AN EXPLORATORY STUDY INTO STUDENT AND TEACHER
PERSPECTIVES OF HOW THE THEORY OF KNOWLEDGE
COURSE SUPPORTS LANGUAGE DEVELOPMENT

A MASTER'S THESIS

BY

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THE PROGRAM OF CURRICULUM AND INSTRUCTION
İHSAN DOĞRAMACI BILKENT UNIVERSITY
ANKARA

JUNE 2017

To my parents, Aylin & Halim Örge,

with heartfelt gratitude

for their support and encouragement

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The Graduate School of Education

of

İhsan Doğramacı Bilkent University

by

Denizcan Örge

In Partial Fulfilment of the Requirements for the Degree of

Master of Arts

in

Curriculum and Instruction

Ankara

June 2017

İHSAN DOĞRAMACI BILKENT UNIVERSITY

GRADUATE SCHOOL OF EDUCATION

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I certify that I have read this thesis and have found that it is fully adequate, in scope
and in quality, as a thesis for the degree of Master of Arts in Curriculum and
Instruction.

Asst. Prof. Dr. Jennie Farber Lane (Supervisor)

I certify that I have read this thesis and have found that it is fully adequate, in scope
and in quality, as a thesis for the degree of Master of Arts in Curriculum and
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ABSTRACT

AN EXPLORATORY STUDY INTO STUDENT AND TEACHER

PERSPECTIVES OF HOW THE THEORY OF KNOWLEDGE COURSE

SUPPORTS LANGUAGE DEVELOPMENT

Denizcan Örge

M.A., Program of Curriculum and Instruction
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June 2017

The Theory of Knowledge (TOK) is one of the most challenging courses offered by

the International Baccalaureate Diploma Programme (IBDP). By design, TOK is a

course that requires students to exhibit a high level of English language proficiency.

However, since students whose first language is not English also take this course, it

is not known if and how TOK teachers support students' language development. To

that end, the purpose of this exploratory study is to gain insights into language

teaching practices implemented by teachers of the Theory of Knowledge (TOK)

course. Language supports and teaching techniques of teachers were investigated in

eight IBDP schools: six from Turkey, one from Lebanon and one from Sweden. Data

collection from 305 students and 18 teachers took place via student and teacher

surveys that were developed to look into classroom practices considerate of

multilingualism and international-mindedness. The surveys yielded a response rate of

85%. Students' level of English, number of languages spoken and the school type

they attended were used as factors to analyze language teaching practices. The results of the study reveal that the most popular language teaching practices are whole class discussion, small group discussion groupwork and use of visual aids, as reported by students. The results of the study also indicate that pairwork and Q&A are used more commonly in national schools than international schools. Language supports used for students' language development are implemented more effectively in national schools, in comparison with international schools.

Key words: International Baccalaureate, Diploma Programme, Theory of Knowledge, TOK, international-mindedness, language supports, language practices, teaching techniques, scaffolding, survey study.

ÖZET

BİLGİ KURAMI DERSİNİN ÖĞRENCİLERİN DİL GELİŞİMİNE OLAN ETKİSİ
ÜZERİNE BİR KEŞİF ÇALIŞMASI

Denizcan Örge

Yüksek Lisans, Eğitim Programları ve Öğretim
Tez Yöneticisi: Yrd. Doç. Dr. Jennie Farber Lane

Haziran 2017

Bilgi Kuramı (BK) dersi, Uluslararası Bakalorya Diploma Programı (UBDP)
müfredatındaki en zorlayıcı derslerden biridir. İçeriği gereği BK derslerinde
öğrencilerin üst düzey İngilizce dil becerisine sahip olması gerekmektedir. Bu dersi
anadili İngilizce olmayan öğrenciler de almaktadır. Fakat, BK öğretmenlerinin
öğrencilerin dil gelişimini destekleyip desteklemediği bilinmemektedir. Bu
çalışmanın amacı BK öğretmenlerinin gerçekleştirdikleri dil öğretim uygulamalarını
araştırmaktır. Bu bağlamda, İsveç, Lübnan ve Türkiye'den toplamda sekiz UBDP
okullarında uygulanan öğretim teknikleri ve dil desteği çalışmaları incelenmiştir.
Çok dillik ve uluslararası farkındalık konuları göz önüne alınarak, 305 öğretmen ve
18 öğrenciden veri toplamak için öğretmen ve öğrenci anketleri geliştirilmiştir.
Anketlere %85 oranında bir katılım gözlenmiştir. Dil öğretim uygulamalarını analiz
etmek için kullanılan faktörler arasında öğrencilerin dil seviyesi, konuştukları dil
sayısı ve eğitim aldıkları okul türü bulunmaktadır. Öğrenci anketinin sonuçlarına

göre en popüler teknikler arasında sınıf tartışmaları, grup çalışmaları ve görsel ögelerin kullanımı vardır. Araştırma sonuçları, sınıfta ikili çalışmanın ve soru cevap tekniklerinin ulusal okullarda uluslararası okullara kıyasla daha yaygın olarak kullanıldığını göstermiştir. Ayrıca, ulusal okullarda dil desteği uluslararası okullara kıyasla daha etkin bir şekilde verilmektedir.

Anahtar Kelimeler: Uluslararası Bakalorya Diploma Programı, Bilgi Kuramı, Uluslararası farkındalık, dil desteği, dil öğretim uygulamaları, öğretim teknikleri, öğrenim desteği, anket çalışması.

ACKNOWLEDGEMENTS

The completion of this thesis would not have been possible without the involvement of several people who, in one way or another, offered valuable guidance, support and assistance in the making of this study.

First and foremost, I would like to express my sincerest gratitude to my supervisor, Dr. Lane, for her invaluable guidance, support and understanding. Her insightful advice, recommendations and constructive feedback made this thesis what it is now. I would also like to acknowledge committee members, Dr. Ateşkan and Dr. Onur, for their ideas and useful comments.

I am indebted to Dr. Martin for creating the research instruments and for her relentless efforts during the initial phases of the study. I am grateful for her contributions to the data collection and clean-up processes. Her dedication to this research and her trust in my writing ability is very much appreciated. In addition, I would like to acknowledge Dr. Kalender for his support with statistical analyses carried out in this study.

Special thanks go to Dr. Akşit for his constant emotional and mental support over the past two years, which I will remember and cherish for the rest of my life and in future academic endeavours. His words of wisdom, along with academic and professional advice, have made me the person I am today.

I would like to thank the faculty and administrative members of the Graduate School of Education and the class of CITE 2017. I am especially thankful to my friends from the English Language subject area for all the good times, their full support and

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CHAPTER 1: INTRODUCTION

Introduction

This study explores language teaching practices implemented in the Theory of Knowledge (TOK) course offered by the International Baccalaureate Organization (IBO). The study draws on previous research into TOK, international-mindedness and multilingualism. The aim of this study is to examine student and teacher perspectives of how the TOK course supports students' language development, in consideration of the concept of international-mindedness.

The following sections of this chapter include information on the background, problem and the purpose of the study. The research questions, significance and the purpose of the study are also presented in this chapter.

Background

The international baccalaureate

Founded in Geneva, Switzerland in 1968, the International Baccalaureate (IB) is an educational foundation developing international curricula for different grade levels all around the world. The IB offers a continuum of global education which is divided into four parts: Primary Years Programme, Middle Years Programme, Diploma Program (DP) and Career-related Programme.

The Diploma Programme (DP) is offered to students aged 16-19 and the curriculum is made up of six subject groups and the DP core, which consists of the Theory of Knowledge (TOK), Extended Essay and Creativity, Activity, Service.

Theory of knowledge

The Theory of Knowledge (TOK) course, along with the Extended Essay and the Creativity, Activity, Service, lies at the heart of the IBDP curriculum. A core component of the IBDP curriculum, TOK is a two year course about critical thinking and inquires into the phenomenon of knowledge. TOK, thanks to its curricular structure, analyzes knowledge claims and questions the concept of knowing. It also attempts to answer the question of how we know what we claim to know (IBO, 2013, p. 10).

The TOK course lays down eight "ways of knowing" which are regarded as tools to explore knowledge and knowledge claims in diverse contexts. These ways of knowing are language, sense perception, emotion, reason, imagination, faith, intuition, and memory. TOK also identifies eight "areas of knowledge" which are deemed as specific branches of knowing. These areas include mathematics, the natural sciences, the human sciences, the arts, history, ethics, religious knowledge systems, and indigenous knowledge systems (IBO, 2013, p. 8).

TOK and international-mindedness

The IB, and the DP programme in particular, puts a great deal of emphasis on international-mindedness. According to Castro, Lundgren and Woodin (2013), international-mindedness revolves around three main aspects which are intercultural understanding, global engagement and multilingualism. Since the IBDP supports international-mindedness and international-mindedness promotes multilingualism, there is an undeniable link between the DP core (e.g., the TOK course) and multilingualism. The IBO (2011) puts forward that internationally-minded people value multilingualism, highlighting the importance of speaking multiple languages and adopting a global mindset. However, the extent to which the TOK course helps

students become multilingual and/or develop English language skills is fairly unknown.

The TOK course supports and encourages international-mindedness in relation to the course aims. The aims of TOK target the development of greater social and cultural awareness with a view to understanding the wider world as well as the links between individuals and communities. Furthermore, the course also aims at developing an interest in and an appreciation of the diversity and richness of cultural perspectives, which overlaps with the IB's vision of fostering and nurturing international-mindedness (IBO, 2013, p. 14). All the above-mentioned aims are also highly related to the IB mission statement in that TOK intends to "develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect," and "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, 2013, p. 5).

Language development

Samovar, Porter and McDaniel defined language as a set of shared signs or symbols that a cultural group mutually uses to construct meaning (2010, p. 225). When languages are in question, it is almost impossible to overlook the concepts of human culture, interaction and communication. Samovar et al. put forward that "language, communication, and culture are intricately intertwined with one another" (2010, p. 271). This stems from the fact that every single word we choose reflects our beliefs, attitudes, values and view of the world, which, in fact, have been cultivated by personal and social experiences specific to a particular culture (Samovar et al., 2010, p. 271). According to Salzmann (2007), the development of human culture, thanks to

its intricacies, could not have been possible without the aid of language (p. 49). Similarly, Keating (1994) explains the notion of communication as the competency of sharing ideas, emotions and culture through language and interaction.

In addition to the abovementioned concepts, Hymes (1972) introduced the term "communicative competence" and described it as a native English speaker's innate ability and understanding of social and cultural norms and their meanings present in language. Similarly, Risager (2007) emphasized that communicative competence involves linguistic and cultural knowledge of a particular society. As a result of these developments, communicative language teaching (CLT) was introduced to the field of English language teaching in the 1970s and communicative competence was placed at the very center of this approach to teaching (Hymes, 1972).

Especially in the field of foreign language education, language development in terms of both fluency and accuracy can be a challenging process in which non-native speakers of English are likely to struggle. In order to overcome some of those challenges, Richards (2006) explains the importance of using both accuracy and fluency oriented tasks and strategies such as group work, dialogue and free response writing and opinion-sharing activities.

