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When Clil is mandatory
Learner's emotional impact of Clil from
the students' and the teachers'
perceptions.

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Abstract

This study is aimed at investigating the students' emotional impact of a Clil module which took place in a High School in the province of Venice during the 2013-14 school year.

The paper is made up of two parts: a theoretical section focusing on the importance of emotions in the language learning process and how this factor is contemplated in Clil methodology, and the research proposal with the analysis of data, the presentation and discussion of results. The research proposal consists of a case study and it is a mixed-method research since data was collected through quantitative questionnaires which at the same time asked the subjects to motivate their answers to each closed-ended question. There were two questionnaires containing specular questions: one administered to the students (70 subjects) and the other to the non linguistic subject (NLS) teachers (4 subjects). Answers from the two questionnaires were compared in order to observe if the teachers' perceptions matched the students'; this allowed us to suggest some didactic implications.

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Introduction

The aim of this thesis is to analyse the emotional feedback of a group of 70 students who took part in a Clil module. Their perceptions and those of their 4 teachers have been taken into account through two typologies of questionnaire created for this purpose; one was administered to the students, the other to the teachers.

The main reasons for conducting this research were: my personal interest for the emotional dimension of learning which has always fascinated me, both as a student and as an aspiring teacher; my curiosity towards the Clil methodology, originated and sustained by the participation to some conferences on this topic, including the Think Clil in Venice; the recent compulsoriness of the Clil methodology in the Italian School System, which I think may have an emotional impact on students.

In the first chapter, we will try to offer some theoretical assumptions to the research project presented in the second chapter, reviewing the main considerations made by the literature on this field about the role of the emotions in the learning process. We will focus on its specific references and implications concerning language learning and teaching. In the second part of the first chapter, we will discuss how these aspects are contemplated in the Clil methodology, after proposing a brief presentation of its main characteristics.

In the second chapter, we will illustrate the research project providing information about the participants, the typology of research adopted, the data collection procedures, the instruments of the data collection and the methodology of the analysis.

In the third chapter we will present the analysis of the data emerged from the questionnaires.

In the fourth chapter we will present the results of our study and make some considerations about its didactic implications.

1 Literature review

In this section we will present the theoretical assumptions at the basis of our case study. In the first part of the chapter (1.1) we will deal with the importance of the emotional dimension in the learning process.

In the second part of the chapter (1.2), after a brief description of the Clil methodology and its advantages (1.2.1, 1.2.2), we will focus on what Clil is aimed at as far as motivation is concerned. Moreover, we will see how this aspect is contemplated in the case of mandatory Clil.

1.1 The emotional dimension in the learning process

The importance of the emotional dimension in the learning process has gained relevance in language teaching starting from the Seventies, when the humanistic psychology implications started spreading from the Anglo-Saxon countries. This approach has been fighting for years against the resistance of the dominant cognitive approach. Cognitivists, on the one hand shed light on some aspects concerning the brain, on the other hand chose to set aside the emotional factors because they were considered complicated, or, for the most extremists, even detrimental, as observed in the following quotation: “Motivation and emotion are often seen as peripheral or epiphenomenal in that regard, or worse, as potentially detrimental to reason and sound judgment.” (Yun Dai, Stenberg, 2004: 11 quoted in Cardona, 2010a: 33).

From the Nineties, new discoveries about the neurological processes connected to motivation made it possible to shed more light on what happens in the brain during the learning process. In particular, the research about the memorization dynamics have put emotions at the core of the learning process. It is from these findings that the concept of *affective filter* has been introduced, as the metaphor of the glandular conflict between the amygdale and the hippocampus when facing a stressful situation (Balboni, 2012). This process can lead to the arrest both of the fixation and of the recollection of the information into the memory system, interfering with acquisition and seizing up the learner (ibid.).

In the language teaching research, these discoveries led to the integration of the non-conscious dynamics into the motivational system, before conceived as a group of

psychological mechanisms that lead to a conscious spur towards learning (Daloiso, 2009).

Starting from these considerations, Daloiso – a researcher of the Venetian school of language education – claims that in order to be willing to learn, a student must be involved from three dimensions: emotions, feelings and motivation (ibid.) Emotions are adaptive, non-conscious answers operated by the mind to external pressures. There are two categories of emotions: the primary ones, which are inborn and universal – e.g. fear or anger, and the secondary, which are socio-cultural determined – e.g. shame or guilt.

Feelings are the conscious reactions to emotions: the perceptions, such as being sad or being happy.

As far as motivation is concerned, among the several definitions we will refer to Balboni's idea of motivation as “una serie di dinamiche psicologiche che conducono ad una spinta cosciente verso l'apprendimento” (ibid: 42).

These three dimensions are intertwined during the learning process; in fact, a learner can have a strong motivation towards learning a language, but he/she can experience negative emotions towards some contextual variables during the course and associate negative conscious feelings to these emotions, damaging the initial motivation, up to the point of deciding to give up learning that language. (ibid.)

As Balboni argues, it is in this very reaction, called *arousal*, that the teacher can and must interfere. Learning a foreign language is, in fact, an experience that inevitably asks students to face negative emotions like fear and anxiety. However, what must be avoided are their psychological and physiological arousal reactions (Balboni, 2013).

1.1.1 The cognitive theory of emotions

In order to understand how emotions are transformed into conscious feelings and motivational drives, we take into account the Stimulus Appraisal Theory, also known as the Cognitive Theory of emotions theorized by Magda B. Arnold and applied to the language teaching field by Jane Arnold and Schumann (ibid.). According to Schumann, not only “there is an interaction between the *thinking brain and the feeling brain*” (Gabryś-Barker, 2013: 100), but even more significantly, before being interiorized, the stimulus is gathered by the emotional brain and filtered through it (ibid.). This process of filtration is called *appraisal* and it consists of “a matching between the new stimulus

information and the stored information about the emotional relevance and motivational significance of the same stimuli or similar stimuli encountered in the past” (Schumann, 1997: 184-185 quoted in Gabryś-Barker, 2013). The evaluation of the new stimulus is done on the basis of five criteria (ibid., Balboni, 2012, 2013).

- a. *novelty*: it checks if the stimulus, in terms of the task itself, type of input data or action/strategy followed in performing the tasks (output) is familiar. The newer and more unexpected a stimulus is, the more challenging it is for the brain, which is engaged to strive to acquire it. An event or an input which has already been proposed is not – cognitively and emotionally – appetizing and breeds boredom;
- b. *intrinsic pleasantness*: the more appealing, enjoyable and rewarding a stimulus or a type of approach to a task is, the more it leads to an approach and a sense of belonging to the situation;
- c. *goal/need significance*: the relevance value the stimulus has for the individual considering how it can interfere with or promote his/her goals and needs;
- d. *coping potential*: it refers to one's perception of ability of dealing with the intellectual, physical and psychological consequences of the stimulus in that situation;
- e. *norm/self compatibility*: the individual evaluates if the stimulus and the output he/she has to produce endangers or strengthens his/her self-esteem and social/cultural image.

Considering the appraisal, the mind generates a psychological and physiological reaction focused on dealing with the event, or attempting to avoid it. This reaction is aimed at gaining pleasure from the stimulus – or at lowering its negative effect – and at producing the desire to repeat or to continue the experience (Balboni, 2013).

As far as the neurobiological dimension is concerned, learning motivation has been defined as a continuous process of Stimulus Appraisal (see Schumann, 2004; Tarantino, 2008).

1.1.2 *Pleasure in Balboni's motivational model*

On the basis of these considerations, Balboni has proposed a classification of emotions that in his opinion can be very useful in language teaching: Plato's model of Eros, Pathos and Epithymia (Balboni, 2013). He claims (ibid.) that the language learning and teaching situation must be characterized by emotions that:

- a. generate a positive arousal, which must be pleasant in order to favour the process of acquisition (the Eros);
- b. must not stimulate the amygdale in the production of the steroids (the Pathos);
- c. must produce motivation (the Epithymia).

The connection between pleasure and motivation is also present in his model of motivation for studying: the tripolar-model (Balboni, 2012). In this model, pleasure is put on a superior level compared to Need and Duty, the other two components of the model conceived as a motivational source of human action. Balboni claims that the motivations for studying based on Need and Duty are not powerful for the acquisition process, since Need works partially and Duty activates the affective filter. The former, in fact, is connected to the left hemisphere of the human brain and requires to be perceived by the student. Furthermore, usually student's perception of satisfying his/her Need is reached before the "threshold level". On the contrary, pleasure is a motivational source linked to the right hemisphere of the brain and can involve the left hemisphere¹. This way it becomes very powerful and can raise the student's interest even for those languages whose Need is hardly perceived.

For "pleasure", Balboni (ibid.) does not only mean any intrinsic pleasant situation or emotion, but also the combination of elements connected to the everyday didactic situation, such as:

- a. *the pleasure connected to the learning process* when students have to deal with feasible activities and non-anxiety-inducing or self-threatening situations, and when they conceive mistakes not as failure marks, but as belonging to the

¹ The two hemispheres of the brain work in different ways; the right one is related to emotions, while the left one is connected to rationality. During the learning process, both hemispheres are activated; therefore the most effective way to favour acquisition is to foster both the rational and the emotional aspects of learning (See Balboni, 2012).

learning process. This is connected with what has just been said about teacher intervention for the arousal of negative emotions, the norm/self - compatibility criterion in the Schumann's Stimulus Appraisal Theory, and the Need Achievement Theory²;

- b. *the pleasure of variety*, since monotony implies boredom, which endangers motivation. That is the reason why the course, the didactic material, the activities must be varied;
- c. *the pleasure of novelty*, which is connected with the pleasure of variety. When something is unusual, or unexpected, our mind is more inclined to acquire it (see 1.1.1);
- d. *the pleasure of the challenge*, especially self-challenge and only if the students assess themselves and turn to the teacher if they eventually want to learn more about a mistake they made;
- e. *the pleasure of systematizing information*, which stems from understanding the working of a process. It not only involves the right hemisphere of the brain, but also the left, so it constitutes a strong motivation (see p. 4);
- f. *the pleasure of being autonomous*, of feeling in a central position as far as the methodology, the activities and the texts are concerned;
- g. *the pleasure of satisfying the personal sense of duty*, which can lead to make efforts even in those assignments that are far from the learner's interest and needs.

Moreover, according to Caon (2006), researcher of the Venetian school of language, this last factor, "the sense of duty" can put the duty dimension in a positive perspective and create a new relationship with the other factors. In this so-called "meaningful relationship" the three dimensions can cohabit and not be opposed. This change of perspective can stem from the *professional* relationship with the teacher seen as a trustworthy expert who "promotes, at the price of diligence and hard work, the growth of the person in terms of his/her cognitive, emotional, and social components" (ibid: 32) and the *human* relationship which concerns the teacher not only as a professional figure (Balboni, 2012).

² The Need Achievement Theory sees motivation as closely related to achievement. It is grounded on the distinction between people who had experienced success and those who have experienced failure and discouragement during their learning. According this theory, the former category of people would be inclined to take challenges because they think they can cope with them, while the latter group would be failure oriented (see Coonan, 2012).

In the context of mandatory education, Balboni says:

L'emozione legata al piacere di lavorare con una persona cui si è affezionati e di cui si ha stima, e da cui ci si sente apprezzati, è una delle più costruttive in questa prospettiva (Balboni, 2013: 17).

Pleasure, joy and curiosity are elements that we also find in the “intrinsic” motivation. Two kinds of motivation have in fact been individuated depending on their source: extrinsic and intrinsic motivation. Although the motivation based on an external factor is important (extrinsic), it has been demonstrated that in the language learning process it is the intrinsic motivation that plays a fundamental role (see Gardner 2007; Noccetti 2013). As reported by Noccetti:

La motivazione intrinseca, più duratura e più importante nell'apprendimento linguistico, deriva dunque da attività divertenti, che danno piacere, che sono associate alla novità, all'esplorazione di idee nuove e allo sviluppo di conoscenza (funzionale ai propri bisogni) ed è associata alla sensazione di riuscita di un compito (Noccetti, 2013: 48).

1.2 Clil and motivation

In the next paragraphs, we will analyse the main features of the Clil methodology and see their implications on motivation. Some researches have demonstrated the positive effects of Clil taking into account the neurobiology of the learning process (Ting: 2010) up to the point of connecting Clil to the cognitive-emotional approach³ (Cardona, 2008).

1.2.1 Clil: key definitions

CLIL is an acronym which stands for “Content and Language Integrated Learning” and has substituted all the previous definitions of those teaching context where a language was used as a vehicle for the learning and teaching of a non- linguistic subject (Coonan, 2012). This acronym was originally used as an umbrella term as testified by the Eurydice definition:

³ The cognitive-emotional approach has been hypotised by Cardona himself considering the fundamental importance of emotions for the linguistic acquisitional process (see 1.1). According to him, motivation, cognitive processes and emotions interact with each other, so they all have to be armonically developed.

The acronym CLIL is used as a generic term to describe all types of provision in which a second language (a foreign, regional or minority language and/or another official state language) is used to teach certain subjects in the curriculum other than the language lessons themselves (Eurydice, 2006:8 in Coonan, 2012:74).

Nonetheless, Coonan underlines that two other definitions make it possible to grasp the main principles contained in the acronym. The first is by David Marsh and stresses the dual-focused nature and the learning dimensions of Clil.

Any dual-focused educational context in which an additional language, thus not usually the first language of the learners involved, is used as a medium in the teaching and learning of non-language content. (Marsh, 2002:15 in Coonan, 2012).

The second is by Coonan herself and emphasizes the methodological-didactic dimension and the strategic choices that are to be made to act what is implicit in the Clil acronym: the *integration* of content and language.

Clil is a type of educational path, more or less long, characterized by strategic, structural-methodological choices, aimed at ensuring integrated dual-focused learning- language and content- from students who learn through a non-native language (Coonan, 2006: 23 in Coonan, 2012: 74).

In conclusion, the innovative element of the Clil methodology lies in the fusion of the language learning environment with the subject learning one. This is the reason why Clil has been introduced as an alternative to immersion methods, which have been proved not to lead automatically to a significant improvement in the FL competence (Coonan, 2010)⁴.

1.2.2 *Advantages of Clil*

Balboni indicates a series of advantages promoted by the Clil methodology, which concern its main objective: the improvement of quality and time of the language acquisition. Clil lessons provide (Balboni, 2012):

⁴ We are referring to some researches conducted in Canada during the 1980s by Swain and Lapkin (see Coonan, 2009).

- a. *a higher exposition to the foreign language*: students deal with it also during hours dedicated to other subjects besides the foreign language curricular ones;
- b. *a higher authenticity of the language*: it is used not to talk about language itself, but about the subject;
- c. *a higher authenticity of the activities*: during Clil lessons, the language is used to achieve “real world tasks”, for extra-linguistic purposes, and not in fictitious situations as during traditional foreign language classes;
- d. *input which is made comprehensible through extra-linguistic knowledge*: in a Clil context, input is not made comprehensible through periphrasis or translation in the mother tongue as in traditional lessons, but students and teachers have to turn to their knowledge of that subject or to extra-linguistic instruments – such as maps in case of geography Clil lessons;
- e. *attention focused on contents and not on the linguistic form*: that constitutes an ideal condition for language to be acquired according to Krashen’s rule of forgetting⁵, since the affective filter is not activated in case of a linguistic gap, or mistake;
- f. *motivation towards the subject*: the possibility for students who are not particularly interested into language learning to succeed in following the lessons because of the interest towards the subject.

Moreover, through Clil the students cannot only develop their *Basic Interpersonal Communicative Skills* (BICS), but also their *Cognitive Academic Linguistic Proficiency* CALP (Serragiotto, 2003; Cardona, 2008).

1.2.3 *Motivational charge of Clil*

Balboni claims that in the Clil context teaching becomes “meaningful” because the language is not proposed as an instrument that will eventually be used in the future, but as a means that in the next hour will be used “per lavorare su concetti, informazioni, significati veri, non simulati” (Balboni, 2012: 216).

One of the fundamental dimension which is meant to contribute to the success of the linguistic learning process in the Clil context is, in fact, connected with the

⁵According to Krashen, the fact that a learner forgets to be acquiring a language facilitates the acquisitional process itself (Krashen, 1983).

psychological aspect related to the vehicular use of the FL: *authenticity* and the students' identification with his/her own learning process (Coonan, 2010). According to Wolff (1997 in Coonan, 2010), the pseudo-authenticity of the activities presented in the traditional FL lessons can prevent the depth and quality of the learning process.

On the other hand, meaningfulness and authenticity increase the identification of student into his/her own learning because the foreign language becomes an instrument through which he/she can learn other things: notions, concepts, skills, just like their mother tongue. Cardona says on this point:

L'ambiente Clil aumenta il livello di autenticità del contesto comunicativo e ciò implica un diverso tipo di motivazione [...]. Nel Clil la motivazione è fornita dalla significatività dell'attività da svolgere. Oltre alla motivazione estrinseca (strumentale) si sviluppa anche la motivazione intrinseca (integrativa) che costituisce un presupposto necessario per un apprendimento più stabile nella memoria a lungo termine. (Cardona, 2008: 183).

The effect of this identification is a greater cognitive and affective involvement. Focusing on the affective consequences, these are connected with attitudes, interest, self-esteem and self-efficacy⁶ (Coonan, 2010). Clil improves students' self-confidence, an implication of what has been discussed about the sense of challenge (see 1.1.1). It has been demonstrated by research in this field that in vehicular language learning students are more prone to take risks in language production since their attention and worry is about the subject content and not the quality of the language. When interacting into another language, students take a challenge in being understood: observing that they have been understood and have expressed their thoughts, they raise their self-efficacy perception (Coonan, 2012). Taking risks is, then, fundamental for succeeding and increases self-efficacy and self-esteem, which are strongly connected with motivation as we have seen in Chapter 1 (Cardona, 2008). This is also claimed by Nocetti (2013), who argues that the Clil context creates those conditions which favour the learning process (see 1.1).

⁶ Self-esteem, i.e. the evaluation one makes about his/her own worth, is considered to be a basic requirement for successful cognitive and affective ability. It has been demonstrated, in fact, that the cognitive aspects of learning are fostered in an atmosphere in which self-esteem is promoted (Waltz and Bleuer in Arnold, Brown: 1999). Self-efficacy is connected to one's judgement about his/her competence of coping with a task. It must be guaranteed during the learning process because it often significantly interferes with the result (Bandura, 1996 in Cardona, 2010b).

On this point we find it relevant to mention what emerged from the LI.VE project⁷ (Coonan, 2010) and the findings contained in the Apprendo in Lingua Due⁸ collection (Serragiotto, 2007). The first investigation showed that the Clil experience gave rise to a strong motivation in students. Their reactions were, in fact, mostly positive and connected to the pleasure derived from the novelty and variety of the experience. It provided them with positive attitudes, a strong interest, a higher attention, and the perception of satisfaction, self-efficacy and skills improvement mostly stemming from the perceptions that they had succeeded in understanding and making themselves understood.

As far as the Apprendo in Lingua 2 project is concerned, there are three aspects which came out regarding motivation both towards the language and the subject:

- a. students appreciate the roles inversion between the teacher of the subject and the language one. This way, they felt more at ease in language production because the teacher of the subject would sometimes make a language mistake;
- b. students who attend language course of study have turned out to be more motivated towards subjects when studied through a foreign language, especially non-linguistic subjects which are usually not their favourite;
- c. students who followed a job oriented course of study were more motivated towards the language when used as a vehicular language in the main subjects of their course (ibid.).

Nevertheless, both the projects also reported a lower but not undeniable percentage of negative answers. In the “LI.VE” project, 16% of the students expressed their negative reactions through a list of negative emotions ranging from confusion to fear and anger, and another 9% were troubled by the difficulty of comprehension, even though they claim not to have reacted negatively (Coonan, 2010).

⁷ The “LI.VE” (LIngua VEicolare) research project was coordinated by the “Istituto Regionale Ricerca Educativa” of the Friuli Venezia Giulia region in Italy and involved 189 high school pupils who had experienced the study of a variety of school subjects through English. They were asked to fill in a questionnaire which was created in order to verify their degree of interest and motivation into the Clil experience.

⁸ The “Apprendo in lingua 2” project was a training and research project conducted by the “Ufficio Scolastico Regionale” of the Veneto region in Italy, Ca’ Foscari University of Venice and the Istituto Regionale Ricerca Educativa Veneto. After one year of post-lauream training in the Clil methodology, 33 teachers of 12 schools in Veneto experimented Clil lessons for two years. Data was gathered from their logbooks with particular attention to the impact that the methodology had on the teaching and learning of the subject and the foreign language.

Taking into consideration the Apprendo in Lingua 2 findings from the teachers' perspective, it emerged that at the beginning some students were sceptical, and others worried that their results in the subject would decrease, especially those who already had troubles in that subject. By the way, most of the students overcame these worries and just few of them attributed their negative results in the subject to the Clil experience (Serragiotto, 2007).

Coonan claims that the negative reactions must be cared about, especially when Clil is compulsory (Coonan, 2010). The fact that some students changed their minds during the experience stresses the fact that motivation must be constantly *sustained* during the experience. In fact, in some cases the intrinsic motivation raised by authenticity cannot be enough (Coonan, 2012). Negative emotions, as discussed in the previous chapter, can lead to a negative arousal and stop the process of acquisition. Again, it is up to the teachers to monitor the negative impact.

According to Serragiotto, moreover:

[...] se c'è una guida, se i compiti sono graduati, se c'è supporto linguistico durante il percorso, si nota, anche attraverso altre esperienze Clil, che alla fine si rileva una maggiore motivazione ed un maggiore coinvolgimento da parte degli studenti, anche da quelli più prevenuti inizialmente (Serragiotto, 2007: 47).

On this topic, Balboni (2014) adds that time and reflection must be spent for creating motivation, otherwise Clil may not produce spontaneously what it is aimed to do. He claims, in fact, that Clil cannot cause spontaneous endogenous – internal – motivation if not “propriamente spiegato, discusso e presentato agli studenti” (ibid.: 41) because it can be felt as a further difficulty. Moreover, for some languages it can neither create exogenous motivation, since students hardly perceive its need.

He also distinguishes motivation between two Clil contexts: when Clil is a choice of the foreign language teacher, and when Clil is compulsory. We will take into account the second case because it provides the context of our research.

In Italy Clil has become mandatory with the former Minister for Education reform in 2010 and concerns the teaching of a subject in English for Technical High Schools, and in a foreign language for “Licei”. For “Licei Linguistici” two subjects, one in the third year, and one in the following are taught in two different languages. The teaching is carried out by the teacher of the subject alone, in some cases supported by the language teacher.

In this particular situation, according to Balboni, building motivation is harder than when Clil is an option for the teacher. Its complexity concerns mostly three dimensions:

- a. the fact that students can have previously experienced Clil with the language teacher. In this case the latter, as reported by Balboni, can convey the message that the subject teacher may know English, but is not specialized in teaching it. According to Balboni, the only choice for not de-motivating students is the “team-teaching” option – i.e. the collaboration between the FL and the NLS teachers to plan and deliver the lessons;
- b. the fact that students’ school and families see Clil as a choice imposed by politics and an invention of the former Minister of Education. This de-motivating factor must be contrasted, e.g. through the provision of information about the language teaching aspects of that methodology, its spreading in Europe and its presence in the University;
- c. the fact that motivation must be daily sustained focusing on the “challenge” and “novelty” factors (see 1.1) and providing a constant feedback on their results and aims reached both in the language and in the subject.

We think that the following quotation from Coonan can be representative of what has been said so far “È un tipo di studente *nuovo, motivato, di cui ha necessità il Clil e che, allo stesso tempo, il Clil contribuisce a creare*” (Coonan, 2010: 135, my emphasis), and we have seen how much this must be guaranteed by the teacher’s intervention.

In conclusion, we have examined the ideal conditions for the learning to happen effectively from a neuropsychological perspective. We have then seen how the Clil context can sustain the creation of these conditions through the promotion of a motivating environment. However, we have also considered the issues related to motivation that Clil may generate; these problems must be especially examined and addressed by teachers in order to guarantee the fulfillment of the aims of Clil.

In this context, our case study has been carried out to verify the reactions to a Clil module and suggest some possible didactic interventions.

2 Our case study

This section is dedicated to the presentation of our case study. After having mentioned the objectives of the study, we will provide some indications about the informants' characteristics (2.2), the data collection procedures and the instruments of the data collection: the questionnaires of the students and the teachers (2.3). Finally, we will explain the method through which the data analysis was conducted.

2.1 Objectives of the study

The aim of this study was to observe how the carrying out of a Clil module had impacted on a group of students who had experienced an experimental 10-h curricular Clil module. In particular, we wanted to focus on their emotional reactions taking into account their own voices and that of their teachers. Starting from the previous studies conducted in Italy, which had signaled that the students' emotional reactions can be both positive and negative, we wanted to observe how their reactions had intertwined with the compulsoriness nature of the experience. In particular, focusing on their motivations provided to their answers, we wanted to bring into light the main points from whence their reactions had originated. This gave us the possibility to propose some intervention aimed at sustaining the positive impact, or trying to weaken the negative.

2.2 Subjects of the study

The subjects of this study are 70 students who attended the fourth and the last year of the Liceo Scientifico and Classico during the school year 2013/2014 and their non-linguistic subjects (NLS) teachers who took part in the Clil module experience. There were respectively:

- a. 18 students belonging to the fifth year of the Liceo Scientifico, who experienced a 10-hour Clil module of Arts (A group);
- b. 19 students who attended the last year of the Liceo Classico and whose Clil module concerned Physics (B group);

- c. 15 students of the fourth year of the Liceo Scientifico, whose NLS studied through the Clil methodology was Physics (C group);
- d. 18 students who belonged to the fourth year of the Liceo Scientifico and had a Clil module of Mathematics (D group).

Seven questionnaires out of 70 were blank, therefore we analysed 63 questionnaires in total. The students of each group belonged to the same class. All the classes experienced a 10-h Clil module.

2.3 Data collection procedures

In March 2014, I met the headmaster Dott. Zennaro Luigi at his office in order to ask him if I could administer the questionnaires to the teachers and the students. My request was accepted with particular receptiveness both from him and from the teachers who took part in the Clil experience. On that occasion, I met them and I illustrated to them the aims and the procedures of my investigation. They also showed interest and care for the collection of the data after my sending of the questionnaires. Three months later, I went again to the headmaster and collected all the questionnaires. Both the headmaster and the teachers pointed out that most of the students welcomed my demand positively too.

Another headmaster of a neighbouring Liceo was contacted and reacted with equal interest, but unfortunately was not able to participate to my investigation because his school would have dealt with Clil methodology starting from the following year.

2.3.1 *The questionnaires*

I created two typologies of questionnaire made up by 15 questions presented in Italian. One typology was administered to the students, the other to the teachers. The students' questionnaire was anonymous; the only information contained was the class, the subject and language that were taught through the Clil methodology.

The questionnaire structure was specular for the two typologies of questionnaires since they share the same focus: the students' perceptions. In fact, the teachers were asked for an opinion on the students' reactions. The questions were all thought considering the following aspects:

- a. the first question⁹ was aimed at investigating the student's expectations towards the Clil methodology from their own voices. In fact, it was asked to the students to tell which was their reaction when they figured out that they would have to study that subject through the English language. I wanted to find out their starting emotions in order to understand if they felt more enthusiastic for living a new experience or the heaviness of the duty of that experience. Students' expectations are, in fact, connected with their motivation, as proposed by Eccles' "expectations – values" model¹⁰ (Tarantino, 2008).
- b. questions ns. 2, 3, 4, 11¹¹ are modeled on the basis of Schumann's Stimulus Appraisal Theory and they focus respectively on the interest, usefulness, pleasure and cope ability criteria. We proposed these questions in order to figure out if the stimulus provided during the Clil lessons is "appetizing" from the emotional and cognitive perspectives from students' perceptions;
- c. the usefulness of the stimulus offered is also the focus of questions ns. 5, 6, 7¹², in connection respectively with the subject, the language and the transversal skills, the main focuses of Clil methodology;
- d. in question n. 8¹³ the students had to express their thoughts about their motivation towards both the language and the subject, trying to perceive if it had increased positively, negatively or had not changed due to the experience;
- e. questions n. 9 and n. 10¹⁴ asked the students to point out advantages and disadvantages of the Clil methodology on the basis of their experience. We were interested in discovering which were the main aspects that impressed positively

⁹ How did you react when you were told you would have been involved in a Clil experience ? (q.1)

¹⁰ Eccles sees motivation as directly determined by the importance that the students give to the task (value) and from their succeeding expectations, which are influenced by their perceptions of ability in that situation and how much they think they can cope with it. (De Beni, Moè, 2000 in Tarantino, 2008).

¹¹ Do you think that learning a subject and at the same time improving your foreign language competence has been an useful (q.2)/ interesting (q.3)/ enjoyable (q.4) experience? How would you judge the level of difficulty of the Clil activities? (q.11).

¹² Do you think that this experience has been useful: to improve your competence in the subject (q. 5)/ to improve your competence in the foreign language (q. 6)/ to develop new skills for studying in general (q.7)?

¹³ Has the Clil experience changed your motivation towards the subject and/or the language?

¹⁴ In your opinion, what are the advantages (q.9) / disadvantages (q.10) of the Clil methodology ?

and negatively the learners in order to see if the results had strengthened (or not) what had been discovered in the previous research;

- f. questions ns. 13, 14, 15¹⁵ asked the students how they would react if they had the chance to repeat the experience with the same subject (question n. 13) and with an additional subject (question n.14). Through these questions, our aim was to have an idea about students' reactions to their emotions felt during the experience – i.e. to discover their arousal. In expressing their willingness to reiterate the experience, and especially providing a motivation to it, in fact, they gave information about their global appraisal of the input provided. Question n. 15 goes deeper in their appraisal of the experience, asking them about their satisfaction. These questions are to be considered as the counterpart of question 1. From their comparison, in fact, it is possible to see if their expectations about the experience have been confirmed at the end of the course, or not, and their reasons.

The 15 questions are made up of three typologies:

- a. Questions 2, 3, 4, 5, 6, 7, 11, 12, 15 are Likert scale with five degrees of answer;
- b. Question 1, 13, 14 are yes/no questions;
- c. Question 9 and 10 are open-ended questions.

All the questions are followed by some lines where students were asked to motivate their answers.

2.4 Method of data analysis

In order to simplify the analysis of the data, we collected the students' answers into three categories: "positive", "positive enough" and "negative" answers. Positive answers contained "moltissimo" and "molto" choices, "abbastanza" became "positive enough", and "poco" and "pochissimo" belonged to the "negative" section.

¹⁵ Are you happy to repeat the experience next year ? (q.13); How would you react to the possibility of experiencing another Clil module in a different subject? (q.14); Are you satisfied with the experience? (q.15).

As far as motivations to the questions are concerned, we decided to create some categories, which could represent and summarize – mostly on the basis of the frequency of a particular word – the students’ answers. In some cases, especially in the global results and charts, we decided to put in a category called “altro” all the answers that were given individually. Anyway, when considered meaningful, the content of these answers was reported too.

After having created the categories, we put data in an Excel worksheet and elaborated them using percentages and values. For each question, we illustrated data through a pie chart, which represented the higher or lower positivity of the answers through the three levels “positive”, “positive enough” and “negative”. Then, for each category, we created a bar chart, which contained motivations with indications of value. We repeated the same procedure for the four classes and, finally, we put together all the findings of the classes for each question in as many graphs. In total, we analysed 949 answers and created about a hundred and fifty charts.

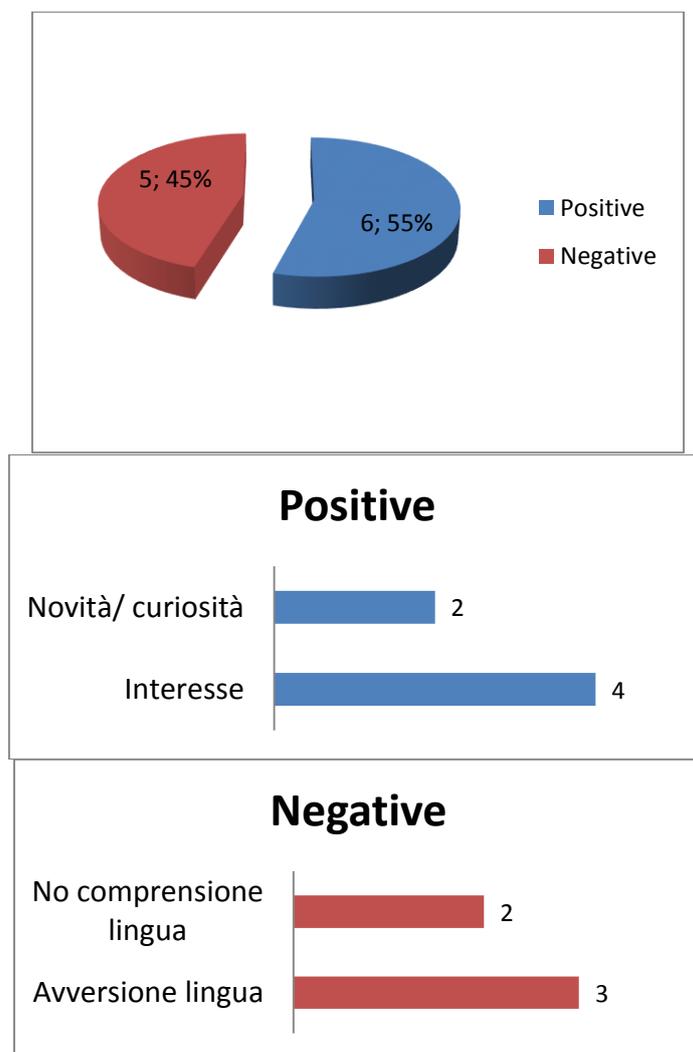
3 Analysis of the data

In this section, we will provide the analysis of the data. We will start illustrating the charts of each group of students, followed by a sum up of their answers divided on the basis of the question. We will, then, proceed to compare the students' and the teachers' answers.

3.1 Analysis of the students' questionnaire

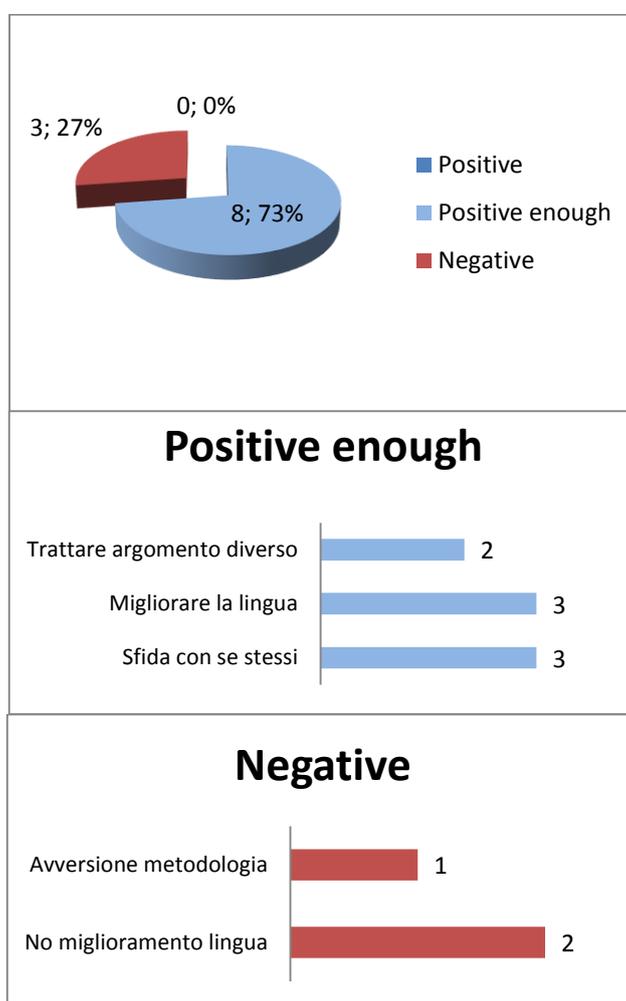
A group

Question n.1: Quando hai saputo che avresti fatto un'esperienza Clil, come hai reagito?



