

# The internationalization of education within the Dutch context

*Implementing the IB MYP and CLIL*

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### Abstract

In today's globalizing society, schools strive to equip their learners with the necessary knowledge and skills to develop international mindedness and intercultural literacy. This has led to changes in the educational field, including the development and implementation of international curricula. Both the International Baccalaureate Middle Years Program (IB MYP) and Content and Language Integrated Learning (CLIL) offer some valuable possible contributions to a more international education system. Therefore, this study strives to identify and describe factors that influence the successful implementation of the IB MYP and CLIL in Dutch secondary education. The successfulness is evaluated on two criteria; institutionalization (the degree to which the change is integrated in the everyday teaching and learning practice) and outcomes (the degree to which the desired outcomes are achieved).

The research was conducted at the TTO (bilingual education) department of a Dutch secondary school. This school offers the TTO-track for four years, after which most students complete their final two years of secondary education at the VWO (pre-university secondary education). Different groups of stakeholders were interviewed to gather their views on the factors affecting successful implementation of CLIL and the IB MYP, which were categorized according to a number of *general factors* affecting implementation.

In conclusion, the lack of *clarity* and the *complexity* of the IB MYP aspect of the curriculum, that also impacted its *practicality*, the lack of support from some *teachers* and the concern of equipping students to meet *national requirements* affected the institutionalization of the IB MYP and CLIL in a negative manner, whereas the support and enthusiasm of the TTO teachers, the professional development activities and teacher collaboration were identified as (indispensable) factors supporting the institutionalization of the IB MYP and CLIL.

Although there were some issues on how exactly to implement and institutionalize the IB MYP, students and teachers indicated that TTO students developed a number of skills inherent to the IB MYP. The problems that the students experienced during the transition to the VWO regarding content knowledge gaps were not due to the *quality/practicality* of the IB MYP. Rather, they were due to a different focus between the IB MYP and the VWO and the *national requirements* of the VWO. CLIL did not cause that many issues, which is reflected in the learning outcomes. The English proficiency of TTO students was above average, although they did not perform as well on grammar. Some issues with the *quality/practicality* of the program regarding content and first language learning barely affected the desired learning outcomes.

Although these factors offer some preliminary insights in the implementation of an internationalized curriculum within Dutch secondary education, further research is needed to establish the outcomes and effects of internationalized curricula within the Dutch context.

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## 1 Introduction

### 1.1 Rationale and Problem Description

In recent years, internationalization has become an important issue in education (Resnik, 2012). Schools have to cater for society's need for global citizenship and intercultural aware learners (Ten Dam & Volman, 2004). This has led to the development and implementation of various versions of international curricula. Generally, these international curricula aim at developing both international mindedness and intercultural literacy of students (Weenink, 2008). International mindedness, on the one hand, refers to the common goal of international curricula to develop international understanding, openness and awareness. Intercultural literacy, on the other hand, refers to the ability to communicate within different international settings, which includes an appreciation of the variety of culture and customs as well as the language aspect (Weenink, 2008). The language aspect is concerned with the ability to communicate with people of different nationalities and native languages. For business, studying, trading, socializing and tourism, English is nowadays a truly international language and could be considered as the modern day lingua franca<sup>1</sup> (Cogo, 2011). Although the internationalization of education might be a desirable and possibly even an inevitable development, the implementation process of various international curricula is not without struggle. Schools often experience difficulties in implementing these curricula, since they require a different philosophy and a different set of necessary knowledge and skills than more 'traditional' curricula (Weenink, 2008).

Although there are several international curricula, the International Baccalaureate (IB) school network is the largest and most rapidly expanding global curriculum (Resnik, 2012; Weenink, 2008). The IB consists of three programs; the Primary Years Program (PYP), the Middle Years Program (MYP) and the Diploma Program (DP) (Wade, 2011). Since this study focuses on secondary education, the corresponding International Baccalaureate Middle Years Program (IB MYP) is discussed. The curriculum of the IB MYP is supported and strengthened by three fundamental concepts; intercultural awareness, holistic learning and communication. Furthermore, the IB MYP employs an inquiry-based approach to teaching and learning with an emphasis on interdisciplinary instruction (Wade, 2011). This study will however place its focus on the international aspect of the IB MYP curriculum, that aims at developing international mindedness and intercultural literacy. The latter adds another dimension to international education within non-English speaking nations, concerning the necessity of developing

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<sup>1</sup> Lingua franca: *a language used as a common language between speakers whose native languages are different*. Oxford Dictionary.

intercultural literacy. In these nations, developing intercultural literacy is often operationalized through the introduction of bilingual instruction on a large scale to improve English proficiency. Bilingual teaching and learning is often realized through Content and Language Integrated Learning (CLIL), an approach in which a foreign language is used as a medium for instruction in other subject areas. Rather than viewing content and language as separate entities, CLIL stresses the relation between content, communication, cognition and culture (Coyle, 2007).

Both the IB MYP and CLIL offer some valuable possible contributions to a more internationally oriented educational system, however, schools often experience difficulties when implementing these approaches. In both the IB MYP and the CLIL implementation, these difficulties are often related to finding or training the right teachers, that are both willing and qualified to teach within these approaches (Eurydice, 2006; Barber & Mourshed, 2007; Stilisano, Waxman, Hostrup, & Rollins, 2011). Additionally, schools that implement the IB MYP experience difficulties with meeting national requirements (Stilisano et al., 2011) and implementing a CLIL approach could have negative effects on content- (Spada & Lightbown, 2002; Lyster & Ballinger, 2011) and first language learning (Lyster & Ballinger, 2011). Within the non-English speaking countries, the already complex implementation process of the IB MYP is further complicated by the language aspect, i.e. teaching in English.

This study concerns the non-English speaking context of secondary education within The Netherlands. The implications that the Dutch context might have for the implementation of the IB MYP and CLIL are briefly discussed in the next paragraph, as well as a description of the research context. The general difficulties that occur in the implementation process of the IB MYP and CLIL, combined with the implications related to the Dutch context, lead up to the research question of this study, discussed in paragraph 1.3.

## 1.2 Context Description

International education is on the rise within the whole of Europe, but the increase in schools that offer an international track has advanced more rapidly in The Netherlands than anywhere else (Weenink, 2008). Known under the Dutch term 'TTO' (Twee Talig Onderwijs: *bilingual education*) the increase in schools that offer an international track in the Netherlands over the last two decades has been immense. Aside from the linguistic aspect, these schools often have an additional focus on "European and international orientation" (Weenink, 2008, p. 1090), provided by internationalized curricula such as the IB programs. In the past 20 years 120 TTO schools were founded in the Netherlands (Verspoor, De Bot & Van Rein, 2011), which means that currently almost 20% of Dutch secondary schools have an international department (CBS, 2012).

The Dutch context is an interesting one, since it differs from that of other European countries. In the first place, English is an important trading language and has a prominent place in Dutch society, the educational system and the scientific world (Admiraal et al., 2006). This gives the Dutch a more international outlook, in comparison to other European countries (Verspoor et al., 2011). In the second place, Dutch students are often exposed to both the English language and British and American culture, through frequently accessing popular English media (Verspoor et al., 2011). Therefore, studying the implementation of the IB MYP and CLIL within the Dutch context, might yield different outcomes than in other contexts.

The research of this study was conducted at a Dutch secondary school that offers education at different levels. In addition to the 'regular' VWO (Voortgezet Wetenschappelijk Onderwijs: *pre-university secondary education*) and gymnasium (comparable to the VWO, with the addition of Latin and Ancient Greek subjects), the school has a TTO department as well. The students can choose to follow the TTO on its own, or they can combine it with the additional gymnasium subjects. The latter option is then called TTO+.

TTO and TTO+ (the TTO department) differ from the VWO in a number of ways;

1. Bilingual (CLIL)

At the TTO department, 50% of the curriculum is taught in English. This means that the department applies a CLIL (Content and Language Integrated Learning) approach, which is discussed extensively in paragraph 2.3.

2. IB MYP

The TTO department is part of the IB MYP (International Baccalaureate Middle Years Program), which works with over 3000 schools in 140 countries to offer IB programs to over 900000 students (Wade, 2011). The characteristics and content of the IB MYP are elaborated upon in paragraph 2.2.

### 3. Admission level

Within the Dutch educational system, the level of secondary education (MAVO, HAVO, VWO or gymnasium) to which a student is admitted is for a large part dependent of a national examination that is completed at the end of primary school. This national examination is called the 'cito' test. Depending on that test score, the student is admitted to a certain level of secondary education. Generally, a cito score between 538 and 545 is sufficient to be admitted to a HAVO/VWO class (Cito-score, 2010). To be admitted to the TTO department, students need a score of 545 or higher.

### 4. Small group policy

The TTO department employs a small group policy, with class sizes not exceeding 25 students.

### 5. Additional costs

Attending the TTO department at this secondary school, entails an additional cost of €750 per school year.

Taking these differences into account, it can be concluded that students who opt for the TTO department follow a completely different course of learning, with an entirely different curriculum than at the 'regular' VWO department of the school. The TTO is a four year program and after completing these four years TTO students have two options;

1. International School (IS): Proceeding their IB education, through following the International Baccalaureate Diploma Program (IB DP), a two year pre-university program leading up to the IB-diploma. The IS is situated right next to the secondary school and the two schools collaborate in the realization of the IB MYP at the TTO department.
2. VWO/gymnasium: Switching to the VWO department of the school, completing two years of VWO, leading up to a VWO diploma. The TTO+ students can switch to the gymnasium, leading up to a gymnasium diploma.

The organization of the secondary school and the IS is summarized in figure 1, providing insights in the students' learning courses. For a pre-university education in the first four years they can choose to follow VWO, with TTO as an alternative, on the one hand and gymnasium, with TTO+ as an alternative, on the other hand. When completing the first four years at VWO or TTO, students can go to VWO 5-6 (yellow line, figure 1). When completing the first four years at gymnasium or TTO+, students can go to gymnasium 5-6 (green line, figure 1). Both the TTO and the TTO+ students can also opt for the option to finish their final two years at the IS, following the IB DP (red line, figure 1).

Most TTO student choose to complete the last two years of their education at the VWO/gymnasium department of the secondary school. One of the possible reasons for this



decision is the cost of following the IB DP, which is over €6000 per school year, whereas following the IB MYP at the TTO department costs €750 per school year.

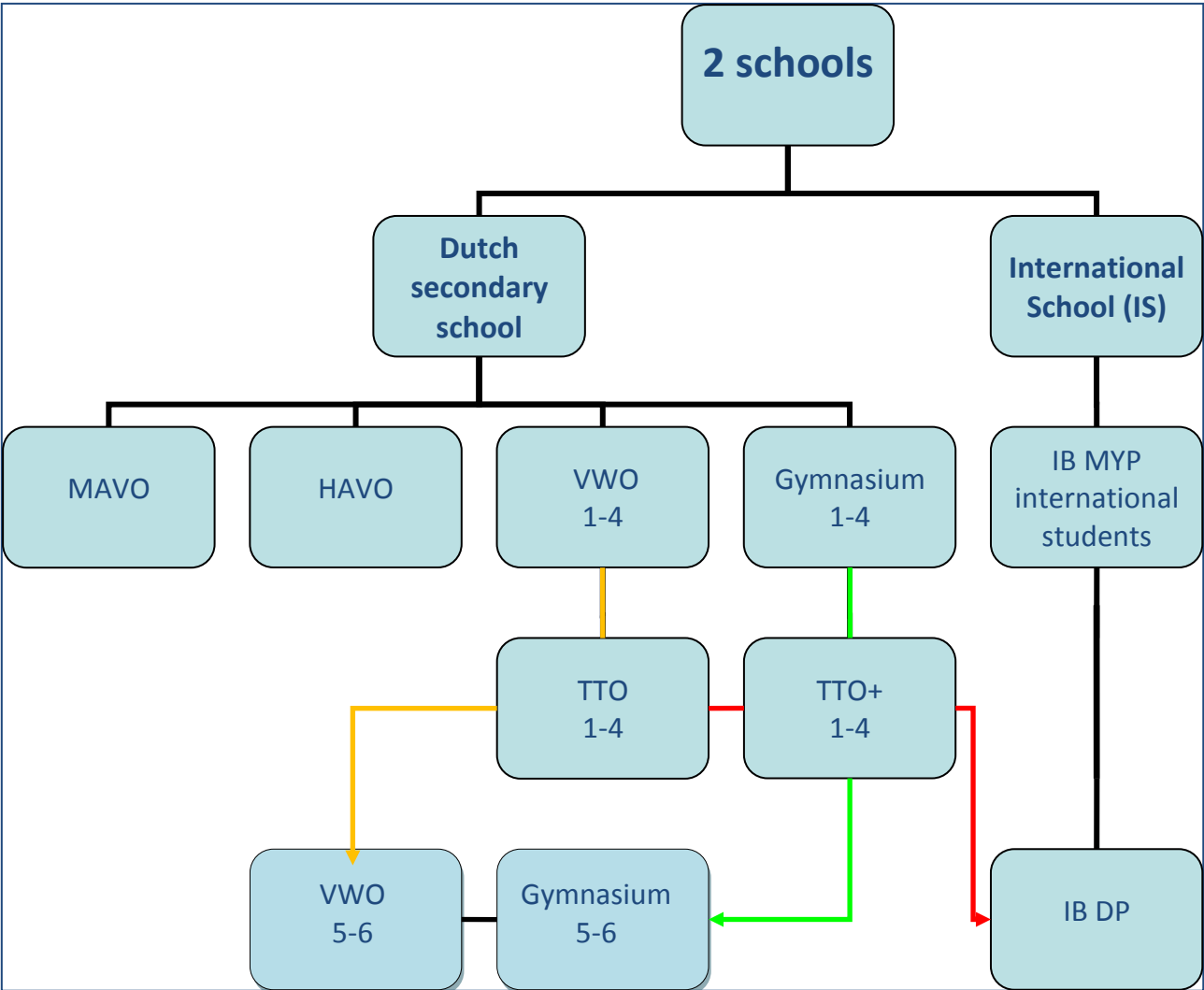


Figure 1. Organizational structure of the secondary school and the IS.

### 1.3 Research Question

The studies regarding the implementation of the IB MYP and CLIL discussed in paragraph 1.1 and the difficulties schools faced throughout the implementation process, concern the implementation of **either** the IB MYP **or** CLIL, throughout various context. The scope of this study concerns the Dutch context, which is briefly discussed in the previous paragraph. The Netherlands are a non-English speaking nation and providing international education to develop both international mindedness and intercultural literacy includes the language aspect. Implementing **both** the IB MYP **and** CLIL, to cater for this twofold goal of international education is considerably more complex. Combining both the IB MYP and CLIL alters the nature of the change and schools might face different obstacles in the implementation process. Therefore, the research question posed in this study is:

*Which factors influence the successful implementation of the IB MYP and CLIL in Dutch secondary education?*

To answer this research question, chapter 2 provides a theoretical framework that includes a definition of successful implementation and a number of general factors that determine the success or failure of an innovation identified by Fullan (2007), as well as a more elaborate description of the IB MYP and CLIL and the factors affecting the successful implementation of these approaches, based on the findings from the literature. Within this study the focus is on the Dutch context, and the consequences this different context might have are discussed in the second chapter as well. Based on the findings from the literature discussed in this chapter, some preliminary conclusions are drawn about the factors influencing the successful implementation of the IB MYP and CLIL in Dutch secondary education. These conclusions will be verified in a case study within the Dutch secondary school described in paragraph 1.2, to provide additional understanding of the implementation of these internationalized curriculum approaches. In chapter three the method of this case study is discussed, including the research design, the participants, the instrumentation, the procedure, the analysis of the data and the reliability and validity measures that were taken. This leads to the results, that are presented in chapter 4, leading up to the final conclusions on the research, the implications these might have, the limitations of the study and recommendations for further research in the final chapter.