In addition to developing communicative competence, language learners are able to improve their overall language proficiency by means of self-reflection. This technique can be used by teachers of different subject areas. According to Vygotsky (1978), self-reflection functions as a tool that helps language learners internalize knowledge and skills through critical thinking and self-assessment as well as scaffolding provided by the teacher.

Scaffolding in the field of education refers to support that is designed to help students accomplish a task or an activity they cannot otherwise manage to complete on their own (Hammond & Gibbons, 2005). According to Mercer (1994), teachers can scaffold students' learning by means of sequencing tasks and offering good quality guidance and support in the classroom. By doing so, teachers challenge their students to complete an activity and push them beyond their current skills and abilities. Once the students are in this process, they begin to develop an understanding of new concepts and eventually learning occurs as a result of internalization process.

Gibbons (2002) pointed out that language learners need to be engaged with authentic materials and challenging tasks. She emphasized the importance of the nature of the support given and put forward that scaffolding needs to be temporary and tailored to the needs of the students. Since effective scaffolding aims to enable learners to succeed independently, teacher support and assistance should gradually fade, depending on students' level and specific needs. Thomson (2012) described some of the scaffolding techniques such as checking understanding of lexical items, eliciting, modelling the target structure, and recasting. All of the techniques used to improve students' accuracy carry an element of communicativeness and give students an opportunity to practice language in context.

Problem

The Theory of Knowledge (TOK), by design, is a challenging course that requires students to exhibit a proficient level of language ability and use their higher-order thinking skills (IBO, 2013). While such higher level thinking skills might be relatively easier to display for native speakers of English, it is usually not the case for non-native speakers who learned to speak English as a foreign language. This makes

the whole process of conceptualizing different "ways of knowing" across diverse "areas of knowledge" rather difficult. However, literature on how TOK supports the overall English language development of DP students is very limited. Furthermore, there is a lack of research on strategies in TOK that help students develop and exhibit a high level of language proficiency. To that end, further research is needed to identify language teaching techniques and scaffolding strategies employed inside TOK classrooms.

Purpose

The purpose of this survey study is to explore both student and teacher perspectives of how the Theory of Knowledge (TOK) course supports English language development. The aim is to investigate and explain language teaching techniques, strategies for scaffolding and language supports used to develop the English language competence of students during the implementation of TOK in the context of IBDP school settings.

Research questions

The main research question for the overall study is:

- How does the TOK course help students develop language proficiency?

In order to address the main research question, the following the sub-questions were created to investigate student and teacher perspectives.

- What language teaching techniques do students report that their teachers use in TOK classes?
- What language teaching techniques do teachers report that they use in their TOK classes?

- How do students describe their TOK courses in terms of language supports?

- How do teachers describe their teaching practices in terms of language supports?

Significance

TOK is an integral component of the IB's core curriculum and is delivered in a number of national and international educational institutions both in Turkey and around the world. The fact that IBDP is implemented around the world signifies an educational trend on a global scale. As of today, there are forty-four educational institutions offering the DP program in Turkey and each year an increasing number of schools are applying to the IB in order to commence the procedures to get accredited by the IBO. Additionally, the number of IB programmes offered worldwide grew by 46.40% between February 2011 and February 2016 (IBO, 2016). This trend is likely to result from the common belief about how an IB diploma enhances students' language skills and career prospects (Sagun, Ateskan, & Onur, 2016). To that end, the findings of this study shed light on the perspectives of stakeholders (i.e., students and teachers) about how TOK supports English language development. Furthermore, the results of this study reveal some of the language teaching techniques and scaffolding strategies used in TOK classrooms which may be employed by other IBDP schools as well, especially in countries like Turkey where English is not the native language.

As stated above, there is an ever-growing shift towards adopting the IB curriculum. Every year more and more schools are adopting the IBDP in different countries (IBO, 2016). However, research on TOK and its implications regarding broader issues of international-mindedness and differences between national and international schools is very limited. To that end, the findings of the study provide a

foundation for conducting in-depth studies about classroom practices, and eventually impact further research on how any course that involves higher order thinking skills can benefit from integrating techniques for language development.

Definition of key terms

International-mindedness is a set of values, attitudes, knowledge, understanding and skills explicitly associated with multilingualism, intercultural understanding and global engagement (Singh & Qi, 2013).

Multilingualism is "a reconfiguration of how we think about languages that takes into account the complex linguistic realities of millions of people in diverse sociocultural contexts" (IBO, 2011).

Scaffolding refers to temporary support provided for learners to be able develop a skill or an understanding of new concepts, which is eventually withdrawn once the learner acquires the skill or concept in question (Hammond & Gibbons, 2005).

The Theory of Knowledge (TOK) is a two year course about critical thinking, inquiring into the phenomenon of knowledge. The course analyzes knowledge claims and questions the concept of knowing by asking the question of how we know what we claim to know (IBO, 2013).

CHAPTER 2: REVIEW OF RELATED LITERATURE

Introduction

This study explores student and teacher perspectives about how the Theory of Knowledge (TOK) course supports English language development in consideration of the concept of international-mindedness. In order to conceptualize the relationship between TOK and international-mindedness, it is important to understand the aspects they have in common. For the present study, the common aspect is language development.

The purpose of this chapter is to provide an understanding of classroom practices used in TOK classes to aid IBDP students in developing their overall language proficiency. Results of previous research and studies on international-mindedness, reports and curriculum guides published by the IBO as well as other related literature on language development and language teaching techniques will serve as the theoretical framework for interpreting the findings of the present study.

International-mindedness

The term international-mindedness is a rather complex concept encompassing different notions related to having a universal and open mind set. Swain (2007) argues that there are many different ways of defining and applying international-mindedness in schools around the world. For instance, the 2009 IB definition of international-mindedness was largely attributed to intercultural sensitivity, which mostly equated international-mindedness to reflecting on one's own perspective as well as recognizing the perspectives of other cultures (Singh & Qi, 2013).

Over the past few years, however, the idea of international-mindedness has matured and evolved to include two other aspects, turning the idea into a rather extended concept. In an exploratory study conducted by the University of Western Sydney, Singh and Qi (2013) defined international-mindedness as a set of values, attitudes, knowledge, understanding and skills explicitly associated with multilingualism, intercultural understanding/sensitivity and global engagement. In order to clarify the aforementioned aspects underlying international-mindedness, Singh and Qi produced an executive report summarizing the major ideas of their qualitative study conducted in China, Australia and India. In that report, Singh and Qi analyzed theoretical underpinnings of IM and aligned them with the IB Learner Profile to show which attributes students need to possess to be considered internationally-minded learners. The report indicated that internationally-minded learners are, above all, open-minded and knowledgeable individuals as well as strong communicators and those learner attributes correspond to intercultural understanding, global engagement and multilingualism, respectively (Sriprakash, Singh & Qi, 2014).

In an exploratory study on conceptualizing and assessing international-mindedness, Castro, Lundgren and Woodin (2013) defined international-mindedness as an overarching concept, which is implicitly embedded into IB programmes. The findings of the study revealed that international-mindedness does not have a specific curriculum. Instead, it is regarded as an approach that embodies the IB philosophy and related values.

Multilingualism

Communication is an integral part of exploring one's identity and sustaining personal development. The intuitive need to communicate is essential for the development of languages (IBO, 2011). As the name suggests, multilingualism refers to learning to communicate in a variety of ways in more than one language. "It supports complex, dynamic learning through wide-ranging forms of expression" (Singh & Qi, 2013).

In their investigation, Castro et al. (2013) found that the IB programmes acknowledge multilingualism as an essential component of international-mindedness and that multilingualism helps develop an understanding of other people, cultures and experiences.

The significance of multilingualism and/or being able to speak at least two languages stems from the fundamental role of languages in the classroom. This can be evidenced in the assumption that "a language wraps itself around, in, through and between everything that teachers and learners do in the classroom" (Ritchhart, 2002, p. 141). In an effort to support the above statement, Mensah (2015) points out that a diversity of languages needs to be embraced and promoted as the ability to communicate in multiple languages is the underlying principle of international-mindedness.

Multiculturalism is considered to be a significant aspect of the IB programmes (IBO, 2012). In a study conducted by the George Washington University Centre for Equity and Excellence in Education, Ballantyne and Rivera (2014) found that bilingualism and multilingualism are key to achieving multiculturalism and should be encouraged as a value in any educational institution. In that respect, multilingualism is

considered "a resource and an opportunity for engendering the ideals of international-mindedness, along with multiculturalism" (IBO, 2012).

Intercultural understanding

Culture, in the simplest of terms, can be explained as ways of thinking, beliefs and values of a particular group or society. The word "intercultural", however, denotes the idea of between or across cultures. To that end, intercultural understanding refers to "the ability to understand the perceptions concerning one's own culture and the perceptions of the people who belong to another culture, and the capacity to negotiate between the two" (Samovar et al., 2010, p. 52).

Global engagement

Thanks to recent advances in information technologies, global engagement has become an increasingly common concept in the field of education. According to Singh and Qi (2013), the IB's educational philosophy defines global engagement as the commitment of both students and teachers to explore and address humanity's challenges as well as local and global issues. In other words, the focus of global engagement is on staying connected to this ever-changing and interconnected world. The IB aims to educate learners in a way that they will be able to manage the complexities of today's globalized world. Such an educational framework is actually geared towards developing awareness and commitments required for global engagements (Singh & Qi, 2013).

The role of languages in IBDP classrooms

In non-native English speaking countries, the use of English language to teach school subjects has become popular in recent years. According to Dearden (2014), Turkey is one of these countries and the English language is used as the medium of instruction rather than just a foreign language. This is especially true in the case of private schools in Turkey, which implement the IBDP curriculum and offer instruction in English. Over the last decade, the number of the IB Diploma Programmes around the world has significantly increased. As of 1 February 2016, there were 5,578 programmes being offered worldwide, across 4,335 schools (IBO, 2016). Such figures actually signal the rising interest in internationally-minded learners (Doherty, 2009; Tarc, 2009).

The IB explains the role of language as being central to the development of critical thinking and makes connections between critical thinking and international-mindedness, which is essential for the cultivation of intercultural awareness and global citizenship (IBO, 2011). The IB programmes, especially the DP program in particular, facilitate meaningful learning thanks to their focus on intercultural understanding and linguistic tools which, in fact, allow students to take part in global engagements (Singh & Qi, 2013). In that respect, the abovementioned terms and concepts are in concord with one another and they are therefore essential for the ultimate goal of internalizing languages that are different from one's mother tongue.

In a comparative study of international-mindedness in the IB programmes in Australia, China and India, researchers concluded that many IBDP classrooms are multilingual sites, supporting post monolingual pedagogies for international-mindedness. They also found that internalization of international-mindedness throughout the IB continuum might serve as a tool for developing shared

understanding and multilingualism, which, as a whole, helps students to facilitate global engagements. However, acknowledging the features of and harnessing multilingualism to the fullest capacity still remains a key challenge for teachers as part of their pedagogy for international-mindedness (Sriprakash, Singh & Qi, 2014). According to IBO (2011), schools and teachers have a responsibility to ensure that all students reach their full potential when it comes to language development. For that reason, language-related needs of students must be catered for by IBDP teachers as all teachers are considered to be language teachers (Hawkins, Caputo & Leader, 2014).