Observing the students' answers to question n.1, we can say that there is not a strong difference between the positive (55%- 12 out of 19) and the negative answers (45%- 7 out of 19). Focusing on the motivations provided, for the positive the students mentioned "interest" (67%, 4 out of 6), "curiosity for the novelty of the experience" (33%, 2 out of 6). On the other hand, the students also expressed an aversion towards the language (60%, 3 out of 5) and a difficulty in comprehending the English language (40%).

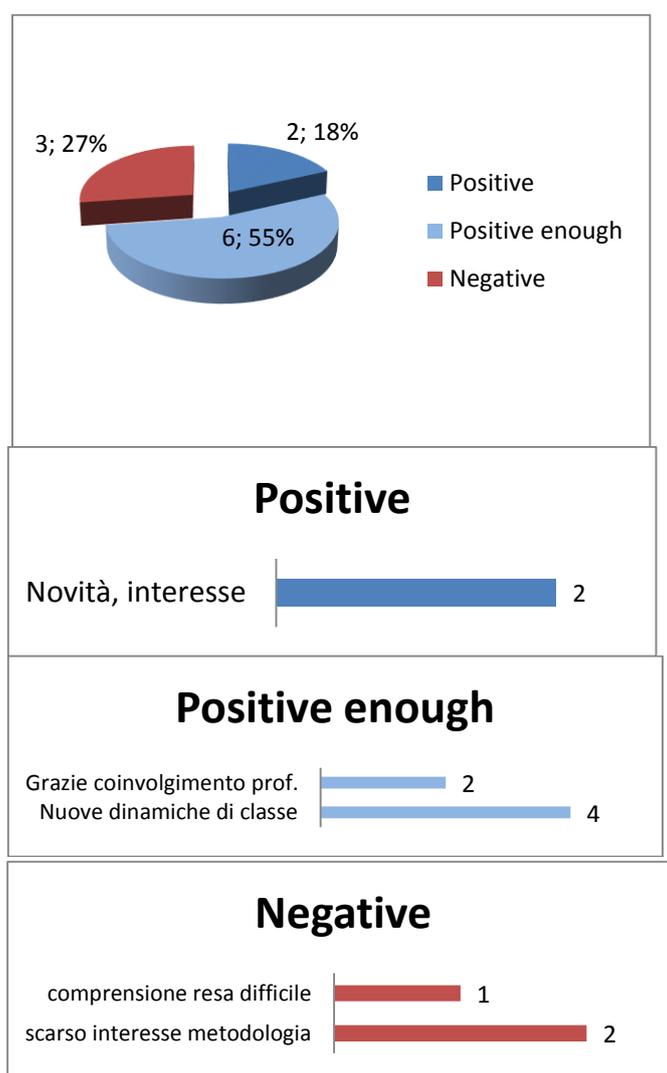
Question n. 2: "Apprendere una lingua e insieme contenuti non linguistici è stata per te un'esperienza utile?"



From the analysis to the answers to question n.2, we can see that the majority of the sample (73%, 8 out of 11) considered the Clil experience "useful enough". The 37.5% (3 out of 8) students belonging to this category attributed their answer to the fact that "the experience had been a challenge which they had taken upon themselves"; another

37.5% to the fact that “it had helped them to improve the foreign language”; the remaining part attributed its usefulness to “the opportunity to study the foreign language focusing on a different topic”. The negative answers (27%, 3 out of 11) are for the 67% (2 out of 3) connected with “the perception that it had not improved their language skills”.

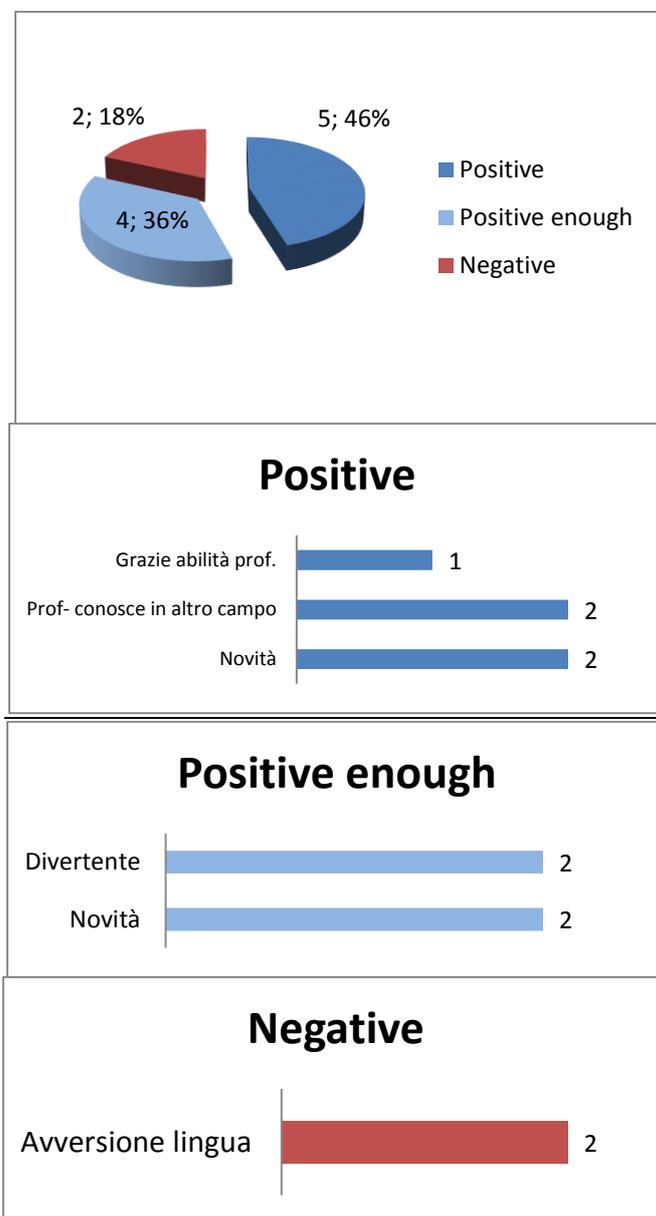
Question n. 3: Apprendere una lingua e insieme contenuti non linguistici è stata per te un'esperienza interessante?



Focusing on question n. 3, we figure out that quite half of the sample considered the Clil experience “interesting enough” (55%, 6 out of 11) mostly for the “creation of new classroom dynamics” (67%-4 out of 6) and a “higher involvement and participation to the lesson” (33%- 2 out of 6). Another 18% (2 out 11) declared that the experience had been “interesting” because “it had brought novelty and interest to the lessons”.

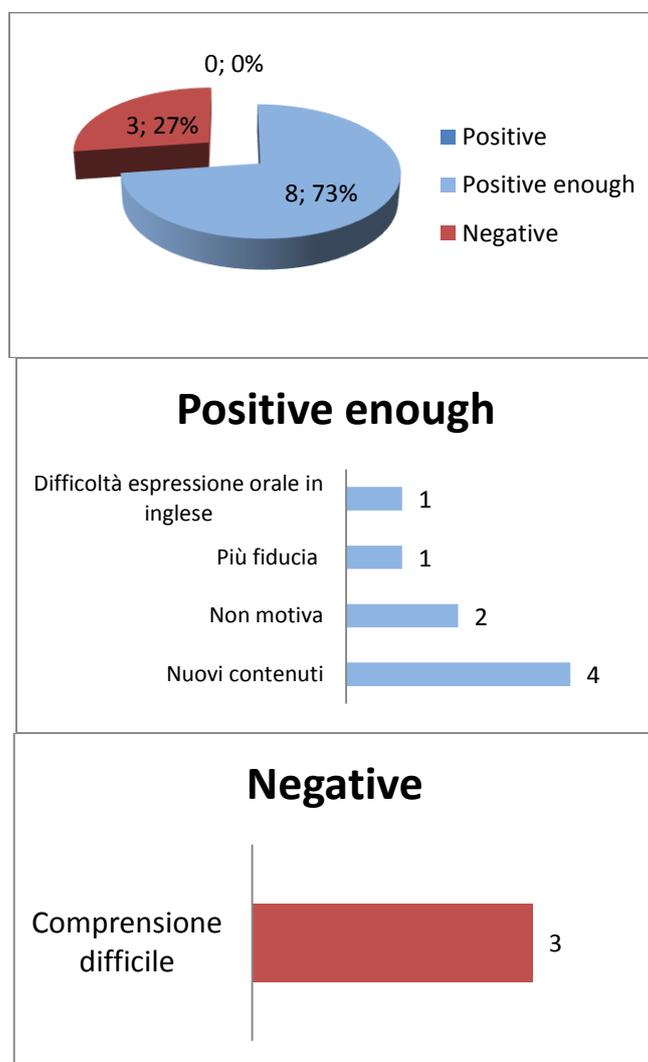
Considering the negative answers, they were for the 67% (2 out of 3) due to a “lacking interest towards the Clil methodology”.

Question n.4- Apprendere una lingua e contenuti non linguistici è stata per te un'esperienza piacevole?



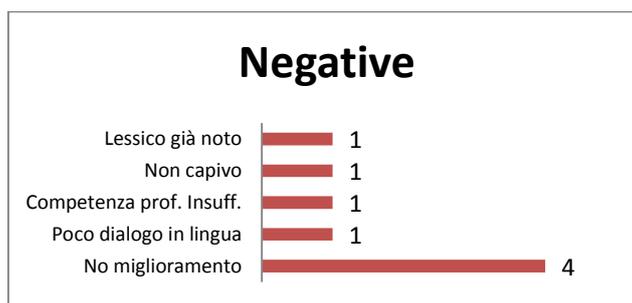
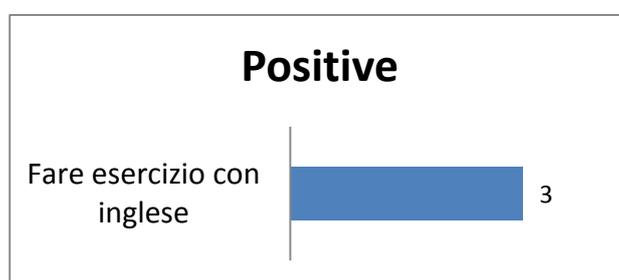
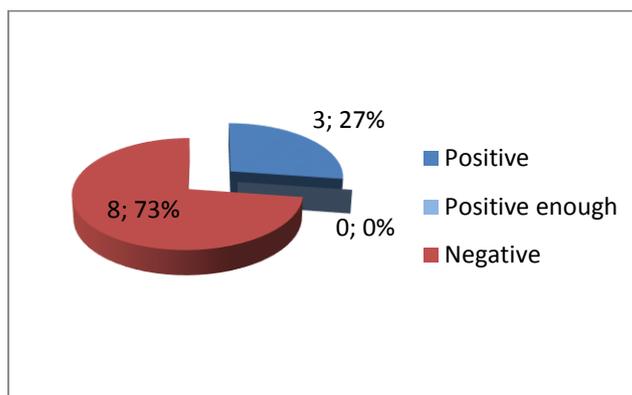
As we can see from the charts, the majority of the sample found the Clil experience “pleasant” (46%, 58 out of 11) almost thanks to the novelty (40%, 2 out of 6) and “the opportunity to be listened by the teacher in a different subject” (40%-2 out of 6). Another 36% (4 out of 11) asserted that the experience had been “pleasant enough” due to its novelty (50%-2 out of 4) and because “It had been enjoyable” (50%). Finally, 18% of the sample (2 out of 11) gave a negative answer sustained by their aversion towards the English language.

Question n.5- Secondo te, questa esperienza ti è servita a migliorare le tue conoscenze nella disciplina studiata?



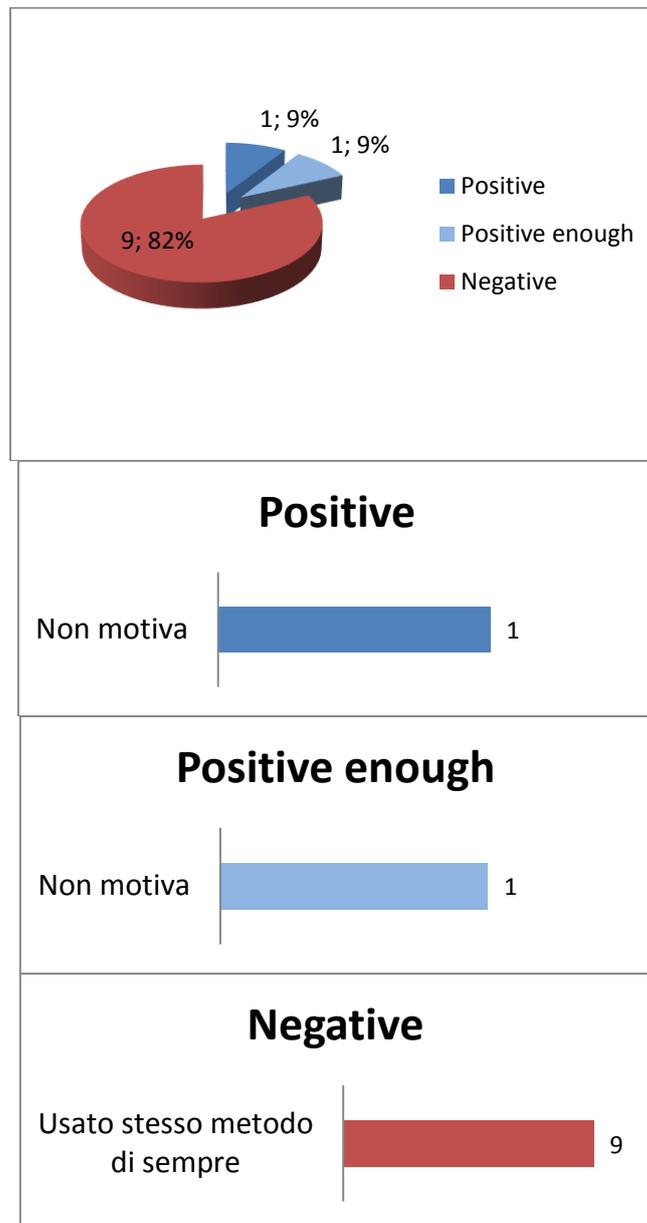
The most frequent answer to question n.5 is “positive enough” (73%- 8 out of 11). The students indicated, in fact, that the Clil experience had been useful enough to improve their knowledge of the non-linguistic subject thanks to the new contents acquired (50%, 4 out of 8), even though the 25% (2 out of 8) they did not provide any answer. The negative answers reached the 27% (3 out of 11) of the sample and were all justified with the perception that the comprehension had been complicated by the vehicular language.

Question n.6- Secondo te, questa esperienza è servita a migliorare le tue conoscenze nella lingua straniera?



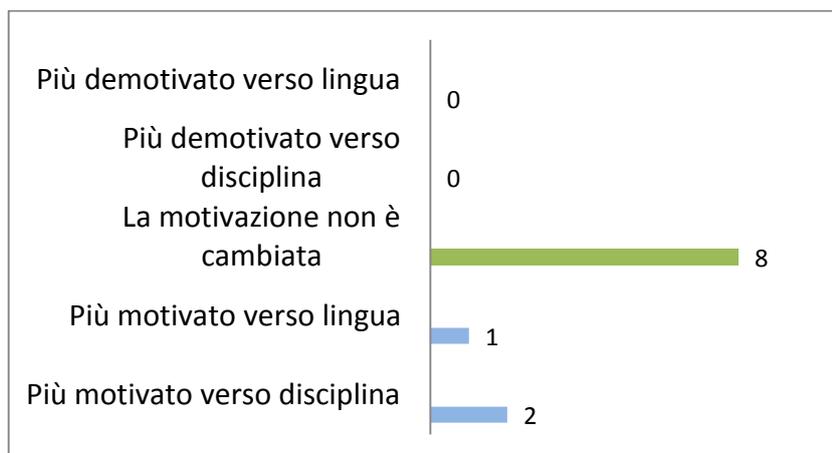
Taking into account the students' answer to question n.6, we can see that the majority of them (73%- 8 out of 11) considered that the Clil experience had not improved their competence in the English language. The 50% (4 out of 8) claimed that they had not noticed any difference; other four students mentioned various reasons for the negative answers. The remaining part of the sample (27%- 3 out of 11) answered “positively” and unanimously claimed that it had been useful because “it had given them the opportunity to practice their English”. No “positive enough” answer was given.

Question n.7- Pensi che l'esperienza ti sia servita a sviluppare abilità utili per lo studio in generale?



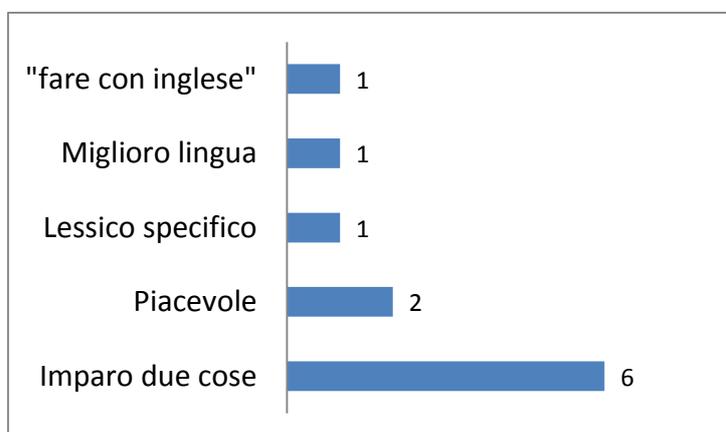
Looking at question n.7, the most frequent answer was negative (82%) and motivated for the totality of the students pointing out that “No change had been noticed as far as the study methodology was concerned”. The “positive” and “positive enough” answers were both chosen by a 9% of students, but were not motivated.

Question n. 8- L'esperienza Clil ha cambiato la tua motivazione nei confronti della disciplina studiata e/o della lingua?



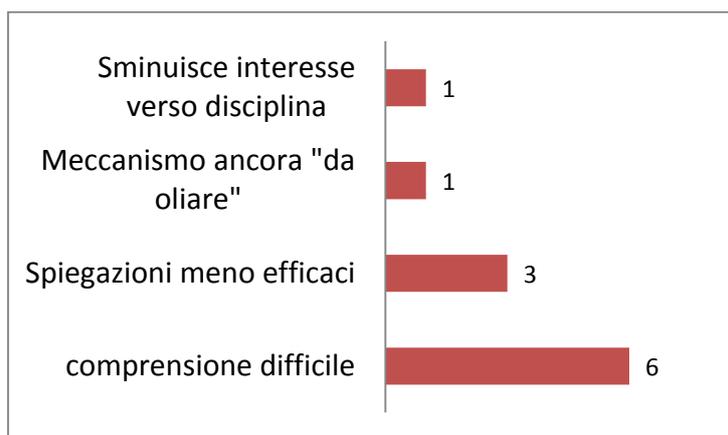
As we can see from the chart, most of the students (73%-8 out of 11) did not notice any difference between their motivation before and after the Clil experience. However, 18% of the students (2 out of 11) claimed “to feel more motivated towards the non linguistic subject”. Moreover, a student noticed a higher motivation towards the language (9%). No student claimed to be less motivated.

Question n. 9 - Secondo te, quali sono i vantaggi della metodologia CLIL?



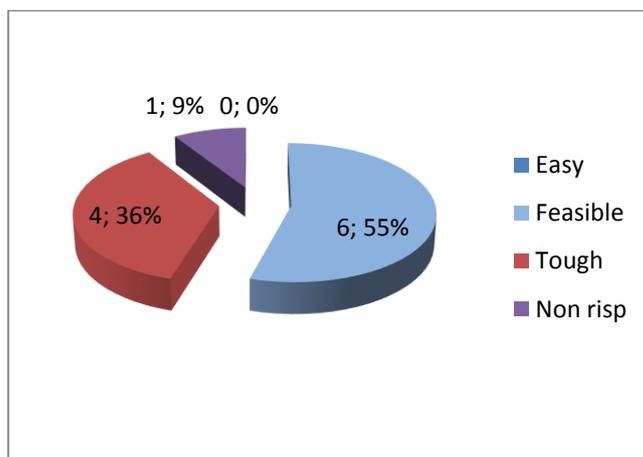
When the students were asked about the main advantages brought by the Clil methodology, their most frequent answer was that: “They can at the same time improve their knowledge on two subjects” (55%- 6 out of 11 students). The remaining part of the sample determined to the 18% (2 out of 11) that “it had been a pleasant experience”.

Question n. 10 - Secondo te, quali sono gli svantaggi della metodologia CLIL?



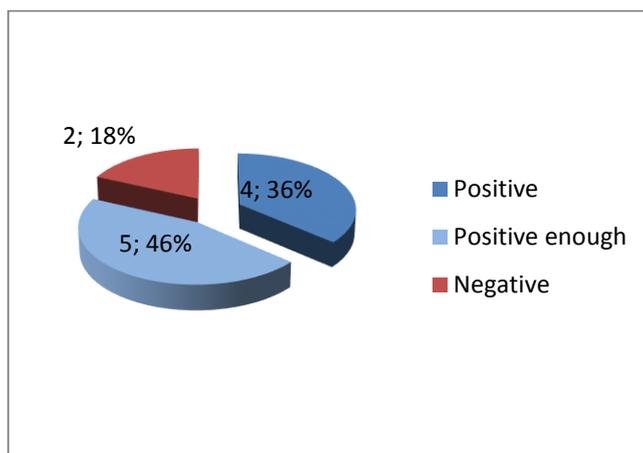
The most recurrent disadvantage of the Clil methodology pointed out by the students was that “the comprehension of the non linguistic subject had been made more difficult” (54.5%, 6 out of 11), followed by “the explanations had been less effective than those of the traditional lessons” (27.5%, 3 out of 11).

Question n.11 -Come giudicheresti il livello di difficoltà delle attività Clil?



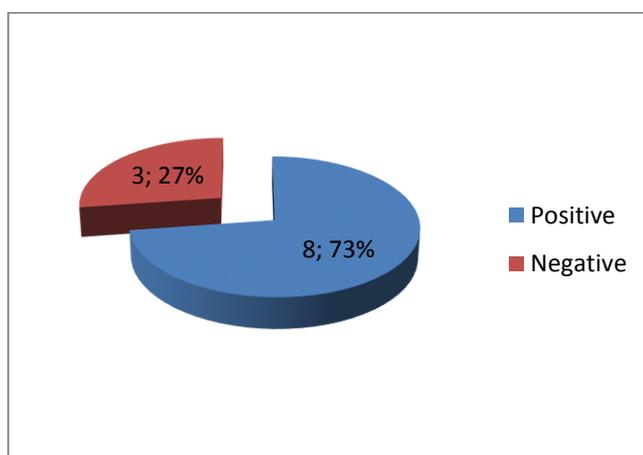
For this question the 55% (6 out of 11) of the sample remarked that the activities were “feasible”, the 36% that they were “tough” (4 out of 11). No student provided any motivation to his/her answer.

Question n. 12 - Secondo te, le modalità di svolgimento di lavoro in classe Clil sono state efficaci?



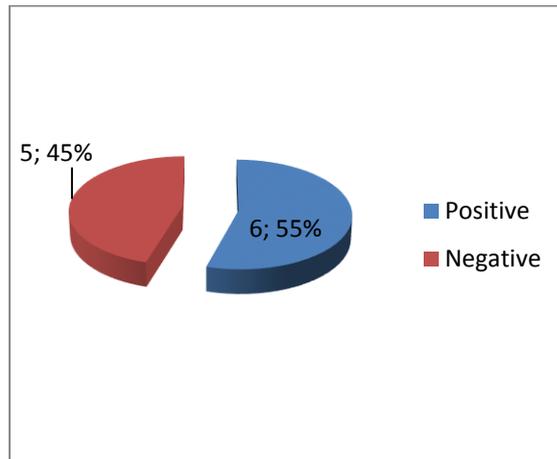
Looking at question n.12, 46% (5 out of 11) of the students signaled that the lessons had been “effective enough”, 36% (4 out of 11) that they had been “effective”, and another 18% (2 out of 11) answered negatively. No student motivated his/her answer.

Question.13- Sei contento di ripetere l’esperienza l’anno prossimo?



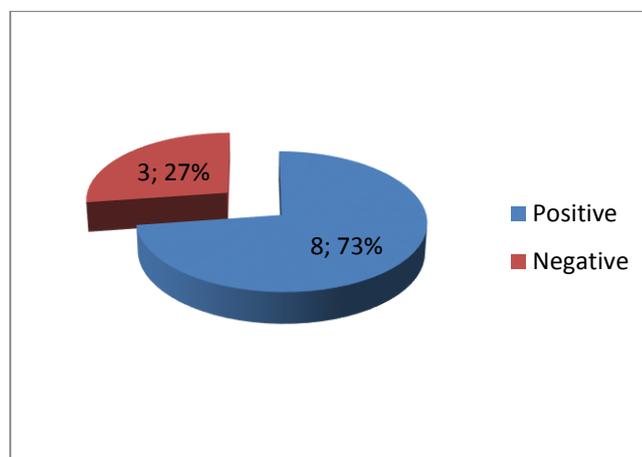
As we can see from the chart, most of the students would react positively to the idea of repeating the Clil experience the following year (73%, 8 out of 11). Unfortunately, once again, their answers were not motivated.

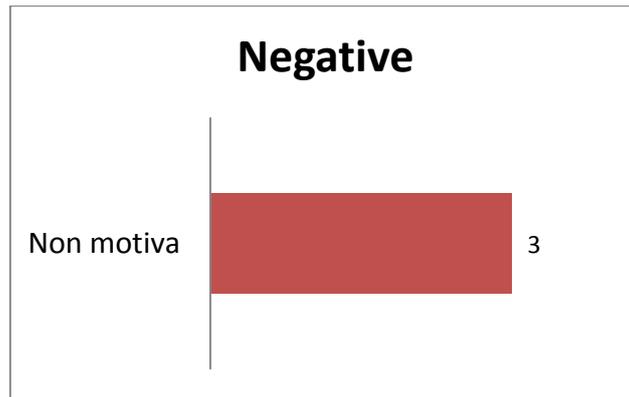
Question n.14- Se il prossimo anno potessi scegliere di studiare anche altre discipline in una lingua diversa dall'italiano, come reagiresti?



The students' answers to this question revealed that there is not a big discrepancy between the percentage of those who would welcome the possibility of studying a further subject through Clil (55%, 6 out of 11), and those whose reactions would be negative (45%, 5 out of 11).

Question n. 15- Ti ritieni globalmente soddisfatto di questa esperienza?

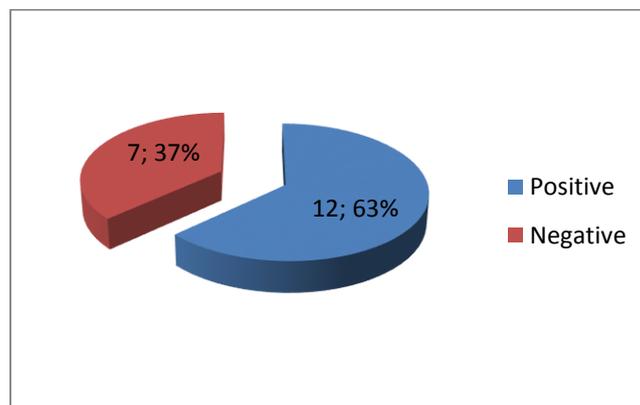


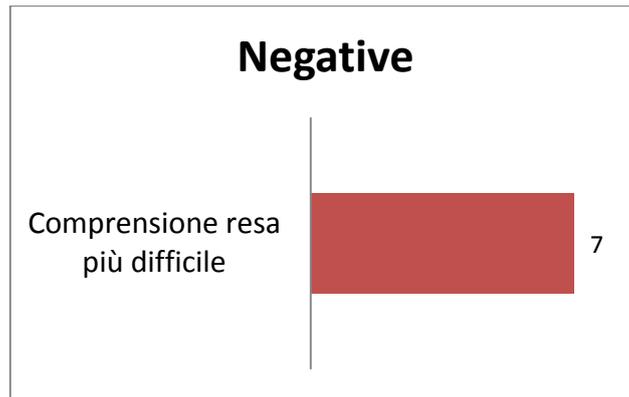


The majority of the sample claimed to be globally satisfied with the experience (73%, 9 out of 11) and mostly (in most cases) did not justify their answer (37%, 3 out of 9). The other motivations provided indicate that the students' satisfaction stems from the novelty of the experience (25%-2 out of 11) and its usefulness (25%- 2 out of 11). All the negative answers were not motivated.

B group

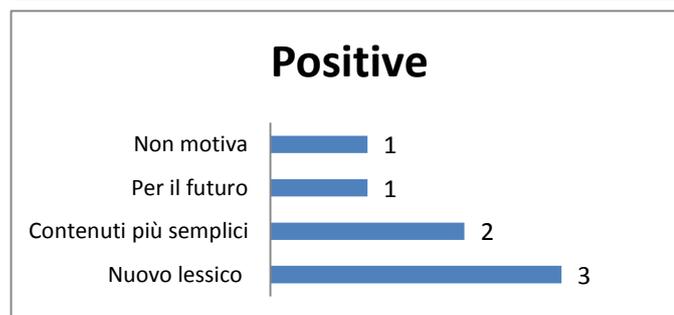
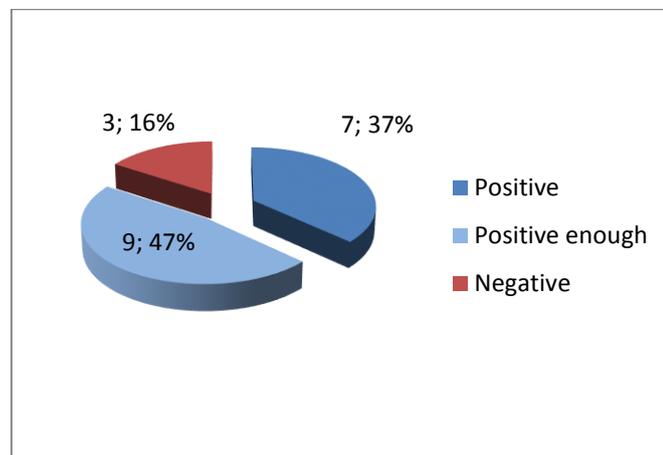
Question n.1: Quando hai saputo che avresti fatto un'esperienza Clil, come hai reagito?

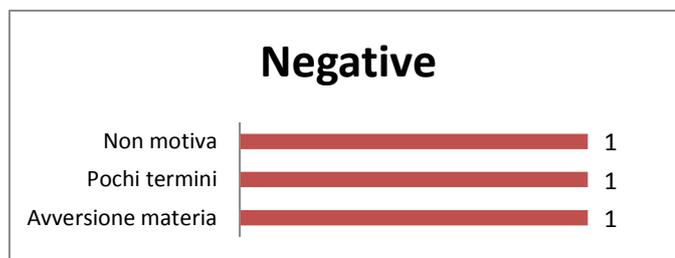
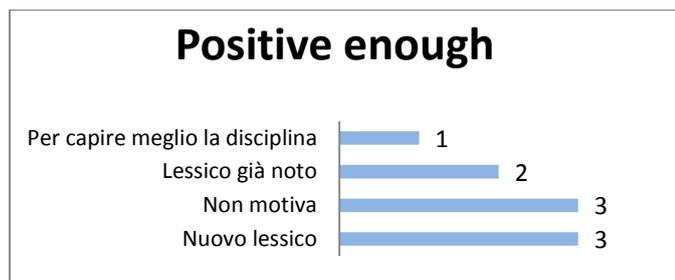




Focusing on question n.1, we figure out that the majority of the sample showed positive reactions at the beginning of the Clil experience (63%- 12 out of 19 answers). These reactions were for the 50% (6 out of 12) connected to feelings of curiosity towards the new experience, while the other half reported as a motivation the “interest” (25%- 3 out of 12) and the “needfulness” (17%- 2 out of 12). The negative answers (37%, 7 out of 19), on the other hand, were all attributed to the perception that the comprehension of the content had been made more difficult.

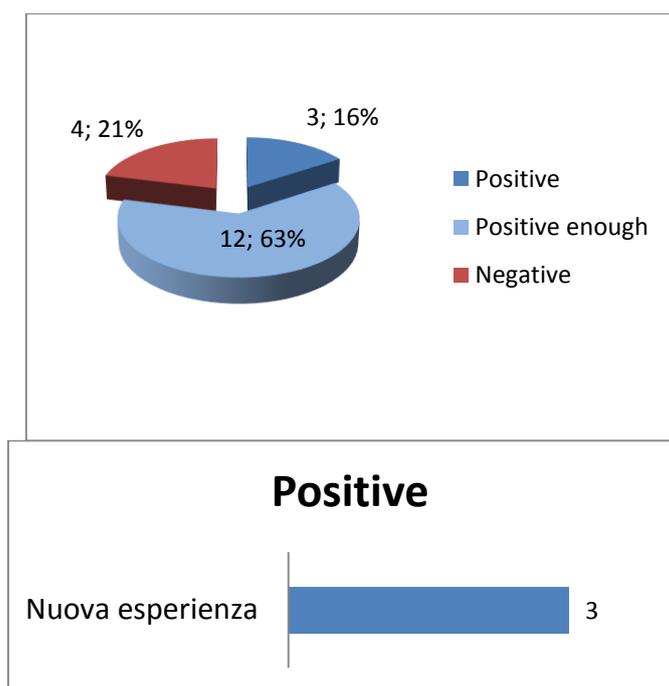
Question n. 2: “Apprendere una lingua e contenuti non linguistici è stata per te un’esperienza utile?”

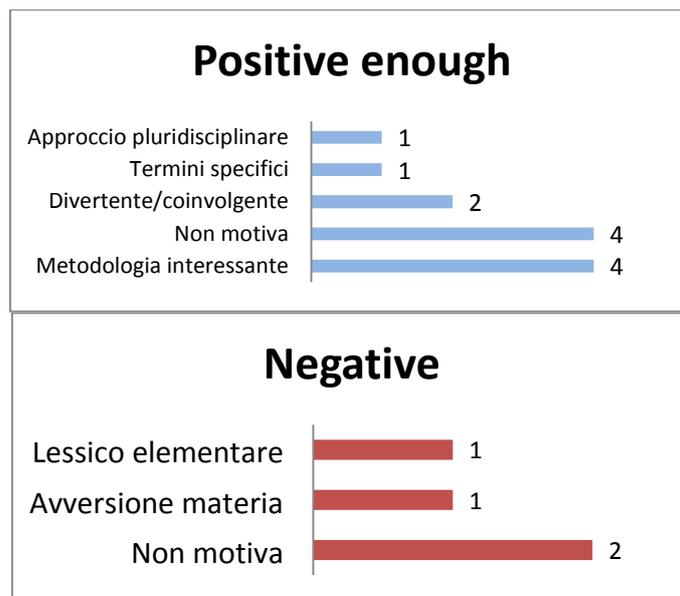




From the observation of the answers provided to question n. 2, it is possible to say that the sample is mostly divided into the “positive enough” (47%, 9 out of 19) and the “positive” answers (37%, 7 out of 19). The most frequent motivation provided for both the categories were that the Clil experience had been useful because it led to a “lexical improvement” (43% - 3 out of 7 for the “positive”; 33%- 3 out of the 9 for the “positive enough”). For the “positive enough” category, however, this motivation reached the same percentage of the “non motivated answers”.

