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"Student motivation in CLIL – a case study in an upper secondary technical college in Austria (HTL)"

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1. Introduction

We are living in a connected world. Networking is the key to success and money and there have been numerous inventions and innovations which enhance and promote what is called 'globalisation'. In order to give 503 billion Europeans one single strong voice in the dialogue with the rest of the world, the European Union was established on European soil and consists now of 28 member states¹. Naturally, when such a huge number of individuals unite in their business and trade activities, there are linguistic, cultural and religious differences. Culture and religion are not the topic of this paper, but languages is and in that respect the members of the European Union developed a strategy. In 2008, the European Commission issued its second communication on multilingualism, renewing the 2005 Commission communication A new framework strategy for multilingualism. In the 2008 Commission communication Multilingualism: an asset for Europe and a shared commitment it becomes clear that Europe as a multilingual conglomerate yields advantages as well as difficulties. Trying to overcome obstacles and to avoid miscommunication, the document strongly promotes a positive view on multilingualism and emphasises its advantages. Languages can act as doors which may open up new worlds and ways of thinking and no European citizen must be kept from such an experience. The European ideal is a union of variety in which multilingualism has a major role and in which citizens are encouraged to learn foreign languages (cf. European Commission 2008: 3-4). The communication clearly states that the member states of the European Union are invited to provide their citizens with facilities where they can study the national language(s) and in addition to that two foreign languages (cf. ibid: 12).

International exchange, work mobility and employability are fields in which bi- and multilingualism are prerequisites. In order to be able to compete on the global marketplace, EU citizens must be able to speak foreign languages (cf. European Commission 2012a: 5). According to the 'Eurobarometer 2012', almost 85% of Europeans agree with this view, stating that EU citizens should be able to speak at least one foreign language (cf. European Commission 2012b: 8). Which foreign language this should preferably be seems clear - approximately two thirds think that English is one of the most advantageous languages (cf. ibid.: 7). This perception of English is reflected in actual language practice – English is the most widely spoken foreign language in the entire European Union with a percentage of 38% (cf. ibid.: 5) and it is most widespread as a foreign language in 19 out of 25 member states examined (cf. ibid.: 6).

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¹All information about the European Union is taken from http://europa.eu

This clear evidence seems to suggest that foreign languages, especially English, should be made accessible to Europeans at a very early stage, preferably in primary education already. Furthermore, in order to reach an advanced competence level in a foreign language, the EFL (English as a Foreign Language) lessons may not be enough. Apparently, more intense exposure to foreign languages is necessary and countries all over Europe started to put this into practice by introducing the English language in subject lessons. We have come to know this teaching concept under the name of CLIL (Content and Language Integrated Learning) and so far it seems to enjoy popularity. Unlike the teaching in international schools and in separate English trackes, CLIL is now used in all types of primary, lower and upper secondary schools and complements the teaching in the national language. Subjects in which CLIL is used are sometimes taught in the foreign language exclusively; but are most frequently made up of multilingual sessions and employ bilingual learning material (cf. Abendroth-Timmer 2007). And since additional language exposure outside of the EFL classroom contributes strongly to a positive learning outcome (cf. Gimeno et al. 2010), CLIL has become a teaching instrument which is strongly supported by the European Union and which is included in the educational roadmap (cf. European Commission 2012c: 14). The Commission advises member states to include foreign language instruction in content subjects in order to improve language learning and teaching and to make it more effective (cf. ibid.: 2). CLIL is believed to not only increase the language exposure, but also student motivation, because it succeeds in connecting language learning with relevant topics (cf. ibid.: 18).

Austria follows the European trend and employs CLIL nationwide in various school types and on different levels. Recently, the concept was officially included in the curriculum for upper secondary technical colleges (Höhere technische Lehranstalten – HTLs), which makes CLIL now part of Austrian educational law (cf. BGBl. II – Ausgegeben am 7. September 2011- Nr. 300, 3). The purpose of educational policy is obviously to achieve the best outcome and in terms of languages the highest competence level possible. But all innovation and regulation will not be effective if the stakeholders concerned do not approve of the measurements. The stakeholders under examination in this paper are the students in a particular upper secondary technical college and the parameter of approvement is motivation. First of all, Gardner (1979, 2010) asserts that motivation is a factor which strongly influences language achievement and must thus be considered in order to guarantee success in learning and teaching. Furthermore, the degree of motivation is an indicator for the quality of teaching, which is the main concern of educational law makers. High task motivation is likely to lead to a positive learning outcome, while low task motivation might hinder proper learning (cf. Dörnyei 2013).

Therefore, the focus of the present MA thesis lies on the question of which attitudes Austrian pupils hold towards learning English and whether CLIL acts as a motivational boost.

In order to find out more about learner attitudes and student motivation, a field study was carried out in an Austrian upper secondary technical college (HTL). The 119 participants of the study were between 16 and 18 years old and categorised into the following three reference groups:

- 4th form CLIL group (17-18 years old): This group of students was the first to be affected by the new curriculum, which means that they have officially been taught in CLIL the previous year.
- 3rd form CLIL group (16-17 years old): This group just started CLIL lessons, according to the national curriculum. The focus of examination naturally lies on expectancies of CLIL.
- EAA group (16-18 years old): This group consists of two classes, one from level three and one from level four. What unifies them is that both are classes from the English track, which means that they have English as a medium of instruction (Englisch als Arbeitssprache EAA) in almost all subjects and on a much wider scale than the CLIL groups described above.

The employed questionnaire is based on modified motivational concepts by Dörnyei and Taguchi (2010), Clément; Dörnyei and Noels (1994), Noels; Pelletier; Clément and Vallerand (2000), Deci and Ryan (2002) and Gardner (1979, 2010). The study aims at capturing student motivation in environments in which English is used as language of instruction. Motivation and attitudes towards learning English are monitored in order to find out whether there is a difference between classes in which CLIL was newly introduced in the third form and classes that belong to the general English track. Other aspects to clarify are whether experience and expectancies of CLIL in the fourth and third forms match and whether CLIL affects content motivation.

The first part of the present thesis deals with different motivational concepts and theories which are relevant for the following field study. Motivation is examined from different disciplines and angles in order to provide an overview of the complexity of the matter. Special attention is paid to Gardner's (1979, 2010) Socio-Psychological and Socio-Educational concepts and to the Socio-Dynamic perspective by Dörnyei and Taguchi (2010). Another focus lies on the classic and broadly known distinction between intrinsic and extrinsic

motivation (Noels et al. 2000) and its further examination by Deci and Ryan (2002) within their Organismic Integration theory.

In the second part, the teaching concept of CLIL is examined in detail. As a first step in this section, the bases of CLIL are mentioned, including assumptions from second language acquisition, discourse analysis and language teaching which have paved the way for CLIL. Secondly, the concept behind Content and Language Integrated Learning is explained and political dimensions are explored, before getting to CLIL practice in Austria.

In the final part of the thesis, the field study is presented in detail. Considerations for designing and conducting the questionnaires, the procedure and finally the results are treated.

For policy makers, such as the Commission of the European Union and the Austrian ministry of education, it is important to get feedback on the acceptance of employed measurements. This is why the present study seeks to provide information on student motivation in CLIL and ideally consequently serves as a thought-provoking impulse.

2. Motivation

The origin of the English word 'motivation' lies in Latin where *movere* means 'to move'. Basically, motivation defines the concept by which people are willing to progress; to take an effort in order to achieve some pre-set goal. It is not such a clear notion as it might seem, however, and researchers have disputed about its nature and its composition over the last two centuries. There was even a point in time when the American Psychology Association envisaged deleting the word 'motivation' from their database Psychological Abstracts, because they felt that the concept was too broad and could not be defined clearly enough (cf. Dörnyei & Ushioda 2011: 3). However, there has always been consensus about the fact that there is a difference in the feelings and emotions of a motivated in contrast to an unmotivated individual (cf. Masgoret & Gardner 2003: 128), and thus researchers have continued their work.

Today global English and globalisation are notions with which we are familiar and which have substantial influence on educational policies, language didactics and students' motivation. Ushioda (2013: 2) reasons that "the global importance ascribed to English might lead us to assume that the need to learn English is unquestionable, and that therefore student motivation is not really a problem". But in reality we see that not all students are equally motivated, or not motivated at all, to study English which is why motivational issues are high

on the national and international educational agendas. Governments and researchers invest big amounts of money into motivation research to solve these problems (cf. Ushioda 2013).

Motivation research is, just like human motivation as such, a very complex issue and there is no universally valid theory to it. Rather, there are different approaches and viewpoints which researchers have investigated and elaborated. Hence, none of the later discussed models claims to be comprehensive, but each is an attempt to explain parts of what the complexity of motivation can mean. To give the reader a first impression on what motivation may mean and how broadly it is defined, this chapter is opened with Menezes De Oliveira E Paiva's (2011: 63) view on motivation, before turning to a few motivational theories in more detail:

I view motivation as a dynamic force involving social, affective and cognitive factors manifested in desire, attitudes, expectations, interests, needs, values, pleasure and efforts. It is not something fixed [and] varies over a period of time or over stages along the acquisition process. [...] [I]t is a necessary condition for autonomy.

2.1. Attribution theory

One of the most widely known theories about motivation is called 'Attribution theory'. As Dörnyei and Ushioda (2011: 15) state, Attribution theory is "one of the few cognitive models of motivation to integrate emotions". The model has developed out of people's wish to understand why events have happened. The basis on which it is founded is the assumption that the causal attributions people draw from past failure or success, have an effect on future achievement. Bernard Weiner (1980), one of the main defenders of this approach, emphasises the influence which past experiences have on future success or failure and consequently on motivation. The core of this theory is that causal attributions influence emotions and expectations which in turn determine performance. Weiner (1980) explains that people come up with causality in their effort to explain why past events happened the way they did. However, causality is not a matter of perception; it is a construct of the mind. Causal correlations are used to explain the past as well as to predict the future. Thus, he differentiates between internal and external attributions in terms of motivation and further success. For example, if the learner thinks that they failed because of lack of ability (external), they are not likely to take the challenge again. However, if they think that they failed because of lack of effort (internal), they might give it another try. Dörnyei and Ushioda (2011: 15) confirm that "[p]ast failure that is ascribed to stable and uncontrollable factors such as low ability [...] hinders future achievement behaviour more than failure that is ascribed to unstable and controllable features".

Closely connected to Attribution theory – and thus treated as a sub-category – is the theory of the Possible Selves which sees the 'self' as the experiencer of one's emotions and impressions. Strahan and Wilson (2005), who are researchers in self-theory, confirm that the past influences the way people see their present and also their future selves. This perception of the self depends on how as well as on what exactly they remember; for example motivation is higher when people believe that they can re-experience a positive past event. According to Strahan and Wilson (2005: 4) the key to an optimistic future achievement is to focus on – and in a certain way relive – a superior past self. Having conducted a study amongst university students, they found that those who felt that their past success was relevant and important to their present-selves, were motivated about the future, whereas those who did not reexperience their past glories, did not expect them to influence their future-selves. They thus showed that "past selves can have an impact on people's constructions of possible future selves; but only when past selves are experienced vividly and perhaps incorporated into present identity" (Strahan & Wilson 2005: 4).

Research in Attribution theory and the theory of the Possible Selves continued and lead to what is called the Temporal Self-Appraisal theory, which assumes that people naturally tend to think positively about themselves. Strahan and Wilson (2005: 5) explain that people's sympathy with themselves results from an evaluation of the past which preserves or boosts their self-respect. Usually, people achieve this positive attitude towards their current-selves by criticising the long-past self and praising the recently-past self, "because psychologically close selves and events still have direct implications for current identity whereas distant selves are no longer included in current self and may be contrasted instead" (Strahan & Wilson 2005: 6).

2.2. Expectancy-Value theory

Expectancy-Value theory assumes that motivation consists of two isolated factors which, when multiplied with each other, determine the type of motivation: "expectancy of success" and "value" (Dörnyei & Ushioda 2011: 13). "[E]xpectancy of success" is a notion which consists of the following two subitems: firstly, it means the degree to which an individual expects to be successful with a task and secondly it defines the nature of the rewards they hope to get. The factor "value" refers to the importance an individual assigns to a successful completion of the task as well as to the final reward. Simply put, this theory assumes that a learner's motivation, persistence and success or failure depend on what they are expecting to achieve on a task and on how much they value the task itself.

According to Dörnyei and Ushioda (2011: 15), there are three different procedures which influence people's expectancy of success: "processing one's past experiences" (cf. 2.1. Attribution theory), "judging one's own abilities and competence (Self-Efficacy theory)" and "attempting to maintain one's self-esteem (Self-Worth theory)".

In connection with Self-Efficacy theory, 'Judging one's own abilities and competence' refers to an individual's capability to determine their personal strengths, which will consequently influence the type of activities they will choose in the first place, how much effort they are willing to put into them and how persistent they will be. Evaluating their abilities is thus what determines how self-efficient learners can be. People who have a feeling of low self-efficacy will regard a difficult task as a peril and instead of focusing on how to overcome the challenges, get lost in their personal obstacles and in their feeling of inferiority and inability. In contrast to this, people with a "strong sense of efficacy" have an enhanced "achievement behaviour [...], approach threatening situations with confidence [...], maintain a task [and] heighten and sustain effort in the face of failure" (Dörnyei & Ushioda 2011: 16).

A key aspect about Self-Efficacy beliefs is that they are not directly related to actual ability and competence (Dörnyei & Ushioda 2011: 16). Thus, sometimes people who actually have tremendous potential believe their self-efficacy to be low due to negative feedback, low self-esteem or other environmental influences.

The third mechanism which may influence people's expectancy of success is the concept of Self-Worth. This theory is based on the assumption that people are highly interested in maintaining a sense of self-value, especially when faced with bad feedback, competitions or lack of success. To some extent, a connection can be drawn here to Temporal Self-Appraisal theory (cf. 2.1.2). Cases are reported in which people deliberately choose not to exert an activity properly because of immense fear to fail. Thus, in case they actually fail, they can blame it on lack of effort rather than on lack of ability. Naturally, an individual's perception of ability and competence for motivation is central to this theory (cf. Dörnyei & Ushioda 2011: 17).

An important representative of the Expectancy-Value theory is John Atkinson (cf. Atkinson & Raynor 1974) with his "achievement motivation theory". To the above mentioned motivational factors 'expectancy of success' and 'value' he adds "need for achievement" and "fear of failure". The difference between the two concepts is merely that the first is characteristic of a person who strives for excellence and success for its own sake, while the latter is typical for somebody who makes an effort in order to avoid negative consequences.

However, as is typical for real-life situations, the two characteristics are not mutually exclusive.

2.3. The Motivational Model

Another approach to the concept of motivation is the so-called Motivational Model (cf. Deci & Ryan 2002). It assumes that motivation can be formed either within a human being or from external influences and that personality traits have an influence on this source of motivation. Furthermore the model believes that people are unconsciously motivated by basic needs and that pursuing realistic and positive goals will boost motivation. It is based on the following sub-assumptions: Cognitive Evaluation theory, Basic Needs theory, Organismic Integration theory, Causality Orientations theory and finally Deci and Ryan's (2002) Self-Determination theory.

Cognitive evaluation theory is one of the most widely propagated concepts of motivation. According to this approach, there are two types of motivation – one being called intrinsic the other extrinsic. "Intrinsic motivation (IM) generally refers to motivation to engage in an activity because that activity is enjoyable and satisfying to do" (Noels et al. 2000: 61). The key aspects of this kind of motivation are competence and autonomy in terms of behaviour (cf. Wigfield, Cambria, & Eccles 2012: 465). Intrinsic motivation derives from people's need for self-determination and proficiency and can be split into three sub-categories according to Noels et al. (2000: 61). The first one is called "IM-Knowledge" and tries to define the motivational incentive for experiencing the sensation of learning something new and gaining knowledge. The second concept – "IM-Accomplishment" – is the term for the motivation to complete a task or attain a goal and finally "IM-Stimulation" "relates to motivation based simply on the sensations stimulated by performing the task, such as aesthetic appreciation or fun and excitement" (Noels et al. 2000: 61).

Deci and Ryan (2003: 11) suggest "that there are two primary cognitive processes through which contextual factors affect intrinsic motivation": change in "perceived locus of causality" and in "perceived competence". Change in 'perceived locus of causality' can either mean a reduction of intrinsic motivation when the locus of causality is external, or an increase of motivation if it appears internal. The second change addresses the perception of competence: if the subject feels that their competence is increased, intrinsic motivation will be enhanced, but when perceived competence is decreased, intrinsic motivation will be decreased.

As has been pointed out, intrinsic motivation may be enhanced or thwarted by external factors, such as a deadline or a monetary reward. So, what will happen if intrinsically motivated

learners receive a reward for what they are doing? There is scientific consensus that possibly the intrinsic motivation and therefore the interest will be lost (cf. Deci and Ryan 2002, Vallerand 1994). The reason for this shift in motivation is that the formerly intrinsically motivated person will explain success consequently with the reward, which in turn leads to some kind of self-determination loss (cf. Vallerand 1994: 308-309). However, it is important to note that not all external factors influence intrinsic motivation in the same way. Deci and Ryan remind that verbal praise for example is different from material rewards in that it rather enhances intrinsic motivation (cf. Deci & Ryan 2002: 11).

Extrinsic motivation, as opposed to intrinsic motivation, describes the learning motivation which is enhanced by the prospect of attaining some instrumental end, like passing an exam or winning a competition. If we view motivation as a continuum, extrinsic motivation would be located between amotivation – which is basically no motivation at all – and intrinsic motivation. Even though intrinsic and extrinsic motivation are not mutually exclusive and cannot be placed on one dimension, the concepts are set apart by definition in order to facilitate the understanding.

Noels et al. (2000: 75) suggest in their study on intrinsic and extrinsic motivation that "[t]o foster sustained learning, it may not be sufficient to convince students that language learning is interesting and enjoyable; they may need to be persuaded that it is also personally important for them". What they additionally propose is that learners who are granted freedom of choice and perceive self-competence tend to be motivated in a more self-determined way. In contrast to that, learners with little choice show more amotivation. Another crucial factor is the degree of internalisation of the reason for learning a second language: the more internalised it is, the more comfortable the students appear.

The second column of the Motivational Model is Basic Needs theory. First of all, the prerequisite for a something – such as in our case motivation – to be called 'need' is a connection to mental and physical well-being (cf. Deci & Ryan 2002). The general assumption is that in order to enhance one's well-being one's needs must be satisfied and if they are not, negative consequences will follow. Needs are a universal concept which apply to people of all sexes, cultures and generations, but whose satisfaction varies on a personal level. Connecting to Goal theory which will be mentioned later in this thesis (cf. section 2.8.) Deci and Ryan (2002: 23) are of the opinion that "there will be a positive relation between goal attainment and well-being only for those goals that satisfy basic psychological needs".

Deci and Ryan's (2002: 6) concept of "basic needs" includes "competence, relatedness, and autonomy". They argue that these needs are innate and must be satisfied in order for a human being to develop naturally and soundly and even if people are not aware that these basic needs are their final goals, they will naturally strive for them (cf. Deci & Ryan 2002: 7). By "competence" they mean the feeling of power and ability to do something. People strive after situations in which they can exert their abilities and knowledge and finally experience success. The second basic need "relatedness" concerns the social part in human life. "Relatedness reflects the homonymous aspect of the integrative tendency of life, the tendency to connect with and be integral to and accepted by others" (Deci & Ryan 2002: 7). Finally, the concept of "autonomy" has to do with a certain feeling of independence. It describes the human need to feel in charge; to feel that we do what we do out of free will and by own choice (cf. Deci & Ryan 2002: 7-8).

Another concept of the Motivational Model, which simultaneously is at the core of Organismic Integration theory, is Deci and Ryan's (2002) "internalization", which is "the process of transferring the regulation of behaviour from outside to inside the individual" (Wigfield, Cambria, & Eccles 2012: 465). This means that it is possible that people who were originally not motivated for a task become autonomously extrinsically motivated by the influence of significant others or an important peer group. Even though the task did not seem interesting in the beginning, they "take in the regulation and integrate it with their sense of self" (Deci & Ryan 2002: 15). An important aspect to note here is that of "relatedness" (Deci & Ryan 2002: 19) to others, by which internalisation is greatly enhanced (cf. section 2.3.). But relatedness alone is not enough for successful internalisation to happen; positive feedback from the significant others and a feeling of competence are crucial as well.

According to Deci and Ryan (2002: 17-18), there are different triggers for such extrinsic motivation which are dependent on perception of autonomy: "external regulation, introjected regulation, regulation through identification and integrated regulation". External regulations are factors which cannot be influenced by the learner, but which strongly influence the learner's motivation. The classic example of this type of motivation is when somebody is motivated only in order to escape punishment or receive a reward. In case such a regulation disappears, the motivation will immediately disappear as well. In contrast to this, introjected regulation is more internalised and refers to the pressure which people put on themselves because they feel they have to. In a way, this aspect of motivation comes from the inside, but it can definitely not be called self-determined, because the motivation does not derive from free choice; it is not "part of the integrated self" (Deci & Ryan 2002: 17). The driving factor

here is possible self-esteem – people are motivated either in order to avoid shame or to boost their feeling of worth. The third type of extrinsic motivation – identified regulation – defines the motivation a learner has who decides to achieve something for personal reasons. Such a learner will be more willing to study because of fixed goals (cf. Noels et al. 2000: 62). For Deci and Ryan (2002: 17), the key word with this type of motivation is identification: "[it] represents an important aspect of the process of transforming the external regulation into true self-regulation". Finally, integrated regulation represents the most self-determined form of extrinsic motivation which is already very close to intrinsic motivation. We talk about integrated regulation when identifications are judged and integrated in the personal set of values, beliefs and goals. The only difference which stays is the reason why activities are performed: this form of motivation is still called extrinsic, because a personal goal is the driving factor, and not the pleasure of the work itself.

To clarify, introjection, identification and intrinsic motivation do not describe varying degrees of motivation, but present different orientations of motivation. It is also not a continuum in that people progress from the more external to the more autonomous forms of motivation smoothly. Rather, according to Deci & Ryan (2002: 18), people show characteristics of a certain type of motivation at a certain point of time, depending on their former experience and the interpersonal surrounding.

The fourth branch of the Motivational Model is Causality Orientations theory; an approach which intends to explain personality traits determining how people behave and in which ways they experience the world around them. Orientations are divided according to different degrees of self-determination which everybody has to some extent. On the one hand, there is "autonomy orientation" (Deci & Ryan 2002: 21) which is the concept for how people regulate their behaviour relating to their personal values and beliefs. This kind of orientation is an index about people's inclination towards intrinsic or integrated extrinsic motivation. On the other hand, there is "controlled orientation" [original emphasis] (Deci & Ryan 2002: 21) which is the attitude toward behavioural rules and regulations.

The final component of the Motivational Model – Deci and Ryan's Self-Determination theory (SDT) – serves as a basis to understand how self-motivation and well-being may be enhanced. Deci and Ryan (2002) start from the assumption that everybody has an innate urge to improve and develop. This development is two-fold – there is individualisation on the one hand, and adaptation to the behaviour and beliefs of peers on the other. For a healthy development of

oneself it is important to find a good balance of both, which is of course a question of cultural surrounding and other externalities.

Sheldon's (2002) 'self-concordance model of healthy goal-striving' is in some way a continuation of the previously defined Self-Determination theory (SDT). In fact, SDT does not look at how and why people choose future goals and new life directions from the massive amount of possible choices. The 'self-concordance model' builds on "idiographic personal goals" which people develop and pursue out of their "perceived locus of causality (PLOC)" (Sheldon 2002: 65). This means that individuals will logically set themselves goals which they feel are necessary and have a certain purpose. However, the problem Sheldon (2002) has found is that people are sometimes unsuccessful in choosing goals which represent what they truly need, want and wish, which in turn may lead to poor self-development. In this approach, there is thus a close connection between personal goals, motivation and well-being.

2.4. The Socio-Cultural model and Complexity theory

Having looked at several cognitive approaches to motivation, let us now consider the influence society and culture may have on the concept.

Learning takes place through participation in cultural systems of activity, and knowledge itself is viewed as a cultural entity distributed across the environment where that knowledge is developed and deployed, embodied in physical tools [...], social tools [...] or symbolic tools [...]. (Dörnyei & Ushioda 2011: 33)

Socio-Cultural theory is primarily concerned with the theory of learning, but has recently started to serve as an approach to understanding how motivation is socially and culturally influenced. Research has discovered that it is not only the surrounding which influences individual motivation, but that people are the producers and not merely products of their social and cultural surroundings.

Socio-Cultural questions are of complex nature which makes it necessary to include Complexity theory at this point. According to Sade (2011: 43), the context forms a piece of the whole system and is not simply the background, which in turn means that the context is part of an individual's identity. This makes it clear that the social context has a decisive influence on the motivation to learn a language. Sade (2011: 42) adds that motivation represents the "experience of belonging rather than a personal trait" and states that it is a decisive factor in the development of one's own identity. She departs from a socio-complex view which assumes that "[h]uman beings are positioned in webs of social relations that not only mediate their actions, but also contribute to processes of identity emergence and social belonging" (Sade 2011: 43). It is important to note here that the social context as well as the

identity system are non-linear, complex systems which are altered when the environment changes and which can never be fully predicted in their development. Moreover, the social aspect is seen as being an integral part of an individual's identity system, which links motivation inextricably to complex social mechanisms.

2.5. The Socio-Psychological model

From the Socio-Cultural approach, the Socio-Psychological model is deduced and elaborated in several publications by different researchers. Robert C. Gardner is amongst the pioneers of this branch of motivation research which has its roots in Canada of the 1970ies. Gardner (1979) is of the opinion that the determining factor in hindering or enhancing communication amongst various cultures in multicultural settings like Canada, is the motivation to learn another language. According to his perception, motivation "orient[s] the student to try to acquire elements of the second language, and includes the desire the student has for achieving a goal, and the amount of effort he expends in this direction" (Gardner 1979: 197). His view is similar to what other scientists say about intrinsic motivation in that motivated individuals set themselves specific goals in whose attainment they put substantial effort and persistence and they are determined to achieve their goals and even enjoy the activities on the way. Another link can be drawn to Goal theories, which will be discussed later (cf. section 2.8.). The basic concept of motivation according to this model consists of the following two aspects: the learner's desire to acquire the language and the "attitudes toward learning the language" (Gardner 2010: 9). Gardner (1979: 209) extends this definition and adds the concept of "Motivational Intensity (an index of the amount of effort expended to learn" a second language. It is to be made clear that all three components contribute to the motivational intensity and that they must be analysed in their tripartite form in order to gain insights on motivation. Finally, he explains that motivated learners have reasons behind their behaviour, which are called "motives" (Gardner 2010: 8).

Similar to the intrinsic versus extrinsic motivation distinction, there is a difference between "integrative and instrumental" (Gardner 2010: 12) motivation and orientation. Integratively motivated students study a language because they want to be able to converse with people from the L2 speaker community and to learn about their way of life, while instrumentally motivated ones do so in order to obtain a better job, or classify as educated. Delimiting 'integrative' and 'instrumental' from 'intrinsic' and 'extrinsic', it must be noted that both of Gardner's (2010) concepts would classify as 'extrinsic', because the instrumentally as well as

the integratively motivated individual is motivated because they expect rewards and not for the pleasure of learning.

