



## TRAINING EFL PRE-SERVICE TEACHERS FOR CLIL

**Thooptong Kwangsawad<sup>i</sup>**

Faculty of Education,  
Mahasarakham University,  
Thailand

### **Abstract:**

Content and Language Integrated Learning (CLIL) is regarded as an innovative form of education in response to the demands and expectations of the modern age. CLIL is not easy to apply and it requires considerable effort to put into practice. The teacher is an important factor in processing the CLIL classroom; therefore, it is important that the teachers are trained and qualified in CLIL concepts. CLIL is generally recognized in collaboration of subject teachers and language teachers means that teachers combine and integrate their subject knowledge. However, in this study 19 EFL pre-service teachers were trained for CLIL without any collaboration with subject teachers. The aim of this paper is to investigate strategies that EFL pre-service teachers used and challenges they faced during CLIL implementation.

**Keywords:** CLIL teacher education; pre-service teacher professional development

### **1. Introduction**

The forces of global change, converging technologies and adaptability to the subsequent knowledge age present challenges for education. And within education as a whole, they present challenges for the teaching and learning of additional language. Content and Language Integrated Learning (CLIL) is not merely a convenient response to the challenges posed by rapid globalization; rather, it is a solution which is in harmony with broader social perspectives. CLIL was developed as an innovative form of education in response to the demands and expectations of the modern age. Input from different academic fields contributed to the recognition of this approach to educational practice (Coyle, Hood & Marsh, 2010).

CLIL is an innovative approach which refers to educational settings where a language different from learners' mother tongue is used as a medium of instruction. The other language is used from kindergarten to tertiary level, and the extent of its use may range from occasional foreign language texts in individual subjects to covering the

---

<sup>i</sup> Correspondence: email [thooptongk@hotmail.com](mailto:thooptongk@hotmail.com)

whole curriculum (Papaja & Swiatek, 2016). Thus, CLIL demands for a new type of teacher, who will need not only linguistic and disciplinary training, but also methodological skills. A number of pre-service teacher training programs based on the principles of the Common European Framework of Reference for Language (CEFR) were developed in order to prepare teachers for CLIL (Marsh, Canado & Padilla, 2015).

CLIL teachers are required to teach one or more subjects in the curriculum in a language other than the usual language of instruction. A professional teacher will also recognize that the CLIL context means that it is not only the teacher's linguistic competence which is of importance, but also that of learners. This leads directly to the notion of methodological shift. The main characteristic of this shift lies in the movement from teacher-centered to learner-centered methods (Papaja, 2014). It is very important for those teachers who know that their linguistic skills are limited to adapt their content and method accordingly. This is where preparation becomes crucial (Marsh, 2001). It is also reasonable to suggest that teachers with more limited linguistic skills have to pay more attention to lesson planning in order to feel more confident (Papaja, 2013).

Teacher education in CLIL at both pre- and in-service level needs to involve a range of programs which address a wide range of CLIL training needs. There is a growing evidence that approaches to CLIL teacher education are starting to change, to move away from traditionally defined language courses, which pay lip service to CLIL, to courses which are conceptualized specifically for CLIL teachers and are delivered by those who work in CLIL field. Such training courses need to go far beyond language development and profession (Coyle, Hood & Marsh, 2010). The significant questions about CLIL are who should be responsible for teaching content through the second language and how this should be done. Teacher roles and competences in CLIL programs may take different forms. They can lean more on content-based instruction, where language teachers are responsible for bringing the content matter to their classes, or they can be of the 'language-sensitive type', where content teachers bring the foreign language to their classes (Pavón Vázquez, 2010). There is no single recipe for CLIL and its success depends on a thorough analysis of context, an evaluation of needs, and the resources, human and material, which are available (Coyle, 2009).

CLIL is no easy undertaking for the teachers involved. This has all too often only been recognized in practice as its flexibility of form or type and specificities of context make features of implementation difficult to determine. What is understood across most contexts is that CLIL is demanding for teachers in terms of adjusting practice and developing competences, and that prior training is essential: Teachers undertaking CLIL will need to be prepared to develop multiple types of expertise among others in the content subject; in a language; in best practice in teaching and learning; and, in the integration of CLIL within an educational institution (Marsh, Mehisto, Wolff & Frigols, 2010: 5). However, it seems there are not sufficiently prepared yet to undertake this new approach, and the reason is basically the lack of preparation of CLIL teachers. Most of the teachers that there are nowadays need to attend some special courses designed for the development of a second language through which they will teach contents (Pérez Cañado, 2013).