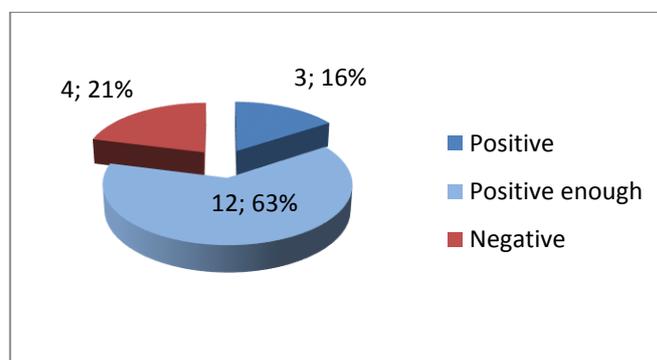
Question n. 3: Apprendere una lingua e contenuti non linguistici è stata per te un'esperienza interessante?

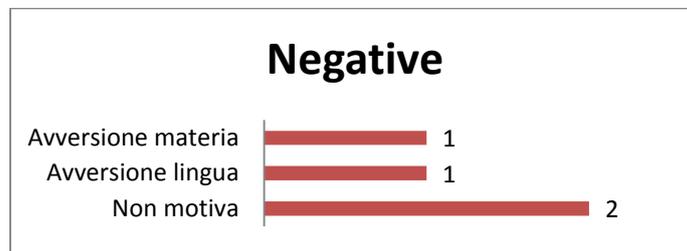
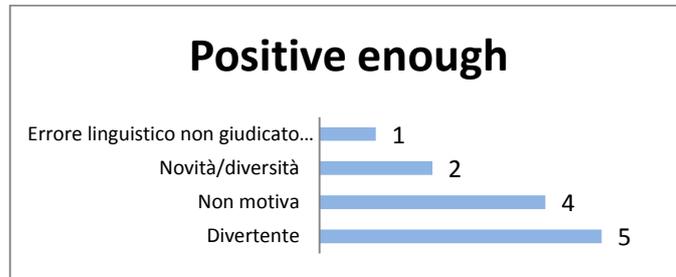
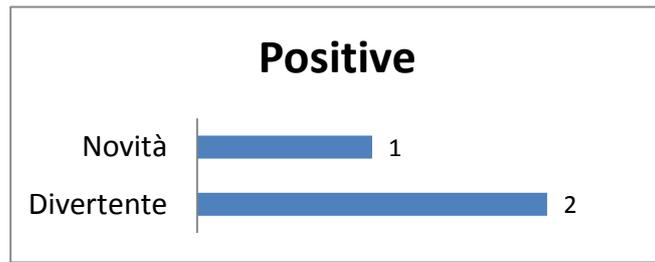




Taking into account question n.3 we notice that the 63% (12 out of 19) of the students considered the Clil experience “interesting enough” mostly because they found interesting the methodology itself (33%- 4 out of 12), while an equal percentage of students did not provide any motivation. Another provided motivation connects the interest to the fact that “it had been enjoyable and involving” (17%- 2 out of 12). In second place we found the “negative” answers (21%- 4 out of 19), which were for the 50% (2 out of 4) not motivated. The other 50% was equally divided into “aversion toward the methodology” (25%- 1 out of 4) and the statement that “the lexicon had been already acquired” (25%- 1 out of 4). Finally, 16% of the answers (3 out of 19) are “positive” and motivated connecting the interest to the novelty factor (3 out of 3- 100%).

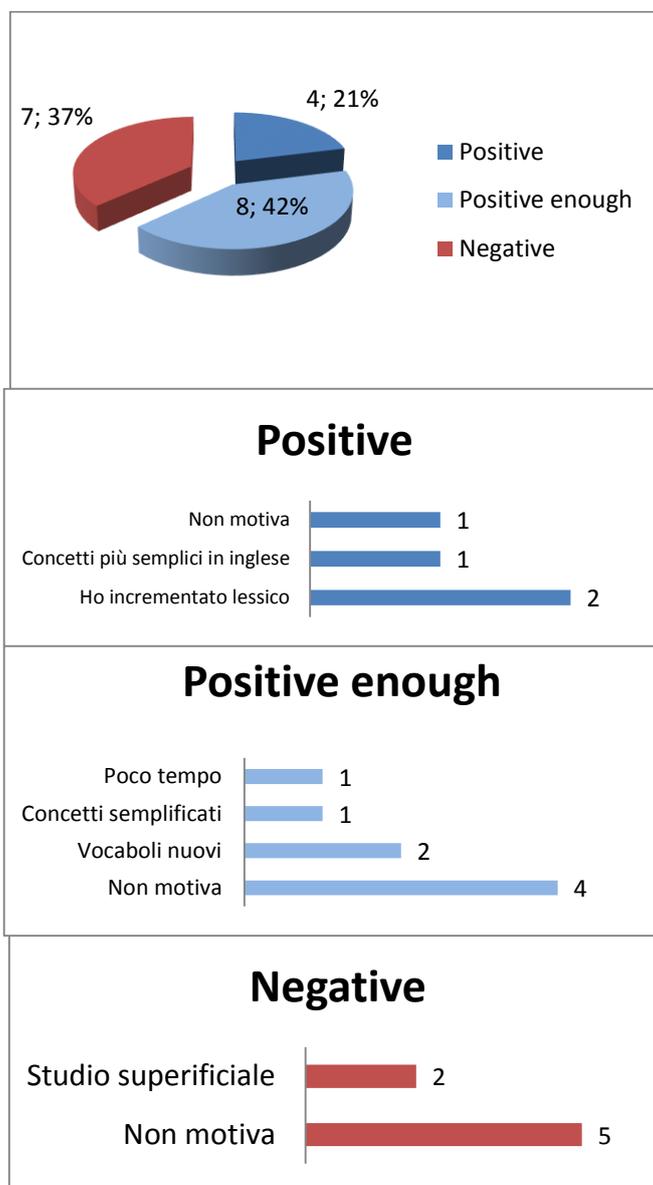
Question n.4- Apprendere una lingua e contenuti non linguistici è stata per te un'esperienza piacevole?





As far as the enjoyment of the experience is concerned, 63% (12 out of 19) of the students considered it “pleasant enough”. The majority of them found the lessons “pleasant” (42%- 5 out of 12), while 33% (4 out of 12) did not motivate their answer. Moreover, 16% (3 out of 19) of them claimed that the lessons had been “pleasant” claiming to have been “entertained” (67%-2 out of 3), and to have welcomed their “novelty” (33%- 1 out of 3). The negative answers were given by the 21% (4 out of 19) of the sample and were for the 50% not motivated. The remaining 50% presented the following personal motivations: the aversion towards the language (25%- 1 out of 4) and towards the content subject (25%- 1 out of 4).

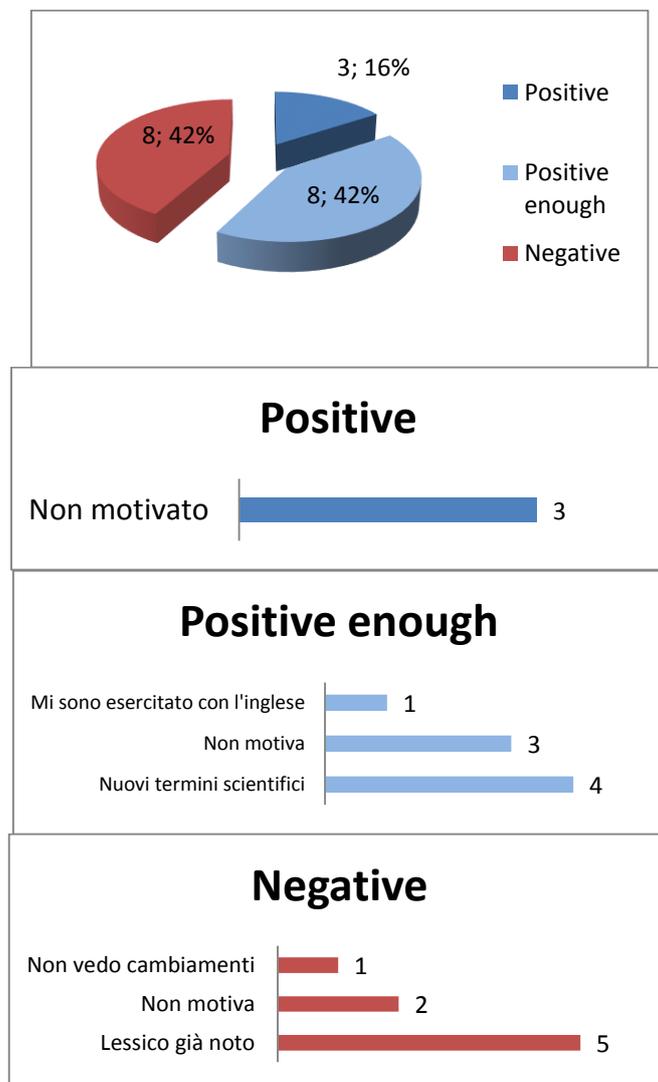
Question n.5- Secondo te, questa esperienza ti è servita a migliorare le tue conoscenze nella disciplina studiata?



The majority of the sample for this question is divided into 42% (8 out of 19) of students who thought that the Clil experience had been “useful enough” to improve their knowledge of the subject, and 37% who thought that it had not (7 out of 19). Half of the answers of the first category were not motivated (4 out of 8), the other 25% showed that the students appreciated “the improvement of their lexicon”. Moving to the negative answers, we can see that the majority of them were not motivated (71%- 5 out of 7), while the remaining part is justified by the students’ consideration that “the topics had been discussed less deeply than during the traditional lessons”. Moreover, there is a

21% (7 out of 19) of “positive answers”, mostly motivated mentioning the lexical improvement (50%, 2 out of 4).

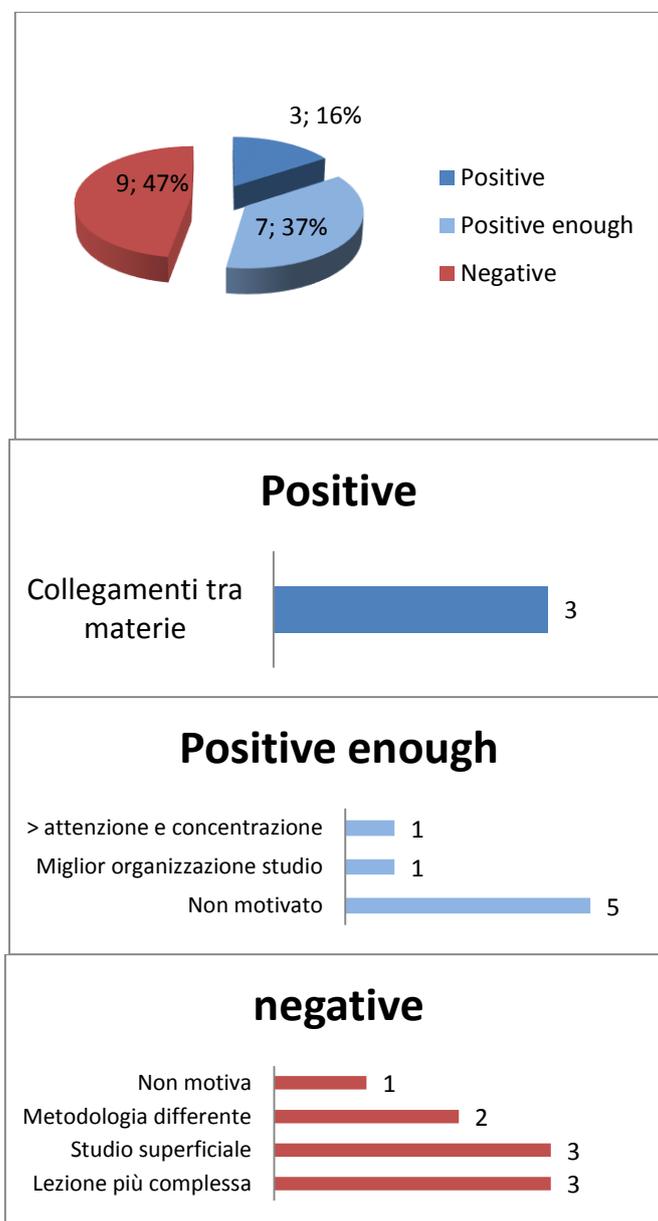
Question n. 6 - Secondo te, questa esperienza è servita a migliorare le tue conoscenze nella lingua straniera?



Apart from a minority of 16% constituted by the “positive” answers which were not motivated, the remaining part of the sample is divided into two equal portions: 42% of “positive enough” answers (8 out of 19) and 42% of “negative” answers. Focusing on the first category, 50% (4 out of 8) of the answers mentioned as a motivation “the acquisition of new lexicon”, 37.5% (3 out of 8) did not provide any motivations, and 12.5% of them claimed to have improved their competence because “they had the opportunity to practice their English”. For the negative answers, on the other hand, 62.5% of the students (5 out of 8) perceived not to have improved their English because

“the lexicon had already been acquired”, while the remaining 25% did not motivate their answers.

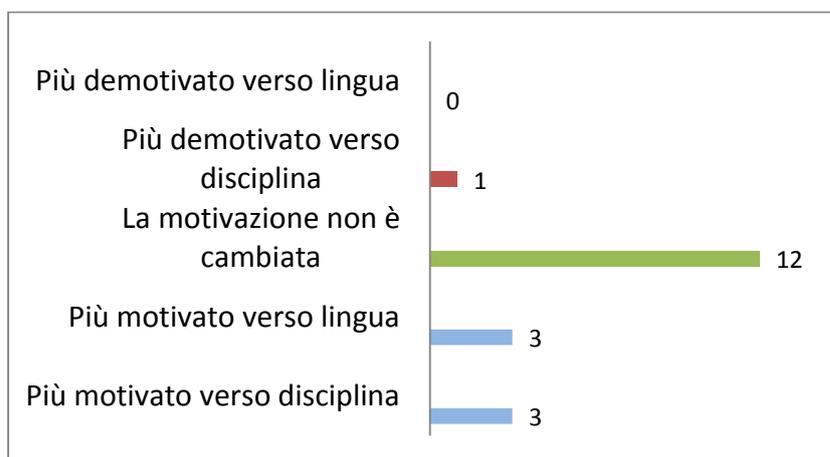
Question n.7 - Pensi che l’esperienza ti sia servita a sviluppare abilità utili per lo studio in generale?



The answers to this question individually show that the class is divided into those who think that the experience had not been useful to develop their transversal skills (47%), 37% of students who claimed that it had been “useful enough”, and a 16% who answered positively. Those belonging to the first group supported their opinion pointing out that “the complexity of the Clil lessons is higher” (33%), or that “ in the Clil lessons the level of investigation of the study is lower “ (33%) and signaled that “the Clil

lessons require a methodology of study totally different” (22%). As far as the second group is concerned, it is composed by a 72% of unmotivated answers. Finally, the answers which belong to the positive group were unanimously motivated mentioning the fact that “Clil incites you to experiment interdisciplinary links”.

Question n. 8 - L'esperienza Clil ha cambiato la tua motivazione nei confronti della disciplina studiata e/o della lingua?



As we can see from the chart, 63% (12 out of 19) of the students perceived that the Clil experience had not changed their motivation towards both the English language and the non linguistic subject. It is also worth noticing that 32% of the students claimed that their motivation had improved (16%- 3 out of 19 towards the subject and 16%-3 out of 19 toward the language). Only one person out of 19 (5%) declared that his/her motivation towards the subject had lessened.

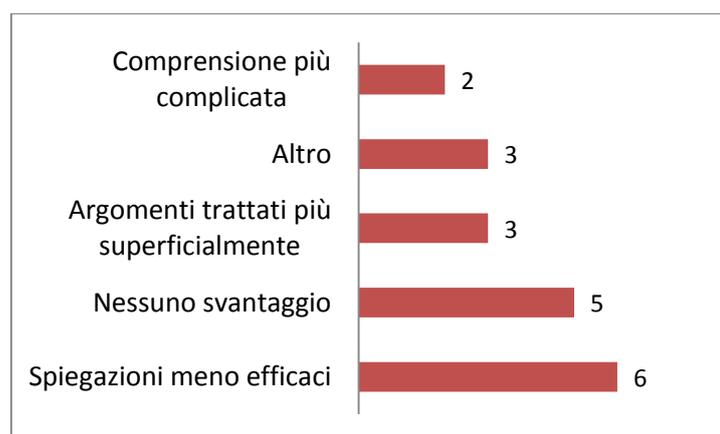
Question n. 9 - Secondo te, quali sono i vantaggi della metodologia CLIL?¹⁶



¹⁶ Two people did not provide any answers.

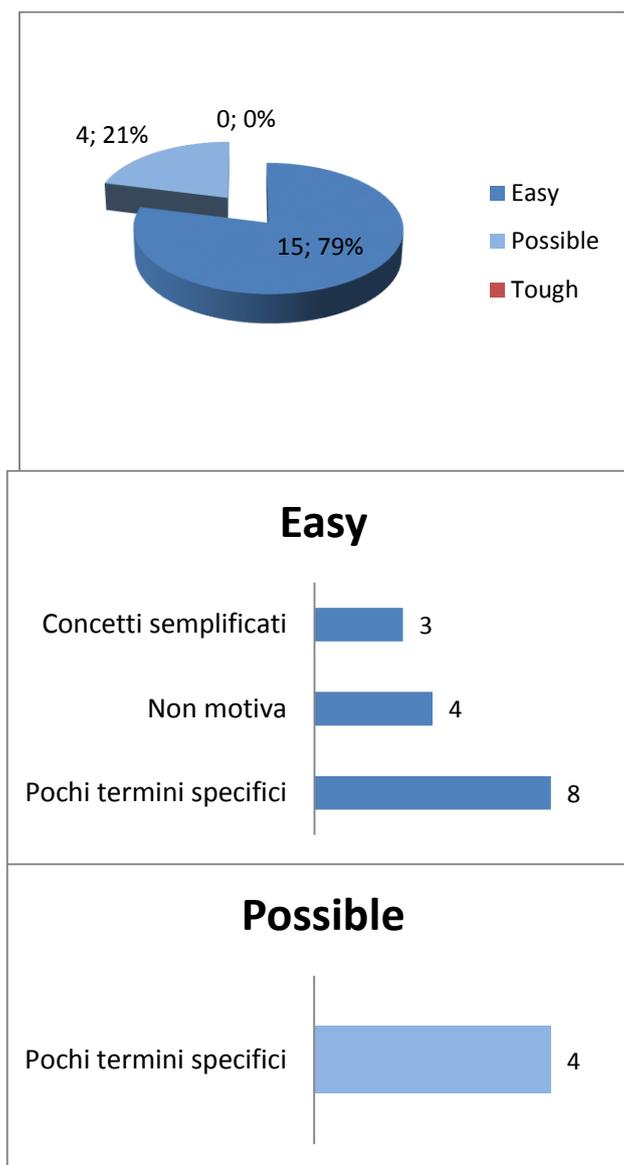
Focusing on question n.9, which asked the students to write down some advantages of the Clil methodology according to their experience, we can see that the most popular consideration made by the students was the following: “Clil is useful because it makes you improve your lexicon on the foreign language” (35%- 6 out of 17). In second position of frequency there is the following consideration: “It gives you the opportunity to practice your English applying it to the study of a subject” (23%- 4 out of 17); the third position is occupied by the claim that: “It is an opportunity for your school career” (18%- 3 out of 17 answers). The remaining answers are equally divided individually into 4 categories (6% for each one): “The use of multimedia devices”, “The simplification of the concepts”, “More interaction between the students”, while a students signaled that there had not been any advantage.

Question n. 10 - Secondo te, quali sono gli svantaggi della metodologia CLIL?



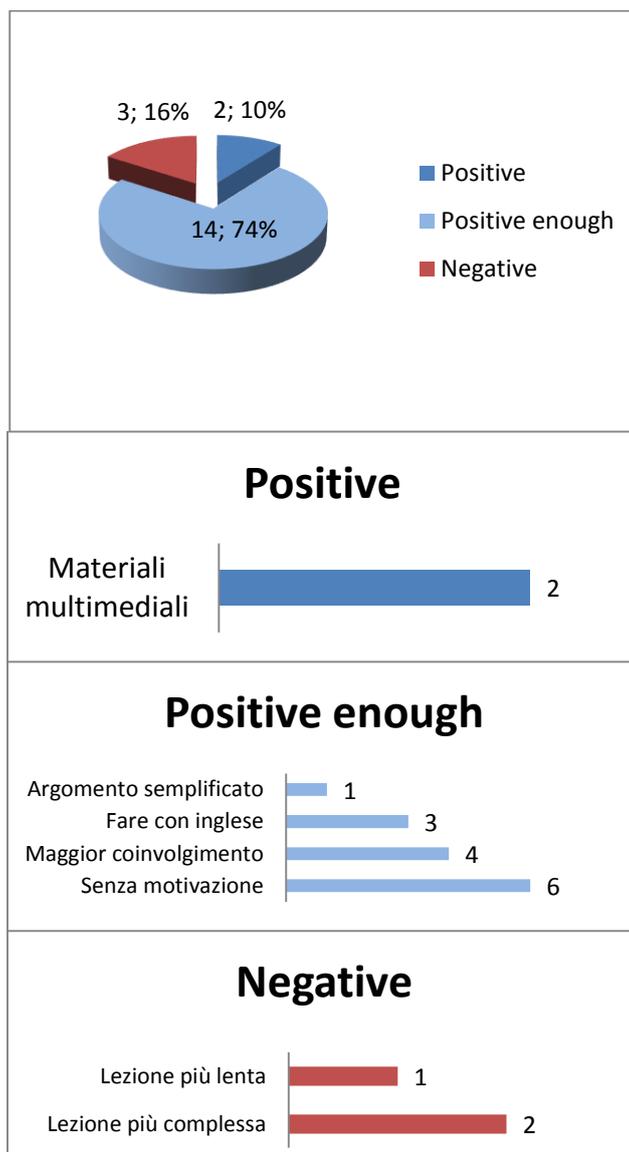
As for the disadvantages of the Clil methodology, which were pointed out by the students as an answer to question 10, 32% of them (6 out of 19) signaled that “The explanations in class had been less effective than in the traditional lessons”, 16% (3 out of 19) claimed that “The topics had not been discussed as deeply as during the traditional lessons”, 10% (3 out of 19) that “The comprehension of the subject had been made more complicated”. It is very important to signal that 26% (5 out of 19) of the sample think that “The Clil methodology had not had any disadvantage”

Question n.11 - Come giudicheresti il livello di difficoltà delle attività Clil?



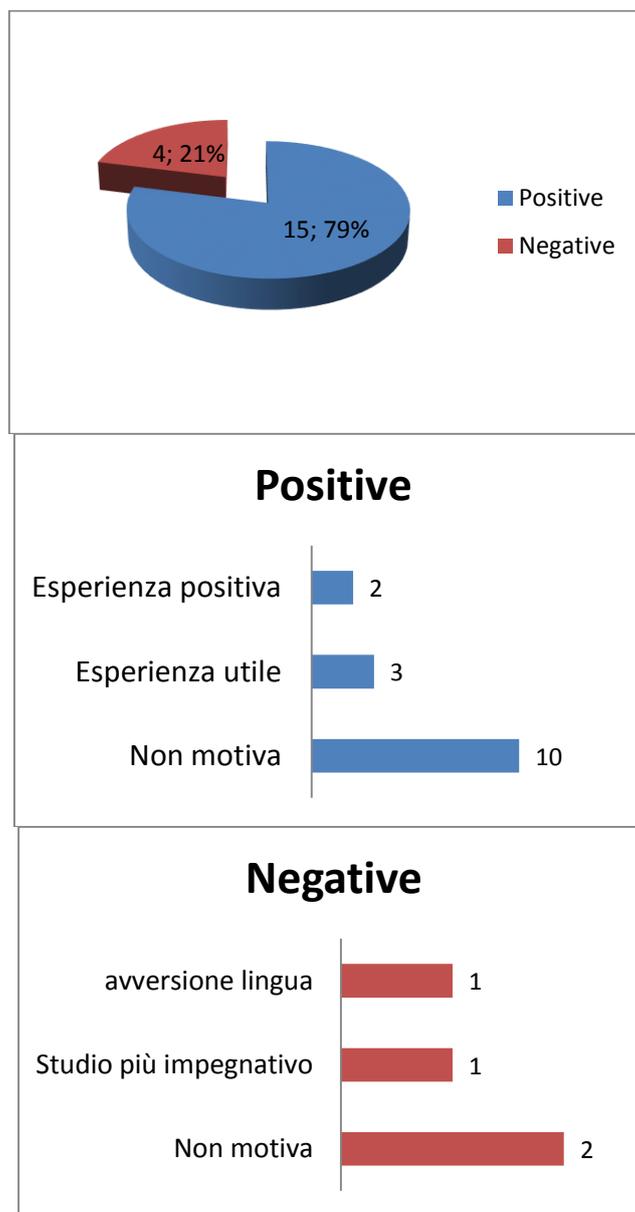
Taking into account the answers provided to question 11, whose focus was the level of difficulty of the lessons in the students' opinion, almost $\frac{3}{4}$ of the sample said that the activities had been easy (79%, 15 out of 19). The majority of them declared that it was because "They lessons only contained few specific words" (53% 8 out of 15), 27% (4 out of 15) did not provide any motivation and the remaining 20% (3 out of 15) said that it was due to the fact that "The concepts had been simplified". The other portion of the whole sample (21%- 4 out of 19) was composed by those who unanimously determined that the activities had been "feasible" thanks to the presence of "just few subject-specific words".

Question n. 12 - Secondo te, le modalità di svolgimento di lavoro in classe Clil sono state efficaci?



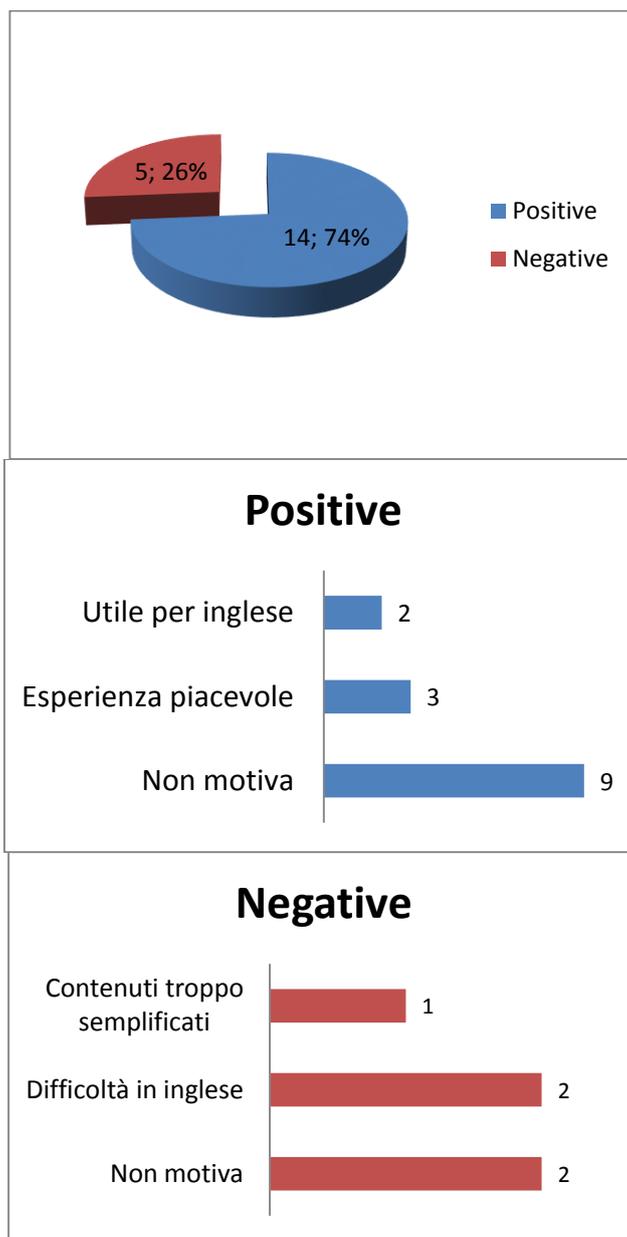
For the majority of the sample the way the lessons had been handled was “effective enough” (74%- 14 out of 19). As far as the motivations were concerned, 43% of them were not motivated (6 out of 14), 28.5% of the students pointed out that “They had been more involved by the teacher” , 21.5% that “They had been able to apply the English language into practical issues”. The remaining part of the sample is composed by 16% (3 out of 19) of “negative” answers which were for the 67% (2 out of 3) due to “the fact that the lessons were made more complicated”, and a 10% (3 out of 19) of positive answers whose motivation was the use of multimedia devices.

Question n. 13- Sei contento di ripetere l'esperienza l'anno prossimo?



As we can see from the chart, the majority of the students would be glad to repeat the experience the following year (73%, 15 out of 19), even though most of them did not provide any motivation to their answer (67%, 10 out of 15). The other motivations provided to the positive answer were connected to the usefulness of the experience (20%, 3 out of 15), and the enjoyment (13%, 2 out of 15). The remaining students claimed that they would not be glad to repeat the experience: half of them did not provide any motivation to their answer (2 out of 4), the other half imputed it to their aversion towards the language.

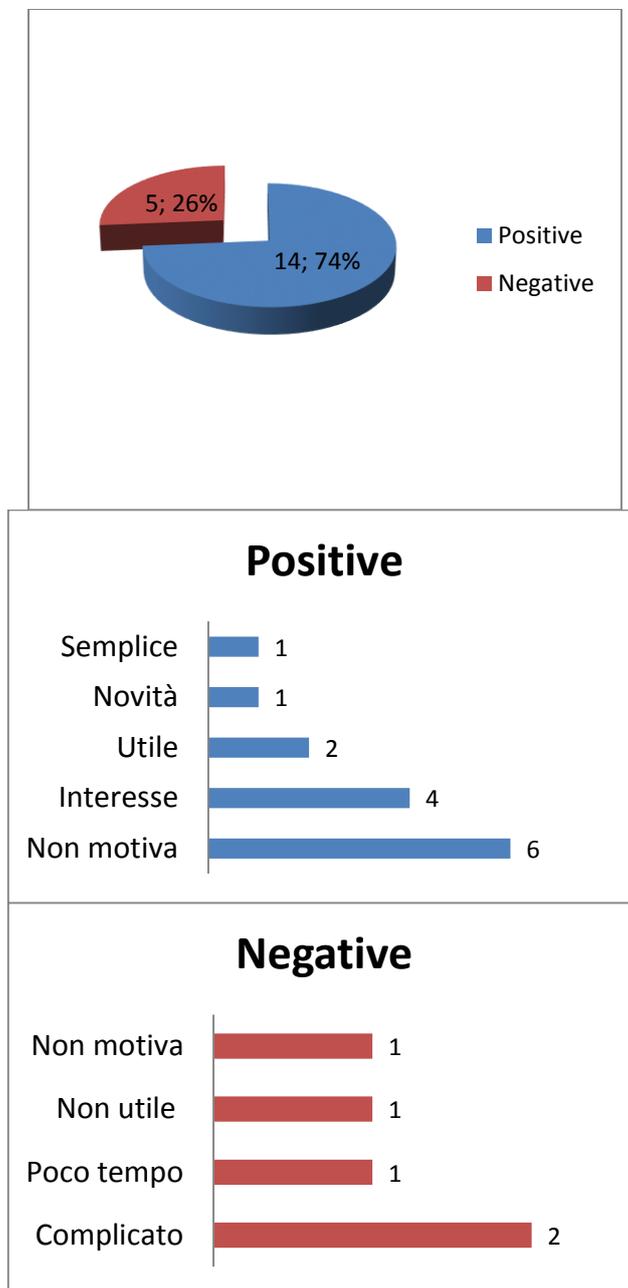
Question.14- Se il prossimo anno potessi scegliere di studiare anche altre discipline in una lingua diversa dall'italiano, come reagiresti?



Question n.14 asked the students to express their reactions towards the possibility of repeating the Clil experience studying an other subject through Clil. The students' answers to this question were mainly positive (74%, 14 out of 19) and for the 64% (9 out of 14) not motivated. Another 21.5% of students (3 out of 14) motivated their answers mentioning the enjoyment of the experience, while the remaining 14.5% (2 out of 14) said that they would react positively thanks to the possibility to improve their English. As far as the negative answers are concerned (26%, 5 out of 19), 40% of them were not motivated (9 out of 14), another 40% were linked to the students' difficulties

with the English language, while the remaining 20% reported that “the topic had been too simplified”.

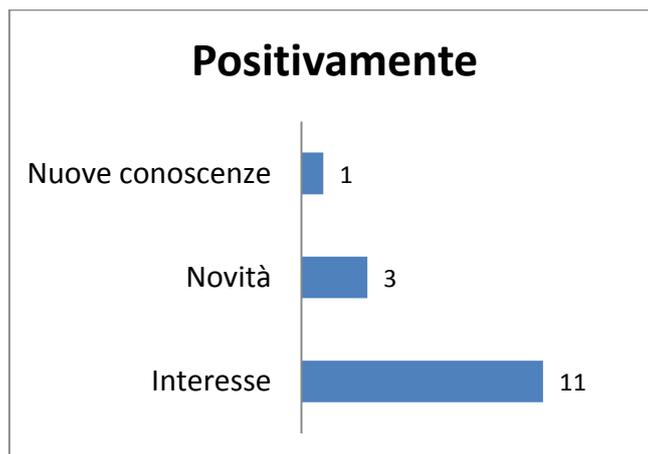
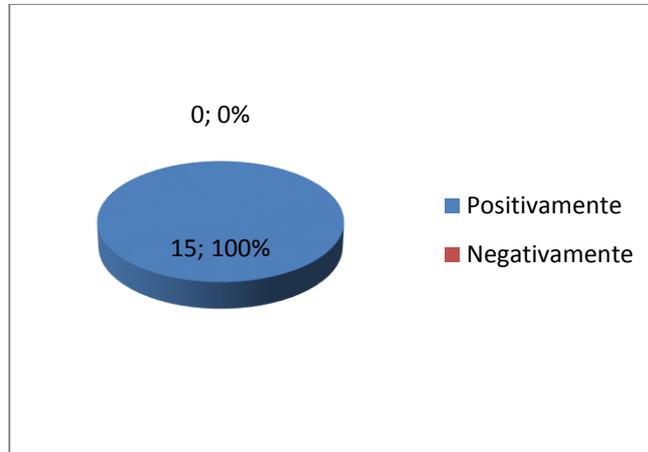
Question n. 15- Ti ritieni globalmente soddisfatto di questa esperienza?



The students’ answers to this question reveal that they are globally satisfied with the Clil experience (74%, 14 out of 19). Most of their positive answers were not motivated (43%, 6 out of 14), 28.5% (4 out of 14) were connected to the fact that “it had been an interesting experience”, another 14.5% (2 out of 14) to its usefulness. Moving to the negative answers (26%, 5 out of 19), 40% of them (2 out of 5) were due to the complexity of the experience.