It is a well-known fact that a threshold level of proficiency in English is the key to success in many of the IB programmes (IBO, 2008). In support of this claim, Cummins (2007) proposed that there are four dimensions of teaching which ensure learner engagement and active participation. The four dimensions are regarded as stages and include activating prior understanding and building background knowledge, scaffolding meaning, extending language and affirming identity. Those dimensions resemble Vygotsky's scaffolding strategies and contribute to learner engagement and ensure active participation.

The educational theory of Lev Vygotsky

Lev Vygotsky is one of the most prominent psychologists of his time and his work constitutes the basis for much of the research in the field of cognitive development. Vygotsky's theory of cognitive development has become known as Social Development Theory and it mainly focuses on the role of social interaction in the development of cognition. Most of his research puts a great deal of emphasis on the role of social interaction since he believes that communication is central to the

process of meaning-making, a mechanism of mentally interpreting an input and creating knowledge (Vygotsky, 1978).

In order to develop a deeper understanding of cognitive development, it is essential to be familiar with the two main principles of Vygotsky's Social Development Theory: the more knowledgeable other and the Zone of Proximal Development (ZPD). The concept of the more knowledgeable other refers to someone or something with a better understanding or a higher ability level than the learner as far as handling a specific task or process is concerned. The more knowledgeable other could actually be a person or a computer software, but the underlying principle for this concept is that such a person or system must be more knowledgeable from and superior to the learner when it comes to the subject matter at hand (Vygotsky, 1978). The ZPD is a significant concept which relates to the stage where a learner cannot accomplish a task on his/her own, but can achieve it with further guidance and assistance from the more knowledgeable other (Vygotsky, 1978).

Vygotsky emphasized the importance of the central role cognitive development plays in language development. He put forward that a language serves a means to determine ways of how a learner thinks. In an effort to support this notion, Wellings (2003) stated that, in the process of language development, mistakes can be made as part of the concept formation and meaning-making phases. This finding is actually in line with the scope of TOK which revolves around the complex relationship between diverse areas of knowledge and ways of knowing.

According to Vygotsky, "learning always involves some type of external experience, hence an interaction, which is transformed into an internal process through the use of language" (Feden & Vogel, 1993). Therefore, language development is believed to

stem from social interactions with the aim of fulfilling communication purposes since languages are considered to be human beings' greatest tool with respect to Social Development Theory.

Classroom practices

Vygotsky's Social Development Theory suggests a number of practical approaches that draw on scaffolding and student-centered instruction. In 1999, Sugata Mitra, a reputable researcher in the field of education, started a series of experiments which is today known as the Hole-in-The-Wall Education Project. Basically, the experiments were based on computers mounted to the brick walls in an area of New Delhi, India. The idea behind the experiments was to observe whether children could possibly learn in the absence of supervision and formal teaching. The experiments concluded that children, regardless of their sociocultural and socioeconomic backgrounds, can learn to actively use computers without adult intervention, but with the help of their friends (Mitra & Rana, 2001). This approach to learning overlaps with the findings of many researchers in the field of education and draws on the importance of scaffolding in the learning process. According to Mitra and Rana (2001), just like with the computers, students could express themselves, to learn to explore together through brainstorming and engaging in meaningful, cooperative activities.

In a study conducted by Hamilton and Ghatala (1994), researchers concluded that Vygotsky's theory of cognitive development suggest some methodological approaches that can be employed in the classroom. Such approaches can be explained as scaffolding; that is, providing further encouragement and guidance. Hamilton and Ghatala (1994) stated that scaffolding strategies refer to assisting students on tasks while the students are in the ZDP. Just like any other process, there are stages through which meaningful scaffolding is provided. These stages include

building interest, engaging the learner and breaking down the tasks into manageable steps. The final stage of scaffolding is to model or demonstrate the required task, which will eventually enable the learners to imitate such behavior, resulting in internalization of the intended task and/or subject matter (Feden & Vogel, 2006).

The aforementioned stages could be fulfilled by means of implementing some language teaching practices. These practices are techniques and strategies that include the use of visual aids and graphic organizers, demonstrations, dramatization, and small or structured collaborative groups (Vygotsky, 1978).

In addition to the abovementioned techniques, there are a number of studies about the impact that different classroom practices have on students' overall progress in language development. These practices, which draw on Vygotsky's principle of scaffolding, constitute the basis of a student-centered classroom, where teachers act as facilitators and help students develop language skills. In a student-centered classroom, students interact and communicate with one another. They work together and contribute to each other's learning (Jones, 2007, p. 2). As autonomous learners, students are involved in their own learning processes. They help each other and contribute to their peers' development. As a result, in student-centered classroom, students are likely to improve their English language skills because they engage in stimulating and enjoyable activities.

TOK, by design, is a course that places students in a critical role in terms of constructing knowledge and producing knowledge claims. Since students engage in critical thinking and take an active role in their own thought processes, teachers are often expected to incorporate student-centered strategies in their lessons. These strategies include ensuring equal participation and engagement of all students in

class discussions and facilitating group activities (Crose, 2011). Such classroom practices, along with many other techniques summarized below, create a social and communicative learning environment that helps students become more active and involved.

According to Callahan and Clark (1988), all students can benefit from and learn better through pair and groupwork, regardless of their language levels. In an action research conducted to investigate the effectiveness of groupwork practices, Otienoh (2015) found that more learning took place during groupwork sessions. The results of the research also concluded that students' language skills were enhanced due to increased interaction and cooperation between students. Similarly, Jones (2007, p.40) explained that pair and groupwork are the most effective techniques to be used to especially develop students' speaking skills.

According to Lamsfuß-Schenk and Wolff (1999), setting up small group discussions in the classroom potentially increases the quality language output produced by the students, which implies a positive contribution to students' language development. Larsen-Freeman (2000) explained that facilitating small group and paired activities gives students opportunities to interact with each other. According to Jones (2007, p. 30), pairwork and small groups work best for facilitating discussions as students might feel less anxious to talk to a small number of other students and share their opinions. Such activities often involve communicative tasks that engage students in the lesson. The researchers emphasized that students feel more comfortable with the teacher being a facilitator, which results in developing a better understanding of the subject or content studied.

In a small-scale quasi-experimental study, Ammar and Spada (2006) investigated the effectiveness of corrective feedback in an ESL context. The results of the study showed that students who received prompts in response to their mistakes developed their language skills substantially, as compared to those who received no feedback. The researchers concluded that students provided with oral corrective feedback in the form of prompts made significant progress in their language development. Similarly, in a study carried out with Italian ESL students, Gattullo (2000) found that giving corrective feedback in the form of prompts leads to better results in oral language proficiency and improves speaking skills.

Personalization is one of the most commonly used methods in language teaching and learning. By means of personalization, students get a chance to share their ideas and beliefs through real life experiences and actively take part in the lesson (Boumová, 2008). According to Moskowitz (1978), it is necessary for students to first explore what they can produce about the content of the lesson using their personal thoughts and feelings. By drawing on their own experiences, students will be fully engaged and the content of the lesson will be more relevant. Jones (2007, p. 13) believes that personalization in a student-centered classroom is one of the most important aspects of language learning. When students are given personalized discussion topics, they tend to talk about their own experiences and share personal feelings. This leads to an increase in the use of English as a medium of communication and, eventually, contributes to students' language development.

Similar to the use of personalization in the classroom, Islam and Islam (2013) looked into the effectiveness of role play in tertiary education. The researchers found that students get an opportunity to talk about real life situations accurately in the target language. The study concluded that role play as a technique for language teaching

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had a positive influence on students' speaking skills. In a study conducted with intermediate level students, Qing (2011) maintained that role pay technique increased students' fluency in English. According to the study, students also showed signs of enhanced intercultural awareness and exhibited communicative competence as a result of expressing themselves in both imaginary and real-life scenarios, using the English language.

Question and answer is a commonly used classroom practice in educational settings. Jones (2007, p. 27) signaled the importance of setting up Q&A sessions as an opportunity to provide the students with instant feedback in the classroom. When a student makes a mistake or generates a misconception, other students could be asked to suggest possible corrections in a friendly environment. Jones also added that Q&A sessions could easily be turned into whole class discussions. In whole class discussions or larger groups, each student involved in the discussion has a chance to agree or disagree with their peer's view and interact with one another.

Conclusion

Overall, this chapter shared some example studies and other relevant research from the literature. The role of languages in IBDP classroom, the concept of international-mindedness and the importance of language development through effective language teaching practices make up the key areas of the studies mentioned. However, because the purpose of this study is to specifically investigate teaching practices in TOK classes, it is necessary to gain perspectives into language supports that are provided for IBDP students by TOK practitioners.

CHAPTER 3: METHOD

Introduction

The purpose of this exploratory study is to examine student and teacher perspectives of how TOK supports English language development within the context of international-mindedness. The TOK course is taught entirely in English and can be challenging in terms of its scope and content. However, the extent to which teachers, while delivering TOK lessons, support students' English language development remains unknown. To that end, language teaching techniques used and language supports offered as part of the course constitute the main points of investigation in this study.

This chapter aims to describe the research design and the methods used to collect and analyze data. In addition, information on the context, instrumentation and the sample of the study is presented.

Research design

This study is based on an online survey about the perspectives of students and teachers from IB schools in Turkey, Lebanon, and Sweden. Creswell (2014) defines survey research as a quantitative or numeric account of trends, perspectives and opinions of a population on a given topic. The underlying principle of survey research design is to collect data from a sample of the population with a view to drawing inferences to the population involved. To that end, this exploratory survey study aims to describe sample populations with respect to classroom practices that reflect how the TOK course supports language development in select schools.

The research design of this study allowed the researcher to collect both quantitative and qualitative data on the perspectives of the participants. In addition, the survey design made reaching a large number of participants possible.

Context

The TOK course is an integral component of the IBDP core curriculum and is delivered in a number of national and international educational institutions in Turkey and around the world. A core element of the IBDP, TOK is a course about epistemology and inquires into the concept of knowledge and knowledge acquisition. TOK, by design, is a challenging course requiring students to exhibit an advanced level of English proficiency. For that reason, the extent to which English language development is supported is the main focus of this study.

The context of this study includes eight IB schools from countries where English is not the native language. Six of these sample schools are from different regions of Turkey and the other two are from Sweden and Lebanon. Of the eight participating schools, three are considered to be international, while the remaining five are regarded as national schools. Despite being from non-native English speaking countries, all sample schools deliver the TOK course in English. More information regarding the participant schools in this study is given in the section below.

Participants

Six of the eight sample schools participating in this study are from Turkey and they were purposefully selected based on their locations and differences with regard to their international and linguistic backgrounds. The remaining two schools were conveniently selected from European-Middle Eastern regions. The details of the sample schools are shown in Table 1 below.