Existing research suggests that CLIL provides considerable opportunities for teachers' professional development, but simultaneously pose a noticeable challenge. The CLIL challenge revolves around two related problems: balancing language and content, and providing meaningful and cognitively engaging instruction in the CLIL classroom. The literature is unequivocal in that mastering this challenge necessitates explicit knowledge, but there is clear evidence regarding the important role identity plays in becoming professional as a CLIL teacher (Llinares & Morton, 2015). Different studies have been carried out to explore using CLIL in EFL context in Thailand. However, there is limited research on pre-service teacher development. This study tries to look into qualitative aspects of teacher education for CLIL. It focuses on the students enrolled in bachelor degree courses of the university, EFL pre-service teacher education and attempts to tackle some of the problems associated with the introduction of CLIL that converge at the point of methodology criteria and professional competences of a newly qualified teacher. Specifically, the research question to be addressed is "What strategies that EFL pre-service teachers used and challenges they faced during applying CLIL to the science lesson?"

### **1.1 Core 30 features of CLIL**

Mehisto, Marsh and Frigols (2008: 29–30) introduce core 30 features of CLIL:

#### **1. Multiples focus:**

- 1.1 supporting language learning in content classes;
- 1.2 supporting content learning in language classes (1.3) integrating several subjects;
- 1.3 organizing learning through cross-curricular themes and projects (1.5) supporting reflection on learning process.

#### **2. Safe and enriching learning environment:**

- 2.1 using routine activities and discourse;
- 2.2 displaying language and content throughout the classroom;
- 2.3 building student confidence to experiment with language and content;
- 2.4 using classroom learning centers;
- 2.5 guiding access to authentic learning materials and environments;
- 2.6 increasing student language awareness.

#### **3. Authenticity:**

- 3.1 letting the students ask for the language help they need;
- 3.2 maximizing the accommodation of student interest;
- 3.3 making a regular connection between learning and students' lives;
- 3.4 connecting with other speakers of the CLIL language;
- 3.5 using current materials from the media and other sources.

#### **4. Active learning:**

- 4.1 students communicating more than the teacher;
- 4.2 students help set content, language and learning skills outcomes;
- 4.3 students evaluate progress in achieving learning outcomes;
- 4.4 favoring peer co-operative work (4.5) negotiating the meaning of language and content with students;
- 4.5 teachers acting as facilitators.

#### **5. Scaffolding:**

- 5.1 building on a student's existing knowledge, skills, attitude, interests and experience;
  - 5.2 repackaging information in user-friendly ways;
  - 5.3 responding to different learning styles;
  - 5.4 fostering creative and critical thinking;
  - 5.5 challenging students to take another step forward and not just coast in comfort.
6. Co-operation:
- 6.1 planning courses/lessons/themes in co-operation with CLIL and non-CLIL teachers;
  - 6.2 involving parents in learning about CLIL and how to support students;
  - 6.3 involving the local community, authorities and employers.

## 1.2 Framework for integrating content and language

To drive the 30 core features, Coyle, Hood and Marsh (2010) developed a framework for integrating content and language which is called "The 4Cs Framework".