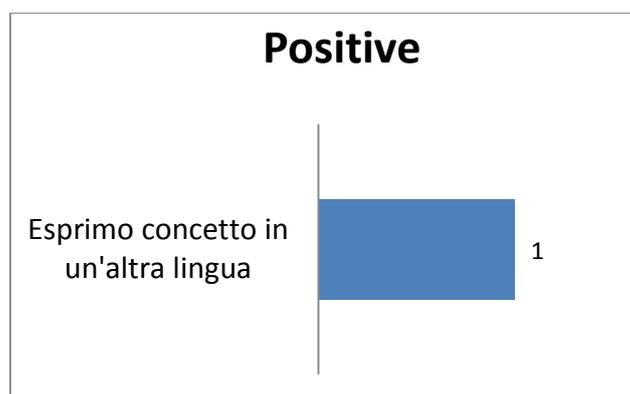
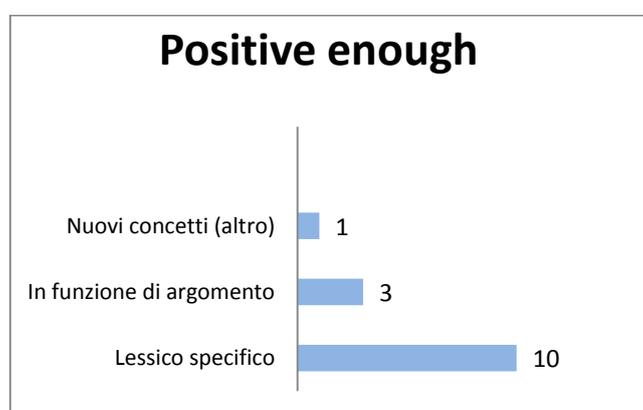
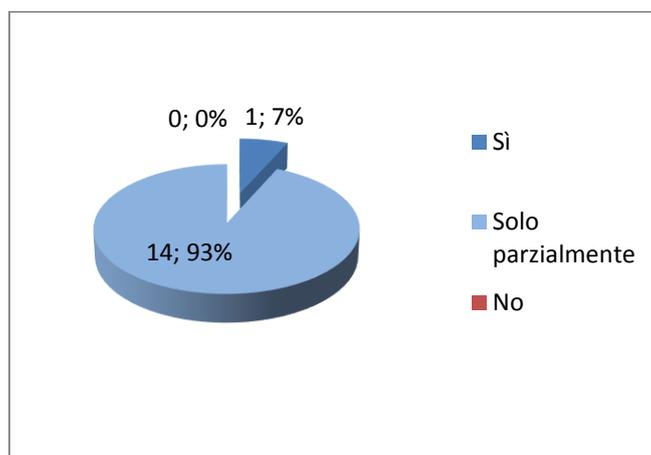
C group

Question n.1 : Quando hai saputo che avresti fatto un'esperienza Clil, come hai reagito?



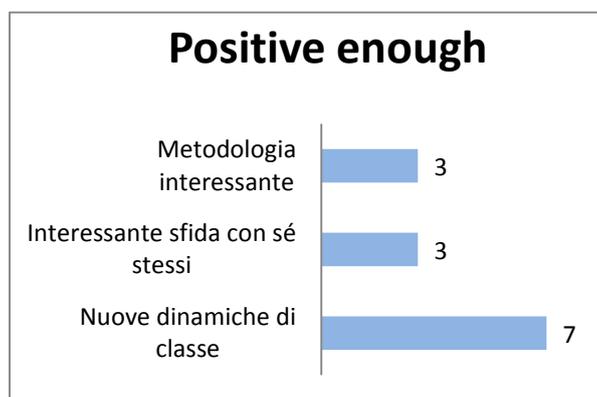
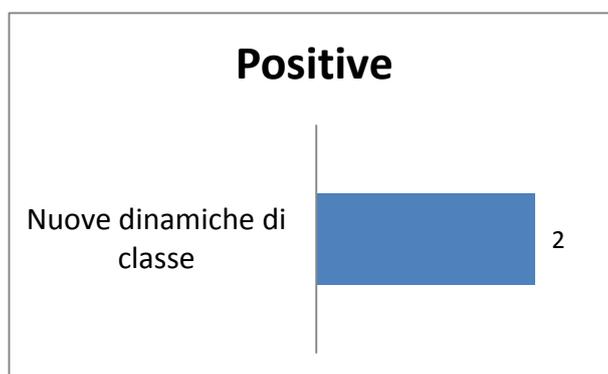
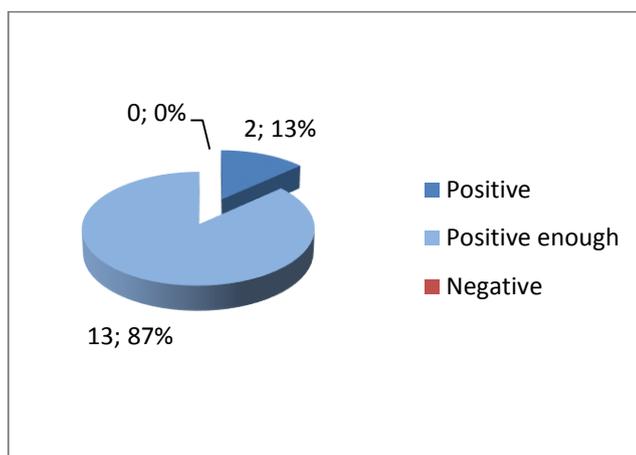
From the analysis of the answers provided by the students to the first question we can notice that all the sample began the Clil experience with a positive attitude. The most mentioned motivations were “we perceived interest” (73%- 11 out of 15) and “we were fascinated by the novelty” (20%).

Question n.2: “Apprendere una lingua e contenuti non linguistici è stata per te un’esperienza utile?”



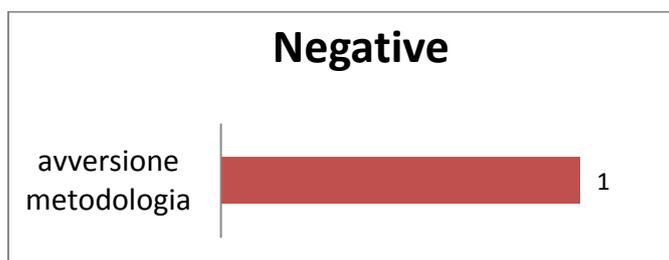
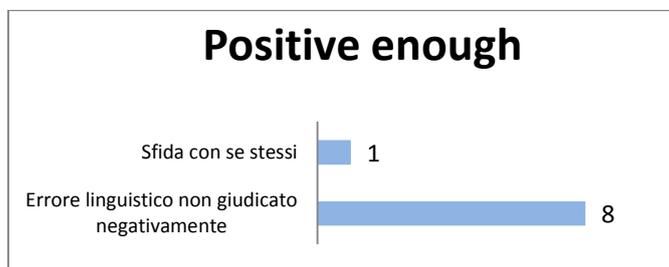
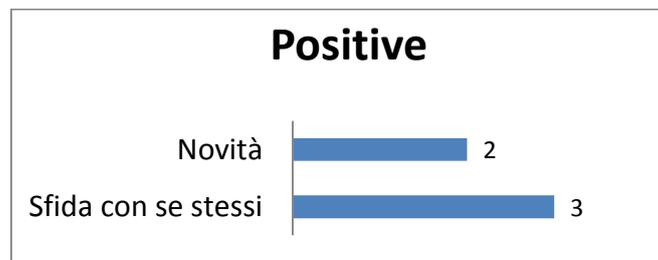
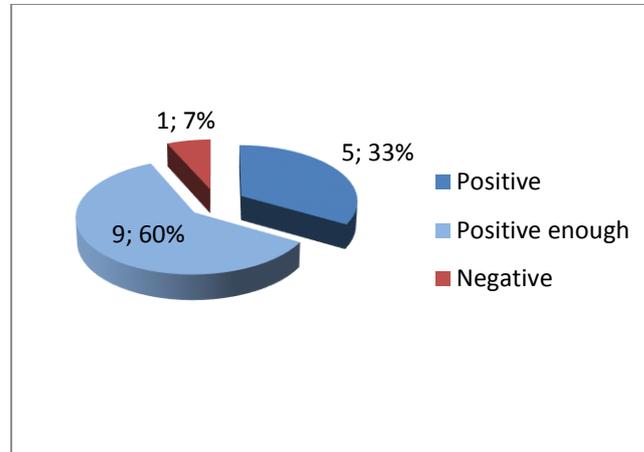
As we can see from the pie chart, for the majority of the students the Clil experience had been “useful enough” (93%- 14 out of 15 answers) because it provided them with an improvement of their lexicon specific of the subject in the English language (71.5%).

Question n.3- Apprendere una lingua e contenuti non linguistici è stata per te un'esperienza interessante?



Observing the students' answers to question n.3 it is possible to say that most of the sample thought that the Clil experience has been “interesting enough” (87%- 13 out of 15 answers) thanks to “the new dynamics created in class with the other students and the teacher” (54%- 7 out of 13 students). The other motivations provided are equally divided into: “It consists in a challenge upon yourself” (23%- 3 out of 13 answers) and “The methodology itself is interesting” (23%- 3 out of 13 answers). No student said that the experience had not been interesting.

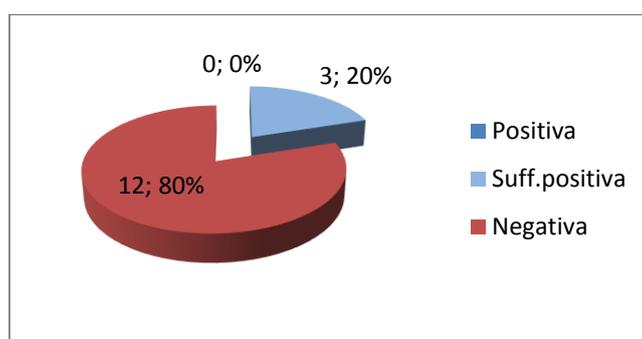
Question n.4: Apprendere una lingua e contenuti non linguistici è stata per te un'esperienza piacevole?



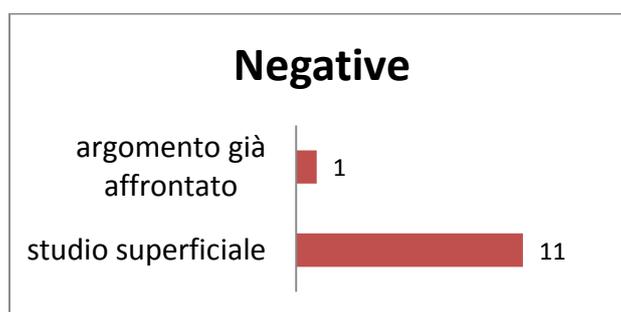
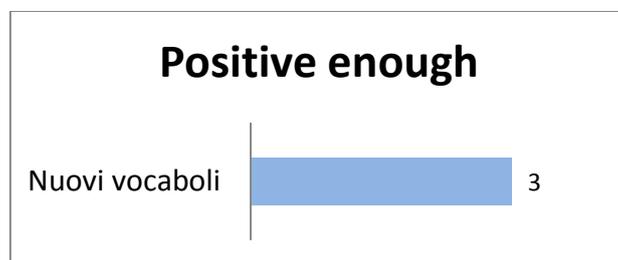
The analysis of the answers to question 4 reveals that more than half of the sample judged the Clil experience “positive enough” in terms of enjoyment (60%-9 out of 15 answers). For most of these “positive enough” answers, the motivation provided was that the students did not feel judged by the teacher if they made any mistakes in the English language. The remaining part of the sample is composed by 33% of “positive” answers (5 out of 15) and another 7% of “negative answers (1 out of 15). As far as the

“positive” are concerned, 60% (3 out of 5) of them presented the following motivation: “The Clil experience had been pleasant because it provided us with the opportunity to take a pleasant challenge upon ourselves”; 40% (2 out of 5) indicated that the students found pleasant the “novelty” factor. Finally, only 1 student (7%) gave a “negative” answer claiming that it had not been pleasant because he/she did not like the methodology itself.

Question n.5- Secondo te, questa esperienza ti è servita a migliorare le tue conoscenze nella disciplina studiata?



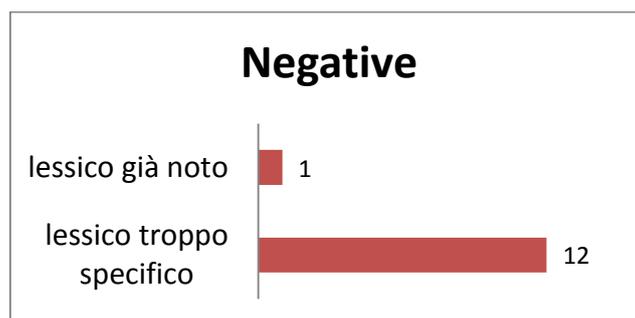
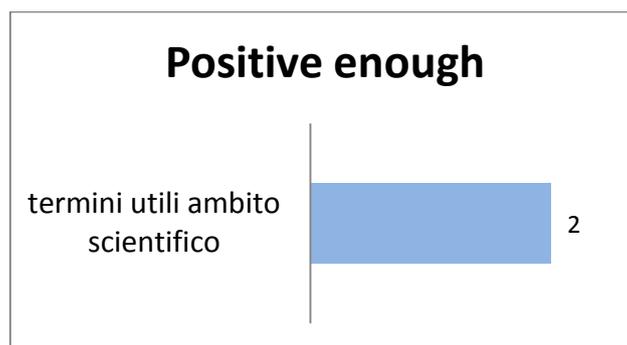
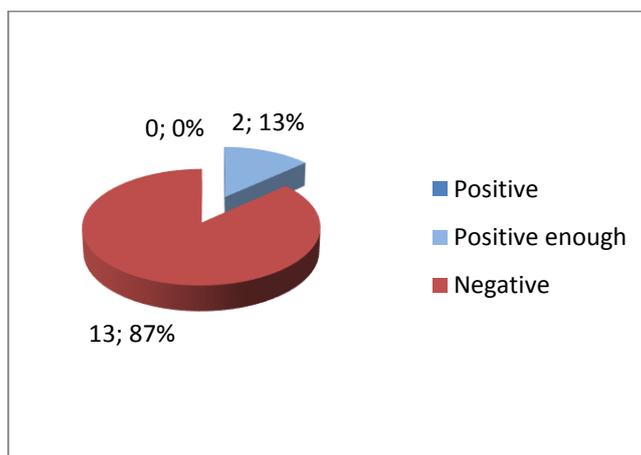
Positive = 0



Focusing on the answers provided to question n. 5, we figure out that 80% (12 out of 15 answers) of the students did not think that their knowledge of the subject had improved, and the remaining part that it had partially improved (20%- 3 out of 15). For the negative answers, 92% (11 out of 12) of them reported as motivation that “the study of the subject had been less in-depth than during the traditional lessons”; the remaining 8%

(1 out of 12) claimed that “The topic had already been discussed, so actually it was a revision”. The positive enough answers are all connected to the “acquisition of new lexicon” (100%- 3 out of 3 answers).

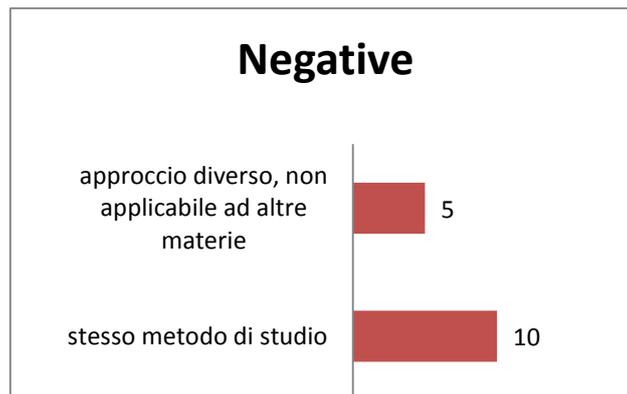
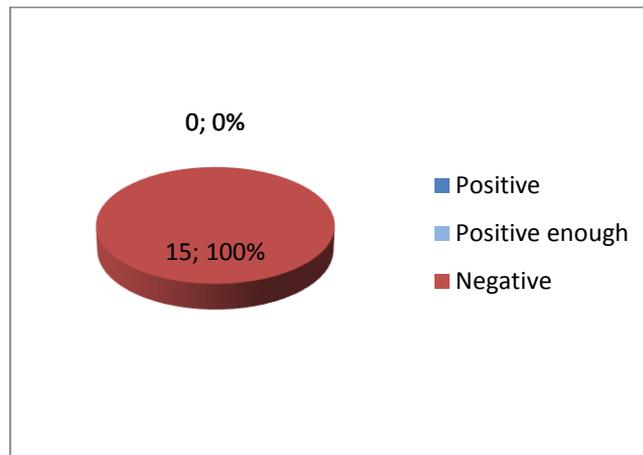
Question n.6- Secondo te, questa esperienza è servita a migliorare le tue conoscenze nella lingua straniera?



When they were asked if the Clil experience had been useful to improve their knowledge in the English language most of the students answered negatively (87%-13 out of 15) and motivated their answer for the 92% (12 out of 13 answers) mentioning that “the lexicon was too specific on the subject”, and for the 8% (1 out of 13 answers) saying that “the lexicon was already acquired”. On the other hand, the lexical improvement concerning the scientific field had been appreciated by the remaining part

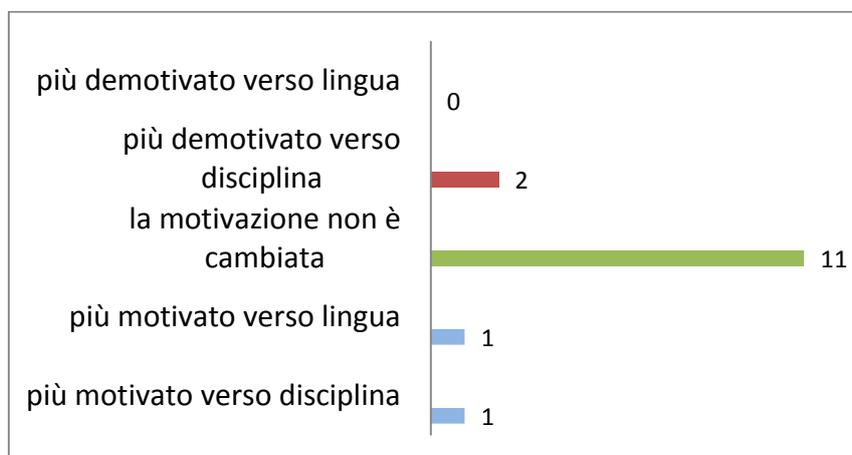
of the sample, who claimed that the experience had been “positive enough” (13%- 2 out of 15 answers).

Question n.7- Pensi che l’esperienza ti sia servita a sviluppare abilità utili per lo studio in generale?



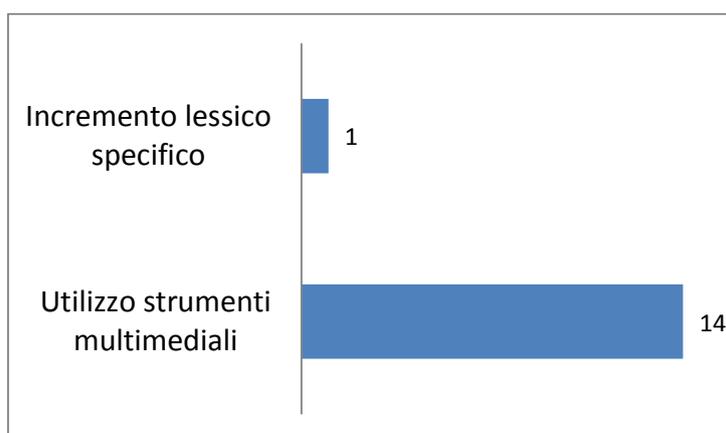
The whole sample provided a negative answer for question n.7 (100%- 15 out of 15), indicating that the improvement of the transversal skills had not been perceived by any students. For the 67% (10 out of 15 students) this consideration was due to the fact that “It had not changed anything to their study methodology”. The remaining percentage (33%- 5 out of 15 students), on the other hand, claimed that “the study methodology that Clil requires was different from the traditional one, so it did not seem applicable to the other subjects”.

Question n. 8 - L'esperienza Clil ha cambiato la tua motivazione nei confronti della disciplina studiata e/o della lingua?



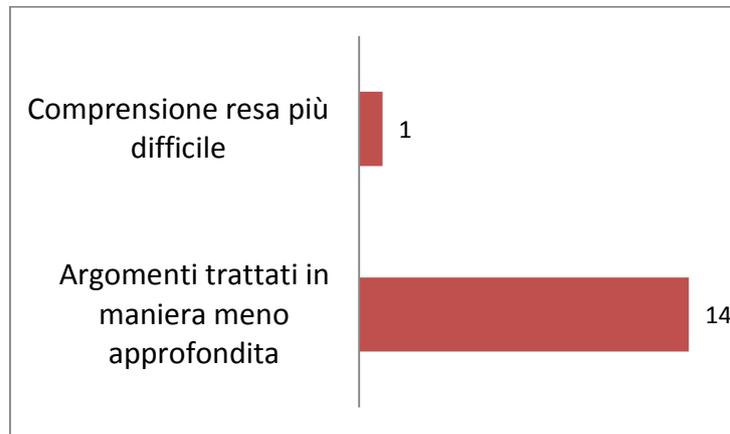
The answers to this question show that 73% (11 out of 15 answers) of the sample did not perceive that his/her motivation towards both the subject and the English language had changed thanks to the Clil experience. The remaining part of the sample is composed by 13% of people who thought that their motivation towards the subject had lessened (2 out of 15 people) and another 13 % of people who thought that their motivation had improved (7% towards the language- 1 student; 7% towards the subject- 1 student).

Question n. 9 - Secondo te, quali sono i vantaggi della metodologia CLIL?



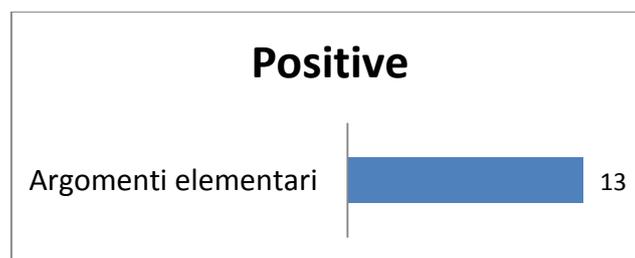
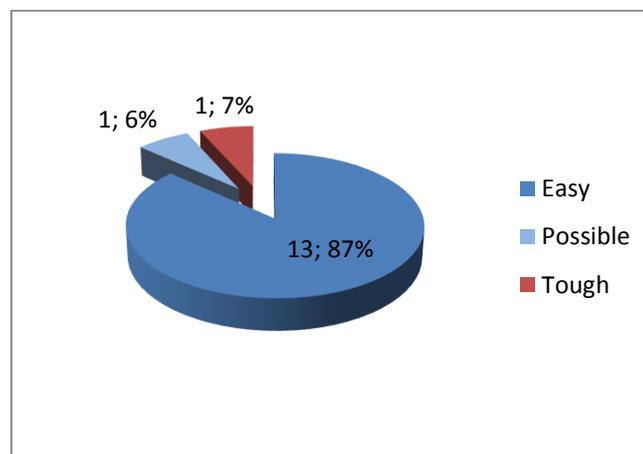
As we can see from the chart, almost the whole sample signaled the students' appreciation for "the use of multimedia devices" (93% of the sample, 14 out of 15 students).

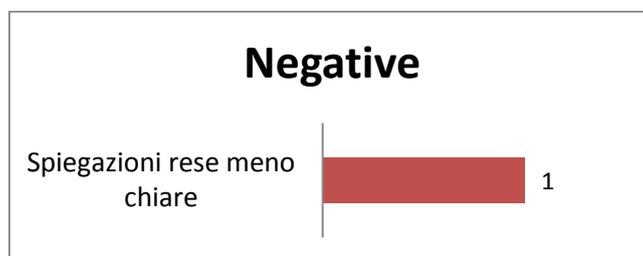
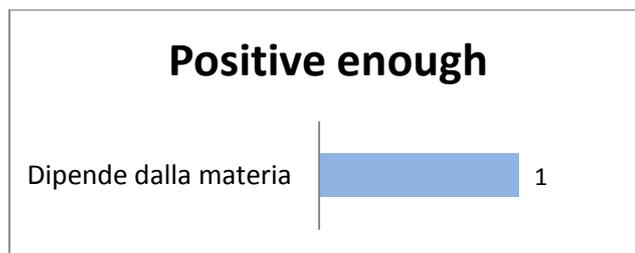
Question n. 10 - Secondo te, quali sono gli svantaggi della metodologia CLIL?



Focusing on the disadvantages of the Clil methodology, almost the total answers mentioned that the topics had been discussed less deeply than during the traditional lessons (93% of the sample, 14 out of 15 students).

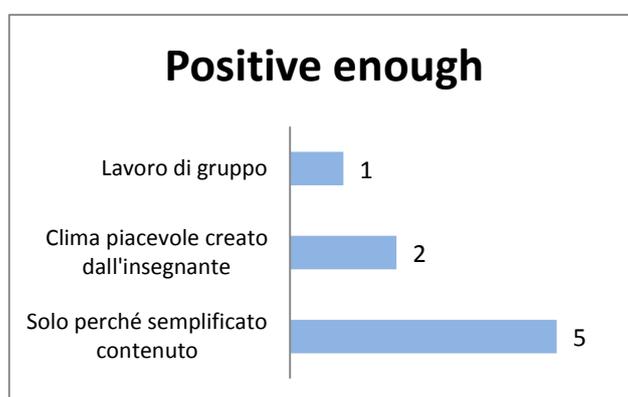
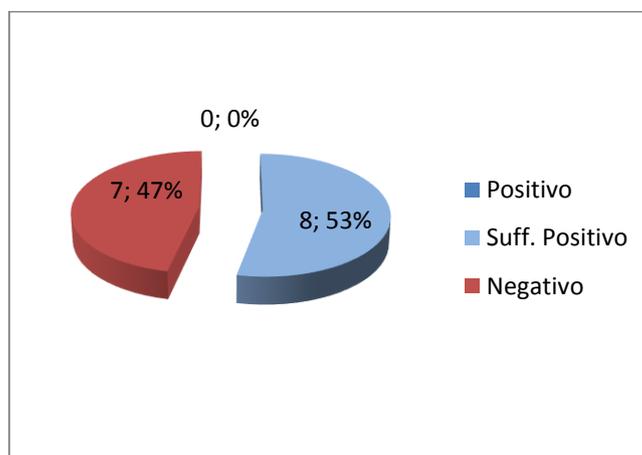
Question n. 11 -Come giudicheresti il livello di difficoltà delle attività Clil?

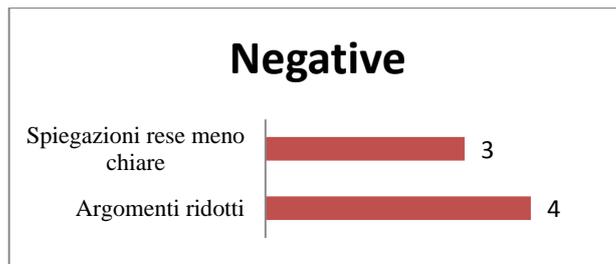




As far as the level of difficulty of activities proposed is concerned, the majority of answers judged it “easy” (87%- 13 out of 15 questions) because “the topic studied was not complicated” (100%- 13 out 13 answers).

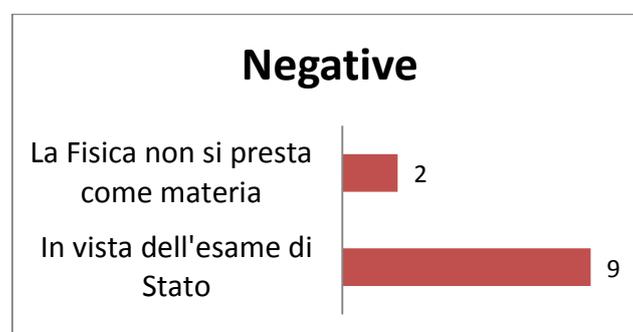
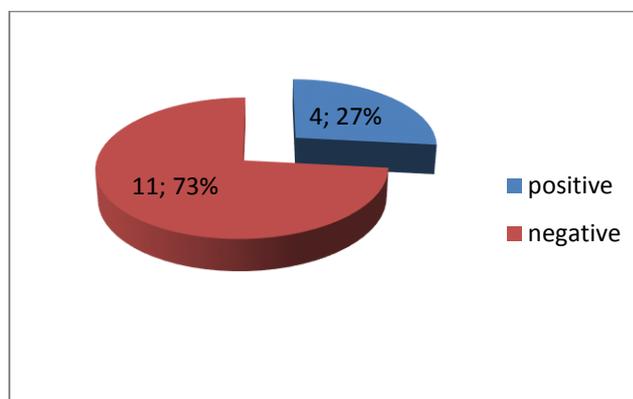
Question n. 12 - Secondo te, le modalità di svolgimento di lavoro in classe Clil sono state efficaci?

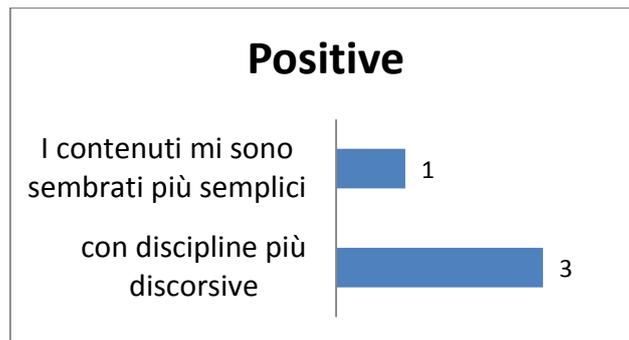




For question n.12, the sample is almost equally divided into the “positive enough” (53%- 8 out of 15 answers) and the “negative” answers (47%- 7 out of 15 answers). Focusing on the former category, the answers were motivated determining the following reasons: 62.5% (5 out of 8) connected the efficacy to the simplification of the topics, another 25% (2 out of 8) to “the pleasant environment created in class by the teacher”, and the remaining 12, 5% (1 out of 8) to “the opportunity of working in groups”. Moving to the “negative” answers, they were for the 57% (4 out of 7) due to the fact that “the topics had been reduced” and for the remaining 43% (3 out of 7) to the perception that “the explanations had been less clear”.

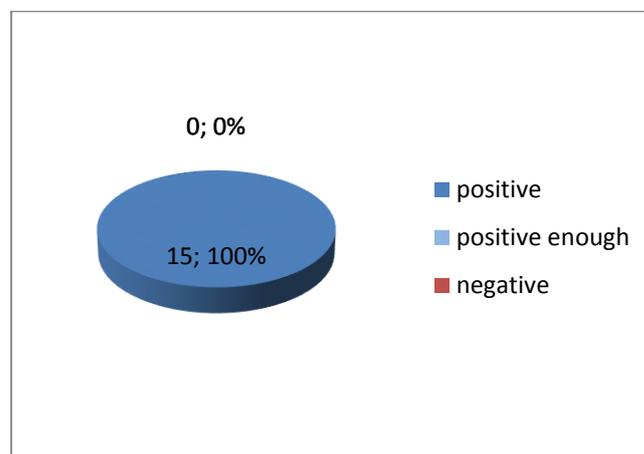
Question.13- Sei contento di ripetere l’esperienza l’anno prossimo?

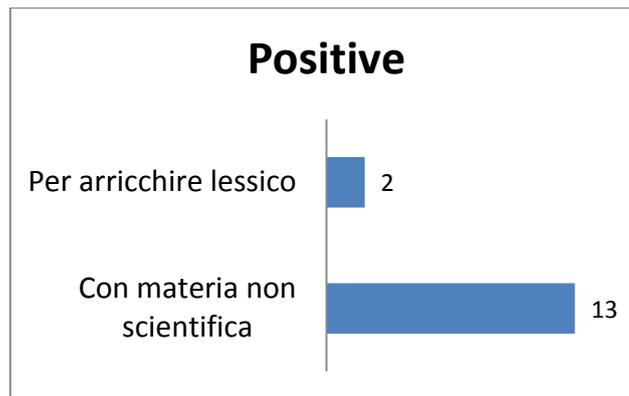




The most frequent answer to question n.13 was “negative” (73%- 11 out of 15 answers), in fact 82% of the students (9 of 11) claimed that they would not be happy to repeat the Clil experience the following year due to the fact that they would have to approach the final exam, and the remaining 18% (2 out of 11 answers) because in their opinion Physics is not suitable to the Clil methodology. The other answers provided were “positive” (27%- 4 out of 15 answers), but with the condition that the subject chosen would not be scientific (75%- 3 out of 4).

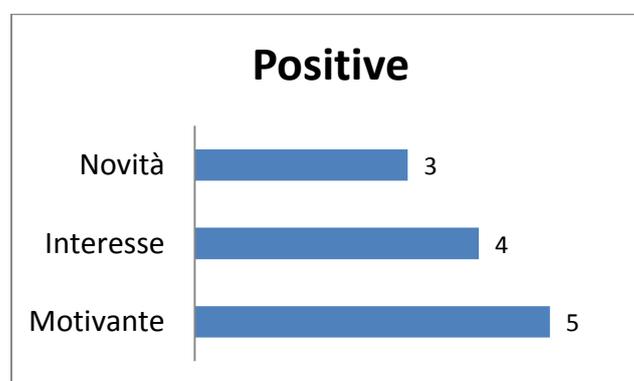
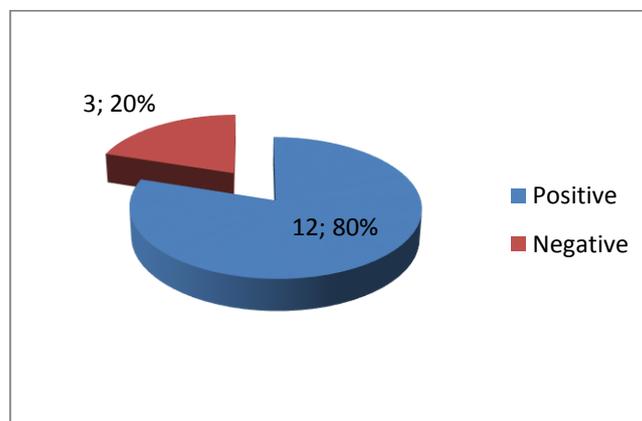
Question.14- Se il prossimo anno potessi scegliere di studiare anche altre discipline in una lingua diversa dall’italiano, come reagiresti?

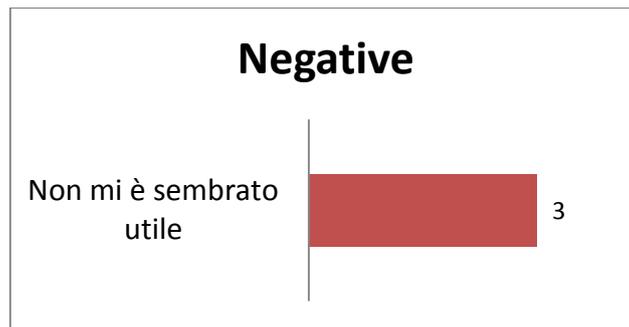




For this question the total amount of the students expressed their positive attitude towards the possibility of repeating the Clil experience with other subjects providing a positive answer motivated for the 87% (13 out of 15) under the circumstance that “the subject taught through the Clil methodology would not be scientific”. The remaining 13% (2 out of 15) reported the following motivation: “It would be useful to improve our English lexicon”.

Question n. 15- Ti ritieni globalmente soddisfatto di questa esperienza?