Table 1

Profile summary of sample schools

School Pseudonym	Location	Profile Summary
Diversity School	Istanbul, Turkey	This school is an international school offering the IBDP curriculum, along with the U.S. curriculum that leads to a U.S diploma. The teachers come from 16 different nationalities and the students must have a non-Turkish passport for admission, which indicates that the school is culturally diverse in terms of teacher and student profile.
Ege School	Izmir, Turkey	Ege School is a national school that is located in the western part of Turkey. The school offers international projects, student clubs and social service programs that enable students to engage in different activities.
Doğu School	Erzurum, Turkey	This national school is located in the eastern part of Turkey. The IGCSE, IBDP and MEB are required of all students. Throughout the academic year, students attend several field trips in order to investigate both curricular and extra-curricular subjects.
Turkish National School	Istanbul, Turkey	This national school combines MEB and IBDP curriculum. Admitted students enroll in English prep classes depending on their level of English.
Old School	Istanbul, Turkey	This national school is one of oldest private schools in Turkey. Students begin with an intensive one-year English prep program. The school supports a wide variety of international activities and offers the IBDP curriculum.
Mediterranean School	Mersin, Turkey	This school is a national school located in the Mediterranean region of Turkey and they offer the IBDP curriculum.
Swedish School	Lund, Sweden	This is an international school located in Europe and they offer the IBDP curriculum.
Lebanese School	Beirut, Lebanon	This is an international school that offers four diploma programs: International Baccalaureate, French Baccalaureate, Lebanese Baccalaureate and the college preparatory program. Most of the students in that school are trilingual (English, French and Arabic).

Note. Profile summary. Adapted from "*An exploratory study of a student-centered course in IBDP schools: how is TOK implemented to support intercultural sensitivity?*" by T. Ozakman (2017). Adapted with permission.

A total of 305 students and 18 teachers from the sample schools completed the survey. The students who took the survey are all IBDP Year 1 students. Of the 305 students, 180 are female and 125 are male. The students come from different educational backgrounds and have varying language characteristics. All students speak at least two languages and some are multilingual. As for level of English, while some students take English as Language A and study works of literature, some study English as Language B and focus on language acquisition.

Instrumentation

Research instruments that are used to collect data play a seminal role in every research. For this exploratory study, TOK Practices surveys were developed in consultation with a team of experienced TOK/IBDP teachers. There are two versions of the surveys used in this study: a survey for IBDP students (Appendix A) and another for TOK teachers (Appendix B). In both versions, there are three sections that have a number of questions to explore different aspects of international-mindedness. The first, second and third sections of the surveys aim to explore demographic information, school cultures and language development, respectively. In the second and third sections, there is a 24-item instrument with a 5-point likert scale (5= strongly agree, 1= strongly disagree). In addition to the Likert scale items, there are open-ended questions that further explore the aspects related to language teaching practices.

This study focuses particularly on English language development in TOK classes; therefore, items from Section 3 of both student and teacher surveys were the primary source of data used to address the research questions.

Student survey

In Section 3 of the student survey, item 26 was a focal point of the analysis; it included a checklist of language teaching techniques that could be used by TOK teachers to support English language development. These techniques include whole class discussion, small group discussion, groupwork, visuals and videos, pairwork, use of personalized discussion topics and Q&A session. The reason why the abovementioned techniques were chosen is because they are practices that will likely facilitate learning via cooperation, communication and interaction among students.

Students were asked to indicate (check) which items their teacher uses; they could check all that applied – in other words, they did not have to limit their choice to a single technique nor did they have to rank their choices.

The other items from Section 3 of the instrument that were used in the present study included seven Likert scale items that were compiled into a subscale. These items focused on student perceptions and opinions about how their teachers support language development in their TOK classes. These items are as follows:

- Students who are not as good at English have little opportunity to participate (3.3).

- Oral skills are important for doing TOK presentations, so oral skills are supported through a variety of practice in class (3.9).

- Essay writing skills needed for TOK are developed through practice and feedback (3.10).

- Language learning is supported through techniques that help me at my level of language development (3.15).

- Some students with weaker English skills struggle to communicate verbally (3.21).

- When needed, my teacher provides supports for helping students with lower level English skills to communicate (3.22).

- When I struggle with writing my TOK essays, my teacher gives extra help (3.24).

Teacher survey

In the teacher version of Section 3, item 26 was designed as an open-ended question. Teachers were asked to share (write) the language teaching techniques they used with students that have differing language levels in their TOK lessons. Unlike the student survey, teachers were not given a checklist. The rationale behind this approach was to get as many details from teachers as possible. Different from the student survey, teachers were asked to respond to three other open-ended questions (3.27, 3.28 and 3.29). Items 27 and 28 ask teachers to share the supports and scaffolding techniques that they use to help students with oral English skills and the TOK essay. Item 29 asks teachers to reveal their insights into how TOK discussions about language as a way of knowing help students develop their appreciation of multilingualism.

Similar to the student survey, seven Likert scale items were compiled into a subscale that focused on perceptions about how teachers support language development in their TOK classes. These items are the same as the ones that were used in the student survey; however, the wording of the statements was changed as follows:

- Students who are not as good at English have little opportunity to participate (3.3).

- Strong oral skills are important for doing TOK presentations, so oral skills are supported through a variety of practice in class (3.9).

- Essay writing skills needed for TOK are developed through practice and feedback, including individualized feedback (3.10).

- I support my students' language learning through scaffolding techniques at needed levels of language development (3.15).

- Some students with weaker English skills struggle to communicate verbally (3.21).

- When needed, I provide supports for helping students with lower level English skills to communicate (3.22).

- When students struggle with writing their TOK essays, I give extra help (3.24).

After the instruments were finalized by the development team, a pilot study for both students and teachers was conducted at an international laboratory school in Ankara, Turkey in order to provide evidence for the reliability of the research instruments. The pilot also assured validity by identifying any ambiguous points of the questions and the subscales. For that reason, teachers and students were asked to report the items that they thought to be vague or unclear. As a result of the pilot study, statements starting with "the student" were changed to "I" to create a sense of

engagement in the survey. Other than that, a few minor changes were made to the wording of the questions to add clarity to the overall meaning.

In order to ensure the reliability of the items, the Cronbach Alpha coefficient for the language supports subscale was checked and two items that decreased the internal consistency were removed (3.3 and 3.21). With the remaining five items, the scale achieved a high internal consistency with a Cronbach Alpha value of .764.

Method of data collection

Data collection for this study consisted of two online surveys developed for students and teachers. Prior to administering the surveys in the sample schools, permission to conduct research in schools were obtained from the Ministry of National Education of Turkey. Following that, consent forms were collected from the parents of participating students in April. Afterwards, both versions of the survey were adapted into a Google Survey Form that was emailed to contact persons in each of the sample schools. Then, a copy of the consent form for the participating students and teachers was placed in the introduction of the online survey. Lastly, TOK teachers or the IBDP coordinators were given a briefing explaining the procedures for administering the online survey to ensure optimal participation of all students and TOK teachers.

Data collection through the online Google Forms took place in May, 2016. Students and teachers in each school were emailed the links and the surveys were completed in pre-determined TOK or IBDP class periods, using school computers or personal devices such as laptops or smartphones. Both teachers and students completed the survey together during the selected TOK or IBDP class periods; however, some teachers and students had to complete the survey in class periods different from the pre-determined slots due to scheduling changes in schools.

Method of data analysis

After the data had been collected through student and teacher surveys using Google Forms, it was converted into an MS Excel document. Following that, the names of the sample schools were changed to pseudonyms in order to keep school names confidential. Later, the responses were reviewed and the data was cleaned up to be transferred into IBM SPSS Statistics 24 software. Some of the participants (n=14) were removed because they were either submitted too late or the responses were inappropriate. The removal of the late submissions resulted in all second year IBDP students being omitted from the study.

In order to provide a general overview of the sample, demographic information was examined first. This was done by analyzing basic descriptive data to present the number of schools, the number of student participants and male to female ratio in each school. In a similar manner, demographic information of participating teachers was also examined. Following the examination, teachers' country, subject areas, years of teaching experience and years of TOK teaching experience were reported.

As mentioned in the instrument design section, two sources of data were used for the current study: the checklist of teaching techniques and the subscale of Likert questions related to language supports. Student responses to the checklist were coded into a new variable (0 meaning no and 1 meaning yes) to make the analyses possible using the SPSS software. Teacher responses, on the other hand, came from an open-ended question, so their responses were read carefully and reported descriptively.

As noted above, the language supports subscale of five items was created after the reliability check. Students' mean responses for the subscale were determined and used for further analysis to compare various participant populations (items 3.9, 3.10,

3.15, 3.22 and 3.24). In the teacher survey, the same subscale included similar items; however, due to the low number of participant teachers (n=18), their responses were not used to conduct statistical tests and were analyzed qualitatively.

To investigate student perspectives of language teaching techniques used in TOK classes, different subpopulations were compared based on possible differences in language proficiency. The different groups include level of English (Language A High Level, Language A Standard Level and Language B), number of languages (multilingual or non-multilingual) and the school type they attend (national or international) were selected as factors. The rationale behind selecting the abovementioned factors was to see if students with differing language characteristics and educational backgrounds would report on different teaching techniques. This approach also allowed the study to gain insights into teachers' classroom practices in the sense that whether TOK teachers differentiate their classroom practices or not. After determining the factors, Pearson's Chi-square test was conducted to see if there was an association between the factors listed above and the language teaching techniques used by TOK teachers. Bar charts were created with the SPSS software and added to the analysis results, illustrating any significant associations caused by the respective factors.

Although not a language characteristic, gender was used as a factor to explore student perspectives of language teaching practices in TOK classes. However, it was discovered that gender is not influential factor for teachers to differentiate their practices.

As for teacher perspectives of classroom practices, the same item (3.26) about language teaching techniques was designed as an open-ended question, which

allowed teachers to freely reflect on their classroom practices. In addition to language teaching techniques, other open-ended items (3.27, 3.28 and 3.29) from the teacher survey were analyzed to gain insights into teacher perspectives. Similar to the student survey, the data coming from the teachers' version of the survey was converted in an MS Excel document to be analyzed qualitatively. Since the aim was to gain as many insights as possible, language teaching techniques both similar to and different from student responses were read and analyzed carefully. A list was made for each open-ended question and common responses were highlighted in order to identify frequent patterns of classroom practices. Most of the time, teachers provided short answers to the open-ended questions, so the responses were essentially quantified to tally the findings. Following the analysis, the findings were reported in a descriptive manner as these items are open-ended questions designed to find out about teacher perspectives. For inter-rater reliability purposes, two other researchers reviewed the qualitative data coming from the teacher survey. The reviewers came up with the same results regarding language teaching techniques, scaffolding strategies and TOK discussions about multilingualism.

Language supports subscale (3.9, 3.10, 3.15, 3.22 and 3.24) is an integral part of this survey study as those items reflect the beliefs of the students and teachers involved in this research. Because students from different school types participated in the survey, an independent samples t-test was conducted to compare language supports offered in national and international schools in order to check whether there was a mean difference in teachers' classroom practices. Following the analysis, the result of the t-test and the significant mean difference in language supports were discussed by looking at the means of the two groups compared.

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Similar to teacher perspectives of language teaching techniques, teacher beliefs about language supports are important to gain further insights into teachers' classroom practices. Since there were only 18 teachers, it was not possible to conduct statistical tests. For that reason, the mean values of teacher responses to each subscale item were calculated using the MS Excel. Finally, teacher responses were descriptively reported with the respective item number and the mean value.