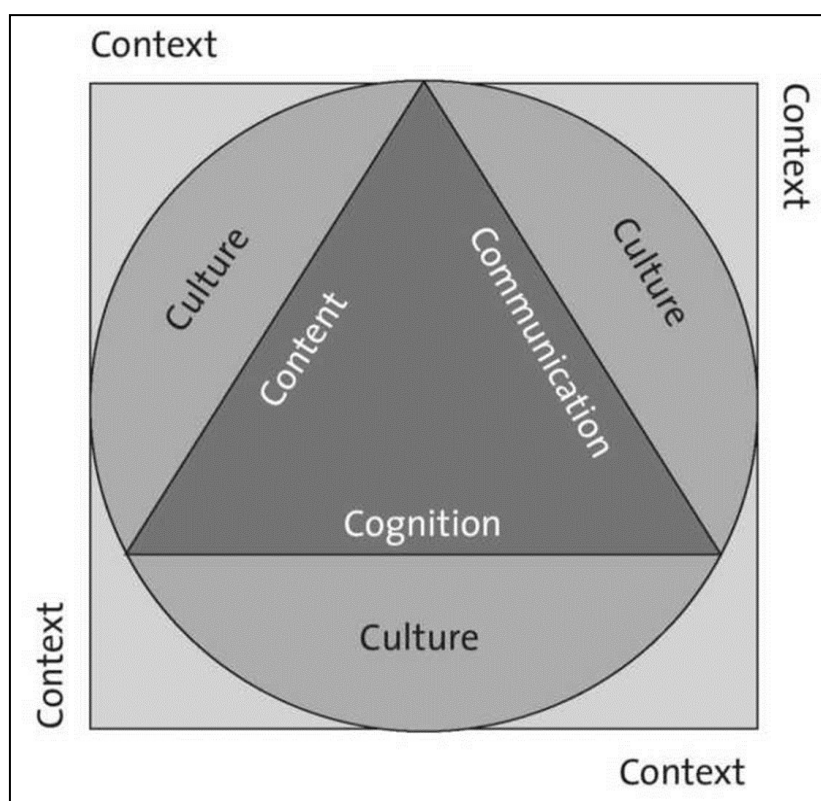


Figure 1: The 4Cs Framework

The 4Cs Framework (Figure) integrates four contextualized building blocks: content (subject matter), communication (language learning and using), cognition (learning and thinking process) 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. It suggests that effective CLIL takes place as a result of this symbiosis, through: progression in knowledge, skills and understanding of the content; engagement in associated cognitive processing; interaction in the

communicative context; development of appropriate language knowledge and skills; and the acquisition of a deepening intercultural awareness.

### 1.3 The CLIL teacher

Marsh, Maltjers and Hartiala (2001) identify the competencies required of a CLIL teacher:

#### 1. Language/Communication

- sufficient target language knowledge and pragmatic skills for CLIL.
- sufficient knowledge of language used.

#### 2. Theory

• comprehension of the differences and similarities between the concepts of language learning and language acquisition.

#### 3. Methodology

- ability to identify linguistic difficulties.
- ability to use communication/interaction methods that facilitate the understanding of meaning.
- ability to use strategies for correction and modeling good language usage.
- ability to use dual-focused activities which simultaneously cater for language and subject aspects.

#### 4. The learning environment

- ability to work with learners of diverse linguistic/cultural backgrounds.

#### 5. Materials development

- ability to adapt and exploit materials.
- ability to select complementary materials on a given topic.

#### 6. Assessment

- ability to develop and implement evaluation and assessment tools.

Coonan (1998) outlines the characteristics of CLIL teachers as follows:

- CLIL teachers learn to develop and to use methodological approaches adapted to the specific CLIL learning context;
- CLIL teachers become more aware of the language features and non-language features;
- CLIL teachers become more responsible for language learning and development;
- CLIL teachers learn to understand the importance of content in the language processing;
- CLIL teachers learn how to cooperate with other teachers and schools.

The essential questions about CLIL are who should be responsible for teaching content through the second language and how this should be done. Majority of these cases, the implementation of CLIL requires the content teacher to be responsible for teaching content subjects through the foreign language. Unfortunately, many content teachers are unsure about the way they should perform in the CLIL class because they are not aware of the methodological changes required in these contexts, or because these methods differ from the way they have learnt languages and from the way they have been trained to become regular teachers. In theory, the teachers of content material

should have sufficient linguistic competence to be able to pass on academic content in a second language as well as an in-depth knowledge of their own subject. A lack of adequate knowledge of the language can create considerable anxiety among teachers which has led to the suggestion that it would be a better option to train foreign language teachers to teach specialized content (Pavon Vázquez & Ellison, 2013).

