byram & Wagner, p. 5, 2017). Thus, Byram's work has in recent years increasingly focused on the development of intercultural competence (ICC), for both teachers and students in order to develop what he calls, intercultural citizenship. Additionally, Byram advocates for in-service and future teachers to reconsider their identity and reflect upon their role beyond the language teacher of the communicative method. Alternatively, current and future teachers, and here the future of teacher training is key, need to develop personally and professionally as both language and culture teachers, as mediators in today's multicultural, multilingual classroom. In other words, "Language education needs to play a leading role in the development of our students' intercultural communicative competence, i.e., combining language skills with the knowledge, skills, and attitudes that help them become 'intercultural citizens' (Byram, 2008).

More recently, Byram and Wagner (2017) have studied a new approach to language teaching which focuses on intercultural citizenship by merging "instrumental and humanist educational purposes", and emphasise the teaching of "skills, attitudes and knowledge". An approach that seeks to go beyond teaching linguistic and communicative competence, to teaching intercultural competence and the responsibilities thought to be key for the proficient, well-rounded citizen of the 21st century. Furthermore, in the foreign language classroom, teaching for intercultural communication, must, according to the authors, consider students' intertwining "identity in different linguistic and cultural backgrounds." (Byram and Wagner, 2017)

Although the approach to intercultural competence and citizenship in the classroom is not free of flaws, the authors claim that *intercultural citizenship language teaching* stimulates learners to further and enhance their language acquisition. Byram's work has seeded a possible restructuring of teacher education, at all levels, and of the classroom, as we know it today. One that is truly more inclusive, more global,

while at the same time acknowledging the local. Hence contributing to a revisiting of our current understanding of identities, from a micro to a macro level.

Summary and relation to the TE-Con3 Framework

Byram's work may easily be weaved into the framework of the TE-CON3 project in that it calls for the intercultural, global education practices that 21st-century students need to become active, productive participants in society. In this sense language is not simply seen as a conglomerate of grammatical rules, but as a vehicle of intercultural communication, that permits the teaching and learning community to mediate across various fields of study, through language acquisition.

3.6. The Lexical Approach

Michael Lewis, who coined the term Lexical Approach (LA), suggested that lexis is the basis of language, however, it can be misunderstood in language teaching because of the assumption that grammar is the foundation of language and managing within a grammar system is a prerequisite for communicating actively in the target language (Moudraia 2001). That is why over the last few decades, this approach has been considered as a significant alternative to traditional grammar-based teaching methods as LA has been defended by many researchers who see lexis as the basis of developing communicative competences (Torres Ramírez 2012). This means that providing instructions should be done in a way that learners mostly focus on meaning as when one learns a language naturally, the focus is on what one wants to say, i.e. the meaning, not just the structure (Conzett 2000). According to advocates of the LA, having rapid access to a stock of junks, not storing numerous grammar structures in the brain, is what guarantees fluency in communication. The basic principle of the LA then is that "language is grammaticalised lexis, not lexicalised grammar", i.e. lexis plays the most crucial part in creating meaning, while grammar has a managerial role (British Council). This approach does not only suggest reconsidering the role of grammar in language teaching, but also analysing how lexis is introduced in a foreign language classroom (Racine 2018).

Lewis suggested the following taxonomy of lexical items: words, polywords, collocations, institutionalised utterances, and sentence frames and heads. The main focus of the LA is on collocations as "instead of words, we consciously try to think of collocations, and to present these in expressions" (1997). He refers to those items as

lexical chunks. Apparently a considerable amount of what English native speakers utter and write consist numerous of chunks. In addition to understanding the input, it is also necessary to notice the chunks that carry the meaning (Conzett 2000). Conzett adds that The Noticing Hypothesis (NH) is “a hypothesis that input does not become intake for language learning unless it is noticed, that is, consciously registered”. Batstone adds that “noticing is a complex process: it involves the intake both of meaning and of form, and it takes time for learners to progress from initial recognition” in order for them to reach the underlying purpose (1996). It can be said that encouraging learners to notice the lexical chunks and collocations is fundamental when it comes to any methodology related to the lexis of a language, however, Lewis does point out that noticing chunks is necessary but not sufficient for input to become intake. However, it should be noted that learning a language in chunks is a memory improvement technique as by grouping words and analysing them as a whole allows the brain to process more information. If learners do not notice chunks as chunks, they cannot be stored in a manner that supports the development from intake into output (Conzett 2000).

The LA has not just moved the focus from grammar to lexis. In addition, Michael Lewis introduced a new paradigm instead of the Present-Practise-Produce (PPP). Although the PPP paradigm can still function a central part of teacher training, Lewis decided to divert from it within the LA and suggested an alternative Observe-Hypothesise-Experiment paradigm. Observe refers to the idea that language must be met and noticed and that is why the LA differs from the Natural Approach developed by Stephen Krashen and Tracy Terrell. The hypothesis factor refers to sorting the input on the basis of noteworthy similarities and differences in a language. However, an argument against using the LA is that mastering chunks of a language is just one component of communicative competence (Racine 2018).

The role of the teacher seems to vary as well as it is evident that some aspects of foreign language learning are counter-intuitive, i.e. phrases tend to be easier to remember than single words and smaller pieces of a language do not automatically mean that they are easier. That is why teachers need to be proactive in helping learners develop an understanding of the nature of lexis and point students' attention to what is truly necessary and worthwhile. Some recommendations for understanding collocations are the following: working with dictionaries, guessing the meaning of lexical items from context, using real situations in simulations and working in groups in

order to exchange knowledge (Moudraia 2001). Furthermore, teachers have an invaluable role when predicting problems and providing students with negative evidence which is crucial to forming an effective hypothesis (Conzett 2000).

Relation to the TE- Con3 Framework

Taking into account the TE-Con3 idea to rely on a modular approach, which includes lexical density and lexico-grammatical inventory, the LA seems as a reliable approach to incorporate as it implements repetition and recycling of information (Moudraia 2001). Furthermore, applying modular approach together with the LA, both problem-solving tasks and vocabulary in a specific context can be seen as benefits of combining those two approaches. In addition, the LA highlights the importance of communicative competences and thus draws attention to language-sensitive issues as well as promotes interactive and performative approach, which are among the foci of TE-Con3.

3.7 Kumaravadivelu's Postmethod Pedagogy

Kumaravadivelu's postmethod pedagogy reflects a "repeatedly articulated dissatisfaction with the limitations of the concept of *method* and the transmission model of teacher education" (Kumaravadivelu 2001:537). Postmethod theory includes the three-dimensional system of particularity, practicality and possibility and aims at "(a) facilitating the advancement of a context-sensitive language education based on a true understanding of local linguistic, sociocultural, and political particularities; (b) [rupturing] the reified role relationship between theorists and practitioners by enabling teachers to construct their own theory of practice; and (c) [tapping] the socio-political consciousness that participants bring with them in order to aid their quest for identity formation and social transformation" (Kumaravadivelu 2001:537). Postmethod pedagogy includes a pedagogy of particularity, a pedagogy of practicality, and a pedagogy of possibility, exploring the concepts of postmethod learner, postmethod teacher, and postmethod teacher educator.

Pedagogy of particularity considers educational contexts in which teachers and students pursue the same goals in specific institutional and sociocultural contexts. Pedagogy of particularity is therefore holistic by definition as it must consider local pedagogical demands: "it starts with practising teachers, either individually or collectively, observing their teaching acts, evaluating their outcomes, identifying

problems, finding solutions, and trying them out to see once again what works and what does not. Such a continual cycle of observation, reflection and action is a prerequisite for the development of context-sensitive pedagogic knowledge” (Kumaravadivelu 2001: 539).

