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## **State of the Content and Language Integrated Learning (CLIL) implementation in vocational schools across Europe**

Wdrażanie metody zintegrowanego nauczania  
języka i przedmiotu (CLIL) w szkołach zawodowych  
w Europie

**Key words:** vocational schools, content and language integrated learning (CLIL), foreign language teaching, bilingual education.

**Abstract.** The following article collects information on current experience and state of the art of CLIL methodology in vocational schools across selected countries of the European Union, namely Poland, Austria, Romania, and Spain. Relevant issues, both general and country-specific, are outlined. The analysis suggests that CLIL is the natural ally of vocationally-oriented education, therefore all attempts to introduce CLIL into vocational schools' classrooms should be valued.

**Słowa kluczowe:** szkoły branżowe (zawodowe), Zintegrowane Kształcenie Przedmiotowo-Językowe (ZKPJ), nauczanie języka obcego, kształcenie dwujęzyczne.

**Streszczenie.** Artykuł prezentuje informacje na temat aktualnego stanu wiedzy o metodologii CLIL oraz poziomu jej wdrożenia w szkołach zawodowych w wybranych krajach Unii Europejskiej, a mianowicie w Polsce, Austrii, Rumunii i Hiszpanii. Przedstawiono istotne kwestie zarówno ogólne, jak i specyficzne dla danego kraju. Przedstawiona analiza sugeruje, że CLIL jest naturalnym sprzymierzeńcem edukacji zorientowanej zawodowo, dlatego wszelkie próby wprowadzenia CLIL do sal lekcyjnych szkół zawodowych powinny być traktowane przez decydentów priorytetowo.

**Introduction.** Content and Language Integrated Learning (CLIL) has been a tremendous success story and its influence on educational processes is currently expanding quickly across Europe and beyond. One of the available definitions describes

CLIL as: “a dual- focused educational approach in which an additional language is used for the learning and teaching of both content and language” (Mehisto and Marsh, 2008: 9). More generally, we could say that it is the integration of learning a foreign language with learning some other content. Moreover, students are expected to focus on the content or information rather than on a linguistic syllabus (Larsen-Freeman, 2000: 137).

Research carried out in recent years has shown that knowledge of foreign languages is recognized as a key competency in the labour market. It is therefore obvious that vocational schools should focus on improving the language skills of pupils in order to meet the obligation to prepare young people for work, especially in the context of the globalization process. This should apply not only to individual professions or professional fields, but also to professions in the field of healthcare, social services, hospitality, industry, technology, business or administration. Content and Language Integrated Learning enables vocational schools to meet the needs of the economy by improving general and specialist language skills of employees, as well as by increasing the competences of professionally active people.

It should also be noted that the British Council organised four Regional Policy Dialogues in Europe between May 2013 and March 2014. The Dialogues examined the contribution of languages to vocational education and training (VET). The institutions participating considered the relationship between content and language integrated learning (CLIL) and VET and concluded that the two are compatible in their shared concern for promoting an ability to use language in real life situations. The talk basically suggested that CLIL is the natural ally of vocationally-oriented education, with regard to both its hands-on approach and to its facilitation of multilingualism. It also compared and contrasted CLIL with Vocational English, and suggested that CLIL’s focus on procedural knowledge makes it the ideal vehicle to fulfil the aims of the EU’s strategic Europe 2020 initiative (Borg, 2014: 14).

The following Report collects information on current experience and state of the art of CLIL methodology in vocational schools across selected countries of the European Union, namely Poland, Austria, Romania, and Spain. Relevant issues, both general and country-specific, are outlined.

**CLIL as a form of foreign language provision in EU vocational schools – an Overview.** CLIL stands for Content and Language Integrated Learning (Mehisto and Marsh, 2008: 9). As the name implies, CLIL is a unique methodology aimed at delivering the essentials of the taught subject through the medium of a foreign language, but in such a way as to conterminously reap several didactic, cultural, and professional benefits (cf. Taillefer, 2013) along with the selected advantages of functional bilingualism (Opacki, 2017: 46). Thus, CLIL tasks have to be specifically designed to elicit this conterminous reaping of benefits. Owing to this, CLIL should not be confused with LSP (Language for Specific Purposes), as, despite certain similarities, the purpose of the classes taught and the construction of said classes markedly different between the former and the latter. Specifically, Content and language integrated learning (CLIL) aims to unify linguistic

and extra-linguistic goals (cf. Lyster, 2007; Walenta, 2018) in such a way that neither is at a disadvantage relative to the other. From the perspective of the teacher, this means that knowledge must be explicated through the facilitation of understanding and that the language matter to be learned must be delivered through the realization of content learning objectives.

There is no teaching and learning without language. Every teacher is a language teacher (Ting, 2012). But there is no learning without content either. As stated in Gregorczyk (2012:21) CLIL does not lead to any deficiencies as far as content acquisition is concerned. The 4C framework (Coyle, 2008) focuses on the interrelationship between content (subject matter), communication (language), cognition (thinking) and culture (awareness of self and otherness) (see CLIL matrix). It is based on the synergies of subject learning (content and cognition) and language learning (communication and culture). Therefore, it can be very effective and is highly brain compatible (Ting, 2012).

Acquiring subject knowledge is not enough, learners have to understand the subject matter, develop thinking skills (cognition) and gain conceptual understanding. But in order to construct an understanding, to develop cognition, the linguistic demands must be defined and met (Bloom, 1984). Each step towards cognitive progression according to Bloom's Taxonomy (Bloom, 1984) demands specific linguistic means which the learners have to master and which have to be supplied by the teacher. Therefore, the teachers have to be aware what the learners need in order to develop cognition and expand their conceptual understanding.