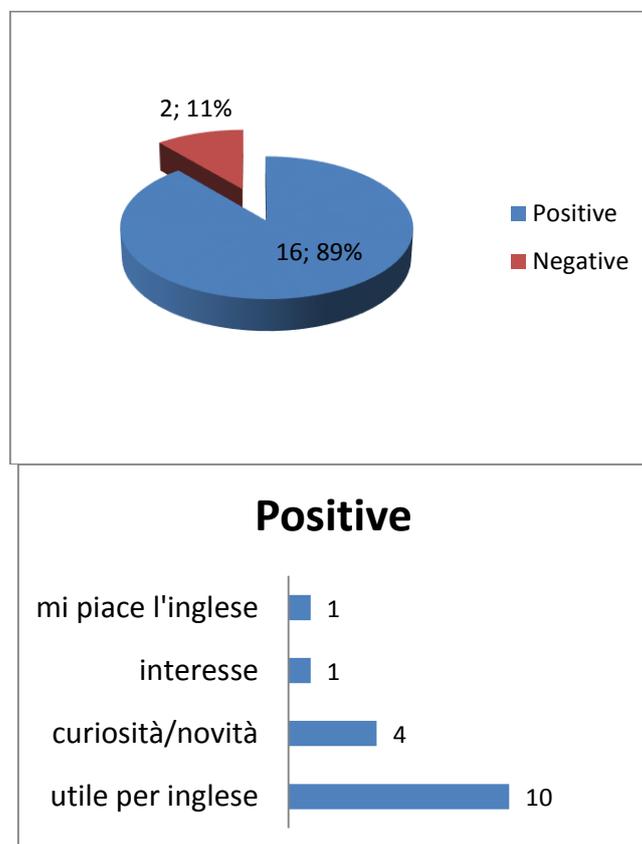


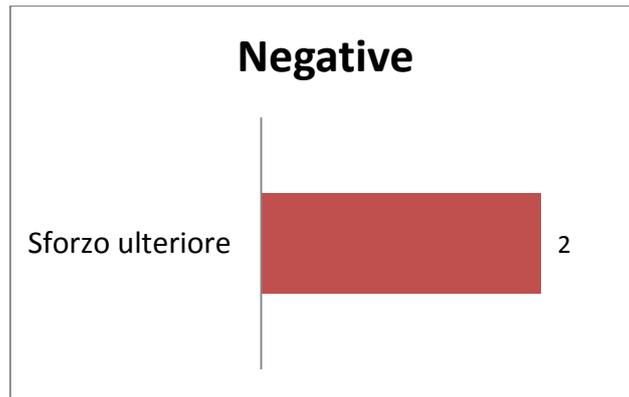


In question n. 15 the students were asked to say if they had been globally satisfied with the Clil experience: the majority of them answered positively (80%- 12 out of 15 answers) pointing out that it had been “a motivating experience” (42%- 5 out of 12 students.). The other motivations provided connect the students’ satisfaction to the “interest” (33%- 4 out of 12) and the “novelty” (25% - 3 out of 12) factors. The remaining 20% (3 out of 15) of the global sample is composed by the negative answers, which were unanimously related to the students’ perception that “the experience had not been useful enough”.

D group

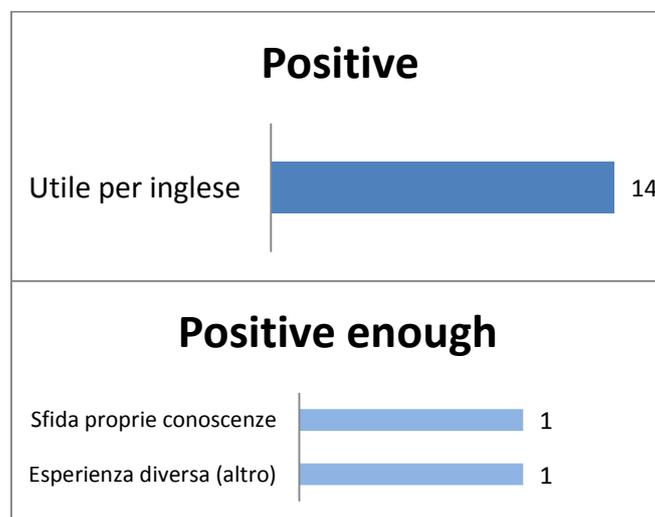
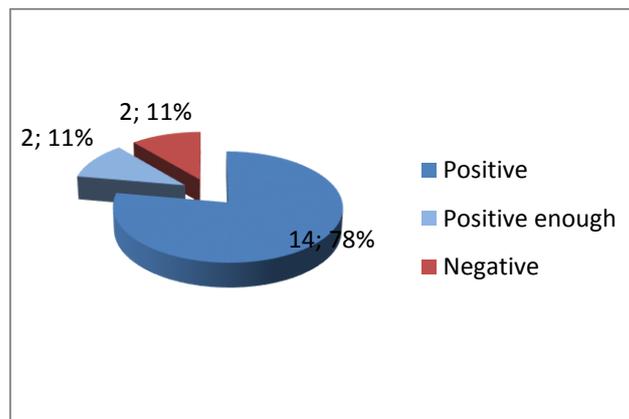
Question n.1: Quando hai saputo che avresti fatto un’esperienza Clil, come hai reagito?

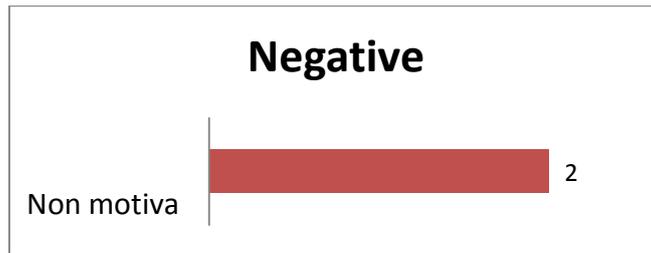




Taking into account the answers to question n.1, they are almost totally positive (89%- 16 out of 18) and mostly connected (62.5%- 10 out of 16) to “the needfulness of English” and the curiosity for the novelty of the experience (25%- 4 out of 16). The negative answers (11%, 2 out of 18), on the other hand, are all connected to the students’ perception that “the Clil experience needs a further effort from their part”.

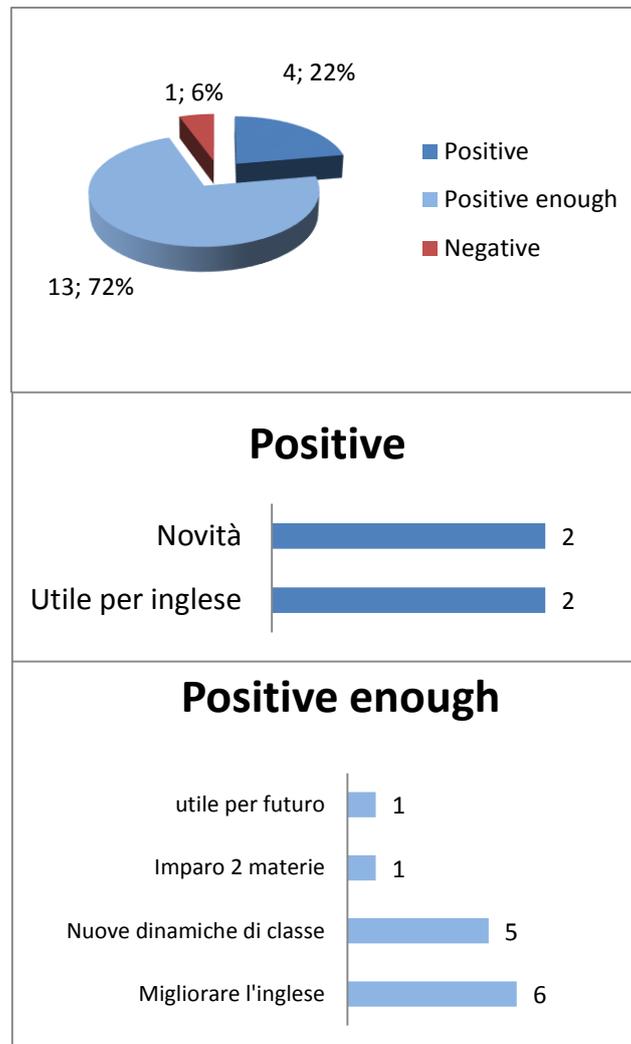
Question n. 2: “Apprendere una lingua e contenuti non linguistici è stata per te un’esperienza utile?”

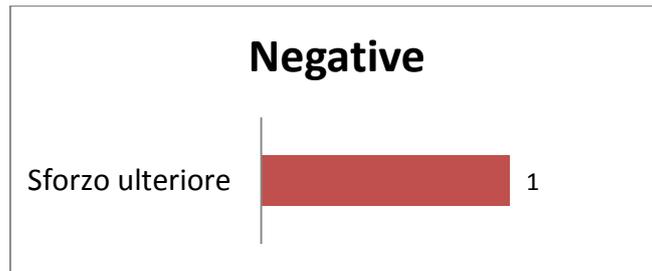




Observing the answers to the second question we notice that almost the whole sample provided a “positive” answer (78%-14 out of 18), which was motivated with the claim that the Clil experience had been useful for the improvement of the language.

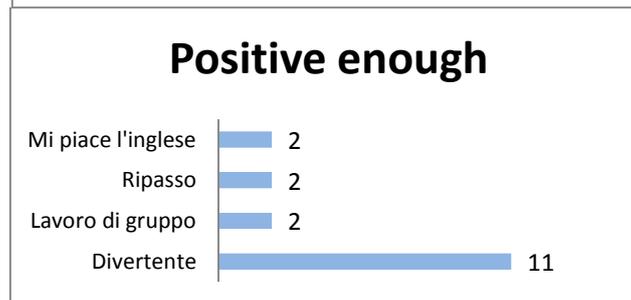
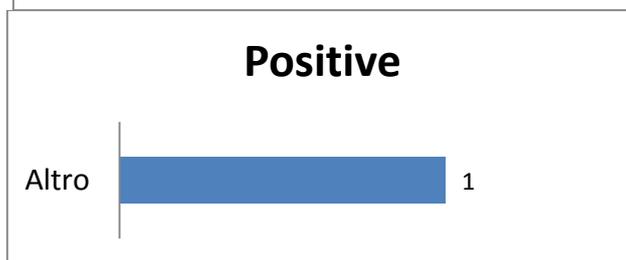
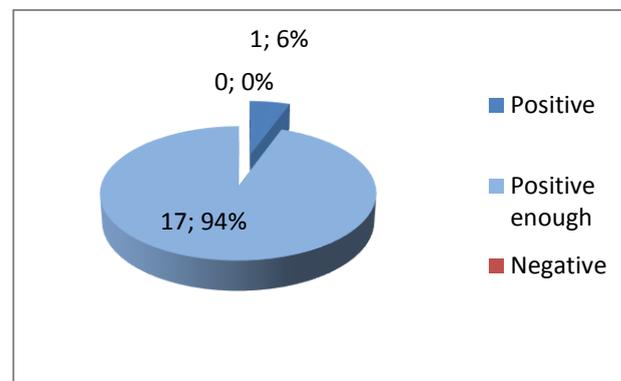
Question n. 3: Apprendere una lingua e contenuti non linguistici è stata per te un'esperienza interessante?





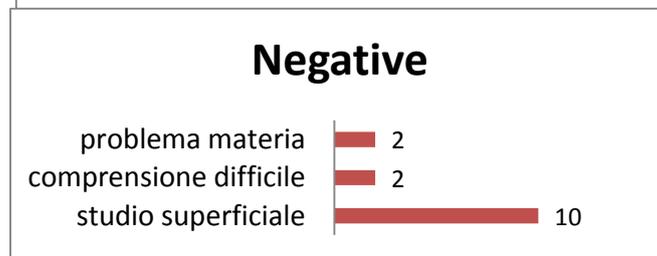
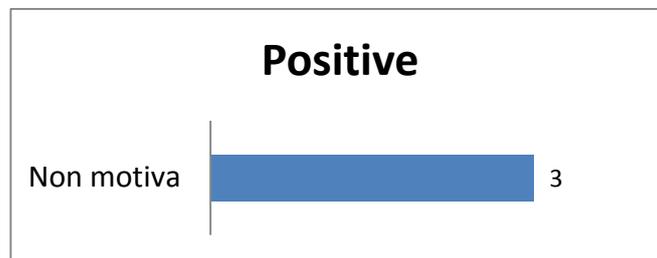
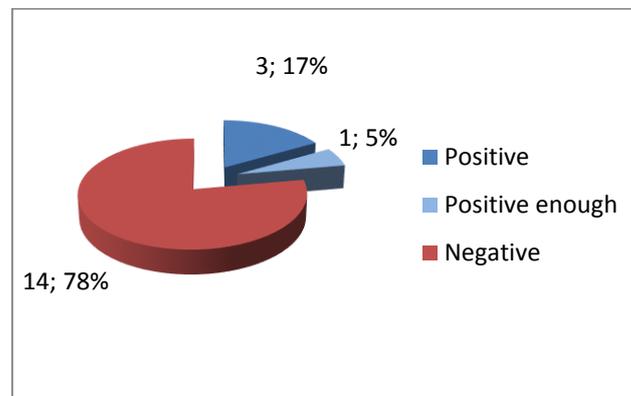
For question n.3 the most frequent answer was “positive enough” (72%-13 out of 18) with the consideration for the 46% of the students (6 out of 13) that “the Clil experience had been interesting because it allowed them to practice their English”, and their appreciation for the new dynamics created in class (38%- 5 out of 13). The remaining part of the sample is divided into 22% (4 out of 18)of students who answered positively and motivated their answer to the 50% (2 out of 4) mentioning that “It had been interesting because Clil is useful to improve their English language skills”, and to the other 50% pointing out the “novelty of the methodology”.

Question n.4- Apprendere una lingua e contenuti non linguistici è stata per te un'esperienza piacevole?



As far as the enjoyment of the experience is concerned, quite the whole sample said that it had been “pleasant enough” (94%- 17 out of 18) pinpointing to the 65% (11 out of 17) that the experience had been “enjoyable”. The other motivations provided are equally divided (11.5% for each category) into the following assertions: “I enjoyed myself working with my colleagues”, “I appreciated the fact of going over my lessons” and “It has been pleasant because I like English”.

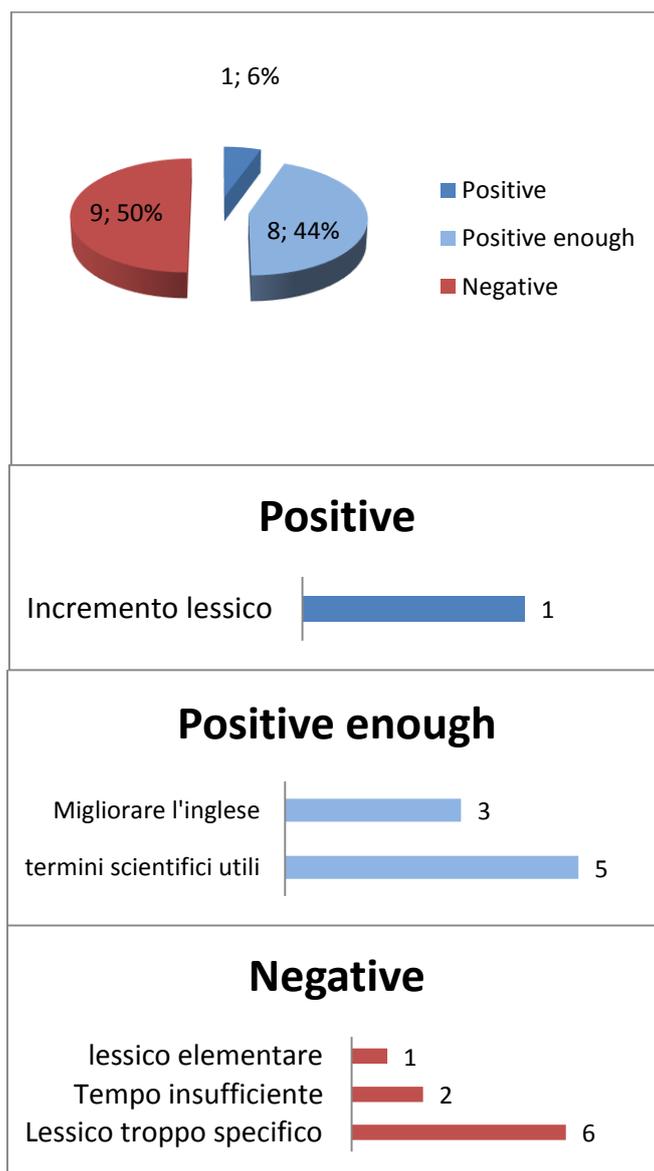
Question n.5- Secondo te, questa esperienza ti è servita a migliorare le tue conoscenze nella disciplina studiata?



Taking into account the students’ answers to question n.5 it is possible to see that 78% (14 out of 18) are negative and in most cases due to the claim that “the study had been less in depth than during the traditional lessons” (72%- 10 out of 14). The other students observed that “the comprehension of the topic had been made more complicated” (2 out

of 14) and another 14% admitted to have some problems with that subject even when studied in his/her mother tongue. The remaining part of the sample is divided into 17% (3 out of 18) of positive answers that were not motivated and a “positive enough” answer.

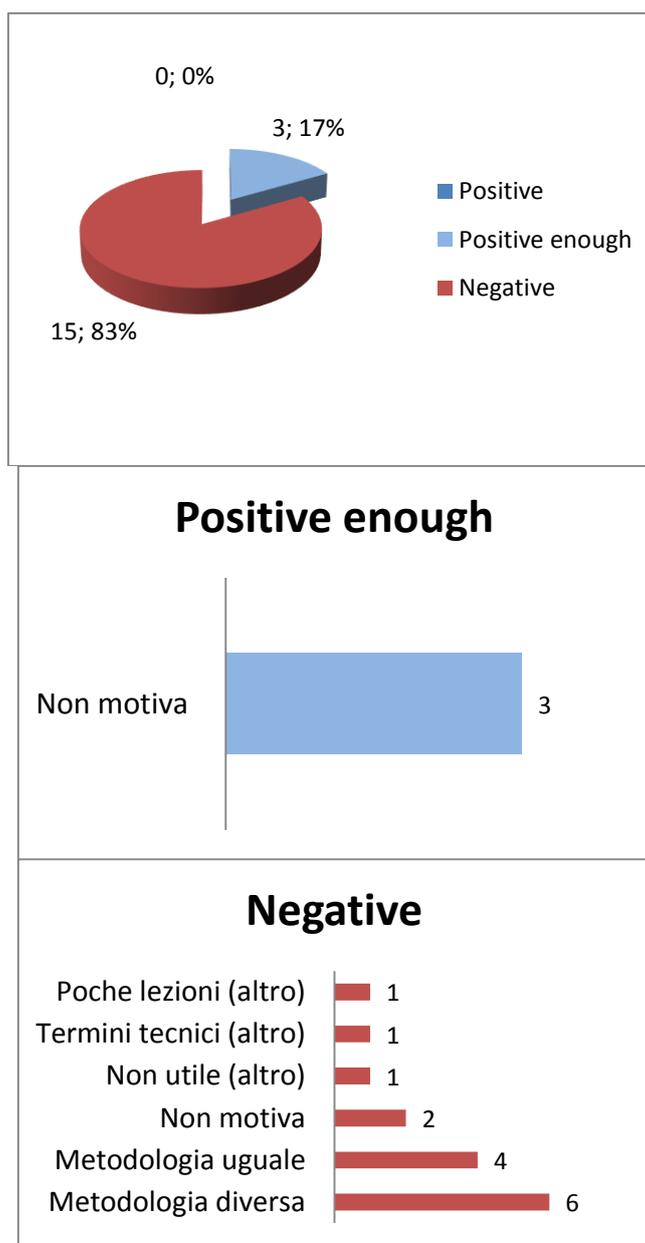
Question n. 6- Secondo te, questa esperienza è servita a migliorare le tue conoscenze nella lingua straniera?



When asked if they thought that the Clil experience had been useful to improve their English, the sample mostly divided itself into 50% (9 out of 18) of “negative” answers and 44% of “positive enough” (8 out of 18). Most of the negative answers signaled that the lexicon had been “too specific on the subject” (67%- 6 out of 9), and the 22% (2 out of 9) that “there should have been more time taken to obtain more improvements”.

Moving to the “positive enough”, the majority of them (62.5%, 5 out of 8) were motivated with the consideration that the students acquired “new lexicon in the scientific field”, and for the 37.5% (3 out of 8) that “they had had the chance to practice their English”.

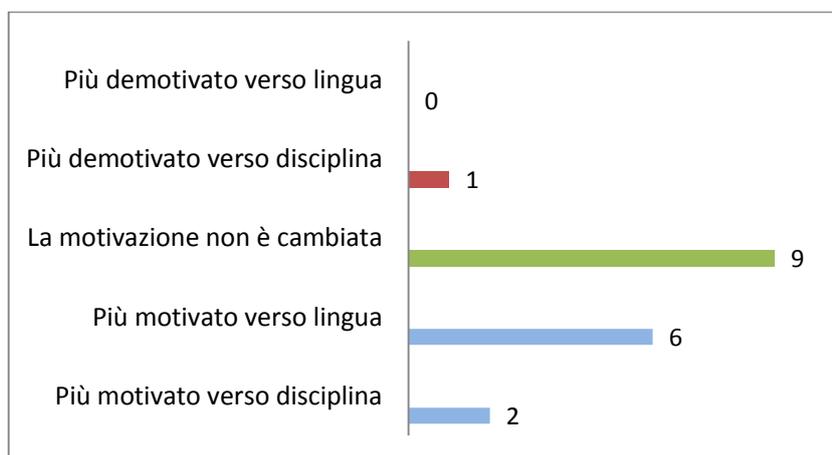
Question n.7 - Pensi che l’esperienza ti sia servita a sviluppare abilità utili per lo studio in generale?



The answers provided to this question highlight that for most students the Clil experience had not been useful to improve their transversal skills. In particular, most of the negative answers were due to the perception that “Clil requires a study methodology

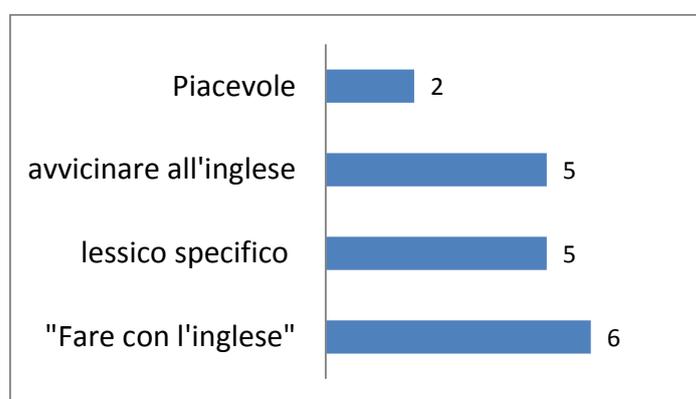
totally different from the traditional one” (40%, 6 out of 15). However, another 27% (4 out of 15) of this category claimed that “It had not changed their study methodology”. The remaining part of the sample provided a “positive enough” answer, but did not motivate it. No student chose a positive answer.

Question n. 8- L’esperienza Clil ha cambiato la tua motivazione nei confronti della disciplina studiata e/o della lingua?



As we can see from the chart, 50% (9 out of 18) of students perceived that their motivation towards the language and the subject had not changed because of the Clil experience. Another 33% (6 out of 18), though, noticed a rise in their motivation towards the language, and 11% towards the subject (2 out of 18). However, a student signaled that his/her motivation towards the subject had decreased (6%).

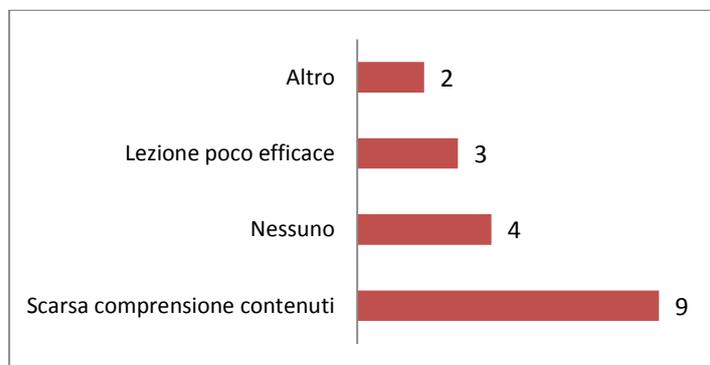
Question n. 9 - Secondo te, quali sono i vantaggi della metodologia CLIL?



Focusing on the Clil advantages according to the students, we can see that the most popular is “the possibility of using the English language for doing practical things” (33%, 6 out of 18), followed by the considerations: “It provides you with a subject-

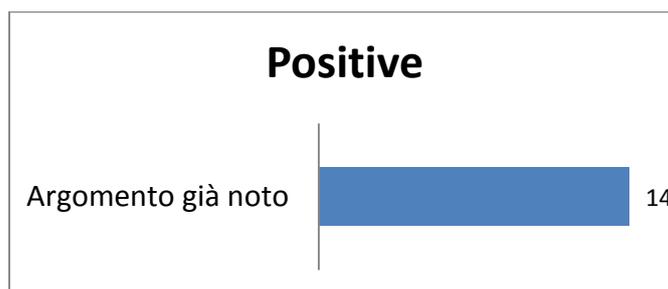
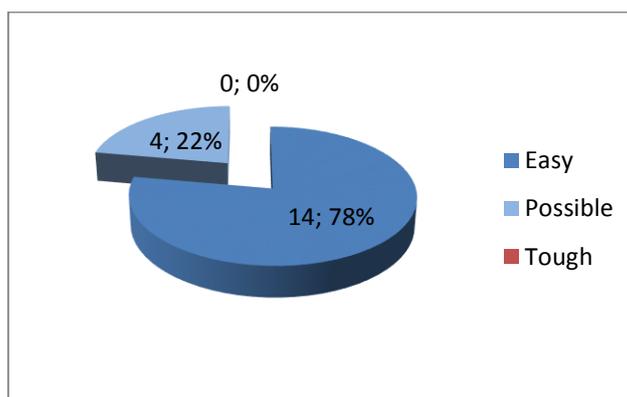
specific lexicon” and “It is an opportunity to get closer to the language” which shared the second place (28%, 5 out of 18 for each). The remaining percentage is composed by those students who pointed out “an enjoyable experience” (11%- 2 out of 18).

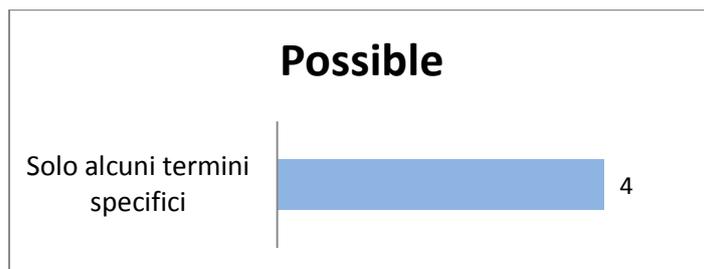
Question n. 10 - Secondo te, quali sono gli svantaggi della metodologia CLIL?



According to the students’ answers, the most mentioned disadvantage of Clil was that “the comprehension had been made more difficult” (50%, 9 out 18). It is interesting to notice that for the 22% of students (4 out of 18) the Clil methodology had not had any disadvantages. Moreover, another 17% (3 out of 18) observed that “the explanations had not been as effective as they are during the traditional lessons.

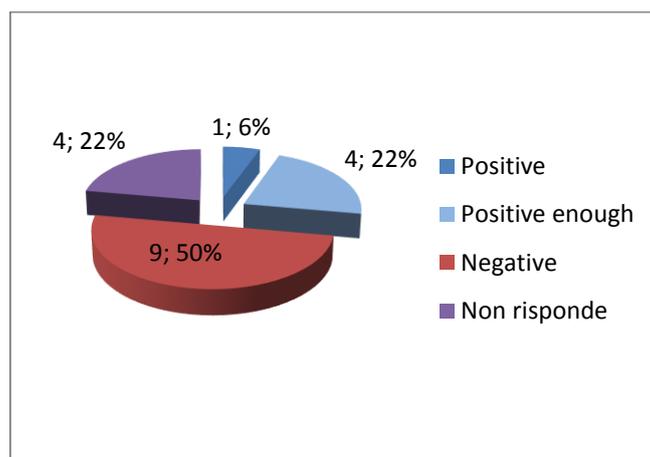
Question n. 11 -Come giudicheresti il livello di difficoltà delle attività Clil?





When they were asked to express their opinion on the level of difficulty of the activities during the Clil lessons, 78% (14 out of 18) of the sample unanimously maintained that the activities were “easy” because “the topic had already been known”. Another 22% (4 out of 18) declared that the activities were “feasible” due to the presence of just few subject-specific terms (100% - 4 out of 4).

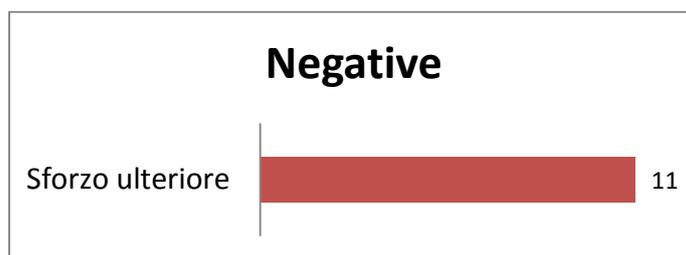
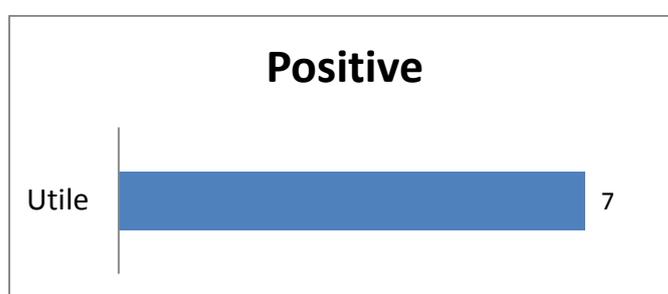
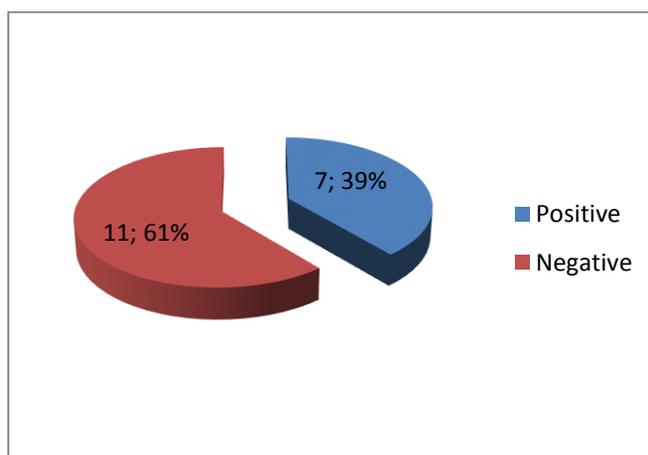
Question n. 12 - Secondo te, le modalità di svolgimento di lavoro in classe Clil sono state efficaci?¹⁷



If we observe the chart we can see that half of the sample (50%, 9 out of 18) provided a negative answer, the 22% (4 out of 18) gave a “positive enough” answer, and another 22% did not provide any answer. No answer was motivated.

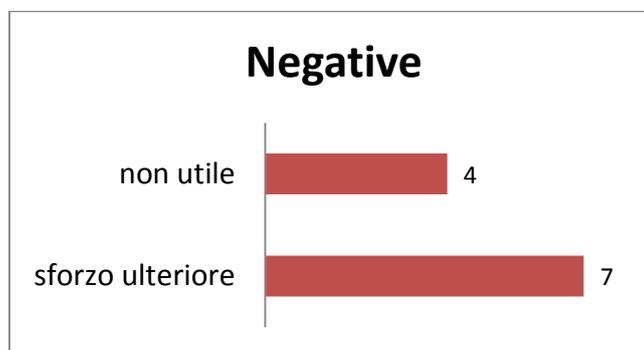
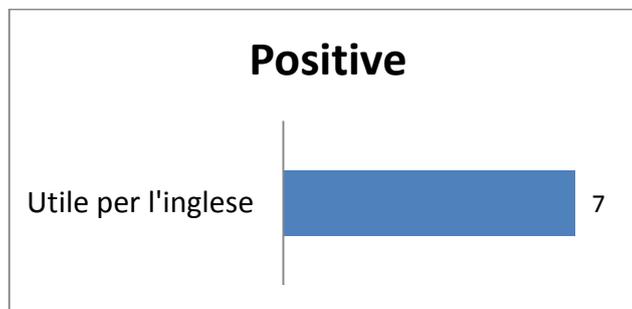
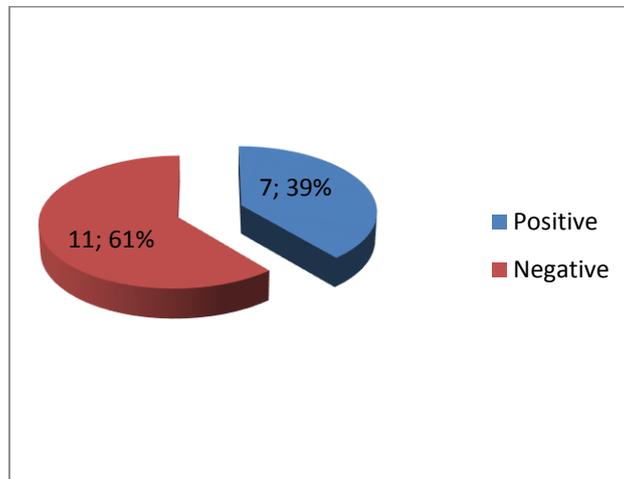
¹⁷ Four people did not answer to this question.

Question n. 13- Sei contento di ripetere l'esperienza l'anno prossimo?



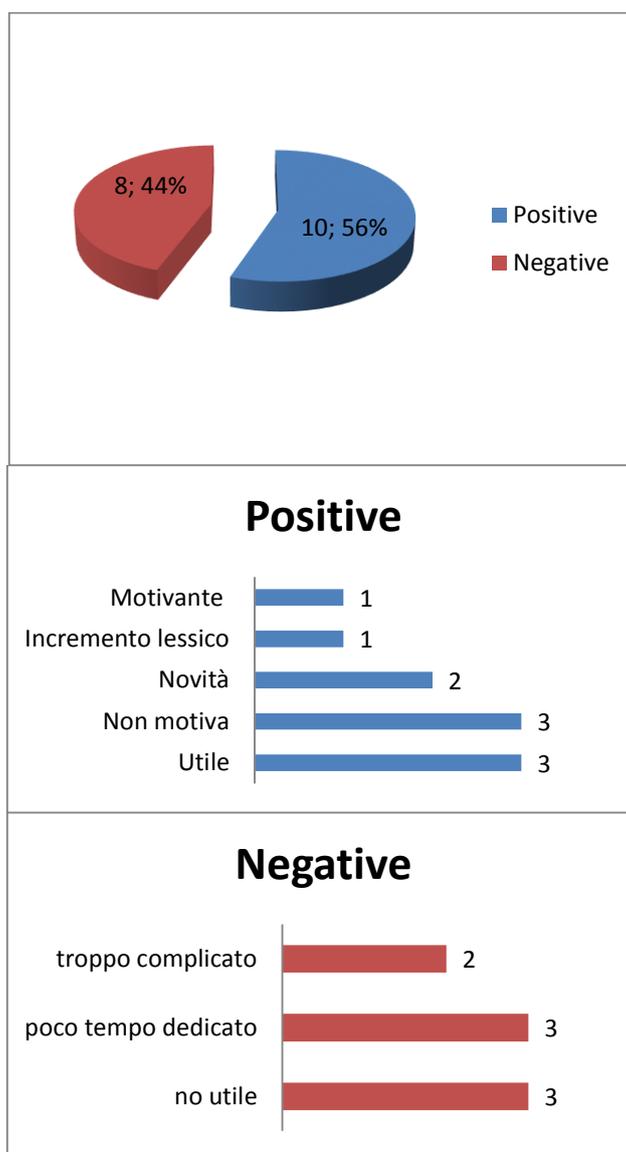
As for question n. 13, the students' answers revealed that 61% (11 out of 18) of students would not be happy to repeat that experience the following year because "it would be a further effort", while the remaining 39% (7 out of 18) would react positively due to "its usefulness".