## **2. Method**

### **2.1 Participants**

The participants in this study were third-year 19 EFL pre-service teachers enrolled in TEFL 1-2 at Faculty of Education, Mahasarakham University in Thailand. These courses provided the participants with theory and practice of CLIL. TEFL 1 focused on lectures and seminars. The lectures tended to be tutor-center, but there was room for reflective tasks and group work activities in order to understand CLIL. TEFL 2, were provided the participants with opportunities for applying CLIL in the classroom. With a theoretical base rooted in an adaptation of the 4Cs Framework, they created lesson plans ready for putting into action in a secondary school to teach science classes in English for four weeks.

### **2.2 Data collection and analysis**

The qualitative study, which lasted one school year, conducted in a rural lower secondary school where students' level of English was particularly low. An open-ended questionnaire and classroom observations were used to investigate strategies that the EFL pre-service teachers used and challenges they faced during applying CLIL to the science lesson. All the teachers were observed while teaching science through English (3 hours per week). Following the teaching, they were asked to complete the open-ended questionnaire.

## **3. Findings and discussions**

### **3.1 Findings from the open-ended questionnaire**

In this part, the researcher presents the questions asked in the open-ended questionnaire and also discusses the answers given by the EFL pre-service teachers.

A. *As an EFL teacher, what problems you encounter when implementing CLIL in the classroom? How to solve those problems?*

All the EFL pre-service teachers were aware of the difficulties of providing content in a foreign language, which they encountered when providing the students with the tools and help to work with the materials. They wrote that knowledge about science in a foreign language was very important. They had to master subject matters that are beyond their field of expertise. They had to use texts and materials that focus on concepts they were unfamiliar with, and got engaged in activities that they were not accustomed to, consequently their working effort was double. Three EFL pre-service

teachers wrote that to cope with this problem, they had to cooperate with science teachers in the content of the lessons to be taught. Ten EFL pre-service teachers mentioned that subject teacher assistants could be a huge asset to CLIL classrooms, but they needed not be involved in the classrooms. In this case, they only need science teachers to help them with the content during the preparation of the lessons. Five EFL teachers pointed out that they could overcome this issue by providing adequate preparation for CLIL teaching. They also suggested that professional development courses to prepare EFL pre-service teachers for the specifics of the CLIL methodology should be also provided by the program designers. Findings from this question indicate that EFL pre-service teachers require the expertise to help them understand science concepts. In addition, they need more CLIL training. According to Coyle (2006), the language teacher is in need of special training due to the demand for planning CLIL lessons requires a different approach from either subject disciplines or foreign language study.

B. *What do you think about the difficulties for students when they learn science through English?*

All the EFL pre-service teachers agreed that using English medium in science instruction was one of the challenges when teaching students whose mother tongue is Thai because they were teaching the science skills and content as well as teaching the language. They found that English language was a barrier that affects their students' understanding of scientific concepts. Moreover, vocabulary was a huge obstacle in teaching science. They found that the students only grasped the fundamentals of concepts but could not expand on them due to limited English. The contents were advance beyond the level of English that the students were at. Findings from this question are not surprising that all the EFL students encountered with language problems since the students had to move from Basic Interpersonal Communication Skills (BICS) to Cognitive Academic Language Proficiency (CALP) which required them to demonstrate understanding and comprehension of academic terms. Chall, Jacobs and Baldwin (1990) suggest that teachers can overcome this issue by using beginning reading tasks including word recognition, oral reading, and spelling. Krashen (2004) has emphasized, reading is crucial for academic development since academic language is found primarily in written text. Additionally, according to Coyle (2005) in practice, teachers need to keep in mind that the CLIL approach builds on and transfers the range of reading strategies developed in literacy in English, for example, the use of contextual clues, including non-verbal features such as layout, punctuation and graphical illustrations, reading between the lines (inference), visualizing and summarizing main ideas.