## 2 Theoretical Framework

### 2.1 Factors Affecting Successful Implementation

To determine which factors affect successful implementation, the following paragraphs explore the definition and meaning of implementation and when implementation can be considered successful, as well as the general factors that determine the success or failure of an innovation.

**2.1.1 What is implementation?** The term 'implementation' is used throughout different contexts, including the educational field. What exactly the term entails, is not always clear and although it is used frequently in educational circles, it is used rather loosely (Marsh & Willis, 2007). The vagueness of the term can be illustrated by the broad definition of implementation provided in the Oxford Dictionary;

"the process of putting a decision or a plan into effect"

When zooming in on the meaning of implementation within the education field, Fullan (2007) provides the following definition;

"curriculum implementation can be considered the translation of a written curriculum into classroom practices, i.e. the process of enacting the planned curriculum"

Within this process of enacting the planned curriculum, he distinguishes three broad phases that the educational change process generally consists of; initiation, implementation and institutionalization (figure 2).

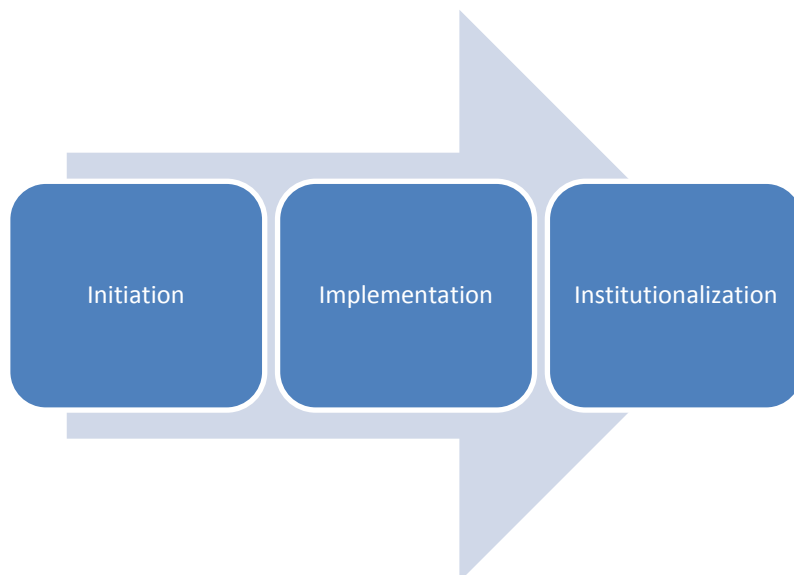


Figure 2. Overview of the educational change process (Fullan, 2007)

Within this general representation of the educational change process, initiation consists of the process that leads up to and includes a decision to adopt or proceed with a change. After this decision is made, the implementation phase involves the first experiences of attempting to put an

idea or reform into practice. Finally, institutionalization can be considered to be an extension of the implementation phase in that the new program is sustained beyond the first year or two. Throughout this study, as the research question indicates, the focus will be on the implementation of the curriculum and which factors affect its successfulness. In order to identify these factors, the following paragraphs will elaborate on what constitutes successful implementation and what determines its success or failure.

**2.1.2 What is successful implementation?** In general terms, the successfulness of implementation can be evaluated by two criteria, identified by Fullan (2007: 65-66):

1. institutionalization; whether the change gets built in as an ongoing part of the system and the program is sustained beyond the first years of implementation.
2. outcomes; the degree of school improvement in relation to given criteria (such as improved student learning and attitudes; new skills, attitudes or satisfaction on the part of teachers and other school personnel; or improved problem-solving capacity of the school as an organization).

The first of these two criteria to evaluate the successfulness of implementation might seem obvious; for the curriculum to have any impact it needs to be accepted by teachers and enacted in their teaching and learning practice (Marsh & Willis, 2007). Although this is obviously essential to the succeeding of the innovation, whether any change is in fact implemented and sustained is dependent on a number of factors, that are discussed in the following paragraph.

The second criterion is dependent of the first; an innovation needs to be implemented and institutionalized in order for it to reach the desired outcomes. However, the fact that the first criteria might be met does not guarantee that it actually yields the outcomes that are strived for. Again, that depends on a number of factors affecting implementation, discussed in paragraph 2.1.3.

To determine whether the implementation of the IB MYP and CLIL has been successful considering the second criterion, the desired outcomes of these approaches need to be identified. Only then it can be determined if these desired outcomes were in fact realized, i.e. if the implementation of these approaches was successful. Paragraphs 2.2 and 2.3 will elaborate on both the IB MYP and CLIL and identify the objectives of these approaches and the outcomes they strive for.

**2.1.3 Which factors determine the success or failure of an innovation?** After establishing what implementation is and when it can be considered successful, the final aspect of the research question posed in this study concerns the factors that affect successful implementation. Implementing changes in education is never without obstacles and the process of educational reform is a very complex one. The difficulty is that educational change is not a single entity, it is

multidimensional. Correspondingly, the success or failure of an innovation is dependent of a number of interacting variables. Fullan (2007) defines a number of factors that affect the implementation process, which he divides in three major categories; characteristics of the change, local characteristics and external factors (figure 3).

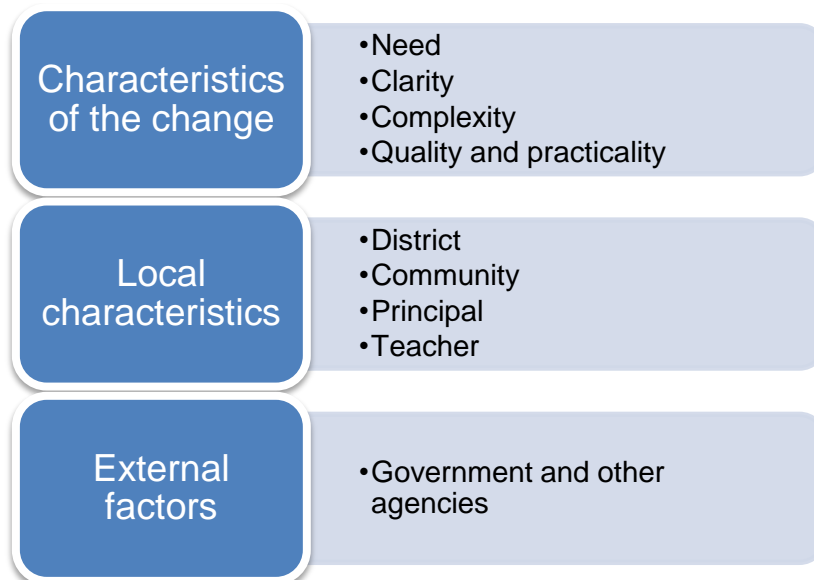


Figure 3. Factors affecting implementation (Fullan, 2007:87)

Together, these general factors determine the success or failure of implementation (Fullan, 2007). In paragraph 2.4, these factors are discussed in terms of the implementation of the IB MYP and CLIL. The difficulties and obstacles that were faced in the implementation of these approaches, determining its success or failure, are categorized according to the factors affecting implementation as represented in figure 3.

## 2.2 The International Baccalaureate Middle Years Program (IB MYP)

The world is becoming less dependent on national boundaries and a global economy and culture is a developing phenomenon (Resnik, 2012). Schools have to cater for society's need for global citizenship and intercultural aware learners, since schools are an essential factor in preparing students for society. They have to equip their learners with the necessary knowledge and skills for our current, globally oriented society (Ten Dam & Volman, 2004). Learners need to develop a different set of skills and competences than previously, which has led to changes in the educational field. In many cases this has led to the development and implementation of international curricula. The International Baccalaureate (IB) school network is the largest and most rapidly expanding global curriculum (Resnik, 2012; Weenink, 2008) and is currently being used at over 3000 schools in 140 countries, offering its curriculum to over 900000 students (Resnik, 2012; Wade, 2011). The IB consists of three programs; the Primary Years Program (PYP), the Middle Years Program (MYP) and the Diploma Program (DP) (Wade, 2011). Since this study focuses on secondary education, the corresponding Middle Years Program is discussed.

The programs are supported and strengthened by three fundamental concepts; intercultural awareness, holistic learning and communication. These concepts are made concrete through a flexible curriculum where lessons are taught with full awareness of individual learning. Furthermore, the IB MYP employs an inquiry-based approach to teaching and learning with an emphasis on interdisciplinary instruction (Wade, 2011). Links between subjects are made and subjects are linked with the outside world. This is enabled by using five common *themes* that weave between every subject (figure 4).

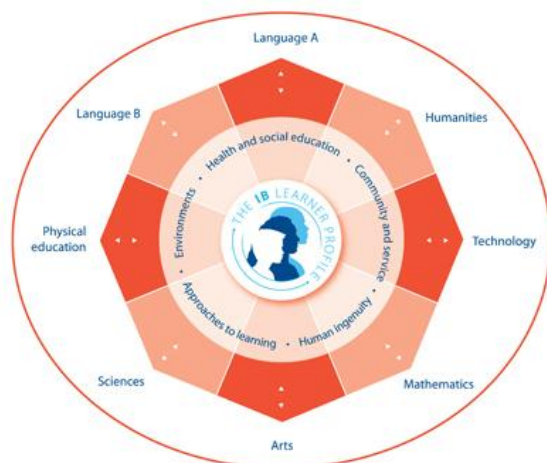


Figure 4. Interconnected curriculum of the IB MYP (Maartenscollege, (n.d.), <http://myp.maartenscollege.nl>)

Although the inquiry-based teaching and learning practice and the interdisciplinary approach fulfill a central role within the IB MYP curriculum, these are not distinctive for the IB MYP and are applied throughout various curricula. What makes the IB MYP curriculum truly distinctive is the explicit focus on international awareness, which is clearly stated in the IB mission statement; “The international Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programs of international education and rigorous assessment. These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.” (IBO, 2009)

Therefore, this study will be concerning the international aspect of the IB MYP curriculum, that has a twofold goal: international mindedness and intercultural literacy. International mindedness, on the one hand, refers to the common goal of IB schools to develop international understanding, openness and awareness. Intercultural literacy, on the other hand, refers to the ability to communicate within different international settings, which includes an appreciation of the variety of culture and customs as well as the language aspect (Weenink, 2008). The language aspect is especially important in non-English speaking nations, which is further elaborated upon in paragraph 2.3. The IB MYPs intention to develop international mindedness and intercultural literacy in their students is shaped through the IB Learner Profile (figure 5). The IB Learner Profile consists of ten attributes and is considered by the IB as “a map of a lifelong journey in pursuit of international mindedness” (IBO, 2009).

Although the attributes described in the IB Learner Profile (figure 5) sound inspiring and there may be validity in claiming that the attributes and values they embody will enable students to become internationally minded, there is no documentation of the theoretical foundations these attributes were based upon and how and why they were chosen. Furthermore, it is unclear how these attributes are to be applied or reflected in actions and how the IB or schools evaluate the efficacy of their application by students (Wells, 2011). The difficulties that arise from these unclear foundations, regarding the delivery and monitoring of the IB Learner Profile are further discussed in paragraph 2.3.

<b>Inquirers</b>	They develop their natural curiosity. They acquire the skills necessary to conduct inquiry and research and show independence in learning. They actively enjoy learning and this love of learning will be sustained throughout their lives.
<b>Knowledgeable</b>	They explore concepts, ideas and issues that have local and global significance. In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines.
<b>Thinkers</b>	They exercise initiative in applying thinking skills critically and creatively to recognize and approach complex problems, and make reasoned, ethical decisions.
<b>Communicators</b>	They understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others.
<b>Principled</b>	They act with integrity and honesty, with a strong sense of fairness, justice and respect for the dignity of the individual, groups and communities. They take responsibility for their own actions and the consequences that accompany them.
<b>Open-minded</b>	They understand and appreciate their own cultures and personal histories, and are open to the perspectives, values and traditions of other individuals and communities. They are accustomed to seeking and evaluating a range of points of view, and are willing to grow from the experience.
<b>Caring</b>	They show empathy, compassion and respect towards the needs and feelings of others. They have a personal commitment to service, and act to make a positive difference to the lives of others and to the environment.
<b>Risk-takers</b>	They approach unfamiliar situations and uncertainty with courage and forethought, and have the independence of spirit to explore new roles, ideas and strategies. They are brave and articulate in defending their beliefs.
<b>Balanced</b>	They understand the importance of intellectual, physical and emotional balance to achieve personal well-being for themselves and others.
<b>Reflective</b>	They give thoughtful consideration to their own learning and experience. They are able to assess and understand their strengths and limitations in order to support their learning and personal development.

Figure 5. The IB learner profile (International Baccalaureate Organization, 2009:5)

The literature study of Hirs (2013) discussed a number of studies within various settings that have evaluated the implementation of the IB MYP curriculum and the effects it yields. In line with the ambiguities about the delivery and monitoring of the IB Learner Profile to develop international mindedness, there are no studies that assess international mindedness or intercultural literacy in IB students. Without any clues in the IB MYP curriculum on how to set appropriate tasks to develop international mindedness and employ assessment criteria to monitor the outcomes, the already abstract concept of ‘international mindedness’ is not easily evaluated (Wells, 2011). There are, however, numerous studies that evaluate the academic performance of IB MYP students within various international contexts. These studies generally concluded that the academic performances of IB MYP students were as well as or better than those of their non-IB peers (Tan & Bibby, 2010; Tan & Bibby, 2011; Wade, 2011). Although these results imply a positive effect of the MYP on academic achievement of students, it has to be noted that this effect might only be



partially due to the curriculum of the MYP. Wade (2011) indicates that assessing the impact of the MYP is complicated by issues of selection, since most MYP students are high achieving students to begin with. The choice to follow the MYP instead of a 'regular' program is often based on higher levels of achievement and motivation of the students that opt to take the most demanding courses.

Furthermore, it was reported that there was increased collaboration and cross-discipline planning among teachers and administrators within IB MYP departments/schools. Because the IB MYP intends to make connections between the different subjects within the curriculum and sometimes even studies a single concept across different curriculum areas, teachers need to collaborate and plan more to ensure a balanced curriculum and to avoid overlap between the subjects (Stilisano et al., 2011). Enhanced levels of collaboration among administrators and teachers can be considered to be a positive influence because it increases the coherence of the curriculum. Furthermore, it is necessary to reach an effective interdisciplinary approach, without knowledge gaps or overlap (Stilisano et al., 2011). However, it also increases teacher workload, which can negatively affect teacher support and staff retention.