Foreign language acquisition is for Gardner (1979: 193) "a central social psychological phenomenon" and he sees the main difference to all other obligatory study domains at school in the fact that it implies learning about formerly unknown cultures and their heritage. When studying Maths or History, one relates new ideas to the existing world knowledge and by that extends the knowledge body in this field. This is not possible when studying a foreign language, which means that building a completely new knowledge body becomes necessary, since every language has a different structure, cultural background and speaker community.

According to Gardner (1979: 193), the acquisition of an L2 involves "acquiring symbolic elements of a different ethnolinguistic community" [original emphasis] and subsequently means adopting certain behaviours. According to his research, students who show openness towards the L2 community and who are willing to identify with this group, have higher motivation potential. Dörnyei (2003: 4), another researcher who adopts a Socio-Psychological view, confirms that learning a second language involves not only knowing discrete elements of the language, like grammar or vocabulary items, but relies heavily on social components. He also believes that a positive attitude towards the L2 speaker community, which involves the desire to communicate and in certain ways even assimilate to members of that group, is crucial for motivation also (cf. Dörnyei 2003: 5). Yet, in contrast to Gardner, who limits identification to the second language community, Dörnyei (2003: 6) looks at the concept from a more socio-dynamic viewpoint and extends it "to some more basic identification process within the individual's self-concept" [original emphasis]. This broader and more recent definition develops from the idea that English is no longer the language which is only used with L1 English speakers, but first and foremost amongst non-native speakers in what is called 'English as a Lingua Franca' or 'World English' (cf. Dörnyei & Ushioda 2009: 2-5). It seems outdated to talk about integrativeness towards a specific speaker community when there is not one single group of speakers.

2.6. The Socio-Educational model

Gardner's theory does not only comprise a Socio-Psychological, but also a Socio-Educational view on motivation. In addition to the cultural component of second language acquisition, the so-called 'integrativeness', there is an educational component, the classroom setting. This component consists of the environment in the classroom, the course as such and its curriculum, students' attitudes towards the teacher and the students' academic nature. Gardner (2010: 5)

makes it clear that by "integrative motive" he means a combination of the cultural and the educational part, namely the motivation and orientation towards learning an L2, the attitudes towards the target language speaker community and attitudes towards the learning environment. All these factors influence and shape 'integrativeness' and consequently determine how well somebody will acquire a foreign language. Gardner (2010: 10) finally clarifies "that [while] the cultural component can play a role in language classroom motivation, [...] the educational component would not be expected to play a role in the cultural component of language learning motivation".

Again, Dörnyei (1996) is of a similar opinion as Gardner. To language learning motivation as a social phenomenon he adds an educational and a personal side. The personal dimension of motivation concerns the linguistic self-confidence of a speaker which is shaped by language anxiety, previous language experiences, self-evaluation and evaluation of the learning task. The educational aspect is similar to what Gardner (2010) defines as the educational component, but also includes "[g]roup-specific motivational components" (Dörnyei 1996: 77).

In sum, what is seen as an 'integratively motivated student' is someone who wants to learn the language, is open and willing to identify with the target community and enjoys the specific learning environment. Even though there are factors which may (negatively) influence second language acquisition (the social context, differences in the individual, the learning environment, success etc.), Gardner (1979) is convinced that social aspects of motivation are apt to leading to long lasting proficiency.

2.7. The hierarchical model

Having got a feeling for the complexity of motivation as a concept, let us now have a look at how it may be structured. Vallerand and Ratelle (2002) emphasise the complexity of the term motivation and state that in order to understand it, we must have a look at the separate aspects which form it. They define three different levels of motivation: "the global, contextual, and situational level" (Vallerand & Ratelle 2002: 39). The 'global motivation' is similar to what Deci and Ryan (2002: 21) call "autonomy orientation" and is concerned with somebody's personality and general attitude towards tasks; it can be either intrinsic or extrinsic.

The concept of 'contextual motivation' is related to "controlled orientation" [original emphasis] (Deci & Ryan 2002: 21) and does not view a person as a whole, but looks at different contexts and situations in their life. Vallerand and Ratelle (2002: 44-45) believe that people's motivation in a specific context of life is influenced by the social circumstances within this context. Similar to what Gardner (2010) says, social factors determine the degree

of motivation. Especially in the school context this plays a crucial role. If the student dislikes the teacher for whatever possible reason, the (intrinsic) motivation may be diminished. Likewise, the colleagues may have an effect on motivation.

On the situational level, motivation is analysed more specifically, which basically means in a precise situation. The question here is why subjects perform a certain activity at a certain point in time. "Motivation at this level is assumed to be unstable because of its responsiveness to the environment" (Vallerand & Ratelle 2002: 45). Even though the three levels of motivation have different characteristics and features, consequences may be influential on all three layers. In other words, if somebody engages repeatedly in activities where they are intrinsically motivated and if they experience the positive effects of that, they are likely to experience more frequent contextual intrinsic motivation.

2.8. Goal theory

Having already briefly mentioned a connection to Deci and Ryan's (2002) Basic Needs theory (cf. section

2.3.) and to Gardner's (1979) Socio-Psychological model (cf. section 2.5.), let us now have a detailed look at which Goal theories there are.

Goal-Setting theory developed out of the question about adults' motivation at their workplace and defines a way of improving work performances. Researchers have been interested in the difference of performance depending on the goals the individuals set for themselves. This theory links to the theory of the so-called 'self-regulatory processes' which refer to the actions people take in order to attain certain pre-set goals. People set goals and search for apt actions which have the aim of reaching the goal. However, the way to the goal is not linear, because individuals review and adjust their attainment strategies over and over again (cf. Schunk & Usher 2012: 13).

Dörnyei and Ushioda (2011: 20) enumerate three "areas where goals may differ: *specificity*, *difficulty* and *goal commitment*" [original emphasis]. According to studies they have conducted, learners who set themselves ambitious, high goals show higher commitment and are very likely to outperform others who set for themselves easy, non-specific goals. "High commitment to goals is attained when (a) the individual is convinced that the goal is important; and (b) the individual is convinced that the goal is attainable" (Dörnyei & Ushioda 2011: 20). Tremblay and Gardner (1995: 508) add that "goals regulate effort expenditure" and that learners with ambitious goals persevere also longer in a difficult task. Furthermore, they developed a concept named "Goal Specificity" which is used for describing the extent to

which an individual has specified their goals. Hock, Deshler and Schumaker (2005) support this idea and state that students with clear-set goals and ideas appear to be more motivated to work hard in order to attain the pre-set goals. Here, there is clearly a link to the Possible Selves theory (cf. section 2.1.). Students who have a clear idea about what possible self they do not want to become, show greater motivation (cf. Hock, Deshler & Schumaker 2005: 209-210).

The connection to Strahan and Wilson's (2005) theory about Temporal Self-Appraisal (cf. section 2.1.) is indicated at this point, because it focuses further on the question whether there is a difference in student motivation depending on the temporal nearness of goals. In fact, studies have shown that people are more motivated if a goal is close to the present. Trying to explain this phenomenon, Strahan and Wilson state that "a specific type of elaboration – making concrete action plans, or focusing on the process by which a goal would be attained – seems to be a key component in explaining why a close possible self is more motivating than a distant one" (Strahan & Wilson 2005: 12).

Another distinction which Dörnyei and Ushioda (2011: 21) introduce is that of "[p]roximal versus distal goals". They emphasise that goals are not only results which are aimed at, but that they also represent checkpoints which help to evaluate the performance, stating what the successful result should be. Thus, when it comes to time-consuming, long-lasting working and learning processes, such as acquiring a second language, it is important that the learners set themselves proximal sub-goals which serve as feedback on the way to the final goal and which are therefore essential motivating features.

In contrast to Goal-Setting theory, which initially examines adults' motivation at their workplace, Goal-Orientation theory is concerned with children's motivation and achievement in school. There are two different achievement goals which define the orientation the students have towards work: "mastery orientation" and "performance orientation" (Dörnyei & Ushioda 2011: 21). The first concept is meant to define a student's wish to acquire the learning content appropriately, while the second one means a student's desire to demonstrate their abilities and knowledge, to have excellent grades or to simply outperform colleagues. Students who set themselves mastery goals have therefore different criteria for success and a different background for why they do an activity to those who set themselves performance goals. "Central to a mastery goal is the belief that effort will lead to success and the emphasis is on one's own improvement and growth" (Dörnyei & Ushioda 2011: 22). In contrast to this, 'performance orientation' sees learning as means to attain a goal and the subsequent praise or

reward. Connecting Goal theory to Cognitive Evaluation theory (cf. section 2.3.) discussed earlier, it can be assumed that 'performance orientation' might cause extrinsic motivation. Wigfield et al. suggest in this context that "having positive competence beliefs, intrinsic motivation, and mastery goals for activities may be the most adaptive pattern for positive motivation" (Wigfield, Cambria, & Eccles 2012: 466).

A scientist who further develops Goal theories and brings in self-regulatory perspectives is Albert Bandura (2001). His concept of self-regulation is central in psychological research and focuses on the communication amongst individuals, the contexts in which they find themselves, and processes with which they are involved. Bandura (2001: 8) suggests that an agent, in order to achieve a goal, cannot simply follow an intention and a corresponding action plan, but must modify and regulate appropriate courses of action. This constant altering of motivation and acts is what he calls 'self-regulation' and is a process that must not be overlooked when examining goal attainment strategies. A concept which is central to his cognitive theory is 'perceived self-efficacy', which affects the self-regulation process (cf. also section 2.2 Self-Efficacy theory). Efficacy beliefs determine whether people are optimistic or pessimistic and if their thinking is self-enhancing or rather self-hindering. Perceived self-efficacy has an important influence on the self-regulation of motivation in that it determines which activities people are going to challenge, how much effort they are willing to take and how long they can carry on when faced with substantial challenges (cf. Bandura 2001: 10).

2.9. The neurobiological model

Taking into account a very different viewpoint, let us now briefly look at the medical component of motivation. John Schumann (2001) connects the field of neurobiology and psychology in his theory and defines "stimulus appraisal" and "social cognition" as the functions for motivation in the neural system of the brain. 'Stimulus appraisal' is the evaluation of the motivational and emotional importance of a stimulus which surrounds an individual, while "[s]ocial cognition is the ability to make hypotheses about the intentions and dispositions of others" (Schumann 2001: 23). 'Stimulus appraisal' has five different reasons to happen: "novelty" which is the degree to which something is perceived as new or unexpected, "pleasantness" which is the degree to which something appears as attractive, "goal / need significance" which determines if a stimulus is involved in attaining a goal or satisfying a need, "coping potential" which represents the degree to which somebody feels capable of coping with the event, and "self- and social image" (Dörnyei 2003: 10) which defines whether the event corresponds with social patterns and the person's concept of the self.

These stimulus appraisals are consequently integrated into an individual's general value system and control human actions as a consequence.

Another concept which Schumann (2001) introduces is that of the 'incentive stimulus'. Incentive motives stimulate the brain in such a way that it engages with the language input, of whichever sort it may be (a teacher, a course, a written text etc). Such 'incentive motives' may result from either 'mastery orientation' or 'performance orientation' (cf. section 2.8. Goal Orientation theory). All these different kinds of stimuli are then connected with the goal, which in our case is acquiring the target language. Consequently, if the learner thinks that the stimulus is helpful in order to achieve the goal, brain functions are getting into action and hence motivation is boosted.

2.10. The Situated approach

This approach departs from the assumption that the physical and psychological learning environments have a significant influence on learning and motivation. In contrast to Gardner's Socio-Psychological model, this one has a so-called "micro perspective" (Dörnyei 2003: 12) on the matter. This conception gave rise to three different branches of L2 motivation research – 'willingness to communicate', 'task motivation' and 'learning strategies'. While 'willingness to communicate' and 'task motivation' will be explained in greater detail, just a brief note on learning strategies. These are manners by which learners enhance the efficacy of their learning processes and consequently achieve a better outcome. Dörnyei (2003: 16) states that the use of such strategies "constitutes instances of motivated learning behavior". However, nowadays one must be careful with the term as such. Recent psychological and educational research doubts the existence of clear-set learner types and corresponding learning strategies. So, instead of using the term 'learning strategy', it is now rather a question of "self-regulatory learning" (Dörnyei 2003: 17) which again links to Bandura's (2001) perspective on self-regulation.

MacIntyre et al. (2003) found that perceived competence and anxiety concerning the second language enhance or hinder self-confidence and motivation. These two aspects may change over time and from one situation or language to another, but their relation is always determining. According to MacIntyre et al., "the avoidance of communication because of immediate anxiety arousal seems likely to override the more distal facilitating impact of language learning motivation" (MacIntyre et al. 2003: 143). So is the willingness to communicate directly linked to communicative competence? Dörnyei (2003: 12) strongly denies that. The willingness to communicate is practically somebody's willingness to enter

into a conversation with somebody else, making use of an L2, and this willingness may exist despite an individual's low language competence level, or may not exist despite an individual's high language competence level. Somehow, this concept relates to Dörnyei and Ushioda's (2011) idea of Self-Efficacy (cf. section 2.2.) which was introduced earlier in this paper.

Dörnyei (2003) defines task motivation as the core of the Situated model of L2 motivation, because tasks are at the micro level of classroom learning. According to researchers and teacher experts, tasks contribute greatly to the learners' motivation and must therefore be introduced, carried out and evaluated carefully. Dörnyei (2003: 15) divides motivation into the following three parts: "task execution, appraisal, and action control". The first mechanism refers to the degree of a learner's task involvement which is initiated by the action plan (instructions). 'Appraisal' describes the process in which the learner continually evaluates and processes the various stimuli which come from outside and how they judge the progress they made towards the desired action outcome. Dörnyei's (2003) notion of 'appraisal' is analogous to what Schumann (2001) defines as 'stimulus appraisal' in his neurobiological approach (cf. section 2.9.). Finally, 'action control' comes into force when the learner realises during the appraisal stage that the progress is stopping or slowing down. 'Action control' is a self-regulatory mechanism which is stimulated in order to boost or save learning-specific action. As can be seen, this last mechanism is closely related to Bandura's (2001) self-regulatory perspective.

Similar to other cognitive models like the Expectancy-Value theory (cf. section 2.2.), Eccles et al. define four reasons why people can value a task and consequently develop motivation to perform it. First of all, there is the "attainment value" which defines the degree of importance an individual assigns to the activity, secondly the "intrinsic value" which refers simply to the joy an individual experiences by doing the task, thirdly the "utility value" which determines the degree to which a task is relevant to future ambitions, and lastly the "cost" which defines what someone has to give up in order to do the activity (cf. Wigfield, Cambria, & Eccles 2012: 465). Dörnyei and Ushioda (2011: 19) state that the comprehensive value of a task forms on the basis of these four aspects and determines consequently the degree and form of motivation displayed.

2.11. The Process-Oriented approach

Since the Situated approach only looks at a static aspect of motivation, researchers have come up with an additional model – the process-oriented approach. This approach takes into

account that motivation is dynamic and shows variations at certain points in time. Dörnyei and Otto (1998: 65, quoted in Dörnyei & Ushioda 2011: 6) give a global definition of motivation which accounts for its dynamic nature:

motivation can be defined as the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritised, operationalised and (successfully or unsuccessfully) acted out.

According to Dörnyei (2003), there are different stages an individual can reach in attaining a goal and accordingly the motivation varies. Motivation is thus described as a process consisting of "initial wishes and desires" which become goals and are then transformed "into operationalized intentions" (Dörnyei 2003: 18). Dörnyei (2003: 19-20) defines three separate phases in the process: the "Preactional stage", the "Actional stage" and the "Postactional stage". He calls the motivation in the first stage "choice motivation", because the kind of motivation which is developed predetermines the goal which someone will consequently try to attain. In the 'Actional stage', the previously generated motivation is actively upheld and cultivated during the execution of the action. Dörnyei (2003: 20) refers to it as "executive motivation" and emphasises its challenges in classroom settings, where students are easily distracted during a task. The 'Postactional stage' is termed "motivational retrospection" (Dörnyei 2003: 20) and represents the phase where learners evaluate the activities in retrospect. This stage is decisive for further projects, because it determines which activities learners will be motivated to perform in the future. This stage is closely linked to Weiner's (1980) Attribution theory (cf. section 2.1.) discussed earlier in this paper.

2.12. Socio-Dynamic perspectives

On a timeline, the Socio-Dynamic approach is the most recent of all approaches discussed so far. It emerges out of the Process-Oriented approach around the year 2000 and continues to be researched. Dörnyei himself critically reflected on his Process approach and found three weak points: for one thing, the learning process can not be clearly defined and delimited, for another the actional process is not isolated and interferes with other processes in which the individual is engaged, and thirdly cause-effect relations are not linear, but interwoven and highly complex. Thus, the focus of the Socio-Dynamic perspective lies on "the situated complexity of the L2 motivation process and its organic development in dynamic interaction with a multiplicity of internal, social and contextual factors" (Dörnyei & Ushioda 2011: 72).

2.12.1. A Person-In-Context Relational model

For Ushioda (2013: 1), motivation is one of the substantial factors which influence success in foreign language acquisition and probably one of the main reasons why first language acquisition is different from second language acquisition. Her approach, in contrast to the linear ones, focuses on the dynamics of unpredictable, complex, non-linear relations among processes, contexts and individuals. Here, motivation is not perceived as an isolated variable, but as a result of relations between humans and their dynamic social environment. The "person-in-context relational view of motivation" (Dörnyei & Ushioda 2011: 77) focuses on a person's complex individuality instead of speaking about an abstract language learner persona. In contrast to common generalised models of learners and their motivation, she argues for a personalised view on each and every learning individual. What she considers is that somebody who would classify as a language learner probably has other aspects of social identity too; nobody is a language learner only. Consequently, their social circumstances; their other identities are relevant to the motivational process of language learning: "where L2 motivation is concerned we need to understand second language learners as real people who are necessarily located in particular cultural and historical contexts, and whose motivation and identities shape and are shaped by these contexts" (Dörnyei & Ushioda 2011: 78). Ushioda (2011) insists on considering a learner as an individual person who thinks and feels, has a personality and a background and finally interacts with a complex social system. In her view, motivation forms from a dynamic process which is shaped by the complexity of the relationships between the learning individual and the environment.

In view of the ever increasing importance of English as a global and international language and the resulting pressure on educational policy makers, Ushioda (2013) emphasises the importance of autonomy in order to sustain genuine student motivation: "In order to address these motivational dissonances, what seems important is to nurture and support students' sense of personal ownership and autonomy in relation to learning and using English for their own purposes and needs" (Ushioda 2013: 9). Ushioda (2011) has long been interested in how autonomy and motivation correlate. One main motivational aspect of interest in her research branch is to what extent the learners in the language classroom can speak as themselves; in other words to which extent they can express their other identities (e.g. being a Hip Hop dancer etc.) (cf. Dörnyei & Ushioda 2011: 77-79). It is Ushioda's (2011) view that in order to successfully acquire a language it is necessary that the learner does not only practise patterns which were given by others, but that they become able to express their own opinions and wishes in the L2. Language learning should be about "expressing personal meanings and

identities" (Ushioda 2011: 14) instead of merely practising language chunks. She argues strongly for a classroom atmosphere in which students are encouraged to work autonomously, that is to choose the activities they need and in which they are interested. This identity perspective sheds light onto how the individual controls self-determination and "also highlights a dimension of student motivation that is specifically concerned with *self-expression*, which has unique relevance [...] when the object of learning is a language" (Ushioda 2011: 22) [original emphasis].

In terms of analysis, this approach presents quite a challenge, since it goes beyond the individual and examines their complex evolving surroundings. "In essence, the unit of analysis becomes 'person(s)-in-context(s)' since one cannot be dissociated from the other" (Dörnyei & Ushioda 2011: 78). Because the concept of context is so broad and we cannot clearly define what it includes and what it excludes, there is no practical 'how to' strategy of research.

2.12.2. The L2 Motivational Self System

The "L2 Motivational Self System" is another dynamic motivational model formulated by Dörnyei and Ushioda (2011: 79) and develops out of two formerly described concepts – that of integrativeness / integrative motivation and that of the possible selves. Amongst other researchers, Dörnyei criticises that the notion of 'integrativeness' is in its original design closely linked to the identification with a specific L2 community. He argues that in spite of what was assumed by Gardner (1979), this identification is not fundamental to all motivation in general, but only in certain socio-cultural environments.

The influence of the possible selves approach on the 'L2 motivational self system' is of a different nature. It is said to consist of the following three parts (cf. Dörnyei & Ushioda 2011: 86):

- 1. The "Ideal L2 Self" is the concept for what a language learner would like to become (e.g. a proficient L2 speaker). Because people naturally want to minimise the discrepancy between the actual self and the ideal self, this concept is an extremely strong motivator. This part of the motivational self system is closely linked to Dörnyei and Ushioda's (2011) concept of 'self-efficacy' (cf. section 2.2.) and to the notion of Goal orientation (cf. section 2.8.) discussed earlier.
- 2. The "Ought-to L2 Self" is the model for describing the features which learners believe that other people think their ideal self ought to possess.

3. The "L2 Learning Experience" which denotes the external motives related to the learning environment (e.g. the classmates, the curriculum etc.). As has been outlined, several scientist, like Gardner (1979) also consider this aspect as a determining factor in motivation.

2.12.3. A Complex Dynamic Systems perspective

The last dynamic model on motivation discussed in this thesis is the Complex Dynamic Systems perspective. According to Dörnyei and Ushioda (2011: 91-92), motivation, cognition and affect are dynamic, distinct systems which interact with each other and which cannot exist separately from each other. Thus, instead of isolating distinct motives and analysing them separately out of context, they suggest a "systemic approach" [original emphasis] which aims at "identifying higher-order 'motivation conglomerates' that also include cognitive and affective factors and which act as 'wholes'" (Dörnyei & Ushioda 2011: 86). Dörnyei and Ushioda (2011: 92-97) therefore define four templates for situated motivational conglomerates which combine all three levels of motivation, cognition and affect:

1. "Interest"

Interest is a perfect example for a motivational conglomerate. For one thing, it is related to the 'intrinsic / interest value' of motivation which denotes the pure joy and satisfaction of carrying out an activity (affect), and for another thing, it is of a cognitive nature, denoting the enthusiasm for a certain domain. Thus, interest is a two-fold concept which first of all prevails in the individual and is then modified by the environment.

2. "Motivational flow"

Dörnyei and Ushioda (2011: 94) define flow as "a heightened level of motivated task engagement" which represents "in many ways [...] the optimal task experience". The condition of experiencing a flow may happen when people face a challenging task and intuitively know what to do and how to proceed while being absolutely certain about the positive outcome and about their apt skills. Dörnyei and Ushioda (2011: 95) define several cognitive factors which determine a flow, namely appraisal of a challenging task, believing in one's personal skills, a strong sense of command over the task completion, transparent goals, and focused attention.

3. "Motivational task processing"

This concept denotes a dynamic process in which the learner alternates monitoring, evaluating and changing phases. Dörnyei has come up with the triangular model

mentioned earlier in this work, which includes "task execution, appraisal and action control" (Dörnyei & Ushioda 2011: 96).

4. "Future self-guides"

Dörnyei and Ushioda (2011: 97) see their "future self-guides" as the ultimate motivational conglomerate, because "possible selves present broad, overarching constellations [and] blend together motivation, cognitive and affective areas". They suggest that 'future self-guides' must therefore be made of a vision which triggers the appropriate emotions to stimulate the suitable self-regulation strategies.

2.13. Critical summary

In conclusion, motivation is a complex notion as is reflected in the variety of theories trying to define it from various points of view. It seems clear that experience and past events have a substantial influence; that one's self-perception and one's feelings of competence are determining and that likewise personal goals may boost motivation. Furthermore, motivation may come from a learner's inside or be generated by external factors, like the prospect of a reward, or even both. As far as language learning is concerned, the attitude towards the L2 speaker community is decisive and willingness to communicate helps as well. Finally, many researchers stress the importance of the social and the learning environments for motivation and there have been attempts to explain motivation as a biological phenomenon of the brain. Motivation is certainly dynamic, can change over time and is strongly shaped by a learner's personality.

Not all aspects and influences mentioned are easily measurable, however, which made it necessary to choose from the wide range of possibilities a set of practical motivational characteristics for the questionnaire which is about to follow. Furthermore, research practice is in some branches still limited, which is why approved and tested motivational questionnaires are available only in a set of theories discussed above. Based on the literature and research on questionnaires available, two aspects from Dörnyei's "L2 Motivational Self System" (The Ideal Self and The Ought-to L2 Self), three aspects about Extrinsic motivation – Instrumentality and two notions from Deci and Ryan's "Organismic Integration theory" (Introjected and Identified regulation) – four notions from Gardner's "Socio-Psychological model" (Travel orientation, Interest in the English language, Cultural interest, English as a global language), three from his "Socio-Educational model" (Attitudes towards learning English in the CLIL lessons, English anxiety, Regular English lessons) and finally Intrinsic motivation are included and related to Content interest.

3. CLIL

The purpose of this chapter is to explain the concept of Content and Language Integrated Learning (CLIL). In sections 3.1.–3.3., there is an overview of the research branches which shaped its development, including the field of second language acquisition, classroom discourse analysis and finally teaching practice. Then, the concept itself is presented and its theoretical background elaborated. Finally, since CLIL is not merely an educational practice, but also a political one, the political dimension and CLIL practices in Austria are discussed at the end of chapter 3.

3.1. Second language acquisition

The first pillar of CLIL forms on assumptions from second language acquisition which are believed to have had and still have an influence on the emergence of CLIL. Comprehension hypothesis, output hypothesis, language learning as a human information processing and sociocultural theory are four domains in the research on second language acquisition and are believed to have paved the way for Content and Language Integrated Learning as a teaching concept.

3.1.1. Comprehension hypothesis

The basic assumption of Krashen's (2009: 81) "Comprehension [or Input] Hypothesis" is that language is acquired and literacy developed when understanding of messages takes place; in other words when we are able to make sense of what we hear and read, when we get "comprehensible input". He argues that acquiring a language is a process which happens in an individual's subconscious and which is influenced by several affective variables, like motivation, self-esteem and anxiety. In order for successful language acquisition to happen, the learner needs to be open to input, "the 'affective filter' must be low or down" (Krashen 2009: 81). It is important to note here that Krashen (2009) departs from the tenet that L2 acquisition is comparable to a child's natural acquisition of his or her mother tongue (L1).

It is Krashen's (2009: 83) conviction that "comprehensible-input based methods", such as his "Natural Approach", are more effective ways for language acquisition than "skill-building based methods" which support the conscious learning of grammar and vocabulary rules and emphasise the importance of correction. His reception-based approach to language teaching involves for example extensive reading. Krashen (2009: 83-84) argues that what he calls "sheltered' subject matter teaching" in an L2 has been proven to be as, or even more,

effective in the development of a foreign language than traditional instruction and he makes it clear that

[i]ncreasing comprehensible input clearly results in more language acquisition and more literacy development; we consistently see positive correlations between the amount of reading done and progress in reading, as well as the amount of aural comprehensible input received and language development.

One main aspect of this theory is "acquisition without instruction" (Krashen 2009: 88). For one thing evidence has shown, he argues, that children have taught themselves to read without help, and for another, there is no need for instruction in order to have broad vocabulary knowledge either. It is a fact that learners can acquire new words just by reading texts independently and can even develop good writing skills without being explicitly taught. Studies have furthermore proven that teaching spelling is in many cases not effective and that it only helps students to correctly spell words which they would have learned by themselves anyway (cf. Krashen 2009: 88).

