

TANSU ÖZAKMAN

AN EXPLORATORY STUDY OF A STUDENT-CENTERED  
COURSE IN INTERNATIONAL BACCALAUREATE DIPLOMA  
PROGRAMME (IBDP) SCHOOLS: HOW IS THEORY OF  
KNOWLEDGE (TOK) IMPLEMENTED TO SUPPORT  
INTERCULTURAL SENSITIVITY?

A MASTER'S THESIS

BY

TANSU ÖZAKMAN

THE PROGRAM OF CURRICULUM AND INSTRUCTION

İHSAN DOĞRAMACI BILKENT UNIVERSITY

ANKARA

APRIL 2017

2017



AN EXPLORATORY STUDY OF A STUDENT-CENTERED COURSE IN  
INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME (IBDP)  
SCHOOLS: HOW IS THEORY OF KNOWLEDGE (TOK) IMPLEMENTED TO  
SUPPORT INTERCULTURAL SENSITIVITY?

The Graduate School of Education

of

İhsan Doğramacı Bilkent University

by

Tansu Özakman

In Partial Fulfillment of the Requirements for the

Degree of Master of Arts

in

Curriculum and Instruction

İhsan Doğramacı Bilkent University

Ankara

April 2017

İHSAN DOĞRAMACI BİLKENT UNIVERSITY  
GRADUATE SCHOOL OF EDUCATION

THESIS TITLE: AN EXPLORATORY STUDY OF A STUDENT-CENTERED  
COURSE IN INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME  
(IBDP) SCHOOLS: HOW IS THEORY OF KNOWLEDGE (TOK)  
IMPLEMENTED TO SUPPORT INTERCULTURAL SENSITIVITY?

TANSU ÖZAKMAN

April 2017

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. Robin Ann Martin

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 F. Lane

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.

---

Prof. Dr. J. J. Thompson, The University of Bath

Approval of the Graduate School of Education

---

Prof. Dr. Alipaşa Ayas

## ABSTRACT

### AN EXPLORATORY STUDY OF A STUDENT-CENTERED COURSE IN INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAMME (IBDP) SCHOOLS: HOW IS THEORY OF KNOWLEDGE (TOK) IMPLEMENTED TO SUPPORT INTERCULTURAL SENSITIVITY?

Tansu Özakman

M.A., Program of Curriculum and Instruction

Supervisor: Asst. Prof. Dr. Robin Ann Martin

April 2017

This study investigated the factors that affect students' intercultural sensitivity scores and their self-rated Theory of Knowledge (TOK) aims along with their perspectives on the implementation of TOK. The participants were 305 International Baccalaureate Diploma Programme (IBDP) year 1 students from six different schools in Turkey, one in Sweden and one in Lebanon. A questionnaire was used to collect data and was composed of four sections: open-ended and multiple-choice questions to collect demographic information; a Likert item scale to gather information about participant school culture and international mindedness; another Likert item scale about TOK classrooms; and Intercultural Sensitivity Scale. Both qualitative and quantitative analysis were done in order to explore students' perspectives on their school culture, implementation of TOK course, their self-rated intercultural sensitivity scores and TOK outcomes.

The qualitative analysis contributed to the exploration of the participant school cultures and differences between the participant students. In addition, quantitative analysis, a one-way ANOVA and independent samples *t* test, helped to explore students' self-rated IS scores and TOK aims. The findings indicated that there is a statistically significant difference between students' self-rated IS scores and their

perceptions on TOK aims achieved. The results showed that students with higher IS scores have more positive attitudes about implementation of TOK course as they have higher self-rated TOK aims.

According to the findings, international experience and school type influence students' IS scores. Even though it was assumed that students in international schools would have higher self-rated IS, it was discovered that students in national schools have relatively higher IS scores. However, in terms of students' self-rated TOK aims, it was revealed that students' international experience and the school type do not influence their self-rated TOK outcomes.

The study contributes to the existing literature by having studied IS level differences between students who have more international travel experience and those who have less international travel experience and students from schools with mostly national peers and those who have more international peers. It also contributes to TOK literature by exploring factors such as IS scores, international travel experience and school type, which may affect students' self-rated TOK aims.

**Key words:** Theory of Knowledge, International Baccalaureate, Intercultural Sensitivity, Intercultural Communication Competence

## ÖZET

### ULUSLARARASI BAKALORYA DİPLOMA PROGRAMI OKULLARINDA BİLGİ KURAMI DERSİ KÜLTÜRLERARASI DUYARLILIĞI NASIL ETKİLER?

Tansu Özakman

Yüksek Lisans, Eğitim Programları ve Öğretim  
Tez Yöneticisi: Yrd. Doç. Dr. Robin Ann Martin

Nisan 2017

Bu çalışma öğrencilerin kültürlerarası duyarlılık puanlarını ve kendilerinin derecelendirdiği Bilgi Kuramı sonuçlarını etkileyen faktörleri ve Bilgi Kuramı dersinin uygulanması yönelik düşüncelerini incelemektedir. Araştırmaya Türkiye’den altı, İsveç’ten bir ve Lübnan’dan bir okul olarak toplamda 305 Uluslararası Bakalorya Diploma Programı (UBDP) öğrencisi katılmıştır. Veri toplamak için dört bölümden oluşan bir anket kullanılmıştır. Ankette demografik bilgi toplamak için açık uçlu ve çoktan seçmeli sorular; katılımcı okul kültürü ve kültürlerarası duyarlılık hakkında bilgi toplamak için bir Likert madde ölçeği; Bilgi Kuramı dersiyle ilgili bir başka Likert madde ölçeği; ve kültürlerarası duyarlılık ölçeği yer almaktadır. Araştırmada öğrencilerin okul kültürü, Bilgi Kuramı dersinin uygulanması, kendilerinin derecelendirdiği kültürlerarası duyarlılık puanları ve Bilgi Kuramı çıktılarını ile ilgili bakış açılarını keşfetmek amacıyla nitel ve nicel veri analizi yapılmıştır.

Nitel analiz, katılımcı okul kültürlerinin araştırılmasına ve katılımcı öğrencilerin arasındaki farklara katkıda bulunmuştur. Ayrıca, nicel analiz, tek yönlü ANOVA ve bağımsız örneklem t-testi, öğrencilerin kendilerine özgü puanlarını ve Bilgi Kuramı sonuçlarını keşfetmede yardımcı olmuştur. Elde edilen bulgular, öğrencilerin

kültürlerarası duyarlılık puanları ile Bilgi Kuramı puanları arasında istatistiksel olarak anlamlı bir fark olduğunu göstermektedir. Elde edilen sonuçlara göre kültürlerarası duyarlılık puanları yüksek olan öğrencilerin Bilgi Kuramı puanlarının da yüksek olduğu saptanmıştır. Kültürlerarası duyarlılık puanları yüksek olan öğrencilerin Bilgi Kuramı sonuçlarının daha yüksek oranlara sahip olması, bu öğrencilerin Bilgi Kuramı dersinin uygulanmasına ilişkin daha olumlu tutumlara sahip olduklarını göstermektedir.

Elde edilen bulgulara göre, uluslararası deneyim ve okul türü, öğrencilerin kültürlerarası duyarlılık puanlarını etkilemektedir. İlk olarak uluslararası okullardaki öğrencilerin kültürlerarası duyarlılık puanlarının daha yüksek olacağı varsayılsa da, ulusal okuldaki öğrencilerin kültürlerarası duyarlılık puanlarının daha yüksek olduğu bulunmuştur. Öğrencilerin uluslararası tecrübelerinin ve okul türlerinin onların kendilerini değerlendirdikleri Bilgi Kuramı başarı sonuçlarını etkilemediği keşfedilmiştir.

Çalışma, daha fazla uluslararası seyahat deneyimi olan öğrenciler ile daha az uluslararası seyahat deneyimi olanlar ve çoğunlukla ulusal akranları olan ve daha fazla uluslararası akranları olan öğrenciler arasındaki kültürlerarası duyarlılık sonuçları açısından farklar olduğunu göstererek mevcut literatüre katkı sağlamaktadır. Özetle, kültürlerarası duyarlılık puanları, uluslararası seyahat deneyimi ve okul tipi gibi faktörler öğrencilerin Bilgi Kuramı dersine olan bakış açılarını etkileyebilir.

Anahtar Kelimeler: Uluslararası Bakalorya, Bilgi Kuramı, Kültürlerarası Duyarlılık



## ACKNOWLEDGEMENTS

First of all, I would like to express my sincere gratitude to my supervisor Asst. Prof. Dr. Robin Ann Martin, who supported me and motivated me during this challenging process. She provided me with invaluable feedback and helped me in each step of the thesis. It was a precious experience to have worked with her.

I would like to thank Asst. Prof. Dr. Jennie F. Lane for her feedback and Asst. Prof. Dr. İlker Kalender for his support in SPSS analyses. Without their guidance, it would have been difficult to improve my thesis.

I am grateful to my friends in the MA CITE program, Gökçe Bala Bulut and Nazmiye Gür. They always supported me whenever I needed them and together we spent such valuable moments both in Ankara and in England. I would also like to thank my dearest friend Ezgi Ulusoy for helping me survive and not letting me give up. Sharing our memories and having similar experiences encouraged me to successfully finish my thesis, and I believe she will finish hers this time next year.

I am truly grateful to my boyfriend who has always supported me during my most stressful moments. He has never lost his patience and helped me solve the problems that I encountered.

Last, but not least, I owe a lot to my dear family, my parents, my sister and my brother. Without their support, I would not be able to have bachelor's degree and Master's. They have always encouraged me during my education life and my life in general.

## TABLE OF CONTENTS

ABSTRACT .....	iii
ÖZET.....	v
ACKNOWLEDGEMENTS .....	vii
TABLE OF CONTENTS .....	viii
LIST OF TABLES .....	xii
LIST OF FIGURES .....	xiii
CHAPTER 1: INTRODUCTION .....	1
Introduction .....	1
Background .....	1
International baccalaureate.....	1
Theory of knowledge .....	3
International mindedness .....	5
Intercultural sensitivity.....	6
Student-centered strategies in TOK classrooms .....	7
Problem .....	7
Purpose.....	9
Research questions .....	9
Significance.....	11
Definition of key terms .....	13
CHAPTER 2: REVIEW OF RELATED LITERATURE.....	15

Introduction .....	15
International mindedness .....	16
Intercultural communication competence .....	18
Three perspectives of intercultural communication competence.....	20
Instruments that assess intercultural communication competence.....	21
A developmental approach to intercultural competence .....	22
Exploratory studies about intercultural sensitivity.....	26
Intercultural understanding .....	29
International education.....	30
Strategies to facilitate intercultural learning .....	32
Conclusion .....	34
CHAPTER 3: METHOD .....	35
Research design.....	35
Context .....	35
Participants.....	38
Instrumentation .....	38
Section 1: Demographic information.....	39
Section 2: School culture and international mindedness.....	39
Section 3: TOK classroom and language development .....	41
Section 4: Intercultural understanding .....	42
Pilot study and reliability .....	43
Method of data collection.....	46
Method of data analysis .....	46

CHAPTER 4: RESULTS .....	51
Introduction .....	51
Student characteristics that closely relate with international mindedness .....	52
Prior experiences in international schools.....	52
Prior experiences in IB schools.....	54
Students’ perspectives.....	57
Teachers’ perspectives .....	58
Student characteristics that influence their intercultural sensitivity scores .....	59
School cultures in terms of supports for international mindedness .....	61
TOK courses in terms of supports for intercultural competence .....	69
Students’ perspectives.....	71
Teachers’ perspectives .....	72
Students’ and teachers’ perspectives on the cultural diversity of their TOK classes .....	73
Students’ perspectives.....	75
Teachers’ perspectives .....	77
Student characteristics that influence their perspectives on the implementation of TOK course .....	83
Conclusion .....	85
CHAPTER 5: DISCUSSION.....	87
Introduction .....	87
Overview of the study .....	88
Major findings.....	89

TOK courses in terms of supports for intercultural competence .....	89
Prior experiences in IB schools, international schools, international travel experience and differences among peers as students’ characteristics that closely relate with intercultural sensitivity .....	91
Student characteristics that influence their intercultural sensitivity scores .....	93
School cultures in terms of supports for global engagement and TOK aims.....	95
Students’ and teachers’ perspectives on cultural diversity in their TOK classes .....	97
Aspects of intercultural understanding that influence perspectives on the TOK course .....	100
Implications for practice .....	101
Implications for further research .....	103
Limitations .....	104
REFERENCES.....	107
APPENDICES .....	112
Appendix A: TOK Practices: A Survey for IBDP Teachers.....	112
Appendix B: TOK Practices: A Survey for IBDP Students.....	122
Appendix C: Parent Permission for Students to Participate .....	132
Appendix D: Permission to Use the ISS .....	133
Appendix E: Research Questions, Methods and Items .....	134

## LIST OF TABLES

### Table

1. Summary of participating schools.....	37
2. Realibility of the subscales in sections of survey .....	45
3. Schools pseudonym and numbers of participating students .....	52
4. Descriptives of international school years across schools .....	53
5. Descriptives of IB years across schools .....	55
6. Descriptives of prior experiences in other countries/cultures .....	56
7. Summary of distinguishing characteristics of students across schools.....	59
8. Descriptives of IS dimensions.....	60
9. Summary of IM-related features across schools .....	65
10. Mean scores and standard deviations of supports for global engagement.....	67
11. Mean scores and standard deviations of meeting the aims of TOK.....	68
12. Summary of the most emphasized aspects of TOK that foster IM across schools .....	75
13. Descriptives of student engagement and teacher support subscales .....	76
14. Means of students' self-rated TOK achievement .....	79
15. Descriptives of each school in number of AOKs perceived for supporting IS ....	80
16. Descriptives of each school in number of WOKs perceived for supporting IS ...	81
17. Students' perspectives on AOKs that develop intercultural understanding .....	82
18. Students' perspectives on WOKs that develop intercultural understanding .....	83

## LIST OF FIGURES

### Figure

1. Adapted from Bennett, 1993: The Developmental Model of Intercultural Sensitivity  
..... 25



## **CHAPTER 1: INTRODUCTION**

### **Introduction**

Intercultural communication is one of the most significant aspects in our lives and its importance is increasing due to globalization. With technological advancements in transportation and media, more and more people from different cultural and national backgrounds have a chance to meet each other and communicate with each other.

This interaction and communication requires having good relationships and being open to learn because people need to know how to be respectful towards other people who are culturally different or have different ways of thinking. The International Baccalaureate Programme (IBDP) aims to encourage students to accept differences and have a mutual respect in their relations. As a core subject of IBDP, Theory of Knowledge (TOK) has similar aims. TOK puts emphasis on the use of real life situations, and relating them to clear knowledge questions that help students to explore how people gain knowledge. This study will focus on how the TOK course and teachers support students' intercultural understanding, with respect to communicating with people who have perspectives different from their own.

### **Background**

#### **International baccalaureate**

As it is stated in the official IB guides, the International Baccalaureate education aims to help people cross boundaries that separate languages, countries, and cultures (IBO, 2013). It provides an international education that features high-quality



programs for students. These programs aim to develop intercultural understanding and respect. The IB mission is “to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect” (IBO, 2013, p. 5). The mission statement includes ten core values that students need to develop and these values are also included in the IB Learner Profile. The IB learners strive to be:

- Inquirers: curious, enthusiastic lifelong learners who ask questions.
- Knowledgeable: exploring significant ideas both locally and globally.
- Thinkers: critical/creative decision makers.
- Communicators: good listeners.
- Principled: honest, fair and responsible.
- Open minded: developing critical appreciation of cultures.
- Caring: committed to service.
- Risk takers: courageous.
- Balanced: focused on well-being, of the people.
- Reflective: thoughtful and realistic. (IBO, 2013, p. 6-7).

These qualities set high expectations for students to be high achievers not only in terms of academic success but also being responsible citizens. The IB students need to improve themselves by considering these learner profile qualities, which also imply understanding diverse ways of knowing. In particular, being inquirers, communicators, open-minded and reflective are needed in order to develop international mindedness because the young learners should be enthusiastic about learning, listen to other people carefully, appreciate differences and be realistic about their comments. Therefore, the IB programmes aim to create opportunities to have healthy relationships with people from different cultures (or sub-cultures within a country) and develop an intercultural understanding.

The International Baccalaureate started in 1968 and it is an organization that includes four different educational programs. The *Diploma Programme (DP)* is a two-year program for the students aged 16-19, grades 11 and 12. The DP includes six subject groups, studies in language and literature, language acquisition, individuals and societies, sciences, mathematics and the arts. In addition to these subject groups, there are also three core elements. The first one is *Theory of Knowledge (TOK)* and it requires reflecting on the nature of knowledge. The second is the *Extended Essay* that students need to work independently to write a 4,000-word essay on a topic they choose. The last one is *Creativity, Activity, Service*, which requires students to complete a set of experiences and at least one project related to *Creativity, Activity* and/or *Service*. These components are important in terms of enabling students to explore local and global issues for developing an understanding of diverse cultures (IBO, 2013). In addition to the DP, the *Primary Years Programme (PYP)*, the *Middle Years Programme (MYP)* and the *Career-related Programme* are offered by IB and they encourage personal development as well as academic achievement.