Although the IB MYP offers a possible contribution to the realization of international education, the implementation of the IB MYP curriculum can be problematic. A number of challenges that were faced in the implementation process arose from the literature study of Hirs (2013); In the first place, a study of Stilisano and colleagues (2011) within the context of Texan schools identified the teachers as a major and multidimensional challenge in the implementation process. Not all teachers were convinced of the need for the IB MYP curriculum and were unwilling to change their teaching style. Furthermore, teaching within the IB MYP curriculum proved to be complex since it requires a different set of teaching skills and knowledge. Finding the right teachers that were prepared to engage in extensive professional development activities proved to be difficult. In the second place, these Texan schools experienced some difficulties regarding the bureaucratic practices of the school district and a lack of district support (Stilisano et al., 2011). In the third place, some schools reported some difficulties concerning parental support. Finally, enacting the IB Learner Profile can create problems, according to a study by Wells (2011), who states that there is a lack of clear guidelines from the IB on how the Learner Profile has to be enacted in the teaching and learning practices of schools. These difficulties are discussed further in paragraph 2.4.

### 2.3 Content and Language Integrated Learning (CLIL)

Teaching in a foreign language is currently an important educational trend, which is directly related to society's need for global citizenship and intercultural awareness (Ten Dam & Volman, 2004; Coyle, 2007; Lasagabaster & Sierra, 2009; Lorenzo, Casal, & Moore, 2010). The European Commission formulated objectives on bilingual teaching and teaching in a foreign language in the 1995 Resolution of the Council and its White Paper on education and learning, striving to have EU citizens reach proficiency in three European languages, that is, two languages other than their first. Furthermore the Resolution argues that this goal should also be included in national curricula (Eurydice, 2006, p. 8). An important method, which is expected to have positive outcomes, is Content and Language Integrated Learning (CLIL) (Eurydice, 2006).

CLIL is a methodological approach based on the notion of bilingual or immersion education that seeks to develop proficiency in both the non-language subject and the language in which this is taught (Coyle, 2007). This calls for an integrated approach to both teaching and learning to ensure that the non-language subject is not solely taught *in* a foreign language, but *with* and *through* a foreign language (Eurydice, 2006). Solely translating the subject matter content in a foreign language is not sufficient to reach effective CLIL, instead it is necessary to have theoretical principles which provide a basis for CLIL pedagogies (Coyle, 2007). Coyle (2007) offers a conceptual framework that represents the nature of CLIL teaching and learning, based on a holistic perspective, which is represented in figure 6.

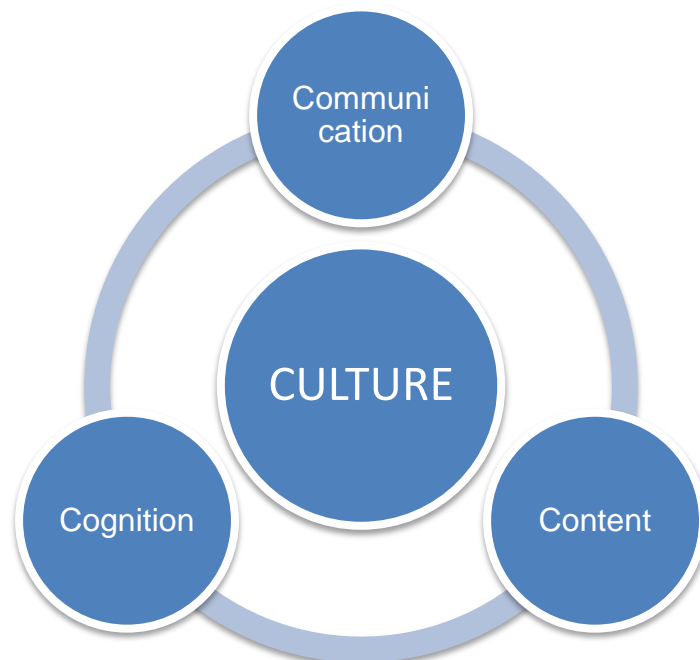


Figure 6. The 4Cs Framework for CLIL (Coyle, 2007:551)

The 4Cs framework is based on the notion of interactions between content and language, which are not found in the traditional repertoires of separate language teaching or subject teaching. Rather than viewing content and language as separate entities, this framework stresses the interrelationship between content (subject matter), communication (language), cognition (learning and thinking) and culture (social awareness of self and otherness). Culture is an important factor which is connected to both language and thinking, since language also reflects the views and characteristics of a certain culture (Coyle, 2007).

The framework has implications for the application of CLIL, which cannot be realized effectively through simply teaching in a foreign language, but needs to bear in mind the different facets and interactions of CLIL to develop appropriate pedagogies (Coyle, 2007; Eurydice Report, 2006). Effective CLIL, then, is reached through “progression in knowledge, skills and understanding of the content, engagement in associated cognitive processing, interaction in the communicative, the development of appropriate language knowledge and skills as well as experiencing a deepening cultural awareness” (Coyle, 2007:550).

A number of studies on schools that have implemented CLIL described in the literature study of Hirs (2013) provide some insights in the effects of CLIL. The most apparent and desired effect of CLIL is to reach greater proficiency in one or more foreign languages. Lightbown and Spada (2006) conclude from multiple studies that CLIL does indeed increase the development of comprehension skills, vocabulary and general communicative competence in the foreign language. Both Lorenzo, Casal and Moore (2010) and Lasagabaster (2008) found that in the Spanish context of respectively Andalusia and the Basque Country CLIL learners were clearly outperforming their mainstream peers in terms of linguistic outcomes and competence levels. Furthermore, Lasagabaster and Sierra (2009) found that CLIL learners held significantly more positive attitudes towards English (which was the foreign language in this case) in comparison to their peers who participated in a traditional foreign language classroom. Increased student motivation is an important gain, since it is expected to contribute to improving knowledge and skills in English. This was confirmed in the before mentioned study of Lasagabaster (2008) and it is underlined by Lightbown and Spada (2006), who state that CLIL is a very effective method to increase student motivation for language learning, since it creates a more genuine and immediate need to learn the language and provides more variation and depth in vocabulary and language structure than in the typical foreign language classes.

A number of studies within various settings have evaluated the implementation of CLIL and the effects it yields. A number of challenges that were faced in the implementation process arose from these studies; In the first place, the potentially negative effects CLIL might have on first language learning and content learning is one of the main concerns of the approach, although the

research on these issues is rather ambiguous (Admiraal et al., 2006). In the second place, CLIL is a relatively flexible approach that could be applied within various context, which could be seen as one of the reasons for its success (Coyle, 2007). However, this flexibility also includes a risk of watering down or misapplying CLIL. A study of Georgiou (2012) states that some CLIL teachers watered down the content subject and treated CLIL in a foreign language oriented manner. In the third place, teaching within a CLIL approach is complex and it is difficult to find adequate teachers, that need language competence as well as good knowledge of the non-language subject to be taught (Eurydice Report, 2006). These obstacles that are faced in the implementation process of CLIL are elaborated upon in paragraph 2.4.

## 2.4 Factors Affecting the Successful Implementation of the IB MYP and CLIL

By evaluating the obstacles that were faced in a number of studies concerning the implementation of the IB MYP in the literature study of Hirs (2013), a number of factors affecting the implementation of the IB MYP were identified.

In the first place several studies identified a number of challenges regarding the characteristics of the change (*need, clarity, complexity and quality/practicality*). In several schools that implemented the IB MYP curriculum, some challenges regarding the perceived *need* for change arose. Not all teachers were convinced of the need for the IB MYP curriculum and therefore did not support the change it represented (Stilisano et al., 2011). Some challenges concerning the *clarity* factor of the IB MYP implementation were identified in a study of Wells (2011), who states that the IB Learner Profile (figure 5) is the main framework for developing an international mindset within the IB MYP curriculum. However, it is not clear how the attributes from the IB Learner Profile are to be applied or reflected in action and how the IB or schools evaluate the efficacy of their application. This lack of clarity increases the *complexity* of the IB MYP as well, since the lacking of clear guidelines on how to incorporate the IB Learner Profile in teaching and learning practice, implies that schools and teachers have to figure out themselves how to deliver the attributes and develop adequate teaching and learning strategies. The fact that this is left to individual schools and teachers, then, implies that the *quality* and *practicality* is not ensured (Wells, 2011).

In the second place, some challenges concerning the local characteristics (*district, community, principal and teacher*) were identified. These regard a lack of support and bureaucratic practices from the *district* office, a lack of parental and *community* support and the crucial role of the *teacher* as a factor affecting the implementation process. Finding or training adequate teaching staff proved to be a major issue in the implementation of the IB MYP, and providing continuous professional development activities were not only costly but also time-consuming. The latter issue negatively impacted teacher support for the change, which was already an issue because not all teachers perceived it as a necessary change (Stilisano et al., 2011). Furthermore, teacher collaboration was an important aspect in the implementation of both the IB MYP and CLIL, to realize a coherent curriculum (Coyle, 2007; Stilisano et al., 2011).

In the third place, the external factors were an issue in the implementation process of the IB MYP, mainly because it proved to be difficult to balance the IB MYP curriculum with national standards and requirements.

The obstacles that were faced in several studies concerning CLIL were evaluated according to the same categories (figure 3), to identify the factors affecting the implementation process of this approach. In the first place, the characteristics of CLIL influenced the *clarity* of the change.

Because CLIL is 'transferable' across different contexts, it risks being watered down or misapplied and if specific guidelines are not given it could become a time-consuming, ineffective and frustrating experience (Coyle, 2007; Georgiou, 2012). The fact that teachers need language competence as well as good knowledge of the non-language subject to be taught makes CLIL rather *complex*. Furthermore, CLIL possibly impacts first language learning and content learning in a negative manner, which concerns the *quality and practicality* of the approach (Spada & Lightbown, 2002; Lyster & Ballinger, 2011).

In the second place, the local characteristics were an issue in some cases. A study of Lyster and Ballinger (2011) reported a lack of parental and *community* support but a more pressing issue were the *teachers* that need to be experts in two respects (language and content) and needed to engage in extensive professional development activities.

In the third place, the external factors concern the potential negative impact CLIL might have on content and first language learning, which may cause an inability for students to meet national requirements in certain subjects.

All these (interacting) factors combined determine the success or failure of the implementation process of the IB MYP on the one hand and CLIL on the other hand. Together they offer some preliminary insights in the factors that influence the successful implementation of the IB MYP on the one hand and CLIL on the other hand.

**2.4.1 Factors affecting the successful implementation of the IB MYP and CLIL, relevant to the Dutch context.** The scope of this study, however, concerns the Dutch context. Since the first category of factors affecting implementation, characteristics of the change, are inherent to the change itself, the factors identified in this category are equally applicable to the Dutch context. The local characteristics and external factors, however, are context-related. Since there are no specific *district* legislations in the Netherlands, this factor is not relevant for the Dutch context. There are however some national requirements, including national school leaving exams that are in Dutch (Admiraal et al., 2006). This implies some potential problems because the IB MYP curriculum has to equip students with the necessary knowledge and skills to pass these exams and the potential problem of CLIL impacting first language learning and content learning needs to be overcome. Since international education in the Netherlands is always on a voluntary basis, parental and *community* support is a minimal concern (Admiraal et al., 2006). The *teachers*, however, are a major concern since they need to engage in professional development activities to teach according to the IB MYP philosophy, as well as becoming experts in the English language and the non-language subject to be taught. This makes the acquisition of new and well-equipped staff and the professional development of teachers an obstacle that is difficult to overcome. Aside from the needed professional development activities, teacher collaboration is an important

aspect in the implementation of both the IB MYP and CLIL as well (Coyle, 2007; Stilisano et al.; 2011).

Combining the factors identified in the literature with the local characteristics and external factors of the Dutch context provides a number of factors that are expected to influence successful implementation;

The possible lacking of a perceived *need* for the change, the lack of *clarity* on how to deliver and monitor the IB Learner Profile and the risk of watering down or misapplying CLIL without specific guidelines, the *complexity* for teachers of delivering the IB Learner Profile without clear guidelines and becoming a competent IB MYP teacher that also possesses language competence and knowledge of the non-language subject to be taught, the lacking of guidelines to ensure the *quality and practicality* of the enactment of the IB Learner Profile and the potential negative impact of CLIL on first language and content learning, the excessive amount of knowledge and skills that is needed to be an adequate *teacher* and the correspondingly extensive professional development activities and teacher collaboration activities teachers would need to engage in and, finally, the national requirements and national final school leaving exams set by the *government* that could imply a challenge for students that need to acquire the necessary content and first language knowledge. These factors, expected to affect the successful implementation of the IB MYP and CLIL within Dutch secondary education are summarized in table 1.

Table 1

*Factors affecting the implementation of the IB MYP and CLIL, relevant for the Dutch context*

<u>Category</u>	<u>Factor</u>	<u>Specifics</u>
Characteristics of the change	Need	IB MYP: lacking of a perceived need > lack of teacher support
	Clarity	IB MYP: lack of clarity on delivering and monitoring the Learner Profile CLIL: risk of watering down or misapplying without specific guidelines
	Complexity	IB MYP: lack of guidelines on Learner Profile > complex process of developing teaching strategies CLIL: possessing/acquiring both language competence and knowledge of the non-language subject to be

		taught
	Quality/Practicality	IB MYP: no quality measures for the practical enactment of the Learner Profile
		CLIL: risk of compromising first language learning and content learning
Local characteristics	Teacher	IB MYP: lacking of a perceived need > lack of teacher support
		Both: acquiring qualified new staff
		Both: professional development activities
		Both: teacher collaboration
External factors	Government	National requirements and examinations

These factors are expected to affect the successful implementation of the IB MYP and CLIL. Successfulness, in this case is determined by two criteria, as described in paragraph 2.1.2: institutionalization and outcomes. Institutionalization concerns the degree to which the change gets built in as an ongoing part of the teaching and learning practice of the TTO department (Fullan, 2007). The outcomes concern the degree to which the desired outcomes of the IB MYP and CLIL are reached. As described in paragraphs 2.2 and 2.3 the TTO curriculum strives to develop both international mindedness and intercultural literacy in their learners. The desired outcome of developing international mindedness, on the one hand, is represented by the desired attributes from the IB Learner Profile (figure 5) and is to be reached through the implementation of the IB MYP. The desired outcome of developing intercultural literacy, on the other hand, is represented by the CLIL objective of reaching greater proficiency in a foreign language, which is English in this case, while reaching proficiency in the non-language subject to be taught at the same time. In addition to these desired outcomes inherent to the IB MYP and CLIL, the TTO curriculum needs to prepare students for the VWO as well, due to the organization of this school, discussed in paragraph 1.2. Since most students make the transition to the Dutch VWO after four years of TTO, the TTO curriculum needs to equip students with the necessary knowledge and skills to succeed at the VWO.