Krashen (2009) firmly argues against error correction. He cites various studies which have shown that students whose errors were corrected rarely performed better and, if there was improved performance through correction, it was limited to situations in which conscious rule application was granted enough time to take place. Krashen (2009: 85) explains that "[i]n all studies in which error correction had an effect, the measure used emphasized form, and the subjects had done a great deal of conscious learning".

In sum, the model assumes that when input is comprehensible, which is either achieved through the context or by deliberately simplifying the language, acquisition will happen, even more when positive emotions are activated. Connecting this to Content and Language Integrated Learning, Dalton-Puffer et al. (2010: 7) add that "[t]he latter condition is widely thought to be fulfilled in CLIL by virtue of the fact that language mistakes are neither penalized nor corrected in CLIL classrooms".

3.1.2. The output hypothesis

In contrast to Krashen's view, it has been argued that input alone is not sufficient and that learners need opportunities to use and speak the language in order for successful acquisition to happen. Defenders of the output approach argue that it is essential that students use a foreign language in production, because otherwise they might develop good perception skills but lack the ability to use the language. Additionally, when it comes to (grammatical) correctness and focus on form, output seems crucial. By receiving constructive feedback on their utterances, learners analyse the structures of their own language and modify them, which

is how linguistic proficiency is developed. Even though research has provided divergent results, output is generally believed to be positive for language acquisition. This especially holds true when output is not reduced to the mere repetition of pre-formulated chunks and phrases, but gives the students the possibility to try out new language constellations (cf. Gass & Selinker 2008: 325-329). Vollmer (2010: 39) agrees with this theoretical concept and could confirm in his study that verbalisation, which can be oral as well as written production, "leads to an intensified processing" of the language.

The last consideration before finishing this section is how the output hypothesis relates to CLIL. At its basis is the assumption that CLIL provides additional foreign language input outside of the English as a Foreign Language classroom (cf. Gimeno et al. 2010). This hypothesis leads to the reasoning that additional language input in turn means additional opportunity for L2 output, which is finally where output hypothesis and CLIL as a teaching concept connect.

3.1.3. Language learning as information processing

For Dakowska (2013), language learning is a deeply cognitive process in which the mind of a human organism is consciously involved. She says that "[h]uman cognitive architecture determines all our cognitive processes, including foreign language learning" (Dakowska 2013: 11). To put it simply, cognition defines the organisation and processes whereby people build information in order to survive and meet expectations of the environment, and it is information which makes human organisms and social systems operate. In order for information processing to occur, our neuronal brain tissue must be provided with energy which emerges from action between human organisms. This means that energy must be provided in a form that is known to the receiver in order to be recognised as information. In human cognition, information processing can lead to learning, which practically means "perceiving, decoding, comprehending, structuring and storing information" (Dakowska 2013: 11). In human communication, information is then constructed and deconstructed, depending on significance, meaning and the social environment. According to Dakowska (2013), meaning is the central component of successful communication. So, without meaning and information, there would be no communication. Furthermore, information can be represented in a specific form (coded), altered into a different form of representation and stored. But information's most important feature in sociocultural environments is that it can be produced by someone and then be delivered to others. Now, language learning, "involves not only [...] perceptual structuring [of information clusters], but a considerable elaboration and enrichment of information available in the environmental stimulus" (Dakowska 2013: 22). As a conclusion, this approach trying to explain the cognitive involvement in (language) learning is not the means to an end or the only basis for CLIL. Language acquisition is not only a cognitive, but also a deeply-rooted social phenomenon which is why we will now turn to assumptions from sociocultural theory.

3.1.4. Sociocultural theory

Sociocultural theory as a learning theory was first formulated by Lev Semenovich Vygotsky and forms now the essential basis of CLIL. Sociocultural theory assumes that language cannot be analysed in isolation, because it exists within the realms of a social context. The theory is based on the assumption that whatever people do or think is shaped by symbolic cultural heritage such as language and by material cultural relics (cf. Gass & Selinker 2008: 283). It is argued that learning, consequently, is not exclusively an intrapsychological process which only involves human cognition, but that "it is linked to social and local ecology; it is adaptive to an emergent set of resources, resources that are embodied in social interaction" (Gass & Selinker 2008: 280). However, this does not mean that the sociocultural approach neglects the importance of cognitive processes completely; rather it combines them with the contextual events. Sociocultural theory assumes that cognitive processes develop from experiences which are made in the full social, cultural and historical context and that language is then the tool which individuals use in order to relate to their environment (cf. Gass & Selinker 2008: 280-285).

Connecting this approach to CLIL, the classroom environment becomes important. Every classroom setting is a form of social context which consists of the students, the teachers, the regulations and laws etc. Therefore, the classroom forms an essential part of the learning environment in all school contexts, and CLIL is one such context.

3.2. Classroom discourse

Apart from assumptions from second language acquisition, learning as social practices in the form of classroom discourse is also a pillar of CLIL. Having a closer look at what this implies, it must be explained what discourse is. Johnstone (2002: 2) defines the concept of 'discourse' as the "actual instances of communication in the medium of language". Discourse analysts have a closer look at the knowledge about language which a speaker activates when operating in the world (e.g. asking questions, obtaining information, expressing emotions etc.). This knowledge is based on what a speaker has experienced by either acting or observing, and still remembers. Johnstone (2002: 3) summarises that discourse thus acts on both levels – it is the source of this knowledge as well as its development. What discourse analysis examines is

hence how language functions and how it is structured in use, looking at participants, settings and processes (cf. Johnstone 2002: 4). In contrast to morphological or syntactic analyses of language, which disassemble connected text in order to explore the micro-details, discourse analysis investigates bigger chunks of language, such as paragraphs, entire conversations or speeches. Meaning very much depends not only on the choice of words and how they are arranged in a sentence, but also how theses chunks of information are put in order. Johnstone (2002: 5) explains that "[d]iscourse analysis sheds light on how speakers indicate their semantic intentions and how hearers interpret what they hear, and on the cognitive abilities that underlie human symbol use". In sum, discourse analysis tries to find out why a certain speech act is uttered the way it is and which social constructions underlie (e.g. what power-relations) (cf. Johnstone 2002: 1-28).

Relating this understanding to Content and Language Integrated learning, Gajo (2007: 568) reasons that for integration to develop in CLIL, the teacher must pay special attention to the linguistic components in subject contents and must be aware of the importance of discourse in acquisition. He suggests that the link between the foreign language and the non-linguistic subject is discourse. Discourse is shaped by the subject matter, as well as by the linguistic ground. Gajo (2007: 568) calls "mediation" the stage in which content knowledge is turned into discourse; and "re-mediation" the process by which linguistic paradigms are linked to discourse.

Finally, Walsh (2006: 3), a main representative in the field of classroom discourse analysis, defines particular "communication patterns" for the language classroom which are substantially different from pure content-driven lessons. According to him, "the linguistic forms used are often simultaneously the aim of a lesson and the means of achieving those aims" (Walsh 2006: 3). In the CLIL classroom this means that speaking itself is learning, which implies that students are learning as they communicate during the lesson. Interaction is the key to successful language acquisition and students must actively use communication patterns in the classroom in order for learning to happen (cf. Walsh 2006 16-38).

3.3. Teaching concepts

The third pillar of CLIL identified in this MA thesis is based on three language teaching concepts. As has been outlined, there is a political and an educational dimension to CLIL and the latter is of particular importance here since the interest of the present MA thesis lies in educational linguistics. Various assumptions about how best to teach foreign languages were developed long before the concept of CLIL even emerged and some of them had and still

have an influence on the teaching concept. These are Content-based language instruction, bilingual teaching and learning and communicative language teaching.

3.3.1. Content-based language instruction

Researchers nowadays agree that in order to learn a language successfully, it must be contextualised. In other words, learning vocabulary items and grammar rules in isolation is not as effective as learning chunks and phrases in specific thematic contexts. In order for this to happen, experts like Brinton et al. (2011: 1) believe that authentic material is one of the key aspects. Coyle et al. (2010: 11) agree and clarify that by 'authentic' they mean subject matter and teaching material which is close to real-life situations and which helps acquiring the foreign language in a more naturalistic way. Brinton et al. (2011: 2) have devised a definition of content-based language instruction which states that it is a combination of teaching a language and teaching a certain content. For them, the aim of this teaching concept is to "eliminat[e] the artificial separation between language instruction and subject matter classes" (Brinton et al. 2011: 2), which is distinctive of most traditional educational environments. Dalton-Puffer and Smit (2007: 9) see the implication of CLIL in "that language and content integration represents more of an actual communicative event, or a more 'authentic' communicative event, as it is often called, than language teaching per se".

In the content-based language classroom, the activities are adapted to the specific subject matter taught and aim at motivating students to reflect and learn in the target language. Naturally, it is most commonly assumed that the learner group is homogenous, which is not the case in all schools across Austria, but holds true for the particular vocational secondary school under examination. According to Brinton et al. (2011), the content-based method naturally leads to the integrative teaching of all language skills. Certainly, the approach requires that course design and curricula are slightly adapted or even altered completely, and must contain indications of how to integrate the content with the language aims. Another challenge concerns the teachers who, unlike in the foreign language classroom, must let the content dictate which language items are taught and when (cf. Brinton, et al. 2011: 2). But not only are the instructors challenged in this type of teaching; also the learners receive more responsibility. This responsibility results firstly from the fact that content-based language instruction very intensely focuses on the learner needs. In the case of Austria, the teaching prepares students for professional situations which they are likely to encounter in their lives and focuses on language aspects which they will most probably need. Secondly, as is also pointed out in the section on motivation, students learn more effectively when they perceive the content as relevant and thirdly, content-based teaching is based on what the students have

previously experienced and learned (concerning both the subject matter and the second language knowledge) (cf. Brinton et al. 2011: 3). As a quarter cause for students' increased responsibility in content-based instruction Brinton et al. (2011: 3) name the "focus on contextualized *use* rather than on fragmented examples of correct sentence-level *usage*" [original emphasis]. They underline that through this, the learners will get a feeling for the discourse level, the social components of verbal interaction and naturally for grammar rules.

Another advantage of the content-based approach seems to be that it is effective in teaching all age groups. Brinton et al. (2011: 9) further suggest that this kind of instruction is especially appropriate for learners who have specific practical language aims. In their opinion, the key to success in this approach is clearly "rich second language input in relevant contexts [...] where the attention of the learner is focused mostly on the meaning rather than on the language" (Brinton et al. 2011: 9).

Finally, as is mostly the case in educational environments, practice of content-based teaching is ahead of its research. Therefore, attention still lies on the development of teaching material and curricula instead of efficacy documentations. However, existing research suggests that the approach achieves good language development and high academic proficiency while inspiring students with interesting and relevant subjects. Brinton et al. (2011: 215) have even found "limited but promising evidence that content-based instruction enhances both language and concept development and promotes positive attitudes". To sum up, while some research has been undertaken, there is still a need for more empirical data as well as practical and theoretical work on the content-based approach. It is on its way and gains popularity, but up until now one cannot make definite assumptions about its effectiveness in educational settings (cf. Brinton et al. 2011: 213-218).

3.3.2. Bilingual teaching and learning

Abendroth-Timmer (2007) asserts that fully bilingual education is one of the most widely discussed and promoted educational concepts in the media, schools and research nowadays. In Austria, the term EAA (Englisch als Arbeitssprache), which translates to 'English as medium of instruction', emerged and it is used as a synonym for bilingual teaching in this paper. It must be noted here that originally EAA was the name used for the teaching concept of what is now CLIL (cf. Dalton-Puffer et al. 2011: 196). The purpose of bilingual teaching is that students use a second language in their subject classes so that they are well-trained for the challenges of their future international working lives (cf. Abendroth-Timmer 2007). Additionally to that aspect, Abendroth-Timmer (2007: 20) clarifies that the aim is to promote

joint learning of students with different origins and mother tongues and to enhance the willingness to communicate amongst each other. By speaking more than one language in the classroom setting, a cultural opening can be achieved, which may lead to a better understanding of the subject matter. As Abendroth-Timmer (2007: 81) underlines, "Bilingualer Unterricht kann durch seine Mehrperspektivität ein Ort der Reflexion von sprachlichem Handeln in gesellschaftlichen und wissenschaftlichen Diskursen sein". It enhances "language awareness" in that it gives students the chance to discover the structure of their mother tongue and "cultural awareness" (Abendroth-Timmer 2007: 98) in that it serves as a means to discover different cultural perceptions and thus enhances transcultural learning. Another important implication of the bilingual approach is that it enhances reflection about the learning process as such, which in turn is a significant factor for motivation. By leading the students to analyse the language structures when reading a scientific text in a foreign language, the consciousness about the learning process can be enhanced (cf. Abendroth-Timmer 2007: 100-105).

It must be noted here that even though 'bilingual' in its basic concept means the use of two languages – the country's native language and an additional foreign language – the ideal outcome of bilingual classes is a maximum boost of language competence in the L2, which may be achieved with the so-called "Immersion" (Abendroth-Timmer 2007: 71). Abendroth-Timmer explains "immersion" as a form of teaching in which almost exclusively the second language is used and in which the teacher does not explain or translate every single step (cf. Abendroth-Timmer 2007: 71-72). However, in reality, bilingual modules employ both languages and try to help students to develop linguistic and subject competence in both languages. The aim is for the students to develop a double conceptualisation which also includes the L1 in the teaching. This implies that ideally, the learning materials in the L1 and in the foreign language alternate in accordance to the content. (cf. Abendroth-Timmer 2007: 105).

A crucial factor to consider in that respect is that a specific subject matter is not only characterised by specific vocabulary items, but also by certain forms of discourse. The ability to communicate successfully includes more than understanding texts about the subject matter and being able to translate relevant vocabulary into a second language (cf. Abendroth-Timmer 2007: 93-98). Therefore, Abendroth-Timmer (2007: 96) states that "[d]ie Schülerinnen und Schüler müssen nicht allein Konzepte entwickeln, sondern darüber hinaus Versprachlichungsstrategien erlernen". As a result, when bilingual learning finally happens

successfully, it promises students more "Autonomie in der sprachlichen Handlungskompetenz" (Abendroth-Timmer 2007: 95).

3.3.3. Communicative language teaching

When discussing recent teaching concepts, of course communicative language teaching must not be missing. Littlewood (1981: 1) sees one of the most distinctive features of communicative language teaching (CLT) in that it focuses on both language levels – the functional as well as the structural – and combines them in a communicative way. The structural aspect of a language is concerned with grammar and its rules, while the functional view is not so clear-set and depends on the situation and the social environment. Various experts, like Littlewood (1981) or Hedge (2000), engaged with the relationship between linguistic form and function and it is stated that "as a single linguistic form can express a number of functions, so also can a single communicative function be expressed by a number of linguistic forms" (Littlewood 1981: 2).

The goal of this teaching approach is clearly communicative competence which can only be achieved through meaningful communication in the foreign language. A speaker's communicative ability is characterised by the following (cf. Littlewood 1981: 6):

- 1. A high level of linguistic competence which permits a spontaneous and flexible language use. This is what Hymes (1998: 14) calls knowing "whether or not something is formally *possible*" [original emphasis], which builds on grammatical correctness in a language.
- 2. The ability to differentiate between linguistic form and communicative function. This means that items which can be uttered in a linguistically correct way must also be known to have a specific communicative function. Hymes (1998: 14) summarises this ability under the term "feasibility" and explains that in order for communication to make sense, a sentence does not only have to be grammatically correct, but also feasible.
- 3. The knowledge of the social dimensions of language forms, such as politeness. This is what Hymes (1998: 14) calls "appropriateness and acceptability". For example, a sentence can be grammatically correct, feasible, but inappropriate.
- 4. The skills and strategies which allow a speaker to express what they want to say effectively in concrete situations. Hymes (1998: 14) calls this dimension "accepted

usage". According to him, this is a question of whether an expression does in fact occur. A sentence may be possible, feasible, appropriate and not occur.

Communicative language teaching is based on the principles "whole-task practice", "motivation", "natural learning" (Littlewood 1981: 17) and a positive learning environment. Whole-task practice does not separate each individual skill involved in an activity, but represents "practice in the *total skill*" [original emphasis] (Littlewood 1981: 17) and 'natural learning' denotes the natural process of language learning which happens when the learner actively communicates. Furthermore, communicative language teaching provides space for positive networking amongst learners and teachers and these inter-personal interactions help to create a positive learning environment which supports the learners.

As far as the form-meaning dichotomy is concerned, Littlewood (1981: 89) states that the goal of communicative language teaching is to provide the learners with a broad range of communication situations in which they focus on meaning rather than on form, because focusing on form can sometimes hinder speech. Very important in this respect is feedback. Feedback helps the learners discover where their strengths and weaknesses lie and which parts of their language performance they must change.

3.4. So what is CLIL?

Having looked at the scientific branches which influenced the development of the concept, let us now turn to CLIL itself. Content and Language Integrated Learning (CLIL) developed in the 90ies when it first acted merely as a neutral and handy term to ease communication between international specialists and is now an umbrella term for educational practices as well as for "an even wider array of terms tied to specific lingua-cultural, national, educational and disciplinary traditions" (Dalton-Puffer et al. 2010: 3).

As a first consideration, what makes Content and Language Integrated Learning as an educational concept different from approaches like content-based language learning or fully bilingual teaching and learning? First of all, CLIL is a form of partially bilingual education. This means that an L2 is used in selected subjects and only to a limited extent, in contrast to fully bilingual classes. According to Coyle et al. (2010: 6), the difference "is the planned pedagogic integration of contextualized content, cognition, communication and culture into teaching and learning practice". Dalton-Puffer et al. (2010) add to that the distinction between second and foreign language. While content-based instruction and immersion education involve a second language as vehicular, Content and Language Integrated Learning employs a foreign language. This means that CLIL students will mostly encounter the CLIL vehicular

language at school and not in society in their everyday lives, and that teachers are most likely non-native speakers of the vehicular language (cf. Dalton-Puffer et al. 2010: 1). In a more recent publication Dalton-Puffer et al. (2014: 215) add that CLIL teachers are trained in subjects other than foreign languages and that CLIL lessons count as content lessons, which is where a clear-cut boundary to content-based instruction (CBI) is found.

Despite numerous attempts to define CLIL, Cenoz et al. (2013) criticise that there is no clear definition of the concept. It lacks specifications concerning the allocation of teaching time dedicated to content on the one hand and to language on the other, and its learning environments are so diverse "that it is difficult to think of any teaching or learning activity in which an L2/foreign language would be used that could not be considered CLIL" (Cenoz et al. 2013: 246). CLIL as an innovative and new teaching approach has become popular amongst researchers, teachers and politicians, but according to Cenoz et al. (2013: 247), there is no clear-cut proof that it is different from content-based instruction or immersion and they thus claim that it is not a distinct concept. Dalton-Puffer et al. (2014: 214) agree that boundaries between CLIL and immersion education are blurry, but they submit that a term develops within historical and social contexts and that CLIL emerged as a value-free concept that promoted multilingualism and innovations in teaching in Europe in 1990, while immersion education was introduced thirty years earlier in Canada under different circumstances. Furthermore, the research in CLIL "has added new foci and carved a new research agenda in ways that have not been equally prominent in work on immersion" (Dalton-Puffer et al. 2014: 215). From this debate it can be seen how difficult it is to define a new teaching concept and how important it is to consider historical, social, educational as well as linguistic influences within.

But not all boundaries between CLIL and other existing concepts have been drawn in the present thesis yet. There is still the question about what sets CLIL apart from the EFL (English as a Foreign Language) classroom. Lorenzo and Moore (2010: 24) see the difference in the way the learners are treated – while in the traditional EFL class they are seen as inferior beginners, they are perceived to be the able users in the CLIL classroom. Another opinion, stated by Dalton-Puffer and Smit (2007: 8), is that the subject matter in the CLIL context makes foreign language learning purposeful. They argue that there is more meaningfulness in language learning in the CLIL classroom than in the traditional EFL classroom, because the subject content naturally forms a part of teaching. Thirdly and lastly, Vollmer (2010: 35) perceives the difference between CLIL and FLE in that

it has to do with securing and constantly widening the linguistic basis for appropriate subject-specific conceptualisations and efficient subject-specific communication, including semantic networking, logical structuring of texts, use of cohesive devices, of conventionalised registers and of formal style.

As has been shown, CLIL is often praised as the teaching wherein the target language is more authentically used than in the English as a Foreign Language (EFL) lessons. But English is not the only language used in the CLIL classroom. Dalton-Puffer (2005: 1291) emphasises the importance of the L1 culture and its languages, which is why the CLIL classroom relies more on the conception of English as a Lingua Franca than the regular EFL classroom.

In education, the concept of Content and Language Integrated Learning (CLIL) became popular around 1990 and is described as "the various educational methods by which non-language subject matters is [sic] taught through a second, foreign or other additional language" (Marsh et al. 2001: 6). The teaching concept CLIL is dual-focused, which means that both language and content are part of it, even though the emphasis may be at times on one of the two. There are diverse understandings of Content and Language Integrated Learning and Marsh et al. (2001: 13) for example say that CLIL gives the students the chance to develop a connection between knowing about a certain content and developing language skills which allow real life communication. Mehisto et al. (2008:11) as well as Gajo (2007: 564) furthermore emphasise the notion of "integration": on the one hand, content subjects include sequences of language acquisition, and on the other, content from subject classes is incorporated into language learning. They summarise that "[t]hus, in CLIL, content goals are supported by language goals" (Mehisto et al. 2008: 11) and vice-versa. However, Coyle et al. (2010: 1) found out that in practice "CLIL is [generally] content-driven" in European contexts and does not put equal focus on language.

As a last general remark, the first L in CLIL does not necessarily mean English as the language of instruction, but in practice this is most commonly the case. As will be elaborated in more detail later, in Austrian upper secondary technical colleges no instances of CLIL using any different language from English or German has been reported.

3.5. The theoretical concept behind CLIL

Having discussed the approaches which led to the emergence of CLIL and having mentioned some basic features, let us now turn to what CLIL comprises. As has been outlined, CLIL is a dual concept which involves content as well as language learning. Mehisto et al. (2008) even insist on a third part which forms CLIL – learning skills, and Coyle (2007) takes up all three

elements and adds culture. In order to understand the synergy of them, each part is examined separately.

3.5.1. Content learning

The question of content in CLIL is far more complex than it may seem. Coyle et al. (2010) claim that it is not simply choosing a random subject from the school curriculum and teaching it in a foreign language. Even if in some CLIL programmes only certain subjects are chosen for CLIL, there are contextual variables of the learning institutions which determine the content. In other words, factors such as the teaching staff, language assistants, students' age etc. are decisive in what is appropriate for the content in CLIL. Content points can be taken from the national curriculum of one subject or be interdisciplinary, connecting two or more subjects. Theoretically, it must be decided at any given point in time where to put the emphasis – on the content or on the language – but it must never omit one of the two entirely (cf. Coyle et al. 2010: 27-28). Dalton-Puffer et al. (2010: 2) however, are convinced that in "CLIL programmes in Europe [...] [i]t is the curriculum of the content-subject that is delivered in the foreign language while language goals may be high but remain implicit". What can be discerned from these observations is that there seems to be tension between the pedagogical aims and the socio-cultural teaching realities.

As far as the successful learning of the content is concerned, Coyle et al. (2010: 29) state that "students must be cognitively engaged". In order for the students to be in such a state, the teachers must provide tasks which actively involve them and create opportunities for thinking and reflecting on their own learning. It has been proven in several studies that people must be challenged with activities so that they can find appropriate solutions, broaden their horizons and acquire new knowledge (cf. Coyle et al. 2010: 27-32).

Students and teachers involved with CLIL sometimes classify certain content as being too difficult to be taught in a foreign language, since understanding it in the mother tongue is already a challenge. Mehisto et al. (2008: 20) disagree and state that "[f]ar from interfering with content acquisition, CLIL can actually facilitate it". According to them, academic results in various subjects have shown that students taught in CLIL were equal or even better than students taught in their L1, especially also when it came to reading, writing and listening skills in the L1. This is apparently due to the meta-linguistic awareness which students develop in bilingual education. However, I share some teachers' and students' opinion, that one must be careful which content is addressed, because if the subject is complex and very difficult in itself, the results will probably not be better; equal at best. This would maybe be

different if more dedication and time was given to bilingualism. There are without doubt time constraints and guidelines concerning the subject material in school settings, but simply translating a worksheet written in a foreign language into the students' mother tongue is not the ideal CLIL teaching either.

Finally, one positive aspect still needs to be mentioned. There is a possibility that some students are more motivated to learn content when it is presented in a foreign language. These students "like the hands-on and participatory nature of the CLIL classroom, finding learning through CLIL to be fun and challenging" (Mehisto et al. 2008: 21) and whether they exist in Austrian upper secondary technical colleges will be one topic of investigation in the following survey.

3.5.2. Language learning

As Coyle et al. (2010: 35) emphasise, "using language to learn is as important as learning to use language". Thus, let us now turn to the part of language learning in CLIL.

CLIL promotes a communicative approach to language learning in which the focus lies on meaning rather than on form. As is stated by many CLIL teachers, they correct only few grammatical mistakes their students make or none at all, but rather promote successful communication and prioritise lexis over grammar items (cf. Chapter 4. The field study). All in all, the CLIL approach promotes communicative skills which are practically employable in authentic interactive situations. Coyle et al. (2010: 33) make it clear that "[s]tudents have to be able to use the vehicular language to learn content *other* than grammatical form" [original emphasis]. However, some researchers have warned about neglecting the form, which can lead to an insufficient development of the language amongst the learners. It is therefore suggested to initially define whether a CLIL lesson is going to be content-, or language-emphasised and, if the latter is the case, deliberately draw students' attention to difficult forms of language (cf. Coyle et al. 2010).

Lorenzo and Moore (2010: 31) could confirm in their study that CLIL students lacked linguistic accuracy and writing style, but that "the learners display[ed] an impressive flexibility in responding to the communicative needs of the task". Thus, they suggest a form of language teaching in the CLIL classroom which does not focus either on grammar or on lexis, but on semantics.

One of the challenges in the CLIL teaching is that the cognitive and linguistic levels of a student may not be equal. To put it simply, a student might be able to grasp a particular aspect of content, but might not be able to understand or explain it in a language other than the

mother tongue. Gierlinger et al. (2007: 81) call this dilemma "semantische [...] Dissonanz in EAA [Englisch als Arbeitssprache]". Coyle at al. (2010) reason further that the grammatical progression in a CLIL class, for example, may differ from what would be expected in an EFL class, since the student may need certain grammar knowledge in order to understand and be able to talk about a specific topic. It is thus the teacher's responsibility to decide on the content- as well as on the language objectives and appropriately structure the CLIL lesson. Addressing this challenge, Coyle et al. (2010: 36) have designed the "Language Triptych" which consists of three essential vehicular language parts "language of learning, language for learning and language through learning" [original emphasis]. This model can help as a guide towards linguistic progression, in other words to language learning and use. According to Coyle et al. (2010: 36), their model of the triptych helps to show the different levels of linguistic challenges and thus allows the teachers to analyse their students' needs.

1. Language of learning

'Language of learning' is the language which learners need in order to be able to understand a particular aspect of a topic. Recent genre analysis focuses on exactly this question – which language must somebody know in order to understand a particular science branch? This implies that the teacher might have to shift the focus from a grammatical difficulty to a notional and functional aspect of language, depending on the context. What Coyle et al. (2010: 37) correctly see is that "[f]or the subject teacher it requires greater explicit awareness of the linguistic demands of the subject or content to take account of literacy and oracy in the vehicular language".