### **Theory of knowledge**

As one of the core subjects of the IBDP, TOK focuses on how knowledge is constructed and how people acquire knowledge. The course combines *Areas of Knowledge (AOK)* and *Ways of Knowing (WOK)* to convey the essential concepts of the course. WOK include sense perception, reason, emotion, faith, imagination, intuition, memory, and language, and the AOK include mathematics, natural sciences, human sciences, history, religious knowledge systems, indigenous knowledge systems, the arts, and ethics. The course encourages students to explore different ways of knowing how to know, and the students are required to use WOK

for discussing the AOK. They both require using critical thinking and interacting with other people. In order to acquire knowledge, students need to develop self-awareness and sense of identity that will help them to communicate with people from different cultures, and this is also among the aims of the course. When differences come to play, fostering international mindedness –the underlying aim of the course,– becomes more significant and meaningful. Students need to develop an understanding of people from different cultures so that they can, without being prejudiced, interact with their culturally distinct counterparts and learn to appreciate different perspectives.

Recognizing differences rather than denying them is one of the most effective ways to appreciate diverse ways of knowing. Even though books are considered as main sources to find out information about a topic or a subject, people are also as effective as the books, especially in some ways of knowing such as reasoning and memory, because they have the first-hand experience. Since the mission of the IB is to “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), giving them a chance to discuss differences with their classmates and exchange ideas will contribute to their developing intercultural understanding towards people from different cultural backgrounds.

The overall TOK aim includes questioning how people know. It encourages students to understand the importance of knowing and allows them to develop knowledge. Apart from the main aim, there are also five specific aims of TOK and within these five, three are directly related to the understanding of cultural differences and perspectives. The students, who take the TOK course, need to become aware of how

people construct knowledge, develop an interest in cultural diversity and reflect on their own beliefs (IBO, 2013, p.14). These specific aims of TOK stimulate students' interest in discussing global issues and encourage them to be open to different cultural perspectives.

### **International mindedness**

International mindedness (IM) is considered as one of the underpinning attributes of the IB learner profile. Even though it is not a course in itself and has no curriculum, IM is noted as an important principle underlying the IBDP core curriculum. The core components of IM include multilingualism, intercultural understanding and global engagement (Castro, Lundgren & Woodin, 2013). These core components are significant to develop international mindedness because they require interaction with other people as well as learning about various methods of inquiry.

The first of these components, multilingualism, is related to the concept of identity because there is a likelihood that multilingualism helps people, who share the same history or experiences, to connect through languages (Castro, Lundgren & Woodin, 2013). The second component, intercultural understanding, puts an emphasis on accepting cultural differences and having positive relationships with other people. In addition, global engagement includes meaningful interaction with the world as a whole and encourages people to make a difference in the world. All of these three components, in general, help students improve in their understanding towards cultural differences and develop an international mindset.

As the world becomes more diverse in terms of cultural differences and more people from various backgrounds exchange views and thoughts, the need for developing

global competencies increases respectively. Consciously or unconsciously, people have stereotypes or prejudices against other groups who have different ways of living. These socially constructed ideas hold people back from having close relationships with others. The IB encourages students to be inquirers, open-minded, communicators and reflective. The design of TOK supports these IB Learner Profile qualities and encourages students to understand the benefits of diverse ways of knowing. Since the students, who are at the center of the IB programme, are nurtured toward being internationally-minded people, they need to recognize their common humanity and live in harmony with people from different backgrounds.

### **Intercultural sensitivity**

Intercultural sensitivity is a person's desire to understand cultural differences and accept those differences among cultures. An interculturally sensitive person enjoys exploring cultural differences and shows ability to adapt to the cultures that are different from one's own culture.

Intercultural sensitivity is a part of intercultural communicative competence because it contributes to developing effective communications in an intercultural context. In that sense, sensitivity and competency complement each other, which lead students to be more willing to learn about cultural differences by engaging in intercultural communications. Intercultural sensitivity also influences students' intercultural understanding and global engagement. When students have a desire to learn about different cultures, which indicates that they develop intercultural sensitivity, they also improve knowledge and understanding that helps them to appreciate and value cultural differences. Therefore, intercultural sensitivity is a conceptual framework used in the present study because of how it is seen as an underlying influence on

intercultural communicative competence, intercultural understanding and global engagement.

### **Student-centered strategies in TOK classrooms**

Educating teachers is highly important because teachers contribute to students' academic achievement as well as personal development. The role of teachers in TOK classes includes guidance and teachers are the facilitators of learning in and outside of class. Even though many IBDP schools are situated in cultures where teacher-centered approaches are used, there are some classes where students have a critical role in constructing knowledge. In order to facilitate learning, student-centered strategies can be used and students are encouraged to share their ideas or experiences. Some of these strategies consist of building up a welcoming classroom, providing equal engagement of all students, having students engage in discussions and assigning group activities (Croese, 2011). Since students have different learning styles, having a variety in class stimulates student interest and they become more active in class. These strategies also help students to share their experiences. When students express themselves and their ideas, a social environment within class is shaped as a result of student interactions. This creates a communicative environment in class that allow students to develop an understanding of each other (Mohsenin, 2010; Summers & Volet, 2008).

### **Problem**

The TOK Guide emphasizes that fostering international mindedness is one of the coherent aims of the IBDP core curricula and it is closely related with “developing responsible global citizens” (IBO, 2013, p. 5). The guide includes information about

the construction of knowledge and states that different cultural perspectives and traditions help people make meaning out of their perceptions. The course, in general, encourages students to share their beliefs and examine different contexts so that they can develop an intercultural understanding. However, what is happening in TOK classrooms depends on the TOK teacher because the IBO gives teachers autonomy to choose the course materials and the type of activities students need to engage in. So, what the students learn in this course with respect to intercultural sensitivity and specific AOK are inherently not very clear. Therefore, the practical issues related to the implementation of TOK and the development of intercultural understanding can be considered as a problem for both the teachers and students.

Another problem is related to the research issues. TOK is core to the IBDP but still previous research about this topic has been limited. In their research, Singh and Qi (2013) focused on conceptualization and assessment of international mindedness but they did not explore the relationship between TOK and international mindedness. In 2014, another study examined the outcomes of TOK, yet again it did not provide much information about how teachers and students develop intercultural understanding (Cole, Gannon, Ullman & Rooney). Similar to these, in their recent study, Bergeron and Rogers (2015) investigated the impact, perception and the implementation of TOK. Even though their research study was about the implementation, it did not specifically focus on how the students develop intercultural understanding or how the teachers foster global competencies. These studies are not adequate enough to understand how TOK is implemented in IBDP schools to foster how students gain an understanding of different cultures. Therefore, the present research aims to identify the strategies that are used to lead TOK and how the course itself contributes to the broader goals of intercultural understanding.

## **Purpose**

This is an exploratory survey study that will help to address the practical and investigative problems related to the implementation of TOK in IBDP schools. In order to explore the problems, a survey that collects qualitative and quantitative data will be used to understand the school cultures, course implementation, student and teacher perspectives about TOK and the intercultural sensitivity levels of TOK teachers and students. Demographic information will be collected to describe the student and teacher characteristics. Both TOK teachers and students will participate in the *Intercultural Sensitivity Scale* (Chen & Starosta, 2000), and their perspectives regarding the implementation of TOK and its support for intercultural understanding will be explored.

## **Research questions**

1. Do student characteristics that closely relate with international mindedness differ across schools? If so, how?
  - 1a. Do students' prior experiences in international and IB schools differ across school?
  - 1b. Do students' prior experiences in other cultures/countries differ across schools?
  - 1c. How do students describe themselves as being different from their peers?
2. What student characteristics influence their intercultural sensitivity scores?
  - 2a. What were students' overall self-ratings of intercultural sensitivity?
  - 2b. Do students with more experience in a variety of cultures have higher IS scores than those with fewer experiences across cultures?



- 2c. Do students in schools with mostly international peers have higher IS scores than those with peers who are from similar backgrounds?
3. Do students describe their school cultures differently in terms of the supports for international mindedness?
- 3a. How do students describe their school culture?
- 3b. How do students describe their schools' supports for intercultural pedagogy, including the development of intercultural understanding and intercultural competences?
- 3c. How do students describe their schools' supports for global engagement?
- 3d. How do students describe their schools' supports for the aims of TOK, which all closely relates to IM?
4. How do stakeholders (students and teachers) describe their TOK courses in terms of supports for intercultural competence?
- 4a. What are teachers' relevant backgrounds for teaching TOK?
- 4b. What are the opportunities noted for developing intercultural competence?
5. Do students' perspectives on the implementation of TOK differ across schools? If so, how?
- 5a. What aspects of TOK foster IM?
- 5b. Which student-centered strategies are used while implementing TOK?
- 5c. What are the students' perspectives on achieving the aims of TOK?
- 5d. Which AOKs and WOKs guide discussions that develop students' intercultural understanding?
6. Do student characteristics (that relate with IM) influence students' perspectives on the implementation of TOK courses? If so, how?

6a. Do students who rate stronger in intercultural sensitivity have more positive attitudes about the implementation of TOK than the ones who rate weaker in intercultural sensitivity?

6b. Do students with more experience in a variety of cultures have more positive attitudes about the implementation of TOK courses than those with fewer experiences across cultures?

6c. Do students in schools with mostly international peers have more positive attitudes about the implementation of the TOK courses than those with peers who are from similar backgrounds? (i.e., schools with mostly local students versus schools with students from variety of cultural backgrounds)?

### **Significance**

Communication and culture affect one another in a highly significant way. People express themselves as they learn from their family and culture. Many things such as people's behaviors, ways of life, and even clothing give us some ideas about their culture. Since everybody is unique in their own sense, communication enables us to learn more about the other people and their culture as well. Throughout history, there have been too many unfortunate cases where people were denied the chance to interact with others who were culturally different. This has caused problems in terms of communication and some groups have been exposed to discrimination. In recent years, people have become more aware of these problems and they have started to engage in intercultural communications with people from different cultures. These interactions help them to realize that everyone has a different culture and some behaviors cannot be labeled as right or wrong.

One way of constructing knowledge is through communication, and schools are one of the most important places for adolescents to communicate. Whether they are national or international, schools serve students from different cultural backgrounds. In order to learn from each other, there should be interactive engagement among students, and they should communicate with each other in order to learn from one another. For that reason, this study aims to help schools to understand the importance of raising internationally minded students who value differences rather than seeing them as burdens. Another aim of this study is to inform administrators and teachers about notable opportunities for developing intercultural competence in IBDP schools. The techniques that are used in the sample schools will be identified in order to see how different schools foster intercultural understanding in TOK classes.

In addition to the contributions to education, this study will also help the research area because it will provide some information about the factors that affect students' intercultural understanding, specifically in relation to intercultural sensitivity, and their TOK outcomes. Even though studies about TOK provide information about the key concepts of the course and its benefits, the few studies conducted to date are primarily theoretical (Bergeron & Rogers, 2015; Cole, Gannon, Ullman & Rooney, 2014). This research will focus on a practical investigation of the TOK course. It will examine the attitudes of first year IBDP students and teachers taking TOK in order to yield practical information about its implementation. The findings of this study can be a basis for further research in terms of investigating more about teachers' and students' perspectives about their TOK course and how the IB mission statement is supported in TOK courses.

## Definition of key terms

**Global engagement:** This is another key concept based on the IB's notions of international mindedness. Unlike intercultural understanding, global engagement focuses on activities outside of school. These activities may include helping others in the community and civic engagement activities such as organizing events to raise awareness about global issues. Principles like dignity, ethics, human rights and justice are related with engagement because being aware of these principles enable people to value cultural differences and help them to develop IM (IBO, 2012).

**Intercultural awareness:** This concept is about understanding cultural conventions that affect the way people think and behave (Chen & Starosta, 2000).

**Intercultural communication competence:** This term refers to "individual's ability to execute effective and appropriate communication behaviors in order to achieve one's communication goal in an intercultural context" (Chen & Young, 2012, p. 176).

**Intercultural sensitivity:** It is defined by Chen and Starosta (2000) as a desire to understand and accept differences among cultures. Interculturally sensitive people enjoy cultural differences and show ability to adapt to new cultures. For this study, intercultural sensitivity is situated at the crossroads of intercultural understanding and global engagement, thus it can be seen as a notion that reflects on aspects of students' international mindedness.

**Intercultural understanding:** This is one of the three key concepts of international mindedness and it is closely related to developing knowledge of different cultural groups. People who have intercultural understanding appreciate different cultural

perspectives and behaviors while being respectful and open to their culturally distinct peers (Castro, Lundgren & Woodin, 2015).

**International mindedness:** As a key IBO concept, IM is about being open-minded about humanity, accepting and respecting other cultures (Castro et al., 2015).

Internationally minded people collaborate with their culturally-distinct peers and aim to help to create a better world.



## **CHAPTER 2: REVIEW OF RELATED LITERATURE**

### **Introduction**

Schools are important places in terms of raising students who can use their ability to question and are able to gain a spectrum of knowledge by investigating more about other people around them. International schools enable students from different regional, cultural and even national backgrounds to come together and exchange ideas. In order to have effective communications, students need to grasp why differences are important and how they can make use of them. Many factors such as having been abroad, speaking a second language, having foreign friends, a diverse school culture, having a teacher who facilitates cultural understanding can affect how people see each other and contribute to growing mutual respect.

Student and teacher perspectives can be explored with regard to intercultural understanding and the relationships between being in a diverse cultural environment and having respect towards other people. This study aims to examine student and teacher perspectives about how TOK supports intercultural understanding as well as the specific aims of the course itself. It will also investigate if some characteristics related to intercultural understanding influence students' perspectives on the implementation of TOK course and their intercultural sensitivity.

The IB discourse associated with international mindedness has centered on multilingualism, intercultural understanding, and global engagement (Castro, Lundgren & Woodin, 2013). More than other IBDP curricula, TOK seems to address most directly issues overlapping with intercultural understanding, which

includes intercultural competence such as mutual understanding, respect for other cultures and equality. In the sections that follow, the related literature about international mindedness, intercultural sensitivity and intercultural understanding will be reviewed in order to discuss what these terms mean and how they are fostered in a TOK course.

### **International mindedness**

International mindedness is a multi-faceted concept and it is about being open to cultural differences, accepting and respecting people from different cultural backgrounds. In its framework, it has also three conceptual tools that contribute to the development of international mindedness, and they are multilingualism, intercultural understanding and global engagement. In their study, Castro, Lundgren and Woodin (2015) focused on how international mindedness is conceptualized in the IB documents and reviewed the concepts that are related to international mindedness. They analyzed a total number of 30 official IB documents in order to investigate how IM is framed in the IB.

Multilingualism is one of the tools that is being integral to international mindedness, and the IB (2012) defines multilingualism as “a reconfiguration of how we think about languages that takes into account the complex linguistic realities of millions of people in diverse sociocultural contexts” (as cited in Castro et al., 2015, p. 191). In clear terms, the IB conceptualizes multilingualism as speaking and learning languages, which helps people to connect and exchange ideas. Multilingualism and plurilingualism are sometimes used interchangeably; however, Castro et al. state that plurilingualism is about taking an active participation in a society because it expands peoples’ perspectives not only in terms of cultural understanding but also developing

a global identity (2015, p. 191). This comparison indicates that multilingualism is more about understanding diverse social contexts while plurilingualism is about becoming a part of a diverse cultural context by avoiding misunderstanding.

According to Castro et al. (2015), the relationship between multiculturalism and avoiding conflicts is largely missing in the analyzed IB documents. Therefore, the distinction between multilingualism and plurilingualism is important to improve the quality of the documents so that the concepts are better understood and fostered in the IB programmes.

Intercultural understanding is another tool that is essential for international mindedness. Even though intercultural understanding is incorporated in intercultural competence, they are slightly different concepts. The IB documents recognize intercultural understanding as accepting and appreciating cultural differences. It requires exploring different cultural perspectives. However, intercultural competence describes how knowledge about other cultures is embodied within a person who is acting interculturally sensitive. For that reason, it can be said that intercultural understanding is more about exploring cultural differences while intercultural competence is about interaction and negotiation between culturally different groups.