To date there is no known research on the combination of the IB MYP and CLIL and the implementation process involved. To gain some further insights in the factors influencing the



successful implementation of the IB MYP and CLIL in Dutch secondary education, the results from the literature study (Hirs, 2013) will be verified in a case study, that is described in the following chapters.

### 3 Method

Based on the theoretical framework presented in chapter 2, a number of factors affecting the successful implementation of the IB MYP and CLIL were identified. These factors were categorized according to the general factors affecting implementation, as described by Fullan (2007), that are presented in figure 3. These factors were then reviewed in the light of the Dutch context (paragraph 2.4.1), which resulted in some preliminary insights in the factors affecting the successful implementation of the IB MYP and CLIL in Dutch secondary education (table 1).

These preliminary insights from the theoretical framework were verified in a case study. This chapter discusses the followed method and the chain of evidence within this study. This includes a discussion of the research design in the first paragraph, addressing the chosen approach and the theoretical foundations used as a framework for the research. In paragraph 3.2 the different participants are discussed, that represent the different groups of stakeholders within the TTO department. All these participants were interviewed using structured interview protocols, that are discussed in paragraph 3.3, followed by a description of the procedures that were followed in conducting and transcribing these interviews in paragraph 3.4. Paragraph 3.5 provides insights in the coding and analysis of these transcripts and the way the gathered data was 'translated' into results. Finally, paragraph 3.6 addresses the measures that were taken to ensure reliability and validity.

#### 3.1 Research Design

To identify and describe the factors that affect implementation in a teaching and learning practice, a case study approach was chosen. A single case was studied, which is the TTO department within the context of a Dutch secondary school, as described in paragraph 1.2. It concerns a descriptive case study, that aims at describing the factors that affect the successful implementation of the IB MYP and CLIL at the TTO department of a Dutch secondary school. A case study is a research method within which the researcher tries to achieve in-depth insights in one or more object(s) or process(es). It provides an unique example of real people in real situations, enabling readers to understand ideas more clearly than simply presenting them with abstract ideas or theories (Cohen, Marion & Morrison, 2011).

The decision to apply a case study design was made for a number of reasons; In the first place, a case study can catch unique features that may otherwise be lost in large-scale data (e.g. surveys) and these unique features may hold the key to understanding the situation (Cohen et al., 2011).

In the second place, a case study recognizes the complexity and embeddedness of social truths and by carefully attending social situations, it can represent something of the discrepancies or conflicts between the viewpoints of participants. In this study different stakeholders within the TTO department are interviewed to gather different views and perceptions on the implementation of CLIL and the IB MYP, as discussed in paragraph 3.2.2.

In the third place, it can provide insights in other similar situations and the fact that a case study represents a real-life situation makes that it is immediately intelligible and can be understood by a wide audience (Cohen et al., 2011). This case is a rather unique or extreme case of international education within the Dutch context; only two other schools in the Netherlands apply CLIL combined with an IB MYP approach. However, as described in paragraph 2.3, the increase in schools that offer an international track in the Netherlands over the last two decades has been immense. Aside from the linguistic aspect, these schools often have an additional focus on "European and international orientation" as well (Weenink, 2008, p. 1090). This means that the current study at the TTO department describes an extreme case of an expanding number of schools that offer international education in the Netherlands. Cohen and colleagues suggest that an extreme case can provide a valuable 'test bed', since it represents a type of situation that can be described as "if it can work here, it will work anywhere" (2011:291).

In the fourth place, the fact that case studies are conducted in a 'real-life' situation might contribute to the direct interpretation of insights, that may be directly put to use for staff and individual self-development, within institutional feedback, formative evaluation and educational policy making (Cohen et al., 2011). The TTO department where this study was conducted expressed a desire to gain more insights in the implementation of their curriculum and which factors contributed to the success or failure of that implementation process, possibly making use of those insights to improve or alter the curriculum. The fact that a case study approach was chosen generally contributes to an immediate interpretation and can be easily understood by a wide audience, since case studies are written in everyday, non-professional language (Cohen et al., 2011).

The design of this case study is based around the general factors affecting implementation identified by Fullan (2007), represented in figure 3. In chapter 2, these general factors are reviewed in the light of the Dutch context, identifying factors affecting implementation relevant to this context (table 1). These serve as the general framework for research throughout this study, as well as the structuring of the interviews and analysis, which is further elaborated upon in the remainder of this chapter.

These factors combined determine the success or failure of the implementation of the IB MYP and CLIL. As discussed in paragraph 2.1.2, successfulness can be evaluated on two different

criteria: institutionalization and the outcomes. As discussed in paragraph 2.4.1, the desired outcomes are to develop international mindedness (IB Learner Profile) and intercultural literacy (English proficiency), as well as equipping students with the necessary knowledge and skills to succeed at the VWO after completing four years of TTO.

To evaluate the successfulness of the implementation on both criteria, the stakeholders that are responsible for the enactment of the curriculum in the teaching and learning practice were interviewed about the degree to which institutionalization was reached and which factors affected this. These stakeholders are the school leader, the IB MYP coordinator and the TTO teachers, that are discussed in the next paragraph. To evaluate to what degree the desired outcomes were reached and which factors affected the ability to reach them, the TTO students, former TTO students in VWO 6 and the VWO teachers were interviewed. These three groups of respondents provide some insights in the learning experiences of the students and the (experiential) learning outcomes they yield, which will be discussed further in paragraphs 3.2 and 3.3.

### 3.2 Participants

In total, eight different (groups of) respondents were selected; the school leader, the IB MYP coordinator, TTO teachers teaching in English, TTO teachers teaching in Dutch, TTO students, a VWO teacher teaching English to former TTO students in VWO, VWO teachers teaching other subjects to former TTO students and former TTO students in VWO. These respondents were selected because they represent the different stakeholders within the TTO department. They were asked to offer their views on the factors affecting the successful implementation of the IB MYP and CLIL within the TTO curriculum. To gather these views and perceptions, all respondents were interviewed, reviewing the relevant factors expected to affect successful implementation (table 1) from multiple perspectives. To ensure an adequate picture and to improve the reliability and validity of the study through triangulation, each of the factors was evaluated through interviewing at least two groups of respondents.

Since there was only one school leader and one IB MYP coordinator, there was no selection procedure in place for these respondents. The teachers were selected by the school leader, who has the best insights in their willingness and ability to talk about the curriculum, their schedules and experience at the school, bearing in mind to select those teachers who in total will give a good representation of the teaching staff as a whole. The students were randomly selected, with a total of seven TTO students per year and five VWO students. Since the research of this study was conducted at the start of the school year, the first year TTO students were excluded. Because they only attended the TTO for a couple of weeks, they probably cannot yet provide a adequate representation of the school. The same applies to the VWO students; the former TTO students in VWO5 were excluded as well, since they were only at the VWO for a couple of weeks. The characteristics of the participants are discussed in the following paragraphs.

**3.2.1 School leader.** The team leader of the TTO department can be identified as the school leader, since she is responsible for the general management and organization of the department. The school leader has been working at the department for 11 years, and started working at the department when it was first introduced at the school. Prior to these 11 years she did not have any experience with CLIL or the IB MYP. Her views and opinions on the factors affecting implementation are collected through an interview, which is discussed in paragraph 3.3.1.

**3.2.2 IB MYP coordinator.** The IB MYP coordinator is an external stakeholder to some degree; he is not concerned with the department or its curriculum as a whole, but only addresses the implementation of the IB MYP. This implementation includes the development and the composing of the curriculum documents and materials, but also acting as a coach and facilitator in teacher meetings regarding the IB MYP. Aside from his position as IB MYP coordinator, he is head of the International School (IS), that is situated next to the secondary school. His views and opinions on

the factors affecting the implementation of the IB MYP are collected through an interview, which is discussed in paragraph 3.3.2.

**3.2.3 TTO teachers.** Since only 50% of the subjects are taught in English, there are both teachers that teach in English and teachers that teach in Dutch. The views and opinions on both CLIL and the IB MYP of the four teachers that teach their subjects in English, were collected through interviews, as discussed in paragraph 3.3.3. The characteristics of the teachers, teaching in English are summarized in table 2.

Table 2

*Characteristics of the TTO teachers, teaching in English*

<u>Teacher</u>	<u>Subject</u>	<u>Years of experience at TTO</u>	<u>Previous experience with CLIL/IB MYP?</u>	<u>Native speaker of English?</u>
1	Geography	4	No, not at all	No
2	History	5	Yes, with MYP	No
3	Chemistry	5	No, not at all	No
4	Science	2	Yes, with MYP	Yes

The teachers that teach in Dutch do not apply CLIL in their classroom practice but do work within the IB MYP approach. Therefore, only their views and opinions on the IB MYP were collected through interviews, as discussed in paragraph 3.3.3. The characteristics of the teachers, teaching in Dutch are summarized in table 3.

Table 3

*Characteristics of the TTO teachers, teaching in Dutch*

<u>Teacher</u>	<u>Subject</u>	<u>Years of experience at TTO</u>	<u>Previous experience with IB MYP?</u>
5	Dutch	6	No, not at all
6	Latin, Ancient Greek, KCV	3	No, not as a teacher
7	Mathematics	5	No, not at all
8	Mathematics	4	No, not at all

**3.2.4 TTO students.** A total number of 21 students were interviewed, to collect their views and perceptions on the TTO department. The students in years 2-4 were asked for their views and

opinions of the TTO and their learning. Their views and perceptions were gathered through interviews, as discussed in paragraph 3.3.4.

**3.2.5 Former TTO students in VWO 6.** When students complete their four years at the TTO department, they have to make a switch to either the VWO department or the DP at the International School, as discussed in paragraph 1.2. Therefore, there are a number of students coming from the TTO department in VWO 5 and 6. Since this group of students have made the transition, they are able to reflect on their experiences at the TTO. Their views and perceptions of the department were collected through interviews, as discussed in paragraph 3.3.5.

**3.2.6 VWO teachers, teaching former TTO students.** A total of three VWO teachers were interviewed, collecting their views and perceptions on the outcomes of the TTO department. The characteristics of the VWO teachers are summarized in table 4.

Table 4

*Characteristics of the VWO teachers, teaching former TTO students*

<u>Teacher</u>	<u>Subject</u>	<u>Years of experience at</u> <u>VWO</u>	<u>Previous experience with</u> <u>CLIL/IB MYP?</u>
9	English		Yes, with both
10	Dutch	10	Yes, with both
11	Mathematics and NLT	10	Yes, with both

### 3.3 Instrumentation

All the respondents that are mentioned above are interviewed, using structured interview protocols. Within this study, the choice was made to use structured interviews with open-ended questions, for a number of reasons; In the first place the face-to-face setting of an interview allows the interviewer to clarify the purpose of the study and to clarify any misunderstandings the respondent might have about the interview items. In the second place, it ensures that the questions are addressed at an appropriate speed, allowing the interviewer to achieve more in-depth answers and ask respondents to elaborate when their answers are brief or unclear. This in contrast to, for example, a(n) (open-ended) questionnaire, that is often filled in more hurriedly and (therefore) risks providing less elaborate answers. In the third place, the interviews are structured to ensure that the gathered data are comparable amongst the different respondents and that the data are complete for each interviewee on the topics that are addressed, which facilitates the organization and analysis of the data. In the fourth place, the interview items are open-ended to provide the interviewer with more flexibility, providing the ability to go more into depth and clear misunderstandings, allowing the interviewer to make a truer assessment of what the respondent really believes (Cohen et al., 2011).

The interview items are composed according to the factors expected to affect implementation identified in the literature review, matching the different factors to relevant groups of respondents. Generally, the interview items were not directly aimed at these factors, because of the risk of directing the question and therewith the answer towards a certain issue. Rather, the interview items were kept more open-ended. This way, the question is not directed at a certain factor and offers the possibility for the respondents to identify other factors affecting successful implementation. Instead, the interviewer kept a 'check list' during the interview with the findings from the literature, that are summarized in table 1. This way, the respondent was asked an open-ended question like: "What do you believe to be the most important challenges or obstacles of the TTO department?". After the initial response, the interviewer had the opportunity to ask about factors that arose from the literature findings, that were not mentioned by the respondent. The composing of the interview items and their relation to the factors is further elaborated upon in the following paragraphs.

**3.3.1 School leader interview protocol.** The interview protocol of the school leader consists of nine items, and can be found in appendix 1. The interview items were composed according to the factors affecting the successful implementation of the IB MYP and CLIL, as identified in the theoretical framework, presented in chapter 2. For example, the findings from the literature suggest that the IB MYP program does not provide clear guidelines on how to apply and evaluate the attributes from the IB Learner Profile in practice (see paragraph 2.1). This means that the



curriculum materials need to be developed by the school itself, which may affect the way the IB Learner Profile is realized in the curriculum documents and materials. To assess the *clarity* and the possible *complexity* of developing these materials, the school leader was asked what she considers to be the most important aims of the TTO department and how these are integrated in the TTO curriculum (items 2 and 3). Furthermore the school leader was interviewed about some organizational issues as well, concerning the acquisition of staff and the realization of professional development activities and teacher collaboration, since these all are potential factors affecting successful implementation identified in the theoretical framework (items 6-8).

**3.3.2 IB MYP coordinator interview protocol.** The interview protocol of the IB MYP coordinator consists of nine items, and can be found in appendix 2. Since the IB MYP coordinator operates at the same level as the school leader the items are similar. However, they only concern the IB MYP since he has no role in the implementation of CLIL. Furthermore, he also provides in-school teacher training regarding the IB MYP and was therefore interviewed about these professional development activities and teacher collaboration as well.

**3.3.3 TTO teachers interview protocols.** There are two groups of TTO teachers; those who teach in English and those who teach in Dutch. The first group is interviewed about their views and perceptions of the TTO departments curriculum, including both the IB MYP and CLIL. The second group of teachers are not concerned with CLIL and are therefore only interviewed about the IB MYP. The interview protocol of the teachers teaching in English can be found in appendix 3 and the interview protocol of the teachers teaching in Dutch can be found in appendix 4.

The factors affecting the implementation/institutionalization were evaluated through interviewing the teachers on issues regarding the perceived *need* and support for change, by asking them if they deliberately chose to work within the TTO and if they believed that it had added value for their students (items 4 and 5). Similar to the interview protocols of the school leader and the IB MYP coordinator, the teachers were asked what they believed to be the most important aims of the TTO (item 6), to evaluate the *clarity* of the TTO curriculum for the teachers, as well as how they integrated these in their teaching and learning practice (item 7) to evaluate the *complexity* of doing so, since the findings from the literature suggest that both the IB MYP and CLIL might be lacking *clear* guidelines and are rather *complex*.

Furthermore, the *TTO teachers* were also questioned about the degree and nature of the professional development activities and teacher collaboration (items 8-11), to evaluate if and to what degree it influences the successful implementation of the TTO curriculum.

**3.3.4 TTO students interview protocol.** The interview protocol for the TTO students consists of seven items, and can be found in appendix 7. These items were aimed at gaining insight in the learning experiences of the students, striving to identify factors contributing to the (un)successful

implementation of the IB MYP and CLIL. In contrast to the school leader, IB MYP coordinator and the teachers, students are not generally concerned with curriculum documents. Therefore, the interview items are formulated and composed somewhat different, to gain insight in the students' views on the TTO curriculum and their learning experiences.