Pedagogy of practicality questions the relationship between theory and practice. According to Kumaravadivelu, teachers should establish personal theories upon testing and critically consider pre-existing professional theories. Pedagogical theory should translate in teacher and student autonomy by providing the required autonomy to experiment with different approaches in context-sensitive pedagogic environments. In sum, “a theory of practice (...) feeds and is fed by reflective capabilities of teachers that enable them to understand and identify problems, analyse and assess information, consider and evaluate alternatives, and then choose the best available alternative, which is then subjected to further critical appraisal.” (Kumaravadivelu, 2001, 541). Teachers’ professional and personal experiences are crucial to addressing the “microcosm of the classroom” (Kumaravadivelu 2001:542), analysing sociopolitical particularities and providing the most appropriate teaching and learning opportunities.

Pedagogy of possibility implies teachers’ and students’ social, economic and political experience and how they reflect and articulate in the classroom in the pursuit of knowledge, subjectivity and self-identity. Kumaravadivelu adds that “language teachers can ill afford to ignore the sociocultural reality that influences identity formation in the classroom, nor they can afford to separate the linguistic needs of learners from their social needs. In other words, language teachers cannot hope to fully satisfy their pedagogic obligations without at the same time satisfying their social obligations” (Kumaravadivelu 2001:544).

Kumaravadivelu’s postmethod learner is academically and socially autonomous, i.e., “willing and able to take charge of their own learning” (Kumaravadivelu 2001:545). In order to enable student autonomy, teachers are to provide “cognitive, metacognitive, and affective techniques that they can use for successful [and active] learning.” (Kumaravadivelu 2001:546).

Postmethod teachers may provide postmethod learners with an array of opportunities such as identifying personal learning strategies and styles; evaluating learning outcomes; searching for additional language reception or production opportunities; seeking teachers’ feedback; collaborating with peers, and using all opportunities to communicate with skilled speakers of the language. Kumaravadivelu’s

liberatory autonomy informs that learners should be equipped with the intellectual tools to overcome “sociopolitical impediments (...) of their full human potential” (Kumaravadivelu 2001: 547). Liberatory autonomy includes learners’ research on the social functioning of languages; learners’ journal reports on their social background; enables community self-awareness and self-improvement; uses differentiated online tools to expand linguistic knowledge. The postmethod teacher entails autonomy as well. Teachers as individuals should “build and implement their own theory of practice that is responsive to the particularities of their educational contexts and receptive to the possibilities of their sociopolitical conditions.” (Kumaravadivelu 2001:548). Training in specific teaching disciplines allows teachers to acknowledge the need to overcome methodological restrictions and embrace other possibilities closely related to social and political contexts. Novel methodologies may include questionnaires, surveys, and interviews and internet-based dialogue.

The postmethod teacher educator recognizes “prospective teachers’ voices and visions [legitimizing] their knowledge and experience (...) as an important part of the dialogue between teacher educators and prospective teachers” (Kumaravadivelu 2001: 552). Therefore, postmethod teacher educator education is dialogic and intertwines meanings and belief systems, offering the possibility to construct meaning and the emergence of new and ongoing identities.

In postmethod pedagogy, language acquisition implies the coexistence of different social, political and linguistic backgrounds in the classroom (glocal, culture-oriented and language-sensitive); liberatory autonomy allows teachers and learners to question epistemic and identity issues using different theories and practices (multiculturalism and multidisciplinary). To achieve academic success, teachers and learners may rely on several tools (from online discussions to journal writing) to complete language acquisition (task-based).

Summary and relation to the TE-Con3 Framework

B. Kumaravadivelu’s postmethod theory includes a pedagogy of particularity, practicality and possibility. Its outcomes reflect on the learner, the teacher and teacher educator. Postmethod pedagogy favours all institutional, social, economic and political experiences both from teachers and learners. Therefore, language learning (theory and practice) is glocal addressing local matters (personal and professional experiences) while aiming at language as a tool for citizenship. Michael Byram’s

intercultural communicative competence consists of a non-standardized approach to language teaching and learning (language and culture overcoming language and grammar). Byram's intercultural citizenship pedagogy tailors the 21st-century teachers and learners as educational actors, intercultural citizens and open to otherness. Postmethod theory and intercultural communicative competence present a progressive approach to pedagogy and language teaching and learning. In postmethod theory and intercultural communicative competence, the language classroom disrupts traditional approaches to language focusing extensively on the cultural over the grammatical. Teaching and learning languages are the byproduct of theory as much as subjectivity, intersubjectivity and (social, cultural and political) identity.

3.8. Content and Language Integrated Learning (CLIL)

Introduction

Several approaches and methodologies for teaching English as a Foreign Language (EFL), such as Communicative Language Teaching (CLT) or the Grammar Translation Method (GTM) have kept their popularity in the first decades of the 21st century, either as standalone practices or in combination with others.

However, since its formal introduction in 1994, the Content and Language Integrated Learning (CLIL) approach has seen a rapid introduction and implementation in most stages of European formal education, no in small part due to the support of the European Union institutions, as CLIL is a direct result of the EU efforts to promote bilingual education in its member states.

A definition of CLIL

When David Marsh put forward the first modern CLIL theory in 1994, he defined it as "situations where subjects, or parts of subjects, are taught through a foreign language with dual focused aims, namely the learning of content and the simultaneous learning of a foreign language" (Marsh 2). In Content and Language Integrated Learning (CLIL) at School in Europe, it has been pointed out that CLIL is used a general term to refer to various types of provision in which a foreign language is implemented to teach certain subjects (2005).

However, since then, the nature of CLIL as a methodology or as an approach has been controversial (Costa 19). Their main proponents themselves refrain from

taking a side on the debate, opting instead for defining it as an “umbrella term covering a dozen or more educational approaches” (Mehisto et al. 12), which include immersion, bilingual education, multilingual education, language showers, or enriched language programmes.

Moreover, the term CLIL is not universal. In fact, at least other 33 names or acronyms have been identified, such as Dual Focused Instruction, Teaching Content through a Foreign Language, Content Based Language Teaching, or Bilingual Content Teaching (Chaplier & O’Connell 70).

Types of CLIL

Given the number of CLIL methodologies and names that have been implemented worldwide, the need for a working classification has become apparent. While there is not a comprehensive classification of all CLIL methodologies, Bentley has tentatively identified three types of CLIL -soft, hard, and modular which have become a standard classification in CLIL literature. These are their characteristics (Kondal & Bairi):

Types of CLIL	Language Content	Time	Context/setting
Soft CLIL	Language-led	45 min. Once a week	Some content topics are taught during a language period
Modular CLIL	Subject-led	15 h during a semester/term	Subject teachers select topics from the subject syllabus which they teach in the target language.
Hard CLIL	Subject-led	Almost 50 % of the curriculum.	Almost half of the curriculum is taught in the target language. The subject would reflect what is taught in the target language or can be new content

CLIL’S 30 core features

In their seminal 2008 book *Uncovering CLIL*, Peeter Mehisto, David Marsch and María Jesús Frigols move away from the hitherto purely theoretical approach to the issue to lay out a more pragmatic view of CLIL. In it, they identify 30 core features classified into six main groupings (multiple focus, safe and enriching learning environment, authenticity, active learning, scaffolding and co-operation).

The 4Cs framework: classroom practice

These four main principles, with the caveat of the renaming of “community” into “culture”, would be further developed by Do Coyle et al. in their 2010 book *CLIL: Content and Language Integrated Learning*, and renamed as the 4Cs Framework, a term universally recognized in the CLIL environments.