The last concept of international mindedness is global engagement. According to Castro et al. (2015), different interpretations can be delivered in classrooms according to a specific cultural context and global engagement can be interpreted as global citizenship. Schattle (2008) defines global citizenship as an action that includes living within multiple cross-cultural societies and being actively committed to the world as a citizen. Global citizenship includes knowledge about local, national and global aspects of citizenship, valuing cultural differences and having skills to



take action and responsibility about cultural diversity. However, in the IB documents global engagement is defined as undertaking activities outside of school, developing an understanding of cultural differences and accepting diverse cultures. Castro et al. argue that even though IB learners are encouraged to develop knowledge about rights and responsibilities, there is no explicit evidence that they recognize values and beliefs that are necessary to develop critical cultural awareness (2015, p. 193). Therefore, the differences between global engagement and global citizenship should be explored so that the missing features of these concepts are further developed to improve the understanding of international education.

These three core components of IM, multilingualism, intercultural understanding and global engagement, are re-conceptualized as a result of different interpretations by different institutions, such as schools and political institutions. Even though the IB learner profile and concepts embodied in IB programmes are universal, teachers have autonomy to be flexible in their implementation. Therefore, how different schools conceptualize IM should be investigated in order to identify issues covered in TOK classes that foster intercultural understanding.

### **Intercultural communication competence**

Culture is a collection of behaviors and beliefs of a certain group of people that share similar experiences or history (“culture,” n.d.). Since culture shapes people’s way of living and thinking, people have different understanding, and that difference also affects the way they communicate with other people. In their study of intercultural communication competence, Chen and Young (2012) emphasize that culture and communication affect one another because people’s behaviors and communications

are shaped primarily by their culture. For that reason, each cultural group can have their own certain beliefs and behaviors that they follow. However, this does not mean that one cultural group is better than the other or the behaviors of one group are right while the other group's are wrong.

Chen and Young define intercultural communication competence (ICC) as “an individual's ability to execute effective and appropriate communication behaviors in order to achieve one's communication goals in an intercultural context” (2012, p. 176). This competence includes four dimensions and each of these dimensions has four components that help people to have effective communication with others from different cultural backgrounds. The abilities of an interculturally competent person include personal attributes, communication skills, psychological adaptation and cultural awareness.

The first dimension is personal attributes and it means having a positive personality, as Chen and Young (2012) stated. People who possess this attribute have self-disclosure, self-awareness, self-concept and social relaxation. The second dimension, communication skills, is about being able to interact with people from different cultural groups. People who have communication skills also have message skills, social skills, flexibility and interaction management. The third dimension, psychological adaptation, refers to being able to deal with culture shock. People who are good at psychological adaptation can handle frustration, stress, alienation and ambiguity when they communicate with their culturally different peers. The last dimension, cultural awareness, means that people are able to recognize people from differing cultural groups, based on their social values, customs, norms and systems (Chen & Young, 2012, p.177).

### **Three perspectives of intercultural communication competence**

In addition to its four dimensions, according to Chen (2010), the ICC can be examined from three different perspectives; which are intercultural awareness, intercultural adroitness and intercultural sensitivity. Even though these concepts seem closely related, there are some slight differences among them.

The first one of these perspectives, intercultural awareness, is the cognitive perspective of ICC. It includes understanding of cultural differences of a person's culturally distinct peers. In order to have intercultural awareness, people need to learn about the beliefs of different cultural groups. Without knowing cultural differences, people cannot adapt to their new cultural environment or cannot have effective communication with people from different cultural groups (Chen & Young, 2012, p. 178).

The second perspective of ICC is intercultural adroitness (or intercultural effectiveness) and it is the behavioral perspective of ICC. It is the ability to accomplish effective intercultural communication with different cultural groups through behavioral performance. Intercultural adroitness can consist of both verbal and non-verbal communication skills that facilitate fruitful intercultural communication. Studies conducted by Cupach and Imahori (1993), Martin and Hammer (1989), and Wiseman (2003) show that effective intercultural communication skills contain five features; which are message skills, interaction management, behavioral flexibility, identity management, and relationship cultivation (as cited in Chen & Young, 2012, p. 180). As these features demonstrate, an effective intercultural communication includes performing verbal and non-verbal

behaviors, initiating conversations, using proper communication strategies with one's culturally distinct peers.

The last perspective is intercultural sensitivity and it is the affective perspective of ICC. It includes developing positive feelings and emotions towards culturally distinct groups. In order to develop intercultural sensitivity, people need to have intercultural awareness so that they can identify the cultural characteristic first, and then become willing to accept and respect the values of different cultural groups. According to Bennett (1986), Triandis (1977) and Yum (1989), an interculturally sensitive person has six personal characteristics; which are self-esteem, self-monitoring, open-mindedness, empathy, interaction involvement and suspending judgment (as cited in Chen & Young, 2012, p. 179). These characteristics mean that interculturally sensitive people have a sense of self-value, behave in an appropriate way in their cultural interactions, open to differences, are responsive in their personal interactions and do not come to a conclusion without having adequate information about a subject.

### **Instruments that assess intercultural communication competence**

Some instruments were developed to assess intercultural communication competence. The first one of these instruments is the intercultural awareness scale that was developed by Chen (1995). It is a 20-item Likert scale that consists of statements about cultural values. There is not any right or wrong answers for the questions. Respondents need to express their feelings by giving numbers that indicate to what extent they agree or disagree with the statements.

The second one is the intercultural adroitness scale that was introduced by Portalla and Chen (2010). It is a 20-item Likert scale that includes statements about behavioral flexibility, interaction relaxation, interactant respect (level of value placed upon the culturally different counterpart), message skills, identity maintenance and interaction management. Similar to the intercultural awareness scale, this scale also does not have any right or wrong answers. The respondents need to rate the statements considering their personal views and behaviors. The last scale to assess ICC is the Intercultural Sensitivity Scale (ISS). This instrument was developed by Chen and Starosta (2000), and it includes 24-item Likert scale that involves statements about interaction engagement, respect for cultural differences, interaction confidence, interaction enjoyment and interaction attentiveness.

### **A developmental approach to intercultural competence**

A developmental model of intercultural sensitivity was introduced by Bennett (1986) as a framework to explain people's reactions to cultural differences. According to Hammer, Bennett and Wiseman (2003) "the underlying assumption of the model is that as one's experience of cultural differences becomes more complex and sophisticated, one's potential competence in intercultural relations increases" (p. 423). This means that developing cultural competence relates with experiencing cultural differences. In Bennett's model (1986), developing intercultural sensitivity includes six stages extending from ethnocentrism to ethnorelativism. This developmental theory of intercultural competencies especially important for recognizing how people can grow and develop through education and training, to show the dynamic rather than static elements of ICC as a concept. Thus, it might also

be useful for interpreting how a course like TOK influences students in terms of developing intercultural understanding and more specifically intercultural sensitivity.

Ethnocentrism means that a person sees his/her own culture as a center of reality.

People who are in the ethnocentric stage behave according to their cultural values because they think their views are superior in comparison to other cultures. The first stage of ethnocentrism is *Denial* and it includes two subsets, which are isolation and separation. People who are at the Denial stage are not able to identify the differences between cultures because they are not experienced in terms of cultural differences.

The other subset, separation, is related to either physical or psychological distance between different cultural groups, and people at this stage search for a distance because they feel more comfortable in their own cultural zones. The second stage of ethnocentrism is *Defense*, and this stage comes after a person experiences a cultural difference. Since people at this stage feel insecure when they are initially exposed to a cultural difference, they defend their own culture after realizing the differences between their own culture and the other cultural group. This stage has three subsets; denigration, superiority and reversal. Denigration is about negative stereotyping of different cultural groups, superiority is about seeing one's culture as superior and reversal is about adopting the new cultural values after spending considerable time in the new cultural environment. The last ethnocentric stage is *Minimization*. People at this stage minimize the cultural differences even though they are aware of the differences that they encounter because they pay more attention to the similarities between their own culture and the other culture. Minimization stage includes two subsets; physical universalism and transcendent universalism. The former of these subsets is about explaining life in terms of biological factors. This means that people in physical universalism stage know that everybody has common physical

characteristics, yet they are not aware of the fact that everybody acts in a different way because of the cultural context that they live in. The latter subset of Minimization stage is about the belief that people have some common transcendental principles that they share despite their behavioral differences.

Moving beyond ethnocentrism, ethnorelativism means that people do not see the differences between cultures as a threat to their own cultural values. The first stage of ethnorelativism is *Acceptance* and it is about respecting cultural differences.

According to Bennett, there are two subsets for the Acceptance stage and they are respect for behavioral differences and respect for value differences. Even though people notice differences in language and behaviors before Acceptance stage, they start seeing them as worthy of respect in the respect for the Behavioral difference stage. For the next substage, people think that everybody has their own personal worldviews shaped by their cultural values. Therefore, there are some relative constructs that are formed by different cultural groups.

The second and final stage of ethnorelativism is *Adaptation*, and it is about developing skills to communicate with people of other cultures. This stage includes two subsets, empathy and pluralism. The first one, empathy, is “the ability to experience some aspect of reality differently from what is ‘given’ by one’s own culture” (Bennett, 1993, p. 53). The other one, pluralism, is about having another cultural context than one’s own culture. People in this stage identify themselves with more than one cultural view because they have experiences in a different cultural context.

In the original theory, the last stage of ethnorelativism was Integration, but this stage was removed as a construct by later research (Hammer, 2012). People who have

multiple perspectives about cultures integrate their identity into a new culture and define their values according to cultural context; however, later research showed that this concept was not part of the continuum, but a separate construct.

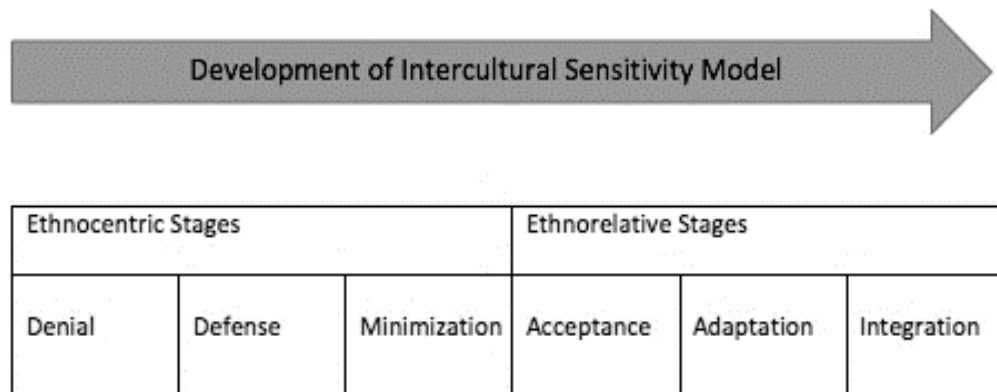


Figure 1. Adapted from Bennett, 1993: The Developmental Model of Intercultural Sensitivity

In his research, Hammer (2012) focused on development of intercultural competence by underlining the importance of exchanges among people and how these exchanges can help people to gain a better understanding of the similarities and differences that people share (p. 115). He stated that research with the IDI highlighted important insights about the development of intercultural competence during a student's study abroad experience. He used eight different components of the study abroad programs and analyzed which of these components significantly affect students' intercultural competence. He found out that cultural mentoring, learning about patterns of cultural differences, reflection on intercultural experiences, active involvement in the cultural setting, pre-departure and reentry preparation, and onsite intercultural interventions are influential in terms of developing intercultural competence (p. 133). This means that duration and type of housing that students experience in their program do not significantly contribute to their development of intercultural sensitivity.



As a result of this developmental theory, an instrument that assesses intercultural competence was developed. The Intercultural Development Inventory (IDI) has been used in different fields including education and business in order to assess the impacts of international programs. The IDI is a 50-item questionnaire and it can be completed in approximately 20 minutes. The questions are about participants' cultural experiences and the respondents' answers reflect their engagement in an intercultural experience.

### **Exploratory studies about intercultural sensitivity**

Assessing intercultural sensitivity is one of the key issues in cross-cultural contexts. Since the world has become more globalized in recent years, IS and ICC have gained in significance within various disciplines such as education, health and business. Especially in education, exploratory studies were conducted to assess IS levels of students in order to explore the factors that contribute to their development of ICC and IS. Several of these studies are summarized below.

One of the exploratory studies with high school students attending international schools outside of the United States was conducted by Straffon in 2003. In this study, Straffon investigated the relationship between the length that students spend in international schools and their IS levels. He hypothesized that the longer the students attend international schools, the higher their IS levels are. He used a 60-item scale called the Intercultural Development Inventory (IDI) developed by Bennett and conducted the study with 336 high school students attending an international school in Southeast Asia. The students come from over 40 different national backgrounds, and they have cultural differences. The findings of this study show that none of these

students are in the Denial and Defense stages, which means that they do not ignore cultural differences and nor do they see their own culture as superior. In terms of ethnocentric stages, only 3% of the students were in Minimization stage and this shows that these students are aware of the cultural differences but pay more attention to the similarities in their interactions with culturally distinct groups.

Most of the students in Straffon's study are in ethnorelative stages, which indicates that they are able to shift their perceptions according to the cultural differences.

Notably, 71% of them are in Acceptance stage and they respect cultural differences.

The remaining 26% are in Adaptation stage which shows that they are able to relate with their culturally distinct peers in their communications. These results are also validated with the interviews and the students' responses indicate that they make use of cultural differences in a positive way because their culturally diverse school environment helps them learn more from each other. Therefore, this study shows that there is a positive correlation between the time that students spend in international schools and their IS levels.

Another study that focuses on assessing IS of students was conducted by Medina-Lopez-Portillo (2004). In order to investigate the relationship between the length of time spent in a different cultural environment and students' IS levels, 28 students from the University of Maryland attended a study abroad program. Eighteen of these students spend seven weeks in Taxco while the other ten spend sixteen weeks in Mexico City. A 50-item Intercultural Development Inventory was given to the participants in order to measure their IS levels. Even though the pretest results of these two groups do not differ significantly, their posttest results, after attending the program, show that the IS levels of students in the Mexico City program were higher

than the other group of students who participated in a relatively shorter study abroad program. In addition to the posttest results, follow-up interviews with the participant students showed that Mexico City students gave more detailed examples when they talked about their cultural experiences while the Taxco program students remained more impersonal and abstract in their responses. Therefore, the results of this study show that spending more time in study abroad programs significantly affect students' level of IS because the more the students experience a new culture, the more they improve their understanding towards their culturally distinct peers.

One of the recent studies about assessing the skills of intercultural sensitivity of high school students was carried out by Ruokonen and Kairavuori (2012). The participants of this research were Finnish ninth graders and 1214 students took the IDI as a part of a national evaluation project under the theme of "Cultural identity and internationalism" (2012, p. 36). Since Finnish national core curriculum fosters appreciating cultural inheritances, and being able to understand the roots of diversity and function in a multicultural community, this project aimed to assess learning outcomes of the Finnish curriculum design. Another aim of the study was to help students discover their own cultural identity and improve their intercultural interactions with their culturally distinct peers. The findings of the study showed that 40% of the students were already at the Acceptance stage, 25% were at the Adaptation stage and 6% were at the Integration stage. So, most of the students were at the ethnorelative stages, but many boys were still at the levels of Minimization and Defense (2012, p. 37). Even though the curriculum objectives were mostly met, the difference between boys' and girls' IS scores should be further investigated in order to help them improve their cultural understanding.

A most recent study that focuses on intercultural sensitivity and factors that affect students' IS levels was conducted by Chocce, Johnson and Yossatorn (2015). In their study, the researchers investigated gender, nationality, field of study, foreign language abilities, international travels, study abroad and foreign friends as predictive factors of intercultural sensitivity. Survey participants were 209 freshmen students in an international college in Bangkok, Thailand. The hypothesis of the research was that at least one of these seven factors could predict the IS levels of the first-year undergraduate students. In order to test the hypothesis, all seven factors were combined to identify the ones that could influence intercultural sensitivity. The regression analysis showed that nationality had the highest influence on students' IS scores and international friendships was the second highest influencing factor, while the other five variables (gender, field of study, foreign language ability, international travels, and study abroad) were not significant in terms of developing intercultural sensitivity.

### **Intercultural understanding**

Intercultural sensitivity and intercultural understanding are very similar constructs. They both focus on the importance of developing competencies that help people to have more effective intercultural communications. In that sense, intercultural sensitivity was developed more broadly as a theoretical framework by researchers whereas intercultural understanding was presented more for an audience of international educators.

Intercultural understanding is one of the essential tools for developing international mindedness which gives values to cultures, languages, different viewpoints and experiences. As Rader (2015) stated, intercultural understanding includes knowledge

about similarities and differences among cultures. When people develop intercultural understanding, they have effective intercultural communications which leads to appreciation and respect for cultural diversity. Therefore, giving value to languages and cultures is essential for developing intercultural understanding.

According to Hill (2006), intercultural understanding contains both cognitive and affective domains. The cognitive domain refers to knowledge, and it means that people need to be knowledgeable about cultural differences. The affective domain refers to the positive attitudes such as empathy, curiosity and respect. These three components are very important for developing intercultural understanding because they enable people to have affective responses towards cultural differences.