**3.3.5 Former TTO students in VWO 6 interview protocol.** The former TTO students in VWO 6 were asked to provide their perceptions on their learning outcomes of the TTO department. The focus of the interview is on the learning outcomes regarding the national requirements and the preparation for their final school leaving exams and if they felt they could meet these requirements, including questions on their performance at the VWO and the possibility to address factors in the TTO curriculum that might have affected these learning outcomes.

**3.3.6 VWO teachers, teaching former TTO students interview protocol.** The VWO teachers are able to provide some insights into the knowledge and skills of the TTO students. The ability to compare the TTO students with their VWO peers, gives these teachers the opportunity to identify which knowledge and skills could be attributed to the TTO and which factors might have affected these outcomes.

The VWO teacher English has some insights in the learning outcomes of the TTO, since he teaches the former TTO students. The focus of the interview is on the learning outcomes regarding CLIL, since the respondent teaches English. The interview protocol consists of five items and can be found in appendix 7. Since the desired outcome of CLIL is to improve English proficiency, the English teacher was questioned about the level of proficiency of the TTO students. Since an important factor influencing successful implementation were the national requirements and the national school leaving exams (table 1), this teacher was asked if the TTO students were able to meet these requirements.

While the VWO teacher, teaching in English was interviewed about the learning outcomes regarding CLIL, the VWO teachers teaching other subjects were interviewed about the outcomes including both CLIL and the IB MYP. The major issues in these interviews were the quality of the TTO curriculum, that might have a negative impact on first language and content learning, and the meeting of national requirements and final school leaving exams. The interview protocol consists of six items and can be found in appendix 8.

### 3.4 Procedures

The data in this study are collected through interviews with the different groups of respondents, discussed in paragraph 3.2. Before the interviews were conducted, an interview protocol was made for each group of respondents, based on the theoretical framework in chapter 2. These interview protocols are discussed in paragraph 3.3 and can be found in appendices 1 through 8.

Before initiating the interview, it is important to inform the participants about the nature and purpose of the interview and provide them with an adequate introduction (Cohen et al., 2011). This was realized through providing the different stakeholders within the TTO department some background information on the interviewer and informing them about the nature of the research and the interviews taking place, through including some information on the research in the electronic newsletter of the school that was sent to teachers, students and parents. Furthermore, at the start of each interview, the interviewer introduced herself and the participant was informed about the nature and purpose of the research and the likely duration of the interview, as suggested by Cohen and colleagues (2011). All respondents were asked for permission to audio tape the interview, ensuring that they would remain anonymous throughout all reports and documentation on this study and that the information they provided would not be used for any other purpose than the current study. This was done to ensure some important issues regarding informed consent, guarantees of confidentiality, beneficence and non-maleficence, as suggested by Cohen and colleagues (2011:422).

The interview with the school leader took place in her office within the school, after school time. The interview with the IB MYP coordinator was conducted in his office at the International School (IS), during school time. All the other interviews, with the teachers and the students, were conducted in an empty office within the school, during school time.

The duration of the interviews per group of respondents differed slightly, depending on the extensiveness of their answers. On average, the interviews with the teachers and the students took around fifteen minutes. The interview with the school leader and the IB MYP coordinator both took approximately thirty minutes.

The interviews were recorded and notes were taken by the interviewer. Based on these recordings and notes, transcripts were made of every interview. In the transcription process, data is inevitably lost from the original encounter, since the transcription represents the translation from one set of rule systems (oral and interpersonal) to another very remote rule system (written language). Non-verbal communication as well as intonation, sarcasm and other discursive elements could get lost in translation. To offset this issue to some degree, the transcripts were sent to the respondents by e-mail, asking them to confirm a correct representation of the interview and to make corrections when needed (Cohen et al., 2011). In two cases the

respondents gave feedback, which was used to make the final versions of the transcripts. After completing the transcripts, the data was coded in the Atlas.ti software and analyzed. The analysis of the data is discussed in paragraph 3.5.

### 3.5 Analysis

The data in this study are collected through interviews with the different groups of respondents discussed in paragraph 3.2. These data (notes and recordings) were transcribed, as discussed in the previous paragraph. The first step of analyzing the transcripts was performed by going through a coding process, which provides the ability to identify and describe different themes throughout the interview data and amongst different respondents (Cohen et al., 2011). This coding process consisted of pre-coding, first cycle coding and second cycle coding, examining, reviewing and revising codes throughout (Gorden, 1992; Saldaña, 2009). For the pre-coding, hard-copies of the transcripts were used to highlight significant quotes or passages within the transcript, as suggested by Saldaña (2009) to achieve some initial understanding about the collected data.

Subsequently, the data were transferred to the Atlas.ti software and an initial set of codes was developed for the first cycle of coding. This initial set of codes was derived from the factors affecting the implementation of CLIL and the IB MYP found in the literature review (Hirs, 2013), derived from the general factors affecting implementation identified by Fullan (2007). These codes are called 'structured codes' and can be described as a content-based or conceptual phrase representing a topic of inquiry to a segment of data that relates to a specific research question used to frame the interview (MacQueen et al., 2008, as cited by Saldaña, 2009:66). Within this study, the topics of inquiry concerned the factors affecting the implementation of CLIL on the one hand and the IB MYP on the other hand, identified in the literature review (Hirs, 2013). Structural coding is considered to be a suitable approach for coding interview transcripts, especially for structured interviews (Saldaña, 2009).

After going through the first cycle coding process and assigning initial codes to the data, the codes and data were thoroughly reviewed. As suggested by Saldaña (2009), this revision process was guided by the project supervisor, who offered a different perspective on the coding and analysis of the data. Based on this reviewing of the codes and the data, the original number of first cycle codes was collapsed into a smaller number, since the initial codes resulted to be too narrowly defined and certain segments of the data were better suited to just one key code rather than several smaller ones (Saldaña, 2009). Furthermore, Gorden (1992) suggests that a useful set of coding categories is all-inclusive and mutually exclusive, i.e. both including the entire range of relevant response categories in a particular dimension and being defined clearly enough so that a concrete example could not logically fall into two categories at the same time. Taking this into account, the choice was made to combine the factors *clarity* and *complexity* into a single category, since these factors are strongly related. After all, a lack of clarity of the curriculum, makes it considerably more complex as well. After (and throughout) this revision process, the

second cycle and final codes were assigned to the data. The complete list of codes that were assigned to the interview transcripts can be found in table 5.

Table 5

*List of codes assigned to the interview data*

<u>Category</u>	<u>Factor</u>	<u>Code family</u>	<u>Code</u>
Characteristics of the change	Need	Teacher support > see teacher	
	Clarity/complexity	Clarity/complexity	Clarity/complexity CLIL Clarity/complexity IB MYP
	Quality/Practicality	Quality/Practicality	Quality/practicality CLIL Quality/practicality IB MYP
Local characteristics	Teacher	Teacher support	Teacher support CLIL Teacher support IB MYP
		Teacher quality	Teacher quality
		Professional development	Professional development CLIL
			Professional development IB MYP
		Teacher collaboration	Teacher collaboration CLIL
External factors	Government		Teacher collaboration IB MYP
		National requirements	National requirements and examinations

The codes that were assigned to the data are directly related to the factors affecting implementation relevant to the Dutch context identified in paragraph 2.3. These so-called structured codes therefore serve as a categorization technique and resulted in the identification of several data segments concerning one of these factors (Saldaña, 2009). Within each of the assigned codes and corresponding code families the corresponding data segments were reviewed in terms of identifying common themes or patterns within the data (LeCompte, 2000). Identifying themes or patterns within the coded data segments included looking for similarities and analogies within the data segments belonging to a code, as well as similar or contrasting perceptions across

the different groups of respondents within a certain code (LeCompte, 2000). In the writing up of these identified patterns and themes, which form the results of this study, a balance was sought in providing both a resumptive account of the gathered data, as well as including 'raw data' to clarify the chain of evidence (i.e. from data to results) (Pratt, 2009). The 'raw data' that are provided within the next chapter were considered to be the most compelling bits of data that effectively illustrated the common themes and patterns, or as described by Pratt (2009), these were considered to be 'power quotes'.

The results of the data analysis are presented in the next chapter, categorized according to the codes that were assigned to the data, using the code families as organizing frames, as suggested by Saldaña (2009).

### 3.6 Reliability and Validity Measures

Within this study a number of measures were taken to ensure reliability and validity, which are already briefly mentioned in the previous paragraphs. Throughout the whole of the research, from the gathering and processing of the data to the final writing up of the results, regular consults were scheduled with the project supervisor, who provided a second pair of fresh and critical eyes and the ability to offer a different perspective. This 'shop talking' or 'peer debriefing' supported the reliability and validity of the research (Saldaña, 2009).

The factors affecting the successful implementation of CLIL and the IB MYP are evaluated through collecting the views and perceptions of at least two different groups of respondents. This way validity is increased through triangulation, looking at the factors affecting implementation from the perspectives of different stakeholders (Harinck, 2008:67; Miles & Huberman, 1994).

The interviews were recorded and notes were taken by the interviewer. Based on these recordings and notes, transcripts were made of every interview. The possibility to listen to the recordings while making the transcription contributes to the verifiability and transparency, which makes the research more reliable (Baarda, De Goede & Teunissen, 2009). However, in the transcription process, data is inevitably lost from the original encounter, since the transcription represents the translation from one set of rule systems (oral and interpersonal) to another very remote rule system (written language). Non-verbal communication as well as intonation, sarcasm and other discursive elements could get lost in translation (Cohen et al., 2011). To offset this issue to some degree, the transcripts were sent to the respondents by e-mail, asking them to confirm a correct representation of the interview and to make corrections when needed. These respondent checks of the data, or respondent reflexivity and validation, contributes to the avoidance of researcher bias and increases the reliability of the research (Cohen et al. 2011).

After the transcripts were made, they were coded and analyzed, leading up to the results of the study that are presented in the next chapter. The coding and analysis process was performed in three coding cycles, including pre-coding, first cycle coding and second cycle coding as suggested by Saldaña (2009). Constantly revisiting and reviewing the data and critically reflecting on the assigned codes throughout these coding cycles, as well as consulting with the project supervisor to review the coding and analysis process, supported the reliability of the assigned codes (Gorden, 1992; Saldaña, 2009).



## 4 Results

This study strives to gain some insights in the factors that affect the successful implementation of the IB MYP and CLIL. Since successful implementation can be evaluated on two criteria, institutionalization and outcomes, paragraph 4.1 discusses the factors affecting the institutionalization whereas paragraph 4.2 concerns the factors affecting the outcomes of the TTO curriculum. The factors affecting institutionalization are identified by the relevant stakeholders responsible for enacting the TTO curriculum (the school leader, the IB MYP coordinator and the TTO teachers). The factors affecting the learning outcomes are based on the learning experiences of the current TTO students and former TTO students in VWO 6 and the learning outcomes as perceived by VWO teachers, teaching former TTO students. These learning outcomes of the TTO department could provide insights in the factors affecting (un)successful implementation of the IB MYP and CLIL. The results of these two paragraphs lead up to the conclusion and discussion of this study, which is presented in chapter 5.

### 4.1 Factors Affecting the Successful Implementation of the IB MYP and CLIL; Institutionalization

The results are presented according to the code families they concern, which can be found in table 5, using them as organizing frames. These code families are directly derived from the general factors affecting implementation (figure 3).

**4.1.1 Clarity and complexity.** The TTO teachers were questioned about the clarity and complexity of the TTO curriculum and their statements about these factors mainly concerned the IB MYP aspect of the curriculum. The lack of clarity and complexity of the IB MYP part of the TTO curriculum is mainly reflected in the diverse statements of teachers, regarding the content and objectives of the IB MYP and how they integrate that in their teaching and learning practice. One teacher states for example;

*"I use a lot of what the IBO offers, the IB learner profile and the areas of interaction. Especially the learner profile, I think I pay attention to that and mention it to my students almost every lesson".*

Whereas another teacher states that;

*"I think that a number of things from the IB MYP miss the point, like the IB learner profile and the areas of interaction. They often are dragged in and a lot of students don't get it, don't want to get it and don't do it."*

The latter teacher, in turn, values the interdisciplinary approach and the empirical way of doing projects and research. Two other teacher mainly appreciate the international outlook of the IB MYP curriculum, and try to make their students aware of their global citizenship, which they

believe to be very important and present within their subjects areas; geography and history. Overall, there seems to be a tendency amongst the TTO teachers to prioritize amongst the different aspects of the IB MYP aspect of the TTO curriculum, applying it in an eclectic manner, selecting those aspects that are valuable or useful within their subject area and personal teaching and learning practice.

The fact that the TTO curriculum seems to be relatively unclear and complex adds to the fact that it takes some time for teachers to familiarize themselves with the TTO program. One teacher who faced this explains that this is partially due to the lack of clarity and the complexity of the IB MYP and states that;

*"You can't get a book with; this is the MYP and this is how I'm going to teach it. You have to learn by doing and a lot is just not developed yet. A wiki was recently developed, so that teachers worldwide can communicate with each other. And I noticed that I need that; how do you do it?"*

The required teacher time to familiarize themselves with the curriculum and the ongoing professional development activities teachers need to engage in are further elaborated upon in paragraph 4.1.5.

A final issue regarding the complexity, identified by both the school leader and the IB MYP coordinator, concerns keeping the curriculum up-to-date. This concerns the IB MYP aspect of the TTO curriculum, since the IB MYP adapts its curriculum and the corresponding standards and practices every five years. The school leader states that;

*"The IB MYP curriculum is always developing and in motion. Every subject gets a new curriculum every five years. Therefore it is a challenge to keep everything up-to-date."*

The fact that the IB MYP aspect of the curriculum requires an update every five years, means that the curriculum documents and materials of the TTO department as a whole change as well. In the teacher interview data, this factor affecting the implementation of the IB MYP concerning the complexity was identified by one teacher. He relates this to the professional development activities that TTO teachers engage in and states that these activities are ongoing and that one has to continuously participate in professional development activities, because the IB MYP changes every five years. He adds that;

*"it means that one has to be involved in not only the subject one teaches, but even more in the IB MYP system, which is very different than in the Dutch system."*

CLIL doesn't seem to cause that many problems amongst those teachers that teach in English. This might be due to the fact that one teacher had previous experience with teaching at an international school and another teacher is a native speaker of English, which makes the fact that they have to teach in English less of an issue for these teachers. The other two teachers both state

that they received adequate and sufficient professional development and language training, as is further elaborated upon in paragraph 4.1.5.

**4.1.2 Quality and practicality.** Nearly all TTO teachers seem enthusiastic and supportive of the TTO department and its curriculum, which is illustrated and discussed in the following paragraph. This enthusiasm and support suggest that the TTO teachers seem to value the quality of the TTO curriculum, which they express in the interviews. Their perceptions of the added value of the TTO in comparison to the VWO include the CLIL aspect, and the corresponding increased proficiency in English that the TTO students (are expected to) develop, which is mentioned by four teachers. Aside from the language aspect, the teachers' perceptions about the quality of the program is quite diverse and ranges from an appreciation of the interdisciplinary approach and the inquiry-based learning method to the development of global citizens and the reflection on the learning process. Although they have different perceptions of the IB MYP's value, seven out of eight interviewed teachers seem to be positive about the quality of the TTO curriculum.