CHAPTER 4: RESULTS

Introduction

This chapter is devoted to the findings of the study. It will mainly focus on classroom practices and language teaching strategies used as language supports in order to develop students English proficiency in TOK classes. As part of the study, eight different institutions from both Turkey and abroad were sampled. The participating institutions are IB World Schools and they all implement the IBDP curriculum.

This chapter will also look into whether there are any significant associations between reported classroom practices and a number of factors that include students' level of English (Language A at Standard Level, Language A at High Level and Language B), the number of languages that students speak (multilingual or non-multilingual), gender and whether they are studying at national or international schools. Also, this chapter aims to investigate student and teacher perspectives and check if there are significant differences between national and international schools in terms of language supports offered by TOK teachers.

In order to address the research questions, Pearson's Chi-square test of association and independent samples t-test were conducted. The findings based on the tests are presented in the same order as the research questions.

Before analyzing language teaching practices, frequencies were calculated to develop an understanding of the sample. Demographic information about student characteristics can be found below in Table 2.

Table 2
Demographics of sample schools

School ID	School Pseudonym	IBDP Year 1 Participants	Number of Female Participants	Number of Male Participants
School 1	Swedish School	67	44	23
School 2	Lebanese School	40	20	20
School 3	Diversity School	27	14	13
School 4	Ege School	50	34	16
School 5	Dogu School	22	13	9
School 6	Turkish National School	44	19	25
School 7	Old School	32	24	8
School 8	Mediterranean School	23	12	11
Sample Size		305	180	125

Similar to student characteristics, it is useful to know about teacher characteristics in order to interpret teacher perspectives of classroom practices. Participating teachers are working in three different countries and are specialist teachers of a number of subject areas. In general, almost all teachers are very experienced; however, their teaching experience of TOK varies. Details of demographic information about teachers' backgrounds can be found below in Table 3.

Table 3
Demographics of TOK teachers

Teacher ID	Teacher Country	Subject area	Years of teaching experience	Years of TOK teaching experience
14	Turkey	English as language A	14	1
15	Turkey	English as language A	29	2
16	Lebanon	English as language A	25	13
17	Lebanon	English as language A	2	2
18	Lebanon	English as language A	5	1
2	Sweden	English as language A	19	15
3	Turkey	English as language B	8	6
7	Turkey	English as language B	6	4

Table 3 (cont'd)

Demographics of TOK teachers

Teacher ID	Teacher Country	Subject area	Years of teaching experience	Years of TOK teaching experience
8	Turkey	English as language B	11	1
12	Turkey	English as language B	23	2
4	Sweden	Swedish as language A	1	1
1	Sweden	Psychology	16	3
6	Sweden	Social sciences	15	1
9	Turkey	Social Sciences	28	24
10	Turkey	Mathematics	21	8
11	Turkey	Science	7	5
5	Turkey	Science	6	6
13	Turkey	Science	22	1

Language teaching strategies as reported by students

This section addresses language development in TOK classes. Since the primary aim of the overall study is to explore how TOK contributes to English language development, it is important to look into techniques used for language teaching in the schools sampled and how students describe their TOK classes in terms of language supports.

Both quantitative and qualitative data from student and teacher surveys was analyzed to find out about classroom applications and related scaffolding techniques used for supporting students' language development.

Table 4

Language teaching techniques used in class by TOK teachers

Classroom practices: Language teaching techniques	Sample size (N)	Number of students who said YES	Percentage of students who said YES
Whole Class Discussion	288	259	90
Small Group Discussion/Groupwork	289	242	84
Visuals and Videos	288	233	81
Pairwork	289	210	73
Use of Personalized Discussion Topics	287	143	50
Q&A Session	289	139	48

The above table lists the language teaching techniques used in class by TOK teachers

and shows the number and percentage of students who believe those techniques are

used. There were 289 participants, however, one or two students did not respond to

all of the techniques listed, so the total N varies. Among the techniques listed, Whole

Class Discussion was the most popular choice indicated by the participants (n=259).

A large percentage of the students also reported that their teachers make use of

groupwork and facilitate small group discussions (n=242) as part of language

teaching practices in their TOK classes. Regarding the use of visuals and videos, of

the students who reported on this technique (n=289), 233 think that their teacher

incorporates visual aids in order to support English language development. Pairwork

is commonly incorporated into the lessons by TOK teachers, as reported by 210

students (n=289). Less than half the students indicated that their teachers use either

personalized discussion or question and answer to support their language

competencies.

Qualitative summary of teachers' perspectives on language teaching techniques

In order to gain insights into how English language development is supported in

TOK classes, 18 teachers were surveyed. Since the number of teachers is not

sufficient enough to carry out statistical tests, teachers' responses were qualitatively analyzed.

Of the participants (n=18), eight teachers tend to use pairwork and group work as well as small group and big group discussions, which lead to whole class *discussions*. Similar to student responses, pairwork, group work and whole class discussions are the most popular practices incorporated by the teachers. The qualitative data coming from teachers' responses reveal that there are some additional language teaching techniques used by teachers. These classroom practices are different from those reported by the students. In order to encourage students with differing language levels to improve their language proficiency, two teachers reported that they provide students with prompts, descriptions, examples and cards with important concepts written on them. In addition, one teacher incorporates interactive classroom practices such as role plays, pairing and sharing activities and mini oral presentations in order to promote communication among students in TOK classes. Some classroom practices such as the use of visual aids and personalized discussion topics are mentioned by the students, but teachers did not report using those techniques in their TOK classes.

On a different note, one teacher mentioned the students' level of English is uniform and strong enough to handle the TOK course without any need for language supports or scaffolding. Similarly, three teachers reported that students who take the IB Diploma Programme are generally comfortable enough with their level of English that they do not need further language support.

Qualitative summary of teachers' perspectives on support for TOK essay (3.27)

Of the participants (n=18), eight teachers reported that they provide their students with constructive feedback. According to four of these teachers, feedback sessions take place on a one-on-one basis, which allows students to receive individualized recommendations and comments on their work. The remaining four teachers, however, prefer to give written feedback with leading/guiding questions for students to justify and strengthen their arguments.

Self-assessment and peer review are among the classroom practices incorporated by TOK practitioners. Two teachers reported that they give students their own or peers' papers and ask them to grade and discuss their rationale for marking. Teachers facilitate peer assessment by familiarizing students with the rubric and mark scheme.

Another common practice for supporting students writing skills for the TOK essay is examining past papers. Six teachers reported that they solidify their students' understanding of the essay structure by deconstructing sample essays or model answers written by examiners or other TOK teachers. One teacher mentioned that s/he asks micro questions to guide the students towards a format that matches the criteria of IBO.

Four teachers reported that they use graphic organizers to develop students' understanding of the writing process. In order to sequence the development of the essay, one teacher mentioned that s/he uses a specific outline to stage students' thought process.

Other techniques used for providing support for essay writing included deconstruction of title and key terms, written and verbal reflection activities, and argumentation practice.

Qualitative summary of teachers' perspectives on scaffolding techniques (3.28)

Of the 18 TOK teachers, three mentioned the importance of mental preparation. They reported that planning for any course-related activity in TOK classes is essential and enough time should be allocated for students to mentally prepare for their presentations and discussions.

Understanding abstract language is the key to success in TOK classes. With this in mind, three teachers mentioned the necessity of vocabulary teaching. As reported by these teachers, front-loading of lexical items is a strategy that helps students with their oral skills in TOK discussions. Teachers also mentioned that they change the abstraction level of new concepts in order to teach the terminology that is necessary for understanding the nuances of TOK.

Other practices implemented in TOK classes include speaking practice, Q&A, individual discussions, mini presentations and modeling the language used in TOK presentations. Such classroom applications give students a chance to prepare for the TOK presentations and supports their overall learning.

Qualitative summary of teachers' perspectives on language as a way of knowing and appreciation of multilingualism (3.29)

TOK teachers' responses to this item were similar to each other. One way or another, they believe that lessons on language as a way of knowing help students comprehend the concept of multilingualism and appreciate the importance of being able to communicate in several languages. Following are a few of their comments related to their understanding of the relationship between TOK and and language development:

"The need to see language as a tool, and a rough tool at best, is clear when it's used to analyze examples that relate to, for example, confusions due to translation errors.

Multilingualism is a way of getting more tools, or a sharper tool. But also as a way of seeing the world differently."

"Discussions on language as a way of knowing enable them to understand how languages they speak enrich their perception, how languages they speak affect how they think, how languages influence their communication styles, messages, body language, how languages require certain level of cultural background and so forth."

"Language plays an important role in understanding meaning, so the loss of meaning in translations helps students' appreciation of multilingualism."

"Giving students a nuanced understanding of connotation and denotation of terms and showing that language is dynamic rather than static help students appreciate multilingualism."

"Benefits of multilingualism are explicitly discussed, including explorations of limitations and nuances of different languages."

Language teaching techniques according to students' level of English

The participants of this study are IB students who take English at different levels as part of their IBDP curriculum. Since the primary purpose of this study is to investigate the language teaching techniques used in TOK classes, it is necessary to know the level at which students are studying. For that reason, frequencies were calculated to find out about the number and percentages of students surveyed in order to interpret the findings of this study.

Table 5
Students' level of English

Level of English	Number of students	Percentage of students
IBDP English as Language A at High Level	129	41.3
IBDP English as Language A at Standard Level	97	31.8
IBDP English as Language B	79	25.9
Total	305	100

The table shows the number and percentages of students who took the survey and lists their language proficiency. Of the participants (n=305), 41.3% are currently studying English as Language A at High Level. 31.8% of the students take English as Language A at Standard Level and 25.9% are studying English as Language B.

In order to investigate the relationship between students' level of English and the classroom practices implemented by the teachers, Pearson's Chi-square test of association was conducted.

Table 6
Pearson chi-square test for level of English

Classroom practices: Language teaching techniques	Sample size (N)	Pearson chi square value	Degree of freedom	Asymptotic significance (2-sided)
Personalized Discussion Topics	287	3.126	2	.210
Pairwork	289	2.123	2	.346
Visuals and Videos	288	.960	2	.619
Whole Class Discussion	288	.474	2	.789
Q&A Session	289	.201	2	.904
Small Group Discussion/Groupwork	289	.196	2	.907

According to the Pearson's Chi-square test of association, there is no statistically significant association between students' level of English and the use of language teaching techniques; that is, teachers incorporate the techniques listed in the table regardless of student's level of English.

Although the results of Pearson's Chi-square test of association in Table 5 does not indicate a statistically significant relationship between students' level of English and the use of language teaching techniques, use of Personalized Discussion topics and Pairwork yielded some notable results.

Despite not significant, there seems to be a notable association between the students' level of English and the use of Personalized Discussion Topics, χ^2 (2, N = 287) = 3.12, p = .210. According to student responses, half of the students who take English A at High Level (n=123) reported that their teachers use this technique while 41 students who take English as Language B (n= 70) reported that their teachers do not incorporate personalized discussion topics in their TOK classes. This shows that TOK teachers tend to use Personalized Discussion Topics with students that have strong English proficiency.