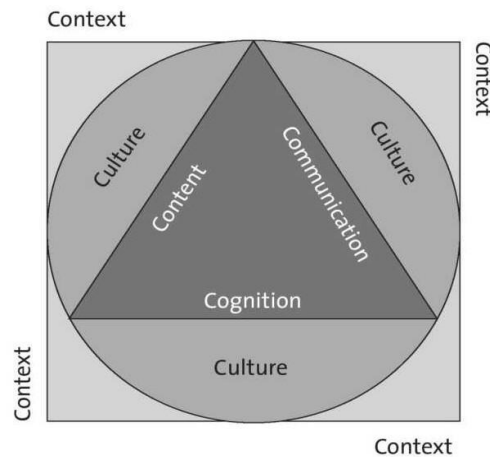


Fig 7. The 4Cs Framework (41).

The 4Cs Framework “integrates four contextualized building blocks: content (subject matter), communication (language learning and using), cognition (learning and thinking processes) and culture (developing intercultural understanding and global citizenship). In so doing, it takes account of integrating content learning and language learning within specific contexts and acknowledges the symbiotic relationship that exists between these elements.” (41)

Given that each of the 4 Cs is highly unique to the context and the subject taught, there is no template for planning CLIL lessons. Nonetheless, the C’s should be taken as the four main considerations when designing lesson plans, which should revolve around them (Pavón and Ellison 72). However, according to the traditional CLIL theory, materials should comply with the 10 criteria, posited by Peeter Mehisto (2012):

1. Make the learning interactions (language, content and learning skills) visible to the students
2. Systematically foster academic language proficiency
3. Foster learning skills development and learner autonomy
4. Include self, peer, and other types of formative assessment
5. Help create a safe learning environment
6. Foster cooperative learning

7. Seek ways of incorporating authentic language and authentic language use
8. Foster critical thinking
9. Foster cognitive fluency through scaffolding of a) content, b) language, c) learning skills development helping students to reach well beyond what they could do on their own
10. Help to make learning meaningful

Teacher collaboration

Due to the rapid implementation, some countries have not demanded dual education of its CLIL teachers (Papaja 149). In order to solve this issue, many implementations have resorted to teacher collaboration.

There can be many modalities of teaching collaboration in a CLIL classroom: “language teachers teaching part of or all the content subjects, native teachers working as content teachers or as language assistants, or language and content teachers struggling to teach together in the same classroom” (Méndez & Pavón 6).

As Ivanova points out, if the collaboration between all the actors involved in designing the CLIL curriculum fails, the students’ learning outcome might be severely hindered either as regards language learning or content learning, or both (79).

Relation to the TE-CON3 Framework

To sum up, CLIL could be considered as a possible approach in the TE-Con3 project as the 4C’s Framework of CLIL strongly matches the orientation of the TE-Con3 project, they both aim to be content-oriented and culture-sensitive by focusing on teaching linguistic knowledge as well as subject content. It is important to note here that culture is considered in its broadest sense and refers not only to specific aspects of a particular culture but to the concept of promoting global citizenship. TE-Con3 can be seen as interactive & performative by offering sets of content modules based on the learners’ educational needs, so is CLIL with its scaffolding and co-operative approach to better meet the learner’s needs.

3.9. Task-Based Learning

Teaching in general and teaching English as a foreign language in the 21st-century is an ongoing challenge that generates debates over which approaches to designing and implementing lessons are more effective in terms of developing learners' plurilateral skills. Since traditional teacher-centred activities have lost their primary place in the educational paradigm, the focus has shifted to learner-centred activities that engage the learner and motivate him to be a dynamic part of the teaching-learning process. Under these circumstances, Task-Based Learning (TBL) seems a possible option for the foreign language classroom nowadays as it strives to prepare students by enabling them to learn the language and, at the same time, acquire the (language) skills they need to live in society. Task-Based Learning (TBL) is definitely emerging as an essential part of curricula in language pedagogies and, as such, it is advocated by prominent second language acquisition researchers along with English language teaching practitioners.

Rooted in the wider practice of Communicative Language Teaching (in a 2009 interview, Rod Ellis calls it a “*strong form of CLT*”), Task-Based Learning (TBL) (also known as Task-based instruction, or TBI) was described by Jeremy Harmer in terms of making “the performance of meaningful tasks central to the learning process” and of being “informed by a belief that if students are focused on the completion of a task, they are just as likely to learn language as they are if they are focusing on language forms” (Harmer 2007:71). This would further translate into the belief that, in order to be meaningful, “a curriculum should be based on tasks, and that learning should emerge from the tasks rather than preceding them” (Harmer 2007: 73).

The theoretical rationale for TBL lies in the claim emanating from Second Language Acquisition (SLA) that language learning is best achieved not by treating language as an ‘object’ to be dissected into bits and learnt as such, but as a ‘tool’ for accomplishing a communicative purpose. In other words, ‘learning’ does not need to precede ‘use’ (Ellis 2013:2).

Central to Task-Based Learning (TBL) is the concept of task, whose “aim (...) is to create a real purpose for language use and provide a natural context for language study. Students prepare for the task, report back after the task and then study the language that arises naturally out of the task cycle and its accompanying materials” (Willis 1996:1). In other words, TBL is “like a sort of PPP upside down” (Willis 1996:19),

as it commonly starts with solving a task only to focus on language once the task has been completed.

When approaching the *task* notion, David Nunan (2004) identifies two types of tasks: on the one hand, *target tasks* and *pedagogical tasks*. *Target tasks* or real-world tasks essentially imply performing the activity outside the classroom context and in the real world; on the other hand, *pedagogical tasks* refer to the tasks students perform inside the classroom and in response to target language input or processing. Nunan concludes that target tasks may be non-linguistic and defines pedagogical task as a classroom activity that makes a student understand and produce the target language while focusing on conveying the meaning and not being too concerned with form.

Since the fundamental element of the TBL construct is the task, then, in order to achieve the purpose intended, it should possess a set of characteristics synthesised as follows:

1. A task involves a primary focus on (pragmatic) meaning (i.e. learners are engaged in understanding and producing messages designed to communicate information and opinions)
2. A task presupposes some kind of 'gap' (there being three main types of such gaps, i.e. information gap, reasoning gap, and opinion gap)
3. The learners need to use their own linguistic and non-linguistic resources needed to complete the task (i.e. they do not simply reproduce language given to them).
4. A task has a clearly defined, non-linguistic outcome, outside the display of correct language. (Ellis 2013:7)

Building the teaching-learning process in the TBL fashion would entail a number of stages as represented in the image below:

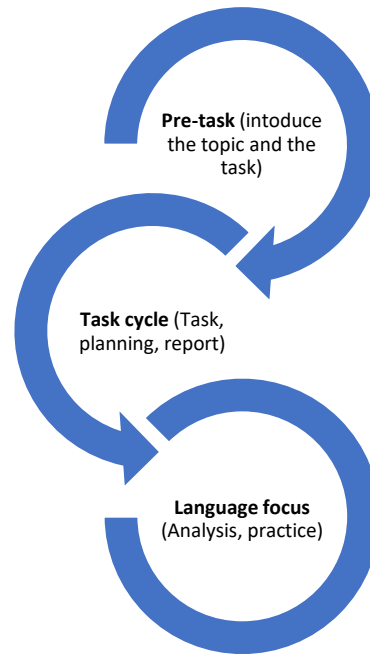


Figure 8. J. Harmer's Task-Based Learning Cycle

According to Harmer (2007), in the *Pre-task stage*, the teacher explores the topic with the class and helps them understand the task instructions, motivates them to properly engage in the task and sets the scene for the next levels of the process. In order to do this, students will have to activate their pre-knowledge about the topic, adapting it to the new aspects presented by the teacher. During the *Task cycle* stage, the students perform the task in pairs or small groups and then report on their results either orally or in writing. Thirdly, the *Language focus* stage, which aims at an analysis of linguistic features and during which students may examine and discuss any specific topic that may have emerged during the performance of the task (Harmer 2007: 71-72).