The framework underpinning CLIL is based on the four aforementioned key 'building blocks' (Coyle, 2006: 9), referred to as the 4Cs Framework:

- Content: The subject matter, theme, and topic forming the basis for the program, defined by domain or discipline according to knowledge, concepts, and skills (e.g. Science, History, Arts);
- Communication: The language to create and communicate meaning about the knowledge, concepts, and skills being learned (e.g. stating facts about the dissociation process, giving instructions on using software, describing emotions in response to music);
- Cognition: The ways that we think and make sense of knowledge, experience, and the world around us (e.g. remembering, understanding, evaluating, analysing, reflecting, creating);
- Culture: The ways that we interact and engage with knowledge, experience, and the world around us; socially (e.g. social conventions for expressing oneself in the target language), pedagogically (e.g. classroom conventions for learning and classroom interaction), and/or according to discipline (e.g. scientific conventions for preparing reports to disseminate knowledge).

According to Coyle, the 4Cs Framework suggests that effective CLIL takes place through progression in knowledge, skills and understanding of the content, engagement in associated cognitive processing, interaction in the communicative context, developing appropriate language knowledge and skills as well as acquiring a deep intercultural

awareness through the positioning of self and ‘otherness’. From this point of view, CLIL involves learning to use language appropriately and, at the same time, using language to learn effectively (Coyle: 2006, 9). It is vital to mention that while methodology relies heavily on specific conditions for successful implementation (e.g. see Baker, 2006, for a list of ‘core’ and ‘variable’ features of immersion), CLIL is instead guided by six relational (and therefore more contextually sensitive and flexible) pedagogical principles that work across different contexts and settings, in order to integrate language and content (Coyle, 2007: 550–551). At the same time, all four key elements underlying the 4Cs framework are incorporated:

- Subject matter means much more than acquiring knowledge and skills. It is about the learner constructing his/her own knowledge and developing skills which are relevant and appropriate (Lantolf, 2000; Vygotsky, 1978).
- Acquisition of content, skills and understanding involves learning and thinking processes. In order to enable the learner to construct an understanding of the subject matter, the linguistic demands of its content as the “conduit for learning” must be analysed and made accessible (Met, 1998).
- Cognition requires analysis in terms of its linguistic demands to facilitate development (Bloom, 1984).
- Language needs to be learned in context (i.e. learning through the language), which requires reconstructing the subject matter and its related cognitive processes through a foreign language e.g. language intake/output (Krashen, 1985; Swain, 2000).
- Interaction in the learning context is fundamental to learning. ‘If teachers can provide more opportunities for exploratory talk and writing, students would have the chance to think through materials and make it their own’ (Mohan, 1986: 13). This seems to be essential when the learning context operates through L2.
- The interrelationship between cultures and languages is complex (Byram, 2001).
- The framework views culture as the core while intercultural understanding pushes the boundaries towards alternative ideas such as transformative pedagogies, global citizenship, student voice and ‘identity investment’ (Cummins, 2000).

The results of such changes are educational experiences that support greater opportunities for authentic and purposeful meaning-making through language. Furthermore, such experiences facilitate the development of new communicative skills while learning new content. Consequently, CLIL provides the basic conditions under which humans successfully acquire any new language: by understanding and then creating meaning (Lightbown & Spada, 2006). If we consider our first language acquisition, children are gradually exposed to new language in their first years of life, matched against corresponding levels of early cognitive development. In contrast, traditional second language classes focus mostly (often exclusively) on elements of language like: grammar, vocabulary, spelling, pronunciation, etc. and at the same time, deliberately tend to avoid exposure to what might be perceived as difficult or challenging. While this conventional separation of language/content seems to be reasonable, we should also bear in mind that that the learners’ ability to use new language is often rudimentary in

comparison to what they can understand and do in their native language. If we allow for separation of the CLIL 4Cs, basic building blocks for language acquisition may be displaced. As a result, we observe a hindrance, rather than successful language acquisition.

As a pedagogical approach, CLIL certainly provides a comprehensive framework that recognizes the complex but necessary interrelationship between language and content for genuine language development. The approach entails a theoretically rich and robust set of principles to help guide teachers on how this can actually be achieved in practice, across various educational settings.

**Why CLIL?** CLIL offers the potential to enhance the individual capabilities of students with respect to the learning of new foreign languages and content subjects and contributes to the build-up of a positive “can-do” attitude among said students. It can be said, therefore, that CLIL combines the benefits of LSP with those of a functional-bilingual education (cf. Opacki, 2017: 46). CLIL has the potential to increase student motivation and its context dependence makes it naturally infused with cultural components. This causes students to not only better understand a particular foreign culture, but also to develop an increased cultural awareness by observing the relationships between a language and the society that uses said language. What is more, the skills and knowledge that students acquire, in particular in a VET context, is likely to increase the student’s chances on the job market. As noticed by Nawrot-Lis (2017), there is a natural relationship between various CLIL models and vocational training, both in terms of their emphasis on practical application and the promotion of multilingualism.

As CLIL teachers one must first be aware of what we are teaching and what the students will be learning. One needs to keep in mind what the learning goals are at all times, so one can assess the outcomes later on. In order to get that, one needs to link content and communication, obviously. One also has to decide what language ones students need to work with the content, maybe get a vocabulary list if there is specialized set of words or phrases the students need to know. One must also think about the language of tasks and classroom activities, as well as the discussion and debate topics that might arise. Cognition in this scenario is also very important, since one needs to determine which thinking skills are more appropriate for the content, or the tasks we should design so higher-order thinking is encouraged. Finally, culture is definitely not an afterthought but a thread that weaves its way throughout the topic one is teaching. One must find opportunities for the CLIL context to bring some kind of “added value” to the contents one is teaching.