Question n.14- Se il prossimo anno potessi scegliere di studiare anche altre discipline in una lingua diversa dall'italiano, come reagiresti?



The most frequent answers to question n.14 were negative (61%- 11 out of 18) and motivated to the 64% (7 out of 11) with the claim that: “It would be a further effort” and that “It would not be useful”. Focusing, on the other hand, on the positive answers (39%- 7 out of 18), they were all due to the assertion that “It would be useful for the improvement of the English language”.

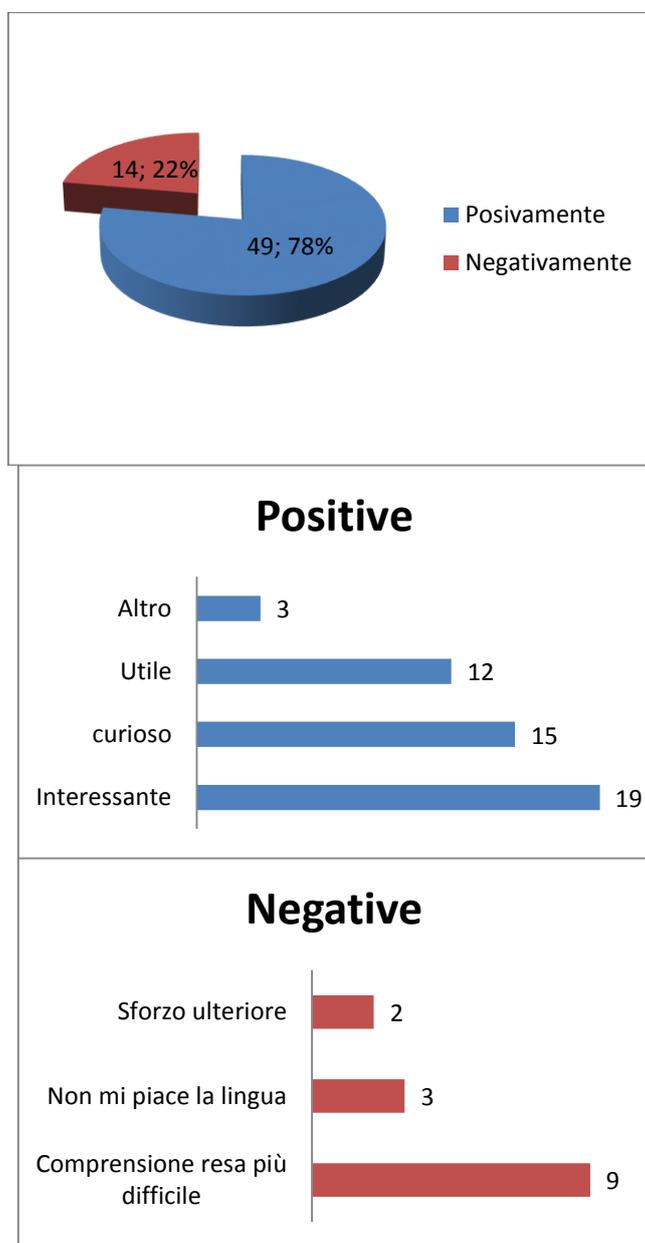
Question n. 15- Ti ritieni globalmente soddisfatto di questa esperienza?



For question n. 15, which inquires the students' global satisfaction with the Clil experience, the sample is divided into 56% (10 out of 18) of positive and 44% of negative answers (8 out of 18). As far as the positive are concerned, 30% (3 out of 10) of them were due to the usefulness of the experience, another 30% were not motivated, and 20% (2 out of 10) were connected to the "novelty of the experience". Moving to the negative, 37.5% of students (3 out of 8) signaled that "they had not perceived the usefulness of the experience", another 37.5% said that "they would have preferred the experience to last longer", and the remaining 25% (2 out of 8) claimed that "It had been too complicated".

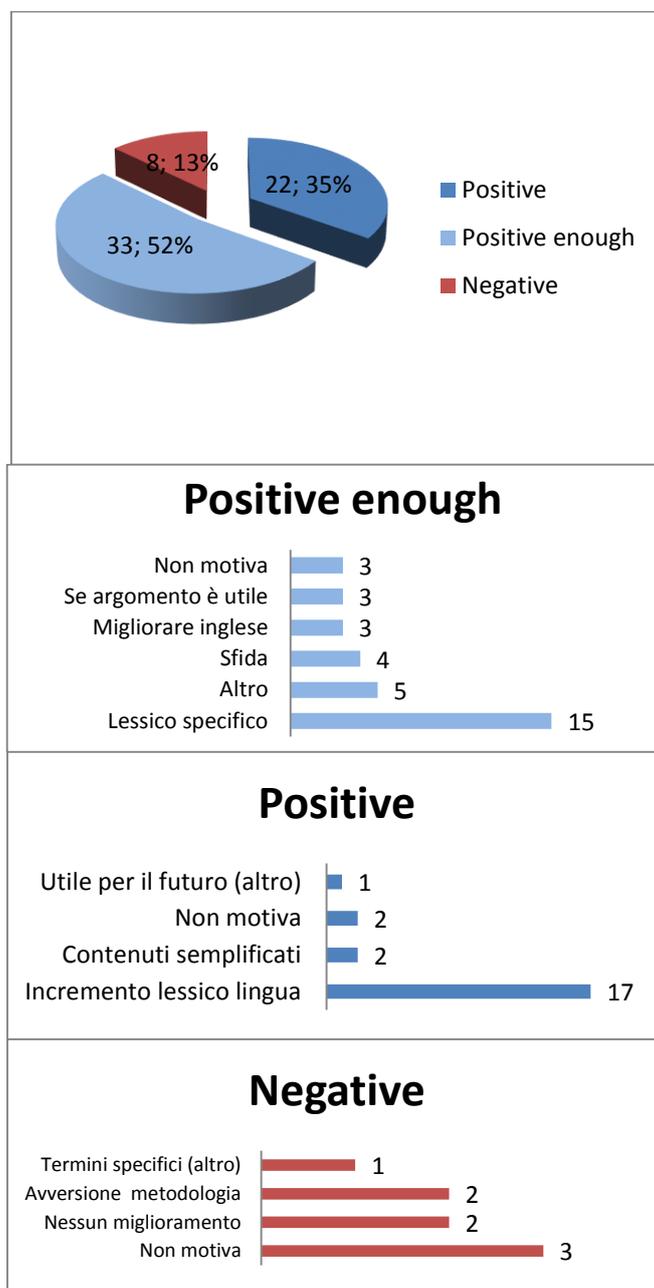
Global Results

Question n.1 : Quando hai saputo che avresti fatto un'esperienza Clil, come hai reagito?



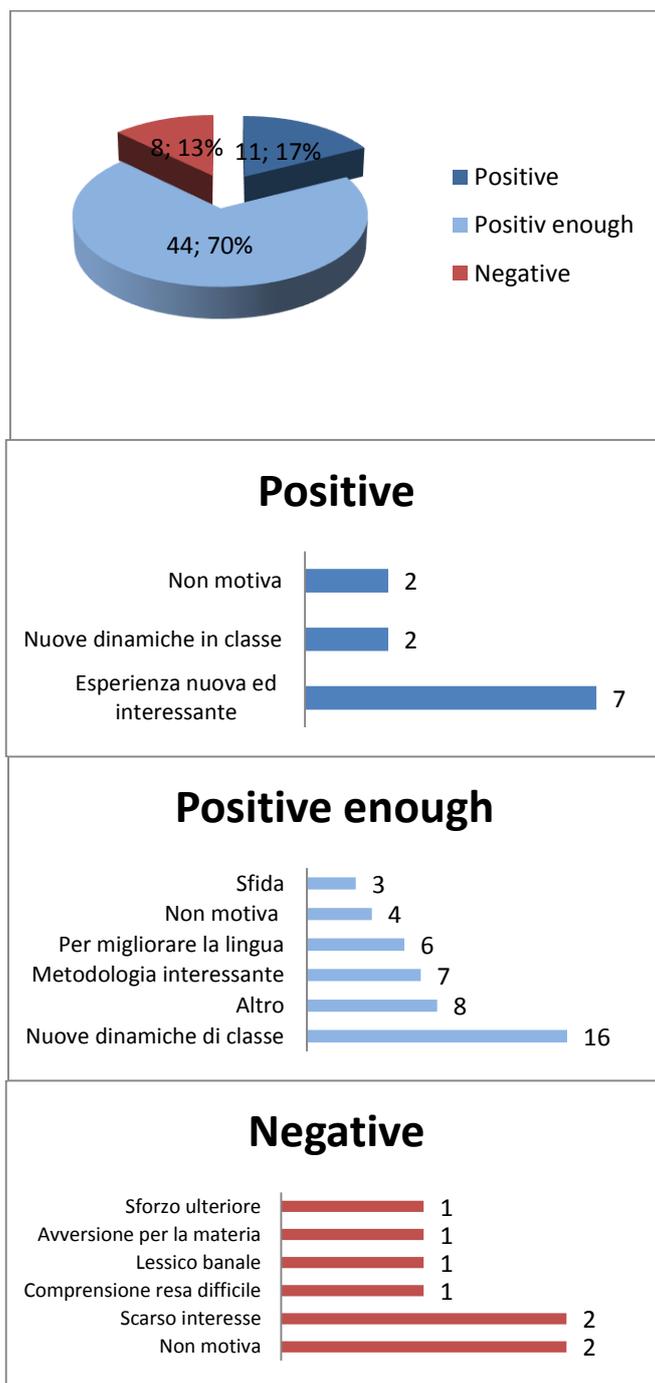
Taking into account the first question, we can see that 78% (49 out of 63 people) of the students had positive expectations connected to *interest* (19 out of 49), *curiosity* (15 out of 49) and *usefulness* (12 out of 49). As far as the negative answers are concerned (22%, 14 out of 63), they were mostly due to the fact that they thought that the comprehension would have turned out to be more difficult (9 out of 14 answers).

Question n. 2: “Apprendere una lingua e contenuti non linguistici è stata per te un’esperienza utile?”



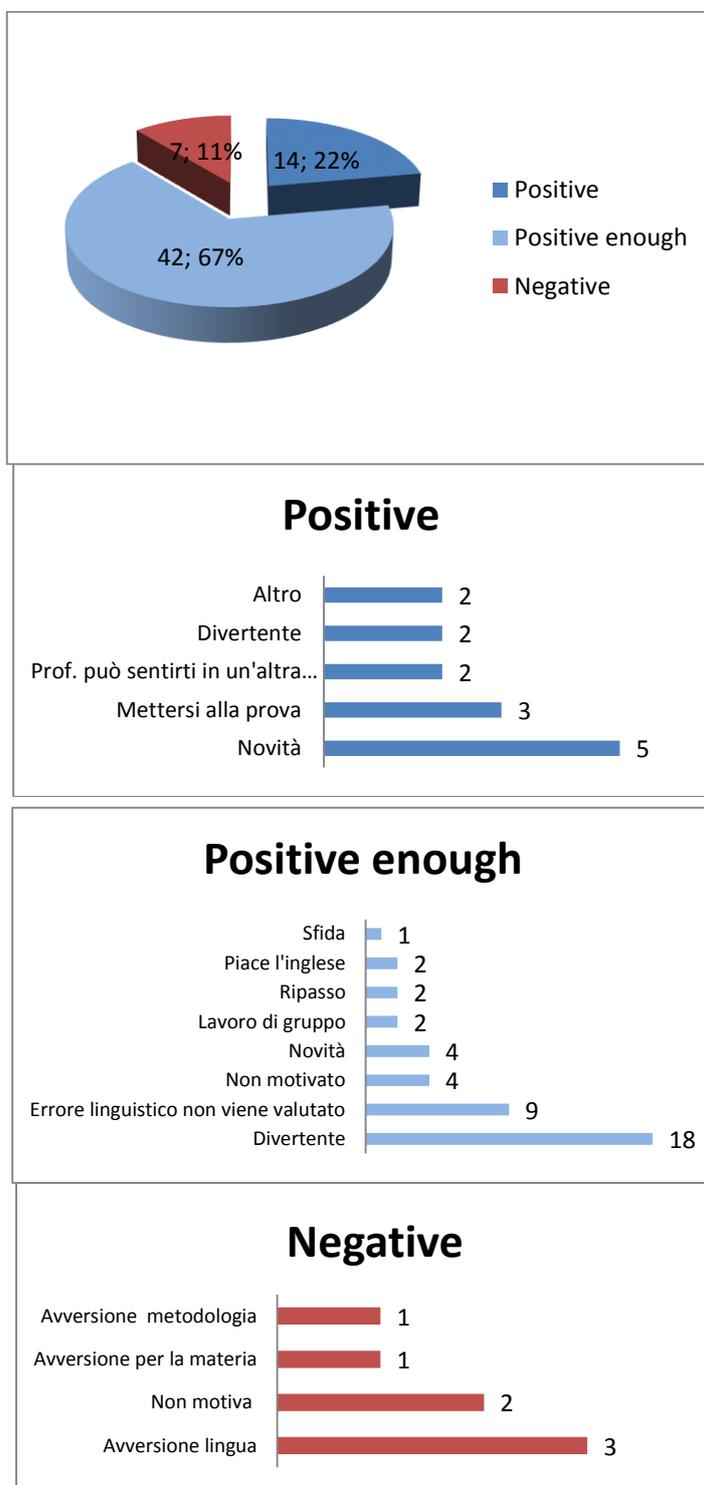
Considering the second question, quite the whole sample (87%) answered positively (35% gave a “positive” answer, 52% a “positive enough”) highlighting that the experience was useful for the language, in particular for the lexical improvement.

Question n. 3: Apprendere una lingua e contenuti non linguistici è stata per te un'esperienza interessante?



As far as the third question is concerned, we face quite a specular situation to the previous question: we have again quite the whole sample answering positively (87%), even though “positive” answers become half the number they were in question n.2 (17% gave a positive answer, 70% was “positive enough”). The majority of people who gave a positive answer pointed out the aspects of *novelty* as a source of interest.

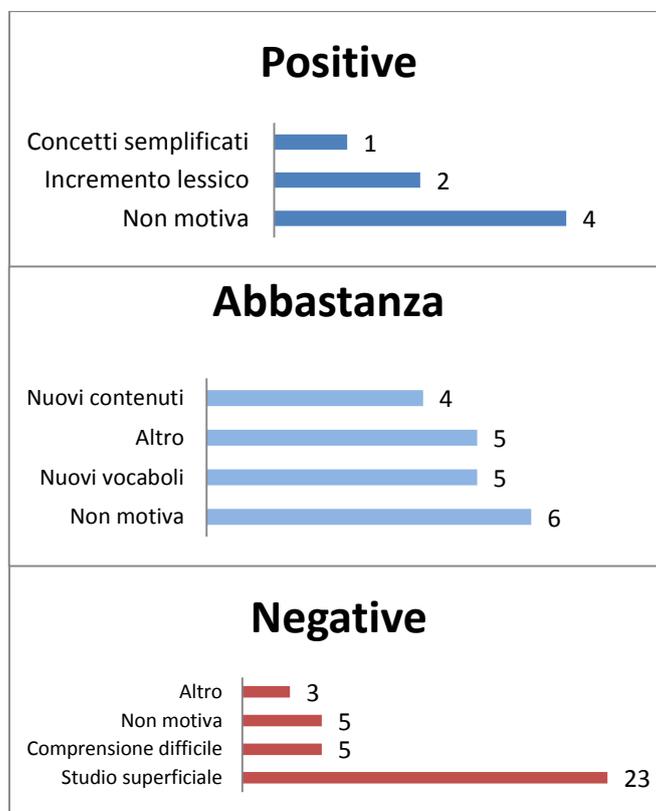
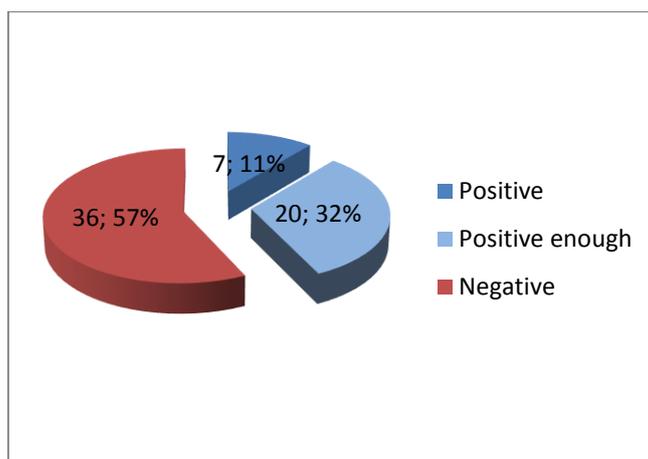
Question n. 4: Apprendere una lingua e contenuti non linguistici è stata per te un'esperienza piacevole?



Focusing on the charts that analyse if the Clil experience had been pleasant in students' perceptions, the majority of the sample (89%) answered with positive feedback (67% "positive enough", 22% "positive"). The first motivation given in terms of frequency is

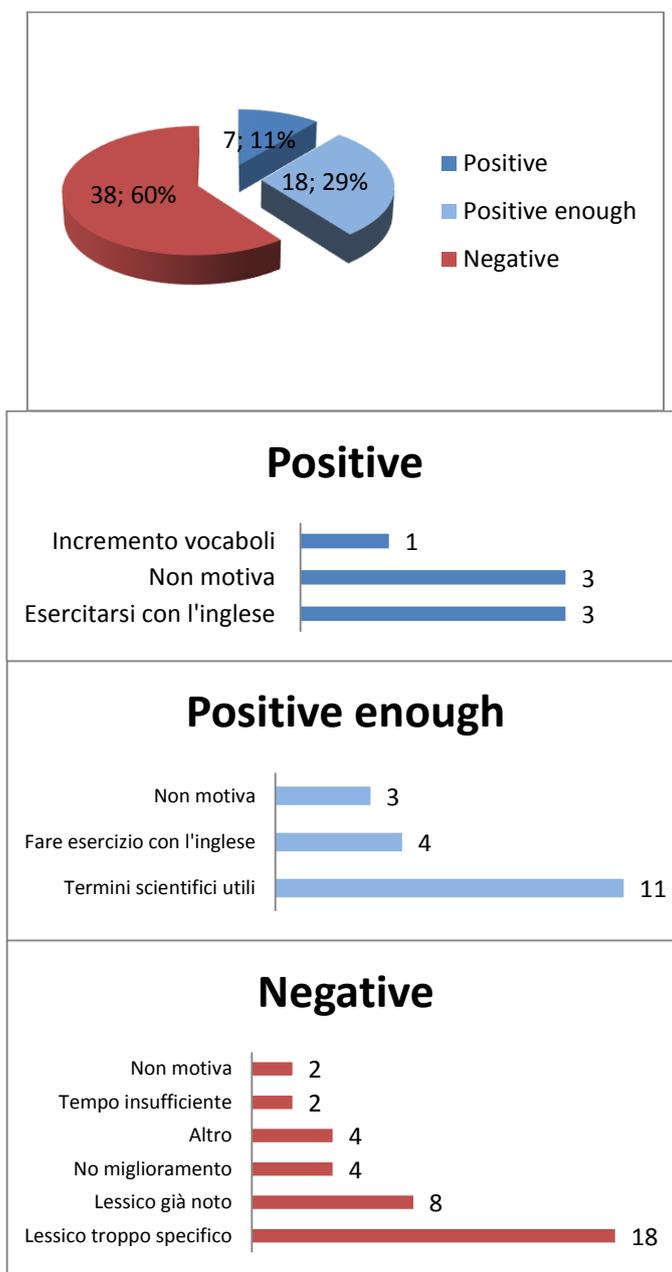
that “they had had fun” while doing Clil lessons (18 out of 42 of the “positive enough”), followed by the fact that they “had not felt judged while speaking in English because the teacher had paid more attention to the content” (9 out of 42 “positive enough”). The third motivation was presented as “novelty”. The students who gave a negative answer mostly attributed it to a lack of predisposition towards the language (3 out of 7).

Question n.5- Secondo te, questa esperienza ti è servita a migliorare le tue conoscenze nella disciplina studiata?



For the fifth question, whose focus is the usefulness of the experience for the subject, the negative answers are more than the total of the positive (57% answered negatively). They were motivated for the 63% (23 out of 36) by the fact that “the study had been more superficial than during the traditional lessons”.

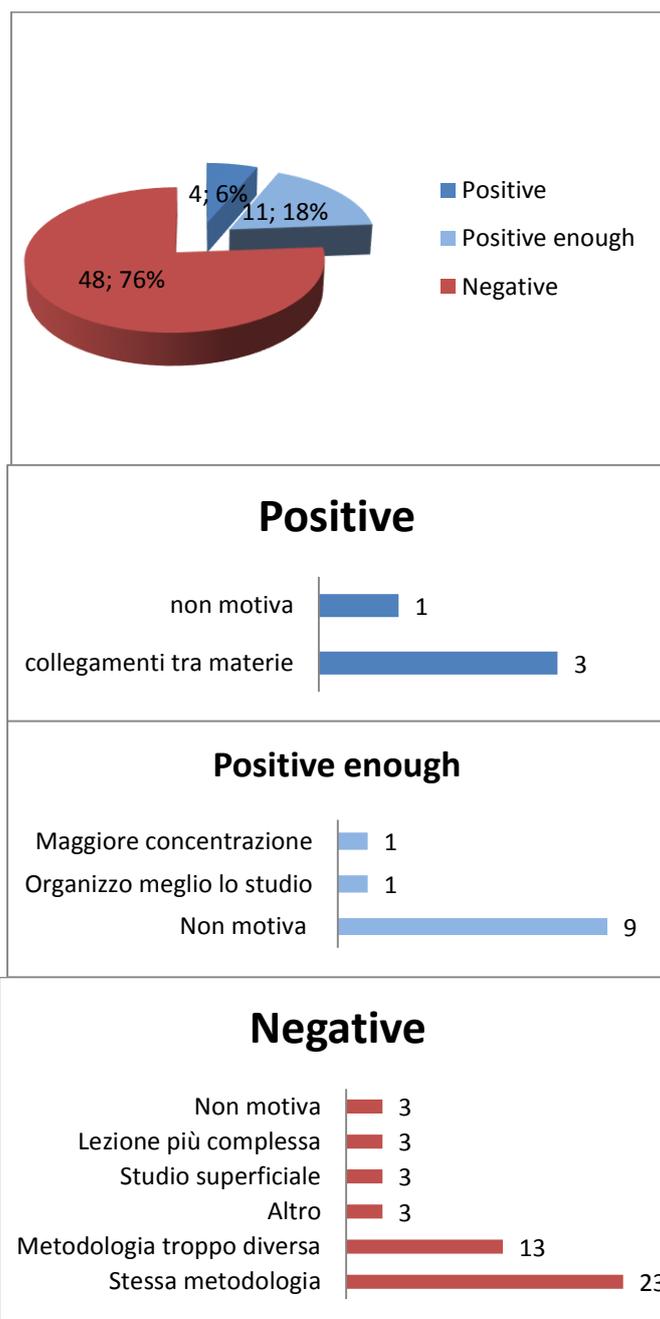
Question n.6- Secondo te, questa esperienza è servita a migliorare le tue conoscenze nella lingua straniera?



In regards to this question related to the usefulness of the Clil experience for the improvement of English, again the negatives answers were more than the positive ones (60%). This reveals students' perceptions concerning the lexicon used during the

lessons (as mentioned in more than the majority of the negative answers: 26 out of 38). The lexicon was not considered to be very useful to improve their English language skills because it was “too specific towards that subject” (18 out of 26), or was too simple (8 out of 26).

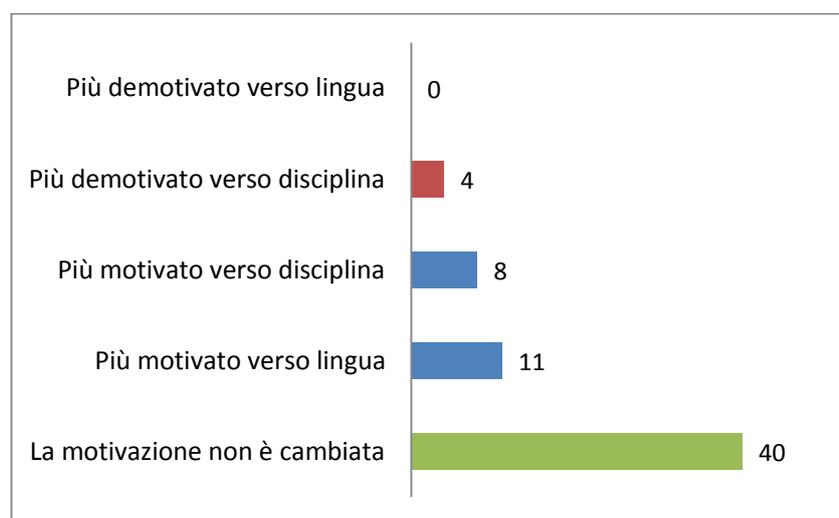
Question n.7- Pensi che l’esperienza ti sia servita a sviluppare abilità utili per lo studio in generale?



The answers to this question show that a high number of students did not perceive the Clil methodology as a useful way for increasing their transversal skills (76%). As far as negative answers were concerned, in fact, 23 out of 48 (48%) students said that this was

due to the application of the same study methodology they used during the traditional lessons, while 13 out of 48 (25%) underlined that there had been no continuity between the methodology used during Clil lessons and that of the traditional ones. Only 4 out of 63 people said that it had been useful, 3 of them claimed that “It had helped them to experience interdisciplinary connections, which would belong to the skills they would eventually need for their final exam”.

Question n. 8- L’esperienza Clil ha cambiato la tua motivazione nei confronti della disciplina studiata e/o della lingua?

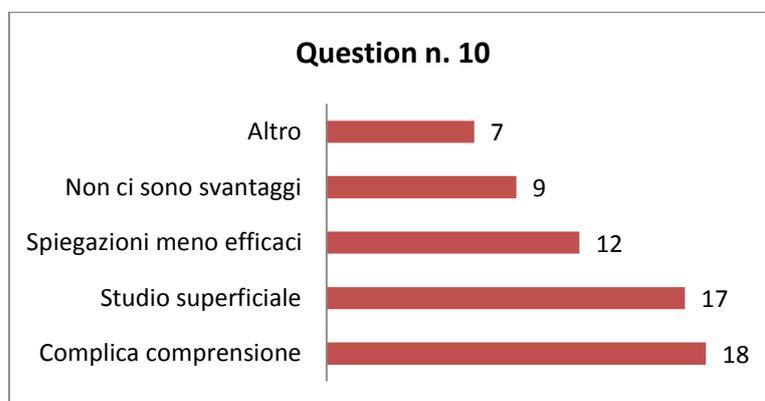
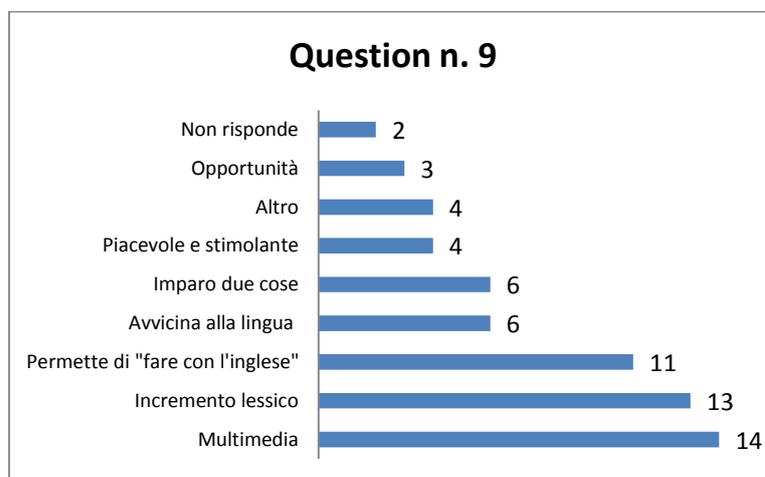


Observing whether and how motivation towards the study of the content and the language has changed due to the Clil experience, the majority of the sample (63,5 %) claimed that nothing has changed. Moreover, 30% of the students declared to have felt more motivated (17.5% towards the language and 12,7% towards the subject).

We cannot ignore that 6% of the students perceived that Clil methodology had lessened their motivation towards the subject. In this case, even though they were few in comparison with the other options, we think it is noteworthy to report their motivation: “now we have to recover our bad grade in the subject”.

Question n. 9 - Secondo te, quali sono i vantaggi della metodologia CLIL?

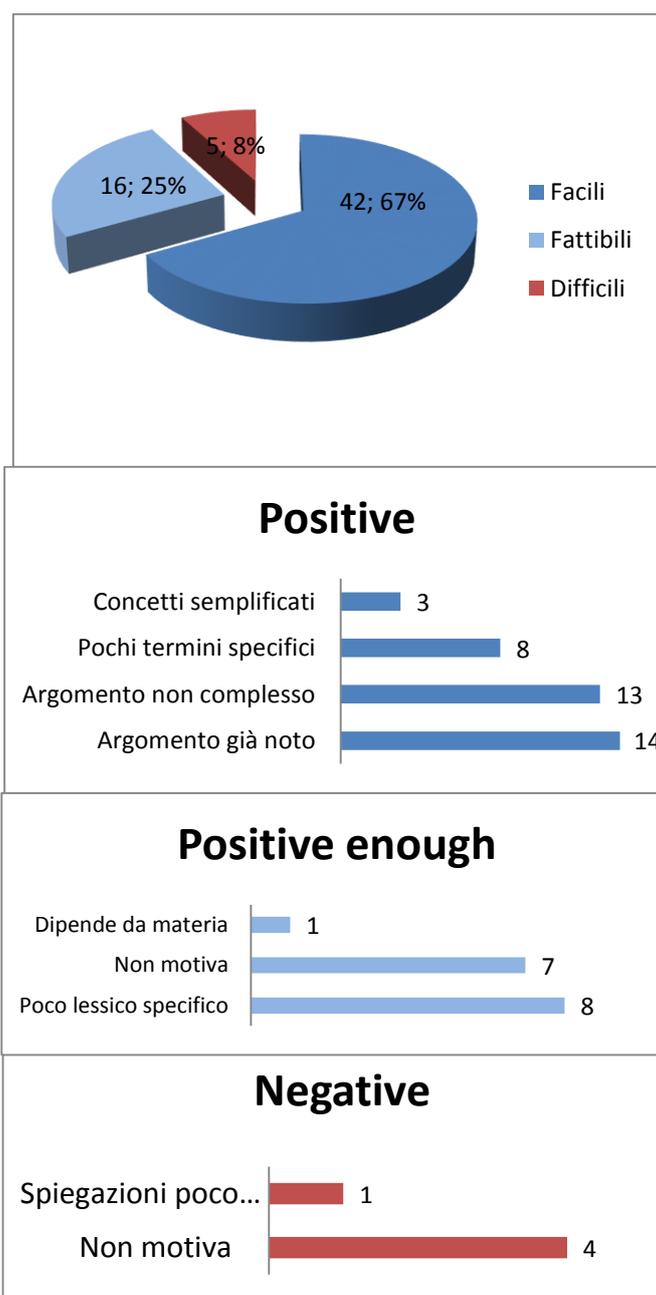
Question n. 10 - Secondo te, quali sono gli svantaggi della metodologia CLIL?



Comparing the answers to the questions 9 and 10, we can see that globally the students highlight both advantages and disadvantages to the Clil methodology (only 9 out of 63 people said that it has “no disadvantages”).

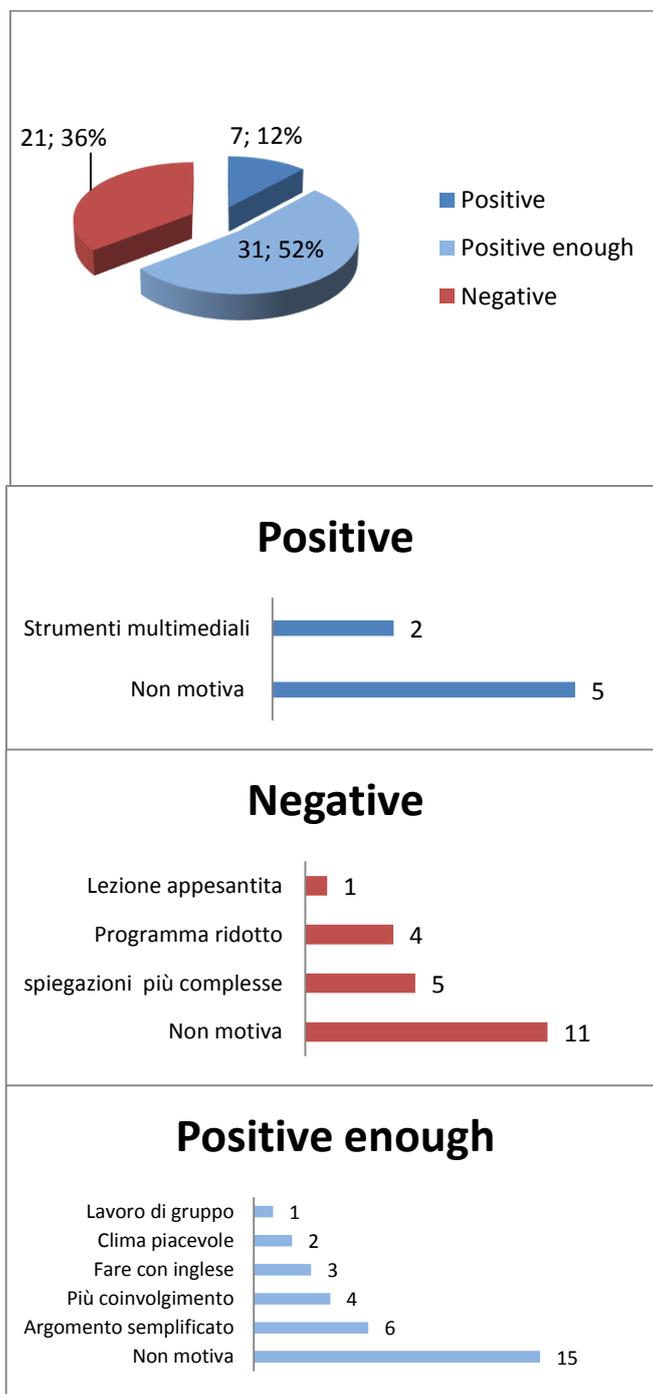
The majority of the students mentioned that they found the content more difficult to be comprehended during the Clil lessons (18 out of 63). It is also said that 17 out of 63 students found it to be less profound than in the traditional lessons. However, a great source of students appreciated this methodology thanks to the presence of multimedia instruments (14 out of 63 students). In the second and the third positions for the advantages there are respectively the fact that lexicon has improved (13 out of 63) and the fact that “they had the chance to apply English to other fields”.

Question n.11 -Come giudicheresti il livello di difficoltà delle attività Clil?



Quite the whole sample (58 out of 63 people) said that activities were not difficult, in particular, 42 of them considered them easy. Fourteen out of these 42 said that they had been easy because the topic had been previously known, 13 that the topic had not been difficult. People who claimed that the activities had been feasible mostly ascribed it to the fact that there had been just few specific words.