Pairwork as a language teaching technique is another statistically non-significant but notable classroom practice that is extensively used in TOK classes, χ^2 (2, N = 289) = 2.12, p = .346. Based on student responses, Pearson's Chi-Square test results show that pairwork is incorporated into the lesson regardless of students' level of English. Of the students taking English B (n=70), 50 reported that their teacher uses pairwork in TOK classes. Similarly, more than 68% of English A Standard Level students (n=94) and 76% of English A High Level students (n=125) reported that their teacher uses pairwork as a language teaching technique.

Language teaching techniques according to students' languages

In this study, students who can speak three or more languages are regarded as multilingual and those who speak less than three languages are considered non-multilingual. Similar to students' levels of English, it is important to know about

how many students are considered multilingual and non-multilingual in order to interpret the findings of the study.

Table 7
Multilingual vs non-multilingual students

Multilingualism	Number of students	Percentage of students
Non-multilingual	226	74.1
Multilingual	79	25.9
Total	305	100

Table 6 lists the number and percentages of students who took the survey and shows whether they are multilingual or not. The number of languages are based on students' self-rated languages that the studens are proficient in. Of the students surveyed (n=305), an overwhelming majority of 74.1% are non-multilingual. 25.9% of the students are multilingual, which means that they are able in three or more languages, including their mother tongue.

In order to investigate the relationship between the number of languages students speak and the classroom practices implemented by the teachers, Pearson's Chi-square test of association was conducted.

Table 8
Pearson chi-square test for multilingualism

Classroom practices: Language teaching techniques	Sample size (N)	Pearson chi square value	Degree of freedom	Asymptotic significance (2-sided)
Small Group Discussion/Groupwork	289	2.606	1	.106
Whole Class Discussion	288	2.063	1	.151
Pairwork	289	.339	1	.560
Visuals and Videos	288	.333	1	.564
Q&A Session	289	.066	1	.797
Personalized Discussion Topics	287	.010	1	.922

According to the Pearson's Chi-square test of association, there is no statistically significant association between the use of classroom practices and whether the students are multilingual or not. Namely, teachers do not differentiate their classroom practices, depending on the number of languages that students speak.

Similar to students' level of English, the Chi-square test of association for the number of languages students speak and the language teaching techniques yielded some notable results.

Despite not significant, Small Group Discussion and Groupwork are notable techniques used by TOK teachers with a view to improving students' language proficiency, χ^2 (1, N = 289) = 2.60, p = .106. While more than 85% of non-multilingual students (n=212) reported that their teacher uses small group discussions and groupwork, only 78% of multilingual students (n=77) indicated that their teacher incorporates this technique in their TOK classes.

Whole class discussions are also among the most commonly used but not statistically significant language teaching practices, χ^2 (1, N = 288) = 2.06, p = .151. According to more than 85% of non-multilingual students (n= 211), TOK teachers set up whole class discussions to support language competencies. By the same token, whole class discussions are widely incorporated into TOK classes, as reported by 91% of multilingual students (n=77).

Language teaching techniques according to students' gender

For this study, 305 students from different schools and with varying English language levels were surveyed. Similarly, the ratio of males to females is relatively disproportionate.

Table 9
Gender distribution

Gender	Number of students	Percentage of students
Female	180	59
Male	125	41
Total	305	100

The above table shows the gender breakdown of students and their percentages. Of

the participants, 59% are female and 41% make up the male students. Since the

number of female students (n=180) is considerably higher than that of the male

students (n=125), it is worthwhile to investigate whether there is a relationship

between students' gender and the language teaching techniques used in TOK classes.

To that end, the Pearson's Chi-square test of association was conducted.

Table 10
Pearson chi-square test for gender

Classroom practices: Language teaching techniques	Sample size (N)	Pearson chi square value	Degree of freedom	Asymptotic significance (2-sided)
Whole Class Discussion	288	1.988	1	.159
Pairwork	289	1.707	1	.191
Q&A Session	289	1.551	1	.213
Visuals and Videos	288	.980	1	.322
Small Group Discussion/Groupwork	289	.644	1	.422
Personalized Discussion Topics	287	.037	1	.847

According to the Pearson's Chi-square test of association, there is no statistically

significant association between the students' gender and use of classroom practices.

Gender, in this case, is not an influential factor that affects teachers' classroom

practices. In other words, as reported by students, teachers do not differentiate their

language teaching techniques depending on the number of male or female students

present in TOK classes.

There are, however, some noteworthy findings, concerning especially Whole Class Discussion, Small Group Discussion / Groupwork and Visuals and Videos. Despite not significant, χ^2 (1, N = 288) = 1.98, p = .159, Whole Class Discussion is the most popular classroom practice, as reported by 160 female students (n=174) and 99 male students (n=114). Similarly, according to 149 female students (n=175) and 93 male students (n=114), Small Group Discussion and Groupwork are the second most popular teaching technique used by TOK teachers to support English language development, χ^2 (1, N = 289) = .64, p = .422. The third most common language teaching technique incorporated by TOK teachers is the use of visuals and videos, χ^2 (1, N = 288) = .98, p = .322. 144 female students (n=174) and 89 male students (n=114) reported that their teachers use visuals and videos to improve students' language competence.

Comparison of school types in terms of language teaching techniques

The survey developed for this study was administered in eight different IB schools from both Turkey and abroad. Six of these sample schools are based in Turkey and include Diversity School, Ege School, Dogu School, Turkish National School, Old School and the Mediterranean School. Two schools abroad include the Swedish School and the Lebanese School, and they are located in Sweden and Lebanon, respectively.

Of the eight sample schools, Diversity School, the Swedish School and the Lebanese School are international schools with diverse student populations. The remaining five institutions, however, are considered national schools due to their student profile. In order to interpret the findings of the study, frequencies were calculated to see the ratio of students going to national and international schools.

Table 11
School types

Type of school	Number of students	Percentage of students
National Schools	170	56
International Schools	135	44
Total	305	100

The above table lists the number and percentage of students who are studying at national and international schools. Despite not entirely equal, there is a relatively proportionate distribution of students between the two types of schools. However, frequencies show that more than 50% of the participants are studying at national schools (n=170) and only 44% are studying at international schools (n=135).

The findings derived from the teachers' data revealed that TOK teachers are using more or less the same approaches. However, in order to investigate whether there is a relationship between the use language teaching techniques and the type of school students attend, the Pearson's Chi-square test of association was conducted.

Table 12
Pearson chi-square test for national and international schools

Classroom practices: Language teaching techniques	Sample size (N)	Pearson chi square value	Degree of freedom	Asymptotic significance (2-sided)
Q&A Session	289	8.137	1	.004
Pairwork	289	5.381	1	.020
Personalized Discussion Topics	287	2.227	1	.136
Visuals and Videos	288	1.889	1	.169
Small Group Discussion/Groupwork	289	.403	1	.526
Whole Class Discussion	288	.002	1	.965

According to the Pearson's Chi-square test of association, there is a statistically significant relationship between the type of school students attend and Q&A session, χ^2 (1, N = 289) = 8.13, p = .004.
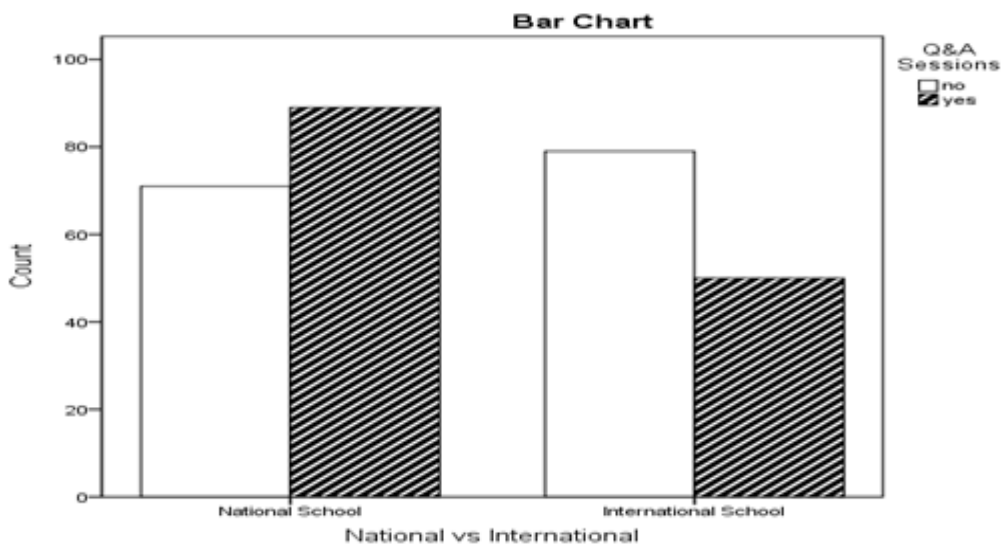
Figure 1. Use of Q&A in national and international schools

Figure 1 shows that, of the students attending national schools (n=160), more than 55% reported their teacher sets up Q&A sessions. However, only 39% of students studying at international schools (n=129) believe their teacher uses this teaching technique in their TOK classes. This indicates that Q&A sessions as a technique for developing students' English language proficiency is used more in national schools, and therefore creates a significant association between Q&A Session and the type of schools sampled.

The results of the Pearson's Chi-square test of association also show that there is a statistically significant relationship between the type of school students attend and the use of Pairwork, χ^2 (1, N = 289) = 5.38, p = .020.
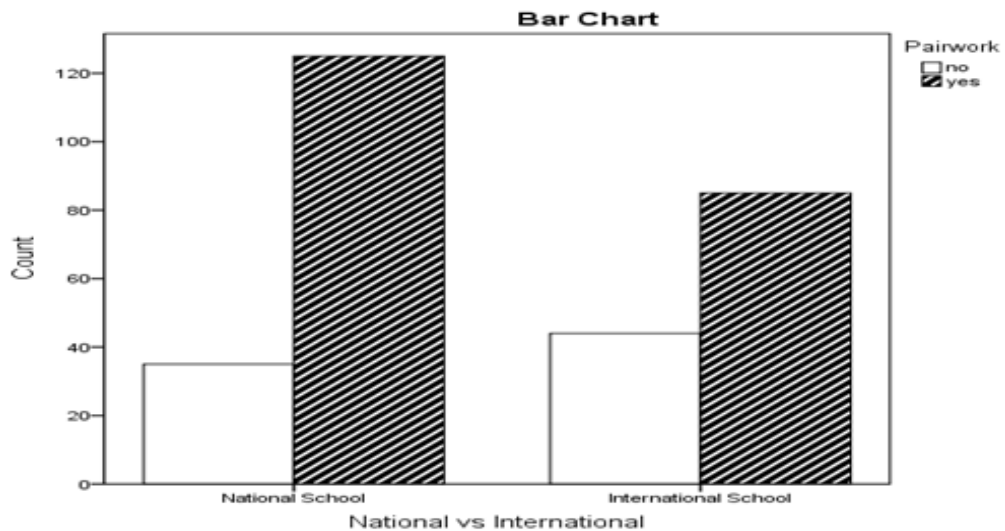
Figure 2. Use of pairwork in national and international schools

As illustrated in Figure 2, 125 students from national schools believe that Pairwork is commonly used in their TOK classes, as reported by 78% of students (n=160). In international schools, however, only 65% of students (n=129) reported that this technique is used by their teacher. While only 22% of students attending national schools (n=160) reported that pairwork is not used in their TOK classes, 34% of students from international students (n=129) believe this technique is not incorporated by their teacher. These numbers indicate that there is a statistically significant association between the use of pairwork and the type of school sampled.