So, as a conclusion, to ensure the CLIL approach works effectively, we must focus on the learners first and foremost. We must encourage them to participate and cooperate in the learning process, which needs to be flexible and adapt to our students’ learning styles. To achieve this we must first make sure the content and its context “reaches” our learners.

The tenets of CLIL can be summarized as follows:

- Task-based concept cycles following Bloom's Taxonomy
- The CLIL Modus operandi (Ting 2012)
- Communicative and conceptual progression
- Activating knowledge
- Guiding understanding, giving feedback, encouraging reflexion
- Cooperative, inquiry based learning, project – based learning
- Portfolio work and formative assessment modes (Poisel, 2007).

**Methods, Caveats, and Limitations.** The present research consists of a series of surveys that have been conducted by each national team participating in the Erasmus+ CLIL-VET project (Poland, Austria, Spain, and Romania). Online questionnaires were distributed among a variety of schools, all specializing, or teaching, a vocational-subject. All of the teachers participating in the study were asked to answer twenty one online questions. A five-point Likert scale has been applied for the majority of the questions. The remaining questions were either „open-ended” or „yes/no” questions.

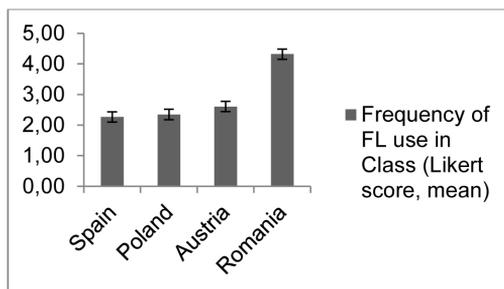
Our teams did not manage to acquire a sufficient number of respondents to warrant parametric tests for every variable tested and the statistical power of some of the tests might also be put into question. Furthermore, due to limited availability of respondents due sampling procedures, typical of regular large-scale studies, were also not an option. Accordingly, for the sake of methodological rigor, scientific integrity, and to ensure a correct interpretation of the results to be reported below, it must be stated explicitly at this point that the current study explores its object exclusively in a declarative fashion, meaning that certain aspects might have been over- or underreported due to individual bias of the respondents.

In layman terms, teachers were surveyed with respect to their impressions regarding certain phenomena, but these phenomena were not objectively quantified using operationalized measurements. This means that what we actually managed to investigate, and hence what we are now reporting, are what VET teachers in selected countries consider to be the prevailing state of affairs rather than the actual state of affairs. For this reason, the present report should be regarded as qualitative in nature and, accordingly, treated as a preliminary investigation rather than a definite study.

**Results.** In order to compare all countries, all charts below report mode values from the Likert scales included in the surveys. Whenever this is pertinent, the Likert scales are translated into appropriate qualitative information (e.g. years of experience, number of languages known, etc.).

**Parametric Comparisons.** This section describes the results of a series of parametric comparisons of the countries involved in the study. Because the groups surveyed in each country were not matched, a randomized sampling procedure was used to select observations for the parametric comparisons, n=38 per country, thus N=152 in total.

### Foreign language use in the classroom



A single factor ANOVA was performed for  $N = 152$  sampled observations. The ANOVA revealed a significant difference between countries:

$$F(3,148) = 29.03, p < .001.$$

The ANOVA was followed by a post-hoc analysis in the form of Turkey's HSD.

This test revealed the following contrasts and effects between countries:

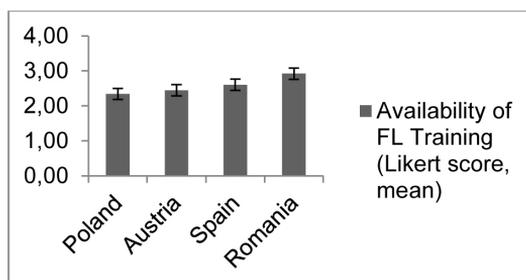
Spain vs. Poland:  $q(148) = 3.67, r = .03$ , not significant

Poland vs. Austria:  $q(148) = 1.46, r = .11$ , not significant

Austria vs. Romania:  $q(148) = 9.52, r = .61$ , significant

Observations: teachers from Romania rate their frequency of FL use higher than their counterparts from the remaining countries surveyed ( $M = 4.32$ ). Teachers from Poland, Spain, and Austria rate this use similarly ( $M_{pooled} = 2.4$ ).

### Availability of foreign language training



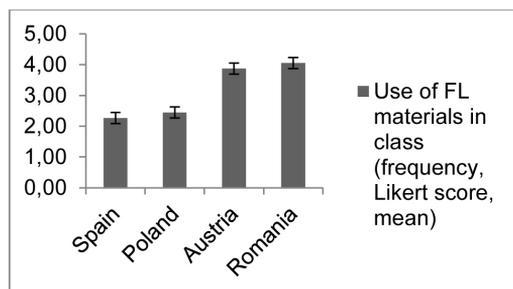
A single factor ANOVA was performed for  $N = 152$  sampled observations. The ANOVA did not reveal any significant difference between countries: ANOVA, single factor:

$$F(3,148) = 2.42, p < .06$$

Given this result, a post-hoc analysis was not called for.

Observations: teachers from all of the countries surveyed do not differ in terms of how they rate the availability of foreign language training. The mean rating assigned is  $M = 2.50$  (rather unavailable), implying that all teachers clearly believe that there is a deficit in the availability of said training.