2. Language for learning

The second concept, 'language for learning', is the language which learners need in order to be able to come to be active in the environment of a foreign language. In order to learn to use a language, they need to develop learning strategies which the teachers should enhance. Such strategies are based on skills which are developed in pair or group work, reflection stages, solution finding processes etc. Furthermore, there needs to be a repertoire of certain speech acts, like enquiring, summarising and concluding, so that the learner can work with the content effectively (cf. Coyle et al. 2010: 32-38).

3. Language through learning

Finally, 'language through learning' is the language which is used in order to reproduce effectively learned content. In other words, the perception is that successful

learning involves language and that by explaining content to a peer students can truly deepen their understanding. Since there is new meaning which is acquired in the CLIL classroom, there is also new language which is needed. However, this need emerges during the process and cannot always be predicted by the teacher in advance, which is why teachers need to be flexible and "find ways of grasping emerging language *in situ*" [original emphasis] (Coyle et al. 2010: 38). Moreover, the concept shows that language acquisition is an un-linear progression which does not emerge from a step-by-step grammar learning.

Vollmer (2010) submits that language learning in CLIL situations does not happen by itself, which is to say without any additional effort. Simply conducting a subject lesson in English will not necessarily help the students achieve linguistic proficiency; there is more to it. Vollmer (2010: 34-35) states that the learning of a language must be structured, planned and continually repeated and "is not just a goal in itself, but it is most instrumental for content learning".

Despite all the research which proves that language learning is an essential part in CLIL and all the recommendations about how to integrate conscious language learning in the CLIL lessons, evidence has shown that it still comes secondary. Vollmer (2010) concludes that this might be the reason for the worrying lack of discourse competence amongst learners.

3.5.3. Learning skills and Culture

The third branch of Content and Language Integrated Learning involves the development of learning skills. As has been mentioned, it is important to develop learning skills in order to reach content and language goals. Mehisto et al. (2008: 11) call content, language and learning skills the "CLIL triad".

Moreover, in Coyle's (2007: 549-550) "4Cs Conceptual Framework" a holistic perspective is adopted, which does not consider language and content as two distinct parts but rather sets "content in the 'knowledge for learning' domain (integrating content and cognition) and language, a culture-bound phenomenon, as a medium for learning (integrating communication and intercultural understanding)". She assumes in her 4Cs Framework that effective CLIL happens when the students develop deeper knowledge and understanding through being cognitively involved, interacting in communicative tasks, generating knowledge about language and getting a refined view on cultural awareness.

Her framework emphasises the effects which the subject matter, language, cognition and culture have on each other when they interact, and prioritises the notion of intercultural

experience. It is built on the assumption that learning content is not only acquiring knowledge and skills, but that the learners construct their own body of knowledge and skills which they perceive as relevant. There are studies by Wiesemes (2007) and Ziegelwagner (2007) which clearly show that CLIL is extremely valuable for intercultural learning. Ziegelwagner (2007) conducted her survey amongst Austrian History teachers who used English in their lessons and found out that the teachers perceived CLIL as a helping tool in juxtaposing different viewpoints on certain historical happenings, which certainly enhanced interculturality. Still, Coyle (2007) and also Vollmer (2010) admit that there has been little research on the influence culture has on CLIL, despite the fact that it is probably one of the most influential domains.

3.6. The political dimension

CLIL, "FAUA" – Fremdsprache als Unterrichts- und Arbeitssprache - (Kazianka & Steinhäusler 1999: 97), or 'Englisch als Arbeitssprache (EAA)' in Austria, are not only teaching concepts, but clearly some "form of extended language policy" (Hüttner et al. 2013: 267). Content and Language Integrated Learning "now features in mainstream schooling at all levels and in most countries and enjoys the explicit support of European Commission policymakers and of many national educational authorities" (Hüttner 2014: 138). The word which must be highlighted here is 'mainstream' which is the reason why CLIL is different from other bilingual education practices that almost exclusively concern private and elite schools (cf. Dalton-Puffer et al. 2010: 3).

Coyle (2007) speaks of a great diversity of CLIL models in Europe, which is to her potential and weakness at the same time. The advantage of CLIL is that it succeeds in connecting both language and content learning in so many different and dynamic educational environments; but the danger of this flexibility may be that it is interpreted freely when there is no fixed framework with clear targets and guidelines. She argues that for CLIL to become a valued concept in official national curricula, it must be supported by substantial theoretical background and positive evidence of language ability and learning outcomes (cf. Coyle 2007: 545-546). Dalton-Puffer and Smit (2007) add that the realisations of CLIL in Europe are rather of a content-driven nature than language-focused. The explanation for this phenomenon is that CLIL implementation rarely implies the necessary adaptation of the national curricula; it merely means a change of the language of instruction in certain content classes (cf. Dalton-Puffer & Smit 2007: 12).

CLIL policy in Europe has two sources – top-down processes on the one hand, and bottom-up initiatives on the other. The European Commission (2008) states their desire for all EU citizens to speak at least two foreign languages in addition to their L1 and declares CLIL as a concept which should enhance this language learning goal. On the civic level, there are parents who support bilingual education out of the desire to provide their children with the best possible education, and teachers who voluntarily take the challenge of teaching their subjects in English (cf. Hüttner et al. 2013: 270-272). Such bottom-up initiatives are most commonly the main driving force for CLIL practices, at least in Austria.

Dalton-Puffer et al. (2008: 166) state that one of the most impressive advantages of CLIL is its cost-efficiency (not costing more than regular classes while delivering good learning results) and they consequently plead for the ministries of education to get actively involved in formulating guidelines and concepts in order to relieve the teachers. In the long run, they argue, laws could also help in catering for accountability and efficiency of the program. The formula for successful CLIL teaching they designed involves (cf. Dalton-Puffer et al. 2008: 207)

- Engagement,
- Structure, and
- Support.

3.7. CLIL practice in Austria

In Austria, CLIL practices have started in the 1990ies, first in primary and general education schools, later also in vocational secondary schools. However, for a long time "there [has not been any] general recommended model for bilingual training at secondary level" (Kazianka & Steinhäusler 1999: 96) and there has been a lack of national guidelines in the Austrian curricula. Dalton-Puffer et al. (2008: 4) state that CLIL practices in Austria are diversified and that they emerged most commonly through local and personal initiatives. Following the so-called "Fremdsprachenoffensive" in 1990, the Schulunterrichtsgesetz (BGBl. – Ausgegeben am 30. Dezember 1996 – Nr. 767, 5133) § 16 Abs. 3 reads as follows:

Darüber hinaus kann die Schulbehörde erster Instanz [...] die Verwendung einer lebenden Fremdsprache als Unterrichtssprache (Arbeitssprache) anordnen, wenn dies [...] zur besseren Ausbildung in Fremdsprachen zweckmäßig erscheint und dadurch die allgemeine Zugänglichkeit der einzelnen Formen und Fachrichtungen der Schularten nicht beeinträchtigt wird. Diese Anordnung kann sich auch auf einzelne Klassen oder einzelne Unterrichtsgegenstände beziehen.

Since the school where the field study (cf. Chapter 4.) was conducted belongs to a special type of secondary technical college which is common only in Austria and in a similar form in Poland, it will briefly be explained here. The so-called HTL (Höhere technische Lehranstalt) has five levels and finishes with a general qualification for university entrance (Matura). Students start after eight years of primary and lower secondary education and are between 14 and 15 years old. After finishing this type of school, they may study at university or start working in the professional branch they chose (i.e. mechanical engineering, electrical engineering, information technology etc.). Since English is clearly the Lingua Franca of science and technology it becomes increasingly important for students in these fields to show not only a good command of technical content, but also of professional communication skills. Thus, a good mastery of the English language is now not only necessary on a basic interpersonal level, but also at the formal, professional stage. Therefore, the curriculum for upper secondary technical colleges in Austria (HTLs) was changed in 2011 and contains now, in addition to the general statements about the educational aims, the following specific regulations on CLIL (BGBl. II - Ausgegeben am 7. September 2011- Nr. 300, 3):

IId. Bestimmungen bezüglich integriertes Fremdsprachenlernen (Content and Language Integrated Learning - CLIL)

Als fremdsprachlicher Schwerpunkt sind in einzelnen Pflichtgegenständen (vorzugsweise in fachtheoretischen Pflichtgegenständen, aber auch in allgemein bildenden und fachpraktischen Pflichtgegenständen, ausgenommen jedoch die Pflichtgegenstände "Religion", "Deutsch" und "Englisch") ab dem III. Jahrgang mindestens 72 Unterrichtsstunden pro Jahrgang in Abstimmung mit dem Pflichtgegenstand Englisch in englischer Sprache zu unterrichten. Die Festlegung der Pflichtgegenstände und des Stundenausmaßes in den einzelnen Pflichtgegenständen und Jahrgängen hat durch schulautonome Lehrplanbestimmungen zu erfolgen. Unberührt bleibt die Möglichkeit der Anordnung von Englisch als Arbeitssprache gemäß § 16 Abs. 3 des Schulunterrichtsgesetzes.

In addition to this provision, the national curriculum for upper secondary technical colleges (HTLs) contains a brief definition of the concept of CLIL (BGBl. II - Ausgegeben am 7. September 2011- Nr. 300, 6):

Unter "Content and Language Integrated Learning (CLIL)" versteht man die Verwendung der Fremdsprache zur integrativen Vermittlung von Lehrinhalten und Sprachkompetenz außerhalb des Unterrichts im Pflichtgegenstand Englisch unter Einbindung von Elementen der Fremdsprachendidaktik. Wegen der Bedeutung der Fremdsprachenkompetenz für die berufliche Praxis sind Unterrichtssequenzen mit CLIL von großer Wichtigkeit. Die Vermittlung der Fremdsprachenkompetenz hat integrativ so zu erfolgen, dass sowohl im fachlichen als auch im sprachlichen Bereich die Schülerinnen und Schüler bei der Herausbildung von Wissen und Fähigkeiten einerseits, als auch sprachlicher

und kommunikativer Kompetenzen andererseits unterstützt werden und damit die Beschäftigungsfähigkeit der Schülerinnen und Schüler in einem globalisierten Arbeitsmarkt gestärkt wird.

Every school still has certain autonomy as far as foreign language education is concerned and therefore no general roadmap can be detected. In fact, every teacher in an Austrian secondary school may choose to introduce CLIL in their classes quite flexibly if only the headmaster approves (cf. Gierlinger 2007). Dalton-Puffer et al. (2008: 214) question the effectiveness of this flexible approach and suggest that CLIL teachers should aim at having a C1 language competence level, according to the CEFR (Common European Framework of Reference for Languages), but at least have a solid B2. In order to guarantee this, CLIL teachers would have to do an entrance exam, use modes of team-teaching and attend further workshops and seminars.

Given that CLIL is in a way "foreign language pedagogy at a national level" (Hüttner et al. 2013: 268), it is surprising how wide-spread and broadly accepted it is in Austria nevertheless. It is Hüttner et al.'s (2013) opinion that in contrast to other educational innovations, the concept of CLIL has found acceptance in the Austrian education system so quickly and easily – even amongst groups of students who are stereotypically not perceived as motivated language learners (e.g. students in technical vocational schools) – because it is heavily shaped by stakeholder beliefs. These beliefs, which build on an unstructured concept of CLIL rather than on a clear management plan, are the reason why CLIL is regarded as successful (cf. Hüttner et al. 2013: 267-268). Dalton-Puffer et al. (2010: 6) add that the widespread perception of CLIL as "efficient and effective language learning setting" also originates from the common dissatisfaction of regular EFL classes which are often associated with boring grammar drills.

There are two studies which were undertaken in Austrian HTLs and which will be discussed in more detail in the present MA thesis, because of their relevance for the research field. The first was carried out by Dalton-Puffer et al. (2008) and further analysed by Hüttner et al. (2013), and the other one is by Jexenflicker and Dalton-Puffer (2010) (cf. section 3.7.2.).

Amongst the findings was that CLIL was used in 65% of all locations and that approximately half of those were planning to further increase the amount of CLIL lessons. The languages used in bilingual teaching were exclusively German and English and 4/5 of the schools which did not employ CLIL said that they were planning to introduce it in the near future. Almost all schools used CLIL in content theoretical subjects (98%), 76% included it in general knowledge subjects and only 21% employed it in practical subjects (cf. Hüttner et al. 2013:

273). The theoretical specialist subjects where CLIL was most frequently used, were those of "Computer Science, Foundations of Data Processing, Electronics and Programming" (Hüttner et al. 2013: 273), while in mechanical engineering German dominated due to the topic's complexity. Concerning the amount of English used in these CLIL lessons, 30% of the interviewed teachers named a percentage of 50, whereas less than a quarter said that CLIL made of 100% of their lessons. According to interviews conducted amongst HTL pupils, classes in English were most commonly part of repetition phases (cf. Dalton-Puffer et al. 2008).

Concerning the teachers involved with CLIL, most of them are specialists in the content subject and do not have any language degree or language teaching formation on the tertiary level (cf. Hüttner et al. 2013: 273). Nevertheless, one of the EFL teachers interviewed in the study said that the role of the English language was raised with the introduction of the teaching concept, admitting that before, English had not been important in the context of HTLs (cf. Dalton-Puffer et al. 2008: 23).

As far as rules and guidelines about CLIL are concerned, the study shows that in all CLIL HTLs but one there were no official regulations. Rather, information and cooperation happened informally within the different departments, relying on the curriculum and national law as the only official documents. Additionally to that, there is no official reference guide stating the prerequisites a CLIL teacher must have. Becoming a CLIL teacher still needs two prerequisites: "self-selection" and engagement (Dalton-Puffer et al. 2008: 69). It is thus concluded that CLIL initiatives were "grass-roots" (Dalton-Puffer et al. 2008: 67) movements in the schools examined. This in turn means a lot of responsibility for the teachers, since they are the ones who are charged with the entire execution of CLIL.

3.7.1. Student perceptions

Having considered some findings about CLIL in Austrian upper secondary technical colleges, let us now turn to student perceptions about CLIL. Students stated that the English language did not make their subject classes more difficult, but comprehension, for example, was a notion to which they attributed more difficulty (cf. Dalton-Puffer et al. 2008). In order to overcome this and other obstacles, students agreed that good preparation before the lessons was needed (cf. Dalton-Puffer et al. 2008: 104-126). In terms of personal improvement in the foreign language, they added that oral competence and paraphrasing became easier after some time of CLIL instruction.

As far as the use of German during CLIL instruction was concerned, no clear picture could be drawn. The amount of L1 depended on the subject, the teacher and the complexity of the situation. Some students reported that German was used for difficult explanations, for administrative tasks and even when a new topic was introduced or in exam situations. In general, they said that the language they used also depended on the learning materials and on the language which the schoolbook predominantly employed (cf. Dalton-Puffer et al. 2008: 104-126). Bearing in mind the variety of forms which CLIL takes in European settings, this is not surprising. The multitude of degrees and forms of English language use in CLIL classes is an indicator of the missing institutional policies, laws and regulations.

A very interesting aspect which was promoted by all students was that they perceived grammatical and linguistic correctness as less important than successful communication in the CLIL classroom; it was more important for them to speak and lose their inhibitions than to employ perfectly correct English. In terms of error correction, students reported regular instances by the teachers, but also by their peers. Interestingly enough, the students said they were less intimidated to speak English since many of their CLIL teachers had an equal or even lower L2 competence. There was mutual correction and feedback, which represents a shift in the traditional teacher-student relationship (cf. Dalton-Puffer et al. 2008: 104-126). What teachers also stated is that CLIL improves presentation skills in English and oral fluency in the foreign language (monologic speaking) (cf. Dalton-Puffer et. Al 2008). Consequently, students lose their fear to speak in a foreign language and language use becomes more automatised. Maillat (2010: 50) explains the loss of fear with what he calls the "mask effect". He argues that hierarchical and social constraints, such as formality, politeness and register, are loosened in the CLIL environment, which leads to a reduction of the affective filter of anxiety. Additionally, CLIL enhances a disconnection of the speaker from the learner identity, hence the definition as 'mask'.

Finally, all students interviewed agreed that CLIL had significant advantages for them, especially in view of English being the international language of business and science. The most significant benefits from CLIL seemed to be a generally higher language competence and more security in speaking, vocabulary range and language ease. A minor part even mentioned that they appreciated CLIL as independent learning. In terms of motivation, however, only two students reported that having the lesson in English intrinsically motivated them to learn the subject matter. More said that CLIL motivated them extrinsically, because certain subjects being taught in English were more modern or appropriate (e.g. computer science). A third of the students were satisfied with the amount of CLIL they were exposed to,

while a clear majority would like to extend it to other subjects, preferably to those of technical nature. On the other hand, students named three main negative aspects about CLIL:

- 1. CLIL classes may have a bad reputation as being arrogant within the school,
- 2. additional workload,
- 3. the disadvantage of learning 'less content', because bilingual teaching takes up more time than teaching in the mother tongue (cf. Dalton-Puffer et al. 2008: 104-126).

3.7.2. Language competence

It seems obvious that exposure to the English language is increased when students have CLIL lessons in addition to their EFL lessons. Certainly, the focus in the content subject lies on thematic knowledge, nevertheless there is exposure to language which in turn enhances language learning (cf. Gimeno et al. 2010: 3174). Various studies have shown that teaching content subjects in an L2 fosters foreign language skills (cf. Lorenzo & Moore 2010, Dalton-Puffer 2005, Denman et al. 2013, Mewald 2007), but because they do not involve students from the particular Austrian school type mentioned, they will not be discussed in further detail in this MA thesis. Even though not all five domains of language competence are equally and consistently better amongst CLIL students, researchers assume a generally higher language level amongst CLIL students. This assumption is proven by the following findings. As far as the domain of dialogic speaking in oral communication is concerned, there is evidence of enhanced speaking skills and self-confidence boost in English (cf. Dalton-Puffer et al. 2008: 12).

The domain of writing was examined by Jexenflicker and Dalton-Puffer (2010) in upper secondary vocational schools in Austria and they found out that CLIL students showed higher language ability in general and also scored higher on the free writing task than their non-CLIL peers. CLIL students showed a wider range of connectives and did not only use basics, such as *and, but, because* which the non-CLIL groups almost tended to overuse. On a grammatical level, CLIL students significantly outperformed their non-CLIL colleagues, especially in the field of language accuracy. While all students showed a big variety of subordinate constructions, only the CLIL groups could use them correctly. This claim is supported in another study by Mewald (2007) in which secondary level CLIL students outperformed their peers in mainstream classes. Concerning vocabulary and expression, the CLIL students again showed better results than the non-CLIL groups. Problems, such as using words from the L1 in the English writing, spelling mistakes, the use of exclusively simple adjectives etc. only occurred in the non-CLIL groups. The CLIL students in contrast to this, obtained high scores

on range of vocabulary, used longer words and avoided the most frequent basic words. Generally speaking, "it seems that CLIL instruction affects those areas most which concern purely linguistic skills (i.e. grammar and vocabulary)" (Jexenflicker & Dalton-Puffer 2010: 181-182).

4. The field study

Having looked at the theoretical backgrounds in the fields of motivation and Content and Language Integrated Learning, the empirical research on student motivation will be presented in the following chapter. The field study was conducted in order to find out about motivation and attitudes towards the English language in CLIL environments of a particular Austrian upper secondary technical college.

4.1. Research questions

This field study seeks to investigate student motivation in CLIL; the fundamental question being whether CLIL enhances student motivation in terms of learning English and in terms of the content. As has been outlined, motivation is not a clear-cut concept that can be analysed in one specific way, which is why one mode of analysis must be adopted. Considering that some of the theoretical concepts on motivation were already tested in real-life studies and others not, it was decided to base this MA thesis on the former. Therefore, relating to the theory on motivation in chapter 2, 14 motivational categories were chosen for the survey (cf. section 4.3.3 Questionnaire items).

It was mentioned earlier in this MA thesis that the curriculum for upper secondary technical colleges in Austria was changed and includes a section on CLIL now. It therefore naturally suggested itself to take a sample of those students who were the first to be concerned as the main focus group (they are now in 4th grade, which means that they are between 17 and 18 years old) and compare their motivational parameters to students who are one grade below and to students who have had English instruction in subject classes from first grade on (they are referred to as EAA classes within the present MA thesis).

The following questions are addressed in the field study:

- 1. Do the scores in the 14 distinct motivational parameters differ between the three groups? If so, are the differences statistically significant?
- 2. If motivational parameters show differences amongst the groups, in what way is motivation different (i.e. which motivational categories seem to be decisive)?
- 3. What do the students like about CLIL?
- 4. What would the students like to improve about CLIL?

4.2. Aims of the study

High language learning motivation and content interest promise success in language acquisition as well as good subject knowledge. Even though the teaching focus in Austrian upper secondary technical colleges does not lie on languages per se, language skills are getting more and more important in view of English as a Global Language at the workplace.

The overall aim of the present survey is thus to investigate the current CLIL practice in an Austrian upper secondary technical college and to compare it to the longer existing concept of Englisch als Arbeitssprache (EAA). The purpose is to find out whether CLIL students' motivation and enthusiasm for the English language is as high as their peers' from the English track who have had English as the medium of instruction in almost all subjects from first grade onwards. Furthermore, it will be analysed whether there is a difference between what new CLIL students expect about the teaching and what one year more experienced students say. Lastly, I will have a look at whether English as the medium of instruction can enhance learner motivation in the content and at what the students personally like and do not like about CLIL.

4.3. Designing questionnaires: basic issues

According to Dörnyei and Taguchi (2010: 1-2), questionnaires are amongst the most widely used tools for research in the social sciences, such as second language acquisition and motivation. For my empirical research, I have chosen to use questionnaires, instead of one-to-one interviews, for the following reasons. First of all, as Dörnyei and Taguchi (2010: 6) point out, one of their biggest advantages is the convenience by which questionnaires can nowadays be designed and set up. Typing up the questions on the computer is fast, but what definitely needs time and dedication is formulating these questions in a way which will elicit valid and reliable data. Secondly, they provide a lot of information in a minimum of time when all students of a class fill them out during one lesson. And finally, the analysis of quantitative data can be supported with the help of a statistic software programme like SPSS. The questionnaires which I designed for this survey are so-called "[s]elf-administered pencil-and-paper questionnaires" (Dörnyei & Taguchi 2010: 3) which require the respondents to answer given questions by either ticking a box on a scale (close-ended questions), or by responding in their own words (open questions).

Despite all advantages mentioned, questionnaires also have some serious limitations which are mentioned here for reasons of completeness (cf. Dörnyei & Taguchi 2010: 6-9). First of all, the questions in a questionnaire must be formulated in a simple and straight-forward way in order to yield valid results. This is aggravated by the fact that respondents are usually not

willing to spend more than half an hour maximum on filling out a questionnaire, which in turn makes pencil-and-paper questionnaires unsuitable for in-depth research.

Furthermore, there is the danger of unreliability. Respondents may misinterpret questions, may not be motivated to work on a questionnaire in the first place (which is a crucial consideration in the school setting, since all students are obliged to attend) or may fail to notice certain aspects. All this can result in questionable reliability, which is something that can unfortunately never be eliminated.

Moreover, there is the possibility that people do not give the true answers about themselves, in other words respondents may give answers which they feel are desired or prestigious instead of the truth. This phenomenon is called "social desirability or prestige bias" [original emphasis] (Dörnyei & Taguchi 2010: 8) and is closely linked with a human's wish to make a good impression on others. A similar threat is "[s]elf-deception" (Dörnyei & Taguchi 2010: 8) which describes the phenomenon by which people do not only deceive others, but also themselves. To put it more simply, while respondents who answer according to the 'prestige bias' consciously know that they are not giving fully honest information, respondents who are influenced by 'self-deception' are not aware that the information they provide is objectively not true.

Another problem may be "acquiescence" (Dörnyei & Taguchi 2010: 9) which denotes people's tendency to agree with a statement when they are uncertain or ambivalent themselves. In case respondents are under such influence, the results from the survey will not be reliable. Furthermore, the "halo effect" (Dörnyei & Taguchi 2010: 9) must be considered. The 'halo effect' refers to people's tendency to overgeneralise when they feel especially positive or negative about something or somebody. In other words, when students for example like a teacher, they may call him or her excellent, even though not everything the teacher does or says can be perfect. This effect also works in the other direction, when people have an aversion against something or somebody and thus never recognise any positive characteristic. Finally, the "fatigue effect" (Dörnyei & Taguchi 2010: 9) may occur at the end of a (long) questionnaire and lead respondents to answer inaccurately due to boredom or fatigue. The problem with these phenomena is that due to the lack of personal contact between the researcher and the respondents, it is also not clear which questions may be taken seriously and are thus valid. The researcher gives out the questionnaires and evaluates them anonymously; there is no possibility to ask individual respondents for clarification or to check whether each respondent means well.

Being aware of the threats and disadvantages questionnaires have, it was nevertheless decided to conduct the quantitative analysis on this basis. In order to tackle the challenge of avoiding the above-cited phenomena which may render the results unreliable, efforts were made to construct the questionnaire as carefully and thoughtfully as possible, following guidelines by Dörnyei and Taguchi (2010), Dörnyei (2007), and Bortz and Döring (2002). As Dörnyei and Taguchi (2010: 11) state,

it is [...] an established fact that careful and creative questionnaire construction can result in an instrument that motivates people to give relatively truthful and thoughtful answers, which can then be processed in a scientifically sound manner.

4.3.1. Layout

In order to avoid the above-cited 'fatigue effect', the questionnaire must not exceed a number of four to six pages and must not take longer than 30 minutes to complete (cf. Dörnyei and Taguchi 2010: 12). In the school setting, the time limit must be adapted to the slowest students in a class, which means that probably 20 minutes are appropriate.

Dörnyei and Taguchi (2010: 13) insist on the importance of a well-designed layout in order to elicit usable data. Since the hard copy is the only link between the researcher and the respondents, it is of tremendous importance to make it attractive and usable. In order for a questionnaire to stand up to this challenge, they suggest a "booklet format" (Dörnyei & Taguchi 2010: 13), which is basically a sheet of A3 paper that is printed twice on both sides and then folded. Moreover, the questionnaire must not look crowded, which would demotivate respondents. Thirdly, they emphasise an "orderly layout that utilizes various typefaces and highlighting options" (Dörnyei & Taguchi 2010: 14). Another thought should be given to the paper quality and, as a last thing, to sequence marking. The marking of sequences is important to achieve a sense of structuredness, which does not only enhance respondents' perception of the researcher's integrity, but is also helpful for the subsequent analysis. Dörnyei and Taguchi (2010: 77) clarify that "when designing the questionnaire we should not only strive for a psychometrically reliable and valid instrument but also for an *intrinsically involving* one" [original emphasis], because a professional layout will convey the feeling of a serious investigation to the respondents.

4.3.2. Language

Bortz and Döring (2002: 254) claim that the language of the questionnaire should correspond to the respondents' every day language practices, which is German in our case. This is done in order to avoid literacy problems and Dörnyei and Taguchi (2010: 49) even believe that data quality increases if the language of the questionnaire is the respondents' mother tongue. Even

though German may not be the mother tongue of the entire student population, it is safe to assume a proficient degree of German with all HTL students.