Student perspectives on language supports

The findings of this study are based on student and teacher perspectives that are revealed through a number of questions from the TOK Practices survey. Section 3 of the student survey includes 24 Likert scale questions about language development in TOK classrooms. Of the 24 Likert scale questions, there are five items that make up the language supports sub-scale. The details of the language supports sub-scale can be found in Table 12.

Table 13
Language supports sub-scale

Survey items
3.9 Oral skills are important for doing TOK presentations, so oral skills are supported through a variety of practice in class.
3.10 Essay writing skills needed for TOK are developed through practice and feedback
3.15 Language learning is supported through techniques that help me at my level of language development.
3.22 When needed, my teacher provides supports for helping students with lower level English skills to communicate.
3.24 When I struggle with writing my TOK essays, my teacher gives extra help.

For validity and reliability purposes, the Cronbach Alpha value of the items numbered 3.9, 3.10, 3.15, 3.22 and 3.24 was checked. Two items (3.3 and 3.21) were eliminated from the sub-scale in order to improve scale reliability. Table 13 below shows the Cronbach Alpha, standard deviation and mean values for the items of the sub-scale.

Table 14
Language supports sub-scale values

Sub-scale	Cronbach alpha	Standard deviation	Mean
Language supports	.764	.77325	3.6675

The primary aim of this study is to investigate language teaching techniques in the schools sampled. Since students from two different types of schools took part in the survey, an independent samples t-test was conducted to compare language supports in national and international schools in order to see whether there is a statistically significant mean difference in the language supports offered.

Analysis results show that there is a statistically significant mean difference in language supports in national (M=3.75, SD=.77) and international (M=3.56, SD=.75) schools; t(303)=2.11, p=0.035. These results indicate that language supports offered

in TOK classes in national schools (M=3.75) are more effective, in comparison to international schools (M=3.56).

Teacher perspectives on language supports

The TOK Practices survey for teachers is essential for reflecting teachers' perspectives on language supports. Similar to the student survey, the teachers' version of the survey includes 24 Likert scale questions about language development in TOK classrooms and there is a sub-scale that has items about language supports. These items are, in fact, identical to the ones in the student survey and designed to gain insights into teachers' beliefs. Since only 18 teachers participated in the survey, it was not possible to run statistical tests.

According to the responses given through the survey, teachers agreed (X=3.9) that strong oral skills are important for TOK classes and they use a variety of strategies to give students opportunities to practice speaking (M=4.27). Teachers also hold the opinion (X=3.10) that essay writing skills needed for TOK are developed through practice and feedback, including individualized feedback (M=4.16) and that they give (X=3.24) extra help when students struggle with their TOK essays (M=3.11). As for language teaching techniques, teachers believe (X=3.15) that they support their students' language learning through scaffolding techniques at needed levels of language development (M=3.44). As far as in-class interaction is concerned, teachers agree (X=3.22) that they provide supports for helping students with lower level English skills to communicate (M=3.5).

CHAPTER 5: DISCUSSION

Introduction

The purpose of this study is to explore both student and teacher perspectives on language development in TOK classes. This chapter shares the findings of the study in relation to language teaching practices and language supports, as reported by students and teachers. The findings are discussed with support from the literature. In addition to the findings, implications for practice, further research, and limitations are presented in this chapter.

Overview of the study

This study was born out of a recognition that there was a lack of research into the concept of international-mindedness. According to Castro, Lundgren and Woodin (2013), international-mindedness revolves around three main aspects which are intercultural understanding, global engagement and multilingualism. Since the IBO supports international-mindedness and international-mindedness promotes multilingualism, there is an undeniable link between multilingualism and the IB curriculum. However, the extent to which the IBDP curriculum, through the Theory of Knowledge (TOK) course in particular, helps students develop English language skills and possibly become multilingual remains fairly unknown.

In order to address this gap in the literature, two TOK Practices Surveys were developed for both students and teachers. The surveys include a number different Likert scale items and open-ended questions for exploring student and teacher perspectives. First, a pilot study was conducted at an international laboratory school in Ankara, Turkey and then the two surveys were administered to eight IBDP schools

from Turkey, Sweden and Lebanon. Three of the sample schools that participated in the survey are international schools while the other five institutions are regarded as national schools. Overall, 305 students and 18 teachers took part in the study and the surveys yielded a response rate of 85%.

Both student and teacher versions of the survey were designed to collect a large amount of data about school cultures, students' intercultural sensitivity levels and classroom practices regarding English language development. The present study specifically focused on student and teacher perspectives of language supports and language teaching techniques. The data collected through the survey were used to answer the following main research question and sub-questions.

How does the TOK course help students develop language proficiency, within the context of international-mindedness?

- What language teaching techniques do students report that their teachers use in TOK classes?
- What language teaching techniques do teachers report that they use in their TOK classes?
- How do students describe their TOK courses in terms of language supports?
- How do teachers describe their teaching practices in terms of language supports?

<center>**Major findings**</center>

This study explores student and teacher perspectives of language teaching practices implemented in TOK classes and this section discusses the major findings of the study. The findings reflect student and teacher perspectives in relation to language teaching techniques used and language supports offered by TOK teachers.

Perhaps the most important finding of this study is the fact that TOK teachers are supporting students' language development while delivering TOK lessons. Whether consciously or not, TOK teachers are incorporating certain classroom practices that contribute to students' language competence, and in fact, help students develop strong oral and written communication skills. This is because of the fact that all teachers, regardless of their subject area, are considered to be language teachers (Ballantyne & Rivera, 2014; Hawkins, Caputo & Leader, 2014).

- What language teaching techniques do students report that their teachers use in TOK classes?

Students were asked to fill out a survey that includes a checkbox type of question listing a number of different language teaching techniques. Students ticked the boxes which listed the technique they believe their teachers use in the classroom. Overall, the findings reveal that whole class discussion, small group discussion and groupwork are the most popular techniques used by teachers. Q&A session and use of personalized discussion topics are the least popular classroom practices in TOK classes, as reported by students. These findings are in line with Vygotsky's (1978) principles of scaffolding and possibly indicate that students enjoy the type of activities that involve peer collaboration and communication. Perhaps when students interact with one another, they get a chance to help, support and possibly learn from

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each other in small or structured collaborative groups (Larsen-Freeman, 2000; Jones, 2007).

To gain insights into whether teachers differentiate their teaching practices with students of varying language proficiency, this study examined students' level of English. Although there is not a significant association between this factor and classroom practices, the study found that TOK teachers tend to use personalized discussion topics more with students who take English as Language A at High Level. According to Moskowitz (1978), students can better produce the content of a lesson using their personal thoughts and own experiences. Thus, it is possible that students with strong language competence are better suited for this technique to be used in TOK classes since they might feel more comfortable expressing their own feelings in English. Another notable finding is about the use of pair work, and not surprisingly, TOK teachers seem to incorporate pairwork regardless of students' English level to promote peer interaction. As Callahan and Clark (1988) put forward, all students can benefit from and learn better through pair and groupwork, regardless of their language levels.

The number of languages that students speak is another factor used to look into language teaching practices. In classes with multilingual students, teachers use small group discussion, group work and whole class discussion more commonly than non-multilingual classes. This finding indicates that students with three languages might feel more comfortable interacting with each other and enjoy discussions that involve their peers. In fact, studies show that setting up small group discussions in the classroom potentially increases the quality language output produced by the students and gives opportunities for interaction, which implies a positive contribution to

students' language development (Lamsfuß-Schenk & Wolff 1999; Larsen-Freeman, 2000).

National and international schools often have different attributes which set them apart from each other in terms of school cultures, intercultural sensitivity levels and varying mindsets. The abovementioned differences are present in language characteristics of students as well. In the sample schools, for example, some students are multilingual and some speak at least two languages. Also, students studying at international schools may have stronger language characteristics and have better English competence because they need to use a language that is not their own (English) as a common vehicle to communicate with each other. For that reason, school type was used as a factor for investigating language teaching techniques and yielded some significant results. In national schools, pair work and Q&A session are used more extensively, as compared to international schools. Jones (2007, p. 27) signaled the importance of setting up Q&A sessions as an opportunity to provide the students with instant feedback in the classroom. When a student makes a mistake or generates a misconception, other students could be asked to suggest possible corrections in a friendly environment. It can be inferred from this finding that students in national schools, more than those in international schools, need to work with a partner or a teacher in order to improve their oral skills and language competence. Also, teachers might be using Q&A more because students in national schools could be needing more teacher-to-student and student-to-student interaction, rather than whole class discussion and group work. It is also worthwhile to keep in mind that reasons why the abovementioned techniques are used less in international schools could result from class size, teaching style or classroom management strategies. Classrooms in Turkish national schools tend to be predominantly teacher-

centered (Yılmaz, 2007). This may have led to students in national schools say that Q&A was one of the main techniques used in TOK classes, as compared with international schools. Although constructivism and student-centered learning is encouraged in Turkey, teachers tend to use conventional lecture, discussion, and questioning approaches to help students cover the material.

- What language teaching techniques do teachers report that they use in their TOK classes?

Teacher perspectives on language teaching techniques are very similar to those of students'. However, teachers' open-ended responses reveal that they also make use of techniques such as prompts, descriptions, examples and cards with important concepts written on them. According to Gattullo (2000), use of prompts in language teaching leads to better results in oral language proficiency. Other studies found that role play and presentations as a language teaching technique supports students' language development and enhances their communicative competence (Qing, 2011; Islam & Islam, 2013). This finding overlaps with teacher responses of the current study. Teachers reported that they incorporate interactive classroom practices such as role plays, pairing and sharing activities and mini oral presentations in order to promote communication among students in TOK classes.

Scaffolding strategies and supports for developing verbal and written English skills are also analyzed as part of language teaching techniques. Open-ended responses coming from TOK teachers reveal that they provide their students with constructive and individualized feedback on their work. Teachers also reported that they prefer to give written feedback with leading/guiding questions for students to justify and strengthen their arguments (Ammar & Spada, 2006). In addition to feedback,

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teachers reported that they reinforce their students' understanding of the essay structure by deconstructing sample essays or model answers written by examiners or other TOK teachers. Ghatala and Hamilton (1994) stated that meaningful scaffolding is necessary to support the learning process. Similarly, TOK teachers in the current study mentioned that using graphic organizers and specific outlines to develop students' understanding of the writing process is also a common practice. Teachers shared that such approaches help students better sequence their essay development since breaking down the tasks into simple steps is much more manageable.

Since language is discussed as a way of knowing in TOK classes, students' perception and appreciation of multilingualism is very related with language development of students. According to TOK teachers, language plays an important role in understanding meaning, so the loss of meaning in translations helps students appreciation of multilingualism. Furthermore, teachers further explained that giving students a nuanced understanding of connotations and denotations of terms in enhances students' perception of different languages. Additionally, discussing that language is dynamic rather than static helps students appreciate diversity and multilingualism (Singh & Qi, 2013; Mensah, 2015).