Though the sequence of tasks may differ from one educational theorist (Ellis) to another (Nunan), especially in what concerns the position of the language focus, there is one idea that generally derives from TBL, i.e. its rejection of the “reliance on presentation methodology” and a belief that “the basis for language development is the learner’s attempt to deploy language for meaning” (Ellis 2003:2).

In order to successfully reach its outcomes, task-based instruction should follow a set of principles, which have been listed by Rod Ellis as follows:

Principle 1: Ensure an appropriate level of task difficulty.

Principle 2: Establish clear goals for each task.

- Principle 3: Develop an appropriate orientation to performing the task in the students.
- Principle 4: Ensure that students adopt an active role in task-based lessons.
- Principle 5: Encourage students to take risks.
- Principle 6: Ensure that students are primarily focused on meaning when they perform a task.
- Principle 7: Provide opportunities for focusing on form.
- Principle 8: Require students to evaluate their performance and progress. (Ellis 2003:276 and following).

Relation to the TE-Con3 Framework

The central reliance on *tasks*, as a means of understanding, using and producing a target language item while performing an action, is a defining feature of the **TE-Con3 model**. Performing a task has the advantage of facilitating learning in a natural context, developed from the students' experiences with the language that is personalised and relevant to them. When performing a task, students are exposed to a varied range of language, to a whole range of lexical phrases, collocations and patterns as well as language forms, as required by their own needs and not by some external, objective ones. This relates very well to the idea that our model, the TE-Con3 model, is **language-sensitive**, with language-related task outcomes reflecting the grammar range for every level of language performance.

The content of a task should also have a social dimension, exploiting such diverse aspects as social roles, group work, functional language, cross-cultural interaction, etc. – which is best reflected in the idea that **TE-Con3 is culture-oriented**.

Performing a task has the ability of expressing meaning in a variety of contexts or making the language in the classroom truly communicative by connecting it to real-life situations and distancing it from constructed, pseudo-communication acts. Thus, it offers an alternative for language teachers by being a learner-centred approach that enables learners to use their existing linguistic resources and exploit them in group work, for instance. Using tasks that have to be solved, EFL learners to be fluent and confident users of English language both inside and outside the classroom in real life situations, which is why this approach should be adopted within the TE-Con3 framework, as one of the latter's main ideas is building **global citizenship**.

TBL can also be related to the **interactive and performative** side of the TE-Con3 model, as tasks are **aimed at exploiting real-world possibilities and encouraging communication in created contexts**. Overall, task-based learning involves sequenced interaction among participants and is, by its very nature, a group action.

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Chapter 4

Pool of TE-Con3 activities

Executive summary

The fourth chapter of the TE-Con3 Framework represents a collection of task samples meant to illustrate in practice the innovative features of the model proposed by the project consortium. With cross-references to TE-Con3 premises, as well as to the theoretical underpinnings from the previous chapters, these fragments of TE-Con3 lesson scenarios intend to provide instances of actual usage of this tool in the practice of foreign language teaching.

The fourth chapter of the TE-Con3 Framework represents a collection of task samples meant to illustrate in practice the innovative features of the model (*multidisciplinary, content-driven, language-sensitive, culture-oriented, glocal, academic, task-based, modular, interactive and performative*), as detailed in Chapter II.

This last chapter is directed at demonstrating the practical utility of the model the project consortium has envisaged in the academic domains proposed in the project application. The sample activities were designed in such a manner as to cover all the stages of a lesson – warming up, setting the scene, analysing the problem, applying the knowledge – and will be arranged as such. Each sample is accompanied by further considerations on the activity and its connection to one or several features of the TE-Con3 model.

Sample Activity 1 – warming up

Academic Domain – Architecture.

Lesson stage – Warming-up.

Lesson topic – Understanding architecture – challenging the myth.

Level – B2/C1

Activity – Pairwork. Discussion.

Activity focus – Understanding architectural signs.

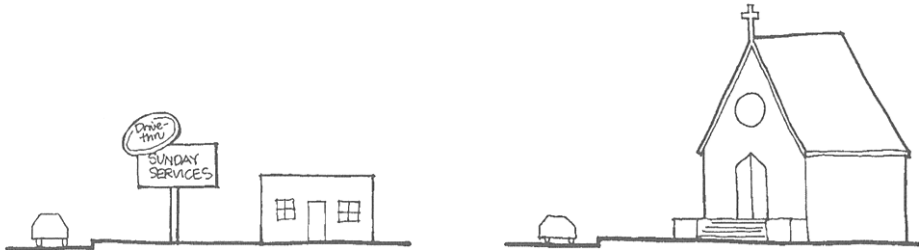
Preparation – One worksheet for each pair.

Time ~ 10 minutes

Procedure

- T tells students that – to introduce the subject of the class – they will share their ideas about architecture.
- T hands out a worksheet to each pair and asks students to discuss the questions there.
- T monitors, helps with content/language, notes down good/problematic language use.
- Students share their answers and opinions with the whole class, T writes key ideas, useful phrases on the board, T elicits correct phrases (based on the notes taken while monitoring)

Worksheet



Warming-up
Look at the pictures and discuss in pairs:

1. Which picture shows a **building**? Which picture shows a **piece of architecture**? Which picture shows **both**? Why?
2. Which **caption** goes with which **picture**?

a. Meaning conveyed
by architectural signs

b. Meaning conveyed
by conventional signs

adapted from: Frederick, M. (2007). *101 Things I Learned in Architecture School*. Cambridge: MIT Press.

Teacher’s notes

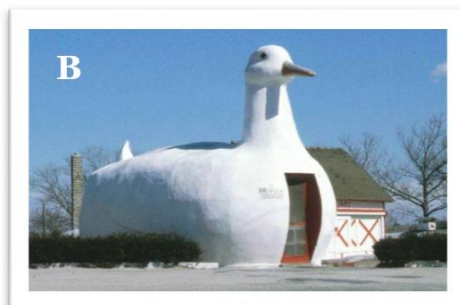
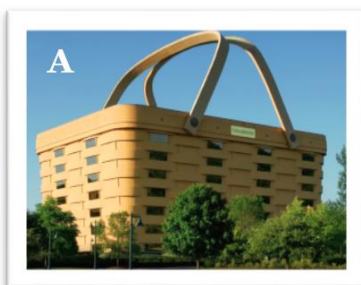
The aim of the activity is to contextualize and personalize the topic of the lesson and to motivate students to engage with it. T should stress that there are no straightforward,

correct answers here (there are no straightforward answers among architects as well!) and invite students to freely share their views. The background information below may – but does not have to – be used as a follow-up to the discussion.

Background information

According to a dictionary definition [Davies, N. & Jokiniemi, E. (2008) *Dictionary of Architecture and Building Construction*. Elsevier] a **building** is “any permanent structure which provides shelter, encloses space and can be occupied by people, animals, goods or services” and a **piece of architecture** is “the product of the art and science of producing built form.”