After reviewing the domains of intercultural understanding, Hill discusses the factors that affect intercultural understanding. He emphasizes that intercultural understanding depends on the nature of the school, such as implemented programs and location, and the type of the students in that school. The student types can be national and international, and their exposure to a different cultural environment depends on school type and program. The school types can be a national school or an international school and they can offer a national or an international program.

### **International education**

International education can contribute to develop intercultural competences and help to raise students who are internationally minded. As Hill (2012) stated, “International mindedness is the key concept associated with an international education” (p. 246). Since there is a link between international mindedness and international education, exploring the factors that help students develop international mindedness and how

their international education experience provide them opportunities to become internationally minded individuals is invaluable.

A research project by Hayden and Thompson (1998) focused on international education by identifying the features of international schools. In order to explore the factors that lead to international education experience, they analyzed students' and teachers' perceptions in international schools. In the research, they used five groups and some categories which contribute to international education experience. These five categories included the influence of teachers, the formal curriculum, links with local community, informal aspects of school and exposure to other students within school (p. 549). These factors were analyzed and grouped according to the ratings of teachers and students.

When teachers' perceptions were analyzed, it was identified that exposure to students within school (about mixing students with other students in the school environment), teacher factors and formal curriculum had high ratings. This means teachers believe that these three dimensions promote the international education experience (Hayden & Thompson, 1998). In the exposure to students within school category, two items had relatively higher ratings: admitting students of many different cultures into school and admitting students of many different countries into school (p. 560). In the teacher factors category, employing teachers from many different countries and employing teachers of many different cultures had higher ratings by the teachers (p. 555). In addition to these, in the formal curriculum category, items about learning in class to be tolerant and learning in class to consider issues from more than one perspectives contribute to the experience of international education were rated the highest (p. 556).

When teachers' perspectives were compared to students' perspectives, Hayden and Thompson (1998) showed that exposure to students within school, exposure to students outside school and informal aspects of school were rated high by the participant students and teachers. Even though some differences between students' and teachers' perspectives were identified, overall, among both sets of stakeholders, the exposure to other students was the highest among all the other categories, and it shows that having national and cultural differences in an international school promotes students' international education experience.

### **Strategies to facilitate intercultural learning**

As the world becomes globalized, the classrooms also become culturally diverse and the interactions between different cultures gain an importance. In order to have meaningful communications with culturally distinct peers, especially in classrooms, student-centered strategies are very important for student development.

According to Crose (2011), cross-cultural relationships allow intercultural learning among students. The classroom environment plays a significant role in terms of facilitating intercultural learning. In order to have students learn from one another, there should be an inviting classroom environment where students can have informal interaction with their peers without feeling uncomfortable. Crose suggests that international students can be paired up with host students to discuss different topics and this will help them to understand each others' points of view. In addition to this, group oriented activities can be organized so that the students can explore different views and learn to appreciate the others' viewpoints.

Many different factors may contribute to developing international mindedness and these factors may vary from one school to another. Hacking et al. (2017) described findings about school practices for developing and assessing international mindedness. Examining definitions about international mindedness by different stakeholders and students, variations between the schools were shown in terms of how they define international mindedness because schools define it depending on their own unique context. So, international mindedness can be fostered in various ways since it can be shaped according to the school context.

The other findings of the study (Hacking et al., 2017) are about the practices of international mindedness in IB schools. Some of the practices that are used for developing and assessing international mindedness are embedding in school life through school mission and philosophy, involving students in decision making and using curriculum to analyze and understand differences among people from different cultures along with sharing experiences. In addition to these, using classroom discussions and conversation by drawing on personal experiences; and modeling international mindedness by creating safe and respectful conversation and discussing controversial issues are also practiced by schools to develop and assess international mindedness. Last but not least, the Hacking et al. (2017) study showed that international mindedness should be fostered intentionally not simply assumed to exist because it is an international curriculum. Therefore, schools should be enthusiastic about international mindedness and supporting intercultural competencies because they enable students to gain various perspectives regarding cultural differences and different ways of life.



## Conclusion

International mindedness is an important concept that is embedded in the IB programmes. This study focuses on the implementation of the TOK course and intercultural sensitivity, as an aspect of especially intercultural understanding, which is one part of international mindedness. The review of literature presented some definitions of international mindedness, intercultural communication competence and intercultural understanding because sometimes it can be hard to understand the similarities and differences between them. In addition to the definitions, some instruments that assess intercultural understanding were introduced in this chapter and this study used one of the scales, which is Intercultural Sensitivity Scale that was developed by Chen and Starosta (2000) as a tool for describing students' intercultural understanding.

Theory of Knowledge is a unique course in IBDP and its focuses on claims about how people gain knowledge. Since people have national, cultural, religious differences, TOK course aims to foster intercultural understanding so that the students, without any prejudice, can communicate with their culturally-distinct peers and learn from each other. Therefore, there is indication that there is a strong link between the TOK course and developing intercultural understanding, and this study will provide evidence to support this connection.

## **CHAPTER 3: METHOD**

### **Research design**

This research is an exploratory study that focuses on students' and teachers' perspectives in IBDP schools in Turkey, Lebanon, and Sweden. As exploratory research, it aims to investigate the variables within TOK that influence students' development of intercultural understanding without trying to provide a final solution to the research questions. It does not aim to provide conclusive evidence, but it contributes to a better understanding of the research problem.

In order to investigate how the TOK course is implemented to support intercultural understanding, both qualitative and quantitative data were collected. The data help to describe the sample population with respect to their traits related to intercultural understanding, and how the school cultures along with the TOK course support intercultural understanding.

### **Context**

International Baccalaureate Diploma Programme (IBDP) is implemented at some of the high schools in Turkey in accordance with the diploma program of the MoNe. In two private Turkish schools, the IBDP is mandatory for every student in Grade 11 and 12. In order to graduate, students are expected to be successful in their IB courses. However, most other schools offer IBDP as an additional programme and students have the option to study the IBDP programme. In these schools, grade 10 is a pre-IB programme for students who are candidates for the full programme in grade 11. Diploma students are required to do a minimum of six subjects, one subject from

each of the six subject groups and these subjects are again integrated with the national curriculum.

Turkish schools are part of the national curriculum system of the Turkish Ministry of Education (MEB). The national curriculum in Turkey is designed in detail for all schools; primary, middle and high, and regular general inspections by members of the inspectorate ensure that the national curricula for all subjects are being adhered to. The national curricula are specified for each subject area and each level, from kindergarten to grade 12. These are contained in special books published by the Ministry and change on a regular basis as national requirements are updated or rethought. The grade 11 and 12 curricula cover different subjects in which the students choose to specialize at the end of grade 10. Students can choose one of the four major choices of science and mathematics, Turkish and mathematics, Turkish and social studies, or languages. In IBDP schools in Turkey, all of these subjects are completed in addition to the IBDP subjects.

The context of this study includes eight IBDP schools from European-Middle-Eastern region where English is not the native language. Six of these schools are from different regions of Turkey and the other two are foreign schools. Table 1 demonstrates more information about the context of the participating schools and in what ways they are similar or different from one another.

Table 1  
Summary of participating schools

School Name (Pseudonym)	Location	Summary Profile
Diversity School	Istanbul, Turkey	This school is an international school offering IB curriculum along with a U.S. diploma curriculum. So, the students may pursue an IB certificate option which may satisfy the requirements of the school's high school 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	This school is located in the western part of Turkey and it is a boarding school that has around 160 residential students from different parts of Turkey. The school offers international projects, student clubs and social service programs that enable students to engage in different activities where they can exchange ideas and learn from one another.
Doğu School	Erzurum, Turkey	This school is located in the eastern part of Turkey students can be enrolled in laboratory schools on full or partial scholarships based on their academic achievement in the admission exams. The IGCSE, IBDP and MoNE are required of all students. Throughout the academic year, students attend several field trips in order to investigate both curricular and extra-curricular subjects.
The National School	Istanbul, Turkey	The school integrates Turkish national curriculum and IB curriculum. Admitted students enroll in prep classes depending on their achievement level in the English language proficiency test. Students who are proficient in English are placed in high school. Annual International Students' Youth and Culture Conference is held in order to discuss issues under the theme of culture.
Old School	Istanbul, Turkey	This school is one of oldest private schools in Turkey. Students are admitted through a nationally-administered entrance exam. All students begin with an intensive one-year English preparatory program before entering the school's four-year course of study. The school supports a wide variety of international activities that enable students to gain new perspectives about various topics.
Mediterranean School	Mersin, Turkey	This school is located in the Mediterranean region of Turkey. It is a boarding school with 313 students outside of Mersin, which creates a culturally diverse school environment because of its location. This is important for the research because diversity may affect students' intercultural understanding.
Swedish School	Lund, Sweden	An international school that has around 220 IBDP students. There is also a Pre Diploma Programme (PDP) which offers courses applied both to the two coming IB Diploma years and some Swedish national courses.
Lebanese School	Beirut, Lebanon	This is an international school that offers four rigorous 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) and almost 40 % have dual citizenship or are non-Lebanese.

## **Participants**

The participants in this study were all first year IBDP students taking the TOK course and their teachers. From the eight schools, a total number of 355 first year IBDP students and 21 TOK teachers were asked to participate in the survey.

However, since the survey was administered in class and some students and teachers were either absent on the day the survey was administered or did not want to participate, a total number of 305 students and 18 teachers responded.

Among these 305 students, 180 are female and 125 are male. Some of them come from IB continuum programs, such as MYP or PYP, while for others it was their first year of the IB program.

Among 18 TOK teachers, ten males and eight females claimed they have been working in culturally diverse schools for at least five years. The demographic information about teachers shows that ten had master's degrees, seven had bachelor's degrees, and one had a doctorate. Besides being the TOK teacher, most are also assigned roles as CAS coordinators, extended essay supervisors, teachers of other IBDP subject areas and IBDP coordinators.

## **Instrumentation**

The "TOK Experiences Survey" contains two versions, a teacher version (Appendix A) and a student version (Appendix B). Sections of the surveys were designed to reflect the conceptual frameworks of factors that may influence students' intercultural competencies in the overall school culture and how the TOK course is delivered to support intercultural understanding.

A member of the research team, Dr. Robin Martin, developed Sections 1, 2, and 3 as an exploratory survey about the aspects of TOK most relevant to the research questions. In developing the survey, Dr. Martin consulted three TOK experts, with experience in teaching TOK and conducting workshops about TOK in IBDP schools across cultures, about the content and phrasing of all items for Sections 1-3 of the survey, and for all the subscales in both Sections 2 and 3 of the survey.

### **Section 1: Demographic information**

Section 1 was based on students' and teachers' demographic characteristics that were discussed as a team as appearing most relevant to the research questions, exploring varied aspects of background and life experiences that likely relate with intercultural understanding.

In the student survey, demographic questions asked about students' gender, native language, proficient languages, number of trips taken outside of home country, length of attending IB programmes, diversity of the school and long term career goals.

In the teacher survey, questions were asked about gender, university degree, prior experiences with TOK, years of teaching, subject area expertise, proficient languages and diversity of the school. The questions were posed to gain an insight about TOK teachers and their experiences.

### **Section 2: School culture and international mindedness**

The Section 2 subscales were developed by looking at the overall mission of the IBDP and aspects of school culture that were seen as directly relevant to the research questions and influences of school culture/climate. Several items in this section were

adapted from an instrument that was developed to investigate school climate in IB Middle Year Program in Turkey (Ateşkan, Dulun & Lane, 2016).

In both student and teacher surveys, 24 Likert scale items were used to discover the participant views about schools' culture. The statement items are divided into five factors: IB Mission/Community Values, Supports for Multiculturalism, Global Engagement, Intercultural Pedagogy and Supports for TOK Aims. Each factor includes five items. Participant students and teachers responded to the statements on a 5-point scale (5= strongly agree, 4=agree, 3=neutral, 2=disagree, 1= strongly disagree).

The first factor, IB Mission/Community Values is related to the core values shown in the school environment. One item example is as follows: "I believe that my school communicates a sense of purpose that reflects the IB learner profile". The second factor, Supports for Multilingualism, aims to discover the multilingual aspects of the school culture. An example of this item is "I believe that my school provides materials, resources, and professional development needed for teaching multi-lingual students". The third factor, Global Engagement, includes items about how the school supports global engagement for students and teachers. An example of this item is "I believe that my school emphasizes teaching lessons that address the global issues that are especially seen in our local community". The fourth factor, Intercultural Pedagogy, includes statements about whether the school helps students negotiate the representations of distinct cultures. An example of this item is "I believe that my school promotes intercultural understanding by helping all students to understand their differences". The last factor, Supports for TOK Aims, concerns the five aims of the course and to what extent they are implemented in the school as a whole. One

item example is as follows: “I believe that my school helps students become aware of how individuals and communities construct knowledge and how this is critically examined”.

In addition to the Likert scale items, open-ended questions about how students and teachers describe their school and how their school supports international mindedness were asked to elicit more opinions.

### **Section 3: TOK classroom and language development**

Section 3 was based on the novel aspects of the TOK curriculum design that would likely impact the learning of students (student engagement and teacher supports) given the overall scope of TOK, combined with two subscales directly relevant to the research questions in relation to learning in TOK classrooms (language supports and the aims of TOK in the classroom).

For this section, 24 items were developed to find out more about the TOK classrooms and language development. The items were divided into four factors: Student Engagement, Teacher Support, Language Support and Meeting Aims of TOK in classroom. Similar to the questions in Section 2, participant students and teachers responded to the statements on a 5-point Likert scale (5= strongly agree, 4=agree, 3=neutral, 2=disagree, 1= strongly disagree).

The first factor, Student Engagement, includes six items. An example of this factor is as follows: “During my TOK courses, students participate actively in discussions”.

The second factor, Teacher Support, includes five statements about how the teachers help students to explain their ideas in a culturally diverse classroom. One example of this item is that “During my TOK class all students are encouraged to express their



preferences and opinions.” The third factor, Language Support, has five items regarding the written and oral language skills that the teachers provide for the students. One item example is that “During my TOK class, students with lower level English skills struggle to communicate”. The last factor, Meeting Aims of TOK in Classroom, includes six items that are about diversity and richness of cultural perspectives. An example of this item is that “During my TOK class, students come to see how TOK concepts relate with the wider world”.

In addition to this scale, open-ended questions about how the TOK course helps to foster international mindedness, how the classroom environment encourages students to interact with one another and how the students are supported to write their TOK essays were asked both to students and teachers.

#### **Section 4: Intercultural understanding**

This section focuses on students’ levels of intercultural sensitivity. In order to measure the IS levels of the participant students and teachers, Intercultural Sensitivity Scale (ISS) was used. As described in Chapter 2, this 24-item scale assesses intercultural sensitivity and was developed by Chen and Starosta (2000), and it is used in this study with their written permission. The ISS indicates how competent different groups of students and teachers are in terms of intercultural sensitivity. Participant students and teachers respond to the statements on a 5-point scale (5= strongly agree, 4=agree, 3=neutral, 2=disagree, 1= strongly disagree), and the items on the scale are divided into five factors or sub-scales: Interaction Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment and Interaction Attentiveness.

The first factor is Interaction Engagement and it has five items which are about how participants feel when they are having an intercultural communication. One example of this item is as follows: “I enjoy interacting with people from different cultures”.

The second factor is Respect for Cultural Differences and it includes six items that focus on how participants behave towards their culturally distinct counterparts. One example of this item is: “I respect the ways people from different cultures behave”.

The third factor is Interaction Confidence and it consists of four items that are about how confident participants feel in intercultural settings. One example of this item is that "I am pretty sure of myself in interacting with people from different cultures”.

The fourth factor is Interaction Enjoyment and it includes three items about how participants react towards culturally different people when they are communicating.

An example of this item is that “I often get discouraged when I am with people from different cultures”. The last factor is Interaction Attentiveness and it has three items that are concerned with participants’ effort to understand the cultural interaction among people from different cultures. One example of this item is that “I am sensitive to my culturally-distinct peer’s subtle meanings during our interaction”.

In addition to this scale, open-ended questions about the topics that stimulate intercultural understanding, cultural richness and cultural perspectives of students (and teachers) were asked to find out how their TOK course supports development of intercultural understanding and respect for cultural differences.

### **Pilot study and reliability**

For construct validity, the sections of the questionnaire and the items in each section were developed after the TOK curriculum was studied. The whole questionnaire was discussed with three experienced TOK teachers, two of whom were also international

consultants. In order to reflect the theoretical meaning of each concept, the items were analyzed in detail and necessary changes were made according to the feedback by the three TOK experts.

After the survey sections were finalized, in order to provide evidence for validity of the survey, the pilot study was conducted with the participation of two TOK teachers and four students from a local IBDP school in Ankara, Turkey. Throughout the pilot study, teachers and students were invited to ask questions about the items that seemed vague. With the feedback received from the students, the subject of the statements that started with “the student” were changed to “I” so that the students feel more engaged and answer the questions from their own perspectives, along with other minor wording adjustments to add clarity to several items, such as changing “culturally distinct counterparts” to “culturally distinct peers” in Intercultural Sensitivity Scale.