C. *According to the 4Cs Framework, do you think which "C" is easy to plan and implement?*

Eleven EFL pre-service teachers answered that they were comfortable and confident in working on "communication-the second C" since it allowed them to play

their own roles as language teachers. Eight EFL pre-service teachers wrote that they enjoyed teaching “content- the first C” because they found that inquiry-based learning kept their students engaged and interested in their learning. Even though they had to ask science teachers to help them with content during the preparation of the lessons, they enjoyed doing “the first C”. They also wrote that in the future CLIL would be done by language teachers well trained in subjects. The experiences of EFL pre-service teachers were used to identify an urgent need to consider the content of training programs as an important contributor to language teacher development. In particular, language teachers’ understanding of how they can enable their learners to learn content through language. EFL pre-service courses should address the development of teaching content through developing teacher awareness of the interconnectedness between content and other Cs. According to Coyle (2008) CLIL starts with content (such as subject matter, themes, cross-curricular approaches) and focuses on the interrelationship between content (subject matter), communication (language), cognition (thinking) and culture (awareness of self and ‘otherness’) to build on the synergies of integrating learning (content and cognition) and language learning (communication and cultures).

### **3.2 Findings from the observation**

Nineteen EFL pre-service teachers were observed by the researcher. The results are as follows:

#### **A. Classroom language**

All of the EFL pre-service teachers have middle levels of language competence confirmed by previous language tests, which are part of the entry examinations to the teacher education program. What they aspire to develop is a professional level of language proficiency for the promotion of subject learning in teaching situations. During the lessons of science, all of them could adapt their language to the students’ level. They asked questions to check the understanding of lesson content. Most teachers addressed difficult words and new terminology to some extent. Additionally, most of them used visual aids and body language to enhance communication and understanding. There were no obvious communication problems in any of the classes. However, since the students had minimal exposure to English prior to the study, they appeared to make no progress in their listening skills even though the teachers used modeling of vocabulary and structures on the PowerPoint, and the concrete, hands-on experiments with a range of materials. The teachers spoke only English and did not translate any words into Thai. The teachers also encouraged the students to speak only in English, provided feedback on students’ incorrect language use. It was noteworthy that the students spoke Thai all the time. Since the students were not able to communicate except for very elementary functions, such as ask and say name, national and so on—and they did have English class two hours a week for a whole school year. Consequently, it was suggested that rather than using only English, the teachers could at least explain grammar points or words in Thai instead of English because the students had big problems in understanding the target language.



### **B. Visuals via ICT**

The teachers introduced the content verbally through explanations and questions, accompanying this discourse with PowerPoint slides as a visual support. They searched visual images and videos from the internet and copied into PowerPoint presentations for presenting new information and language in order to help the students to understand the concept. For CLIL, these can be sourced from native language websites, but this can sometimes be overwhelming for EFL students without adaptation or scaffolding within the lesson.

### **C. Hands-on tasks**

All of the lessons involved student experiments. Each lesson began with a warm-up activity to activate students' English vocabulary with the teachers using PowerPoint slides to revise previously learned words and new ones needed for the particular experiment. To guide students' understanding of the content, the teachers demonstrated the experiment and explained in English what they had to do. The teachers also asked questions of the class to ensure they had understood the process and were able to explain it in English. Then the teachers allocated the class to small groups to undertake the experiments and each group recorded the results in English on a chart. During the experiments, the teachers circulated around groups of students, talking to them in English and helping them to formulate their conclusions in English. Then each group reported the results in front of the class. At the end of each lesson, the teachers summarized what had been done, focusing on the language related to the experiment. From the observation, the researcher found that the effective way of giving instructions and explanations was to simply model what the teachers wanted the students to do through short demonstrations. In cases when the students struggle, it was apparent that more modeling would be an extremely effective solution to aid comprehension, rather than trying to give students even more language to process.

### **D. Letting students communicate**

The students worked in small groups to support each other during each of the experiments and reported the results. Then each group started working on the preparation of oral presentations on the results of the experiment. The teachers helped them during their oral language production when they had problems. The teachers stimulated them to keep on talking and using gestures or body language to make clear what they wanted to say. In addition, the teachers used yes/no questions to encourage the students to show their level of understanding. This was useful for checking students' comprehension of content due to the students' limited use of language. It was suggested that students should also be taught communicative strategies. If the students know some communication strategies, their reactions will be different. Even if they do not know exactly what to say, they will try to find ways to get close to the answer. Thus, teaching communication strategies will enable students to cope with trouble they face in communicating in English.