The pictures and captions come from a book [Frederick, M. (2007). *101 things I learned in architecture school*. Cambridge: MIT], written by a practicing architect and academic, addressing the central questions of architectural education. The conclusion – not disclosed in the exercise – reads: “A **duck** is a building that projects its meaning in a literal way. With regards to Robert Venturi.” Robert Venturi is an architect who is an advocate of the so-called *duck* architecture (a term he coined) – i.e. highly sculptural forms which represent products or services available within (e.g. **picture A** – the headquarters of a company that produces wooden baskets, **picture B** – a shop selling



ducks and eggs, **picture C** – a house for a shoe seller). *Duck* architecture is scorned by some architects (including the book’s author) and considered as kitsch.

Source: <https://www.archdaily.com/875022/9-weird-and-wonderful-architectural-ducks>

Theoretical underpinnings

For an in-depth analysis of the TE-Con3 theoretical underpinnings see Chapters 1-3 of this framework. What is offered below is a brief explanation of how the key TE-Con3 premises translate into the practice of teaching, as exemplified by the activity presented above.

The activity is a fragment of a teaching unit (a 90-minute lesson scenario) in the academic domain: architecture, designed in accordance with the TE-Con3 premises (see table below).

	TO KNOW	TO VALUE	TO ACT
TE-Con3	A. multidisciplinary	D. culture-oriented	G. task-based
PREMISES	B. content-driven	E. glocal	H.
	C. language-sensitive	F. academic	I. modular

The activity is **multidisciplinary** as it involves course participants in discussing architecture – an academic domain beyond their area of expertise. It is **content-driven** in that it is oriented toward interaction with authentic content – fundamental questions concerning the nature of architecture. It is **language-sensitive** as the language needed to talk about the content is addressed in it.

The activity is **culture-oriented** as it inspires interest in architecture and engages learners – coming from different cultural backgrounds – in negotiating its meaning and value. It is **glocal**, as the universal phenomenon of architecture is approached by individual students. It is **academic** in that, by virtue of its subject and complexity, it empowers students to play a substantial role in the versatile academic and/or business world in their future.

The activity is **task-based** as – while not presupposing any definite outcomes – in engages students in a goal-oriented discussion. It is **interactive & performative** in that students engage in purposeful interaction – aimed at sharing and comparing their understanding of architecture. Finally, it is **modular** because, together with other modules, it comprises a set of possible options for teachers – to be adjusted or replaced depending on the course participants’ needs.

Sample Activity 2 – Warming up

Academic domain: Biomedical Sciences and Health Communication

Lesson stage: Warming-up

Lesson topic: Ethics and childhood vaccination

Level: B2

Activity: Warming-up/Brainstorming

Activity focus: increase student participation, motivation, language production, vocabulary development, stimulate discussion, reinforce cultural respect for others' ideas and perspectives, promote ethics in the language classroom

Preparation:

Time: 5-10 minutes

Activity description:

Procedure:

1. Teacher asks the class, “When you think of ***ethics and childhood vaccination***, what comes to mind?”
2. In groups of four, students brainstorm words, phrases or ideas related to the question asked.
3. Individual members of each group will be assigned a task:
 - a) Student A annotates all the contributions.
 - b) Student B shares the contributions.
 - c) Student C guides the discussion.
 - d) Student D reviews, prioritizes and organizes ideas.
4. Each group shares and contributes to the follow-up discussion.

Worksheet(s): Warming-up Activity Worksheet

Teacher’s notes: Throughout the activity the teacher should circulate between groups and act as a facilitator.

Theoretical underpinnings: For an in-depth analysis of the TE-Con3 theoretical underpinnings see chapters 1-3 of this framework. The activity presented is a fragment of a teaching unit (a 90-minute lesson scenario) in the academic domain: biomedical

sciences and health communication, designed in accordance with the TE-Con3 premises (see table below).

	TO KNOW	TO VALUE	TO ACT
TE-Con3	A. multidisciplinary	D. culture-oriented	G. task-based
PREMISES	B. content-driven	E. glocal	H. interactive &
	C. language-sensitive	F. academic	I. modular

Sample Activity 3 – Setting the scene

Academic domain: Automotive engineering

Lesson stage: Setting the scene

Lesson topic: Robots and robotics

Level: B2

Activity: Individual work, pair/group work.

Activity focus: understanding automation, language production, vocabulary development

Preparation: 1 handout on the topic

Time: 50 minutes

Procedure:

1. The teacher prepares a text on the history of automotive automation and hands it over to the students (Handout 1). The text is organized in four sections and its section lacks its title. After carefully reading and analysing the text, students are given the four missing subtitles in a random order and asked to fill in the right subtitle in the right spot. The subtitles are: *Automotive Automation Booms in the 1970s*, *Early beginnings*, *Automotive Automation Today*, *World War II Gives Industrial Automation a Push*
2. The students are asked to read the text again and to extract words/phrases referring to robots and robotics and organize them in: nouns, adjectives, verbs.
3. Follow-up activity: the teacher asks the students who are organized in groups/pairs to group the adjectives and adverbs in the text according to the degree of comparison.

Worksheets

Handout 1

A. It's often said industrial robots have made their biggest mark in the automotive world but it took many decades of refinement for them to get there. How long has it been since robots got their start? The most basic ideas originate in Leonardo's time!

The modern idea for the robot made its first appearance in a play in 1921. In this production, robots were mechanical workers who helped humans – but they eventually revolted and took over the world. To say this is an inauspicious beginning would be an understatement. Still, real-life technology soon began to catch up with the concept.

B. WWII represented a leap forward in technology. U.S. automakers had high quotas and constantly sought ways to improve output. The conflict accelerated development of technologies like the first computer. In 1970, when the first integrated circuit appeared, the automation race was on.

Early industrial robots had no external sensors. However, they were still able to perform basic tasks like pick and place. This made automotive factories much safer for their employees.

C. Prototype industrial robots were deployed in General Motors facilities as early as 1961. These first robots mainly performed spot welding. Their success soon attracted attention from Ford. In 1969, the Stanford Arm was developed. With six degrees of freedom, it was capable of tasks earlier robots couldn't perform. In 1974, it was followed by the Silver Arm from MIT. Using embedded pressure-sensitive sensors and a microprocessor, this new arm was far more versatile. It opened the way for a years-long robot boom with 30% year-on-year growth.

By the 1980s, billions of dollars were spent by companies worldwide to automate basic tasks in their assembly plants. Although automation system deployment did dip in the 1990s, innovative technology has caused it to rebound.

D. Today, robots are an essential part of making automotive plants more competitive. With interest in building plants throughout China, the stock of industrial robots in that country is expected to be higher and higher. In recent years, more than half of industrial robot purchases in North America have been made by automakers.

Today's robots are far more sophisticated than their predecessors. Many are semi-autonomous, with machine vision systems to interact within a changing environment. Some can even work side-by-side with humans. All signs suggest we are in the middle of a new industrial robot boom!

(Source: <https://www.automate.org/blogs/the-history-of-robotics-in-the-automotive-industry#:~:text=Automotive%20Automation%20Booms%20in%20the,soon%20attracted%20attention%20from%20Ford.&text=It%20opened%20the%20way%20for,year%20Don%2Dyear%20growth.>)

Teacher's notes:

The aim of the activity is twofold: 1. to introduce the students into the topic of automation in the automotive field and 2. to follow up on the topic of comparison degrees.