For reliability, the Cronbach Alpha coefficient was used for each section that had subscales. In Section 2, the reliability level of the subscales was found as .76 for IB mission/Community values, .72 for Supports for Multilingualism, .85 for Intercultural Pedagogy, .79 for Global Engagement and .84 for Supports for TOK Aims.

In Section 3, reliability levels were .74 for Student Engagement, .77 for Teacher Support and .88 Meeting Aims of TOK in Classroom. In Language Supports subscale, there were two reverse-coded items that decreased the internal consistency and these items were deleted from the scale (items 3.3 and 3.21) in order to have a high internal consistency. So, the Cronbach Alpha measure for the Language Supports subscale was .76 after the items were removed.

In Section 4, the alpha reliability for Interaction Enjoyment was .84, Respect for Cultural Difference was .78, and Interaction Attentiveness was .58. Since there were only three items in Interaction Attentiveness subscale, no item could be deleted. The Cronbach Alpha level for this subscale indicates a low internal consistency. Two items from Interaction Engagement subscale (items 4.11 and 4.22) and one item from Interaction Confidence subscale (item 4.4) were deleted. So, the final Cronbach Alpha measures for Interaction Engagement was .75 and Interaction Confidence was .76. Table 2 summarizes the final Cronbach Alpha levels of the subscales in Sections 2, 3 and 4.

Table 2  
The reliability of the subscales in sections of survey

Section	Subscales	Items	Cronbach's Alpha
Section 2: School Culture and IM	M/C: IB Mission/Community Values	2.1, 2.2, 2.10, 2.15	.76
	ICP: Intercultural Pedagogy - Supports for Intercultural Competence/Understanding	2.3, 2.11, 2.12, 2.16, 2.17	.85
	GE: Supports for Global Engagement	2.4, 2.9, 2.20, 2.22, 2.23	.79
	ML: Supports for Multilingualism/English Supports	2.5, 2.6, 2.13, 2.14, 2.21	.72
	TOK: Supports for TOK Aims	2.7, 2.8, 2.18, 2.19, 2.24	.84
Section 3: TOK Classroom and Language Development	SE: Student Engagement/Effort/Participation	3.1, 3.4, 3.14, 3.18, 3.19, 3.23	.74
	TS: Teacher Support of Student- centered Learning	3.2, 3.8, 3.11, 3.17, 3.20	.77
	LS: Language Supports	3.9, 3.10, 3.15, 3.22, 3.24	.76
	TOK: Meeting Aims of TOK in Classroom	3.5, 3.6, 3.7, 3.12, 3.13, 3.16	.88

Table 2 (cont'd)  
The reliability of the subscales in sections of survey

Section 4: Intercultural Understanding in TOK Classrooms	Interaction Engagement	4.1, 4.13, 4.21, 4.23, 4.24	.75
	Respect for Cultural Differences	4.2*, 4.7*, 4.8, 4.16, 4.18*, 4.20*	.78
	Interaction Confidence	4.3, 4.5, 4.6, 4.10	.76
	Interaction Enjoyment	4.9*, 4.12*, 4.15*	.84
	Interaction Attentiveness	4.14, 4.17, 4.19	.58

\* Reverse-coded items

### Method of data collection

The survey was delivered through email with links to Google Forms. Before the links were sent, a briefing was given to the lead TOK teacher in each school about how the survey should be administered. A checklist about the administration and parent permission forms were delivered to the TOK teachers so that they could collect the permissions and make adjustments regarding time and place. Standardization was an important part of the administration. In order to have reliable data, the researchers wanted both students and teachers to take the survey together in class. Even though some students were only able to take the survey outside of the class time, most took the survey in class; a few teachers completed the survey later in the day or the day after their students.

### Method of data analysis

The open-ended questions were coded by two coders in order to raise the amount of agreement and reliability. As Neuendorf stated (2002), the agreement among the two

coders are important to have a more reliable analysis of the open-ended items (p.52).

The coders tried to create a pattern in the open-ended answers and the responses summarized by using that pattern.

The quantitative data obtained from student and teacher questionnaires were analyzed by using the Statistical Package for Social Sciences (SPSS). Responses were grouped and analyzed according to the sections and the subsections of the survey. There were some negatively worded items in the scales. After entering all data into SPSS, the negatively worded items were reverse coded accordingly so that they can indicate the same type of response on every item. Next, participants were grouped according to their school. For some of the research questions that involved comparisons, students and schools were grouped into two sets. The schools were grouped according to being a national or an international school. The students were grouped according to their IS scores; higher/lower IS scores, and more/less cultural experience. For these codes, students' mean scores were used as a cutoff point between the students who have higher IS scores and lower IS scores and the students who have more cultural experience and less cultural experience. So, the students who had scores higher than the mean score were coded as one group while the students who had scores lower than the mean score were put into another group. In addition, homogeneity of variance test was conducted for one-way ANOVA tests. According to the results of the homogeneity test, various post-hoc tests were chosen to identify the schools that were different from each other.

After collecting data from the schools, the representativeness of the sample population was investigated. One-way ANOVA test was conducted for research questions 1a: Do students' prior experiences in international and IB schools differ across school? and 1b: Do students' prior experiences in other countries and cultures

differ across schools? to identify the differences between the participant schools. For research question 1c: How do students describe themselves as being different from their peers? qualitative analysis was used to get an insight of how the students describe themselves.

Research question 2a: What were students' overall self-ratings of intercultural sensitivity? explored students self-rating of intercultural sensitivity. In addition, for questions 2b: Do students with more experience in a variety of cultures have higher IS scores than those with fewer experiences across cultures? and 2c: Do students in schools with mostly international peers have higher IS scores than those with peers who are from similar backgrounds? independent samples *t* test was used to compare student characteristics that influence their intercultural sensitivity scores.

Research question 3a: How do students describe their school culture? provided a qualitative analysis of students' stated views about the school culture. For research questions 3b: How do students describe their schools' supports for intercultural pedagogy, including the development of intercultural understanding and intercultural competence?, 3c: How do students describe their schools' support for global engagement? and 3d: How do students describe their schools' supports for the aims of TOK, which all closely relates to IM? one-way ANOVA was used to compare students' characteristics (given their varied international backgrounds)/perceptions about their school's support intercultural pedagogy, global engagement and aims of TOK.

Research questions 4a: What are teachers' relevant backgrounds for teaching TOK? and 4b: What are the opportunities noted for developing intercultural competence?

provided a descriptive analysis of teachers' backgrounds and students' and teachers' perspectives on how their TOK courses support intercultural competence.

Research question 5a: What aspects of TOK foster IM? focused on the aspects of TOK that foster IM and qualitative analysis was used to summarize the topics that were provided by the students. For question 5b: Which student-centered strategies are used while implementing TOK? one-way ANOVA test was used to identify the differences among schools in terms of students' perspectives on the student-centered strategies that were implemented in their TOK classes. In question 5c: What are the students' perspectives on achieving the aims of TOK?, one-way ANOVA was used to identify the differences among schools in terms of the students' perspectives on achieving TOK aims and in question 5d: Which AOKs and WOKs guide discussions that develop students' intercultural understanding?, qualitative analysis was used to identify which AOKs and WOKs guide discussions that develop intercultural understanding.

For research questions 6a: Do students who rate stronger in intercultural sensitivity have more positive attitudes about the implementation of TOK than the ones who rate weaker in intercultural sensitivity?, 6b: Do students with more experience in a variety of cultures have more positive attitudes about the implementation of TOK courses than those with fewer experiences across cultures?, and 6c: Do students in schools with mostly international peers have more positive attitudes about the implementation of the TOK courses than those with peers who are from similar backgrounds? independent samples *t* test was used to compare student characteristics that influence their perspectives on the implementation of TOK courses.



Appendix E presents all of the research questions to show how they align with the items from the scales and research methods that were used.



## **CHAPTER 4: RESULTS**

### **Introduction**

This chapter presents information about the results of the research questions. There are six subsections and each of them provides background information by showing some tables and charts that include statistical analysis of students' responses across schools. The first subsection uses demographic information to identify student characteristics that are related with international mindedness. The second subsection compares students' IS levels with their cultural experiences and school type (national or international). The third subsection provides information about school culture because as discussed in Chapter 2, school culture has an important effect on developing intercultural understanding. The fourth subsection includes descriptive analysis of how students and teachers describe their TOK courses in terms of supports for intercultural competence. The fifth subsection represents students' and teachers' perspectives on the cultural diversity of their TOK classes and the sixth subsection compares students' TOK outcomes with their attitudes about the implementation of the TOK courses, their cultural experiences, the school type (national or international). In Table 3, the number of participants from each school and the school pseudonyms are shown.

Table 3  
School pseudonym and numbers of participating students

School Pseudonym	# of IBDP Student Participants
Swedish School	67
Lebanese School	40
Diversity School	27
Ege School	50
Dogu School	22
Turkish National School	44
Old School	32
Mediterranean School	23

### **Student characteristics that closely relate with international mindedness**

This section includes the analysis of students' prior experiences in IB schools, in international schools and prior life experiences in other countries/cultures. Since these characteristics closely relate with IM, they help to have a general understanding of the participant students and some of their difference across schools.

#### **Q.1.a: Do students' prior experiences in international and IB schools differ across schools?**

##### *Prior experiences in international schools*

Students' prior experiences in international schools is a significant characteristic that can be related with international mindedness. In order to have background information about students' experiences in international schools, students were asked to answer the question: "How many years have you attended a school with many students of different nationalities?" Responses were analyzed by conducting a one-

way ANOVA across schools. Descriptive statistics showed that Lebanese School had the highest mean score ( $M=10.75$ ,  $SD=4.16$ ) while Ege School ( $M=2.22$ ,  $SD=3.79$ ) and Old School ( $M=1.54$ ,  $SD=3.44$ ) had the lowest mean scores. This indicates that the students in Lebanese School spent relatively more time in international schools with peers from a variety of other nations in comparison to the participant schools.

In order to explore if there is a statistically significant mean difference among the schools, an ANOVA test was conducted. The results of the test indicated a statistically significant mean difference: ( $F(7, 29) = 25.164$ ,  $p < .001$ ). Since equal variances were observed, the Sidak was used to conduct a post hoc test to see which schools were significantly different. According to the results, there was a statistically significant mean difference between Lebanese School and all the other participant schools. In addition to this, significant differences were observed between Diversity School in contrast to Lebanese, Ege, Dogu, Turkish National and Old School. Table 4 represents the mean scores of the participant schools in terms of the years they have spent in culturally-diverse schools.

Table 4  
Descriptives of international school years across schools

School Pseudonym	N	M	SD
Lebanese School	40	10.75	4.16
Diversity School	26	6.88	4.23
Mediterranean School	23	6.43	4.06
Swedish School	67	5.77	4.04
Dogu School	22	2.77	2.94
Turkish National School	44	2.53	3.77
Ege School	50	2.22	3.79
Old School	32	1.54	3.44
Total	304	4.85	4.83

### *Prior experiences in IB schools*

In addition to the years that participant students spent in other countries/cultures, their prior experiences in IB schools were also analyzed. One-way ANOVA was used to find out if there is a statistically significant mean difference in terms of students' prior experiences in IB schools. The question "Including this year, how many years have you been an IB students (estimated total PYP, MYP and DP years.)?" was asked to the students and they entered an estimated number that represents the years that they have attended IB programmes. According to the descriptive statistics, Turkish National School had the highest mean score ( $M=7.59$ ,  $SD=3.37$ ) while Mediterranean School had the lowest mean score ( $M=1.00$ ,  $SD=0$ ). In order to explore the differences among the schools, a one-way ANOVA test was conducted. The results of the ANOVA test for that question showed a statistically significant mean difference:  $F(7, 29) = 34.818$ ,  $p < .001$ ). According to the test of homogeneity, equal variances were not observed; therefore, the Games-Howell was conducted as a post hoc test. The results of the post hoc test showed that Turkish National School had a statistically significant mean difference among the other participant schools. This means that, the students of Turkish National School spent more time in IB programmes than in the other schools. Notably, Swedish School, Diversity School and Turkish National School are IB continuum schools in the sample, offering the PYP, MYP, and DP from elementary through high school; however, Diversity School has a more transient population of international families whereas Swedish School and Turkish National School have a more stable population of students. The mean scores and standard deviations of these schools are presented in Table 5.

Table 5  
Descriptives of IB years across schools

School Pseudonym	N	M	SD
Turkish National School	44	7.59	3.73
Diversity School	27	4.67	3.41
Lebanese School	40	3.38	2.76
Swedish School	67	2.99	2.48
Old School	32	1.81	1.97
Dogu School	22	1.05	0.2
Ege School	50	1.02	0.1
Mediterranean School	23	1.00	0
Total	305	3.11	3.22

**Q.1.b: Do students' prior experiences in other cultures/countries differ across schools?**

Developing international mindedness is not only restricted to the time spent in international or IB schools. Students' prior life experiences in other countries/cultures can also have a significant impact on developing international mindedness since it provides opportunities to discover different ideas, cultures and ways of living. Therefore, the participant students were asked about the number of trips that they have taken outside of their countries.

The mean scores indicated that the students in Diversity School travelled to the other countries more than the students in other participant schools ( $M=3.88$ ,  $SD=0.42$ ). Swedish School ( $M=3.80$ ,  $SD=0.60$ ), Lebanese School ( $M=3.82$ ,  $SD=0.50$ ), Ege School ( $M=3.70$ ,  $SD=0.67$ ) and Old School ( $M=3.84$ ,  $SD=0.44$ ) had also similar mean scores and standard deviations, which shows that the students in these schools have more experience in foreign countries/cultures. In terms of the mean scores, Dogu School ( $M=2.72$ ,  $SD=1.20$ ) and Mediterranean School ( $M=3.17$ ,  $SD=1.02$ ) had

the lowest mean score among the other schools, which needs to be considered while analyzing the Intercultural Sensitivity scores of the students in terms of their experiences in foreign countries/cultures. Table 6 shows descriptive statistics of the students' prior life experiences in other countries/cultures.

Table 6  
Descriptives of prior experiences in other countries/cultures across schools

School Pseudonym	N	M	SD	Min	Max
Diversity School	27	3.88	0.42	2	4
Old School	32	3.84	0.44	2	4
Lebanese School	40	3.82	0.50	2	4
Swedish School	67	3.80	0.60	1	4
Ege School	50	3.70	0.67	1	4
Turkish National School	44	3.54	0.81	1	4
Mediterranean School	23	3.17	1.02	1	4
Dogu School	22	2.72	1.20	1	4
Total	305	3.63	0.77	1	4

One-way ANOVA test was conducted to explore which schools had statistically significant mean differences in terms of the time the participant students spent in other countries/cultures. An ANOVA test identified a statistically significant mean difference among the participant schools:  $F(7,29)=8.505$ ,  $p<.001$ . Since equal variances were not observed, the Games-Howell test was used to find out which schools were significantly different. According to the results of the Games-Howell test, Dogu School was different from Swedish, Lebanese, Diversity, Ege and Old School because the mean score of Dogu School was lower than these schools while it was still similar to Turkish National School and Mediterranean School.

### **Q.1.c: How do students describe themselves as being different from their peers?**

#### *Students' perspectives*

In order to gain an understanding of the classroom environment, an open-ended question about how the students see themselves differently from their peers was asked, and approximately 220 students described how their peers are culturally different from them. Since the schools are different from one another in terms of being an international or a national school, the students' and teachers' backgrounds also differ accordingly.

The most common responses are about cultural, national and linguistic differences among the students. In addition to these, 43 students mentioned their religious and regional differences while 61 students added that they are the same in terms of culture.

Students in Swedish School, Lebanese School and Diversity School especially noted that they had national, cultural and religious differences. Since these schools are international schools, it seems that the students in these schools were from foreign countries. In contrast to what the students in these international schools reported, the students in Ege School stated that they had regional and socio-economic differences among their peers. One of the reasons of this regional and socio-economic difference may be related to that school being a boarding school or possibly offering more scholarships than the other schools. Very similar to what their teachers said about their cultural differences, the students in Dogu School (located in a more remote area of eastern Turkey) expressed that they were the same in terms of culture, but they had some regional and religious differences among them. Since this school is a national school and there are no international students in the TOK classroom, it was



reported that there were no national and linguistic difference among the students. In contrast to the students in Dogu School, students in Turkish National School (located in Istanbul) stated that they had different beliefs, nationalities, cultures, socio-economic backgrounds and religious values among the students in the TOK classroom. The students in both Old School (in Istanbul) and Mediterranean School (in a central southern region) mentioned about their cultural, national and religious differences. Since these schools are similar in terms of their school culture, it was identified that the students' responses were parallel.