### Use of foreign language materials in the classroom



A single factor ANOVA was performed for  $N = 152$  sampled observations. The ANOVA revealed a significant difference between countries:

$$F(3,148) = 25.35, p < .001.$$

The ANOVA was followed by a post-hoc analysis in the form of Turkey's HSD. This test revealed the following contrasts and effects between countries:

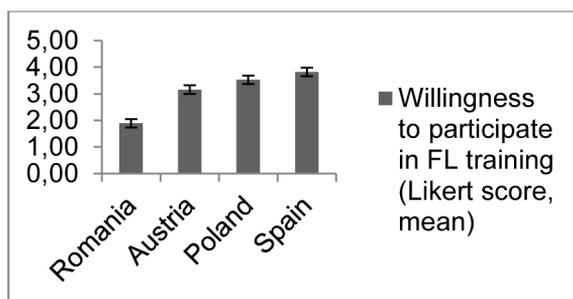
Spain vs. Poland  $q(148) = 0.99, r = .08$ , not significant

Poland vs. Austria  $q(148) = 7.67, r = .53$ , significant

Austria vs. Romania  $q(148) = 0.99, r = .08$ , not significant

Observations: Teachers surveyed in Austria and Romania ( $M = 3.87$  and  $M = 3.05$ , respectively) rate their use of foreign language materials as more frequent than their counterparts from Spain and Poland ( $M = 2.26$  and  $M = 2.45$ , respectively).

### Willingness to participate in foreign language training



A single factor ANOVA was performed for  $N = 152$  sampled observations. The ANOVA revealed a significant difference between countries:

$$F(3,148) = 25.54, p < .001.$$

The ANOVA was followed by a post-hoc analysis in the form of Turkey's HSD. This test revealed the following contrasts and effects between countries:

Romania vs. Austria  $q(148) = 7.54, r = .52$ , significant

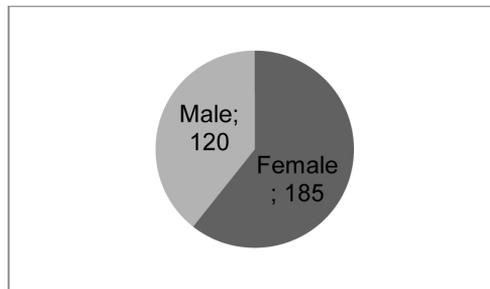
Austria vs. Poland  $q(148) = 2.19, r = .17$ , not significant

Poland vs. Spain  $q(148) = 1.72, r = .14$ , not significant

Observations: Teachers from Romania rate their willingness to participate lower ( $M = 1.89$ ) in comparison with their peers from the remaining countries surveyed, that is Austria, Poland, and Spain ( $M = 3.16$ ,  $M = 3.53$ ,  $M = 3.82$ , respectively).

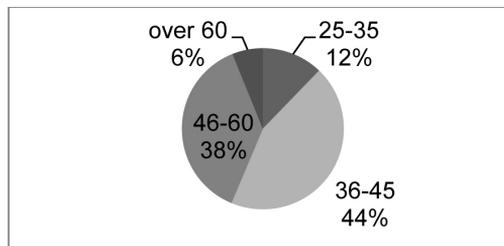
**Non-Parametric Comparisons.** This section describes the results of a series of non-parametric comparisons of the countries involved in the study. The data in these tests did not qualify for parametric testing mainly due to differences in methodological approach between individual countries (i.e. different Likert scale items or their counts, non-compatible question formats, or data asymmetry). On account of this, relevant distributions could not be established: and hence, the data must either be represented as percentiles, fractions, or raw representations.

### Gender



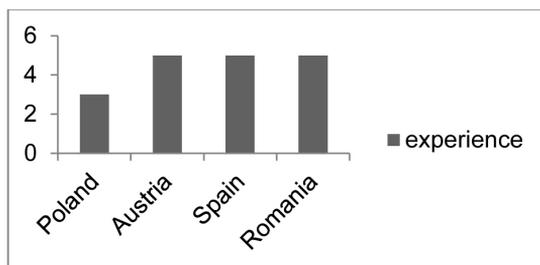
Most teachers surveyed (67%) across all participating countries were female.

### Teacher Age Range

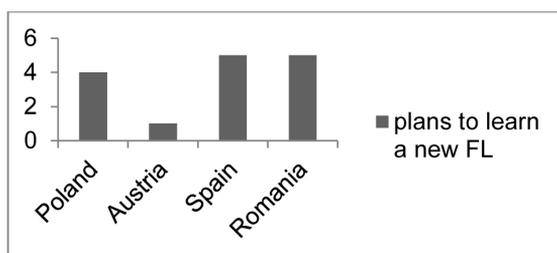


The majority of teachers surveyed fall within the 36–45 (44%) age range followed closely by 36–45 (37%) age range with the remaining age ranges accounting for a minority of the surveyed group.

**Teaching experience.** With respect to teaching experience, the investigated countries relatively equal. As evident from the chart below, most VET teachers surveyed are highly experienced, having taught for more than 20 years (a Likert response of 5) with Polish teachers declaring slightly less experience than their peers from abroad, with 11–15 years of teaching experience (corresponding to a Likert response of 3).



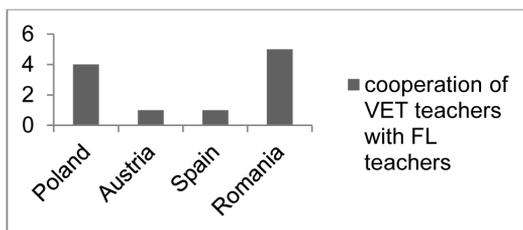
As far as readiness to learn a new language is concerned, it was the Spanish and Romanian VET teachers who reported the highest mode value of 5 (corresponding to the nominal value of "definitely yes"). Polish VET teachers reported a slightly lesser eagerness to undertake additional language education, reporting a mode of 4 (corresponding to the nominal value of "yes"). Finally, Austrian VET teachers appear to be the least willing to commit to learning a new language, reporting a mode value of 1 (corresponding to the nominal value of "definitely not").