Theoretical underpinnings

	TO KNOW	TO VALUE	TO ACT
TE-Con3 PREMISES	A. multidisciplinary	D. culture-oriented	G. task based
	B. content-driven	E. glocal	H. interactive and performative
	C. language sensitive	F. academic	I. modular

The activity above was designed in such a way as to reveal the following traits that relate it to the TE-Con3 Framework: it is **modular** (by which we understand it being part of a module, with this module being followed/preceded by other modules) as it aims at providing course participants with knowledge on a certain topic from a specific academic field. It is **multidisciplinary** because it requires course participants to approach an automotive engineering issue – an academic field that does not fall under their area of expertise. Also, it is **content-driven** as it implies interaction with authentic content – issues related to the history of industrial automation. At the same time, it is **language-sensitive** (under the form of language needed to talk about the content, with further specific reference to language items); its **interactive** and **task-based** nature relies on the requirement for the participants/students to solve a specific task based on meaningful interaction between them. The activity is also **culture-oriented** as it generates interest in automotive automation and challenges the learners to decode its meaning.

Sample Activity 4 – Analysing the problem

Academic domain: Arts and Media

Lesson stage: Analysing

Lesson topic: Public Speaking

Level: B2

Activity: Comparison

Activity focus: Compare and analyse two speeches on the same topic

Preparation: Two videos ([Greta Thunberg calls for action five years after Paris Agreement](#) and [Trumps pulls US out of Paris climate deal](#)) and one worksheet for each student.

Time: 25-30 minutes

Activity description:

Procedure:

- The teacher tells the students that in order to apply the knowledge gathered in the previous activity, the students will watch two videos and compare speeches given on the same topic.
- Before watching the video, the teacher gives each student a worksheet with a Venn diagram, explains the purpose of the diagram and the students' task is to find similarities and differences between the two speeches.
- After completing the diagram, the students are expected to discuss their findings in pairs.

Students share their answers with the whole class and add keywords to their own Venn diagram.

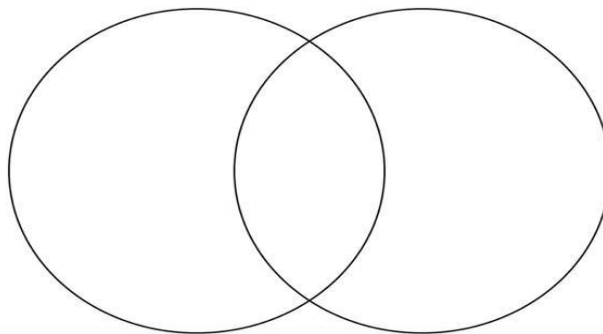
Worksheet:

Analysing

Watch the videos (Greta Thunberg calls for action five years after Paris Agreement and Trumps pulls US out of Paris climate deal) and complete the diagram with similarities and differences, analyse various aspects of the speech and the speaker. Consider the following aspects:

- content (facts),
- emotions,
- pitch, etc.

Refer back to the TedTalk by Julian Treasure.



Teacher’s notes:

The aim of the activity is to analyse the content and various tools of public speaking that have (not) been implemented by two speakers who have given a speech on the same topic. The teacher should emphasise that there are various interpretations regarding the tools of public speaking that students have been made aware having previously watched the video on public speaking and students should be invited to express their ideas and findings which could be transferred into tips for their own speeches.

Theoretical underpinnings:

	TO KNOW	TO VALUE	TO ACT
TE-Con3 PREMISES	C. multidisciplinary	D. culture-oriented	G. task based
	D. content-driven	E. glocal	H. interactive and performative
	C. language sensitive	F. academic	I. modular

The activity is **multidisciplinary** as it involves students in discussing public speaking in the context of arts and media - an academic domain which may be beyond their area of expertise. It is **content-driven** because the purpose of this activity is interaction with authentic content (public speeches given on the topic of climate change). What is more, the activity is **language sensitive** as language needed to talk about the content is implemented.

The activity is **culture-oriented** as it includes speeches by two people from different parts of the world and **glocal** as it addresses attitudes to climate change, a topic relevant all over the world that individual students can analyse. It is **academic** as it introduces a variety of discourses that they can implement during their studies or after graduation.

Although there is no key for this task, the activity is **task-based** as it aims at a purposeful discussion among students. The activity is also **interactive and performative** as students are expected to share their ideas and express their

understanding of the speeches. Last but not least, it is **modular** because, together with other modules, it provides teachers with various options which can be adjusted or replaced depending on the students' needs and interests.

Sample Activity 5 – Applying the knowledge

Academic domain: Geography

Lesson stage: End stage of the module

Lesson topic: Panel show

Level: B2-C1

Activity: Panel Show

Activity focus: Discussion, arguing (see role cards in the Panel Show)

Preparation: Done in the previous lessons

Time: 90 minutes

Activity description & procedure: The organisation and conduction of a Panel Show with different roles that have been prepared in the previous 3 units.

For this task, students are asked to organise a Panel Show. Students take on the roles of experts or people with different opinions on a particular subject and have a discussion in the presence of an audience. The discussion is led by a host who puts forth questions and comments to elicit opinions and argumentative statements from the panellists, asks them to elaborate on points they make, or respond to statements made by other participants on the panel. The Panel Show allows to display a plurality of opposing or conflicting points of view on a certain topic while also relating positions to each other. It offers opportunities for students to demonstrate their content knowledge and their understanding of a topic. Simultaneously, it encourages skills such as argument building and understanding as well as analytical reasoning (Playing beyond CLIL 2021, pp. 12, 21), and, which is important in TE-Con3, requires role-taking and thus encourages empathy as a central capacity in democratic citizenship education.

In this example, students will engage in a Panel Show discussing the topic “The Tesla giga-factory in Brandenburg, Germany – an economic success at the cost of an ecological disaster?”.

To begin with, it needs to be decided which roles should be included in the Panel Show. The role cards below offer some suggestions. Roles can be changed, some can be left out and more can be added if required. The cards outline the function of each role, the stance they take in the discussion. As an additional feature, a personal character trait is assigned. Students might think of other roles that they could take on as well or on more character traits, which can add a lot of fun to the task and the Panel Show itself. Roles can then be assigned to small groups of students. They will prepare for the Panel Show by formulating their respective position, collecting and arranging arguments, anticipating counterarguments, and thinking of how to respond to them. For this, students apply knowledge that they will have gained in previous phases of the module. During the Panel Show, however, there will normally only be one person for each role on stage. The remaining group members become 'ordinary' members of the audience.

As part of the preparation, all students will write down questions and hand them over to the host, who will select some (either by pre-selection or by drawing them from a hat) for discussion during the Panel Show. Before the show starts, the audience could be asked by an animator to vote which stance they take, i.e., in favour of the factory, supporting it under certain conditions, against it, or undecided. This vote is repeated after the show as well to show if and how the discussion influenced the audience's opinion.

At the beginning of the Panel Show, the host welcomes his/her guests as well as the audience, briefly introduces the panellists, and then allows each to deliver a short (timed) introductory statement. The host will lead the panellists through various aspects of the debate's topic. She/he may use the questions provided by the audience as she/he sees fit. As a variation, the audience can be given the chance to contribute to the discussion by asking further questions. If a question from the audience arises, the animator steps in at a suitable point and either gives the person from the audience the chance to speak aloud or forwards the question to the panel. Each of the panellists should be given the chance to fully present his/her stance and arguments. Students should have 30–40 minutes for preparation. The Panel Show itself lasts about 45 minutes.

Variations: Instead of the typical character traits of each role described on the role cards, participants in the Panel Show can adopt various personal qualities (for

some suggestions see below). The qualities can either be chosen by the teacher or students, or they can be drawn randomly.