## References

1. Chall, J. S., Jacobs V.A. & Baldwin, L.E. (1990). *The reading crisis: Why poor children fall behind*. Cambridge, Massachusetts: Harvard University Press.
2. Coonan, C.M. (1998). Content and language integrated learning (CLIL) on Italy: Present situation and possible development. In Marsh, D., Marshland, B. & Maljers, A. (1998). *Future Scenarios in CLIL*. Finland: Continuing Education Center, University of Jyväskylä.
3. Coyle, D. 2009. Foreword. In E. Dafouz; M. Guerrini (Eds.). *CLIL across educational levels*. Madrid: Richmond / Santillana, vii.
4. Coyle, D. (2008). CLIL – A pedagogical approach. In N. Van Deusen-Scholl, & N. Hornberger, *Encyclopedia of Language and Education*, 2nd edition (pp. 97-111). Springer.
5. Coyle, D. (2006). Towards strategic classrooms: Learning communities which nurture the development of learner strategies. *Language Learning Journal*, 31(1) Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/09571730701315774>
6. Coyle, D. (2005). *Developing CLIL: Towards a theory of practice*, APAC Monographs, 6, 5-29.
7. Coyle, D., Hood, P. & Marsh, D. (2010). *Content and Language Integrated Learning*. Cambridge: Cambridge University Press.
8. Krashen, S.D. (2004). *The power of reading: Insights from the research*. Portsmouth: Reed Elsevier Inc.
9. Llinares, A. & Morton, T. (2015). *Applied linguistics perspectives on CLIL*. Amsterdam/Philadelphia: John Benjamin Publishing Company.
10. Mahisto, P., Marsh, D. & Frigols Maria, J. (2008). *Uncovering CLIL*. Oxford: Macmillan Education.
11. Marsh, D. (ed.). (2001). *CLIL/EMILE the European dimension: Actions, trends, and foresight potential*. Public Services Contract DG EAC: European Commission.
12. Marsh, D., Maltjers, A., Hartiala, A. (eds). (2001). *Profiling European CLIL classrooms – languages open doors*. Finland: University of Jyväskylä.
13. Marsh, D., Mahisto, P., Wolff, D. & Frigols, M.J. (2010). *The European framework for CLIL teacher education*. Graz: European Centre for Modern Languages.
14. Marsh, D., Perez Canado, M. & Raez Padilla, J. (eds). (2015). *CLIL in action: Voices from the classroom*. Newcastle: Cambridge Scholars Publishing.
15. Papaja, K. (2014). *A qualitative evaluation of Content and Language Integrated Learning (CLIL) in Polish secondary education*. Newcastle: Cambridge Scholars Publishing.

17. Papaja, K. (2013). *The role of a teacher in a CLIL classroom*. Glottodidactica XI/1 (2013) Adam Mickiewicz University Press Poznań: Retrieved from [https://www.unifg.it/sites/default/files/allegatiparagrafo/06-07-2017/papaja\\_the\\_role\\_of\\_a\\_teacher\\_in\\_a\\_clil\\_classroom.pdf](https://www.unifg.it/sites/default/files/allegatiparagrafo/06-07-2017/papaja_the_role_of_a_teacher_in_a_clil_classroom.pdf)
18. Papaja, K. & Swiatek, A. (eds.). (2016). *Modernizing educational practice: Perspective in Content and Language Integrated Learning (CLIL)*. Newcastle: Cambridge Scholars Publishing.
19. Pavón Vázquez, V. (2010). The introduction of multilingual teaching in Andalusia: Heading towards a newly proposed methodology. *Journal of Border Educational Research*, 8/1:31-42.
20. Pavón Vázquez, V. & Ellison, M. (2013). Examining teacher roles and competences in Content and Language Integrated Learning (CLIL). *L I N G V A R V M A R E N A*, 4 Retrieved from <http://ler.letras.up.pt/uploads/ficheiros/12007>.
21. Pérez Cañado, M. L. (2013). Introduction. *Revista de Lenguas para Fines Específicos*, 19. Retrieved from <http://tauja.ujaen.es/bitstream/10953.1/2189/1/GARCA~1.PDF>

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).