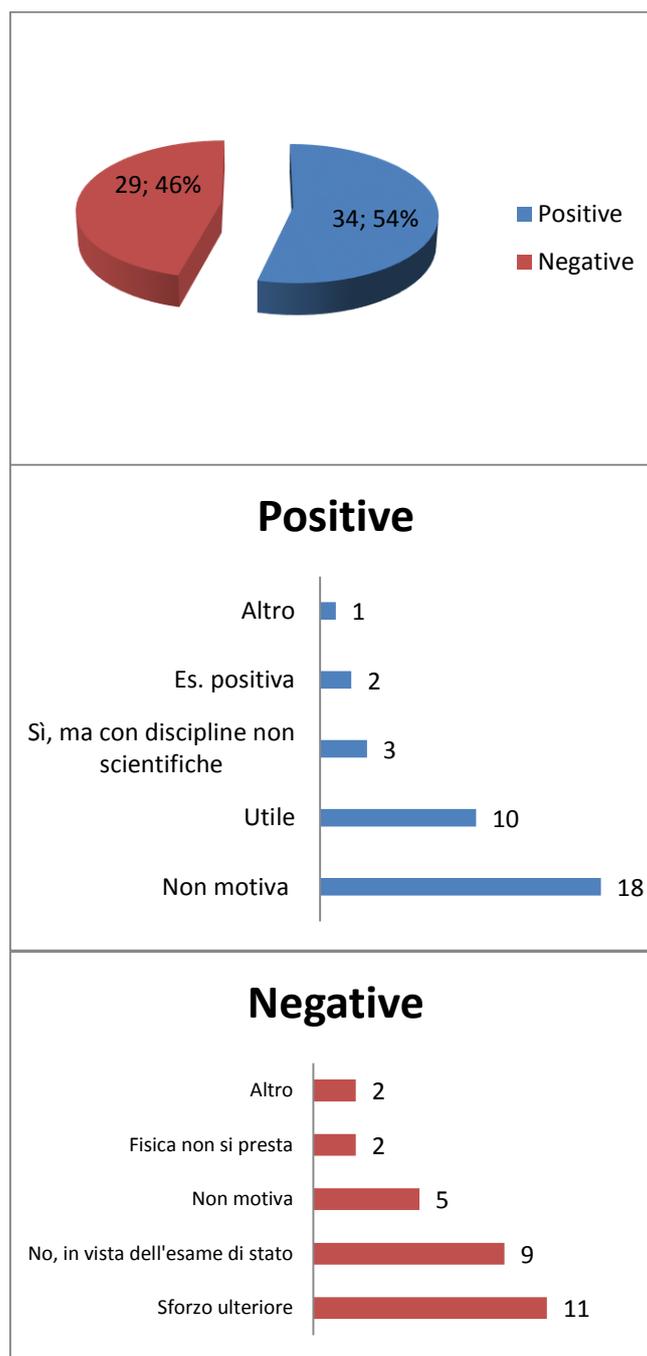
Question n. 12 - Secondo te, le modalità di svolgimento di lavoro in classe Clil sono state efficaci?¹⁸



Beyond the results, which underline the students' satisfaction about the efficacy of the lessons, (64% positive, 36% negative), for these questions we highlight the fact that 52.5% of the students were not able to account for their answers.

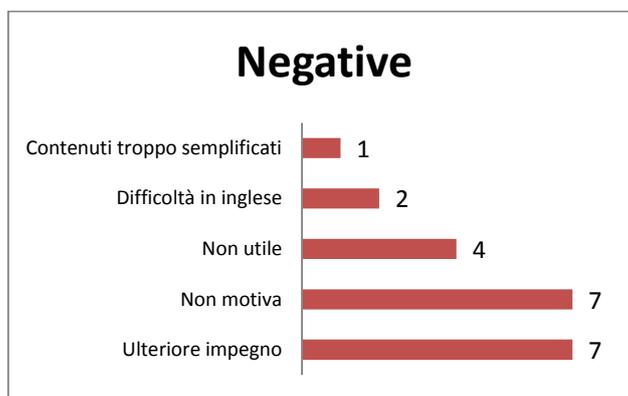
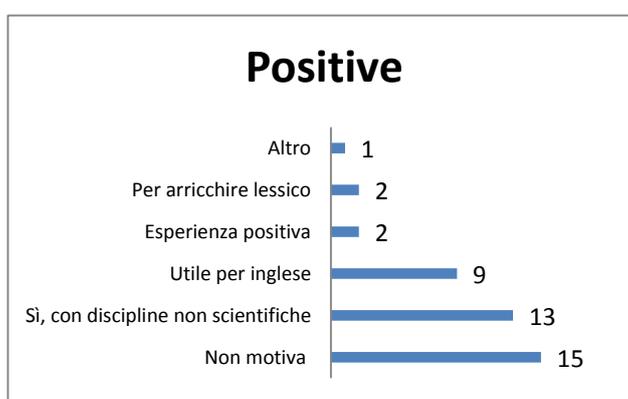
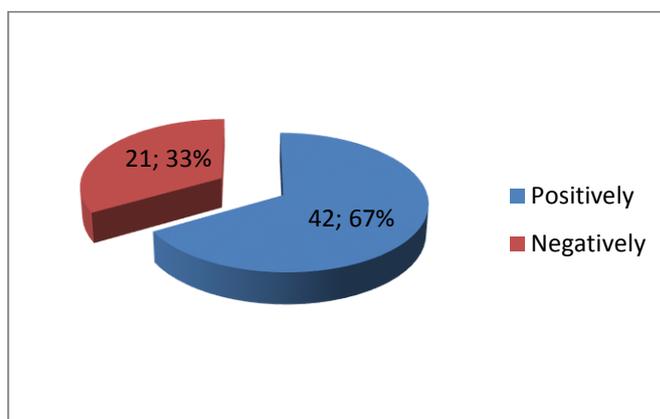
¹⁸ Four people did not provide any answers to this question.

Question n.13- Sei contento di ripetere l'esperienza l'anno prossimo?



The percentages of the positive and the negative answers to this question are similar, respectively 54% and 46%. As far as the positive answers are concerned, 53% of them (18 out of 34) were not motivated. Sixty-nine percent of the negative answers (20 out of 29) pointed out the fact that the Clil experience represented sort of an obstacle for their preparation, in particular for the final exam (9 out of 29).

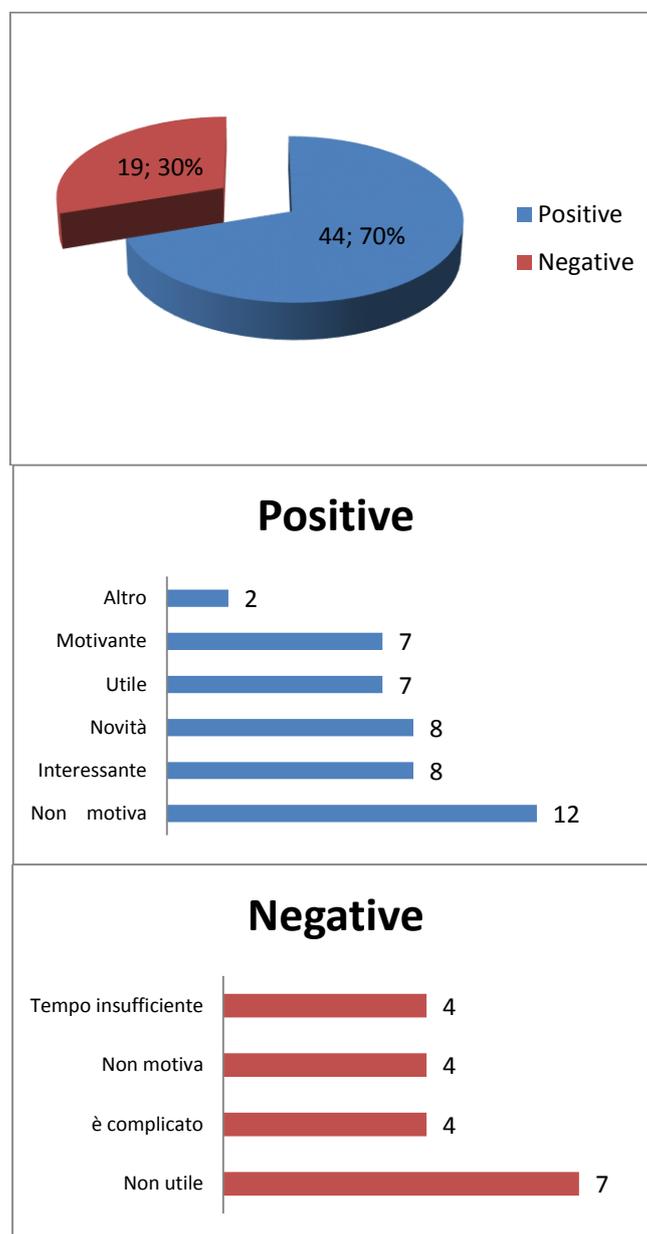
Question.14- Se il prossimo anno potessi scegliere di studiare anche altre discipline in una lingua diversa dall'italiano, come reagiresti?



The percentage of the students who would react positively to another Clil module (67%, 42 out of 63) is twice that of those who would have a negative reaction (33%, 21 out of 63). Examining the positive answers we can see that 13 students out of 42 (31%) would like to repeat the experience, but not dealing with scientific subjects. In fact, scientific subjects were considered too complicated even when taught in Italian. Nine students out of 42 (21.4 %) said that their positive reaction was due to the fact that “It had been useful because English is useful”, while 15 (35.7%) of the total answers were not

motivated. Observing the negative answers, most of them (7 out of 21.33%) were related to the fact that the Clil lessons were more demanding than the traditional ones. It is also worth mentioning that 22 answers out of 63 were not motivated.

Question n. 15- Ti ritieni globalmente soddisfatto di questa esperienza?



Finally, when the students were asked to express their opinions about their satisfaction with the Clil experience, the majority of them gave a positive answer (70%, 44 out of 63). Most of the positive answers were not motivated (12 out of 44, 27%). The remaining of the positive answers were motivated with similar values for the items: “Interest”, “novelty”, “usefulness” and “the experience was motivating”.

Question n. 1:

As we have pointed out in the presentation of the global results, the students' reactions to the Clil methodology were initially mostly positive. In particular, in the C group, no student expressed a negative expectation. A highly percentage of positive reactions was also reported from the D group (89%). The motivation provided for both the groups are the same (interest, curiosity from the novelty) and for the other two groups as well, where the percentage of the positive answers decreases (B group: 63%; A group: 55%). As far as the negative answers are concerned, their percentage increased in group B (37%) and it was connected to the fact that the comprehension of the content was perceived as more difficult. In the A group, it is even more significant (45%), but mostly due to an internal factor: the aversion towards the subject (60%).

Question n.2

The group A, B, C show a majority of "positive enough" answers which in most cases were motivated mentioning the improvement of the lexicon. For the C group, in particular, the whole sample (100%) provided a "positive enough answer". The D group, on the other hand, presents a majority of positive answers sustained by the above-mentioned argument. Both the A and the C group reported a percentage of "positive" answers.

Question n.3

The most frequent answers for the four groups individually are "positive enough" (55%, 3%, 72%, 82%), and reporting as a motivation with high percentages for the A, C, D groups "the creation of new classroom dynamics" (respectively 67%, 54% and 38%). This aspect also appeared in the motivation among those who gave a "positive" answer (group C), together with "the novelty factor", which was the most mentioned for the A, B, D groups. Moreover, while for the C and D groups the "negative" answers were very few (absent for the C and only a person for the D), for the A and B groups they are the second most frequent and mostly not motivated (50% for both).

Question n.4

For question n.4, the most frequent answer is “positive enough” for the groups B, C, D, where it has been chosen by more than half of the students. For the B and D groups, it was mostly motivated pointing out that “the lessons have been enjoyable”, while for the C group the motivation is connected with the perception that during the Clil lessons the students felt more at ease when speaking in English than during the traditional lessons. They claimed, in fact, that they did not feel judged if they made any linguistic mistake. For the A group, instead, the majority of the answers belong to the “positive” category and are mostly motivated with the “novelty factor”.

The percentage of the negative answers is for the A and B groups at about 20% and reveal in most cases the students’ aversion towards the subject or the language. For the C group the negative answers reached the 7% and signal an aversion for the methodology itself, while are absent for the D group”.

Question n. 5

For the C and D groups the most frequent answer was “negative” and in most cases due to the perception that the study of the subject has been less in-depth than during the traditional lessons (respectively 92% and 72%). For the other two groups, on the other hand, the most frequent answer was “positive enough”, while the negative answers reached the second position (27%- 37%).

Question n. 6

For the A and C groups the majority of the people gave a negative answer. Half of them in the A group were justified by the fact that “No improvement was noticed”, while the majority of the C group claimed that “The lexis was too specific on the subject”. The same motivation to the negative answers was provided by the D group, where they have been chosen by half of the sample. The lexical factor is also linked to the motivation to the negative answers provided by the B group, but it concerns the fact that it was felt too simple. For this group the percentage of the negative answers is equivalent to that of the “positive enough” (42% for both). This category is in second place for the B,C,D groups where the most frequent motivation provided is that “the Clil experience offered

new English terms specific of the scientific field”. The positive category gained the lowest percentage for the D and C groups. The latter group, in particular, reported the highest number of negative answers.

Question n.7

For the A and D groups, the majority of the sample thought that the Clil experience had not helped them to develop their transversal skills. The motivation provided by the A group was that the students did not perceived any change in their methodology of study (100%), which was also the second most frequent motivation provided by the D group (27%) and the most frequent for the C group (67%), which presented a totality of negative answers. The remaining part of the negative answers for the C group, and the majority of the D group presented as a motivation the following claim: “The Clil methodology of study is totally different from the traditional one, so it seems not applicable to the study of other subjects”. The situation was different for the B group, where the percentage of the negative answers is lower (47%).

Question n.8

For all the four groups the most frequent answer was “my motivation has not changed” , which reached the same percentage for groups A and C (73%), then decreased for the B group (63%) until it became the 50% of the sample for the D group. As visible in the global results, the option which was chosen as second (17.5% of the global sample) is “we feel more motivated towards the language”, which reached the 33% of the answers for the D group. For the B group, instead, it shares the second place with the option “we feel more motivated towards the subject” (16% for both).

Moving to the other two groups, the second place for the A group is occupied by the claim that they “felt more motivated towards the subject” (18%), while for the C group with the assertion that the students felt more motivated towards the language (13%).

Question n. 9

For the groups B and D, the students signaled, even with differences in the percentages (as we have seen in the analysis of data section), the same advantages, which also

confirm what emerged from their answers to the previous questions. The common most mentioned advantages are the lexical improvement (B group: 35%; D group: 28%), the opportunity of applying English to the study of a subject (B: 23%; D: 28%). A further element of positivity comes from the C group: the use of multimedia instruments, which was mostly unanimously appreciated.

Question n.10

From the comparison of the answers provided by the four groups we see that the most frequently mentioned disadvantage was the fact that the comprehension had been made more difficult (for the A and D groups, where it reached respectively the 54.5% and the 50%). This disadvantage was also mentioned by the other two groups, but reached lower percentages (C: 7%; D: 10%). Another disadvantage pointed out was the fact that the explanations had been made less effective, which is the most popular answer for the B group (32%), the second most chosen option for the A group (27.5%), and reached the 17% for the D group. It is interesting to notice that for the B and D groups the second most chosen option is the claim that “The Clil methodology does not have any disadvantage” (26% and 22%). Another shared answer was that during the Clil lessons the topic had not been discussed as deeply as during the traditional ones” (93% for the group C; 16% for the group B).

Question n.11

As far as the B, C, D groups are concerned, about $\frac{3}{4}$ of the answers are: “the activities were easy” (respectively 79%, 87%, 78%). This category had also been the most chosen for the A group, but with a lower percentage (55%), together with a considerable percentage for the answer “the activities were difficult” (36%). This latter answer reached the 7% for the C group, while for the other groups it was not given.

Question n. 12

The answers to this question are almost heterogeneous for the four groups: the majority of the A and B groups said that the way the lessons were conducted had been “effective enough”; the C group showed a slight majority of “positive enough” too, while the

majority of the D group provided a negative answer. Unfortunately, the students belonging to the A and D group did not motivate their answer.

Question n.13

For the C and D groups the majority of the sample would react negatively to the possibility of repeating the experience the following year (73%, 61%), even with different motivations.

The situation is almost opposite for the A and B groups, where the majority of the answers were positive (73%; 79%). The fact that all the answers provided by the A group and the most frequent answers of the B group were not motivated made it not possible to compare the two groups.

Question n. 14

For this question, each group presents a different situation: starting from the total of positive answers stating that the subject taught through the Clil methodology should not be scientific for the C group and the majority of positive answers not motivated for the B group. The positive answers reached the slight majority for the A group, while they became the minority for the D group due to the perception that “studying an additional subject through Clil would be a further effort”.

Question n. 15

For the A, B, and C groups the situation is almost specular: about $\frac{3}{4}$ of the sample claimed to be globally satisfied with the experience and justified it by mentioning positive values for the Schumann input appraisal criteria. The situation is different for the D group, where the discrepancy between the positive and negative answers is lower, even though the motivation provided are almost the same.

3.2 Analysis of the teachers' questionnaire

Question n.1: Secondo lei, come sono state globalmente le reazioni dei suoi studenti quando hanno saputo che avrebbero fatto un'esperienza Clil?

For the first question, the teacher perceptions matched those of the students, since both claimed that the students' global perception had been positive. This is true for all the four groups.

Question n. 2: Secondo lei, i ragazzi giudicano utile l'apprendimento integrato di lingua e contenuti non linguistici?

For the A group, the teacher detected that the students judged the activities "useful enough", and provided the following motivation: "It had been seen as a stimulus and a new experience, but also as a further burden in the students study load". The majority of "positive enough" answers were given by the students as well, but they highlighted the fact that it had been an opportunity to take a challenge upon themselves, to improve their competence in the foreign language and to apply English to a different context.

For the B group, the teacher claimed that the activities for the students had been "useful" because they had the opportunity to test their language skills in a different context". On the other hand, the students gave a majority of "positive enough" answers to this question, and mostly connected it to the lexical improvement.

As far as the C group is concerned, the teacher agreed with the students in considering the Clil experience "useful enough", and connected his/her assertion by saying that it could be useful for their future career at university. The most mentioned aspect given by the students was the lexical improvement.

Considering the teacher of the D group, he/she did not completely agree with the students' perception, in fact he/she claimed that it had been "useful enough". In his/her opinion, in fact, it had been stimulating, but there had also been some linguistic difficulties.

The students, on the other hand, provided a majority of positive answers, considering that the experience had been useful and imputed it to the improvement of their foreign language skills.

Question n. 3: Secondo lei, i ragazzi giudicano interessante l'apprendimento integrato di lingua e contenuti non linguistici?

As far as the interest towards the methodology is concerned, the teacher of the A group confirmed that it had been "positive enough" signaling, as it was done from the students as well, that the students perceived and appreciated the novelty, but showed some difficulties in handling with the NLS content.

The teacher of the B group agreed with the students' opinion and connected the "positive enough" interest mainly to the students' curiosity for the novelty of the methodology.

As for the C group, the teacher's opinion matched that of the students and stressed the diversity of the adopted methodology and approach. The students showed to have appreciated the new classroom dynamics with the teacher and their colleagues.

For the D group, the teacher confirmed what had been said by the students: the experience had been "interesting enough" because, he/she added, they had the chance to cast their minds into quite an academic experience. The most mentioned aspects highlighted by the students were connected to the improvement of their English skills and the new dynamics created in class.

Question n.4: Secondo lei, gli studenti pensano che le lezioni Clil siano state piacevoli?

In the A group the enjoyment highlighted by the students was noticed by the teacher as well, who connected it with the fact that he/she had tried to propose the activities and topic as captivating as possible. As far as the students' answers are concerned, they were mainly positive and positive enough and connected to the "novelty factor" and the possibility of being known by the teacher in a different field.

Focusing on the enjoyment of the experience for the B group, the teacher's perception agreed with that of the students, who said that it had been pleasant enough because the students have had the opportunity to test their language skills in a different context.

For the C group, according to the teacher the lessons and activities had been enjoyable and involving in their structure. For the majority of students, on the other hand, they had been "enjoyable enough" and due to the fact that they claimed to have simply enjoyed themselves during the lessons and activities.

The teacher of the D group strengthened the students' opinion about the enjoyment of the experience which he/she defined "positive enough": moreover, he/she specified that they had particularly appreciated the tutorials proposed as an activity. From the students' answers, we infer that the lessons in their opinion had been pleasant because they had enjoyed themselves.

Question n. 5: Secondo lei, i ragazzi ritengono di aver migliorato le proprie conoscenze della disciplina oggetto di studio Clil?

In the A group, the teacher agreed with the students considering that the latter thought to have had quite an improvement to their knowledge of the subject. Notwithstanding, he/she added that he/she could not impute this only to the Clil experience, since it had been in its first experiment. The majority of the students pointed out that the experience provided them with the knowledge of new contents.

The teacher of the B group claimed that the topic had not been discussed as deeply as during the traditional lessons. As for the students, a considerable number of them claimed that the experience had not been useful. Most of these negative answers were not motivated, and two of them confirmed the teacher's opinion.

As for the usefulness of the experience for the knowledge of the NLS, the C group teacher's answer matched the students' one, showing that it had not been so useful. He/she pointed out that the chosen topic had been quite simple, while the students indicated that the topic had not been discussed as deeply as during the traditional lessons.

The teacher of the D group disagreed with his/her students and said that "the experience had been very useful to improve their knowledge of the subject". They, in fact, as reported by the teacher, had paid more attention to the non-linguistic contents because they had to "decode" them from the FL, so they had developed a higher problem-solving ability.

Question n.6- Secondo lei, i ragazzi pensano che questa esperienza sia servita loro anche a potenziare la propria competenza nella lingua straniera?

The teacher of the A group reinforced what had been said by his/her students about the fact that they perceived not to have had improved their language skills. Moreover, he/she clarified that despite the offered stimulus, those who had had some difficulties in

the FL had not shown particular efforts to overcome them. Focusing on the students' perception, they highlighted the fact that they had not noticed any difference in their language skills.

For the B group, the teacher claimed that it had been “useful enough” because the students had been able to consolidate their competences thanks to the screening of authentic videos in English and interacting in English about the acquired concepts. The students' perception, on the other hand, were mostly divided into those who thought that it had been "useful enough" thanks to the improvement of the lexis in the foreign language, and those who declared that it had not been useful because they had already acquired the lexicon provided.

Differently from the students' assertion, in the C group the teacher's opinion was that the experience had been useful for the language skills, in particular for practicing their oral production. They had had, in fact, the opportunity to intervene in English, which is becoming less frequent during the foreign language lessons. In the students' opinion, on the other hand the lexicon had been too specific on the subject, so they thought that it could be useful only for that particular field.

In the D group in the teacher's opinion the experience had been “not very useful” to better the students' language skills because they had not respected the task of interacting and communicating with each other in English. The students' perceptions, on the other hand, were divided into those who found the experience useful enough thanks to the improvement of the lexis of that field, and those who found this specificity of the lexis as a motivation for their negative answer.

Question n. 7- Secondo lei, i ragazzi pensano che l'esperienza sia servita a fornire loro spunti su come migliorare abilità utili per lo studio in generale?

As for the development of the transversal skills, the A group teacher's answer disagreed with those of the students, since the former claimed that the way the activities had been structured had offered an effective methodology, useful to analyse the work of art also during the traditional lessons. The students, in fact, demonstrated not to have noticed any change in their study methodology.

Moving to the B group, the teacher said that it had been “useful enough” thanks to the brainstorming and the discussion in groups, which could favour the elaboration of the personal study methodology. The students' opinion for this question seemed not very

defined. In fact, the majority of students gave a negative answer and motivated it mentioning that the lessons had been more complicated and the level of study less in-depth. However, there had also been a considerable number of students who claimed that it had been "useful enough" even though they showed not to be able to motivate their assertion.

As for the C group, the teacher disagreed with the students and claimed that the new kind of approach to the study of the subject could be useful for their study methodology in general. The students' answers, on the other hand, were totally negative. They highlighted two aspects of negativity, which could be apparently contrasting: the majority of them signaled that they had not changed anything in their study methodology; the remaining part said that the Clil methodology required a completely different approach in their study methodology, but they did not know how it could be useful for their "traditional" study methodology.

For this question the D group teacher's opinion differed from the students' one. According to the teacher, in fact, the experience had been "useful enough" to develop their transversal skills. Through the screening of video-lessons in English, as he/she added, they had the opportunity to approach the study of Mathematics in a less theoretical and more intuitive approach. From their part, the majority of students belonging to this group claimed that the experience had not been useful and provided the same motivations provided for the previous group as well, even though their frequency is inverted.

Question n.8 – Ha notato un aumento della motivazione verso i contenuti e/ o la lingua da parte dei suoi ragazzi?

The teacher of the A group noticed a global rise in the students' motivation towards the topic proposed which had been consciously chosen to fit the purpose. According to the students, though, this had been noticed just by few of them, since the majority declared that no change in their motivation had been observed.

From the point of view of the B group teacher, the students had shown a higher motivation towards the subject, demonstrating particular enthusiasm and interest for the novelty of the approach proposed by the Clil methodology. Considering the students' answers, this was pointed out by few of them, while the majority claimed not to have noticed any change. Moreover, a student signaled that his/her motivation had lessened.

According to the teacher of the C group, his/her students showed a higher motivation towards both the content and the foreign language and this was mainly due the stimulus offered by the novelty of the experience. It also had been fundamental for them the opportunity to talk in English without the fear of being corrected (and consequently, evaluated) and judged by the teacher. Once again, the students' answers mostly underlined that their motivation had not changed, and those who noticed a higher motivation were very few. Furthermore, two students declared that their motivation towards the subject had lessened.

As for the D group, the students had showed a higher motivation towards the subject, showing particular enthusiasm and interest for the novelty of the approach proposed by the Clil methodology. The students are divided quite into those who had not perceived any change, and those who have observed a higher motivation towards the language. Moreover, few people claimed to have been more motivated towards the subject and just one student declared to feel less motivated towards the subject.

Question n.9 – Secondo lei, quali sono i vantaggi che i suoi studenti riconoscono alla metodologia Clil?

Focusing on the advantages that the students imputed to the Clil methodology, the teacher of the A group observed that they had particularly appreciated the novelty and the alternative of the activities proposed and the opportunity to deepen their knowledge of the FL, or, at least, to use it in a different context. The students mostly pointed out as an advantage the possibility to improve their competences in the language and in the subject at the same time.

For the B group, the teacher observed that the students had particularly appreciated the fact that the explanations had contained a simpler terminology and a higher number of examples. The students, on the other hand, signaled the following aspects: the lexical improvement, the possibility of applying English to a different field and the opportunity for their school career.

The teacher of the C group mentioned what had been pointed out by the students: their appreciation for the use of strategies and devices they had not been used to (more videos, more images, and more comprehension activities).

The teacher of the D group mentioned the following advantages of the Clil methodology the opportunity for the students to measure themselves against their language skills in a

different context and to experience a higher interest towards the lessons. His/her students put into light the possibility of applying English to a different field, the lexical improvement and the language skills improvement.

Question n.10- Secondo lei quali sono gli svantaggi della metodologia Clil secondo i suoi studenti?

As far as the disadvantages of the methodology are concerned, for the A group the teacher's perception matched that of the students': in some cases the FL constituted an obstacle towards the comprehension of the content leading to the need for a further effort.

For the B group, the teacher signaled that he/she determined that the students had not been able to be as efficient in the content skills as in their mother tongue. His/her students mostly mentioned that the explanations had not been as clear as during the traditional lessons. A great amount of students, on the other hand, said that in their opinion the Clil methodology does not have any disadvantages.

The teacher of the C group agreed with his/her students about the perceived disadvantages; the main setback was the fact that Physics is one of the main subjects for the "Liceo Scientifico", so the students worried for their preparation to the final exam to be endangered.

For the D group the teacher's and the students' opinion agree: the Clil lessons had made the comprehension of the content more complicated. This had been perceived as a further impediment towards the study of the subject that already presents an intrinsic complexity.

Question n.11 - Secondo lei, gli studenti trovano che le attività Clil siano difficili?

The teacher's opinion for the group A signaled that the activities and the lessons had not been difficult because they had been proposed taking into account the average level of competence of the class. The students were divided between those who remarked that the activities were "feasible" and those who defined them "difficult". Unfortunately, no motivation was provided

For the group B the teacher perception regarding the level of difficulty of the activities differed from that of the students': in the teacher's opinion, the activities had been

“difficult” because he/she noticed that sometimes they showed inhibition in expressing the NLS concepts in English in front of the class. The students, on the other hand, mostly judged the activities "easy" or "feasible" due to the presence of just a few difficult terms.

The teacher's perception of the C group about the level of difficulty of the activities confirmed what had been asserted by the students: the activities had been easy. He/she also added that this was because they had been carefully weighted considering the students' average competence and the intrinsic difficulty of Physics. The students' motivation to their answer mostly reported that the topic chosen had been elementary.

The D group teacher, differently from what had been said by the students, claimed that in his/her opinion the lessons and activities had been “difficult enough” considering the students' language competence. The majority of the students, on the other hand, maintained that they have been "easy" because the topic had already been known.

Question n. 12 - Secondo lei, i ragazzi pensano che le modalità di svolgimento di lavoro in classe Clil siano state efficaci?¹⁹

The teacher of the A group said that in his/her opinion the students considered that the way the lessons had been handled had been “effective”, while his/her students mostly declared that it had been “effective enough”.

For the B group, the teacher's and the students' opinion agreed in considering that the lessons had been conducted “effectively enough”.

The opinion of the C group teacher was that the lesson had been handled “effectively enough”, while this was true only for the 53% of his/her students. The remaining part, in fact claimed that the explanations had been less clear and the topics had been quite reduced.

Also for the teacher of the D group, the level of efficacy of the way the lessons had been conducted was “effective enough”. Half of his/her students, on the other hand, answered negatively.

Question n.13- Secondo lei, i ragazzi sono contenti di ripetere l'esperienza il prossimo anno?²⁰

¹⁹ The teachers did not provide any motivations to their answers.

²⁰ Only the C and D groups' teachers answered to this question.

When the teacher of the C group was asked to tell if he/she thought that the students would have reacted positively to the opportunity of repeating the experience the following year, he/she said that they would have been a bit worried. Their apprehensions mainly concerned the fact that the following year they would have had to approach the final exam, and they would possibly have had an external teacher for that subject (Physics). This person could might not have a sufficient competence in English, so it would be useless. This was confirmed by the students' answers.

According to the teacher of the D group, the students were not happy to repeat the experience the following year due to the final exam. As confirmed by the students' answers, they were worried to lose energy.

Question n. 14 - Secondo lei, alla possibilità di studiare anche un'altra disciplina in una lingua straniera, i ragazzi reagirebbero diversamente da come fatto prima di affrontare quest'esperienza?

According to the teacher of the A group, if his/her students would have had the opportunity to study an additional subject through the Clil methodology their perception would have mainly been connected to further difficulty and study load which it would require. The students' on the other hand, mainly answered signaling that they would have had a positive reaction, even though they did not provide any motivation to it.

According to the teacher of the B group, if the students had had the opportunity to study an additional subject through the Clil methodology their perception would mainly have had been positive thanks to the novelty factor, even with the mentioned concerns. This perception was confirmed by the students, even though the majority of them found it difficult to provide any motivation.

The teacher's perception for the C group also matched that of the students. He/she, in fact, said that in his/her opinion the students would have given a higher number of positive reactions provided that the subject was not one of the main subjects for their course of study, or, at least not among the subjects of the final exam.

The teacher of the D group said that his/her students' reactions would have been influenced by the subject that would have been chosen. In his/her opinion, that subject should have been carefully pondered. As for the students, their opinion was divided into a slight majority of negative answers, which denoted the fact that it would have been

conceived as a further effort, or its usefulness would have not been perceived. Those who answered positively, on the other hand, mentioned its usefulness to the improvement of the English language.

Question n. 15 - Secondo lei, i ragazzi sono soddisfatti dell'esperienza?

Analysing the teacher's opinion about the students' satisfaction with the experience for the A group, we notice that it highlighted a sufficient grade of satisfaction, which was confirmed by the students themselves. The teacher also said that while at the beginning the students had seemed a bit puzzled by the novelty of the experience, during the module they had carried out the activities diligently, and in some cases with enthusiasm. The teacher of the B group agreed with his/her students in expressing their satisfaction with the experience: they had, in fact, a greater collaboration, which had made them more confident towards the study. This was confirmed by the majority of the students, who mainly did not provide any motivation to their answer.

Focusing on the global satisfaction of the students of the C group, the teacher confirmed their global appreciation for the experience, sustained by the students' claim that they had asked him/her to repeat the experience. The students, on the other hand, highlighted the fact that it had been a motivating, interesting and new experience.

The teacher of the D group claimed that the students were divided into two categories: those who were satisfied and those who had run into more difficulties due to the English language. These ambivalent reactions were registered by the students too: some of them mentioned as a motivation the usefulness and novelty of the experience, others could not see its usefulness and signaled that the time dedicated had not been sufficient, and that the experience had been too complicated.

Sum up

The teachers have demonstrated to have mostly noticed in the students "positive" and "positive enough" reactions towards the Clil methodology. In some case, though, especially as regards Mathematics (D group), the aspects which have been highlighted have mostly concerned the students' difficulties. According to the teachers the students judged the experience "very" and "quite" useful, interesting and enjoyable mostly thanks to the novelty, variety, the possibility to take a challenge against themselves, and

the relevance for their future school career. As we can see from the table below, these elements of positivity can be also found among the advantages recognized to the methodology. Other advantages mentioned were the presence of simpler explanations supported by more examples (B group), the use of devices which usually are not used during the traditional NLS lessons (C group) and the possibility to apply English to different contents as opposed to the metalinguistic discourse (D group). All the four teachers, in fact, have noticed in the students a higher motivation towards the subject (A and B groups) and towards both the subject and the vehicular language (C and D groups). It has been pointed out, in fact, that the students have shown a higher interest towards the content proposed (A group), also due to giving more attention needed by the presence of the vehicular language (B group). For the C and D group, the teachers precise that the determinant factors were the novelty and the presence of a non anxiety-inducing context in class.

As far as the advantages for the subject are concerned, the teachers have provided quite heterogeneous answers: for the A and B groups they have claimed to have noticed an improvement, but not to be able to impute it exclusively to the Clil experience due to the fact that it had been just an experimentation. In the C group, the teacher declared that the topic chosen had been quite easy, so he/she did not think it could have particularly improved their preparation of the subject. The D group teacher, on the other hand, signaled a higher attention towards the content and the improvement of the problem solving strategy.

Moving to the advantages for their foreign language competence, the A and D groups' teachers said that the experience had not been so useful because the students had not shown a great effort, and in the D group, the students have not followed the teachers' request to interact with each other. For the B and C group teachers, instead, the experience had been considered "useful enough" and "very useful" thanks to the interaction between the students, which in the B group was associated with the screening of clips in the original language.

The teachers agreed, on the other hand, in claiming that the experience had been "useful enough to develop the students' transversal skills". The A and B groups teachers have signaled the development of texts analysis strategies (A) and brainstorming (B), while those of the C and D groups noticed a general approach to the study of the subject more intuitive and less mechanic.

Next to these positive aspects, on the other hand, the teachers have mentioned some

difficulties that the students had to deal with: the A and D groups teachers said that the experience had required further work load from the students' part due to the comprehension difficulties brought in by the vehicular language. The comprehension of Mathematics was already considered difficult in any case (D group). The B and C groups teachers respectively noticed that the students had not been able to be as efficient as in the traditional lessons and that the study of the contents had not been as in-depth as in the traditional lessons. These difficulties seemed to be connected to the fact that the following year the students would have to pass their final exam. In this respect, according to what had been noticed by the teachers, the Clil experience worried them for many reasons. During the school year, a further effort will be required and for some students it could constitute a further difficulty. Moreover, if the NLS studied through Clil methodology is one of the main subject, it could also endanger their preparation. Besides these problems, the students are worried by two uncertainties: a possible Clil test in the final exam and – as pointed out by the C group teacher – the possibility of the presence of an external teacher who does not have a Clil certification. This case would make the preparation of a Clil material useless.