In a second variation, not only the character traits vary, but also the positions that the panellist advocates (i.e., for or against Tesla's factory) are assigned arbitrarily. In this scenario, an environmentalist may need to argue in favour of the factory and find creative arguments to support this stance.

A potential variation to the audiences' pre-/post vote procedure is to arrange anonymous ballots before and after the Panel Show for the entire class. Comparing the results provides an opportunity for follow-up discussions where learners can share their personal opinions (or changes of opinion) stepping outside of the role they played in the Panel Show.

Worksheet(s) for students: Role cards; variation cards with personal qualities.

A Panel Show:

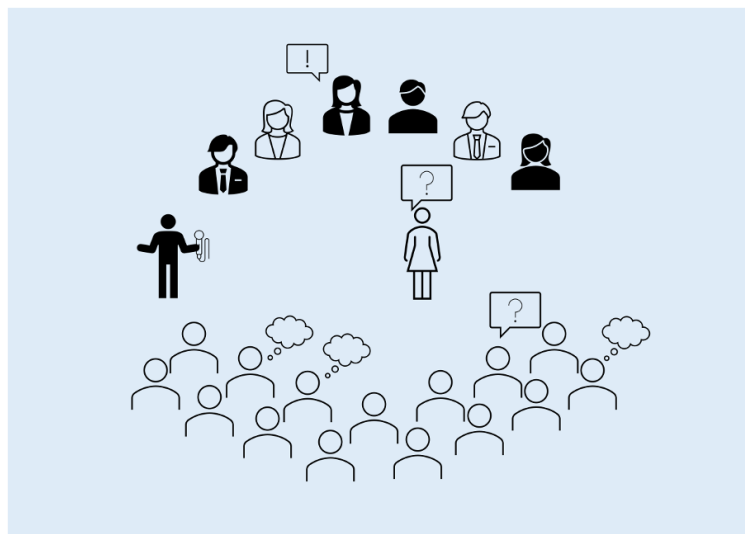


Figure 1: Roles in a Panel Show

Role Cards:**Host**Task:

1. As the host of the panel show you moderate the discussion. First, you need to briefly introduce the panellists and explain why they were selected as guests in the show.
2. You initiate the debate by asking the panellists questions – some of which you have prepared yourself, but also those you received from the ‘audience’. You should already think of which questions to ask whom of the participants before the show begins.
3. During the discussion, it is your task to ask participants to elaborate on their viewpoints or to respond to statements by other people on the panel. You may even ask some provocative questions in order to challenge the panellists’ views. As the moderator, you decide when to move from one aspect of the topic to the next. You may also communicate with the Animator and ask her/him to collect questions or comments from the audience.
4. Finally, you choose when to end the discussion and thank the participants for their contribution.

Personality: Typically, the host of a panel show is confident, charming, humorous, diplomatic, and outgoing. He/She tries to evoke interest in the topic. Although you may ask provocative questions, you should maintain a neutral and fair attitude towards the panellists and their different stances while showing interest in what they have to say. It is your job to make sure that everyone present feels safe in particular if the discussion topic is controversial.

Rescue notice: If things start to go out of hand, ask your tutor/teacher to assist you.



Audience

As a member of the audience, you will take an interest in the topic whatever it is. Remember: You bought a ticket for the studio and perhaps travelled a long way after to see the show.

Task:

1. The audience makes an active contribution to the Panel Show. Before and after the discussion, you will be asked to vote which stance on the topic you take, i.e., in favour of the factory, supporting it under certain conditions, against it, or undecided.
2. During the discussion, you should think of further questions for the panellists or remarks you want to make. Signal to the animator that you want to contribute to a certain aspect of the discussion, and he/she will give you the chance to speak.
3. All members of the audience are also strongly encouraged to react to what the panellists say by applauding, laughing, or expressing disagreement.



Elon Musk

Elon Musk, the CEO of Tesla, promotes Tesla's interests.

Task:

1. Being Elon Musk, you will, of course, argue in favour of the giga-factory and defend it against critics. Therefore, you need to find reasons and arguments that support the factory in Brandenburg. You should also be prepared to give details of the planned production. You should know *a lot* and also why everything you do is a benefit for the people and the community in Grünheide, Brandenburg.
2. Think of which counter arguments might come up from other panellists. How can you dismiss them?

Personality: Elon Musk appears as a very confident person. In interviews or speeches, he often seems calm and laid-back. Watch or listen to an interview with him as part of the preparation for this role.



Environmentalist

Since Tesla announced plans to build a factory in Brandenburg, the main criticism against it has issued from an environmental protection point of view. Therefore, it is crucial to have a representative of an environmental organisation contributing to the discussion.

Task:

1. As an environmentalist, you should be able to demonstrate precisely which impact the factory has on the environment and which resources are particularly endangered. Maybe you can even refer to scientific findings. Which actions do you demand Tesla or politicians to take in order to minimise environmental impact and hazards?
2. Think of which counter arguments might come up from other panellists. How can you dismiss them?

Personality: Since you see a severe threat for the environment in the giga-factory, you should appear in a serious manner. You could also express that the situation makes you angry or show how passionate you are about protecting the environment.



Resident of Grünheide

Since residents of Grünheide, the town where the new giga-factory is built, are directly affected by Tesla's project, they should be represented in the Panel Show. However, there are different groups with different views:

- a) some have voiced concerns about the effects of the factory for the neighbourhood and the environment;
- b) others believe that the factory will bring jobs and prosperity to the little town.

Task:

1. Decide which of the two positions you will represent.
2. As a resident, you demonstrate what has already changed or what potentially could change in the neighbourhood due to the operating factory.
For a) Which actions do you demand from Tesla or politicians in order to minimise negative effects for residents?

For b) Which actions do you demand from Tesla or politicians in order to maximise positive effects for residents?

3. Think of which counter arguments might come up from other panellists. How can you dismiss them?

Personality: As someone who lives in the close surroundings of the factory, you are worried and angry about (potential) consequences for the area. You are eager to express the negative impact on your personal life.



Mayor of Grünheide

Tesla's factory has become a political issue. Playing the mayor of Grünheide, the town near which the new giga-factory is built, you take on the role of arguing which political considerations have led to the (preliminary) approval of the giga-factory.

Task:

1. As a democratic representative, you need to be able to explain which interests have been weighed up against each other in the decision-making process and which advantages for the region are expected from Tesla's production in Brandenburg.
2. Consider if there are there any positive or negative effects for residents? Think of which counter arguments might come up from other panellists. How can you respond to them?

Personality: On the one hand, you need to defend the approval for the construction of the factory. On the other hand, you need to show sympathy for residents who are worried or angry. Try to be rhetorically convincing and perhaps even charismatic. You think about other personal qualities that will help you to stand your ground.



Economic expert

Tesla's giga-factory could be an example of clashing economic and environmental interests. You are in the Panel Discussion as an expert who can explain the pros and cons from an economic perspective.

Task:

1. As an economist, you will need to explain to what extent Tesla contributes to economic growth and thereby put emphasis on the company's economic importance for the region, Germany, and the whole world. However, if you believe that there are disadvantages as well, you also need to elaborate on these during the discussion.
2. Think of which counter arguments might come up from other panellists. How can you dismiss them?

Personality: Act in a scientific manner and demonstrate that you rely on research. As you are not personally involved in the issue, you probably will not need to show a lot of emotion. However, you could decide whether you want to show empathy for one (or more of the sides) on the panel.