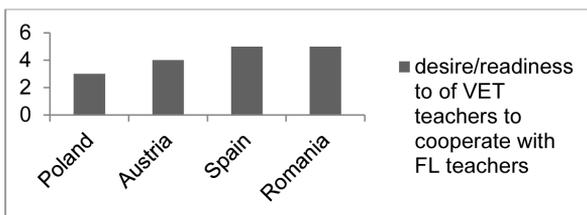
When inquired about the availability of FL training in their respective countries, Polish and Romanian VET teachers each reported the second highest mode value of 4 (corresponding to the nominal value of "yes", given the question "Is there a sufficient amount of training for vocational school teachers who would like to start teaching their subject in a foreign language). Their colleagues from Spain appear not to share this impression, assessing the availability of said training as 2 (or "rather not", given the same question as the afforested). Austrian teachers reported a mode Likert value of 3 (corresponding to the nominal value of "no opinion").

When asked about any and all existing cooperation between VET teachers and foreign language teachers in their respective schools, the teachers surveyed revealed a certain discrepancy between countries. Romanian VET teachers reported that they cooperate with local FL teachers on a regular basis, reporting a mode Likert value of 5 (corresponding to the nominal value of "definitely yes", given the question of "Do you cooperate with foreign language teachers at your school?"). They were followed closely by their Polish peers, who reported a mode Likert value of 4 (corresponding to

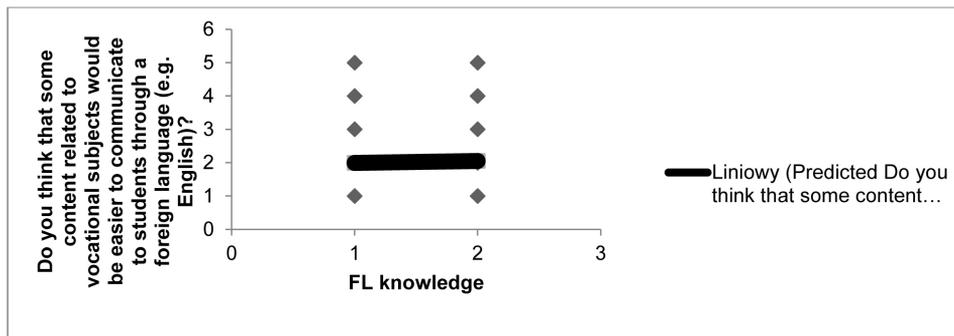
the nominal value of "yes"). VET teachers from Austria and Spain appear to cooperate with local FL teachers the least, reporting a mode Likert value of 1 (corresponding to the nominal value of "definitely not" given the same question as the foretasted).



One should not, however, that there is also a discrepancy between current cooperation and prospective cooperation, as most VET teachers surveyed appear to be willing to cooperate with local FL teachers to some extent. As depicted in the chart below, VET teachers from Spain and Romania are ex aequo the most willing to cooperate with their on-site foreign language teaching colleagues, reporting a mode Likert value of 5 ("definitely yes"). Austrian VET teachers also seem quite willing, reporting a mode only one degree below the former, 4 (or "yes"). Polish VET teachers seem to be the only outlier with respect to this question, reporting a readiness value of 3 ("no opinion").



### Opinion about Foreign Languages as Vehicular Languages (linear regression)



For the following analysis, those samples whose Likert responses ranged between 1 to 2 w.r.t. their foreign language knowledge were extracted and matched with opinions about foreign languages as vehicular tools for teaching (i.e. the question of whether it is easier to teach some subjects via a foreign language). The data were resampled and bootstrapped to include 1185 observations. A regression analysis followed.

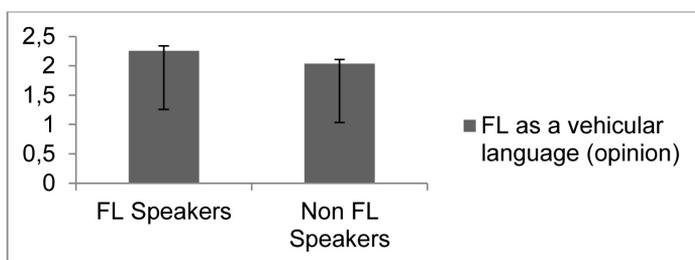
The analysis revealed that:

$R^2 < .000001$ ,  $F(1,1183) = 0.34$ ,  $p = .32$

Observations: No relationship was found between a poor FL inventory and opinion about FLs as vehicles for the transmission of knowledge.

Possible implications: This result indicates that even teachers with a modest knowledge of foreign languages acknowledge the fact that certain subject areas (or possibly entire subjects) are easier to teach in a foreign language rather than the native language of the students. This will most likely apply to the natural sciences, whose rapid development makes translation into national languages impractical.