In order to avoid the 'social desirability bias' discussed earlier, sensitive questions which concern "confidential personal information, undesirable social behavior, or information that might pose a potential threat to the respondent" [original emphasis] (Dörnyei & Taguchi 2010: 44) should not be asked at all, and in cross-cultural settings special attention must be given to how the questions are formulated. Even the field of motivation research in CLIL may contain sensitive topics, such as an evaluation of the teacher and the course, and therefore it is to be made clear to the students that what they write is not given to their teacher and will not influence their grade. Dörnyei and Taguchi (2010: 77) point out rightly that students are unlikely to give honest and maybe even critical information when they cannot be sure about the confidentiality of the questionnaire. Therefore, a few lines guaranteeing confidentiality were written on the front page of the questionnaire (see Appendix).

4.3.3. Questionnaire items

As Bortz and Döring (2002: 253-262) point out, the questions in written questionnaires should be closed and all possible answers given, because the analysis will become significantly easier. In addition, such questions are more objective which makes the entire survey more reliable. In order to still make the questionnaire varied and avoid that respondents feel bored, they suggest employing a range of different answer formats.

Since item wording is extremely difficult, it is advised to make use of so-called "multi-item scales" (Dörnyei & Taguchi 2010: 23) which split a target concept into different areas. Dörnyei and Taguchi (2010: 25) assert that "because of the fallibility of single items, [...] more than one item is needed to address each identified content area, all aimed at the same target but drawing upon slightly different aspects of it". They claim that a minimum of three to four items per content area is necessary. However, what is crucial to consider is that these items should not be right next to each other. Respondents should not have the feeling that they are responding to the same questions over and over again.

From the research question "Does CLIL enhance student motivation in terms of learning English and in terms of the content?" questionnaire items were defined. As has been mentioned, motivation is not a concept with only one definition and therefore there is not one single way in which it can be analysed either. Since questionnaires addressing certain theoretical concepts of motivation mentioned exist and were already tested, it was decided to base this MA thesis on these. In relation to the theory on motivation in chapter 2, the

following 14 motivational categories were chosen for the survey: Dörnyei and Taguchi's (2010: 139-148)

- 1. Ideal L2 self
- 2. Ought-to L2 self/Parental encouragement
- 3. Instrumentality/Promotion
- 4. Attitudes toward learning English
- 5. Travel orientation/Attitudes toward the L2 community
- 6. Interest in the English language
- 7. English anxiety and
- 8. Cultural interest,

Clément et al.'s (1994)

9. Attitude toward English as a Global Language and

Noels et al.'s (2000)

- 10. Introjected regulation
- 11. Identified Regulation and
- 12. Intrinsic Motivation (also found in Takahashi 2005).

Two more categories were added which had not been parameters in the questionnaires mentioned in the literature cited:

- 13. Content interest and
- 14. Regular English lessons.

The specific items for each of the 14 categories are listed in a table in the Appendix (cf. section 9.3.). In the left column, there are items which were designed by researchers and which were used and tested in previous questionnaires. In the right column, there are all items which were used in the questionnaire in the present MA thesis. These are either taken from existing questionnaires directly, that is to say the original wording is kept, or are modified and adapted or newly designed. Finally, for the actual questionnaire, the items were translated into German.

4.4. The sample

The "population" (Dörnyei & Taguchi 2010: 60) of this survey are students in an upper secondary technical college in Austria, aged between 16 and 18. Because not all Austrian students of this type of school can be questioned, I will take a "sample" (Dörnyei & Taguchi 2010: 60) of a total of 119 students. As far as the sample size is concerned, Dörnyei (2007: 99-100) asserts that 30 is enough for correlational research and this is also what is necessary to conduct a statistical analysis. Out of my total sample of 119, 35 belong to the main test

group – the fourth graders who are the first to be affected by the new CLIL regulation in the curriculum – 43 are from test group 2 – the third graders (who are about to begin CLIL) – and 41 students represent test group 3 – a third and a quarter grade of the English track (who have had EAA from the very first year). Dörnyei (2007: 96) underlines the importance of the sample being "similar to the target population in its most important general characteristics". He calls this notion "representativeness" (Dörnyei 2007: 96) and explains that it must be guaranteed in order to be able to draw significant, valuable conclusions about the target population. For my study, I will use a form of non-probability sampling which is called "convenience or opportunity sampling" (Dörnyei 2007: 98), which means that respondents are selected for convenience reasons but are still representative of the population.

An overview of the sample is given in Table 1 below. Each test group is discussed in greater detail in the chapters which follow.

Table 1: An overview of the three groups

Test group	Class	Number of students		Age
Test group 1 (main CLIL	4A	20	35	17-18
test group)	4B	15	32	17-18
Test group 2 (CLIL, one	3A	23 (3 pupils repeating the year)	43	16-17
level below)	3B	20 (4 pupils repeating the year)		16-17
Test group 3 (EAA,	3A	24	41	16-17
English track)	4A	17		17-18

4.4.1. The school

The upper secondary technical college (HTL) where the study was conducted is situated in an Austrian city of approximately 40.000 inhabitants. It is the only technical school of this type and level there and it is frequented by 25% locals and 75% by supra-regionals (cf. Dalton-Puffer et al. 2008: 10). There are more than 1.000 students and approximately 150 teachers.

The allocation of the obligatory 72 CLIL lessons is done by a committee within the school (Schulgemeinschaftsausschuss). In this particular HTL, it was decided to do 40 lessons in technical subject matters and 32 in general education subjects (except for German, English and Religious Education). Theoretically, every teacher has to contribute and conduct a certain amount of their lessons in English, but in practice it is a certain group of highly motivated teachers who cater for all obligatory lessons. While it must also be noted down in the class

register when a lesson is held in English, there is no safe control mechanism to check whether the required 72 hours are held.

4.4.2. 4th form CLIL

All CLIL classes questioned belong to the electronics branch (Elektronikzweig) and start CLIL lessons in the third grade, according to the new curriculum for Austrian HTLs. The main test group interviewed consists of the two forth forms – one class (4A) comprising 20 students and the second (4B) 15 students. The two fourth forms are the main reference group, because they are the first to have been affected by the new curriculum (in grade 3, they had 72 CLIL lessons). They will be asked about their first year of experience with CLIL and their opinion on the concept.

The questionnaire is conducted in a subject concerned with computer science – Digital and Computer Systems (DIC), which is the subject with most CLIL lessons, according to one of the DIC teachers. However, it must be noted that the classes are divided into two groups in this laboratory and that therefore the amount of CLIL taught is not equal. For reasons of time restriction, I cooperated only with one of the two DIC teachers. This teacher is particularly motivated to use English and states that in the third form 1/3 of his lessons are in English. He claims that the nature of the subject makes it easy to use authentic learning material in English and that schoolbooks in any language are rare in DIC, because technology changes so rapidly. All scripts he uses in the lessons are designed by himself and written in English. However, when he explains their content, he also uses German. This particular teacher sees using English as an enrichment of his work and is clearly very motivated to continue using English himself (he reads books in order to improve his language competence). As far as training is concerned, he reports instances where the English teachers coached the subject teachers in a form of in-service training (SCHILF - "Schulinterne Fortbildung"). Ten years ago, such a project was realised in the particular school examined and all teachers met once a week to help each other. Additionally, there are seminars at the pedagogical college (Pädagogische Hochschule) which focus on teaching methods, but not on English language competence enrichment.

He emphasises that the focus in his lessons lies on the technical competences rather than on language level, which is why a good or bad knowledge of English does not influence the grade in his subject. Here, he clearly sees a difference between the technical subjects and EFL. The focus in his CLIL lessons is on communication and subject-specific vocabulary and not so much on grammatical correctness. When he or his students are stuck, they ask their English teachers.

4.4.3. 3rd form CLIL

The two third forms interviewed – 3A and 3B – have a total of 43 students. These classes belong to test group 2 and serve as comparison classes. The purpose is to find out what CLIL beginners expect and whether that coincides with what the fourth forms state. All CLIL lesson characteristics mentioned in the preceding chapter apply here as well. The two third forms have the same teacher as the CLIL fourth forms and they are questioned in the same subject (DIC).

In the engineering branch in this HTL (Maschinenbauzweig), there are two classes per

4.4.4. EAA classes

academic year. One class each belongs to the English track and is thus an EAA class (Englisch als Arbeitssprache). According to the department head, the students in these EAA classes have at least 50% of all subjects in English, depending on the difficulty of the content. Language assistants cooperate with the EFL teachers, but do not come to the subject classes. He explains that certain subjects are too difficult to be taught in a foreign language, which is why mechanics, for example, has a percentage of over 50% German language use. However, when it comes to business subjects, students enjoy up to 100% English during the lessons. Especially when students engage in interdisciplinary projects where several subjects and teachers are involved, English is an important component. An effort is being made to designing more projects of such kind, because they enhance English language use, team building abilities and are relevant to the students' future jobs. However, these projects are not obligatory and thus their execution depends on the teachers' engagement.

In tests, English and German are equally used for the questions and the students may choose a language for their answers. In terms of the final exam (Matura), the oral part is done in English, while all written exams are held in German. Still, only the subject competence is graded; the language level does not influence the final grade in subjects other than EFL. Moreover, it is obligatory to write a mini thesis (Diplomarbeit) in English or German and many students take this opportunity and cooperate with international companies in America, Norway or India.

The mechanical engineering department head criticises that there is no official material in English from the ministry and that it is difficult to find something which matches with the Austrian official curriculum, because many books are published in Germany. Still, the material is often bilingual and students get the English and the German version of the same book. The department head reports that it is at the school's discretion to decide on the

percentage of English during lessons and to design and exchange learning materials between the teachers.

The two classes, 3A and 4A have a total of 41 students and belong to test group 3. The questionnaire is conducted within the mechanical construction – CAD – lessons (Konstruktionsübungen). The teacher of this subject reports that in the first two forms his teaching is predominantly in German, because he does not want to overwhelm or discourage the students. Especially in the first form, the differences in knowledge amongst the students are enormous and therefore the CAD teacher prefers to use less English and concentrate on the subject matter. However, in the higher classes, more than 90% of the general part of the lesson is in English, and the teacher introduces phrases and subject-specific vocabulary in English on a regular basis. Finally, the CAD teacher states that this HTL's focus lies clearly on the technical component, which makes English an additional bonus. He admits that there is a certain fear within the CLIL teachers to teach something 'wrong' and that complex questions concerning difficult topics cannot be discussed in a foreign language, because there is also time pressure.

4.5. Procedure

As a final consideration, before explaining how I conducted the data analysis, let us have a look at the procedure of the survey. One may think that it is easy to print out a few leaflets and have them distributed, but there is more to a successful survey conduction than that.

4.5.1. Piloting the survey

Before the real survey can be conducted, it is important to pilot it. This will help the researcher find out how much time the candidates will approximately need and which items and wordings are maybe difficult to understand. Thus, by the end of summer 2014, the questionnaire was sent to three former students of the particular upper secondary technical college in Austria for piloting. All three candidates had finished in June 2013, so they could safely be assumed to be representative for the CLIL population under examination. The participants needed between 10 and 13 minutes to fill out the questionnaire and sent me valuable feedback concerning wording and sentence structure, which I incorporated in the final version.

4.5.2. Group administration

The kind of survey which includes the researcher delivering and recollecting the questionnaires in person to and from the students in the classroom is called "group administration" (Dörnyei & Taguchi 2010: 68) and is more personal than an email or online

survey. The most important consideration for such a survey to be successful is to make the respondents feel that the survey is purposeful and professional and that what they write is taken seriously (cf. Dörnyei & Taguchi 2010: 73). In order to achieve this, the survey was announced a couple of days before it was conducted. This should set a positive mood for the administration and take away potential anxiety. Dörnyei and Taguchi (2010: 76) emphasise that "[t]he manner in which the questionnaire is presented can have a considerable impact on the participants' performance" and thus propose that the researcher herself conducts the survey in person.

The survey was done at the very beginning of October 2014, i.e. relatively at the beginning of a school year. The questionnaires were completed in class, during the respective CLIL lessons and I was present throughout the whole procedure. After presenting myself, the university and the survey, I explained the topic and the aims in more detail and clarified that all this was part of my final thesis. I told the students why they were selected and guaranteed confidentiality right from the beginning. In order to be sure that reliability was not diminished by any misunderstanding, I discussed what I meant with the concepts "CLIL" and "native speaker" and I explained how to answer the questions. The students were informed that they did not have to give their names, that there were no wrong answers and that their responses would not affect their grades. The time frame was announced (approximately 20 minutes) and the students were orally asked to mark their questionnaire with an X if they did not wish for it to be used for further research apart from my final thesis. At the end of the instruction phase I thanked the students for their help and after they had finished I gathered all papers and thanked them again.

4.6. Analysing the data

As has been outlined above, the major part of the questionnaire consists of closed questions (55 items) which can be analysed quantitatively with the help of statistical software, such as SPSS. There are 5 open-ended questions on the sheet which are analysed in a qualitative manner. The analysis of the data will therefore be divided into two parts – the first dealing with the quantitative data, the second treating the qualitative data.

The quantitative data is computer coded and analysed with SPSS (Statistical Package for the Social Sciences) 17.0. In order for this to be possible, variables are assigned to the questions and the answers get a numerical code. Concerning the statements, students tick a digit between 1 and 6 from a scale; 1 being "I strongly disagree" and 6 "I strongly agree".

After typing the data into the SPSS software, it is necessary to check whether the sample is normally distributed. In order to assess this, all normality plots must be examined. In this case, the data is abnormally distributed, which means that instead of the independent t-test, a nonparametric test with three independent samples must be used for the analysis. Such a test is the so-called Mann-Whitney test which investigates whether the populations from two samples have the same location². The Mann-Whitney test is in this survey used to compare the data according to the three test groups – CLIL fourth forms, CLIL third forms and third and fourth form of EAA (English track). The probability 'p' which indicates significance is set at p < 0.05. This means that when a statement has such a low probability, it is 95% certain that differences amongst the reference groups are not due to chance, but to common qualities within the groups. The same reasoning can be done from the opposite way – a probability $p \ge 0.05$ means that there is a 5% or even higher chance that something occurs by chance (i.e. the difference in opinion between two reference groups) (cf. Field 2013: 31-60). The significant results will be discussed in detail in the next chapter.

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² Information on statistical tests is obtained from Field. 2013.

Table 2: Results of mean comparison between students' motivation toward English; statistically significant items

	Item		4 th CLIL		3 rd CLIL		EAA	
		(N=35)		(N=43)		(N=41)		
		Mean†	SD	Mean†	SD	Mean†	SD	
2	Whenever I think of my future career, I imagine myself using English.	4.94	1.16	5.05	0.95	5.24	0.86	0.03
3	The CLIL lessons help me to develop more self-confidence when speaking English.	3.69	1.28	4.44	1.14	4.59	1.02	0.01
5	I think that the technical subjects should be taught in German exclusively, because the subject matter as such is already difficult to understand.	3.60	1.52	3.02	1.37	2.54	1.40	0.01
8	The regular English lessons motivate me to use English also in other subjects.	3.37	1.11	3.09	1.21	4.07	1.25	0.01
12	I like it that parts of the subject matter are taught in English.	3.63	1.37	4.28	0.98	5.29	0.93	0.00
13	I imagine myself as someone who is able to speak English.	3.80	1.45	4.12	1.14	4.93	0.96	0.00
14	My parents/family believe(s) that I must study English to be an educated person.	3.17	1.50	3.40	1.84	2.22	1.04	0.04
16	I am afraid that other English speakers consider my English to be ridiculous.	2.74	1.42	2.56	1.30	2.05	0.95	0.01
18	In the CLIL lessons I can use what I have learned in the regular English lessons.	4.34	1.51	4.74	1.16	4.83	1.16	0.00
20	I always look forward to the CLIL lessons.	2.57	1.14	3.63	1.25	3.93	1.10	0.00
21	I study English for the satisfaction I feel when I am in the process of	3.26	1.42	3.58	1.37	4.20	1.17	0.00
25	accomplishing difficult exercises in the second language.							
35	CLIL makes me feel more secure when speaking English.	3.60	1.19	4.40	1.20	4.49	1.14	0.02
36	The subject matter is more interesting when it is presented in English.	2.03	0.92	2.91	1.13	3.12	1.23	0.00
40	I am interested in the differences between the German and the English language.	3.03	1.67	3.02	1.32	3.98	1.49	0.02
41	1 I like learning English, because I enjoy speaking English.		1.56	4.14	1.30	4.88	1.08	0.01
42	2 The regular English lessons are a good basis for the CLIL lessons.		1.16	4.37	1.35	4.93	1.27	0.01
48	It will have a negative impact on my life if I don't learn English.	4.57	1.36	4.40	1.47	3.80	1.66	0.04
49	I get nervous and confused when I am speaking in my CLIL lessons.	2.71	1.53	2.44	1.35	1.88	1.14	0.02

5. Results

The results of the survey are presented in two parts – firstly, the statistically significant quantitative data is analysed and secondly, the qualitative data is discussed. The questions in items 28 - 34 turned out not useful for the analysis and are thus not further treated

5.1. Statistically significant differences

As explained above, statistically significant variables have a probability p < 0.05 and are more meaningful than results with a probability p > 0.05. In Table 2, all 18 statistically significant items are listed; to check means, standard deviation and significance for all 56 items, see Appendix, Table 21. It must be mentioned here that 38 items did not lead to any statistic significance. This means that in 38 statements, the three groups do not vary according to the group they belong. The statistically significant items are pooled according to the motivation parameter they belong to and then analysed. The motivation parameters in which statistically significant differences occur are 'The Ideal Self', 'The Ought-to L2 Self', 'Attitudes towards learning English', 'Interest in the English language', 'English anxiety', 'Intrinsic motivation', 'Content interest' and 'Regular English lessons'.

5.1.1. The Ideal Self

The first significant difference appears in item number 2, "Whenever I think of my future career, I imagine myself using English" (p = 0.03). A more detailed analysis shows that in the English track almost 50% strongly agree with this statement, while only approximately 37% of the CLIL classes share the same view (Table 3).

Table 3: Students' responses to Item No. 2, "Whenever I think of my future career, I imagine myself using English."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL *	0.0%	2.9%	8.6%	22.9%	25.7%	37.1%
3 rd CLIL **	0.0%	0.0%	2.3%	32.6%	25.6%	37.2%
EAA	0.0%	0.0%	2.4%	19.5%	29.3%	48.8%

^{* 2.9%} no answer

^{** 2.3%} no answer

Another statistically significant aspect can be discerned in item number 13, "I imagine myself as someone who is able to speak English" (p = 0.00). While approximately 70% (in total) agree and strongly agree in the Englisch als Arbeitssprache (EAA) classes, only ~40% do so in the CLIL classes of the third form, and a minority of ~30% (strongly) agrees in the CLIL classes of the fourth form (Table 4).

Table 4: Students' responses to Item No. 13, "I imagine myself as someone who is able to speak English."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	5.7%	11.4%	28.6%	22.9%	14.3%	17.1%
3rd CLIL	0.0%	4.7%	14.0%	39.5%	32.6%	9.3%
EAA *	0.0%	0.0%	9.8%	17.1%	46.3%	24.4%

^{* 2.4%} no answer

These two significant items belong to the category of the Ideal Self which comprises a total of three items. Since two out of these three show significant differences between the classes which have English as language of instruction throughout all five years and within the entire curriculum, and the classes which have obligatory CLIL lessons starting in the third form and to only a narrow extent, it can be concluded that the student motivation depends on the school branch. Students in the English track have a more positive attitude towards using English in their future professional careers and are also more confident about their language competence.

5.1.2. The Ought-to L2 Self

For students in EAA classes, parents' pressure does not seem to be a decisive factor in their reasons for studying English. There is a significant difference in item number 14, "My parents/family believe(s) that I must study English to be an educated person" (p = 0.04). 31.7% of them strongly disagree with the statement, whereas only 20% of the CLIL fourth forms and merely 18.6% of the CLIL third forms hold the same view (Table 5).

Table 5: Students' responses to Item No. 14, "My parents/family believe(s) that I must study English to be an educated person."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	20.0%	14.3%	20.0%	22.9%	20.0%	2.9%
3 rd CLIL *	18.6%	20.9%	16.3%	9.3%	20.9%	9.3%
EAA	31.7%	26.8%	29.3%	12.2%	0.0%	0.0%

^{* 4.7%} no answer

Likewise, in item number 48, "It will have a negative impact on my life if I don't learn English" (p = 0.04), there is a statistically significant difference which shows that substantially more of the CLIL students than EAA students agree strongly. More than a quarter, namely 28.6% and 25.6% of the two CLIL test groups strongly agree with the statement, while not even a fifth, precisely 19.5%, of the EAA students do so (Table 6).

Table 6: Students' responses to Item No. 48, "It will have a negative impact on my life if I don't learn English."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	5.7%	2.9%	5.7%	28.6%	28.6%	28.6%
3 rd CLIL	9.3%	0.0%	11.6%	25.6%	27.9%	25.6%
EAA	9.8%	17.1%	17.1%	14.6%	22.0%	19.5%

Both item 14 and 48 belong to the category Ought-to L2 Self which comprises a total of four statements. Since the two CLIL groups tend to feel greater parental pressure and believe more strongly that there will be negative consequences if they do not study English, it can be concluded that the Ought-to L2 Self is a more decisive motivational factor for them than for the EAA groups.

5.1.3. Attitudes towards learning English

A very interesting statistically significant difference can be found in item number 3, "The CLIL lessons help me to develop more self-confidence when speaking English" (p = 0.01). While 39.0% of the EAA students and 32.6% of the CLIL third forms agree, only 22.9% of the CLIL fourth form students share this view (Table 7).

Table 7: Students' responses to Item No. 3, "The CLIL lessons help me to develop more self-confidence when speaking English."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	5.7%	11.4%	25.7%	28.6%	22.9%	5.7%
3 rd CLIL	2.3%	0.0%	18.6%	27.9%	32.6%	18.6%
EAA	2.4%	0.0%	7.3%	34.1%	39.0%	17.1%

A similar phenomenon manifests itself in item number 20, "I always look forward to the CLIL lessons" (p = 0.00), but the statistical significance is even greater. 22.0% of the EAA students and 16.3% of the CLIL third forms agree, but a mere 2.9% of the CLIL fourth form students do the same. Analogously, 22.9% – in other words almost a quarter of all CLIL fourth form students – strongly disagree, while only 7.0% of the third forms and no single EAA student hold the same strong view (Table 8).

Table 8: Students' responses to Item No. 20, "I always look forward to the CLIL lessons."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	22.9%	22.9%	31.4%	20.0%	2.9%	0.0%
3 rd CLIL *	7.0%	7.0%	30.2%	34.9%	16.3%	2.3%
EAA	0.0%	12.2%	19.5%	39.0%	22.0%	7.3%

^{* 2.3%} no answer

A resembling attitude can be discerned in statistically significant item number 35, "CLIL makes me feel more secure when speaking English" (p = 0.02). More than half of the EAA students agree and strongly agree, likewise do 53.5% (in total) of the third forms CLIL, whereas only 17.1% of the fourth forms agree or strongly agree to that (Table 9).

Table 9: Students' responses to Item No. 35, "CLIL makes me feel more secure when speaking English."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	8.6%	2.9%	31.4%	40.0%	11.4%	5.7%
3 rd CLIL	2.3%	4.7%	14.0%	25.6%	37.2%	16.3%
EAA	2.4%	2.4%	9.8%	34.1%	31.7%	19.5%

The fourth significant difference in this field is item number 49, "I get nervous and confused when I am speaking in my CLIL lessons" (p = 0.02). While almost 80% (in total) of the EAA students and approximately 60% of the CLIL third forms strongly disagree or at least disagree, only 45.7% of the CLIL students in a quarter form share this view (Table 10).

Table 10: Students' responses to Item No. 49, "I get nervous and confused when I am speaking in my CLIL lessons."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	28.6%	17.1%	31.4%	5.7%	11.4%	5.7%
3 rd CLIL	30.2%	30.2%	16.3%	11.6%	11.6%	0.0%
EAA	48.8%	29.3%	14.6%	0.0%	7.3%	0.0%

Four out of seven items about Attitudes towards learning English show statistically significant differences between EAA students and CLIL third forms on the one hand, and CLIL fourth forms on the other. It seems evident that the latter see less speaking confidence boost in CLIL, that they do not look very much forward to their CLIL lessons, that they develop less speaking security via CLIL and finally that they are more nervous when speaking during CLIL lessons. Consistent evidence shows that EAA as well as CLIL third forms have a more positive attitude towards using English in EAA or CLIL lessons.

5.1.4. Interest in the English language

In the motivational category Interest in the English language, there is another statistically significant difference in item number 40, "I am interested in the differences between the German and the English language" (p = 0.02). Only 9.8% of the EAA students strongly disagree, but 14.0% of the CLIL third forms and finally 25.7% of the CLIL fourth forms think alike (Table 11).

Table 11: Students' responses to Item No. 40, "I am interested in the differences between the German and the English language."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	25.7%	11.4%	28.6%	17.1%	2.9%	14.3%
3 rd CLIL	14.0%	18.6%	37.2%	16.3%	9.3%	4.7%
EAA	9.8%	24.4%	34.1%	22.0%	7.3%	4.9%

In this case it is difficult to draw a clear conclusion for the following reasons. First of all, only one item out of three is significant in the category Interest in the English language. Secondly, even though there is a significant difference on the left-hand side of the scale (strongly disagree) which would assign the CLIL fourth form the most pessimistic attitude, there is also a statistical significance on the right hand side (strongly agree) which turns the case. Thus, I do not allow myself to draw a clear-cut conclusion here, but the results seem to suggest the stereotype of HTL students not to be language-focused.

5.1.5. English anxiety

Another statistically significant difference is obtained concerning item number 16, "I am afraid that other English speakers consider my English to be ridiculous" (p = 0.01). While a total of 73.2% of EAA students strongly disagree or disagree with the statement, third form and fourth form HTL students hold that strong negative view only to an extent of 53.5% and 48.6% respectively (Table 12).

Table 12: Students' responses to Item No. 16, "I am afraid that other English speakers consider my English to be ridiculous."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	22.9%	25.7%	20.0%	22.9%	2.9%	5.7%
3 rd CLIL	25.6%	27.9%	20.9%	16.3%	9.3%	0.0%
EAA	31.7%	41.5%	17.1%	9.8%	0.0%	0.0%

The field of English anxiety contains four different items from which the above mentioned shows statistically significant differences between the EAA students on the one hand and both CLIL groups on the other. Even though it is only one statement, I am of the opinion that a conclusion can be drawn. It shows that a big majority of EAA students are not afraid that other English speakers may consider their English ridiculous, while substantially fewer CLIL students hold that view. Moreover, 0.0% of the EAA students agree or strongly agree, while a few CLIL students actually do. CLIL students seem to be substantially more afraid to use English than EAA students.

5.1.6. Intrinsic motivation

There is a significant difference in item number 21, "I like learning English, because I feel pleasure in achieving a difficult task in the foreign language" (p = 0.00). 29.3% of the EAA

students and 23.3% of the CLIL third forms, but only 8.6% of the fourth forms agree with this statement (Table 13).

Table 13: Students' responses to Item No. 21, "I like learning English. because I feel pleasure in achieving a difficult task in the foreign language."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	11.4%	20.0%	25.7%	25.7%	8.6%	8.6%
3 rd CLIL	9.3%	14.0%	18.6%	30.2%	23.3%	4.7%
EAA	2.4%	4.9%	17.1%	34.1%	29.3%	12.2%

Moreover, there is a statistically significant difference in item number 41, "I like learning English, because I enjoy speaking English" (p = 0.01). There is a strong approval of this statement (agree or strongly agree) by a total percentage of 68.3 in the EAA group, by mere 41.9% in the CLIL third forms and by 45.7% in the fourth forms (Table 14).