Despite these difficulties, the teachers have detected that the students were "very satisfied with the experience" (B, C groups) and "satisfied enough" with the experience (A, D groups). The A, B and C teachers have motivated their claim reporting respectively motivation and enthusiasm, a higher collaboration among the students, which had made them more confident and the fact that the students had asked them to repeat the experience. The D group teacher, on the other hand, motivated his/her answer stressing the difficulties mentioned by those who already had difficulties in that subject.

DOCENTE	A	B	C	D
1. Secondo lei, come sono state globalmente le percezioni dei suoi studenti nei confronti della metodologia CLIL?	POSITIVE	POSITIVE	POSITIVE	POSITIVE
2. Secondo lei, i ragazzi giudicano utile l'apprendimento integrato di lingua e contenuti non linguistici?	<u>Abbastanza</u> É stato visto come uno stimolo e un'esperienza nuova, ma anche come un possibile ulteriore carico di lavoro	<u>Molto</u> Hanno la possibilità di mettersi alla prova in contesti diversi da quelli della lezione di lingua straniera	<u>Abbastanza</u> Utile in vista dell'Università	<u>Abbastanza</u> Esperienza stimolante
3. Secondo lei, i ragazzi considerano l'apprendimento integrato di lingua e contenuti non linguistici un'esperienza interessante?	<u>Abbastanza</u> I ragazzi hanno percepito la novità, pur con qualche difficoltà nell'affrontare i contenuti in LS	<u>Molto</u> Sì, per la varietà apportata	<u>Abbastanza</u> Variare metodologia ed approccio è interessante	<u>Abbastanza</u> Si sono sentiti proiettati in un'esperienza di stampo universitario
4. Secondo lei, gli studenti pensano che le lezioni Clil siano state piacevoli?	<u>Molto</u> Le attività e gli argomenti sono stati proposti in modo accattivante	<u>Abbastanza</u> Hanno messo alla prova le proprie conoscenze in un contesto diverso	<u>Molto</u> Lezioni divertenti e coinvolgenti per come sono state strutturate	<u>Abbastanza</u> Hanno dimostrato di aver particolarmente apprezzato i tutorial in lingua originale
5. Secondo lei, i ragazzi ritengono di aver migliorato le proprie conoscenze della disciplina oggetto di studio CLIL?	<u>Abbastanza</u> Trattandosi di un esperimento non sono in grado di affermare con sicurezza se le conoscenze sulla disciplina studiata sono migliorate unicamente grazie all'esperienza Clil.	<u>Abbastanza</u> Contenuti meno approfonditi rispetto ad una lezione tradizionale di disciplina	<u>Poco</u> Argomento scelto era piuttosto semplice	<u>Molto</u> Maggiore attenzione ai contenuti; problem solving

DOCENTE	A	B	C	D
<p>6.</p> <p>Secondo lei, i ragazzi pensano che questa esperienza sia servita loro anche a potenziare la propria competenza della lingua straniera?</p>	<p><u>Poco</u></p> <p>Nonostante gli stimoli offerti, chi aveva difficoltà nella LS non si è sforzato più di tanto.</p>	<p><u>Abbastanza</u></p> <p>Esposizione alla lingua tramite filmati; interazione nei gruppi</p>	<p><u>Molto</u></p> <p>Gli studenti hanno partecipato attivamente alle lezioni. Hanno avuto modo di migliorare la produzione orale, cosa che ormai sono poco abituati a fare nelle ore di lingua.</p>	<p><u>Poco</u></p> <p>Non hanno rispettato la consegna di interagire</p>

<p>7.</p> <p>Secondo lei, i ragazzi pensano che l'esperienza Clil sia servita loro a migliorare abilità utili per lo studio in generale?</p>	<p><u>Abbastanza</u></p> <p>Strategie di analisi di testi e delle opere</p>	<p><u>Abbastanza</u></p> <p>Brainstorming, discussione in gruppo che possono favorire elaborazione personale del metodo di studio</p>	<p><u>Abbastanza</u></p> <p>Approccio allo studio utile anche per altre discipline</p>	<p><u>Abbastanza</u></p> <p>La visione di video-lezioni in inglese ha dato loro la possibilità di conoscere un approccio diverso allo studio della matematica, meno teorico e più intuitivo.</p>
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<p>8.</p> <p>Ha notato un aumento della motivazione verso i contenuti e/o la lingua da parte dei ragazzi?</p>	<p><u>Sì</u></p> <p>Ragazzi molto interessati ai contenuti del modulo</p>	<p><u>Sì</u></p> <p>La maggior attenzione richiesta dalla lingua ha portato a maggiore attenzione per la disciplina. Hanno apprezzato molto la novità dell'approccio.</p>	<p><u>Sì</u></p> <p>Verso contenuto e disciplina, per la novità e il contesto non ansiogeno</p>	<p><u>Sì</u></p> <p>Verso contenuto e disciplina, per la novità e il contesto non ansiogeno</p>
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<p>9.</p> <p>Secondo lei, quali sono i vantaggi che i suoi studenti riconoscono alla metodologia CLIL?</p>	<p>Novità</p> <p>Varietà</p> <p>Applicare lingua inglese a discipline</p>	<p>Spiegazioni più semplici e corredate da esempi</p>	<p>Utilizzo di strumenti multimediali raramente impiegati in altre lezioni. Maggior utilizzo di brani di comprensione.</p>	<p>Lezioni più stimolanti</p> <p>Applicare lingua inglese a discipline</p>
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<p>10.</p> <p>Secondo lei, quali sono gli svantaggi che i suoi studenti riconoscono alla metodologia CLIL?</p>	<p>Carico di lavoro ulteriore per la difficoltà della comprensione ostacolata dalla presenza della LS.</p>	<p>Non riuscire a rendere nella disciplina come in lingua madre</p>	<p>Contenuto non approfondito in materie oggetto di prova d'Esame</p>	<p>Carico di lavoro ulteriore per la difficoltà della comprensione già difficoltosa di alcune materie</p>
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DOCENTE	A	B	C	D
<p>11.</p> <p>Secondo lei, gli studenti trovano che le lezioni Clil siano difficili?</p>	<p><u>Poco</u></p> <p>Si è cercato di calibrarle secondo le loro competenze</p>	<p><u>Abbastanza</u></p> <p>Riscontrata in qualche caso inibizione nella produzione orale davanti alla classe</p>	<p><u>Poco</u></p> <p>Si è cercato di calibrarle secondo le loro competenze. La fisica di per sé sviluppa e tratta argomenti difficili, bisogna scegliere i moduli più opportuni ad essere trattati tramite metodologia Clil.</p>	<p><u>Abbastanza</u></p> <p>Considerando il livello medio della classe si sono rivelate abbastanza difficili.</p>
<p>12.</p> <p>Secondo lei, i ragazzi pensano che le modalità di svolgimento di lavoro in classe Clil siano state efficaci?</p>	<p><u>Molto</u></p>	<p><u>Abbastanza</u></p>	<p><u>Abbastanza</u></p>	<p><u>Abbastanza</u></p>
<p>13.</p> <p>Secondo lei, i ragazzi sono contenti di ripetere l'esperienza l'anno prossimo?</p>	<p>?</p> <p>Classe 5°</p>	<p>La difficoltà potrebbe essere legata alle prove previste nell'esame di Stato, di cui non sappiamo ad oggi se sarà prevista qualche prova Clil.</p>	<p>Preoccupazione per un'eventuale prova d'esame Clil</p>	<p><u>NO</u></p> <p>Sono preoccupati perché il prossimo anno hanno la maturità, temono di disperdere energia</p>
<p>14.</p> <p>Secondo lei, alla possibilità di studiare un'altra disciplina in lingua straniera, le reazioni dei ragazzi sarebbero diverse?</p>	<p>Ambivalenti. Negative per il carico di lavoro ulteriore</p>	<p>SEMPRE POSITIVE</p> <p>Entusiasmo nei confronti della varietà</p>	<p>MAGGIORMENTE POSITIVE</p> <p>Con discipline non di indirizzo, o comunque non oggetto di prova d'Esame</p>	<p>DIPENDE DALLA DISCIPLINA SCELTA</p> <p>Si dovrebbe valutare con attenzione la scelta della disciplina</p>
<p>15.</p> <p>Secondo lei, i ragazzi sono globalmente soddisfatti dell'esperienza?</p>	<p><u>Abbastanza</u></p> <p>All'inizio un po' perplessi, poi hanno svolto l'attività diligentemente e in qualche caso con entusiasmo</p>	<p><u>Molto</u></p> <p>La maggior collaborazione tra gli studenti ha portato ad una maggiore sicurezza nello studio</p>	<p><u>Molto</u></p> <p>Hanno chiesto di ripetere l'esperienza</p>	<p><u>Abbastanza</u></p> <p>Problematico per chi ha già incertezze nella disciplina</p>

4 Presentation of the results

The content of this section will be the presentation of the results. In 4.1, we will discuss the results obtained from the data analysis, in 4.2 we will offer a short sum up of the aspects emerged from our case study. In 4.3, we will try to point out the main limitations that we individuated in our research and make some proposals for further research.

4.1 Discussion of the results

The students have mostly shown a “positive” and “positive enough” reaction towards the Clil experience, both from the beginning and during the experience, signalling: interest, curiosity and usefulness. The usefulness was connected mostly with the linguistic aspect, in particular with lexical improvement. The interest, on the other hand, was linked with the novelty of the experience and its consequences for the classroom dynamics. This last factor was also connected with the enjoyment of the experience, in particular underlining the social safeness. It has been fundamental for the students the possibility of expressing themselves in the English language without feeling pressured of being judged, or being evaluated by the teacher. Some students have also shown appreciation for the possibility to demonstrate their own linguistic skills to their NLS teacher.

The level of difficulty of the activities proposed was globally judged as “easy” and “feasible” (for B, C, D groups), especially because the topic was already known (D group), not difficult (C group), or containing few specific terms (B group). In regards to art history (group A), instead, the majority of the answers have been “feasible” or “difficult”. We can say, as far as the emotional reactions of the students considering the five criteria of the Schumann’s Input Appraisal, that the experience was demonstrated to be “positive” and “positive enough”.

Next to these positive reactions, however, the students signalled for about 60% and 70% that the experience had not been useful to improve their knowledge of the subject, their language skills, and to reinforce their transversal skills. As for the first aspect, the most frequent motivation provided to the negative answers was that the Clil lesson had provided them with a less in-depth study of the content as opposed to a “traditional” lesson. This point seemed to worry students a lot, in fact it also emerged as one of the

disadvantages of the experience mentioned in question 10. Moreover, it was also pointed out by those who would not repeat the experience the following year, since it could endanger their preparation towards a subject that will be present in the final exam²¹.

Moving to the usefulness of the experience for the English language, although the students had previously mentioned the lexical improvement, from our study two negative aspects had emerged. These aspects could appear contradictory. First, the majority of negative answers reported that “the lexicon provided had been too specific on the subjects”, while, other students had defined it “already known”.

In regards to their transversal skills, the students had claimed in some cases the novelty and diversity brought in by the Clil methodology as opposed to the traditional lessons, while others had said that they had not changed their method of study. The novelty in this case might not be a positive aspect, since most students claimed the impossibility to extend the strategies learnt through Clil to the study of other subjects.

In regards to their motivation towards the subject and the foreign language, most students had not felt more motivated, even though there had been a great number of students who had noticed a higher motivation. This was the case for Mathematics (D group), where even 44% of the students claimed to be more motivated: 33% towards the language and 11% towards the subject. For the C group, on the other hand, two people have pointed out a lower motivation towards the subject.

As we have seen in the previous section, the teachers, from their part, had noticed a higher motivation especially towards the subject.

The students had demonstrated to have appreciated particularly the possibility to apply English to their study of the subject. Other advantages nominated had been the possibility to improve their competence of both the subjects (A group), to approach the foreign language (D group), the use of the multimedia devices (group C) and the opportunity for their future school career.

On the other hand, focusing on the disadvantages, in the first place there is the comprehension issue, worsen by the presence of the FL (A,B,D groups), the less profound level of study of the content as opposed to the “traditional” lessons (B and C groups), and the less effective teachers' explanations (A, B,D groups).

The groups had demonstrated to have been globally satisfied with the experience, even

²¹ As later clarified by the Ministry (Nota Miur 25.7.2014), if the subject studied through Clil is featured in the seconda prova, it would not be in the FL, since the test is nationally administered by the Ministry itself.

though for the D group this was due to a slight majority. They, in fact, provided as a motivation to their satisfaction positive values for the five criteria of the input appraisal. It is also true that the students of the A and B groups would have been happy to repeat the experience, while the majority of the other two groups answered negatively.

The students of the C group, in fact, strongly imputed this to their worry because of their final exam. This was confirmed by their total positive statements in the case of studying a non-scientific subject, or a subject that would not be present in the final exam.

We can summarize what had emerged from our study in the following main points:

- a. the students had appreciated the input provided by the Clil lessons, which had demonstrated to respect the five criteria of the Schumann's input appraisal. This had been confirmed by the teachers' observations. The positivity of these criteria had been confirmed by their motivations provided to the possibility of repeating the experience;
- b. the students had signaled an increase in their motivation towards the language – even though not all of them had demonstrated to have had a full perception with their answers to the specific question. This was partially confirmed by some teachers mentioning the brief duration of the experience. A lot of students, in fact, mentioned the possibility of using English for “doing practical things”. This was also the teachers' opinion, who in some cases had noticed an increase of motivation towards the subject;
- c. the critical points of the experience according to the perceptions of the students and the teachers have mainly been: the comprehension of the content, which had been less easy; the study of the subject, which had been less profound and simplified as opposed to the traditional lessons; the fact that the Clil lessons had been less effective. These points were sources of worry for the students, especially because they found themselves in a particular period of their school career, since they would have had to approach the final exam. This had put them in more difficulty. In some cases they might have found the subject in the final exam (C and D groups), so they were afraid not be well- prepared; others feared that the necessary effort to handle Clil could absorb all their energy. This last factor was made worse when the students already presented some difficulties in

the subjects, the language, or both. This question, as signalled by the C group teacher, was made even more complicated by the fact that it was not clear if the final exam would foresee any written or oral Clil test (at least at the moment when filling out the questionnaire)²².

The comprehension issue had already been noticeable among the students and the teachers in the above-mentioned *Apprendo in lingua 2* collection, as signaled by Coonan and Serragiotto (Coonan, 2007a; Serragiotto, 2006).

Moreover, as Balboni points out:

[...] se già la comprensione in L1 è difficoltosa, non servono molte parole per capire sia la paura dello studente sia la sua difficoltà oggettiva nel seguire lezioni e nello studiare sui testi in LS, dove il livello B1 non è raggiunto da tutti gli studenti nemmeno a fine quinquennio (Balboni, 2014: 39).

Coonan also adds that in a Clil programme it is allowed to think that difficulties could arise with the comprehension, since the student is not “only” asked to use the decoding and interpretation processes. He/she is also expected to be able to *apply* the skills acquired during the foreign language lessons *in order to comprehend and acquire* the non linguistic contents proposed. This could be felt “weight bearing” and “stressful” by the students (Coonan, 2012).

Moreover, she claims:

[...] in un programma Clil, la comprensibilità dell’input è fondamentale per due motivi: perchè lo studente possa apprendere i contenuti presentatigli; perchè lo studente cresca linguisticamente. Questi devono costituire le finalità portanti dei percorsi Clil proposti. In caso contrario non è azzardato dire che l’esperienza Clil non solo potrà risultare inutile, ma divenire perfino dannosa per la demotivazione collegata con l’insuccesso patito e per il non raggiungimento degli obiettivi prefissati per i contenuti (Coonan, 2012:145).

According to Coonan, the comprehension issue in the FL imposes the necessity to find facilitation strategies “for the student” and “by the student him/herself” to make the input comprehensible (Coonan, 2012).

As it has been claimed, rather than reoccurring to simplify it, it has been demonstrated

²² Some clarification came from the Ministry (see p. 106), which determines that the Clil subject would be assessed in the terza prova and in the oral test. The former is created by the teachers of the class, therefore only the actual topics dealt with in class would be assessed; in the latter, it could be part of the test provided that the NLS class teacher is among the examiners.

that it is better to make the input comprehensible *in itinere* (Coonan, 2012). This is also Clegg's opinion, who asserts:

Gli alunni che imparano in una lingua diversa dalla propria fanno più cose, dal punto di vista cognitivo, rispetto a quelle che fanno quando imparano nella loro lingua madre. [...] Questo significa che hanno una capacità mentale minore di concentrarsi sulla comprensione del contenuto di quanta ne abbiano quando imparano in lingua madre. E, quindi, non possono portare a termine alcuni compiti senza aiuto. (Clegg in Lucietto, 2008:54).

As far as the teacher is concerned, Coonan proposes a series of negotiation procedures, the *scaffolding*. As she adds, those strategies, though they are not new,

[...] nella situazione Clil, è utile che ne sia fatto un uso più frequente, strategico e consapevole, proprio perchè non è possibile dare per scontata la conoscenza linguistica da parte dei discenti e, quindi, la comprensione del messaggio (Coonan, 2012: 149).

As for the students, Coonan suggests the use of cognitive, metacognitive and socio-affective strategies (for a complete review see Coonan, 2012; Balboni, Coonan, 2014).

A means to favour the comprehension is the development of the study skills through the *team teaching*, which becomes particularly valid as far Clil is concerned. (Menegale, 2014). According to Menegale, moreover, the *team teaching* leads to an enrichment for both the NLS and the FL teachers (ibid.).

According to the Italian regulation, at the beginning the presence of the FL teacher was not foreseen in the Clil experience, as noticed by Balboni: “L’aspetto assolutamente critico di questa impostazione sta nel fatto che l’insegnante di lingua straniera è del tutto escluso da queste esperienze, che vanno condotte dagli insegnanti dell’altra disciplina [...]. L’insegnante di lingue tuttavia, [...] può collaborare nelle sue ore.” (Balboni, 2012: 214).

The Italian Ministry for Education, instead, proposed, “una programmazione del docente di DNL concordata anche con l’insegnante di lingua straniera o il conversatore di lingua straniera” (Menegale, 2014: 64).

For the NLS teacher it, in fact, it would allow to:

[...] riscoprire metodi e tecniche didattiche proprie dell’insegnamento linguistico [...] che solitamente non utilizza nelle sue lezioni tradizionali, perchè l’attenzione alla lingua tende ad essere sottovalutata, basandosi sulla convinzione che gli studenti non abbiano particolari difficoltà a comprendere i

testi [...], in quanto la lingua usata è l'italiano, loro lingua materna (ibid.:68).

In regards to the FL teacher, working in team enables to:

[...] decentrare l'attenzione dalla lingua come obiettivo di apprendimento in sé e di trasmettere in modo più convincente agli studenti che la LS non è una disciplina da apprendere [...], ma un mezzo di comunicazione reale, uno strumento per veicolare significati [...] (ibid.).

Another advantage of team teaching according to Menegale is higher control of the classroom dynamics and of the levels of learning, because it allows to keep under control the interest and eventual difficulties among the students. In this way there could be “un sostegno più mirato, anche individualmente” (ibid.).

In regards to the choice of the subject and its consequences on the preparation of the exam, a possible attenuation of the problem was addressed in Serragiotto's consideration about the need of reaching a compromise between mandatory Clil and spontaneous Clil. (Serragiotto, 2014). He, in fact, claims that:

[...] qualsiasi addetto ai lavori metterebbe in evidenza che l'ultimo anno di una scuola superiore, con i problemi di esami di stato, commissioni esterne non è forse l'anno più indicato per iniziare questa metodologia [...]. (ib.:60).

This is the same opinion of Ricci Garotti:

Relegare per legge il Clil all'ultimo anno della scuola superior potrebbe comportare un grosso rischio, se la lezione Clil comparisse davvero solo ed esclusivamente nell'ultimo anno. La soluzione possibile sarebbe la proposta dei dirigenti di investire sul Clil anche nelle classi precedent, in modo tale che apprendenti e insegnanti non arrivassero impreparati al quinto anno (Ricci Garotti, 2014: 29).

A proposal of how this integration could be possible is, according to Serragiotto:

[...] per esempio, partire dal terzo anno di un Liceo Scientifico con un modulo di 15 ore di Fisica, poi due in quarta per arrivare al quinto anno con un modulo completo o quasi. C'è così la possibilità che la metodologia diventi anche familiare per gli studenti (ibid.).

In our case, we could say that we have found some integration, since the experience had involved three classes of the fourth year and one of the fifth.

Overall, the total hours involved were 10 hours per class, which for many students have resulted to be not sufficient. It would be interesting to follow up the situation of the

same students the following year, in order to observe the advantages of this anticipation. Focusing on the choice of the subject, the issue appears problematic for various reasons. As it has been pointed out by the headmaster, in our case it had been oriented by several factors. Among these factors, there are the availability of NLS teachers who had been prepared to obtain the certificate required for the teaching through Clil methodology, and the typology of the subject that is more suitable for Clil. On this point, Serragiotto claims that it is preferable to point towards the students' main subjects according to their school course, as to maintain their motivation higher towards learning (Serragiotto, 2003). Moreover, he signals that the choice of the subject has to be connected to the students' foreign language level competence (ibid.). This means that at the lower levels it is preferable to propose subjects which do not foresee only verbal language, but also extra-linguistic elements. Balboni on this point specifies:

[...] sono più semplici le esperienze in discipline in cui la componente iconica gioca un ruolo forte nell'esplicitazione dei significati, dalla geografia alla storia dell'arte alla geometria, oppure in cui formule simboliche sostituiscono le descrizioni linguistiche, come in algebra, chimica, fisica [...] (Balboni, 2012: 219).

In the case of Physics and Mathematics in the fourth year of the “Liceo scientifico” (C and D groups) these assumptions have been respected, anyway, yet both the teachers and the students of the C group signaled that the choice of the subject should have been better considered. This is true especially because this problem interacts with the final exam issue and the necessary study in depth of the contents. It is also true that in the fifth year Clil had not concerned one of the main subjects, nor in the fourth of the “Liceo Classico” (B group).

Regarding the simplification of the contents, according to Ricci Garotti this is the biggest danger because “riduce non solo le aspettative sui risultati di profitto [...], ma anche i risultati stessi (Ricci Garotti, 2014: 25). She also points out that it is from this consideration that some Clil critics consider it an elite experience limited to those students who are selected on the basis of their language and subject competence. In this point of view, it would not be honest to say that what Clil promises is fulfilled for all the students. According to her, so, it would be necessary to deepen the research on the content competence of Clil students, which up until now is inferior to that concerning the language teaching and learning in the Clil context (ibid.).

It is also true that in the “Apprendo in lingua 2” experimentation the Mathematics and

science teachers have brought some changes in their aims to come to terms with the student's difficulties. This had not happened for the other subjects, where the aims had rather been revised. According to Coonan, that proposal is considered “del tutto ragionevole, in sintonia con l’orientamento che vuole garantire la qualità del processo di apprendimento rispetto alla quantità di contenuti da veicolare” (Coonan, 2007a: 51). As a conclusion, we can say to have faced a situation that demonstrates how the students' emotional impact of Clil can be ambivalent. This confirms what has been highlighted by the previous studies. According to Coonan, in fact:

L’insegnamento in lingua straniera veicolare (LSV) suscita nello studente emozioni nuove, che possono essere:

- negative: nella situazione LSV lo studente non sempre riesce a cogliere il senso di ciò che legge/ascolta, avverte che i suoi processi di elaborazione vanno a rilento (*cognitive overload*), prova un senso di frustrazione, sente salire un rifiuto;
- positive: l’esperienza LSV viene vista come un’opportunità; lo studente percepisce la pertinenza dell’LSV rispetto alla sua via futura; è pervaso da un senso di *achievement*, di piacevole sorpresa, di soddisfazione per la sfida affrontata e superata (insaspettatamente), d’interesse per le novità metodologiche (Coonan, 2012).

In altre parole l’esperienza di LSV può avere un impatto emotivo forte sullo studente, impatto che va monitorato, soprattutto se di tipo negativo. (Coonan, 2014:21)

We have seen how in mandatory Clil this must be reinforced. The analysis of our case, though, has provided us with the opportunity to figure out how this can also be more problematic. Such problems derive both from the difficulty in the realization for economic reasons of some solutions that in spontaneous Clil appear immediate²³, and from a lack in clearness of the subject objectives concerning the final exam (at least when the questionnaires were fulfilled).

To conclude, we want to propose some of the students' answers that we reckon can be representative of what has been said so far. We present them in full, without those cuts needed for the elaboration of the data.

Il Clil stimola curiosità e motivazione poiché propone una didattica alternativa (C group student);

Il Clil per me è stato un elemento di novità nella didattica quotidiana (A group

²³ Mandatory Clil is actually a reduction of the real Clil, whose efficacy is reduced due to economic reasons (Serragiotto, 2014).

student);

Le lezioni Clil sono state piacevoli perché trattate in modo diverso e più interattivo, che faceva sembrare la lezione meno pesante (C group student);

Per me è stata un'esperienza molto piacevole, mi sono potuta mettere in gioco in Inglese senza essere giudicata (C group student);

Per me è stata un'esperienza abbastanza utile, interessante e piacevole perché era una novità, è poteva essere accattivante! (D group student);

Per me è stato molto piacevole perché ho imparato l'inglese divertendomi (B group student);

Si studia già tanto...cercare di capire anche in lingua inglese è improponibile! (A group student);

Se non sai bene l'inglese e non lo impari velocemente, è un bel problema! (B group student);

L'esperienza può anche essere piacevole, ma i contenuti di quinta di fisica, materia d'esame, sono troppo complicati per essere trattati in lingua straniera... (C group student);

Non sono contento di ripetere l'esperienza l'anno prossimo... avrò già tanti problemi in italiano con quella materia! (D group student).

4.2 Summary and conclusions

Summing up what emerged from the discussion of the data, we can say that our case study has given us the possibility to confirm what had been observed from the previous studies conducted in Italy (see 1.2.3). As we previously mentioned, they had reported the ambivalence of the emotional impact on the students of a Clil experience. Focusing on our case study, the aspects that the students perceived positively had particularly concerned the five criteria of the Schumann's Input Appraisal. The students, in fact, showed to have been globally satisfied with the Clil experience, because it had brought in their lessons elements of novelty, variety, interest and usefulness. Besides, at last it gave the students the opportunity of challenging themselves by using English for a real purpose and without feeling judged by the teacher in case of mistakes. As we have seen in the theoretical section, when Clil is mandatory it is fundamental to favour motivation

through these elements. We reckon that from this point of view our case study has proved to be positive.

Along with these positive observations, though, some negative aspects showed to be sources of worry for the students from their perceptions and those of their teachers. Their troubles mostly concerned the protection of their preparation on the subject studied through Clil methodology in that particular moment of their school career – approaching the final exam. This problem had led the students and the teachers to express the need for a more careful choice of the NLS. In their opinion, it should not have been one of the main subjects of the school course, or at least not among the subjects contained in the final exam.

We think that our case study provided us with some starting points concerning the main crucial aspects that need a stronger intervention from the teachers' part. By the way, as we have said in the discussion of the data, mandatory Clil does not only constitute a field where particular attention has to be given to create motivation. It is also a context where it appears more difficult to put into effect those methodological solutions that in spontaneous Clil guarantee what it should provide.

4.3 Limitations of the study

One limitation of my study could concern the fact that all the students who had been taken into account pertained to the same “Istituto”. In order to obviate this, as previously mentioned, we tried to contact other schools. Unfortunately, it was not easy to find an additional “Liceo” where some teachers had been attending their Clil training and had already experienced some Clil modules in the school year when this research was being carried out (2013/2014).

In particular, it would have been interesting also to analyse a “Liceo Linguistico”, since it would have provided us with the possibility to investigate the perceptions of those students who already presented a particular motivation towards the study of foreign languages.

Another limitation of my study could be the fact that the Clil modules experienced had only lasted 10 hours due to its experimental implementation. As the teacher signaled, in fact, in some cases it was not possible to determine if the students' reactions had only been imputable to the Clil experience. For these reasons, both the informants' considerations and ours should be cautiously taken into account. By the way, our focus

were the students' perceptions from their point of view and that of their teachers during their first contact with Clil.

Finally, we signal that from the students' part we often dealt with a high number of unmotivated answers, or answers whose motivation was partially unclear or ambiguous. However, it had to be expected because a great number of the questions investigated unconscious aspects that are not easily identifiable, nor quantifiable or justifiable. These aspects also caused some problems in the data analysis and the exclusion of some questionnaires. Anyway, even though we used a large number of charts and percentages to better present the data, our interest was especially qualitative, since it was based on perceptions and, as Serragiotto specifies, “la percezione è quanto di meno quantitativo ci sia” (Serragiotto, 2012:24).

4.4 Further research

Considering what has emerged from this study, it would be interesting in our opinion to widen our focus to the investigation of the teachers' emotions in order to observe how the Clil context affects them. It is more than a decade, in fact, that the research on the learning process has taken into account the role of the teacher' emotions, with recent reflections applied to the language learning field. These reflections concluded that the teachers' emotions at the same time influence their own motivation, their classroom management and their cognitive capacity. However, they also influence and are influenced by those of the students' in “una comunicazione emozionale non controllata” (Balboni, 2013:23). We think that the Clil context could offer in this sense an interesting field of observation since – as we have seen – the Clil methodology does not only cause a change in the students' emotional and cognitive dynamics, but also in those of the teachers, who are equally – if not even more – cognitively and emotionally involved in this “methodological challenge”.

APPENDIX – The students' questionnaire

Questionario per gli studenti - Le tue percezioni sull'esperienza CLIL

LICEO (indicare il tipo di liceo)

CLASSE :

HO STUDIATO.....(indicare la disciplina studiata in una lingua diversa dall'italiano)

in(indicare la lingua)

1) Quando hai saputo che avresti fatto un'esperienza CLIL, come hai reagito?

- positivamente
- negativamente

Motiva la tua risposta

.....
.....
.....

2) Apprendere insieme una lingua e contenuti non linguistici è stata per te un'esperienza utile?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motiva la tua risposta

.....
.....
.....

3) **Apprendere insieme una lingua e contenuti non linguistici è stata per te un'esperienza interessante?**

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motiva la tua risposta

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.....
.....

4) **Apprendere insieme una lingua e contenuti non linguistici è stata per te un'esperienza piacevole?**

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motiva la tua risposta

.....
.....
.....

5) **Secondo te, questa esperienza ti è servita a migliorare le tue conoscenze nella disciplina studiata?**

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motiva la tua risposta

.....
.....
.....

6) Secondo te, questa esperienza ti è servita anche a potenziare la tua competenza nella lingua straniera?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motiva la tua risposta

.....
.....
.....

7) Pensi che l'esperienza ti sia servita a sviluppare abilità utili anche per lo studio in generale?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motiva la tua risposta

.....
.....
.....

8) L'esperienza CLIL ha cambiato la tua motivazione nei confronti della disciplina studiata e/o della lingua?

(puoi scegliere anche più di un'opzione)

- Sì, mi sento più motivato nei confronti della disciplina
- Sì, mi sento più motivato nei confronti della lingua
- La mia motivazione non è cambiata
- No, mi ha demotivato nei confronti della disciplina
- No, mi ha demotivato nei confronti della lingua

Motiva la tua risposta

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.....

9) Secondo te, quali sono i vantaggi della metodologia Clil?

.....
.....
.....
.....
.....
.....

10) Secondo te, quali sono gli svantaggi della metodologia Clil?

.....
.....
.....
.....
.....
.....

11) Come giudicheresti il livello di difficoltà delle attività Clil?

- Per niente difficili
- Poco difficili
- Abbastanza difficili
- Molto difficili
- Difficilissime

Motiva la tua risposta

.....
.....
.....
.....

12) Secondo te, le modalità di svolgimento di lavoro in classe Clil sono state efficaci?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motiva la tua risposta

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.....
.....

13) Sei contento di ripetere l'esperienza l'anno prossimo?

- si
- no

Motiva la tua risposta

.....
.....
.....

14) Se il prossimo anno potessi scegliere di studiare anche altre materie in una lingua diverse dall'italiano, come reagiresti?

- positivamente
- negativamente

Motiva la tua risposta

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.....
.....

15) Ti ritieni soddisfatto di questa esperienza?

-
- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motiva la tua risposta

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.....
.....

Grazie per la collaborazione!

The teachers' questionnaire

Questionario docenti sulle percezioni degli studenti riguardo l'esperienza CLIL.

SCUOLA : LICEO (indicare tipo liceo).....

CLASSE:

HO INSEGNATO.....(indicare la disciplina non linguistica)

in.....(indicare la lingua veicolare)

1) Secondo lei, come sono state globalmente le percezioni dei suoi studenti nei confronti della metodologia CLIL?

positive

negative

2) Secondo lei, i ragazzi giudicano utile l'apprendimento integrato di lingua e contenuti non linguistici?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motivi la sua risposta

.....
.....
.....

3) Secondo lei, i ragazzi considerano l'apprendimento integrato di lingua e contenuti non linguistici un'esperienza interessante?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motivi la sua risposta

.....
.....
.....

4) Secondo lei, gli studenti pensano che le lezioni CLIL siano state piacevoli?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motivi la sua risposta

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.....
.....

5) Secondo lei, i ragazzi ritengono di aver migliorato le proprie conoscenze della disciplina studiata tramite metodologia CLIL?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motivi la sua risposta

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.....

6) Secondo lei, i ragazzi pensano che questa esperienza sia servita loro anche a potenziare la propria competenza nella lingua straniera?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motivi la sua risposta

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.....

7) Secondo lei, i ragazzi pensano che l'esperienza CLIL sia servita a fornire loro spunti su come migliorare abilità utili per lo studio in generale?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motivi la sua risposta

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.....
.....

8) Ha notato un aumento della motivazione verso i contenuti e/o la lingua dai parte dei suoi ragazzi?

(può scegliere anche più di un'opzione)

- Sì, ho notato una maggiore motivazione nei confronti della disciplina
- Sì, ho notato una maggiore motivazione nei confronti della lingua

- No, non credo siano più motivati
- No, ho notato un calo della motivazione nei confronti della disciplina
- No, ho notato un calo della motivazione nei confronti della lingua

Motivi la sua risposta

.....

9) Secondo lei, quali sono i vantaggi che i suoi studenti riconoscono alla metodologia CLIL?

.....

10) Secondo lei, quali sono gli svantaggi della metodologia CLIL secondo i suoi studenti?

.....

11) Secondo lei, gli studenti trovano che le lezioni Clil siano difficili?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

Motivi la sua risposta

.....

12) Secondo lei, i ragazzi pensano che le modalità di svolgimento di lavoro in classe
Cilil siano state efficaci?

- Per niente
- Poco
- Abbastanza
- Molto
- Moltissimo

13) Secondo lei, i ragazzi sono soddisfatti dell'esperienza?

- Per niente
- Poco
- Abbastanza
- Molto
- **Moltissimo**

Motivi la sua risposta

.....
.....
.....
.....

14) Secondo lei, i ragazzi sono contenti di ripetere l'esperienza il prossimo anno?

- sì
- no

Motivi la sua risposta

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.....

15) Secondo lei, alla possibilità di studiare un'altra disciplina in una lingua straniera, i ragazzi reagirebbero diversamente da come fatto prima di affrontare questa esperienza?

- Sì
- no

Motivi la sua risposta

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