### Opinion about Foreign Languages as Vehicular Languages



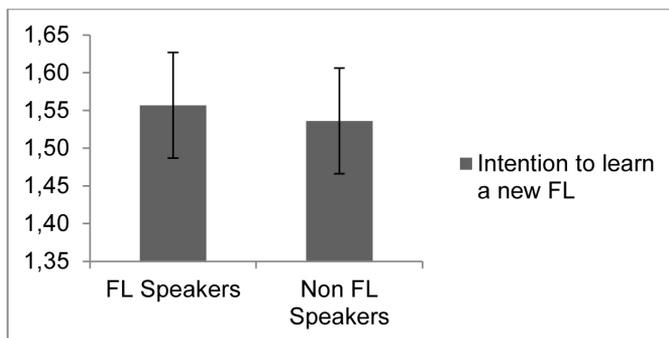
Student's T-Test ( $n = 194$ ,  $n = 194$ ) was used to compare the average opinions of FL speakers and non-FL speakers from all investigated countries w.r.t. to the status of FLs as pedagogical tools. The analysis revealed a significant difference between the two groups:

$t = (385) = 1.99$ ,  $p = .02$ ,  $r = .10$

Observations: upon comparing FL speakers and non-FL speakers it becomes evident that the former consider FLs more valuable pedagogical tools.

Possible implications: While both FL speakers and non-FL speakers consider FLs to be significant tools to transmit knowledge, those teachers who do speak at least one foreign language on average rate the vehicular status of FLs as greater than their peers who do not possess equivalent language skills. This would suggest that teachers who are not FL users may pay "lip service" to the concept of CLIL, simply due to its popularity. It is possible that more awareness raising is required to stimulate actual interest in CLIL within this group.

### Intention to learn a new foreign language



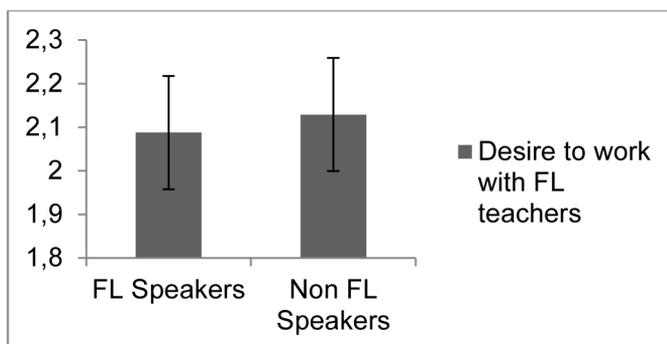
Student's T-Test ( $n = 194$ ,  $n = 194$ ) was used to compare the average opinions of FL speakers and non- FL speakers from all investigated countries w.r.t. to willingness to learn a new foreign language. The analysis did not reveal any significant difference between the two groups:

$$t = (385) = 0,09, p = ,4, r = ,01$$

Observations: FL speakers and non- FL Speakers do not differ in terms of their intention to learn a foreign language.

Possible implications: Prior language knowledge does not seem to influence a teacher's willingness to commit to learning a new language. It is likely that this is due to professional requirements, seeing as all CLIL-VET teachers need to incorporate a notable FL component into their work.

### Desire to work with Resident Foreign Language Teachers



Student's T-Test ( $n = 194$ ,  $n = 194$ ) was used to compare the average opinions of FL speakers and non- FL speakers from all investigated countries w.r.t. to desire to work with resident foreign language teachers (i.e. ones such that are employed at the

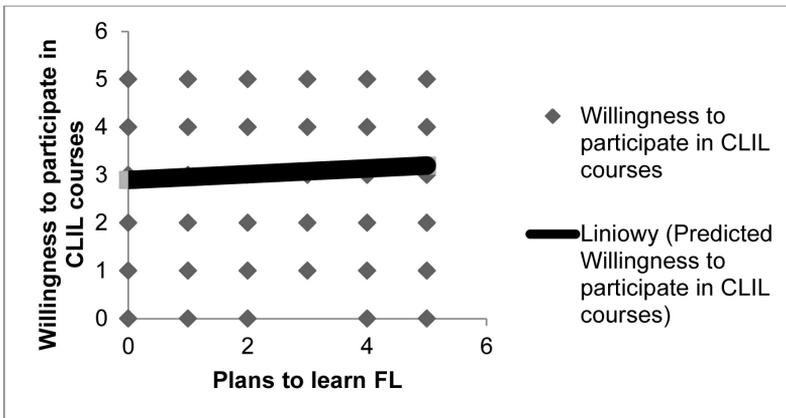
same educational institution as the surveyed teachers). The analysis did not reveal any significant difference between the two groups:

$$t(386) = 0.13, p = 0.3, r = .01$$

Observations: FL speakers and non- FL Speakers do not differ in terms of their intention to cooperate with those of their colleagues who teach foreign languages.

Possible implications: This analysis would ordinarily have two variants, one pessimistic and one optimistic. The optimistic variant would imply that both groups (i.e. regardless of FL skills) are likely and willing to cooperate with their colleagues. The pessimistic variant would assume that neither are willing to cooperate with said colleagues. Unfortunately, given responses averaging below 2.25 on a five item Likert scale, the pessimistic variant must be assumed at this juncture, that is given the current availability of data.

### Foreign language knowledge and willingness to participate in CLIL training/courses



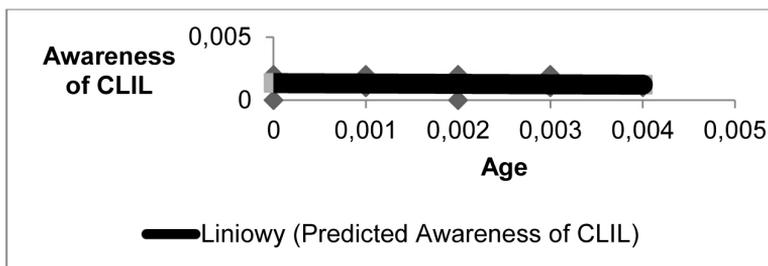
A linear regression analysis was performed for n = 312 samples from all participating countries.