### *Teachers' perspectives*

The same question was also asked to the teachers so that they can describe how their students are culturally different from them. When the teachers' responses were analyzed, it was discovered that some TOK teachers came from foreign countries and they were culturally different from their students. National, ethnic, cultural and language differences are the most common responses that can be considered as a part of cultural diversity.

Among 18 participant teachers, 13 said that the TOK teachers and their students come from different nationalities, which affects their understanding of different ideas and perspectives that may be taught in their TOK courses. However, only three teachers noted that their religious values were dissimilar from their students and their experiences in other cultures were also different. However, differences between the teachers and the students were not always about nationality and language. One of the teachers from Dogu School (in Eastern Turkey) stated that even though they were from the same country and spoke the same language, regional differences shaped the

students' perspectives especially in terms of religious values. The teacher explained that the students were conservative in terms of religion, and very respectful to their teachers and peers as taught by their parents. Therefore, it can be claimed that even the people who share the same national and linguistic values can be classified as culturally different due to the distinct regional differences especially notable within Turkey as well as the Swedish and Lebanese schools in the study. Table 7 includes a summary of distinguishing characteristics of the participant students.

Table 7  
Summary of distinguishing characteristics of students across schools

School Pseudonym	Distinguishing characteristics of students
Swedish School	Students from different cultural, national, ethnic and religious backgrounds
Lebanese School	Students have more experience in culturally-diverse schools
Diversity School	Students travel more internationally than students from other schools.
Ege School	Students have less IB experience
Dogu School	Students have less international travel experience
Turkish National School	Students have more IB experience
Old School	Students from different cultural, regional and religious backgrounds
Mediterranean School	Students have less international travel experience

### **Student characteristics that influence their intercultural sensitivity scores**

#### **Q.2.a: What were students' overall self-ratings of intercultural sensitivity?**

The main focus of the research is to draw connections between the implementation of the TOK course and the students' intercultural sensitivity scores. Even though the fifth research question focuses on that, there is a need for a general overview of how

the students rated their intercultural sensitivity. In order to analyze how the students in the participant schools rate their intercultural sensitivity, the mean scores and the standard deviations of the five IS subscales (or dimensions) were calculated.

Table 8 summarizes the mean scores on each dimension of the intercultural sensitivity scale. The results showed that across all eight schools, “Respect for cultural diversity” dimension of IS had the highest mean score among the five dimensions ( $M=4.17$ ,  $SD=0.84$ ) whereas “Interaction engagement” had the lowest score ( $M=3.50$ ,  $SD=0.48$ ).

Table 8  
Descriptives of IS dimensions

Items	M	SD	Min	Max
Respect for cultural differences	4.12	0.84	1	5
Interaction enjoyment	4.05	0.98	1	5
Interaction confidence	3.93	0.71	1	5
Interaction attentiveness	3.83	0.77	1	5
Interaction engagement	3.50	0.48	1	5
Total average	3.88	0.75	1	5

**Q.2.b: Do students with more experience in a variety of cultures have higher IS scores than those with fewer experiences across cultures?**

In order to see the possible relation between students’ cultural experience and their intercultural sensitivity scores, an independent samples *t* test, was conducted.

Students were grouped into two, the ones that had more cultural experience and the ones that had less cultural experience. Descriptive statistics showed that students, who travelled to other countries more than their peers did, had higher mean scores in

the IS ( $M=3.93$ ,  $SD=0.44$  and  $M=3.74$ ,  $SD=0.55$ ). In Levene's test for equality, equal variances were observed and the results of the independent samples  $t$  test, indicated a statistically significant mean difference between the two groups in terms of their IS scores:  $t(303)=-2.771$ ,  $p=.006$ .

**Q.2.c: Do students in schools with mostly international peers have higher IS scores than those with peers who are from similar backgrounds?**

Students' interactions with international peers or peers from different cultural backgrounds can be one of the factors that help them develop intercultural understanding. In order to compare the IS scores of students in national and international schools, independent samples  $t$  test, were conducted. The students were grouped into two sets, the ones that have international peers and the ones with peers from the same national backgrounds. Descriptive statistics showed that students in schools with peers from similar backgrounds have higher mean scores in the IS ( $M=3.97$ ,  $SD=0.47$ ) than the students who have mostly international peers in school ( $M=3.78$ ,  $SD=0.46$ ). Equal variances were observed and the results of the independent samples  $t$  test, indicated a statistically significant mean difference between the IS scores of students in national schools and international school:  $t(303)=3.519$ ,  $p<.001$ .

**School cultures in terms of supports for international mindedness**

School culture is highly important to gain an intercultural understanding, and IBDP schools are responsible for developing intercultural understanding and global engagement. This section identifies how the students described their school cultures in terms of the supports for the elements of international mindedness that are

especially encompassed by intercultural sensitivity. Both qualitative and quantitative indicators were used to identify students' perspectives on school culture and how it supports intercultural understanding. Question 3.a. includes qualitative analysis and summarizes students' perspectives while questions 3b, 3c and 3d use quantitative analysis. For these three quantitative questions, three subscales were used. The subscales include statements about Intercultural Pedagogy, Global Engagement and Supports for TOK Aims. Intercultural pedagogy items focus on whether the school culture promotes intercultural understanding, while global engagement items identify if the school supports activities that include local and global issues and the items about TOK focus on how much the school culture embraces the five aims of TOK.

### **Q.3.a: How do students describe their school culture?**

Since school culture plays an important role in terms of supporting international mindedness and the exchange of different ideas, students were asked to describe their school culture by using three adjectives. The responses were categorized according to the similarities in the meaning and both positive and negative descriptions were taken into consideration in order to understand the culture of the participant schools.

The three schools that have students from many different countries will be examined first: Swedish, Lebanese and Diversity schools. To begin with, 58 students in Swedish School responded to that question out of 67 participants, and a total number of 32 students described their school culture by using adjectives such as *multicultural, diverse, international, and open-minded*. Among these students, 16 used adjectives like *hard, challenging, competitive, demanding, stressful, test-oriented* and *studious* to explain that their school cares for academic achievement. However, there were also some students who thought that their school is *narrow-*

*minded, close, judgmental and homogeneous* while the nine remaining students described their school as *lively, encouraging, social and friendly*. To continue with, 34 students out of 40 participants in Lebanese School responded to the same question. Among those students, 20 described their school culture as *heterogeneous, crowded, cultural, international, diverse, accepting and open-minded*, 8 said that their school is *rigorous, challenging demanding and supportive*. On the other hand, 6 students characterized their school culture by using some adjectives that have negative connotations such as *chaotic, unfair, and stressful*. Furthermore, 25 students in Diversity School answered that question out of 27 participants and 12 of them described their school culture as *diverse, international, global, Western, and open-minded*. Eight students indicated that their school is like a *family*, it is a *small community* and it is *rooted*. The remaining students said that their school culture was *liberal, respectful, influential, achievement-oriented and social*. In terms of general commonalities of these three schools, it can be said that they are all international, they have diversity in terms of students' cultural/national backgrounds and they are open-minded.

In considering their locations in large cities of Western Turkey, there were three schools that were described by the students as having distinct school cultures within their metropolitan areas. In Ege School, 45 students out of 47 participants responded to that question. 23 of them said that their school is *diverse, international, harmonic, multicultural, Western and modern*. Six of them focused on the academic side of their school and described it as *interactive, challenging and rigorous*. Five students said that their school is *local, traditional and rooted* while another five students used adjectives like *equal and enriching*. As in other schools, there were still a couple of students who maintained that their school *biased and unequal*. Also in the Turkish

National School, 33 students out of 44 reflected their ideas about the school culture. Among the participant students, 14 defined their school culture as *challenging, disciplined, difficult* and *strict*, 10 as *bilingual, diverse* and *global*, and 7 as *responsible, respectful, welcoming* and *supportive*. However, 2 students said that their school culture was *unfair* and *conservative*. Moreover, all the 32 participant students in Old School responded to the question. The most common adjectives that were provided by the students were about academic part of their school as 12 of the students used adjectives such as *competitive, strict* and *ambitious* while 6 students described their school culture as *encouraging, motivating* and *supportive*. Another 11 students focused on the diversity of their school culture by using the words *international minded, multilingual* and *diverse*. Besides these adjectives, 3 students described their school culture by using some words that have negative connotations such as *close-minded* and *unfair*. The most emphasized adjectives by the participant students of these three schools show that they have a diverse school culture which is competitive and challenging at the same time.

Again, considering their location, there were two schools in eastern and southern part of Turkey that were described by the students as diverse within their remote location. In Dogu School, 20 students out of 22 described their school culture. The most common adjectives that were used by the participant students were *diverse, international minded, tolerant, caring* and *open-minded* as 11 students used them to express their ideas about their school culture. Among the other students, 7 of them said used adjectives such as *disciplined, idealistic* and *development oriented* whereas 2 students reflected that their school was *non-supportive* and *strict*. Likewise, 23 students in Mediterranean School responded to the question. Most of the adjectives were about the diversity of the school as 14 students defined their school as

*international, diverse, bilingual, innovative, respectful and open-minded*. Some other students focused on the history of the school and described it as *rooted, old* and *traditional* while a couple of students mentioned about their school as *dogmatic* and *unfair*. The frequently used adjectives that the participant students of these two schools show that even though they are not international schools and do not have international students as other schools, the school culture is still diverse because the students come from different parts of Turkey.

Students responses regarding their school culture is highly important to understand the overall school culture. For this qualitative analysis, students' responses were grouped and a pattern was used. Table 9 includes the most commonly emphasized adjectives that the participant students used to describe their school culture.

Table 9  
Summary of IM-related features across schools

School Pseudonym	IM-related features emphasized most by students	IM-related features emphasized second most
Swedish School	International	Competitive
Lebanese School	Heterogeneous	Open-minded
Diversity School	Diverse	Small community
Ege School	Multicultural	Rigorous
Dogu School	Open-minded	Disciplined
Turkish National School	Challenging	Universal
Old School	Competitive	Diverse
Mediterranean School	Diverse	Rooted



**Q.3.b: How do students describe their schools' supports for intercultural pedagogy, including the development of intercultural understanding and intercultural competences?**

This question examines whether the students describe their school cultures differently in terms of their supports for intercultural pedagogy. In order to compare how the students in different schools responded to that question, a one-way ANOVA was conducted. The results of the ANOVA showed that there is a statistically significant mean difference among schools in terms of their supports for intercultural pedagogy:  $F(7,29)=3.130$ ,  $p=.003$ . Test of homogeneity of variances indicated that equal variances were not satisfied. So, a post hoc test was conducted to find out among which schools there was a statistically significant mean difference. However, post hoc tests including Tamhane, Dunnett T3, Games-Howell and Dunnett C could not identify any statistically significant mean difference among schools.

**Q.3.c: How do students describe their schools' supports for global engagement?**

Global engagement plays a crucial role in international understanding as far as how people are helping each other across cultures. Global engagement exemplifies how diversity contributes to a much richer education and a more internationally oriented experience for students in both local and global contexts. In order to explore how students describe their school cultures in terms of supports for global engagement, one-way ANOVA was conducted across schools and there was a significant difference between schools in their mean scores of support for global engagement:  $F(7, 29) = 7.546$ ,  $p<.001$ ). The equal variances were not observed and Games-Howell was used as a post hoc test to identify which schools describe their school

cultures differently. Post hoc comparisons with Games-Howell test showed that the mean score of Turkish National School ( $M=4.23$ ,  $SD=0.53$ ) was significantly higher from the means scores of Swedish School ( $M=3.43$ ,  $SD=0.76$ ) and Diversity School ( $M=3.47$ ,  $SD=0.61$ ). This indicates that students in Turkish National School show a stronger attitude that their school culture contributes to international mindedness by giving value to global engagement and supporting activities that are relevant to global engagement. Table 10 indicates the mean scores and standard deviations of subscales for global engagement.

**Table 10**  
**Mean scores and standard deviations of supports for global engagement**

School Pseudonym	Global Engagement	
	M	SD
Turkish National School	4.23	0.53
Lebanese School	4.12	0.62
Ege School	3.86	0.67
Old School	3.76	0.71
Dogu School	3.72	0.69
Mediterranean School	3.49	1.04
Diversity School	3.47	0.61
Swedish School	3.43	0.76
Total	3.77	0.76

**Q.3.d: How do students describe their schools’ supports for the aims of TOK, which all closely relates to IM?**

The specific aims of the TOK course include constructing knowledge by making connections, developing an awareness of how individuals construct knowledge, developing an interest in diversity and cultural richness, reflecting on individuals’ personal beliefs and understanding that knowledge brings responsibility (IBO, 2013, p.14). These aims are related to developing intercultural understanding and

sensitivity towards culturally-different people because they emphasize the importance of knowledge and respect. Therefore, assessing how the school cultures support the TOK aims will be helpful to understand if the school supports developing intercultural sensitivity by embracing the TOK aims.

A one-way ANOVA was conducted in order to discover if there is a significant mean difference between the schools in terms of their supports for TOK aims. The results of the test identified a statistically significant mean difference among the eight schools:  $F(7, 29) = 3,728, p=.001$ ). Since equal variances were assumed in the homogeneity of variances test, the Sidak was used to conduct a post hoc test to identify which schools were different. The results of the post hoc test indicated the significant differences were among Swedish School ( $M=3.67, SD=0.72$ ), Lebanese School ( $M=4.05, SD=0.66$ ), Turkish National School ( $M=4.11, SD=0.73$ ) and Mediterranean School ( $M=3.42, SD=0.97$ ). These mean scores signify that students in Turkish National School and Lebanese School feel more strongly that their school culture supports TOK aims while in Mediterranean School there was not a strong relationship about how the school supports TOK aims. Table 11 indicates the mean scores and standard deviations of the subscale for meeting the aims of TOK.

Table 11  
Mean scores and standard deviations of meeting the aims of TOK

School Pseudonym	TOK Aims	
	M	SD
Turkish National School	4.11	0.73
Lebanese School	4.05	0.66
Old School	3.96	0.67
Ege School	3.94	0.74
Dogu School	3.90	0.51
Swedish School	3.67	0.72
Diversity School	3.60	0.63
Mediterranean School	3.42	0.97
Total	3.85	0.74

## **TOK courses in terms of supports for intercultural competence**

Intercultural competence has gained importance in the global world due to the changes in education, communication, technology and transportation. The developments in these areas enable people from different cultural and national backgrounds to come together and exchange ideas. This exchange requires being flexible, adaptable and empathetic because people need to be open in order to accept differences and learn from one another. Deardorff (2006) defines intercultural competence as the “ability to develop targeted knowledge, skills and attitudes that lead to visible behavior and communication that are both effective and appropriate in intercultural interactions” (p. 249). Since intercultural skills can be developed in a number of ways, open-ended questions were asked to the students and teachers in order to discover the techniques and strategies that are used in TOK classrooms. One of the factors that helps develop intercultural competence is related to the teachers’ relevant backgrounds and the other is about the techniques that different teachers use in their TOK classrooms.

### **Q.4.a: What are teachers’ relevant backgrounds for teaching TOK?**

In order to discover the teachers’ relevant backgrounds, questions about how many years they have been teaching their subject areas, IBDP subjects and the TOK course were asked to the teachers. The results show that participants’ teaching experience ranged between 1 and 29 years ( $M=14.30$ ,  $SD=9$ ). According to teachers’ responses, it was seen that Mediterranean School had the most experienced teacher among the participant teachers with 29 years of teaching experience. Similar to that, one of the teachers from Old School had 28 years of teaching experience. In addition to the experience in subject-area teaching, the IBDP teaching experience ranged between 1

and 26 years ( $M=6.8$ ,  $SD=6.8$ ). Again, the same teacher from Old School had the highest experience in teaching IBDP with 26 years and one of the teachers from Lebanese School had 20 years of experience. Very similar to these experiences, range for teaching TOK course is between 1 and 24 years ( $M=5.3$ ,  $SD=6.2$ ). A teacher from Turkish National School had the maximum experience in teaching TOK with 23 years. These results indicate that, even though there are some teachers who are in their early years of teaching IBDP subjects or TOK, there are also very experienced teachers who have been teaching in IBDP schools for a long time such as the teachers in Mediterranean School, Old School and Lebanese School.

In addition to these questions, teachers' experiences in foreign countries, questions about their extra duties in school and their subject areas were also asked to collect descriptive data. In terms of experiences in foreign countries and cultures, it was discovered that only two TOK teachers from Turkish National School and Old School had not been abroad before. The other teachers had spent between 3 and 23 years ( $M=9$ ,  $SD=5.9$ ) in other countries or cultures and one of the teachers from Turkish National School had the highest experience with 23 years.

For other duties, it was found out that two of the participant teachers were IBDP coordinators in their school and four had other administrative duties. As for subject areas, TOK teachers come from different subject areas. Among 18 teachers, there was one psychology, one mathematics and one Swedish language teacher; two Social Sciences; three Science; four English as Second Language and six English Language A teachers who are responsible for teaching TOK in their schools.