Satirist



Task: As part of the panel, the satirist actively participates in the discussion and creates a comic relief during a serious debate. In which way can you make fun of arguments other panellists may come up with? You may even be ironic or sarcastic. Yet, this does not mean that everything you say is supposed to be solely entertaining. You can still claim your own opinion, agree with other panellists, or criticise other positions in a satiric way.

Personality: A satirist is not afraid to interact with people. You should be outgoing, spontaneous, and charismatic.

Animator



Task: The animator is responsible for encouraging interaction of the audience with the host and panellists. Before the show begins, you practice with the audience how they can express agreement or disagreement. You are also responsible for collecting questions from the audience either by interrupting the discussion and giving the person from the audience the chance to speak or by forwarding the question to the host or directly to one of the panellists.

Before and after the show, ask the members of the audience to vote which stance they take, i.e., in favour of the factory, supporting it under certain conditions, against it, or indecisive.

Personality: An animator is not afraid to interact with people. You should be outgoing and spontaneous.

Personal qualities (variation):

extremely confident	shy/nervous
sad	happy
bored	quick-tempered
calm	energetic
charming	compassionate
dramatic	egocentric
optimistic	pessimistic
passionate	earnest
strict	very sceptical/eager to contradict other people
...	...
...	...
...	...
...	...

Teacher's notes: The teacher is responsible for the facilitation of the Panel Show conducted by the learners; as a scaffold, teachers could take the role of moderator.

Theoretical underpinnings

	TO KNOW	TO VALUE	TO ACT
TE-Con3 PREMISES	E. multidisciplinary	D. culture-oriented	G. task based
	F. content-driven	E. glocal	H. interactive and performative
	C. language sensitive	F. academic	I. modular

The activity is **multidisciplinary** as it involves course participants in discussing a geographical theme – an academic domain beyond their area of expertise.

It is **content-driven** in that it is oriented toward interaction with authentic content: the Tesla factory has been built and the economic, social and environmental influences are tangible for the area and the inhabitants.

The module is **language-sensitive** as the language needed to talk about the content is addressed in it.

The activity is **culture-oriented** as it inspires interest in geography and engages learners – coming from different cultural backgrounds – in negotiating the meaning and value of social, economic and environmental factors in discussing the relatively sudden presence of the Tesla factory.

It is **glocal**, as the universal phenomenon of the relation between social, economic and environmental factors in a geographic issue is approached by individual students in their roles as active democratic citizens trying to find solutions for local problems by discussions and negotiation.

It is **academic** in that, by virtue of its subject and complexity, it empowers students to play a substantial role in the versatile academic and/or business world in their future.

The activity is **task-based** as – while not presupposing any definite outcomes – in engages students in a goal-oriented discussion.

It is **interactive & performative** in that students engage in purposeful interaction – aimed at sharing and comparing their understanding of the different angles and perspectives in the discussion and its outcome.

Finally, it is **modular** because, together with other modules, it comprises a set of possible options for teachers – to be adjusted or replaced depending on the course participants' needs.

Sample activity 6 – Applying the knowledge

Academic domain: Automotive engineering

Lesson stage: Applying the knowledge

Lesson topic: Replacing humans with robots

Level: B2

Activity: discussion, pair/group work, role-play.

Activity focus: Robots vs humans

Preparation: 1 handout on the topic, role cards

Time: 50 minutes

Activity description:

Procedure:

1. The teacher prepares a text about the trend of replacing humans with robots in key areas of manufacturing and hands it over to the students, asking them to read it carefully (Handout 2). They can also read the text in a PPT projected in the classroom, so that the teacher makes sure the students understand the text. Then, the students organized in groups of three are asked to extract characteristics of robots and humans, each of them referring to automotive industry.
2. After presenting these features of robots vs humans in terms of advantages and disadvantages related to automotive industry (in each group of three, students choose a member to present the results of their work), the teacher summarizes all the group's results on a flipchart.
3. The teacher organizes students into three groups: A.- management of Automobile Dacia factory, B. -employees of the automotive factory, C.- mediators in a possible conflict situation, with a view to a debate. Each of the groups receives specific cards with info relevant to each of the positions taken. They are asked to formulate their arguments for and against introducing more robots in the factory and then to discuss, taking into account the specific of the factory and of the social context.

Worksheets:

Handout 2

For workers, it's intimidating to hear of industrial digitization plans that envision handing over anywhere from 60 to 80 percent of processes to robots and other programmable machines in the not too distant future. But while there are certainly highly repetitive jobs bots would perform more efficiently and economically, automating alone is not always the best path to higher productivity.

Smart organizations learn quickly enough that if they place efficiency above a smooth organizational transformation, they may find their automation efforts fail to improve their companies' performance. The real key to developing a competitive edge in an age of evermore automation is striking the right balance between people and robots, and evidence abounds that it's not necessarily the most automated factories or service organizations that rise to the top.

People are the most flexible form of automation. They can do anything. You just need to train them.

The automotive industry, among the first to embrace robots in the manufacturing process, provides a working example of why companies cannot simply replace employees or fail to retain and retrain. Stark productivity differences exist between the industry leaders and laggards, in large part based on the efficacy of their automation efforts. One result: Some automakers require as much as six months to transition to producing a new vehicle, while others need no more than a day.

At the root of the discrepancy is an appreciation of which jobs robots do more efficiently and which require a human touch. Leading car companies have almost completely automated

their paint and body shops. These are jobs that require constant repetition and consistent quality and often present safety and ergonomic challenges. Although lead-based paints aren't used anymore, working in these areas still could expose workers to a bevy of unhealthy chemicals, making these the quintessential kinds of jobs robots have been designed to handle.

On the other hand, assembly lines — which must deal with the multitude of options on new models from side airbags to built-in vacuum cleaners — continue to heavily rely on a human workforce. To handle today's highly customized vehicles, with as many as 55,000 parts for the variety of electronics and other bells and whistles offered on autos, requires the flexibility of human workers who can adjust to changing needs and innovations without extensive reprogramming.

To bring along employees, managers must introduce automation in steps. If they go too far too fast, they risk losing critical know-how as employees jump ship or are pushed off. A priority must be identifying and retaining the employees critical to re-engineering processes down the road — as well as those people needed to ensure the effective management of the bots and automation just incorporated into the workflow.

(Source: <https://www.oliverwyman.com/our-expertise/insights/2017/mar/Surprise-Robots-Arent-Replacing-Humans-In-Key-Areas-Of-Manufacturing.html>)

Teacher's notes

The aim of this activity is to make students reflect on the idea of replacing human workers with robots in the automotive engineering field and to gain a deeper understanding of the multiple points of view related to that. The teacher should encourage students to express their opinion on the matter especially during the role play.

Theoretical underpinnings

	TO KNOW	TO VALUE	TO ACT
TE-Con3 PREMISES	G. multidisciplinary	D. culture-oriented	G. task based
	H. content-driven	E. glocal	H. interactive and performative
	C. language sensitive	F. academic	I. modular

The activity above was designed in such a way as to reveal the following traits that relate it to the TE-Con3 Framework: it is **modular** (by which we understand it being part of a module, with this module being followed/preceded by other modules) as it aims at providing course participants with knowledge on a certain topic from a specific academic field. It is **multidisciplinary** because it requires course participants to approach an automotive engineering issue – an academic field that does not fall under their area of expertise. Also, it is **content-driven** as it implies interaction with authentic content – issues related to the industrial automation by means of robots. At the same time, it is **language-sensitive** (under the form of language needed to talk about the content); its **interactive** and **task-based** nature relies on the requirement for the participants/students to solve a specific task based on meaningful interaction between them. The activity is also **culture-oriented** as it generates interest in automation and challenges the learners to decode its meaning.

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