The analysis revealed that teacher age has no effect on opinion about CLIL:  
 $R^2 = .002, F(1,312) = 2.89, p = .08$

Observations: There is no relationship between the number of foreign languages known by a teacher and their willingness to participate in CLIL training/courses.

Possible implications: This result would imply that the need to develop and implement CLIL-VET courses applies not only to teachers who already know foreign languages and use CLIL, but also those who do not speak/use such languages. It is, therefore, very likely that, aside from professional development/improvement courses, it might be worthwhile to also consider creating entry level courses for completely unexperienced teachers.

### Foreign language knowledge and CLIL awareness



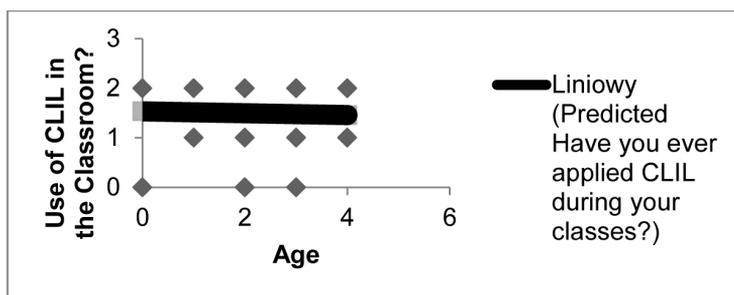
A linear regression analysis was performed for  $n = 312$  samples from all participating countries.

The analysis revealed that teacher age has no effect on awareness of CLIL:  
 $R^2 = .003$ ,  $F(1,312) = 1.18$ ,  $p = .27$

Observations: There is no relationship between the age of a teacher and that teacher's awareness of CLIL.

Possible implications: This could suggest that CLIL, as an idea, is sufficiently popularized within the teaching community in general and/or that teachers make reasonable and consistent efforts to be up to date with the current state of the art.

### Foreign language knowledge and CLIL in the Classroom



A linear regression analysis was performed for  $n = 312$  samples from all participating countries.

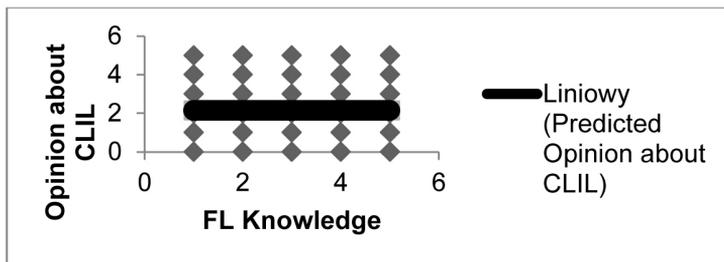
The analysis revealed that teacher age has no effect on the use of CLIL in the classroom:

$R^2 = .001$ ,  $F(1,312) = 0.34$ ,  $p = .55$

Observations: There is no relationship between the age of a teacher and that teacher's tendency to use CLIL in the classroom.

Possible implications: On a similar vein to the previous analysis, this could suggest that CLIL, as an idea, is sufficiently popularized within the teaching community in general and/or that teachers make reasonable and consistent efforts to be up to date with the current state of the art.

## Foreign language knowledge and Opinion about CLIL



A linear regression analysis was performed for  $n = 312$  samples from all participating countries.

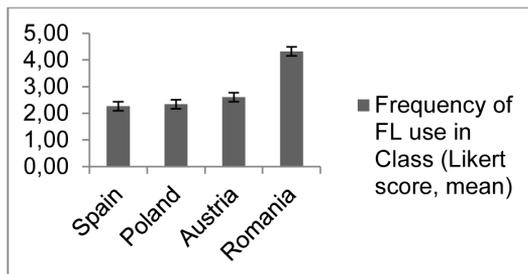
The analysis revealed that teacher age has no effect on opinion about CLIL:

$R^2 < .000001$ ,  $F(1,312) = 0.34$ ,  $p = .98$

Observations: There is no relationship between the age of a teacher and that teacher's opinion about CLIL as a teaching method. As should be evident from the chart, the insignificance is pronounced virtually to the point of flat lining.

Possible implications: This result of this analysis suggests that all surveyed teachers, regardless of age, consider CLIL to be an important and pedagogically valuable teaching method.

## Foreign language use in the classroom



A single factor ANOVA was performed for  $n = 38$  sampled observations. The ANOVA revealed a significant difference between countries:

$F(3,148) = 29.03$ ,  $p < .001$ .

The ANOVA was followed by a post-hoc analysis in the form of Tukey's HSD. This test revealed the following contrasts and effects between countries:

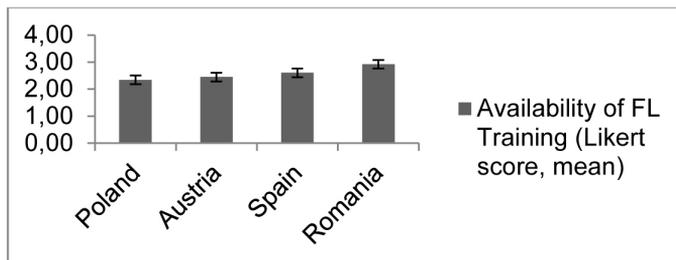
Spain vs. Poland:  $q(148) = 3.67$ ,  $r = .03$ , not significant

Poland vs. Austria:  $q(148) = 1.46$ ,  $r = .11$ , not significant

Austria vs. Romania:  $q(148) = 9.52$ ,  $r = .61$ , significant

Observations: teachers from Romania rate their frequency of FL use higher than their counterparts from the remaining countries surveyed ( $M = 4.32$ ). Teachers from Poland, Spain, and Austria rate this use similarly ( $M_{pooled} = 2.4$ ).