**Q.4.b: What are the opportunities noted for developing intercultural competence?**

*Students' perspectives*

In order to identify the opportunities that are noted for developing intercultural competence in TOK classes, open-ended questions were asked to the students and teachers about the aspects of their TOK courses that foster international mindedness.

Approximately half of the students said that they make use of real life examples, discuss different topics that include local and global issues, make use of different AOKs and WOKs, have discussions with their culturally diverse peers and teachers and develop appreciation by encountering different perspectives. So, these are the most common methods that are used in TOK classrooms of the participant schools.

Since students' responses help to identify how international mindedness is fostered in TOK classroom, examples from their answers help to illustrate the most common methods that are used. A student in Swedish School responded by saying *"We read about international event and news, we discuss questions from different perspectives depending on the students' backgrounds."* Another student in Old School said *"In class, we discuss and reflect upon about many different cultures and it broadens our perspective of the world by gaining more knowledge about their beliefs and understandings of the world."* So, a majority of the students stated that the TOK course contributes to developing an understanding and appreciation of different cultural values. However, there was one student who mentioned that her peers were not very open to accepting differences. One student in Diversity School reported that:

Although I appreciate the intention of TOK classes and study epistemology and philosophy in my free time, the application of TOK classes does not live up to the intention. Students are closed-minded and fail to push the limits of

their thoughts. I don't feel that I grow in TOK purely because of the social environment.

The quotation indicates that this student does not feel like she achieved the TOK aims. Even though the students' responses show that they have a diverse school culture, it does not mean that the school culture always provide opportunities to develop international mindedness in TOK classroom.

### *Teachers' perspectives*

Teachers also responded to the same question by giving examples from their TOK classes. The participant teachers responded to that question by giving examples from the techniques they use in their TOK classes. Among the 18 teachers, 14 said that they give real life examples from different parts of the world as well as from different multilingual and multicultural topics, provide texts and arguments from various cultural contexts from both global and local perspectives, prepare activities that reference to other cultures and enable students to engage in class discussions.

Additionally, a couple of teachers said that annual TOK conferences are organized by the students and these activities create an opportunity to see other people's points of view, which again help to foster international mindedness. One teacher said that "International mindedness is a reflection of the teachers and the lessons they plan."

This indicates that teachers aim to foster international mindedness in TOK classes by including topics and materials that stimulate discussions about multiple perspectives.

## **Students' and teachers' perspectives on the cultural diversity of their TOK classes**

### **Q.5.a: What aspects of TOK foster IM?**

The link between TOK and international mindedness is the main focus of this research. The questions and the analysis up to that part aimed to provide a general understanding of the participant school cultures while this section focuses on the relationship between TOK and international mindedness by providing both qualitative and quantitative analysis of the survey questions. An open-ended question was asked to the students about the aspects of their TOK classes that foster international mindedness. Since it was not an obligatory question, the response rate was lower than the other open-ended questions. A total number of 142 students ( $N=305$ ) from eight different schools responded to that question and explained the features of their TOK classes that foster IM.

The students reported that cultural differences, international topics, classroom discussions, teacher background, questioning knowledge, focusing on real life situations, discussing religion and language were among the aspects of TOK that foster IM.

Considering the school type, responses from the students in international schools are analyzed together. In Swedish School, there were 28 valid responses and the main aspects were about the *cultural diversity of the TOK classroom, international topics and religious beliefs*. Similar to Swedish School, there were 21 valid responses in Lebanese School *and cultural differences, real life situations and teacher background* were reported as the aspects that support IM. In Diversity School, 17 students responded to the question and they stated that *international topics,*



*classroom discussions* and *different perspectives in their TOK class* helped to foster IM.

Considering their locations, students' responses from the schools in larger cities are analyzed together. In Ege School, 26 of the student responses were accepted as valid and students explained that *cultural differences*, *worldwide topics* and *real life situations* foster IM. Similar to the other participant schools, 20 students from Turkish National School stated that *cultural differences*, *classroom discussions* and *international topics* promoted IM. Additionally, 16 responses from Old School were analyzed and they showed that *cultural differences*, *international topics* and *different perspectives* stimulated IM in TOK classrooms.

In addition to these, students' responses from the schools in remote areas are analyzed together. From Dogu School, eighteen students contributed to that question, and they reported that *questioning*, *using real life examples* and *showing respect* were the features of the TOK class while 12 responses from Mediterranean School revealed that *cultural differences*, *religion* and *language* were among the other aspects that support IM in their TOK classroom.

Overall, it was especially notable that *cultural differences* are the most emphasized aspects of TOK that foster international mindedness as it was reported by the participants of the six schools. Unlike cultural differences, in Diversity School it was seen that *international topics* are the most emphasized aspect of TOK and in Dogu School it was reported that *questioning* is the most emphasized aspect of TOK that foster IM. Table 12 summarizes the emphasized aspects of TOK that foster IM across schools.

Table 12  
Summary of the most emphasized aspects of TOK that foster IM across schools

School Pseudonym	Aspects emphasized most by students that foster IM	Aspects emphasized second most by students that foster IM	Aspects emphasized third most by students that foster IM
Swedish School	Cultural differences	International topics	Religion
Lebanese School	Cultural differences	Real life situations	Teacher background
Diversity School	International topics	Classroom discussions	Different perspectives
Ege School	Cultural differences	Worldwide topics	Real life situations
Dogu School	Questioning	Real life situations	Respect
Turkish National School	Cultural differences	Classroom discussions	International topics
Old School	Cultural differences	Different perspectives	International topics
Mediterranean School	Cultural differences	Religion	Language

### Q.5.b: Which student-centered strategies are used while implementing TOK?

#### *Students' perspectives*

Perspectives on student-centered strategies that are used in TOK classes is another important aspect that helps to discover how different schools implement TOK. In order to explore more about students' perspectives, a Likert-item scale was used to assess Student Engagement (items 3.1, 3.4, 3.18, 3.19 and 3.24 which were about students' participation in their TOK class) and Teacher Support (items 3.2, 3.8, 3.11, 3.17 and 3.20 which were about providing opportunities to the students to engage in TOK classes) in participant schools. The questions that were about these two subscales were coded accordingly and descriptive statistics were used to compare schools.

In the Student Engagement subscale, the average mean score was between neutral and agree ( $M=3.67$ ,  $SD=0.69$ ). Lebanese School had the highest mean score ( $M=4.04$ ,  $SD=0.62$ ) while Old School had the lowest mean score ( $M=3.19$ ,  $SD=0.63$ ).

In the Teacher Support subscale, the average mean score was found very similar to the Student Engagement subscale and the score was again between neutral and agree ( $M=3.64$ ,  $SD=0.64$ ). Lebanese School had the highest mean score ( $M=3.87$ ,  $SD=0.51$ ) while Diversity School had the lowest mean score ( $M=3.40$ ,  $SD=0.77$ ). The mean scores and the standard deviations for Student Engagement and Teacher Support subscales are presented across schools in Table 13.

Table 13  
Descriptives of student engagement and teacher support subscales

	School Pseudonym	N	M	SD
Student Engagement	Lebanese School	40	4.04	0.62
	Ege School	50	3.92	0.60
	Turkish National School	44	3.81	0.66
	Diversity School	27	3.74	0.66
	Mediterranean School	23	3.63	0.80
	Swedish School	67	3.47	0.58
	Dogu School	22	3.42	0.73
	Old School	32	3.19	0.63
	Total	305	3.67	0.69
Teacher Support	Lebanese School	40	3.87	0.51
	Ege School	50	3.82	0.66
	Turkish National School	44	3.78	0.65
	Swedish School	67	3.57	0.52
	Old School	32	3.54	0.69
	Mediterranean School	23	3.50	0.74
	Dogu School	22	3.42	0.63
	Diversity School	27	3.40	0.77
	Total	305	3.64	0.64

After conducting descriptive statistics, a one-way ANOVA was used to analyze the differences among participant schools. In Student Engagement subscale, equal variances was observed and ANOVA test showed a statistically significant mean

difference among the schools in terms of their perspectives on the implementation of TOK:  $F(7,29)=7.075$ ,  $p=.000$ . Since equal variances were observed, the Sidak was used as a post hoc test. According to the test, with their high ratings, Lebanese School, Turkish National School, Ege School and Diversity School were significantly different than Swedish School, Dogu School and Old School on Student Engagement. There was no statistically significant mean difference between Mediterranean School and the other participant schools.

In addition to the Student Engagement subscale, the Teacher Support subscale was also compared across schools. One-way ANOVA test was conducted. The ANOVA test showed a statistically significant mean difference among the participant schools in terms of students perspectives regarding the implementation of TOK:

$F(7,29)=2.893$ ,  $p=.006$ . Equal variances were observed; however, post hoc tests, including Sidak, Scheffe, Dunnett and Tukey, were not able to identify any differences among participant schools.

### *Teachers' perspectives*

One of the aims of the TOK course is to stimulate thinking by encouraging students to become acquainted with the complexity of knowledge. In order to contribute to the development of knowledge, TOK teachers provide various discussion topics for the students so that they can become aware of their personal and ideological assumptions as well as questioning how people construct knowledge. As a part of this research, a question was asked to the TOK teachers about which topics stimulate discussions that help students to understand the diversity and richness of cultural perspectives in

their TOK classes. This was an open-ended question and 18 participant TOK teachers responded to that question by giving examples from their own TOK classes.

Among the topics that stimulate discussions in TOK classes were *religion, art and language*, which were used as examples by five TOK teachers; *ethics, culture, mathematics, science and history* were reported by three different teachers. In addition to these, two TOK teachers said that *real-life examples, selectivity of perception, bias, prejudice and stereotypes* were discussed as topics that contribute to the understanding of diversity and richness of cultural perspectives. Other topics such as *emotions, satire, censorship, literature and lateral thinking* were also among the arguments that were exercised in TOK classrooms in the participant schools.

#### **Q.5.c: What are the students' perspectives on achieving the aims of TOK?**

A subscale, including the statements that are in line with the five TOK aims, were created to analyze how much of the TOK aims were perceived to have been achieved by the students. The participant students were asked to record their first impression by indicating the degree to which they agree or disagree with each statement concerning the subscale. Descriptive statistics of the TOK aims scores along with an ANOVA test were conducted to analyze the mean scores of each participant student and to identify the differences among the participant schools. The descriptive analysis showed that Lebanese School had the highest mean score among the eight participant schools ( $M=4.33$ ,  $SD=0.54$ ) while Old School ( $M=3.55$ ,  $SD=0.76$ ) had the lowest mean score in perceived TOK achievement scale.

The results of the ANOVA test indicated that there was a statistically significant mean difference among the participant schools: ( $F(7,29)=6.04$ ,  $p<.001$ ). Since equal

variances were assumed, the Sidak was used to conduct a post test to see which schools were different in terms of their TOK achievement. The result of the post hoc test showed that Swedish School ( $M= 3.67, SD=0.69$ ) was different from Lebanese School ( $M=4.33, SD=0.54$ ) and Turkish National School ( $M=4.18, SD=0.71$ ). Lebanese School ( $M=4.33, SD=0.54$ ) was different from Diversity School ( $M=3.68, SD=0.71$ ), Old School ( $M=3.55, SD=0.76$ ) and Mediterranean School ( $M=3.63, SD=1.00$ ) while Turkish National School ( $M=4.18, SD=0.71$ ) was different from Old School ( $M=3.55, SD=0.76$ ). No significant differences were observed among the other schools. Table 14 presents the mean scores and standard deviations of students' self-rated TOK achievement across schools.

Table 14  
Means of students' self-rated TOK achievement

School Pseudonym	N	M	SD
Lebanese School	40	4.33	0.54
Turkish National School	44	4.18	0.71
Ege School	50	4.06	0.72
Dogu School	22	3.84	0.83
Diversity School	27	3.68	0.71
Swedish School	67	3.67	0.69
Mediterranean School	23	3.63	1.00
Old School	32	3.55	0.76
Total	305	3.89	0.77

**Q.5.d: Which AOKs and WOKs guide discussions that develop students' intercultural understanding?**

The TOK course does not only focus on one specific topic, but it provides a combination of various Areas of Knowledge and Ways of Knowing. There are eight

different Areas of Knowledge (Mathematics, Natural Sciences, Human Sciences, History, the Arts, Ethics, Religious Knowledge Systems and Indigenous Knowledge Systems) and eight different Ways of Knowing (Sense Perception, Reason, Emotion, Faith, Imagination, Intuition, Memory, and Language). These AOKs and WOKs help students to be critical thinkers because they are encouraged to question what they already know and how they know. Therefore, including these AOKs and WOKs into the TOK course enables students to challenge the basis of knowledge and encourages them to think critically, but which ones are included is a decision that is up to each teacher.

The participant students were asked to select which AOKs and WOKs were most helpful for guiding discussions that develop intercultural understanding. The descriptive analysis provided a general understanding of the number of AOKs and WOKs that were included as being most relevant to intercultural understanding in the participant schools. According to the descriptive statistics, Ege School had the highest mean scores in the number of AOKs that students perceived were used to support intercultural understanding ( $M=4.41$ ,  $SD=1.25$ ) while Dogu School had the lowest mean score ( $M=3.55$ ,  $SD=0.59$ ). Table 15 includes the mean scores and standard deviations of each school in AOKs that they perceive as supporting intercultural understanding.

Table 15  
Descriptives of each school in numbers of AOKs perceived for supporting IS

School Pseudonym	N	M	SD
Ege School	49	4.41	1.25
Old School	28	4.32	1.41
Swedish School	63	4.19	1.53
Diversity School	26	4.15	1.22
Lebanese School	37	4.11	2.29

Table 15 (cont'd)

Descriptives of each school in numbers of AOKs perceived for supporting IS

Mediterranean School	20	3.65	2.36
Turkish National School	40	3.63	1.91
Dogu School	22	3.55	1.59
Total	285	4.06	1.71

In addition to the Areas of Knowledge, in the perceived use of Ways of Knowing for supporting intercultural understanding, Lebanese School had the highest mean score ( $M=4.27$ ,  $SD=1.70$ ) while Diversity School had the lowest mean score ( $M=3.88$ ,  $SD=1.96$ ). Table 16 includes the mean scores and standard deviations of each school in WOKs that they perceive as supporting intercultural understanding.

Table 16

Descriptives of each school in numbers of WOKs perceived for supporting IS

School Pseudonym	N	M	SD
Lebanese School	38	4.66	2.29
Ege School	49	4.27	1.70
Old School	28	4.25	1.62
Turkish National School	40	4.22	1.83
Dogu School	22	4.18	1.79
Swedish School	63	4.11	1.85
Mediterranean School	20	4.10	2.49
Diversity School	26	3.88	1.96
Total	286	4.22	1.91

In order to see if there is a statistically significant mean difference among the schools in terms of their perspectives regarding the AOKs and WOKs, one-way ANOVA test was conducted; however, no significant differences were observed:  $F(7,27)=1.276$ ,  $p=.262$  and  $F(7,27)=0.439$ ,  $p=.877$ . In other words, all schools appear to be using about 3 to 5 AOKs and 3 to 5 WOKs as tools for discussions or activities that especially guide intercultural understanding.



In addition to the mean scores and standard deviations of each participant school, frequency analysis of AOKs and WOKs were measured to explore specifically which Areas of Knowledge and Ways of Knowing are commonly practiced as strategies toward developing intercultural understanding in TOK classrooms. Among the eight AOKs, Human Sciences is the most common discipline that is applied, Ethics is the second most common and History is the third most common. The other disciplines included, Religious Knowledge Systems, Indigenous Knowledge Systems, Natural Sciences and the Arts as also widely discussed; however, Mathematics is the least common discipline that participants felt it did not relate as much to intercultural understanding. Table 17 demonstrates the frequency of AOKs covered in the participant schools.

Table 17  
Students' perspectives on AOKs that develop intercultural understanding

Areas of Knowledge	Valid	Missing	Frequency
Human Sciences	285	20	201
Ethics	285	20	200
History	285	20	178
Religious Knowledge Systems	285	20	102
Indigenous Knowledge Systems	285	20	102
The Arts	285	20	102
Natural Sciences	285	20	101
Mathematics	285	20	61

In addition to the AOKs, frequency of WOKs was also analyzed. Among the eight WOKs, Language is the most common discipline that is seen to be supportive of intercultural understanding, Reason is the second most common and Emotion is the third most common. The other disciplines including Sense Perception, Imagination, and Memory are also widely discussed; however, Faith and Intuition are not commonly seen as supportive of intercultural understanding in the TOK classrooms

of the eight participant schools. Table 18 demonstrates the frequency of WOKs that are covered in the participant schools.

Table 18

Students' perspectives on WOKs that develop intercultural understanding

Ways of Knowing	Valid	Missing	Frequency
Language	286	19	218
Reason	286	19	211
Emotion	286	19	187
Sense Perception	286	19	152
Imagination	286	19	123
Memory	286	20	110
Faith	285	20	104
Intuition	286	19	102

### **Student characteristics that influence their perspectives on the implementation of TOK course**

This section focuses on students' characteristics that relate with international mindedness and if these characteristics influence their perspectives on the implementation of the TOK courses. As characteristics of IM, students' IS scores, their experiences in variety of cultures and interaction with international peers were compared with their self-rated TOK achievement.