As mentioned in the previous paragraph, the TTO teachers seem to have diverse views on how to enact the IB MYP in their teaching and learning practice. The lack of clarity and the complexity of the TTO curriculum, especially regarding the IB MYP aspect, is strongly related to the practicality and teachers face some obstacles in the implementation. These obstacles range from a changing curriculum, as discussed in paragraph 4.1.1, to the burden of the required teacher time and the time it takes to familiarize themselves with the program, which is elaborated upon in paragraph 4.1.5, as well as the difficulty of equipping their students with the necessary knowledge and skills to meet the national requirements of the VWO and be able to make the transition from TTO to VWO, which is elaborated upon in paragraph 4.1.7.

**4.1.3 Teacher support.** An important factor in the succeeding of the implementation of any curriculum consists of the teachers involved, since they are responsible for the enactment of the curriculum in the teaching and learning practice.

One issue identified by all TTO teachers that might affect teacher support is the fact that they consider the required time to teach within the TTO departments curriculum to be more than at a regular teaching job and that it forms a burden. Some teachers are more negative about the burden it entails than others. One teacher states for example that;

*"the preparation, the things that you have to deliver to the IB and here at school as well, I really don't think that it is in proportion compared to the other departments at this school. You really have to do a lot more work, for the same amount of money and I think that's strange"*

Other teachers solely express their disappointment about the fact that they can't find the time to realize certain aspects of the TTO curriculum. The fact that teaching within the TTO department

requires a lot more time is confirmed by both the school leader and the IB MYP coordinator. The school leader adds that the TTO curriculum might be more complex and takes more time to realize, but that the TTO team consist of mostly enthusiastic teachers, that are motivated to work within the TTO department and strive to realize its goals.

The statement from the school leader about the enthusiasm of the teachers about the TTO curriculum is confirmed by the interview data. Almost all TTO teachers seem supportive and enthusiastic about the program stating for example;

*“the program is an enrichment.”*

and

*“I think it’s a great department to work at, it keeps you on your toes.”*

It seems, then, that the teachers are supportive of the curriculum, in spite of the fact that it takes more time to realize it. This is illustrated by the statement of one teacher who says that;

*“If you teach at the TTO, it just takes more time than an average teacher in regular education. But you shouldn’t think like that. You should think more like; how do I invest myself in my lessons in a way that I realize a good program. The feeling to make something out of it is more satisfactory to me.”.*

However, there are some teachers that are not as supportive of the program and that are unwilling to change their teaching style. This generally concerns the ‘bovenbouw’ teachers, that only teach a few hours at the TTO department and teach predominantly at the VWO department. This is due to the Dutch system of ‘onderbouw’ and ‘bovenbouw’; the first three years of secondary education is the onderbouw and the last three years is bovenbouw. Onderbouw teachers only need a ‘second degree’ qualification, whereas bovenbouw teachers need a higher ‘first degree’ qualification and most TTO teachers are second degree teachers. The IB MYP coordinator explains the problem that rises in TTO4 by stating that;

*“the problem starts again with the Dutch system of 'bovenbouw' and 'onderbouw'. I have three years of fantastic MYP and then I have the 'bovenbouw', which have to be first degree teachers. So I have teachers that only teach TTO4, are obsessed with the exam criteria because it all starts in TTO4, haven’t done MYP in years 1, 2 and 3 and only have a few classes that are a quarter, a fifth of their contract and they’ve got other things to deal with. And they’re right, it is difficult.”*

The lack of support is confirmed by the school leader who adds that these teachers function within a different, VWO team and that there is less contact with this group of TTO4 teachers. The lack of support of the TTO4 teachers is underlined in an interview with a VWO teacher, that teaches a few hours at the TTO department and states that;

*"I make sure that what they are taught in TTO4 is almost the same as in VWO4, so that there are no knowledge gaps."*

This opinion that preparing the TTO students for the VWO is more pressing than teaching within the IB MYP philosophy is shared by one TTO teacher who said;

*"In my lessons I mainly bear in mind that they need to reach the level they need to take the final examinations in the sixth year. So that is my directive, I try to take the IB MYP into account."*

This teacher teaches in Dutch, so CLIL is not an issue. The TTO teachers that do teach in English seem to be supportive of the bilingual teaching aspect of the TTO curriculum. One teacher states for example;

*"A big advantage of the TTO is the focus on learning a second or third language"*

**4.1.4 Teacher quality.** Since the acquisition of qualified staff potentially affects the successful implementation of the TTO curriculum, both the school leader and the IB MYP coordinator were interviewed about the way teachers are selected and trained. The school leader described the selection process of new TTO teachers as follows;

*"In the job description it is clearly stated that it concerns a vacancy within the TTO department, and that it requires proficiency in English. This proficiency is then evaluated and adequate training is offered to train staff to teach, for example, science in English. This is indicated beforehand and is a requirement. Furthermore, teachers engage in an inauguration program, regarding the philosophy and method of the IB MYP, which is guided by the IB MYP coordinator."*

In addition to this initial professional development activities for new staff, all TTO teachers are expected to engage in ongoing professional development activities, which is elaborated upon in the next paragraph. The school leader expresses that the level of knowledge and skills of the TTO teachers is very high and states that;

*"Teaching at the TTO is often a deliberate decision and the teachers are inspired and motivated to carry out the TTO philosophy"*

She does note however, that the TTO4 teachers are not as involved and supportive of the TTO curriculum, which is underlined by the IB MYP coordinator, as discussed in the previous paragraph.

**4.1.5 Professional development.** An important issue affecting the successful implementation of CLIL and the IB MYP is the professional development activities that are needed to teach within the TTO curriculum. The school leader and the IB MYP coordinator, as well as two teachers, explicitly stress the importance of professional development activities to ensure the succeeding of the TTO curriculum. Generally, the TTO teachers are satisfied about the degree and nature of the

professional development activities that are provided at the school. These consist of an initial language training in Cambridge English (obligatory for those teachers that teach in English), monthly TTO teacher meetings at the school that are guided by the IB MYP coordinator, in-service teacher training once a year and attending an IB MYP conference once every three years. One teacher notes that she regarded the content of the IB conference she went to as bad, but that she learned a lot during the conference despite of that, because it offered her the opportunity to discuss her subject within the IB MYP with numerous experts. Another teacher states that she does not participate in the professional development activities that are provided at the school, because she doesn't think it is feasible to prepare her students for the VWO and combine it with an IB MYP approach.

Three teachers note that it takes some time to get familiar with the TTO program. Again, this concerns mainly the IB MYP aspect of the TTO curriculum, rather than the CLIL aspect. Although teachers need to engage in professional development activities to develop their English as well, this is an individualized learning process and most teachers report to have received adequate language training. On the other hand, it took them a while before they discovered how to enact the IB MYP aspect of the curriculum into their teaching and learning practice. One teacher explains by stating;

*"In my first year I got so much information, it wasn't until my first IB MYP conference that everything fell into place a little. You can't get a book with; this is the MYP and this is how I'm going to teach it. You have to learn by doing and a lot is just not developed yet."*

The lack of clarity and the complexity, as discussed in paragraph 4.1.1, contributes to the difficulty and the time it takes for new teachers to fit within the IB MYP aspect of the TTO curriculum.

**4.1.6 Teacher collaboration.** Aside from the professional development activities teachers need to engage in, teacher collaboration also is expected to be an important factor affecting the successful implementation of both the IB MYP and CLIL. According to the TTO teachers, the teacher collaboration within the TTO department occurs in a spontaneous and flexible manner. This is illustrated by one teacher as follows;

*"Basically it is simply initiated by the teachers themselves. When I have an idea and think that for example history might find it interesting as well, I will simply deliberate. And that is how projects are born."*

This practice of organizing teacher collaboration is confirmed by the school leader.

The flexible and spontaneous manner in which the teacher collaboration is realized is appreciated by the TTO teachers and the same goes for the flexibility throughout other aspects of the TTO curriculum. However, this flexibility also makes it difficult to realize teacher collaboration at times. One teacher illustrates that collaboration is sometimes difficult to realize by stating that;

*“The collaboration does not always go as planned because it is mainly dependent of the teachers. It isn’t something fixed, so if one teacher doesn’t see the need for it, or is new to the program or wants to do it at another point in time, it doesn’t match anymore and you can see a lot of joined projects disappear.”*

This vision is shared by four other TTO teachers.

Furthermore, four teachers indicate that they would like to see more teacher collaboration or even consider it a necessity. One teacher expresses it by stating that;

*“There is some collaboration but I think that there are a lot more possibilities, but it is often a matter of time that we don’t have.”*

He relates the fact that the teacher collaboration could be more extensive to the fact that TTO teachers already have to invest more time to teach within the TTO department, as discussed above. One teacher expresses that she considers collaboration to be a crucial factor in the succeeding of the curriculum by stating;

*“I think it is important in a MYP school, a TTO school, that you are a team and that you can address each other about what went well and what can be improved. You really need an open structure to be able to make the MYP succeed.”*

Regarding the CLIL aspect of the curriculum, only one science teacher states that there is teacher collaboration, working with the English teacher to realize an essay-writing assignment. One teacher at the TTO department is a native speaker of English but she states that;

*“With regards to the bilingual aspect there is no collaboration; I do my own thing and they do their own things”.*

**4.1.7 National requirements.** Both the school leader and the IB MYP coordinator state that it is difficult to meet national requirements. Again, this factor concerns the IB MYP aspect of the TTO curriculum. Although the IB MYP is relatively flexible and can be applied throughout various contexts, the curriculum has to provide the students with the necessary knowledge and skills to proceed their education within the Dutch system. According to the IB MYP coordinator;

*“the biggest problem comes from the fact that the IB MYP has other criteria for assessment and so the physics teacher can’t spend every hour doing knowledge, knowledge, knowledge. It has to be projects, it has to be essays and he or she needs to be able to bring in the knowledge, through that different way of teaching, but again that’s a challenge, that’s difficult.”*

Furthermore, the school leader and the IB MYP coordinator identify the transition from TTO to the VWO as a challenge, which is directly related to the difficulty of meeting national requirements of the VWO. When the TTO departments curriculum does not develop the necessary knowledge and skills in their students to meet the national requirements of VWO4, it is

to be expected that the students struggle with knowledge gaps when they have to make the transition. The IB MYP coordinator illustrates this by stating that;

*“There is so much content to fulfill the demands of the VWO4 exam syllabus that the teachers of the TTO4 don’t always get enough hours to get that knowledge across. And while the students that come into VWO5 are better prepared as learners, they miss the knowledge, the facts.”*

The views of former TTO students that have made the transition to the VWO confirm this struggle, as discussed in paragraph 4.2.

Considering the latter two factors, designing the curriculum of the TTO department in such a way that the students develop the additional skills inherent to the IB MYP as well as acquiring sufficient content knowledge to succeed at the VWO remains a big challenge. Two TTO teachers mentioned that they struggle to meet national requirements within their subject area. One teacher states for example;

*“Something that I still struggle with is the fact that I have to abide by the IB program and the VWO requirements. That is difficult, sometimes I feel like they (VWO teachers) say; they (TTO students) don’t learn anything at the TTO, that’s just a little copying and pasting, they don’t have any knowledge.”*

She does add that she thinks it is more important that students learn to think critically and the practical application, than just learning things by heart.

Although some teachers might value the IB MYP philosophy, they do want to equip their students with the necessary knowledge and skills to succeed at the VWO. This is expressed by another TTO teachers who states that;

*“At the TTO the students are educated in a broad range, they have to work hard and do much more than at the VWO. So some concessions have to be made; you can’t do everything from the VWO and a lot more. When they make the transition from the TTO to VWO they are only assessed on factual knowledge. The transition is tough for students, because they learn a lot at the TTO, that they then don’t use anymore for two years, that can be frustrating. So that is a danger and I think that, as a TTO teacher, you should be aware of that and try to prevent it.”*

He suffices with alerting his students that they have to score sufficiently on knowledge to be able to meet the national requirements, but another teacher chooses to focus her attention to prepare the students for the VWO requirements and tries to include the IB MYP in her lessons, as discussed in paragraph 4.1.3.

The views and perceptions of the TTO students, former TTO students in VWO6 and VWO teachers on the ability to meet national requirements and other factors that contributed to the succeeding or failure of the TTO students, are discussed in paragraph 4.2.



## 4.2 Factors Affecting the Successful Implementation of the IB MYP and CLIL; Learning Outcomes of the TTO Department

To evaluate to what degree the desired outcomes were reached and which factors affected the ability to reach them, the TTO students, former TTO students in VWO 6 and the VWO teachers were interviewed.

These interviews were however not designed as an assessment of the TTO curriculum, evaluating the effects. Rather, they were aimed at identifying factors that affected the successful implementation from the perspective of the students and VWO teachers. The learning outcomes of the TTO department could provide insights in the factors affecting (un)successful implementation of the IB MYP and CLIL. The TTO students, former TTO students and the VWO teachers might be able to identify which factors affected the success or failure of (certain aspects of ) the TTO curriculum, based on the degree to which the desired outcomes were reached.

As discussed in paragraph 2.4.1, the desired outcomes were threefold, including international mindedness, intercultural literacy, and meeting the VWO requirements. The factors that are identified as affecting successful implementation are presented according to the desired outcomes they concern.

**4.2.1 International mindedness (IB MYP).** As discussed in paragraph 2.2, the desired outcome of the IB MYP is for students to develop international mindedness, through acquiring the attributes from the IB Learner Profile (figure 5). Similar to the TTO teachers (paragraph 4.1), the TTO students are not entirely on the same page when it comes to what the IB MYP entails and which knowledge and skills it strives to develop. A number of TTO students state that they do not consider the TTO to be different from the VWO, aside from the fact that some subjects are taught in English;

*"I think that our English gets better, but aside from that, math and stuff...I think that that is the same at the VWO"*

But most students do think that they develop different knowledge and skills than at the VWO, which is reflected in the fact that they engage in different learning activities than at the VWO. Students indicate that they think that they do more projects and group work, write more essays, give more presentations, focus more on evaluation and reflection and do more research, finding out things on their own and looking at things from different perspectives. Furthermore, most students note that they are assessed in a different way; considering not only their test scores, but their attitude in class, reflection reports and other aspects as well. A few students explicitly mention the development of international mindedness and refer to the fact that they learn a lot about different cultures and countries and collaborate frequently with students from the International School.