- How do students describe their TOK courses in terms of language supports?

The survey used for this study included specific items related to language supports that were combined into a subscale. Overall, students' perspectives revealed that teachers are supportive of their language development. As reported by the students, TOK teachers support oral skills through a variety of practice in class and develop essay writing skills through extensive practice and feedback. Findings from other

studies also reported that teachers can use these strategies to support students' oral skills (Ammar & Spada, 2006; Gattullo, 2000). Moreover, students also reported that their overall learning and language development is supported through a number of language teaching techniques. To investigate further if students with different language proficiencies varied in their perceptions, the study compared mean responses. One comparison that found significant differences was between students from national and international schools. Although both groups had positive responses, the findings show that language supports offered in national schools are perceived to be more effective. This might be because students in international schools are already using English extensively on a daily basis among themselves and students do not observe teachers providing extra support. Furthermore, in national schools, students might recognize that they need more intensive practice and support.

- How do teachers describe their TOK practices in terms of language supports?

In the survey, mean responses of teachers are positive regarding providing language supports. For example, they indicate that they create opportunities to practice speaking since they believe strong oral skills are essential for the TOK course. Another interesting finding is about providing support for developing essay writing skills. Teachers shared that they provide individualized feedback, where possible. Small group discussion/group work is the second most popular technique as reported by students and this finding actually overlaps with the finding that indicates TOK teachers provide supports for helping students with lower level English skills to communicate. Larsen-Freeman (2000) explained that facilitating small group and paired activities gives students opportunities to interact with each other. As found by Otienoh (2015), the current study learned that teachers encourage student-to-student

communication and enhance learning by forming and facilitating pair and groupwork.

Implications for practice

This section draws on the major findings of the study and discusses some of the implications concerning language supports and classroom practices in TOK classes in K-12 institutions.

All language teaching techniques used by teachers can be quite helpful when it comes to overall language development of students, regardless of their English level, number of languages, gender and school type. To that end, teacher could try their best to actually incorporate a variety of techniques, whenever possible.

Students attending international schools, who may appear to speak English fluently, also need language support. Due to the challenging nature of the TOK course, students need continual practice, feedback and continuous support. For that reason, TOK teachers at international schools could try to use pair work in order to provide students with opportunities to interact with one another in addition to whole class discussions and groupwork activities. Similarly, Q&A could be incorporated more into TOK lessons because it might help students to improve their oral skills and give teachers a chance to provide instant and individualized feedback.

Teachers could use small group discussion, groupwork and whole class discussion in non-multilingual classes as well. Again, the number of languages that students speak should not be a factor affecting teachers' classroom practices. Whether multilingual or not, students could easily develop their language proficiency and improve their competence by means of discussions and groupwork.

Lastly, TOK practitioners who are not language teachers could familiarize themselves with current educational practices that are used by English teachers. Teachers could either consult their colleagues whose expertise is related to language teaching or attend seminars, workshops and other professional development events. Receiving in-service training on different methods of language teaching could help teachers solidify their understanding of student-centered teaching, cooperative learning and interactive approaches.

Implications for further research

The purpose of this study is to explore how English language development is supported in TOK classes. For that reason, students were asked to fill out a survey that includes a checkbox type of question listing a number of different language teaching techniques. Students ticked the boxes which listed the technique, if they think those techniques are used by their teachers in the classroom. However, instead of using a checkbox, that question could have been designed as a likert scale item. By doing so, it could be possible to calculate means and gain deeper insights into the use of language techniques by running other statistical tests. Having said that, open-ended questions could also help researchers to gain deeper insights into other teaching techniques that students report are used in the classroom.

In this study, multilingualism is used as a factor for looking at student perspectives on language teaching techniques because all the sample schools that participated in the survey are IBDP schools and offer a third language, other than student's native language and English. However, the findings do not show how schools promote multilingualism. For that reason, another study could investigate how school cultures contribute to the promotion of multilingualism or look into language supports offered for multilingual students in other foreign language classes. Such research can be

conducted through a quantitative survey that has both open-ended and likert scale items, which would allow the researcher to run statistical tests using means of student responses.

Further studies could include visits to schools and one-on-one interviews with faculty members and students in order to gain deeper insights into student and teacher perspectives.

Future researchers could look into classroom practices of TOK teachers from different subject areas. In order to investigate their approaches, in-class observations of teachers could be conducted in TOK classes to see what practices teachers are incorporating and how they are implementing them.

An experimental research design that includes a focus and control group could shed light on the effectiveness of different classroom practices. Such a design would allow the researcher to investigate whether certain teaching techniques are effective or not with a pre-test and post-test.

Limitations

Although the main focus of this study is English language development, the theoretical framework of this study includes research conducted about international-mindedness and other studies on multilingualism. This is because schools that participated in the survey are all IBDP schools and they offer a third language other than students' mother tongue and English. To that end, participants in this study are able in at least two languages, if not three. However, the research instruments used in this study are not designed to investigate how multilingualism is promoted. TOK teachers and, schools in general, are thought to encourage multilingualism on the assumption that all IB teachers are language teachers, regardless of their subject area

and that the language teaching techniques analyzed are used by other foreign language teachers as well. For that reason, it is not possible to entirely know the extent to which international-mindedness and multilingualism is promoted.

Six of the eight sample schools in this study were purposefully selected from Turkey and they constitute a representative sample of the IBDP school population in Turkey. The other two schools from Sweden and Lebanon, however, were conveniently selected and they are not a representative sample of IBDP schools in Europe and Middle East. For that reason, it is not possible to make generalizations beyond the countries sampled.

Before the survey was administered, the intended participants of this study were IBDP Year 1 and Year 2 students. However, only Year 1 students completed the survey due to time constraints and scheduling setbacks. Therefore, the findings of the study reflect the perspectives of Year 1 students only.

Even though this study was designed to explore both student and teacher perspectives about how the TOK course supports English language development, the number of teacher respondents was not enough to run statistical tests. For that reason, the data coming from the teachers' survey was only used to explain teachers' perspectives descriptively. Also, the responses obtained from the 18 TOK teachers who participated in the study reflect the perspectives of language practices only in the respective schools, so it is not possible to make generalizations beyond the schools sampled.

The language teaching techniques listed in the Section 3 of the student survey do not include all the techniques from the literature. However, the items listed are the most

commonly used classroom practices. Other techniques could have been listed to give students a wide range of options from which to choose.

The subscales of the research instruments are usually validated through a pilot study. In this study, however, the pilot school selected did not have a large enough sample to test the subscales, so the validation process was carried out through the study itself after the surveys were administered. Nevertheless, all the scales and subscales showed strong item consistency and yielded satisfactory levels of reliability.

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Appendix A: TOK Practices Survey for Students

The following are selected items from the TOK Practices Survey that were used in

the current study. For a complete copy of the instrument, please visit the link below.

https://goo.gl/forms/qslrg34ssD0SP5E63.

Students' perceptions of TOK are important to gain insights into how school

programs and classroom practices support language development and international-

mindedness. This survey asks you to assess your school culture, along with TOK

classroom practices. We invite you to reflect carefully especially on the openended

questions, as they will help us to interpret your views more fully.

Section 1: Demographic Information

1a. Which IB grade level are you in?

  __ 11th grade (or IBDP, year 1)

  __ 12th grade (or IBDP, year 2)

1. What is your gender?

  __ Female
  __ Male

2. In how many languages would you rate yourself as a proficient user? (Enter a

  number.)

  A proficient user means one who has fully operational command of the language:

  appropriate, accurate and fluent with complete understanding, in a variety of

  contexts. ___

List your mother tongue: _____

List other languages in which you are a proficient user:

_____

3. In how many languages would you rate yourself as beginning or intermediate?

(Enter a number.) ___

4. Which of the following best describes your level of English?

__ Taking IB English as Language B

__ Taking IB English at Standard Level

__ Taking IB English at Higher Level

Section 3: TOK classrooms and language development

Item	During my TOK classes…	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.3	Students who are not as good at English have little opportunity to participate.	1	2	3	4	5
3.9	Oral skills are important for doing TOK presentations, so oral skills are supported through a variety of practice in class.	1	2	3	4	5
3.10	Essay writing skills needed for TOK are developed through practice and feedback.	1	2	3	4	5
3.15	Language learning is supported through techniques that help me at my level of language development.	1	2	3	4	5
3.21	Some students with weaker English skills struggle to communicate verbally.	1	2	3	4	5

3.22	When needed, the teacher provides supports for helping students with lower level English skills to commuicate.	1	2	3	4	5
3.24	When I struggle with writing my TOK essays, my teacher gives extra help.	1	2	3	4	5

3.26 - What *communicative language techniques* does your teacher use in the classroom to encourage interactions between students of all language levels? (Check all that apply)

__ Pairwork

__ Small group work

__ Q&A sessions

__ Visuals and videos

__ Whole class discussions

__ Bringing up personalized discussion topics

__ Other:

Appendix B: TOK Practices Survey for Teachers

The following are selected items from the TOK Practices Survey that were used in the current study. For a complete copy of the instrument, please visit the links below.

https://goo.gl/forms/Ngjw5d0mYAghxwWm1

Teachers' perceptions of TOK are important to gain insights into how school programs and classroom practices support language development and international-mindedness. This survey asks you to assess your school climate, along with TOK classroom practices. We invite you to reflect carefully especially on the open-ended questions, as they will help us to interpret your views more fully.

Section 1: Demographic Information

2. Including this year, how many years have you been a teacher? (Enter a number.)

___

10. What is your main subject area for teaching?

   o   English as a first language (Language A)
   o   English as a second or foreign language (Language B)
   o   History
   o   Mathematics
   o   Science
   o   Social sciences (geography, economics, psychology, etc.)
   o   Arabic, French, or other local languages
   o   Turkish Language and literature
   o   Other: _____

11. Including this year, how many years have you taught Theory of Knowledge

(TOK)? (Enter a number.) _____

Section 3: TOK classrooms and language development

Item	During my TOK classes…	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.3	Students who are not as good at English have little opportunity to participate.	1	2	3	4	5
3.9	Oral skills are important for doing TOK presentations, so oral skills are supported through a variety of practice in class.	1	2	3	4	5
3.10	Essay writing skills needed for TOK are developed through practice and feedback.	1	2	3	4	5
3.15	I support my students' language learning through scaffolding techniques at needed levels of language development.	1	2	3	4	5
3.21	Some students with weaker English skills struggle to communicate verbally.	1	2	3	4	5
3.22	When needed, I provide supports for helping students with lower level English skills to commuicate.	1	2	3	4	5
3.24	When students struggle with writing their TOK essays, I give extra help.	1	2	3	4	5

3.26 - What communicative language techniques do you use in your TOK classroom to encourage students with differing language levels to interact?

3.27 – How do you support your students to write the TOK essay?

3.28 – What scaffolding techniques are effective for supporting students' oral English skills?

3.29 – How do TOK discussions about language as a *way of knowing* help students to develop their appreciation of multilingualism?