Table 14: Students' responses to Item No. 41, "I like learning English, because I enjoy speaking English."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	2.9%	11.4%	22.9%	17.1%	11.4%	34.3%
3 rd CLIL	4.7%	7.0%	14.0%	32.6%	27.9%	14.0%
EAA	2.4%	0.0%	4.9%	24.4%	36.6%	31.7%

Two out of the three items concerning Intrinsic motivation show significant differences between the groups. The clearest finding is that the fourth form CLIL students seem to be least intrinsically motivated. The majority does not agree with item 21, "I like learning English, because I feel pleasure in achieving a difficult task in the foreign language" and not even half of this student population like learning English because they enjoy speaking the language. The second conclusion which can be drawn is that the EAA students are of the exact opposite opinion. Almost half of them agree to statement 21 and more than a third enjoy speaking English. Lastly, as far as the third form CLIL students are concerned, there are controversial results. On the one hand, approximately a quarter of them strongly agree to item 21, but on the other only 41.9% say that they enjoy speaking English.

5.1.7. Content interest

One further significant difference appears in item number 5, "I think that the technical subjects should be taught in German exclusively, because the subject matter as such is already difficult to understand" (p = 0.01). While 56.1% of the EAA groups disagree or strongly disagree with that, only 30.2% of the CLIL third forms and merely 25.7% of the fourth forms share this view (Table 15).

Table 15: Students' responses to Item No. 5, "I think that the technical subjects should be taught in German exclusively, because the subject matter as such is already difficult to understand."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	11.4%	14.3%	17.1%	28.6%	17.1%	11.4%
3 rd CLIL *	18.6%	11.6%	32.6%	30.2%	2.3%	2.3%
EAA	26.8%	29.3%	22.0%	12.2%	4.9%	4.9%

^{* 2.3%} no answer

Furthermore, there is a statistically significant difference in item number 12, "I like it that parts of the subject matter are taught in English" (p = 0.00). Here again 53.7% of the EAA students strongly agree, but only 8.6% and 9.3% of the third and fourth form students respectively (Table 16).

Table 16: Students' responses to Item No. 12, "I like it that parts of the subject matter are taught in English."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	8.6%	14.3%	14.3%	40.0%	14.3%	8.6%
3 rd CLIL	0.0%	4.7%	14.0%	39.5%	32.6%	9.3%
EAA	0.0%	0.0%	7.3%	9.8%	29.3%	53.7%

The third statistically significant item belonging to this motivational variable is item number 36, "The subject matter is more interesting when it is presented in English" (p = 0.00). The CLIL fourth forms strongly disagree most significantly with a percentage of 34.3%, the third forms follow with 11.6% and finally there are the EAA students with only 7.3% strong disagreement. It is also striking that in the fourth form no single student strongly agrees or even agrees and that in the third form there is just no strong agreement (Table 17).

Table 17: Students' responses to Item No. 36, "The subject matter is more interesting when it is presented in English."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	34.3%	34.3%	25.7%	5.7%	0.0%	0.0%
3 rd CLIL	11.6%	20.9%	44.2%	11.6%	11.6%	0.0%
EAA	7.3%	24.4%	34.1%	22.0%	7.3%	4.9%

Three out of five content interest items show significant differences between the test groups. It can be concluded that the fourth form CLIL students' interest in the content is not enhanced by the introduction of English. More than a quarter of them think that the difficult subject matters should be taught in German exclusively, less than 10% like it that parts of the subject matter are taught in English and merely 5.7% partly agree that the subject matter is more interesting when it is presented in English. In contrast to that, the majority of EAA students oppose the idea of teaching exclusively in German, more than 90% like it that parts of the subject matter are taught in English and only 7.3% strongly disagree with the statement that the subject matter is more interesting when it is presented in English. The CLIL third forms seem to have a more neutral position in this field. Approximately one third would like to be taught in German in the difficult subjects and concerning the question if they like it that parts of the subject matter are taught in English, no single student strongly disagrees but also only 9.3% strongly agree. Finally, only 11.6% strongly disagree that the subject matter is more interesting when it is presented in English, but on the other end of the scale 0.0% strongly agree either.

5.1.8. Regular English lessons

Another statistically significant item is number 8, "The regular English lessons motivate me to use English also in other subjects" (p = 0.01). While 0.0% of the CLIL fourth forms strongly agree, 4.7% of the third forms and 17.1% of the EAA students do so (Table 18).

Table 18: Students' responses to Item No. 8, "The regular English lessons motivate me to use English also in other subjects."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	8.6%	11.4%	25.7%	42.9%	11.4%	0.0%
3 rd CLIL	7.0%	23.3%	41.9%	14.0%	9.3%	4.7%
EAA	2.4%	7.3%	19.5%	39.0%	14.6%	17.1%

A statistically highly significant item is number 18, "In the CLIL lessons I can use what I have learned in the regular English lessons" (p = 0.0). The most evident strong agreement can be found in the EAA group with a percentage of 34.1, the third forms of CLIL follow closely with 30.2% and finally the group in which only 20.0% strongly agree are the CLIL fourth forms (Table 19).

Table 19: Students' responses to Item No. 18, "In the CLIL lessons I can use what I have learned in the regular English lessons."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL *	5.7%	11.4%	2.9%	28.6%	28.6%	20.0%
3 rd CLIL **	0.0%	2.3%	11.6%	30.2%	23.3%	30.2%
EAA	0.0%	4.9%	9.8%	17.1%	34.1%	34.1%

^{* 2.9%} no answer

One final statistically significant difference is found in item number 42, "The regular English lessons are a good basis for the CLIL lessons" (p = 0.01). 43.9% of the EAA students strongly agree, 31.4% of the CLIL fourth forms and only 25.6% of the third forms (Table 20).

Table 20: Students' responses to Item No. 42, "The regular English lessons are a good basis for the CLIL lessons."

	Strongly	Disagree	Slightly	Partly	Agree	Strongly
	disagree		disagree	agree		agree
4 th CLIL	0.0%	2.9%	14.3%	25.7%	25.7%	31.4%
3 rd CLIL	4.7%	2.3%	16.3%	30.2%	20.9%	25.6%
EAA	2.4%	2.4%	9.8%	14.6%	26.8%	43.9%

^{** 2.3%} no answer

The category Regular English lessons contains four items, whereof three show statistically significant differences between the groups. This fact serves as a basis for the following conclusions. Apparently, the CLIL fourth form students' regular English lessons are not an important source of motivation for their CLIL lessons, but serve at least as a good basis and the majority can use and incorporate what they have previously learned. In the CLIL third forms, there is likewise hardly any approval of the regular English lessons as motivation boost for CLIL, but the majority feel that the regular English classes prepare them well for the use of English in other subjects. In the EAA group, on the other hand there is slightly stronger agreement that the regular English lessons are motivating to use English in other subjects and approximately two thirds believe that the regular English lessons serve as a good basis and provide valuable input.

5.2. Analysis of the qualitative data

At the end of the questionnaire, there are two open questions which read as follows: Item number 59, "What do you like about the CLIL lessons?" and Item number 60, "Do you have suggestions on how to improve the CLIL lessons?" ("What do you expect from the CLIL lessons this year?" for the third forms of CLIL). The answers the students give to these two questions are analysed and summarised into different categories – six categories for questions 59 and five for question 60. To be more precise, each argument a student mentioned was registered and listed in a table. When all aspects were noted down, overlaps were found and consequently the categories defined. The percentages given in the following discussion always refer to the entire student population, or the entire group.

5.3. What students like about CLIL

First of all, students' positive remarks will be presented, as the question is what they like about CLIL. The answers are categorised in their respective motivational domains as far as possible. In cases where students bring in new aspects which are not part of the questionnaire content, fitting categories are suggested.

5.3.1. Engineering and English

The most prominent reason why students like CLIL seems to be the combination of engineering and English. Technical vocabulary and the connection of technical subjects and English are answers given by students from all three groups. Especially for the EAA students, learning technical words in English is an advantage, as can be seen from the 36.6% of all students (N = 119) who write that. But also for the CLIL students this seems to be an important aspect -18.6% of the third form students and 17.1% of the fourth forms like the

technical vocabulary in English. Appraisal of the connection of technical subjects and English is most prominent in the CLIL third forms, with 18.6%. But also the fourth forms and the EAA students name this aspect with 11.4% and 7.3% respectively (Figure 1).

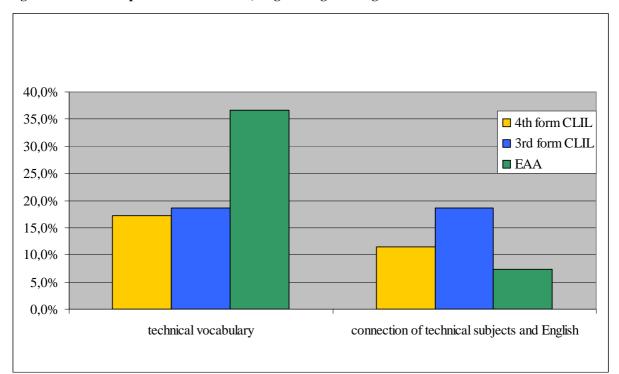


Figure 1: Student responses to Item No. 59, Engineering and English

5.3.2. English in the classroom and outside of school

Another positive aspect mentioned is that CLIL lessons help to improve the speaking ability in English. A positive feature about CLIL seems to be the English language itself and the benefits it may yield for beyond the school when competence is high. Especially for the CLIL third forms, where 18.6% write that they like the English language in their CLIL lessons and that they improved their language competence as a result. English itself seems to be a bonus of CLIL. Likewise, 9.8% in the EAA classes say that they like the English language in the teaching concept. A third aspect is the speaking and discussing in English. In the fourth forms of CLIL 8.6% of the students mention that, 7.0% of the third forms and 7.3% of the EAA students. Another advantage of CLIL belongs to the category of instrumentality – promotion. According to 5.7% of the fourth CLIL forms, 2.3% of the third forms and 7.3% of the EAA students, CLIL is a good preparation for their future professional career and it has practical relevance (Figure 2).

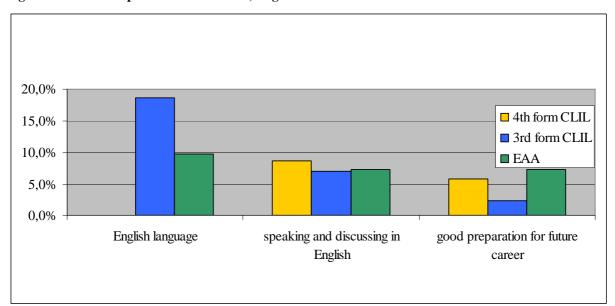


Figure 2: Student responses to Item No. 59, English in the classroom and outside of school

5.3.3. Attitudes toward learning English

The motivational item Attitudes toward learning English is diversified. Students write different aspects such as follows: emphasis not on grammatical correctness or correct pronunciation, casual learning atmosphere, good teachers, losing inhibition to speak English and gaining self-assurance, variation and broadness, the teacher is not superior as far as language competence is concerned. What I summarise under the term 'good teachers' is elaborated by the students in various statements: when problems occur, teachers try to help by explaining things in English or in urgent cases also in German, two students praise the teachers' good language competence, the teachers are sensitive to students' problems and know when certain aspects are too difficult for them in English and the teachers speak slowly and clearly, which makes it easy for the students to follow. Students in all three groups state that they like it that grammatical correctness is not the most important aspect in their CLIL lessons: 5.7% of the CLIL fourth forms, 4.7% of the third forms and 2.4% of the EAA classes explicitly pointed that out. It can be seen here, that this holds true for CLIL students in particular. Another positive aspect is the casual learning atmosphere: 2.9% of the fourth form CLIL students, 7.0% CLIL third form students and finally 12.2% EAA students mention this aspect. The third aspect which I included in the motivational category of Attitudes toward learning English includes the teachers. As has been mentioned earlier, this point comprises several different answers. Most prominently, the third forms of CLIL have faith in their CLIL teachers, 20.3% of them mentioned positive aspects. Students from the fourth form CLIL agree to an extent of 14.3%. Finally, 9.8% of the EAA students mention positive features about their teachers.

All three groups name "losing inhibition to speak English and gaining self-assurance" an advantage of CLIL: 5.7% of the CLIL fourth forms, 4.7% of the third forms and 7.3% of the EAA students. Another prominent advantage of CLIL is seen in the fact that it presents change to other subjects; 17.1% of the fourth form CLIL students appreciate that the CLIL lessons give variety to the curriculum. Similarly, 11.6% of the third forms name that aspect and finally 4.9% of the EAA students.

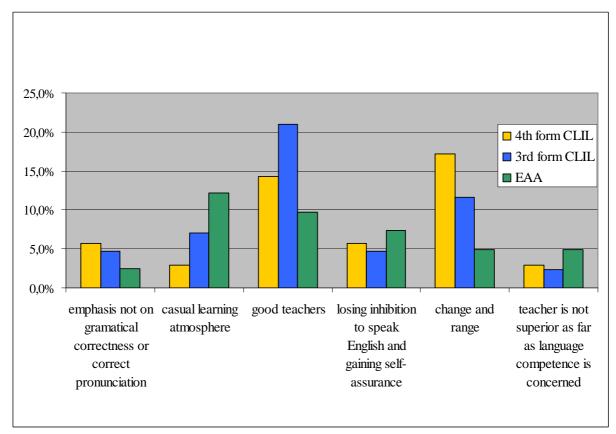


Figure 3: Student responses to Item No. 59, Attitudes toward learning English

5.3.4. Content interest

Two aspects concerning the motivational aspect of content interest are mentioned by the students. 4.7% of the CLIL third form students and 7.9% of the EAA students write that they like the content of the CLIL classes. Secondly, 2.9% of the fourth forms in CLIL and 2.3% of the third forms see an advantage of CLIL in that it helps to understand the content better through a more intense involvement. Apparently, students are more concentrated on the content during CLIL lessons than during normal lessons in their mother tongue, because the foreign language requires a more intense involvement.

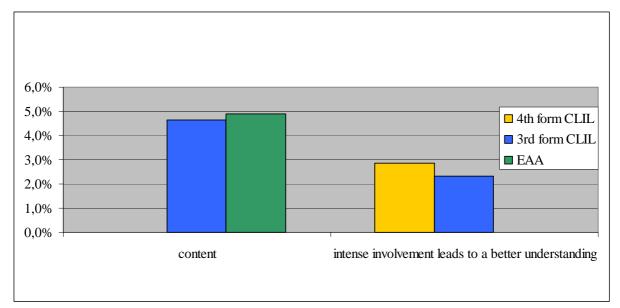


Figure 4: Student responses to Item No. 59, Content Interest

5.3.5. English as a Global Language

One student from each group states that CLIL is positive, because it helps to understand what is happening in the world, for example when reading homepages and online texts written in English.

5.3.6. Bilingualism

The final significant positive aspect about CLIL which is mentioned in all three groups is the combination of English and German. 2.9% of the fourth forms of CLIL, 9.3% of the third forms and 7.3% of the EAA students feel that the mixture of these two languages is as such good. Almost 7% of the CLIL third forms appreciate especially the English teaching materials.

5.4. What students would like to improve about CLIL

5.4.1. Increasing comprehension

Sometimes it seems, CLIL and the use of English as language of instruction pose difficulties for comprehension, but the students have suggestions on how to improve their understanding of the content in CLIL lessons. 25.7% of the CLIL fourth form students would like to be confronted with difficult or new subject matter in their mother tongue, German. One student suggests letting the students vote if they want to learn about a certain subject in English or German; 14.0% of the third form CLIL students and 7.3% of the EAA students make the same suggestion. Another idea is to define and explain new vocabulary more clearly and to write words down – 2.9% of the fourth forms and 12.2% of the EAA students make that clear. Finally, 2.9% of the CLIL fourth forms would like to have a slower pace in the CLIL lessons.

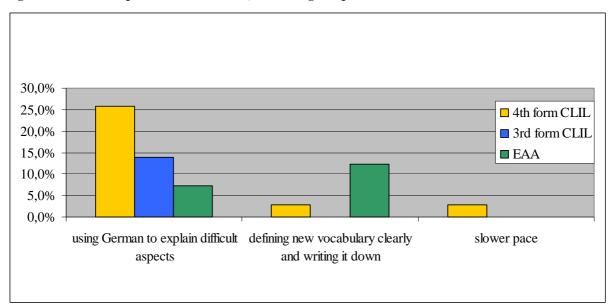


Figure 5: Student responses to Item No. 60, Increasing comprehension

5.4.2. CLIL teachers

Other suggestions and wishes involve the CLIL teachers – 20.0% of the CLIL fourth form students seem to believe that their teachers' language competence is insufficient. In contrast to this, only 2.3% of the third forms and 7.3% of the EAA students think that. In order to increase the teachers' language abilities, 8.6% of the CLIL fourth form students and 4.9% of the EAA students propose to introduce extra classes on how to teach CLIL for teachers or exams which authorise teachers to teach CLIL.

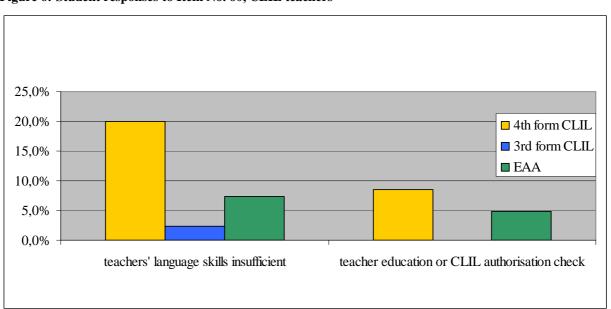


Figure 6: Student responses to Item No. 60, CLIL teachers

5.4.3. Implementation

Students in all groups make different suggestions on how to improve CLIL implementation. In the fourth forms of CLIL, 5.7% would wish for more documents in English and the exact same amount would suggest a settling-in period in which there is a smooth transition from the regular lessons in German to the CLIL lessons. The EAA students have slightly different wishes: 4.9% suggest to bring native speakers to class and provide dictionaries and bilingual books and 2.9% would be in favour of excursions to England where they could make use of what they learned. Finally, 4.7% of the CLIL third forms would like to have a better and more equal distribution of the use of English amongst various subjects.

5.4.4. More CLIL or no CLIL at all?

Finally, there are a few voices pleading for more CLIL and more English and a few who would like to abandon CLIL completely. 2.9% of the CLIL fourth forms would like to have more CLIL lessons and so do 2.3% of the third forms; 12.2% of the EAA students would also like to have more English. In contrast to this, there is a percentage of 5.7 in the fourth forms of CLIL who state explicitly that they would not like to be taught in English at all if they could choose.

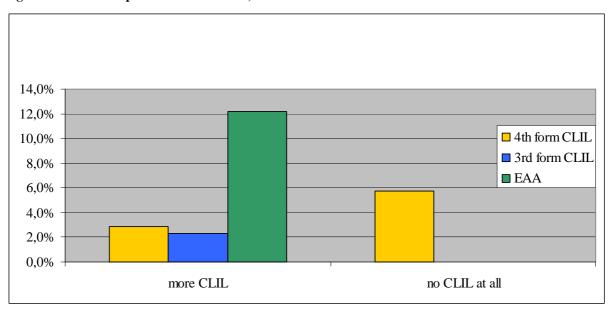


Figure 7: Student responses to Item No. 60, More CLIL or no CLIL at all

6. Discussion of relevant motivational parameters

The aim of this study is to find out more about learner motivation in CLIL settings. As is outlined earlier in this paper, the questionnaire addresses 15 motivational parameters which are examined in two CLIL fourth forms, two future CLIL classes (third form) and two EAA

classes. After presenting the results in chapter 5, the findings are now discussed in reference to the research questions and to findings from other research mentioned in the literature review in chapters 2 and 3. The fields in which statistically significant differences amongst the reference groups occur are discussed in detail in this section.

6.1. The Ideal Self

'The Ideal Self' is part of Dörnyei's 'L2 Motivational Self System' (cf. Dörnyei & Ushioda 2011: 79) and can act as a very strong motivator. It is assumed that if the learners are convinced that they are going to need English in their future professional lives and if they can imagine themselves living abroad and speaking English, their motivation to learn English is probably high. Another possible indication for such an Ideal Self may be the students' self perception – if they consider themselves to be good English speakers they are more likely to be motivated to learn English.

In total 119 students participated in the survey and in general their Ideal Self is rather motivated to learn English with means in all three statements between 3 and 6. One statistically significant difference is found in item number 2, "Whenever I think of my future career, I imagine myself using English" (p = 0.03). When we look at the total of 119 students, we see that 41.2% of all students strongly agree with this statement. But when we take a closer look, as in the analysis above, it becomes clear that in the English track almost 50% strongly agree with this statement, while only approximately 37% of the CLIL classes share this view. The means range from 4.94 in the fourth CLIL classes to 5.24 in the EAA classes. Clearly, the attitudes towards this statement are located on the positive end of the scale, but they are not equally positive in the three different reference groups.

Which explanation can account for this difference in agreement? Without doubt, the entire student population under examination is to some extent aware of the influence English has on the national job market and in the globalised world of work. Still, those students who deliberately chose the English track, which means that they have had English as language of instruction in the majority of their subjects from first grade onwards, seem more strongly convinced that they are going to need English in their professional lives. Probably, this is the reason why they (or their parents) actively chose to combine English and technical subjects by attending an EAA class.

Another highly significant difference is discerned in item number 13, "I imagine myself as someone who is able to speak English" (p = 0.00). Here, the agreement is not as evident as in item 2. Means range from 3.8 in the fourth CLIL classes to 4.12 in the third CLIL classes and finally to 4.93 in the EAA classes. While almost 70% (in total) agree and strongly agree in the

EAA classes, only approximately 40% do so in the third form CLIL classes, and ~30% (strongly) agree in the CLIL classes of the fourth form. The last item concerned with the Ideal Self is statement 38, "I can imagine myself living abroad and having a discussion in English". It is not statistically significant, but still we can see that all students have a rather positive attitude towards it. The mean lies at 4.49 in both CLIL reference groups and at 5.05 in the EAA group.

Moreover, in the qualitative analysis approval for the combination of English with engineering is found. In fact, this is the most prominent reason students give for why they like CLIL. This can be interpreted as student awareness of the fact that they are going to need English in their future professional lives. Technical vocabulary and the connection of technical subjects and English are aspects which students from all three groups praise. Again, especially the EAA students like learning technical words in English, as 36.6% of them offer this reason. But also the CLIL students seem to perceive this as an important aspect – 18.6% of the third forms and 17.1% of the fourth form students like the technical vocabulary in English.

As a conclusion, all students seem to be aware of the fact that they are going to need English in their future lives to some extent. However, the EAA students show significant greater awareness which might be due to their conscious choice of additional classes in English.

6.2. The Ought-to L2 Self

The "Ought-to L2 Self" is defined as the self which students believe that others expect them to be (Dörnyei & Ushioda 2011: 86). In the category of the Ought-to L2 Self there is no clear tendency towards one end of the scale in any of the test groups. In the four statements concerning this aspect, the means vary from 2.22 in the EAA group in item 14, "My parents/family believe(s) that I must study English to be an educated person" to 4.57 in the fourth classes CLIL in item 48, "It will have a negative impact on my life if I don't learn English".

Item 6, "Studying English is important to me in order to gain the approval of my peers/teachers/family/boss" does not have statistically significant differences, but the 45.4% of all participants who strongly disagree and disagree are a clear message. The mean in the CLIL fourth classes lies at 2.71, in the third classes it is 2.77 and in the EAA group it is 3.20. 17.6% of all students slightly disagree and 23.5% slightly agree. It can thus be concluded that the opinions on this statement differ but that there is a tendency towards the mid-lower end of the scale (around 3). In item 39, "Learning English is necessary because people surrounding me expect me to do so" the means are 3.37 in both, the fourth forms CLIL and the EAA

classes, and 3.53 in the third forms CLIL. It is evident that this item is not very decisive and will thus not be discussed in more detail. However, in these two items there is a clear sign of our individualistic culture.

There is a significant difference in item number 14, "My parents/family believe(s) that I must study English to be an educated person" (p = 0.04). EAA students do not seem to be much pressured to learn English by their parents. 31.7% of them strongly disagree that their parents and family want them to study English, whereas only 20% of the CLIL fourth forms and merely 18.6% of the CLIL third forms hold the same view. There is a slight tendency in the CLIL classes towards motivation from external factors with means being between 3 and 4 in both groups.

However, in item number 48, "It will have a negative impact on my life if I don't learn English" (p = 0.04) there is a clear tendency towards the upper end of the scale. 22.7%, 26.1%, and 24.4% of all participants slightly agree, agree and strongly agree to this statement. Furthermore, there is a statistically significant difference which shows that substantially more of the CLIL students than EAA students agree strongly. 28.6% of the fourth forms and 25.5% of the third forms are strongly convinced that there will be a negative impact on their lives if they do not learn English, while only 19.5% of the EAA are.

Concluding, both CLIL groups tend to feel greater parental pressure and believe more strongly that there will be negative consequences if they do not study English. The Ought-to L2 Self seems thus to be a more decisive motivational factor for them than for the EAA group. The reason for this might be that EAA students and/or their parents choose the English track deliberately because it is what they want either for themselves or for their children. The English track implies more intense exposure to English which is why parents may consequently put less pressure on their children.

6.3. Attitudes towards learning English

According to Gardner's (2010) Socio-Educational view on motivation, attitudes towards the learning environment play a crucial role in language learning. The general attitude towards learning English, CLIL in particular, seems to be rather positive. The means in all seven statements concerned with that matter tend towards the upper end of the scale, with 3.60 being the lowest mean except for item 20 which will be discussed in detail later. Special attention must be paid to item 49, "I get nervous and confused when I am speaking in my CLIL lessons", because here the lower the mean, the more positive the attitude towards learning English in the CLIL classroom.

Item 3, "The CLIL lessons help me to develop more self-confidence when speaking English" (p=0.01) shows a clear tendency towards the upper end of the scale -30.3% of the whole population slightly agree, 31.9% agree and 14.3% strongly agree. Furthermore, there is a very interesting statistically significant difference. While almost 40% the EAA students and approximately 35% of the CLIL third forms agree, only 22.9% of the CLIL fourth form students share this view.

Item 11, "I like it that communication is more important than grammar in the CLIL lessons" is not statistically significant, but the means show a strong tendency towards the upper end of the scale – 44.5% of all participants strongly agree with this statement, 34.5% agree. The mean in the CLIL fourth forms lies at 4.89, at 5.40 in the third forms and at 5.02 in the EAA classes. In all three groups it thus seems that students appreciate it that communication is more important than grammar when English is used as language of instruction.

A similar phenomenon manifests itself in item number 20, "I always look forward to the CLIL lessons" (p = 0.00), but the statistical significance is even greater. Almost a quarter of the EAA students and almost a sixth of the CLIL third forms agree, but merely ~3% of the CLIL fourth form students do. Analogously, almost a quarter of all CLIL fourth form students strongly disagree, while only 7.0% of the third forms and no single EAA student share this strong view. Looking at the entire population (N = 119), the scales appear to be almost normally distributed -26.9% of all participants tick "slightly disagree" and 31.9% "slightly agree". Without looking at the reference groups in detail, this item would thus not be decisive.

A similar attitude can be discerned in statistically significant item number 35, "CLIL makes me feel more secure when speaking English" (p = 0.02). More than 50% of the EAA students agree and strongly agree, likewise the third forms CLIL, but only 17.1% of the CLIL fourth forms.