The views of former TTO students in VWO 6 on their learning outcomes are consistent with the aspects identified by the TTO students. The students at the VWO can more easily compare themselves to their VWO peers and discover that they might have a different set of knowledge and skills. Similar to the TTO students, they mention that they have more experience with writing essays, giving presentations and doing projects and that this experience enables them to perform better. One student illustrates by stating;

*"Because of the areas of interaction at the TTO, you get a more profound understanding of things, because you look at them from multiple perspectives. Also, you have more experience with writing essays and doing projects than at the VWO"*

One of the former TTO students explicitly mentions the international attitude of the TTO department, by stating that;

*"The TTO has a more international attitude, we were encouraged to seek contact with students from the International School, to get in contact with different cultures. That way, they try to get you to get in touch with other cultures."*

This international aspect is not reflected as much in the views of the VWO teachers on the learning outcomes of the TTO department. All VWO teachers do mention that the former TTO students are better at giving presentations and writing essays than their VWO peers. One teacher states that she thinks that the TTO students are very involved in the school;

*"I think the average TTO student easily takes the stage, they take part in an open mic night or perform at a PTA meeting. And the round table, that is a student organization that organizes special events in and around the school, there are a lot of TTO or former TTO students in that organization."*

Finally, one teacher mentioned that there are a few students, that are not as good at planning and are messy, which she does not see as much in her VWO classes.

Neither the students, nor the VWO teachers gave much indications about which factors influenced these learning outcomes. In terms of the learning activities (writing essays, doing research, giving presentations etc.), the explanation for having developed these skills is rather straightforward; because the TTO students have a lot of experience they perform well on these skills.

A factor influencing the development of international mindedness concerns *teacher quality*. There are two students that consider the teachers to be experienced and state that they have travelled the world. One students mentioned that the international outlook of the TTO teachers contributed to the fact that;

*"They try to learn you to become a global citizen. But, they should do it a bit less obvious, now it really is; you will become a global citizen and this is how you should act."*

The perception of these students about their teachers being experienced and having travelled can be derived from the experience some TTO teachers have; one teacher had previous experience abroad, at an international school and states she travelled a lot and that she values the international aspect of the TTO a lot, another teacher is British and has taught in various countries and a third teacher has experience with teaching foreign students within the Netherlands, as well as teaching abroad.

**4.2.2 Intercultural literacy (CLIL).** As discussed in paragraph 2.3, the desired outcome of CLIL is to reach proficiency in English, as well as the non-language subject to be taught. Most of the TTO students indicate that they chose to follow the TTO because they wanted to learn English, better than at the regular VWO. A number of students made the choice based on a bilingual home situation, others mentioned that they chose the TTO for future educational and career options (they wanted to study medicine, studying or working abroad etc.). Where the bilingual aspect of the TTO curriculum was a clear motivation for students to choose the TTO track, they indicated that they were less aware of what the IB MYP aspect entailed. One student states for example;

*"I chose to follow the TTO in the first place because of the bilingual thing, because my father lived in America for a long time and speaks better English than Dutch, that's why we speak English at home. I didn't really know about the MYP, but only about the bilingual".*

Only one student stated that he chose to follow the TTO track because of the IB MYP and its project-based learning, more presentations and group work.

These initial motivations for choosing the TTO track are reflected in the TTO students evaluations on their learning experiences. Although they had some initial problems with understanding English, they express the feeling that they are learning English quite fast;

*"It is a nice way of learning, especially English. It is going much faster than when you only have English lessons. I noticed that from the beginning. In that sense it is also more fun, most can't speak English either, so you learn it together and it is nice to see how fast everybody learns"*

This is underlined by the former TTO students in VWO6, who completed their four years of TTO and are able to reflect on their learning outcomes. Generally, they indicate that their English is better than that of their VWO peers. One students states for example;

*"I follow the extra English classes of the DP program, with a group of 20 people, which is of a much higher standard, when I follow English here at the VWO than it really is the basics"*

Another student states that;

*"I had a lot of advantage in English; we might not know the rules better, but we did write essays in English and the people from the VWO are now doing that for the first time, while I could simply write it down."*

This concurs almost completely with the evaluation of the English teacher at the VWO department, who teaches these former TTO students. He states that the TTO students perform better at the communicative skills, speaking and writing, and literature which is of a very high standard. However, he indicates that the TTO students perform worse on grammar, including syntax, word choice and use of the different tenses.

He does not consider the *quality* or *practicality* of CLIL to be the reason that the TTO students perform less on grammar, as he states that;

*"I think that at the TTO the creative assignments, fantasy assignments, the projects, the interdisciplinary things and the integrated learning things are perfect. I think they prepare students very well for speaking, listening and writing. They have an advantage in literature, they write different essays in VWO 6 than in 3 TTO already. That is all perfect."*

Rather, he indicates that it is due to *national requirements* that focus more on grammar;

*"English is a core subject, the examination requirements can no way be made more flexible"*

He concludes however with stating that following the TTO does not mean that you cannot do VWO English or that you would be disadvantaged.

Another factor affecting the outcomes identified by the student was the *quality/practicality* of CLIL, regarding content learning. Most of the TTO students experienced some initial problems with learning in English and at times they did not understand everything the teacher said. However, these students expressed at the same time that it was a matter of getting used to and that after a while, it became a normal practice to them. One student states, for example;

*"At first, it's really difficult, you don't have a clue what they are talking about. But it gets easier and then it's just a second language you have".*

Another problem, according to the students, is the fact that they still speak a lot of Dutch amongst each other, when they are supposed to speak English in class. Three of the interviewed students state that their English is better than their Dutch and that they find it easier to communicate in English. This is probably due to the fact that they all attended an international primary school where they were taught in English.

Another issue regarding the *quality/practicality* concerns first language learning. Although the students are still at the TTO department, some of them already expect some problems when they have to make the switch to the Dutch VWO department. Eight students expect some difficulties due to their lack of knowledge of Dutch terminology in certain subject areas that are taught in English. One student states that;

*"If you quit the TTO and start VWO, that can be a disadvantage, for example with science, because then you learned all those terms in English. So then it could be that you don't understand everything."*

Although some TTO students expect some problems at the VWO because they don't know the Dutch terminology in certain subject areas, four of the former TTO students that are now at the VWO stated that it was easy to adapt to learning in Dutch and that it wasn't really a problem. Only one of the former TTO students stated that she struggled a little with it during the first few tests.

The Dutch teacher of the VWO department confirms that the transition from TTO can be a little difficult, but that the TTO students generally handle it well. She teaches Dutch in TTO4 as well and states that;

*"I make sure that what they are taught in TTO4 is almost the same as in VWO4, so that there are no knowledge gaps."*

She does however notices differences regarding the first language learning of the TTO students; they perform better in presenting but they perform worse in spelling and make more style errors than their VWO peers.

Another factor students identified is *the teacher quality* at the TTO department. Three students mention that some of the TTO teachers are not as proficient in English as they should be and that they should not expect the students to speak English when some teachers switch to Dutch when they are lost for words. These three students who suggested that the teachers are not as proficient as they should be have some more initial experience with English than most TTO students; one student grew up in the United States and the other two students followed their primary education abroad, at an international school.

**4.2.3 VWO requirements.** As discussed in paragraph 1.2, this particular school offers the TTO as an alternative for the VWO only during the first four years of secondary education. After that, most students opt to switch to the VWO department. Therefore, a desired outcome of the TTO curriculum is that it equips students with the necessary knowledge and skills to succeed at the VWO.

As discussed in the previous paragraph, the former TTO students at the VWO did not have much problems with the fact that all their subjects were in Dutch at the VWO department. They did however experience some difficulties with the content knowledge in some subject areas. One student states for example;

*"The transition could have been better. There was a lot of content that we did not cover, which we did need or should have covered."*

They especially experienced problems in the science subjects, where they had to catch up a lot. According to one student, they were offered additional tutoring in the science subjects, which helped to catch up.

The difficulty of transitioning from the TTO to VWO is confirmed by the VWO teachers, two of them indicate that some former TTO students have some knowledge gaps in comparison to their VWO peers.

*"Most of them do have sufficient knowledge and skills, but there are a few that have some knowledge gaps, from the third and fourth year. The content was offered to them but they could compensate with projects. Therefore, they sometimes experience some difficulties with certain subjects"*

This concerns some specific areas and the VWO teachers all believe that, in general, the former TTO students are perfectly able to meet the VWO standard, although the transition from TTO to VWO is somewhat difficult.

The former TTO students indicate that their problems with the transition were probably due to a shift in focus; from viewing things from multiple perspectives, doing projects and writing essays at the TTO, to making tests on factual knowledge and meeting *national requirements* at the VWO. One student illustrates by stating that;

*"The mindset at the TTO is different, you are taught in a different way and the assignments are different. At the TTO we were mainly busy with the writing of essays, learning how to perform research, knowing the content and applying it in practice. At the VWO you are in a classroom, you get told something and you get questions about it on a test, and just make it."*

This is confirmed by the VWO teachers who indicate that the TTO is not better or worse than the VWO, but that the focus is different and that students therefore sometimes experience some problems in the transition. One teacher illustrates by stating that;

*"The didactics of the MYP are so immensely different than the didactics of the VWO, those kids are in a totally different culture and when they transition to the Dutch department, that is kind of hard. That doesn't mean that the didactics are bad, on the contrary, the didactics are great, but the transition could be better. Because students complain often in VWO 5, that the instruction is completely different."*

Despite these difficulties, both the former TTO students and the VWO teachers believe that the TTO students are able to meet the VWO requirements.

## 5 Conclusion and Discussion

### 5.1 Conclusion

This study strives to identify factors that influence the successful implementation of the IB MYP and CLIL in Dutch secondary education. To identify these factors, a case study approach was chosen. A single case was studied, which is the TTO department within the context of a Dutch secondary school, that offers an internationalized curriculum as an alternative for the 'regular' Dutch VWO during the first four years of secondary education. After these four years most students complete their final two years at the VWO.

The TTO curriculum combines the IB MYP with CLIL, striving to develop both international mindedness and intercultural literacy. The successfulness of the implementation of these two approaches is evaluated on two different criteria: institutionalization and the outcomes. Institutionalization concerns the degree to which the change gets built in as an ongoing part of the teaching and learning practice of the TTO department. The outcomes concern the degree to which the desired outcomes of the TTO curriculum are reached.

To evaluate the successfulness of the implementation on both criteria, the stakeholders that are responsible for the enactment of the curriculum in the teaching and learning practice were interviewed about the degree to which institutionalization was reached and which factors affected this. These stakeholders are the school leader, the IB MYP coordinator and the TTO teachers.

In the first place, these respondents identified a number of factors affecting the institutionalization regarding the *clarity* and *complexity* of the TTO curriculum. There seems to be a tendency amongst the TTO teachers to prioritize amongst the different aspects of the IB MYP aspect of the TTO curriculum, applying the IB MYP in an eclectic manner, selecting those aspects that are valuable or useful within their subject area and personal teaching and learning practice. This might be due to a lack of *clarity* about how teachers should enact the IB MYP aspect of the curriculum, so that they develop their own strategies to incorporate the IB MYP in their teaching and learning practice, or it could also be due to the *complexity* of the multifaceted nature of the IB MYP, that forces the teachers to pick and choose because they are unable to incorporate all aspects of the IB MYP. Generally speaking, it seems that determining the exact role that the IB MYP fulfills within the TTO curriculum causes some challenges. This means that although the teachers implement certain aspects of the IB MYP, they are not doing so in a consistent manner. Furthermore, the fact that the IB MYP aspect of the curriculum is altered every five years, makes it complex to keep the curriculum up-to-date and makes it even more difficult for the teachers to enact the curriculum in their teaching and learning practice.

In the second place, some factors regarding the *quality* and *practicality* of the program were indicated by the respondents. Although the teachers are enthusiastic and supportive of the program, and consider it to be of good *quality*, the fact that the IB MYP aspect of the curriculum is unclear and complex makes it less *practical* and difficult to enact it in their teaching and learning practice.

In the third place, there are a number of factors that consider the TTO *teachers*. Both the school leader and the IB MYP coordinator, state that the TTO teachers in general are enthusiastic and supportive of the TTO curriculum. However, the 'bovenbouw' teachers are less supportive and some teachers are unwilling to change their teaching style and in particular do not implement the IB MYP aspect of the TTO curriculum in their teaching and learning practice. Instead, they are more concerned with equipping the TTO students with the necessary knowledge and skills to meet the *national requirements* of the VWO.

Furthermore, all TTO teachers report that the required teacher time is considered to be a burden. However, this does not seem to affect their enthusiasm and supportiveness about the program, nor does it seem to affect the implementation/institutionalization of the curriculum.

An important factor in the implementation and institutionalization of the IB MYP and CLIL is the professional development teachers need to engage in. Both the school leader, the IB MYP coordinator and some TTO teachers underline that professional development is definitely necessary. Most TTO teachers state that the professional development at the TTO is generally well-organized and of good quality. A number of teachers add to that, that it took some time to familiarize themselves with the program, which is probably due to the complexity of the TTO curriculum.

Finally, teacher collaboration was thought to be important in the implementation of CLIL and the IB MYP and most teachers state that this is realized in a flexible and spontaneous manner, which, in combination with a lack of teacher time, can make teacher collaboration difficult to realize. A number of teachers have the desire to organize teacher collaboration more frequently, but they realize that it might be a challenge, since teacher schedules are already overfilled.

To evaluate to what degree the desired outcomes were reached and which factors affected the ability to reach them, the TTO students, former TTO students in VWO 6 and the VWO teachers were interviewed. The desired outcomes, as discussed in paragraph 2.4.1, were threefold; international mindedness through developing the attributes from the IB Learner Profile (figure 5), developing intercultural literacy through CLIL, reaching increased proficiency in English and the non-language subject to be taught and equipping students with the necessary knowledge and skills to meet the VWO requirements.



Regarding international mindedness, the respondents mentioned the most important outcomes of the TTO to be the skills the students acquired through engaging in learning activities, such as giving presentations, writing essays, doing research and projects and reflecting on their work. This is consistent with some of the attributes from the Learner Profile (figure 5), that includes these skills under the headings of 'inquirers', 'communicators', 'reflective' and 'knowledgeable'. The latter is defined as "they explore concepts, ideas and issues that have local and global significance. In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines". This focus on developing more profound insights and knowledge does however have some consequences for the TTO students when they have to make the transition to the VWO. Although the respondents do not concern it to be an issue of poor *quality/practicality* of the IB MYP, former TTO students experience some knowledge gaps when they transition to the VWO. According to the respondents, this is more an issue of *national requirements*, that focus more on factual knowledge. Although this definitely is a factor influencing the learning outcomes of the TTO, which may potentially have negative consequences for the TTO students, both the former TTO students as the VWO teachers do indicate that, despite these difficulties, TTO students are able to meet the VWO level.

The development of international mindedness is not as apparent in the reported learning outcomes, although some TTO students do mention that the TTO focuses more on getting to know other cultures and collaborating with the International School. According to some students this is because of the *teachers* at the VWO, that have travelled a lot themselves and make their students aware of other cultures as well. In addition to that, the VWO teachers mention that TTO students seem to be very involved with things that happen at school, which is consistent with the desire of the IB MYP to develop open-minded and caring learners.

Although there were a number of issues in the implementation and institutionalization of the IB MYP, these experiential learning outcomes are at least in part consistent with the desired learning outcomes, due to the *quality/practicality* of the program and the quality of the *teachers* at the TTO department. The content knowledge gap the students experienced when they had to transition to the VWO, was due to a different focus of the two curricula and the *national requirements* of the VWO.