### Availability of foreign language training



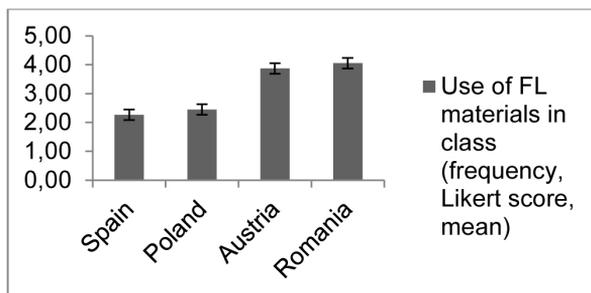
A single factor ANOVA was performed for  $n = 38$  sampled observations. The ANOVA did not reveal any significant difference between countries: ANOVA, single factor:

$$F(3,148) = 2.42, p < .06$$

Given this result, a post-hoc analysis was not called for.

Observations: teachers from all of the countries surveyed do not differ in terms of how they rate the availability of foreign language training. The mean rating assigned is  $M = 2.50$  (rather unavailable), implying that all teachers clearly believe that there is a deficit in the availability of said training.

### Use of foreign language materials in the classroom



A single factor ANOVA was performed for  $n = 38$  sampled observations. The ANOVA revealed a significant difference between countries:

$$F(3,148) = 25.35, p < .001.$$

The ANOVA was followed by a post-hoc analysis in the form of Tukey's HSD. This test revealed the following contrasts and effects between countries:

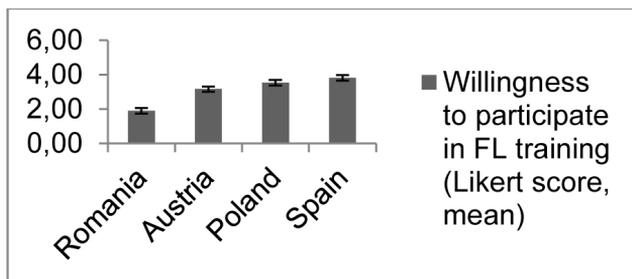
Spain vs. Poland  $q(148) = 0.99, r = .08$ , not significant

Poland vs. Austria  $q(148) = 7.67, r = .53$ , significant

Austria vs. Romania  $q(148) = 0.99, r = .08$ , not significant

Observations: Teachers surveyed in Austria and Romania ( $M = 3.87$  and  $M = 3.05$ , respectively) rate their use of foreign language materials as more frequent than their counterparts from Spain and Poland ( $M = 2.26$  and  $M = 2.45$ , respectively).

## Willingness to participate in foreign language training



A single factor ANOVA was performed for  $n = 38$  sampled observations. The ANOVA revealed a significant difference between countries:

$$F(3,148) = 25.54, p < .001.$$

The ANOVA was followed by a post-hoc analysis in the form of Tukey's HSD. This test revealed the following contrasts and effects between countries:

Romania vs. Austria  $q(148) = 7.54, r = .52$ , significant

Austria vs. Poland  $q(148) = 2.19, r = .17$ , not significant

Poland vs. Spain  $q(148) = 1.72, r = .14$ , not significant

Observations: Teachers from Romania rate their willingness to participate lower ( $M = 1.89$ ) in comparison with their peers from the remaining countries surveyed, that is Austria, Poland, and Spain ( $M = 3.16, M = 3.53, M = 3.82$ , respectively).

**Conclusions.** The analyses described above have led to a series of conclusions that merit further discussion. These conclusions are summarized below. The General Conclusions subsection applies to analyses performed on pooled data from all countries involved. The Cross-Country Comparison section, as the name implies, describe how the individual participating countries differ with respect to survey data.

### General Conclusions

Even teachers with a modest knowledge of foreign languages acknowledge the fact that certain subject areas (or possibly entire subjects) are easier to teach in a foreign language rather than the native language of the students. This will most likely apply to the natural sciences, whose rapid development makes translation into national languages impractical.

While both FL speakers and non-FL speakers consider FLs to be significant tools to transmit knowledge, those teachers who do speak at least one foreign language on average rate the vehicular status of FLs as greater than their peers who not possessed of equivalent language skills. This would suggest that teachers who are not FL users may pay "lip service" to the concept of CLIL, simply due to its popularity. It is possible that more awareness raising is required to stimulate actual interest in CLIL within this group.

Prior language knowledge does not seem to influence a teacher's willingness to commit to learning a new language. It is likely that this is due to professional requirements, seeing as all CLIL-VET teachers need to incorporate a notable FL component into their work. However, it must be noted that the surveyed teachers are, overall, unwilling to cooperate with their FL colleagues regardless of their prior foreign language knowledge.

As prior FL knowledge does not seem to influence the desire to use CLIL, there is a great need to develop and implement CLIL-VET courses designed not only for teachers who already know foreign languages, but also those who do not speak/use such languages.

CLIL, as an idea, appears to be sufficiently popularized within the teaching community in general. One can surmise that this is due to the fact that teachers make consistent efforts to stay up to date with the current state of the art.

All surveyed teachers, regardless of age, consider CLIL to be an important and pedagogically valuable teaching method.

#### Cross-Country Comparisons

Teachers from Romania rate their frequency of FL use higher than their counterparts from the remaining countries surveyed. Teachers from Poland, Spain, and Austria rate this use similarly.

Teachers from all of the countries surveyed do not differ in terms of how they rate the availability of foreign language training. All teachers clearly believe that there is a deficit in the availability of said training.

Teachers surveyed in Austria and Romania rate their use of foreign language materials as more frequent than their counterparts from Spain and Poland.

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