Item 46, "I like the atmosphere of my CLIL classes" shows a clear emphasis on "slightly agree" and "agree" with 36.1% and 34.5% of the entire population respectively. The means from all three reference groups show a similar picture – it is 4.14 in the fourth forms CLIL, 4,37 in the third forms and 4,39 in the EAA classes. The atmosphere seems to be a motivation boost as far as language attitude in the CLIL lessons is concerned.

The fourth significant difference concerning the attitudes towards learning English is item number 49, "I get nervous and confused when I am speaking in my CLIL lessons" (p = 0.02). Looking at the entire population (N = 119), it seems clear that the tendency is towards little nervousness in the CLIL lessons with 36.1% of the total population strongly disagreeing,

26.1% disagreeing and finally 20.2% slightly disagreeing. Taking a closer look at the reference groups we can see that while approximately 80% (in total) of the EAA and 60% of the CLIL third form students strongly disagree or at least disagree, only 45.7% of the CLIL students in a quarter form share this view. In general, students do not seem to be strongly hindered by nervousness and confusion in the CLIL lessons, but there is still a difference in degree amongst the three groups.

As a conclusion, four out of seven items about Attitudes towards learning English have statistically significant differences between EAA and CLIL third form students on the one hand, and CLIL fourth forms on the other. Even though attitudes seem to be positive when looking at the entire population, it is evident that the CLIL fourth forms perceive less speaking confidence boost through CLIL, that they do not look forward to their CLIL lessons, that they perceive CLIL as less helpful for developing language security and finally that they are also more nervous when it comes to speaking in CLIL lessons. Consistent evidence from this survey shows that EAA as well as CLIL third forms have a more positive attitude towards learning English in EAA or CLIL lessons than the fourth forms. The difference in attitudes and perceptions of the third and the fourth CLIL forms even seems to suggest that the third forms are expecting something which might not happen. Trying to interpret this finding, it is supposed that the fourth forms appear frustrated after the first year of CLIL and have difficulty in finding positive aspects about CLIL. Whether this finding is dependent on the particular classes examined, that is to say the experiences of the students and the teachers or other circumstances, remains unclear. In order to find out more, the current third CLIL classes would have to be questioned again in one year's time and the future results consequently compared to their current attitude.

6.4. Interest in the English language

In the Socio-Psychological model on motivation by Gardner (1979), interest in the English language is a crucial factor. As has been outlined, Gardner sees a link between the attitudes towards a foreign language and the success in acquiring it. In my survey, the interest in the English language tends towards the upper end of the scale, with means ranging from 3.02 in the third form CLIL classes in item 40, "I am interested in the differences between the German and the English language" to 4.63 amongst the EAA students in item 55, "I am interested in the way English is used in conversation".

Taking a closer look, we can discern a statistically significant difference in item number 40, "I am interested in the differences between the German and the English language" (p = 0.02).

Only approximately 10% of the EAA students strongly disagree, while 14% of the CLIL third forms and almost a quarter of the CLIL fourth forms think alike. Total numbers show a similar picture - most participants, almost one third, tick 3 "slightly disagree".

In item 51, "I like the rhythm of English" answers are almost equally spread on the scale. However, the means tend towards the upper end -3.74 in the fourth forms of CLIL, 3.60 in the third forms and 4.07 in the EAA classes.

Item 55, "I am interested in the way English is used in conversation" shows a clear tendency towards the upper end of the scale. Considering the total population it can be discerned that 26.1% slightly agree, 29.4% agree and 23.5% strongly agree. The means hint at a similar interpretation – they lie between 4.51 and 4.63.

Aspects about the interest in English in the classroom and beyond are also mentioned in the open answers. 18.6% of the CLIL third forms like the English language in their CLIL lessons and write that they improved their language competence as a result. Similarly, 9.8% of the EAA classes say that they like the English language in the teaching concept. Furthermore, 8.6% of the CLIL fourth form students, 7.0% of the third forms and 7.3% of the EAA students mention that they like speaking and discussing in English during the lessons. Finally, when it comes to using English outside of the classroom, 5.7% of the fourth CLIL forms, 2.3% of the third forms and 7.3% of the EAA students say that CLIL is a good preparation for their future professional career and that it has practical relevance.

A conclusion in the field Interest in the English language remains difficult. First of all, only one out of three items is statistically significant. Secondly, the significance does not indicate a clear result, because peaks occur at both ends of the scale. However, from the qualitative data, it can be seen that there are students in all three groups who praise the use of English as language of instruction and who are also aware of its significance in the future. Contrary to the stereotype of students in the field of engineering not being interested in languages, there are individual exceptions.

6.5. English anxiety

"English anxiety" is also taken from Gardner's (2010) Socio-Educational model about motivation (cf. section 2.6.). He is convinced that being afraid of using English hinders the quality of learning. Thus, English anxiety must be low in the classroom setting so that successful language acquisition can happen. As a general impression, English anxiety which implies fear to speak in English, seems to be low amongst all participants. Item 4, "I am afraid to make a fool of myself in public, because I make so many mistakes when speaking English"

has very low means, ranging from 1.95 in the EAA group to 2.49 in the CLIL third forms. 33.6% of all participants strongly disagreeing and 32.8% disagreeing further confirm that.

A statistically significant difference is obtained in item number 16, "I am afraid that other English speakers consider my English to be ridiculous" (p = 0.01). When looking at the entire population, 26.9% of all participants strongly disagree and 31.9% disagree. An in-depth analysis reveals that while almost three quarters of EAA students (strongly) disagree with the statement, the third form and fourth form HTL students hold that strong negative view to a smaller extent of 53.5% and 48.6% respectively.

Concerning item 22, "I would feel uneasy speaking English with a native speaker" it can be clearly stated that there is again a strong trend towards the lower end of the scale, with 30.3% of the entire population disagreeing strongly and 32.8% disagreeing. The means are also low in all three reference groups – 2.71 amongst the CLIL fourth forms, 2.56 amongst the third forms and only 1.98 in the EAA group. Item 24, "I would get tense if a foreigner asked me for directions in English" shows something similar. 47.1% of all participants strongly disagree and 21.8% disagree. Means are also low, ranging between 1.71 with the EAA group and 2.29 in the CLIL fourth grades.

Concluding, even though English anxiety is generally low when the entire student population is examined (N = 119), there are differences between the reference groups. The category 'English anxiety' contains three different items from which one shows statistically significant differences between the EAA students on the one hand and both CLIL groups on the other. It could be seen clearly that a big majority of EAA students are not afraid that other English speakers may consider their English ridiculous, while substantially fewer CLIL students share that view. Moreover, no single EAA student agrees or strongly agrees, while a few CLIL students do. As regards the other statements which tackle English anxiety, it could be shown that anxiety tends to be low, but is always lowest in the EAA group. The reason why there is stronger speaking anxiety amongst the CLIL groups may be that they were not used to English in other subjects than their EFL lessons prior to the change in the curriculum. Thus, a more frequent English use is something new and unfamiliar to them and they might need more time to get used to it and lose their inhibitions.

6.6. Intrinsic motivation

According to Cognitive Evaluation theory, an intrinsically motivated individual studies English for its pure enjoyment and satisfaction. This form of motivation is supposed to be ideal, because it presupposes a self-determined, proficient individual. Looking at the entire population (N = 119), Intrinsic motivation tends towards the upper end of the scale in the survey. In item 17, "I study English for the satisfied feeling I get in finding out new things" the means range from 3.53 in the group of the CLIL third forms to 4.20 in the EAA group. This is also reflected in the percentages of the whole population – 27.7% slightly disagree and 26.9% slightly agree.

There is, however, a highly significant difference in item number 21, "I like learning English, because I feel pleasure in achieving a difficult task in the foreign language" (p = 0.00). Almost 30% of the EAA students and approximately 25% of the CLIL third forms, but only 8.6% of the fourth forms agree with this statement.

Another statistically significant difference is found in item number 41, "I like learning English, because I enjoy speaking English" (p = 0.01). There is strong approval of this statement ("agree" or "strongly agree") by a total percentage of almost 70 in the EAA group, but only by approximately 40% in the CLIL third forms and by ~45% in the fourth forms. Even though the means are between 4 "slightly agree" and 5 "agree" in all reference groups, differences between the EAA students and the CLIL students are evident.

As a conclusion, two out of three items concerning Intrinsic motivation show statistically significant differences between the groups. The clearest outcome is that the fourth form CLIL students seem to be least intrinsically motivated. First of all, the majority does not agree with item 21, "I like learning English, because I feel pleasure in achieving a difficult task in the foreign language" and not even 50% of the CLIL fourth forms like learning English because they enjoy speaking it. The second conclusion which can be drawn is that the EAA group is of the exact opposite opinion. Almost 50% them agree with statement 21 and more than 30% enjoy speaking English. Even though the general impression concerning item 17 is a rather positive one, motivation seems to be stronger amongst the EAA students. It is attempted to infer an interpretation of these findings at this point. One possible reason why EAA students are more intrinsically motivated than CLIL students is that they deliberately opted for the English track at the age of 14/15. Certainly, this is not true for the entire EAA student population, because there are cases in which the parents decided for them. Still, there is clearly more conscious willingness in the EAA group which implies stronger intrinsic motivation.

6.7. Content interest

Another factor which may influence motivation in CLIL is content interest. As mentioned in section 3.5.1., students must be cognitively involved during a lesson so that successful content

learning can happen (cf. Coyle et al. 2010: 29). The most obvious cognitive challenge in CLIL is the foreign language, which makes thorough preparation and cognitive engagement necessary already prior to the lessons (cf. Dalton-Puffer et al. 2008: 104-126). Furthermore, according to Mehisto et al. (2008: 21), there are students whose motivation for the content is boosted through the use of a foreign language in instructions.

Amongst the findings in the field of content interest, there is one significant difference in item number 5, "I think that the technical subjects should be taught in German exclusively, because the subject matter as such is already difficult to understand" (p = 0.01). While approximately 56% of the EAA group disagree or strongly disagree, less than one third of the CLIL third forms and merely a quarter of the fourth forms share this view. The general opinion on this is situated at the mid-lower end of the scale; the mean being 2.54 amongst the EAA group, 3.02 in the third forms and 3.60 in the fourth forms.

Furthermore, there is a statistically highly significant difference concerning item number 12, "I like it that parts of the subject matter are taught in English" (p = 0.00). Here again almost 55% of the EAA students strongly agree, but only 8.6% and 9.3% of the third and fourth form students respectively. This difference becomes also evident from an analysis of the means – 3.63 amongst the CLIL fourth form students, 4.28 amongst the third forms and 5.29 amongst the EAA students. When looking at the entire population, a rather positive picture can be seen – 29.4% slightly agree, 26.1% agree and 24.4% strongly agree.

From item 27, "I am interested in the content of the CLIL class" it becomes clear that content interest is high in all three groups – means ranging from 4.37 in the CLIL fourth forms to 5.10 and 5.14 in the EAA group and the CLIL third forms. 40.3% of all participants strongly agree and 28.6% agree, which underlines the finding.

The third statistically significant item in the field of Content interest is item number 36, "The subject matter is more interesting when it is presented in English" (p = 0.00). When looking at the entire population, there seems to be disagreement – 16.8% strongly disagree, 26.1% disagree and 35.3% slightly disagree. The CLIL fourth forms strongly disagree most significantly with more than one third ticking 1, the third forms follow with 11.6% and finally there are the EAA students with only 7.3% strong disagreement.

Item 56, "I like it that the content is taught in English" is not statistically significant but shows nevertheless a strong agreement – 23.5% of the entire population slightly agree, 33.6% agree and 28.6% strongly agree. Furthermore, the means are relatively high – in the CLIL fourth grade group it is 4.66, in the third grade group it is 4.63 and in the EAA group it is even 4.90.

Three out of five Content interest items are statistically significant and the other two show relatively clear results as well. While content interest is generally high amongst all students and the majority like it that content is taught in English, it must nevertheless be stated that the fourth form CLIL students' interest in the content does not seem to be enhanced by the introduction of English. More than 25% of them think that the difficult subject matters should be taught in German exclusively, less than 10% like it that parts of the subject matter are taught in English and merely 5.7% slightly agree that the subject matter is more interesting when it is presented in English. In contrast to this, the majority of EAA students would not want teaching to be done exclusively in German, more than 90% like it that parts of the subject matter are taught in English and only 7.3% strongly disagree with the statement that the subject matter is more interesting when it is presented in English. The CLIL third forms reveal a more neutral position. Approximately one third would like to be taught in German in the difficult subjects and no single student strongly disagrees that they like it that parts of the subject matter are taught in English and only 9.3% strongly agree. The reason for the clear difference in perception between the EAA group and the CLIL fourth forms may be that being taught in English in a content subject is something new and unknown for the regular classes. They were probably taught in German exclusively up to form three and need more time to accept and appreciate the change. In contrast to this, content being taught in English is something natural for the EAA classes, which is why they may approve more strongly.

6.8. Regular English lessons

What students experience and learn in their regular English lessons is likely to enhance or hinder motivation in the CLIL lessons. This assumption is rooted in Attribution theory (cf. section 2.1.), which suggests that future performance is influenced by past experience (cf. Weiner 1980). It is assumed that students are willing to use English in other subjects than EFL if their EFL lessons are rated as good. On the other hand, if students are not satisfied with their EFL lessons, they might not feel well prepared to use English also in other contexts. It is worthwhile to have a look at students' opinions about their regular EFL classes in order to find out more. A statistically significant item is number 8, "The regular English lessons motivate me to use English also in other subjects" (p = 0.01). While no single student from the CLIL fourth forms strongly agrees, almost 5% of the third forms and approximately 20% of the EAA students do. As can be seen from the statistical significance as well as from the means – which range between 3.09 amongst the third forms CLIL and 4.07 amongst the EAA classes – the students are neither very positive nor very negative about this statement.

Looking at the entire population (N = 119), item number 18, "In the CLIL lessons I can use what I have learned in the regular English lessons" (p = 0.0) is very positive. 25.2% of all students slightly agree and 28.6% each agree and strongly agree to it. Likewise, the means are relatively high, ranging from 4.34 amongst the CLIL fourth forms to 4.83 in the EAA group, which shows a clear tendency towards the upper end of the scale. Furthermore, this item is statistically highly significant. When looking at the reference groups in more detail it can be seen that the strongest agreement is amongst the EAA students where more than one third strongly agree, the third forms of CLIL follow closely with approximately 30% and finally the CLIL fourth forms with 20%.

In item number 42, "The regular English lessons are a good basis for the CLIL lessons" (p = 0.01) there is also a strong tendency towards the upper end of the scale – 23.5% slightly agree, 24.4% agree and 33.6% of the entire student population strongly agree. Accordingly, the means are high in all groups – 4.69 in the CLIL fourth forms, 4.37 in the third forms and 4.93 in the EAA classes. This item also has a statistically significant difference. Almost 45% of the EAA students strongly agree, approximately one third of the CLIL fourth forms and only a quarter of the third forms.

Item 44, "I am nervous when speaking in the regular English lessons" shows a strong tendency towards the lower end of the scale. 37.8% strongly disagree and 24.4% disagree to this statement, which shows that nervousness is apparently not a big issue in the regular EFL lessons. The means in all reference groups resemble and centre around 2.3.

The category Regular English lessons contains four items whereof three show clear tendencies towards a generally positive view. Looking at the entire population (N = 119), students seem to be using their knowledge from EFL in CLIL and they do not seem to be very much bothered with speaking nervousness during their regular English lessons. Taking a closer look, three statistically significant differences appear between the groups of informants. Apparently, the regular English lessons do not boost the motivation in the CLIL fourth forms, but at least they serve as a good basis and the majority can use and incorporate what they have previously learned. The situation is similar in the CLIL third forms; there is hardly any approval of the regular English lessons as motivation boost for CLIL, but the majority feel that the regular English classes prepare them well for the use of English in other subjects. In the EAA group, there is slightly stronger agreement that the regular English lessons are motivating to use English in other subjects and approximately two thirds believe that the regular English lessons serve as a good basis and provide valuable input. As a result, the

regular English lessons serve indeed as a solid basis for lessons in which English is used as language of instruction, but they are not motivating enough to make the students want more English in content lessons of their own accord. Maybe, if the regular English lessons were more exciting and engaging, the students would be more willing to use the foreign language in other subjects.

6.9. Summary

The general impression on motivation to learn English is rather positive amongst the entire population (N = 119). However, when taking a closer look at each reference group separately, a different picture presents itself. In the category Ideal Self there are several statistically significant differences between the EAA classes and the CLIL classes, the former being much more strongly motivated. For example, almost 70% (in total) of the EAA students agree and strongly agree that they imagine themselves as someone who is able to speak English. In contrast to this, approximately 40% do so in the third form CLIL classes, and only ~30% agree and strongly agree in the CLIL classes of the fourth form. Even though all groups name the combination of the English language and technical subjects as the major advantage of CLIL, this argument is most frequently mentioned by the EAA group.

A similar picture presents itself when looking at the Attitudes towards learning English. Taking the entire student population (N = 119), attitudes seem to be positive, but taking a closer look it becomes evident that CLIL boosts the speaking confidence of the CLIL fourth forms less than all other groups. Furthermore, they look less forward to their CLIL lessons, they perceive CLIL as less helpful for feeling secure in the foreign language and finally they are more nervous when it comes to speaking during CLIL lessons. It can thus be concluded that EAA as well as CLIL third forms have a more positive attitude towards learning English in EAA or CLIL lessons than the fourth forms. Also in terms of intrinsic motivation, the CLIL fourth forms stand out. They seem to be least intrinsically motivated from all three groups. The same result is found in the category Content Interest. While content interest is generally high amongst all students and the majority like it that content is taught in English, the fourth form CLIL students' interest in the content is clearly not enhanced by the introduction of English.

As far as motivation from external factors is concerned, it becomes evident that the CLIL groups are more strongly influenced than the EAA group. They tend to feel greater parental pressure and believe more strongly that there will be negative consequences if they do not study English. Concerning interest in the English language, the differences are less clear. In

general, some interest seemed to be there, with it not being particularly high or low in any of the groups.

Another language aspect of interest is English anxiety which tends to be generally low in all three reference groups. However, even though none of the students seem to be particularly afraid to talk in English, anxiety is lowest amongst the EAA group. Similar to that, the English lessons are generally believed to be beneficial and positive for the CLIL lessons. But in the EAA group, there is slightly stronger agreement that the regular English lessons motivate to use English in other subjects and approximately two thirds believe that the regular English lessons are a good basis and provide valuable input.

Concluding, it is clear that there are differences between the EAA group and the CLIL groups. A reason may be that the EAA students deliberately chose the English track, meaning that they have had English as a medium of instruction from first grade onwards, while the CLIL students did not know about this teaching concept when they entered the school. However, this is mere speculation and not a fact. In order to get clearer results, further studies and individual interviews would have to be carried out. The second obvious difference in motivation, namely between the CLIL fourth forms and the CLIL third forms, may be a sign for a suboptimal CLIL practice. I dare say that the third forms may have huge expectations and hopes which the fourth forms have not seen fulfilled. Whether this holds true on a general basis and is not due to chance would have to be the topic for further analysis.

7. Conclusion

Gardner (1979, 2010) is convinced that a positive attitude towards foreign language learning and high motivation extremely enhance achievement. A motivated learner is very likely to reach a high level of language competence, while somebody who is not motivated may not. Furthermore, there are several studies (Dalton-Puffer 2005, Dalton-Puffer et al. 2008, Denman et al. 2013, Jexenflicker & Dalton-Puffer 2010, Lorenzo & Moore 2010, Maillat 2010, Mewald 2007) which report positive evidence of language and intercultural competence amongst CLIL students. Through the use of English for treating concrete subjects in content lessons, the CLIL classroom is believed to be more authentic than the traditional EFL, which gives the students the chance to develop more sophisticated speaking skills, fluency and a broad vocabulary range. Competences of this kind have become increasingly important in our connected world and foreign language skills are essential in order to be able to compete on the global market place and to meet flexibility requirements. Regulations, concepts and laws must

be well devised to meet the challenge of providing all European citizens with appropriate educational possibilities and finally it is important that all stakeholders approve.

The main incentive to carry out the present study was to get insights on student motivation for the English language and the content in the context of CLIL. CLIL is an educational concept with a political dimension to it, which is why stakeholder views must be considered in order to achieve successful implementation. The results of this survey will ideally serve as a basis of decision-making for policy makers. Naturally, politicians want success from the regulations and measurements they set, but this can only be guaranteed if the stakeholders approve. Since the national curriculum for Austrian upper secondary technical colleges (HTL) was recently changed and CLIL incorporated, it suggested itself to conduct the survey in this type of school. 119 students were asked to fill out a questionnaire about motivation and opinions on English language acquisition.

In terms of structure of this MA thesis, there was an overview of different motivational concepts and theories in chapter 2, with a critical summary at the end. A special focus lay on Gardner's (1979, 2010) Socio-Psychological and Socio-Educational models of motivation and on a Socio-Dynamic perspective (Dörnyei & Taguchi 2010). These concepts assume that motivation depends on the attitudes towards learning a foreign language, on the target as such and on external factors. Another branch of research examined in more detail was the distinction between intrinsic and extrinsic motivation (Noels et al. 2000). After an examination of the concept of motivation, Content and Language Integrated Learning (CLIL) was explained and its origins mentioned in chapter 3. In view of CLIL as an educational practice it was considered important to analyse also its political dimension in the European and especially in the Austrian context.

The questionnaire used in this study was designed on the basis of research by Dörnyei and Taguchi (2010), Clément; Dörnyei and Noels (1994), Noels; Pelletier; Clément and Vallerand (2000), Deci and Ryan (2002) and Gardner (1979, 2010). It contains fourteen different parameters or categories; all concerned with motivation, and was distributed to a total of 119 students. There were three different groups according to which the data was analysed: Group 1, consisting of 35 students in the CLIL fourth forms; group 2, consisting of 43 students from the third forms of CLIL; and group 3, consisting of 41 EAA (Englisch als Arbeitssprache) students.

The general impression on motivation to learn English was rather positive amongst the entire student population (N = 119). However, when each group was analysed separately, a different

picture presented itself. In the category Ideal Self it became evident that the EAA classes were much more strongly motivated than the CLIL fourth forms. Moreover, CLIL boosted the speaking confidence of the CLIL fourth forms less than all other groups and EAA as well as CLIL third forms had a more positive attitude towards learning English in general. What is more, group 1 (fourth form CLIL) seemed to be least intrinsically motivated from all three groups and while content interest was generally high amongst all students and the majority liked it that content was taught in English, the fourth form CLIL students' interest in the content was clearly not enhanced by the introduction of English.

As far as motivation from external factors was concerned, it became evident that the CLIL groups were more strongly influenced than the EAA group. Moreover, even though none of the students seemed to be particularly afraid to talk in English, anxiety was lowest amongst the EAA group.

Concluding, it is clear that there are differences between the EAA group and the CLIL groups. A reason may be that the EAA students deliberately chose the English track, meaning that they have had English as a medium of instruction from first grade onwards, while the CLIL students did not know about this teaching concept when they entered the school. However, this is mere speculation and not a fact. In order to get clearer results, further studies and individual interviews would have to be carried out. The second obvious difference in motivation, namely between the CLIL fourth forms and the CLIL third forms, may be a sign for a suboptimal CLIL practice. I dare say that the third forms may have huge expectations and hopes which the fourth forms have not seen fulfilled. Whether this holds true on a general basis and is not due to chance would have to be the topic for further analysis.

Finally, while it was not the purpose of this study to find out why there are differences in motivation and attitudes between EAA and CLIL students, it could clearly be shown that the CLIL fourth forms are less motivated. This finding should ideally reach policy makers at least on a national level and serve as a basis for decision-making in the future. CLIL being a concept with tremendous learning potential, it is a pity if its implementation does not succeed. It is strongly hoped that it will be possible to change the CLIL practice and everything it entails in the near future in order to guarantee a successful introduction of the in my opinion tremendously beneficial teaching concept of CLIL.

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9. Appendix

9.1. Abstract (English)

Research indicates that a positive attitude towards foreign language learning and high motivation extremely enhance achievement. High task motivation probably leads to a positive learning outcome, while low task motivation might hinder proper learning. Therefore, a motivated learner is more likely to reach a high level of language competence than somebody who is not. The Content and Language Integrated Learning (CLIL) classroom incorporating bilingual teaching and learning may act as motivational basis and gives the students the chance to develop sophisticated speaking skills, fluency and a broad vocabulary range. The main incentive to carry out the present study was hence to get insights on student motivation for the English language and the content in the context of CLIL, and to find out whether CLIL as a teaching concept acts as motivation boost.

Therefore, a field study was carried out in an Austrian upper secondary technical college (HTL). The 119 participants (between 16 and 18 years old) were separated into three different student groups and filled out a questionnaire: Group 1, consisting of CLIL students who experienced one year of CLIL (4th forms); group 2, consisting of students who did not yet have any CLIL lessons (3rd forms); and group 3, consisting of students who had English as language of instruction since first grade (EAA 3rd and 4th form). The employed questionnaire is based on modified motivational concepts by other researchers and contains fourteen different categories; all concerned with motivation.

The general impression on motivation to learn English was rather positive amongst the entire student population (N = 119). However, when each group was analysed separately, a different picture presented itself. It became evident that the EAA classes were much more strongly motivated than the CLIL fourth forms and that CLIL boosted the speaking confidence of the CLIL fourth forms less than all other groups. EAA as well as CLIL third forms had a more positive attitude towards learning English in general and CLIL fourth forms seemed to be least intrinsically motivated from all three groups. While content interest was generally high amongst all students and the majority liked it that content was taught in English, the fourth form CLIL students' motivation to learn the content was clearly not enhanced by the use of English. Moreover, external factors influenced the motivation in CLIL groups more strongly than in the EAA group and even though none of the students seemed to be particularly afraid to talk in English, anxiety was lowest amongst the EAA group.

Clear differences between the EAA group and the CLIL groups and between the CLIL third and fourth forms were found. In order to be able to fully understand and explain these differences, more research would be needed.

9.2. Zusammenfassung (German)

Forschungen haben gezeigt, dass eine positive Einstellung und hohe Motivation das Erlernen einer Fremdsprache ungemein erleichtern, und zu einer verbesserten Leistung führen. Hohe Motivation für eine Aufgabe führt wahrscheinlich zu einem positiven Lernerfolg, während niedrige Motivation das Lernen behindern kann. Daher ist ein motivierter Lerner/eine motivierte Lernerin eher im Stande, ein hohes Maß an Sprachkompetenz zu erreichen, als jemand, der/die nicht motiviert ist. Der Content and Language Integrated Learning (CLIL) Unterricht bezieht bilinguales Lehren und Lernen mit ein und kann somit als Motivationsbasis fungieren, die den Schülern/Schülerinnen die Möglichkeit gibt, ein höheres Sprachniveau, Flüssigkeit beim Sprechen und ein breiteres Vokabular zu entwickeln. Der Hauptanreiz für die Durchführung der vorliegenden Studie war es daher, Erkenntnisse über die Motivation der Schüler/Schülerinnen für die englische Sprache und den Lernstoff im CLIL Unterricht zu bekommen, und infolge dessen herauszufinden, ob das Unterrichtskonzept CLIL ein Motivationsschub sein kann.