Regarding the development of intercultural literacy, i.e. increased proficiency in English and the non-language subject to be taught, most TTO students and former TTO students believed that their English was above average and better than that of their VWO peers. This was confirmed in part by the English teacher at the VWO who indicated that although the TTO students perform better at speaking, writing, presenting and literature, they perform worse on grammar.

Some students mentioned some initial problems with learning in English, due to which they did not understand everything that was explained in class. However, this *quality/practicality* factor resulted to be a minor issue. It barely affected the outcomes and all students indicated that this was only an issue in the first few weeks and just took some getting used to. Regarding first language learning, some TTO students expected this to become a problem when they have to transition to the VWO. The former TTO students at the VWO indicated that this *quality/practicality* factor did not cause any problems and did not affect their learning outcomes at all. This was underlined by the Dutch VWO teacher, who stated that learning in Dutch was not a problem for TTO students. Finally, a minor factor affecting the successfulness of the learning outcomes mentioned by a few students concerned the *teacher quality*. They said that some teachers were not as proficient in English.

## 5.2 Discussion

This paragraph strives to relate the conclusions drawn in the previous paragraph to the findings from the literature and the implications that these results might have for international education in the Dutch context, as well as identifying some limitations of this study, which are described in paragraph 5.2.1. A number of recommendations for further research on the topic of the internationalization of education in The Netherlands are provided in paragraph 5.2.2 and a concise summary of the findings can be found in paragraph 5.2.3.

The outcomes of this study are for the most part coherent with the findings presented in the theoretical framework; the respondents identified some issues regarding the *clarity* and *complexity* of the curriculum, including the lack of clear guidelines concerning the IB MYP aspect and *teacher support, teacher quality, professional development* and *teacher collaboration* were identified as important factors affecting the implementation process. Although the outcomes regarding these factors did not completely correspond with the findings from the theoretical framework, the outcomes were in line with what could be expected based on the findings from the literature.

However, a number of factors that were identified within this study affect the implementation process in a different manner than what could be expected based on the theoretical framework. In the first place, an issue regarding the *quality* and *practicality* of the CLIL aspect of the curriculum, was the possible negative effect it might have on first language and content learning, although the research on this issue is rather ambiguous (Admiraal et al., 2006; Hirs, 2013). However, any negative effects on first language learning or content learning were expected to be attributed to the CLIL aspect of the curriculum. Although some TTO students reported some expected lacking in knowledge of Dutch terminology, this ultimately seems to be a minor issue, as described in the previous paragraph. The reported negative effect of the TTO curriculum on content learning however, was identified by different respondents. This was expected to be due to the CLIL approach, since several studies indicate that through learning in a foreign language, content knowledge might be compromised because of insufficient understanding of the foreign language (Spada & Lightbown, 2002; Kong & Hoare, as cited by Lyster & Ballinger, 2011). Contrary to this expectation, the lacking of content knowledge that students experience when they make the transition from TTO to VWO, seems to be due to the IB MYP aspect of the curriculum. Identified as a challenge in achieving successful implementation of the TTO curriculum by different respondents, the fact that the IB MYP focuses on more than just factual knowledge causes some knowledge gaps when the students have to make the transition to the VWO.

In the second place, these knowledge gaps are directly related to the difficulties that TTO students experience regarding meeting *national requirements*. Something that was not expected

based on the literature review, was the challenges caused by the limited duration of the TTO curriculum, in which students have to make the transition to the VWO after four years of TTO. These challenges include the lack of support 'bovenbouw' teachers, who favor requirements of the national VWO curriculum over the IB MYP philosophy, the struggle of TTO teachers to equip students with the additional knowledge and skills of the TTO as well as preparing them for national examinations at the VWO and the knowledge gap of former TTO students experience when they make the transition to the VWO.

**5.2.1 Limitations and implications.** The conclusions regarding the research question described in paragraph 5.1 offer some preliminary insights in the successful implementation of CLIL and the IB MYP within Dutch secondary education. Although various measures were taken to ensure the reliability and validity of this study, there are a number of methodological concerns and limitations that are discussed in this paragraph.

In the first place, a case study approach was chosen for this research. Although this has some benefits, as described in paragraph 3.1.1, it has a number of potential drawbacks as well. Although this case was selected based on its uniqueness and the idea of providing a valuable 'test bed', since it represents a type of situation that can be described as "if it can work here, it will work anywhere" (Cohen et al., 2011:291), it could imply that it is not as generalizable across other Dutch secondary schools. Furthermore, a case study approach is susceptible to researcher bias, especially since this research was conducted by a single researcher (Cohen et al., 2011).

In the second place, the chosen instrumentation and procedures for this study risk being subjective as well. The participants were interviewed face-to-face according to a structured interview protocol, after which the data was recorded and transcribed. In this transcription and analysis process, data is inevitably lost from the original encounter, since the transcription represents the translation from one set of rule systems (oral and interpersonal) to another very remote rule system (written language). Non-verbal communication as well as intonation, sarcasm and other discursive elements could get lost in translation. The researcher has to interpret and translate the interview recordings into transcripts, which could affect the objectivity of the data.

Throughout the study, a number of measures (see also paragraph 3.6) were taken to overcome these issues and to increase objectivity, reliability and validity;

1. triangulation: to offer a balanced evaluation of the factors affecting the successful implementation of the IB MYP and CLIL, each factor was evaluated through collecting the views and perceptions of at least two different groups of respondents, increasing validity through triangulation.

2. respondent reflexivity and validation: to increase the reliability of the research, the interview transcripts were checked by the respondents, contributing to the avoidance of researcher bias (Cohen et al., 2011).
3. peer debriefing: throughout the whole of the research process, regular meetings with the project supervisor ensured a second set of critical eyes to the gathering and processing of the research data, supporting the reliability of the research (Saldaña, 2009).

Although these limitations need to be taken into consideration when reviewing the outcomes of the current study, it offers some insights in the implementation of an international curriculum within the Dutch context. The findings of this study offer some insights in the factors that affect successful implementation, which could prove to be valuable within the current Dutch educational trend. As described in paragraph 1.2, international education is expanding rapidly within Dutch secondary schools, although there is very little research concerning international curricula within this context. The findings from this study might provide some guidance when schools are implementing, or planning to implement an internationalized curriculum because it identifies a number of possible challenges that need to be taken into consideration. Possessing some knowledge about the obstacles that can be expected, makes it more likely to overcome them.

Furthermore, the TTO department where this study was conducted expressed a desire to gain more insights in the implementation of their curriculum and which factors contributed to the success or failure of that implementation process, possibly making use of those insights to improve or alter the curriculum. This desire is met to some degree by providing the TTO department with the findings from this study, providing the opportunity to put these insights to use.

Finally, the findings from this study could serve as a starting point for further research regarding the internationalization of education within the Dutch context. A number of recommendations for further research are provided in the next paragraph.

**5.2.2 Recommendations for further research.** The current study evaluated the factors affecting the implementation of an international curriculum within a single case; the TTO department of a secondary school. In this case the international curriculum consisted of a CLIL approach as well as the international IB MYP curriculum. This combination of approaches is not the only shape internationalized tracks or TTO streams within the Dutch context come in. Under a common denominator of 'TTO', various internationalized curricula with different characteristics exist within Dutch secondary education, that apply the linguistic aspect of bilingual education in combination with an additional focus on “European and international orientation” (Weenink, 2008, p. 1090). This is a broad definition and the different international curricula within the Dutch

context are therefore expected to be quite diverse. Therefore the implementation process as well as the outcomes of Dutch international curricula should be evaluated throughout different secondary schools and contexts, to achieve a broader view of international education in The Netherlands.

Furthermore, this study only considered the outcomes of the TTO curriculum to a limited degree, linking the experiential learning outcomes to the implementation of the curriculum, striving to identify factors that promoted or hindered the successful implementation. This means that the current study does not provide insights in the actual effects the TTO curriculum may have and if they meet the aims set by the department. Nor does it examine if the TTO has an added value in comparison to 'regular' VWO. To achieve better insights in the effects the curriculum yields, further research is needed.

**5.2.3 Summary.** In conclusion, there were a number of factors that affected the successful implementation of the IB MYP and CLIL. The school leader, the IB MYP coordinator and the TTO teachers indicated that the lack of *clarity* and the *complexity* of the IB MYP aspect of the curriculum, that also impacted its *practicality*, the lack of support from the 'bovenbouw' teachers and the concern of equipping students to meet *national requirements* affected the institutionalization of the IB MYP and CLIL in a negative manner, whereas the support and enthusiasm of the TTO teachers, the professional development activities and teacher collaboration were identified as (indispensable) factors supporting the institutionalization of the IB MYP and CLIL.

Although there were some issues on how exactly to implement and institutionalize the IB MYP, the students and VWO teachers did indicate that TTO students developed a number of skills inherent to the IB MYP. The problems that the students experienced during the transition to the VWO regarding content knowledge gaps were not due to the *quality/practicality* of the IB MYP. Rather, they were due to a different focus between the IB MYP and the VWO and the *national requirements* that apply to the VWO.

CLIL did not cause that many issues in the implementation/institutionalization, which is reflected in the learning outcomes. The (former) TTO students felt that their English proficiency was above average, which was confirmed by the English teacher at the VWO, although TTO students did not perform as well on grammar. Some issues with the *quality/practicality* of the program regarding content and first language learning resulted to barely affect the desired learning outcomes.

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### Appendix 1: Interview protocol school leader

- #1 How long have you been at the school in your current position? What was your familiarity with CLIL/ the IB MYP before coming to this school?
- #2 What do you believe to be the most important aims of the TTO department?
- #3 How are these aims represented in the curriculum of the TTO department?
- #4 What do you believe to be the most important effects of the TTO?
- #5 What do you believe to be the most important challenges or obstacles of the TTO department?
- #6 How are the TTO teachers selected?
- #7 How and to what degree are professional development activities realized?
- #8 How and to what degree is teacher collaboration realized?
- #9 Is there anything else you would like to share about the TTO department?

## Appendix 2: Interview protocol IB MYP coordinator

- #1 How long have you been at the school in your current position? What was your familiarity with CLIL/ the IB MYP before coming to this school?
- #2 What do you believe to be the most important aims of the IB MYP?
- #3 How are these aims represented in the curriculum of the TTO department?
- #4 What do you believe to be the added value of the IB MYP for students?
- #5 What do you believe to be the most important challenges or obstacles of the IB MYP within the TTO department?
- #6 How and to what degree are professional development activities realized?
- #7 What is your role within these professional development activities?
- #8 How and to what degree is teacher collaboration realized?
- #9 What is your role within this teacher collaboration?
- #10 Is there anything else you would like to share about the TTO department?

**Appendix 3: Interview protocol TTO teachers, teaching in English**

- #1 What subject do you teach?
- #2 How long have you been working at the TTO department?
- #3 Did you have any prior experience with working at a TTO and/or IB MYP school?
- #4 Was it a deliberate decision to work at a IB MYP/TTO school? Why?
- #5 What do you believe to be the added value of the TTO for your students?
- #6 What do you believe to be the most important aims of the TTO?
- #7 How do you, in your lessons, work on realizing these aims?
- #8 How and to what degree is teacher collaboration realized?
- #9 Are you, in general, satisfied with the degree and nature of teacher collaboration? Are there aspects that you would like to be different?
- #10 How and to what degree are professional development activities realized?
- #11 Are you, in general, satisfied with the degree and nature of the professional development activities? Are there aspects that you would like to be different?
- #12 Is there anything else that you would like to share about the TTO department?

**Appendix 4: Interview protocol TTO teachers, teaching in Dutch**

- #1 What subject do you teach?
- #2 How long have you been working at the TTO department?
- #3 Did you have any prior experience with working at a TTO and/or IB MYP school?
- #4 Was it a deliberate decision to work at a IB MYP/TTO school? Why?
- #5 What do you believe to be the added value of the TTO for your students?
- #6 What do you believe to be the most important aims of the TTO?
- #7 How do you, in your lessons, work on realizing these aims?
- #8 How and to what degree is teacher collaboration realized?
- #9 Are you, in general, satisfied with the degree and nature of teacher collaboration? Are there aspects that you would like to be different?
- #10 How and to what degree are professional development activities realized?
- #11 Are you, in general, satisfied with the degree and nature of the professional development activities? Are there aspects that you would like to be different?
- #12 Is there anything else that you would like to share about the TTO department?

### Appendix 5: Interview protocol TTO students

- #1 Why did you and/or your parents decide to follow TTO instead of VWO?
- #2 How do you feel about this decision now that you are following the TTO?
- #3 Do you think that the TTO has certain (dis)advantages? (If so,) What do you think these are?
- #4 How do you feel about the fact that some subjects are taught in English? Do you think that this has certain (dis)advantages? (If so,) What do you think these are?
- #5 Do you think that the teaching methods and the assignments/activities that you engage in differ from those at the VWO? (If so,) In which way?
- #6 Do you think that the TTO influences the knowledge and skills that you acquire? (If so,) In which way do you think this differs from the VWO?
- #7 Is there anything else that you would like to share about the TTO department?

**Appendix 6: Interview protocol former TTO students in VWO 6**

- #1 Last year you made the transition from the TTO to the VWO. How did this transition go?
- #2 Did you feel that you had specific (dis)advantages in VWO5, because you followed the TTO? (If so,) What did they consist of?
- #3 What are the most important differences between the TTO and the VWO according to you?
- #4 Would you, in general, prefer the TTO or the VWO? Why?
- #5 How do you, in hindsight, feel about the decision to follow the TTO? Why?

**Appendix 7: Interview protocol VWO teacher, teaching English to former TTO students**

- #1 Do you feel that the TTO students have sufficient knowledge of the English language to handle the VWO level? Why?
- #2 Do you feel that there is a difference in the learning performance of TTO students, in comparison to their VWO peers? (If so,) What does this difference consist of?
- #3 Do you feel that there are specific skills/aspects (such as pronunciation, discourse, listening, reading, writing, grammar etc.) on which the TTO students perform better or worse than their VWO peers? (If so,) What do these consist of?
- #4 Do you feel that the TTO has influenced students' learning skills regarding learning a foreign language? (If so,) In which way?
- #5 Do you think that there are any other (positive or negative) effects that are caused by the TTO? (If so,) What do they consist of?



**Appendix 8: Interview VWO teachers, teaching other subjects to former TTO students**

- #1 What subject do you teach?
- #2 Do you feel that the TTO students have sufficient (content) knowledge to handle the VWO level? Why?
- #3 Do you feel that there is a difference in the learning performance of TTO students, in comparison to their VWO peers? (If so,) What does this difference consist of?
- #4 Do you feel that there are specific skills/aspects on which the TTO students perform better or worse than their VWO peers? (If so,) What do they consist of?
- #5 Do you feel that the TTO has influenced students' learning skills? (If so,) In which way?
- #6 Do you think that there are any other (positive or negative) effects that are caused by the TTO? (If so,) What do they consist of?