Dazu wurde eine Feldstudie an einer österreichischen technischen Sekundarschule (HTL – Höhere technische Lehranstalt) durchgeführt. Die 119 Teilnehmer/Teilnehmerinnen, die zwischen 16 und 18 Jahren alt waren, wurden in drei verschiedene Gruppen unterteilt und füllten einen Fragebogen aus: Gruppe 1 bestand aus CLIL Schülern/Schülerinnen, die bereits 1 Jahr CLIL Unterricht gehabt hatten (4. Klassen), Gruppe 2 bestand aus Schülern/Schülerinnen, die noch nicht in CLIL unterrichtet worden waren (3. Klassen), und Gruppe 3 bestand aus Schülern/Schülerinnen, die den Englisch-Zweig gewählt und seit der 1. Klasse Englisch als Unterrichtssprache hatten (EAA 3. und 4. Klasse). Der verwendete Fragebogen basiert auf modifizierten Motivationskonzepten anderer Forscher/Forscherinnen und enthält vierzehn verschiedene Parameter, die alle Motivation betreffen.

Der allgemeine zur Motivation Englisch zu lernen war unter der gesamten Schüler-/Schülerinnenpopulation (N = 119) positiv. Als jedoch jede Gruppe einzeln analysiert wurde, präsentierte sich ein anderes Bild. Es zeigte sich, dass die EAA Klassen viel stärker motiviert waren als die 4. Klassen CLIL und dass CLIL das Sprech-Selbstbewusstsein der 4. Klassen weniger förderte als das aller anderen Gruppen. Die EAA Klassen sowie die 3. Klassen CLIL hatten eine positivere Haltung gegenüber dem Englisch Lernen im Allgemeinen und die 4. Klassen schienen die von allen drei Gruppen am wenigsten intrinsisch Motivierten zu sein. Während das Interesse am technischen Fach in der Regel bei allen Schülern/Schülerinnen hoch war und die Mehrheit das Vortragen der technischen Inhalte auf Englisch positiv bewertete, zeichnete sich in der Gruppe der 4. Klassen CLIL kein Motivationsschub durch die

Verwendung der englischen Sprache ab. Darüber hinaus beeinflussten externe Faktoren die Motivation in den CLIL Gruppen stärker als in der EAA Gruppe und obwohl keiner/keine der Schüler/Schülerinnen besondere Angst beim Englisch Sprechen zu haben schien, war die Angst in den EAA Klassen am niedrigsten.

Deutliche Unterschiede zeigten sich zwischen der EAA Gruppe und den CLIL Gruppen, und zwischen den 3. Klassen CLIL und den 4. Klassen. Um diese Unterschiede zur Gänze zu verstehen und erklären zu können, wäre weitere Forschung notwendig.

9.3. Items in the questionnaire (English)

9.5. Items in the questionna	
Items from existing questionnaires	Items in the present questionnaire
The ideal L2 self (Dörnyei & Taguchi 2010: 140): • Whenever I think of my future career, I	Whenever I think of my future career, I
imagine myself using English.I can imagine myself living abroad and	imagine myself using English.I can imagine myself living abroad and
having a discussion in English.I imagine myself as someone who is able	having a discussion in English. • I imagine myself as someone who is able
to speak English.	to speak English.
Ought-to L2 self / Parental Encouragement (Dörnyei & Taguchi 2010: 141-142):	
• Learning English is necessary because people surrounding me expect me to do so.	• Learning English is necessary because people surrounding me expect me to do so.
• It will have a negative impact on my life if I don't learn English.	• It will have a negative impact on my life if I don't learn English.
• Studying English is important to me in order to gain the approval of my peers/teachers/family/boss.	• Studying English is important to me in order to gain the approval of my peers/teachers/family/boss.
 My parents/family believe(s) that I must study English to be an educated person. Instrumentality – promotion (Dörnyei & 	My parents/family believe(s) that I must study English to be an educated person.
Taguchi 2010: 142): • Studying English can be important to me	• It is important to study English if you want
because I think it will someday be useful in getting a good job and/or making money.	to earn a lot of money later on.
• Studying English is important to me because English proficiency is necessary for promotion in the future.	• It is important to study English in order to get a good job.
• Studying English is important to me because with English I can work globally.	because with English I can work globally.
• Studying English is important to me in order to achieve a special goal (e.g. to get a degree or scholarship).	• Studying English is important to me in order to achieve a special goal (e.g. to get A-levels or the Cambridge Certificate).
• Studying English is important to me because it offers a new challenge in my life.	• Studying English is important to me because it offers a new challenge in my life.
"External regulation" (Noels et al. 2000: 84):In order to get a more prestigious job later on.	
• In order to have a better salary later on. "Need for achievement" (Takahashi 2005: 105):	
• If I learn English better, I will be able to get a better job.	
• Being able to speak English will add to my social status.	

- If I can speak English, I will have a marvellous life.
- I want to learn English because it is useful when travelling in many countries.
- Increasing my English proficiency will have financial benefits for me.

Attitudes toward learning English (Dörnyei & Taguchi 2010: 144, 147):

- I like the atmosphere of my English classes.
- I always look forward to English classes.
- I get nervous and confused when I am speaking in my English class.
- I like the atmosphere of my CLIL classes.
- I always look forward to CLIL lessons.
- I get nervous and confused when I am speaking in my CLIL lessons.
- The CLIL lessons help me to develop more self-confidence when speaking English.
- I like it that communication is more important than grammar in the CLIL lessons.
- CLIL makes me feel more secure when speaking English.
- I like it that the CLIL teacher is not always superior to the students as far as language competence is concerned, and that there is mutual correction.

Travel orientation (Dörnyei & Taguchi 2010: 144):

- Learning English is important to me because I would like to travel internationally.
- Studying English is important to me because without English I won't be able to travel a lot.
- I study English because with English I can enjoy travelling abroad.

Interest in the English language (Dörnyei & Taguchi 2010: 146)

- I am interested in the way English is used in conversation.
- I find the difference between Japanese vocabulary and English vocabulary interesting.
- I like the rhythm of English.

English anxiety (Dörnyei & Taguchi 2010: 147):

- I would feel uneasy speaking English with a native speaker.
- I would get tense if a foreigner asked me for directions in English.
- How afraid are you of sounding stupid in

- Learning English is important to me because I would like to travel internationally.
- Studying English is important to me because without English I won't be able to travel a lot.
- I study English because with English I can enjoy travelling abroad.
- I am interested in the way English is used in conversation.
- I am interested in the differences between the German and the English language.
- I like the rhythm of English.
- I would feel uneasy speaking English with a native speaker.
- I would get tense if a foreigner asked me for directions in English.
- I am afraid to make a fool of myself in

- English because of the mistakes you make?
- How worried are you that other speakers of English would find your English strange?
- public, because I make so many mistakes when speaking English.I am afraid that other English speakers
- I am afraid that other English speakers consider my English to be ridiculous.
- Cultural interest / Attitudes toward the L2 community (Dörnyei & Taguchi 2010: 148)
- Do you like the music of English-speaking countries (e.g., pop music)?
- Do you like English films?
- Do you like English magazines, newspapers, or books?
- Do you like TV programmes made in English-speaking countries?
- Do you like the people who live in English-speaking countries?
- Do you like to travel to English-speaking countries?
- Would you like to know more about people from English-speaking countries?
- English as a Global Language (Clément et al. 1994, cited in Dörnyei & Ushioda 2011: 268)
- Studying English is important to me because I would like to meet foreigners with whom I can speak English.
- Studying English is important to me because it will enable me to get to know new people from different parts of the world.
- Studying English is important to me because it will enable me to learn more about what is happening in the world.
- Introjected regulation (Noels et al. 2000: 84-85)
- To show myself that I am a good citizen because I can speak a second language.
- Because I would feel ashamed if I couldn't speak to my friends from the second language community in their native tongue.
- Because I would feel guilty if I didn't know a second language.
- Identified regulation (Noels et al. 2000: 85):
- Because I choose to be the kind of person who can speak more than one language.
- Because I think it is good for my personal development.

- Do you like the music of Englishspeaking countries (e.g., pop music)?
- Do you like English films?
- Do you like English magazines, newspapers, or books?
- Do you like TV programmes made in English-speaking countries?
- Do you like the people who live in English-speaking countries?
- Do you like to travel to English-speaking countries?
- Would you like to know more about people from English-speaking countries?
- Studying English is important to me because I would like to meet foreigners with whom I can speak English.
- Studying English is important to me because it will enable me to get to know new people from different parts of the world.
- Studying English is important to me because it will enable me to learn more about what is happening in the world.
 - To show myself that I am a good citizen because I can speak a second language.
- I study English because I would feel ashamed if I couldn't speak to my friends from the second language community in their native tongue.
- I study English because I would feel guilty if I didn't know a second language.
- I study English because I choose to be the kind of person who can speak more than one language.
- I study English because I think it is good for my personal development.

	• It is important to me to know more than just my mother tongue.
 Intrinsic motivation (Noels et al. 2000: 85) For the satisfied feeling I get in finding out new things. For the satisfaction I feel when I am in the process of accomplishing difficult exercises in the second language. For the "high" feeling that I experience while speaking in the second language. Takahashi (2005: 106): Learning English is a hobby for me. 	 I study English for the satisfied feeling I get in finding out new things. I study English for the satisfaction I feel when I am in the process of accomplishing difficult exercises in the second language. I like learning English, because I enjoy speaking English.
	 Content interest I am interested in the content of the CLIL class. The subject matter is more interesting when it is presented in English. I like it that the content is taught in English. I like it that parts of the subject matter are taught in English. I think that the technical subjects should be taught in German exclusively, because the subject matter as such is already difficult to understand.
	 Regular English lessons In the CLIL lessons I can use what I have learned in the regular English lessons. The regular English lessons motivate me to use English also in other subjects. The regular English lessons are a good basis for the CLIL lessons. I am nervous when speaking in the regular English lessons.

9.4. Results of mean comparison

Table 21: Results of mean comparison between students' motivation toward English

	Item		LIL	3 rd CLIL		EA	A	Sig.
		(N=3	35)	(N=4)	13)	(N=4	41)	
		Mean†	SD	Mean†	SD	Mean†	SD	
1	Studying English is important to me because without English I won't be able to travel a lot.	5.71	0.67	5.63	0.54	5.85	0.36	0.28
2	Whenever I think of my future career, I imagine myself using English.	4.94	1.16	5.05	0.95	5.24	0.86	0.03
3	The CLIL lessons help me to develop more self-confidence when speaking English.	3.69	1.28	4.44	1.14	4.59	1.02	0.01
4	I am afraid to make a fool of myself in public, because I make so many mistakes when speaking English.	2.43	1.56	2.49	1.32	1.95	1.00	0.05
5	I think that the technical subjects should be taught in German exclusively, because the subject matter as such is already difficult to understand.	3.60	1.52	3.02	1.37	2.54	1.40	0.01
6	Studying English is important to me in order to gain the approval of my peers/teachers/family/boss.	2.71	1.32	2.77	1.48	3.20	1.44	0.32
7	Studying English is important to me because with English I can work globally.	4.91	1.20	5.26	0.73	5.54	0.92	0.09
8	The regular English lessons motivate me to use English also in other subjects.	3.37	1.11	3.09	1.21	4.07	1.25	0.01
9	It is important to me to know more than just my mother tongue.	4.89	1.32	5.35	.84	5.20	1.19	0.16
10	Studying English is important to me because it will enable me to learn more about what is happening in the world.	3.94	1.64	4.28	1.14	4.17	1.34	0.21
11	I like it that communication is more important than grammar in the CLIL lessons.	4.89	1.25	5.40	0.69	5.02	1.13	0.19
12	I like it that parts of the subject matter are taught in English.	3.63	1.37	4.28	0.98	5.29	0.93	0.00
13	I imagine myself as someone who is able to speak English.	3.80	1.45	4.12	1.14	4.93	0.96	0.00
14	My parents/family believe(s) that I must study English to be an educated person.	3.17	1.50	3.40	1.84	2.22	1.04	0.04
15	Studying English is important to me in order to achieve a special goal (e.g. to get	4.11	1.75	4.56	1.28	4.83	1.26	0.32
	a degree or scholarship).							
16	I am afraid that other English speakers consider my English to be ridiculous.	2.74	1.42	2.56	1.30	2.05	0.95	0.01

17	I study English for the satisfied feeling I get in finding out new things.	3.60	1.46	3.53	1.26	4.20	1.50	0.08
18	In the CLIL lessons I can use what I have learned in the regular English lessons.	4.34	1.51	4.74	1.16	4.83	1.16	0.00
19	Studying English is important to me because it will enable me to get to know new	4.23	1.42	4.49	1.35	4.46	1.47	0.50
	people from different parts of the world.							
20	I always look forward to the CLIL lessons.	2.57	1.14	3.63	1.25	3.93	1.10	0.00
21	I study English for the satisfaction I feel when I am in the process of	3.26	1.42	3.58	1.37	4.20	1.17	0.00
	accomplishing difficult exercises in the second language.							
22	I would feel uneasy speaking English with a native speaker.	2.71	1.49	2.56	1.33	1.98	1.21	0.05
23	It is important to study English if you want to earn a lot of money later on.	4.23	1.57	3.84	1.38	3.73	1.36	0.45
24	I would get tense if a foreigner asked me for directions in English.	2.29	1.41	2.28	1.44	1.71	1.05	0.32
25	I study English because I would feel ashamed if I couldn't speak to my friends	4.74	1.42	4.44	1.37	4.32	1.60	0.81
	from the second language community in their native tongue.							
26	I study English because I think it is good for my personal development.	4.94	1.00	4.81	1.10	4.68	1.42	0.09
27	I am interested in the content of the CLIL class.	4.37	1.40	5.14	0.89	5.10	1.24	0.08
35	CLIL makes me feel more secure when speaking English.	3.60	1.19	4.40	1.20	4.49	1.14	0.02
36	The subject matter is more interesting when it is presented in English.	2.03	0.92	2.91	1.13	3.12	1.23	0.00
37	To show myself that I am a good citizen because I can speak a second language.	3.63	1.57	3.81	1.55	3.83	1.50	0.48
38	I can imagine myself living abroad and having a discussion in English.	4.49	1.52	4.49	1.32	5.05	1.30	0.21
39	Learning English is necessary because people surrounding me expect me to do	3.37	1.61	3.53	1.37	3.37	1.58	0.98
	SO.							
40	I am interested in the differences between the German and the English language.	3.03	1.67	3.02	1.32	3.98	1.49	0.02
41	I like learning English, because I enjoy speaking English.	4.26	1.56	4.14	1.30	4.88	1.08	0.01
42	The regular English lessons are a good basis for the CLIL lessons.	4.69	1.16	4.37	1.35	4.93	1.27	0.01
43	I study English because I choose to be the kind of person who can speak more	4.77	1.50	4.79	1.15	5.24	1.09	0.55
	than one language.							
44	I am nervous when speaking in the regular English lessons.	2.46	1.50	2.23	1.25	2.24	1.36	0.58
45	It is important to study English in order to get a good job.	4.77	1.24	4.56	1.14	4.83	1.09	0.74
46	I like the atmosphere of my CLIL classes.	4.14	1.19	4.37	0.90	4.39	1.02	0.14

47	I study English because with English I can enjoy travelling abroad.	4.60	1.50	4.30	1.34	4.83	1.51	0.14
48	It will have a negative impact on my life if I don't learn English.	4.57	1.36	4.40	1.47	3.80	1.66	0.04
49	I get nervous and confused when I am speaking in my CLIL lessons.	2.71	1.53	2.44	1.35	1.88	1.14	0.02
50	Studying English is important to me because it offers a new challenge in my life.	4.29	1.32	4.26	1.33	4.61	1.09	0.51
51	I like the rhythm of English.	3.74	1.72	3.60	1.33	4.07	1.60	0.16
52	Studying English is important to me because I would like to meet foreigners with whom I can speak English.	5.31	1.16	5.12	1.00	5.37	0.99	0.35
53	I study English because I would feel guilty if I didn't know a second language.	4.20	1.62	4.00	1.66	3.63	1.71	0.53
54	I like it that the CLIL teacher is not always superior to the students as far as language competence is concerned, and that there is mutual correction.	3.94	1.61	4.60	1.22	4.56	1.53	0.29
55	I am interested in the way English is used in conversation.	4.60	1.26	4.51	1.08	4.63	1.22	0.26
56	I like it that the content is taught in English.	4.66	1.28	4.63	1.05	4.90	1.26	0.46

9.5. Questionnaire (German)

CLIL in der HTL

Universität Wien – Institut für Anglistik und Amerikanistik Campus AAKH, Hof 8, 1090 Wien theresa.fuchs@univie.ac.at

Die folgende Umfrage zum Thema CLIL (Englisch als Unterrichtssprache außerhalb des Englischunterrichts) ist Teil meiner Diplomarbeit, die ich im Rahmen meines Englisch-Studiums an der Universität Wien durchführe. Bitte beantworte die folgenden Fragen zu deinem CLIL Unterricht nach bestem Wissen und Gewissen. Der Fragebogen ist kein Test, es gibt keine falschen Antworten und deine Antworten beeinflussen keinesfalls deine Note in diesem Fach. Mir ist es wichtig, dass du deine persönliche Meinung ehrlich sagst, damit diese Umfrage wissenschaftlichen Wert hat. Die anonymisierten Daten der Fragebogenbefragung werden dann unter Umständen auch für weitere vergleichbare Forschungsprojekte zu CLIL an HTLs genutzt. Vielen Dank für deine Hilfe!

Teil I

In diesem Teil möchte ich wissen, wie sehr du den folgenden Aussagen zustimmst, oder sie ablehnst, indem du eine Nummer zwischen 1 und 6 ankreuzt. Bitte beantworte alle Fragen.

Ich stimme überhaupt nicht zu	Ich stimme nicht zu	Ich stimme eher nicht zu	Ich stimme eher zu	Ich stimme zu	Ich stimme voll und ganz zu
1	2	3	4	5	6

Bsp.: Wenn du der folgenden Aussage voll und ganz zustimmst, kreuze die Nummer 6 an:

Ich fahre sehr gern Schi.	1	2	3	4	5	X
						' \
1. Es ist wichtig Englisch zu sprechen, wenn man viel reist.	1	2	3	4	5	6
2. Ich werde in meinem zukünftigen Berufsleben bestimmt Englisc brauchen.	h 1	2	3	4	5	6
3. Die CLIL Stunden helfen mir, mehr Selbstbewusstsein beim Englisch Sprechen aufzubauen.	1	2	3	4	5	6
4. Ich habe Angst, mich beim Englisch Sprechen zu blamieren, we ich so viele Fehler mache.	il 1	2	3	4	5	6
5. Ich finde, dass die technischen Fächer nur auf Deutsch unterrichte werden sollten, weil sie sowieso schon so schwierig sind.	t 1	2	3	4	5	6
6. Mit guten Englischkenntnissen respektieren mich KollegInnen und FreundInnen mehr.	1	2	3	4	5	6
7. Englisch lernen ist für mich wichtig, weil ich dann überall auf der	1	2	3	4	5	6

Welt arbeiten kann.						
8. Der Englischunterricht motiviert mich, Englisch auch in anderen	1	2	3	4	5	6
Fächern zu nutzen.						
9. Für mich ist es wichtig, nicht nur meine Muttersprache zu beherrschen.	1	2	3	4	5	6
10. Für mich ist es wichtig Englisch zu lernen, um mehr darüber zu erfahren, was auf der Welt passiert.	1	2	3	4	5	6
11. Es gefällt mir, dass in den CLIL Stunden die Kommunikation wichtiger ist als die Grammatikfehler.	1	2	3	4	5	6
12. Es gefällt mir, dass Teile des Stoffs im Fachunterricht auf Englisch gelehrt werden.	1	2	3	4	5	6
13. Ich sehe mich selber als jemanden, der/die gut Englisch spricht.	1	2	3	4	5	6
14. Meine Eltern denken, dass ich Englisch lernen muss, um als gebildet zu gelten.	1	2	3	4	5	6
15. Für mich ist es jetzt im Moment wichtig Englisch zu lernen, weil ich gerade ein bestimmtes Ziel verfolge (z.B. Matura, Cambridge Certificate).	1	2	3	4	5	6
16. Ich habe Angst, dass andere Englisch SprecherInnen mein Englisch lächerlich finden.	1	2	3	4	5	6
17. Ich lerne gern Englisch, weil mich Neues fasziniert.	1	2	3	4	5	6
18. Ich kann im CLIL Unterricht verwenden, was ich im Englischunterricht gelernt habe.	1	2	3	4	5	6
19. Für mich ist es wichtig Englisch zu lernen, um neue Leute aus der ganzen Welt kennen zu lernen.	1	2	3	4	5	6
20. Ich freue mich immer auf die CLIL Stunden.	1	2	3	4	5	6
21. Ich lerne gern Englisch, weil es mir Freude macht, wenn ich eine schwere Aufgabe in der Fremdsprache erfolgreich meistere.	1	2	3	4	5	6
22. Ich fühle mich unwohl, wenn ich mit einem Native Speaker Englisch sprechen muss.	1	2	3	4	5	6
23. Englisch zu lernen ist wichtig, damit ich später viel Geld verdiene.	1	2	3	4	5	6
24. Ich bin nervös, wenn mich auf der Straße jemand auf Englisch nach dem Weg fragt.	1	2	3	4	5	6
25. Es wäre mir peinlich, wenn ich mit internationalen FreundInnen nicht auf Englisch kommunizieren könnte.	1	2	3	4	5	6
26. Englisch zu lernen ist für meine persönliche Entwicklung wichtig.	1	2	3	4	5	6
27. Der technische Stoff im CLIL Unterricht interessiert mich.	1	2	3	4	5	6

<u>Teil II</u>

In diesem Teil möchte ich mehr über deinen Englischgebrauch in der Freizeit erfahren. Schreib deine Antwort auf die Linie oder kreuze das Zutreffende an.

28.	Malaha	Sprachen	coriobet /	110000+	42
ZŎ.	weiche	Sprachen	SDEIGHSU	ternst	au:

Fremdsprache(n):			
29. Liest du in deiner Freizei	it Bücher, Zeitschriften	oder Journale auf Englis	sch?
Ja nein	Falls JA , oft	manchmal	sehr selten
30. Hörst du in deiner Freize	eit gern Musik auf Engli	sch?	
Ja nein	Falls JA , oft	manchmal	sehr selten
31. Schaust du in deiner Fre	izeit Filme oder Serien	in ihrer englischen Orig	inalfassung?
Ja nein	Falls JA , oft	manchmal	sehr selten
32. Surfst du in deiner Freize	eit auf Englischsprachig	gen Websites?	
Ja nein	Falls JA , oft	manchmal	sehr selten
33. Verwendest du Englisch	in Social Media (Faceb	ook, Twitter etc.)?	
Ja nein	Falls JA , oft	manchmal	sehr selten
34. Spielst du Englischspracl	hige Computerspiele?		
Ja nein	Falls JA , oft	manchmal	sehr selten

<u>Teil III</u>

Die nächsten Statements sind ähnlich wie die aus Teil I.

35. Durch CLIL fühle ich mich sicherer beim Englisch Sprechen.	1	2	3	4	5	6
36. Der Stoff ist interessanter, wenn er auf Englisch vorgetragen wird.	1	2	3	4	5	6
37. Für mich ist es wichtig Englisch zu lernen, um als gebildeteR	1	2	3	4	5	6
österreichischeR StaatsbürgerIn zu gelten.						
38. Ich kann mir vorstellen, einmal im Ausland zu leben und dort	1	2	3	4	5	6
Englisch zu sprechen.						
39. Ich muss Englisch lernen, weil die Leute um mich herum von mir	1	2	3	4	5	6
erwarten, dass ich mir gute Englischkenntnisse aufbaue.						
40. Die Unterschiede zwischen der deutschen und der englischen	1	2	3	4	5	6
Sprache interessieren mich.						
41. Ich lerne gern Englisch, weil es mir gefällt, Englisch zu sprechen.	1	2	3	4	5	6
42. Der reguläre Englischunterricht ist eine gute Basis für den CLIL	1	2	3	4	5	6
Unterricht.						
43. Ich bin stolz darauf, mindestens eine Fremdsprache zu sprechen.	1	2	3	4	5	6
44. Ich bin nervös wenn ich im regulären Englischunterricht auf	1	2	3	4	5	6
Englisch spreche.						
45. Englisch zu lernen ist wichtig, damit ich später einen Beruf	1	2	3	4	5	6
bekomme, der mir Freude bereitet.						
46. Ich finde die Lernatmosphäre in den CLIL Stunden angenehm.	1	2	3	4	5	6
47. Für mich ist es wichtig Englisch zu lernen, weil ich gerne reise.	1	2	3	4	5	6
48. Wenn ich nicht Englisch lerne, wird das negative Folgen für mein	1	2	3	4	5	6
Leben haben.						

49. Ich bin nervös wenn ich im CLIL Unterricht auf Englisch spreche.	1	2	3	4	5	6
50. Englisch zu lernen ist eine bereichernde Herausforderung in	1	2	3	4	5	6
meinem Leben.						
51. Der Klang der englischen Sprache fasziniert mich.		2	3	4	5	6
52. Für mich ist es wichtig Englisch zu lernen, um mit Leuten auf der	1	2	3	4	5	6
ganzen Welt kommunizieren zu können.						
53. Ich würde mich schämen, wenn ich keine Fremdsprache	1	2	3	4	5	6
beherrschen würde.						
54. Es gefällt mir, dass der/die CLIL LehrerIn den SchülerInnen	1	2	3	4	5	6
sprachtechnisch nicht in allem überlegen ist, und dass man sich						
gegenseitig korrigiert.						
55. Es interessiert mich, wie Englisch in der internationalen	1	2	3	4	5	6
Kommunikation verwendet wird.						
56. Ich finde es gut, dass Englisch nicht nur im Englisch Unterricht	1	2	3	4	5	6
vorkommt.						

<u>Teil IV</u>

Bitte gib folgende Informationen bekannt und schreib deine persönliche Meinung.

57.	Welche Note hattest du letztes Jahr in Englisch?
58.	Wo liegen deine Stärken in Englisch (z.B. Verstehen, Reden, Lesen, Schreiben, Vokabel und Grammatik)?
50	Was gefällt dir am jetzigen CLIL Unterricht?
55.	
60.	Hast du Ideen, wie man den CLIL Unterricht noch verbessern könnte?

9.6. Curriculum Vitae

Personal data

Name Theresa Fuchs

Nationality Austrian

Education

Since October 2012 Ba studies Environmental Management (UBRM),

University of Applied Sciences (BOKU), Vienna

Since October 2009 English and French studies, University of Vienna

Summer term 2012 ERASMUS exchange, University of Lausanne

June 2009 A-levels with distinction

Working experience

Since September 2014 Austrian Federal Ministry of Agriculture, Forestry,

Environment and Water Management (BMLFUW)
Department for Climate change and air pollution
Vaint Winn In Institute Property Conference

February 2014 Voigt+Wipp Industrial Research GmbH, Vienna

Internship

Since October 2013 University of Vienna

Tutor for British English pronunciation

Summer 2013 Kinderfreunde Steyr/Kirchdorf

Child entertainer

07/03/2013 – 07/16/2013 *EF Education First*, Hastings (UK)

Course leader

07/09/2012 – 08/31/2012 Advanced Machine and Engineering Co., Rockford IL

USA Trainee

August 2011 Vienna State Opera

Tour guide

Summer 2011, 10, 09, 08 ArcelorMittal FCE Austria GmbH, Steyr

Internships

Languages

English C2, CAE certificate

French C1, DELF B1 certificate

Spanish A1