#### **Q.6.a. Do students who rate stronger in intercultural sensitivity have more positive attitudes about the implementation of TOK than the ones who rate weaker in intercultural sensitivity?**

An independent samples *t* test, was conducted to compare self-rated TOK outcomes of the students who had higher IS scores and lower IS scores. Students' IS scores were coded as higher and lower according to the mean score of the total IS, which was 3.89. Among 305 participant students 144 were in the lower IS score category

while 161 were in the higher IS score category. The results of the test showed that the students who had higher IS levels had higher self-rated TOK outcomes ( $M=3.85$ ,  $SD=0.59$ ) than those who had lower scores in IS ( $M=3.57$ ,  $SD=0.63$ ). The equal variances were assumed and a statistically significant mean difference among these two groups were observed:  $t(303) = -4.059$ ,  $p < 0.001$ . In other words, this finding shows that students' intercultural sensitivity may influence their perceptions of TOK outcomes achieved in their classes.

**Q.6.b. Do students with more experience in a variety of cultures have more positive attitudes about the implementation of TOK courses than those with fewer experiences across cultures?**

Another independent samples  $t$  test was conducted to compare the self-rated TOK outcomes of the students who had more variety of cultural experience and the ones that had less variety of cultural experience. According to the mean score of the cultural experience subscale, students' responses were divided into two groups. The scores that were lower than the mean score were coded as having less variety of cultural experience while the scores that were equal to the mean score and higher than the mean score were coded as having more variety of cultural experience.

Among 305 participant students, 66 were in the less variety of cultural experience group while 239 were in the more variety of cultural experience group. The mean scores for cultural experience indicated that the self-rated TOK outcomes of the group that had more variety of cultural experience ( $M=3.73$ ,  $SD=0.60$ ) were higher than the other group that had less variety of cultural experience ( $M=3.67$ ,  $SD=0.68$ ). However, independent samples  $t$  test, did not identify any statistically significant

mean difference between the two groups in terms of their TOK achievement scores:  
 $t(303)=-0.705, p=0.48$ .

**Q.6.c. Do students in schools with mostly international peers have more positive attitudes about the implementation of the TOK courses than those with peers who are from similar backgrounds?**

In order to explore if the school type influences perceived TOK outcomes, an independent samples  $t$  test, was conducted to compare the self-rated TOK outcomes of the students in national schools and international schools. Among 305 participant students, there were 170 students in national schools and 135 in international schools. The mean scores of the students who are in a school with mostly national peers were slightly higher ( $M=3.74, SD=0.65$ ) than the students who are in a school with mostly international peers ( $M=3.69, SD=0.59$ ). Nevertheless, the  $t$ -test showed no statistically significant mean differences between self-rated TOK outcomes of the students in national schools and students in international schools:  $t(303)=0.776, p=0.438$ .

### **Conclusion**

This chapter presented qualitative and quantitative analysis of the six exploratory research questions about students' characteristics that relate with international mindedness, student characteristics that affect intercultural sensitivity, school culture and TOK courses in terms of their supports for intercultural competence, cultural diversity of TOK classrooms and student characteristics that influence their self-rated TOK achievements. The tables provided further summary for the open-ended questions. Most of the qualitative analysis described the participant school cultures, students' perspectives on their school culture and implementation of the TOK course.

Quantitative analysis presented the differences among the participant schools. In the next chapter, the findings will be interpreted and the implications for practice and further research will be discussed.



## **CHAPTER 5: DISCUSSION**

### **Introduction**

This exploratory study investigated students' and teachers' perspectives about their school culture, implementation of their TOK course and the factors that might affect their self-rated intercultural sensitivity scores and TOK achievements. The findings of this study, which focuses on TOK and intercultural understanding, are part of a more comprehensive study about TOK and international mindedness. In order to assess students' intercultural understanding, Intercultural Sensitivity Scale (Chen & Starosta, 2000) was used.

In addition to the Intercultural Sensitivity Scale, two more Likert item scales, along with additional open-ended questions, were developed according to the TOK aims and practices. These scales were combined into an online survey that was used to assess how TOK teachers and school cultures support intercultural understanding. First year TOK students and TOK teachers from eight different schools completed the survey. Their responses were analyzed using both qualitative and quantitative methods.

In this section, the findings of the six research questions will be investigated, and implications for practice and further research along with the limitations are discussed afterwards.

## **Overview of the study**

In this study, how the Theory of Knowledge is implemented to support intercultural sensitivity was explored in eight different IB schools from the Middle-Eastern Region. The qualitative findings provided an understanding of the school culture in terms of their support for intercultural sensitivity. The participating students and teachers described the school culture, the TOK course and how they are different from one another. Their responses show that the participant school cultures have diversity in terms of where the students and teachers come from. Even in the sample national schools (where most of the students come from the same country), the students have cultural differences because they are from varied regions of Turkey. Compounding these differences is that student experiences may affect their cultural understandings. Many students reported traveling to other countries whereas others have not been abroad. Student responses also indicate that their IB experiences vary. There are some students who have studied in the IB programmes for many years (including PYP and MYP) while others have only one or two years of experience. These experiences are important in order to discuss the factors that may affect students' self-rated intercultural sensitivity scores and their self-rated TOK achievements.

Developing intercultural sensitivity can be achieved in many ways; there is not merely one factor that contributes to it. TOK classrooms are one of the places where students from different backgrounds come together, and the TOK aims to raise students who appreciate and respect differences. Therefore, exploring the link between TOK and intercultural understanding helps to see the different factors that contribute to the development of intercultural understanding.

## Major findings

### **TOK courses in terms of supports for intercultural competence**

Students' and teachers' descriptions of their TOK courses in terms of their supports for intercultural competence were analyzed in order to explore the factors that may contribute to students' intercultural competence. Therefore, different factors such as teachers' experience in IBDP schools, TOK teaching experience and overall teaching experience along with students' ideas on strategies and methods that are used in their TOK classroom were described in this section.

Teachers' relevant backgrounds for teaching TOK may have an impact on students' developing intercultural competence. In order to investigate more about teachers' backgrounds, their overall teaching experiences along with specific IB and TOK teaching experiences were considered. According to TOK teachers' responses, it was explored that the most experienced teachers are from Swedish, Lebanese, Turkish National, Old and Mediterranean School with more than 15 years of teaching experience. The most experienced IB and TOK teachers are from Swedish, Old and Lebanese School again with more than 15 years of IB and TOK teaching experience. These three schools likely have more experienced teachers due to the establishment and reputations of the schools. Since these schools are very old schools, one was founded in 1085, the other one in 1876 and the last one in 1891, they have learned to attract experienced teachers. More importantly, for the purposes of this study, is that teaching experience alone was not what appeared to differentiate the results of the school cultures and TOK subscales, but it may have been a contributing factor that is worth further consideration.



Developing intercultural competence in TOK classes can be achieved by using different strategies and methods. In order to identify the opportunities that are noted for developing intercultural competence in the participant schools, students and teachers reflected on the aspects of their TOK courses that foster international mindedness. The majority of the students reported: 1) use of real life examples, 2) discussions on different topics that include local and global issues, 3) focus on different AOKs and WOKs, 4) discussions with their culturally diverse peers and teachers in their schools and 5) the explicit exploration of different perspectives in order to develop appreciation of differences. These responses show that various methods are used to develop intercultural competence in the TOK classes and the students are aware of their importance for developing intercultural competence.

Besides the positive comments, some students responded that the social environment does not provide them many opportunities to develop intercultural competence. Even though the intention of the TOK course is to help students develop international mindedness and intercultural competence, when the students are not open to differences and willing to learn from each other's' national/cultural experiences, the aims of the TOK are not successfully achieved. Sometimes the process of becoming more open may relate to students' intercultural experiences because it helps them to discover different cultures and ways of living. Therefore, it can be said that school culture or teachers' support alone may not be enough to achieve the TOK aims; the students should be open to new ideas and be eager to improve their intercultural understanding through their intercultural communications.

**Prior experiences in IB schools, international schools, international travel experience and differences among peers as students' characteristics that closely relate with intercultural sensitivity**

Developing knowledge of cultural differences requires being exposed to a culture that is different from one's own. Since schools are diverse places, students have a chance to communicate with people from different backgrounds. As mentioned in Chapter 2, a research by Chocce, Johnson and Yossatorn (2015) explored that international friendship was the second highest factor (among gender, field of study, foreign language ability, international travels, and study abroad) that influenced students' intercultural understanding.

In examining the first research question, it was found that students' prior experiences in international and IB schools differ across schools. In terms of international school experience, students in Lebanese School had more interactions with international peers. Since that school is one of the three international schools in the sample, finding differences from Lebanese Schools and the other participant schools was expected. When it comes to prior experiences in IB schools, the ANOVA test showed that Turkish National School had the greatest number of students who reported prior IB experience. Since that school is one of the three participant schools that implements PYP and MYP, students in Turkish National School might have been in that school from their primary or middle years or they had previously been to schools that implement PYP and MYP. In either case, students in Turkish National School have more experience in IB programmes.

Students' international travel experience can be another factor that influences their intercultural sensitivity. This research noted that students in Diversity School

travelled more than the students in other participant schools. This may mean that they had more cultural travel experience than the other participant students. Different from Diversity School, students from the Dogu School had very few experiences in other countries/cultures. This finding can be used to interpret other research questions in a way that it helps to explore if students' international travel experience is one of the factors that affects their intercultural sensitivity or their self-rated TOK achievement scores.

Students' prior experiences in IB schools, in international schools and their international travel experience enable them to develop knowledge of different cultural groups. In addition to these, a summary of how students describe themselves as being different from their peers was also presented in the previous chapter (Table 7) in order to understand how the students are different from their peers. Students' responses are valuable to have an insight into the distinguishing characteristics that they have in each school. According to the quantitative analysis of the questions in Section 1 and the qualitative analysis of the open-ended questions in Section 4 of the student survey (Appendix B), some of the distinguishing characteristic of the participant students were identified and summarized. Students in Swedish School reported that they have different cultural, national, ethnic and religious backgrounds. Similar to Swedish School, students in Old School also reported that they have peers who come from different cultural, national and religious backgrounds. In Lebanese School, students have report that they have experience in culturally-diverse schools. In Diversity School, students have more travel experience in foreign countries/cultures. In Ege School, students have less IB experience while students in Turkish National School have more IB experience. In Dogu School and Mediterranean School, it was observed that students have less experience in other

countries/cultures than the other participant students. As these responses show, differences among students may result from various factors including the programs that are implemented, location of the school and type of the school such as national, international, boarding or day school.

### **Student characteristics that influence their intercultural sensitivity scores**

For the second research question, in order to explore students' overall self-ratings of intercultural sensitivity, Chen and Starosta's model of Intercultural Sensitivity Scale (2000) was used. In their self-rating of intercultural sensitivity, it was observed that participant students perceive themselves as accepting and respecting others' cultural diversities in their communication (Respect for Cultural Differences) and they enjoy their intercultural interactions (Interaction Enjoyment subscale). In addition to these, according to their self-rating in Interaction Confidence subscale, the participant students feel confident during their intercultural communication (Wu, 2015, p. 6).

Among the five dimensions of IS, it was observed that participant students, on average, do not spend much effort to understand what is happening in intercultural interactions and do not feel like they participate much in intercultural communication with their peers because their self-rated scores in Interaction Attentiveness and Interaction Engagement scales were not as high as the other three subscales (Chen & Starosta, 2000). These differences among the self-rated IS scores show that students may feel comfortable in some aspects of intercultural sensitivity such as respecting cultural differences, enjoying interactions with people from different cultures and being confident in their interactions. However, but they may still be hesitant in terms of being attentive and engaged in intercultural interactions.

In their study, Chocce, Johnson and Yossatorn (2015) explore the differences between the IS scores of students who had more travel experience and the ones that had less travel experience; however, their study could not identify any significant differences between two student groups, the ones that had more international travel experience and those who had less international travel experience. In contrast, the present findings suggest that international travel experience and experience living abroad do have significant effect on students' level of intercultural sensitivity. The analysis indicates that participant students with more international travel experience also have higher level of intercultural sensitivity than the students who have less international travel experience across cultures. In all likelihood, this relates to the fact that students with experience in different cultures already have an increased awareness of cultural differences, and they are also motivated to explore different cultures. For interpreting results that follow, this is important because it may give these students an advantage in a course like TOK.

Since school type can be another factor that affects students' IS levels, IS scores of students in national and international school were compared to explore the impact of school type on developing intercultural sensitivity. Even though the assumption was that students in international schools would have higher level of intercultural sensitivity, interestingly, it was discovered that students in national schools have actually higher IS scores. This could be because students in national schools are more likely to be proactive in interacting with people from different cultural backgrounds while students in international schools are exposed to the same multicultural environment. Still, as this finding was so unexpected, it is worth further inquiry and exploration as to the possible reasons behind it.

### **School cultures in terms of supports for global engagement and TOK aims**

For the third research question, school culture is one of the important factors that affects international mindedness so it was also explored. In order to explore the participant school cultures in terms of their support for IM, students described their school culture by using some adjectives. According to the students' responses, it was seen that the most emphasized IM-related features of the participant schools included being international, diverse, multicultural, heterogeneous and open-minded. These adjectives provide evidence that the cultural environment nurtures IM and students feel that they develop intercultural understanding perhaps because they are provided with opportunities to interact with people from different national/cultural backgrounds. In addition to these, students' ideas on how their school supports international mindedness demonstrate that competitive, challenging, rigorous and disciplined school environment also contribute to the development of international mindedness. The reason why students believe that these features affect their IM may be because the schools encourage them to have strong intercultural understanding and support them to develop international mindedness through their intercultural communications. Yet, some of these adjectives might have been used in a critical way because a disciplined, competitive and rigorous school environment may aim to have more academic achievement rather than giving more value to development of international mindedness. Therefore, the variety of the adjectives that were used may indicate that the schools have different aspects that support international mindedness.

Castro et al (2015) describes global engagement as accepting different cultures, developing an understanding of cultural differences and engaging in activities outside the school. Since it is an important aspect of international mindedness, students' ratings on their schools' support for global engagement were analyzed.

According to the results of research question 3c, students in Turkish National School showed a stronger attitude with their high ratings in global engagement subscale than most of the other participant schools. This may mean that students in Turkish National School feel that their school culture contributes to international mindedness by giving value to global engagement and by supporting activities that are relevant to global engagement. The reason why Turkish National School was significantly different from the other participant schools may be due its location. Since Turkish National School is located in the middle of Istanbul, which is one of the most interculturally diverse cities in the world, exploratory strategies may be used by the school to promote IM. The findings of the general school culture in terms of its supports for global engagement can help to explore to what extent participant schools support global engagement that contribute to develop international mindedness. It might also be worth considering how TOK teachers could take better advantage of the school's unique setting and globally-engaged students.

As mentioned in previous chapters, among other aims, TOK aims to provide an assortment of Areas of Knowledge and Ways of Knowing so that the students develop a richness of knowledge rather than having static perspectives. In order to understand how factors that make schools different may also influence students' self-rated TOK outcomes, their scores were analyzed across schools. The mean scores show that students in Turkish National School and Lebanese School have the high ratings in TOK aims subscale while Diversity School and Mediterranean School have relatively low ratings. This may be interpreted as the students in Turkish National and Lebanese School feel more strongly that their school culture supports TOK aims whereas the students in Mediterranean and Diversity Schools are more hesitant about their schools' support for TOK aims. The reason why students in Turkish National

School and Lebanese School have higher ratings in their perceptions of TOK outcomes achieved may be related to their high ratings in the global engagement subscale. As these two schools were rated higher in their supports for global engagement, this may show that students in Turkish National School and Lebanese School feel more achieved in their self-rated TOK outcomes because their school supports global engagement more than the other participant schools. Therefore, schools' support for global engagement may influence students' perceptions of TOK outcomes achieved, and this requires further inquiry.

### **Students' and teachers' perspectives on cultural diversity in their TOK classes**

For the fifth research question, when it comes to identify the aspects of TOK that foster international mindedness, qualitative analysis was used to explore students' perspectives. According to students' responses, the most emphasized aspect of TOK is cultural differences. This means that by focusing on cultural experiences in their TOK classes, students develop international mindedness because cultural differences enable them see different perspectives and they learn from each others' experiences. In terms of the second most and third most emphasized aspects, various responses were identified by different schools. As it was summarized in Table 9, international topics, real life situations, classroom discussions, worldwide topics, different perspectives, teacher backgrounds, respect, language and religion are emphasized in the TOK classroom. These various aspects indicate that international mindedness can be fostered by using different topics. Therefore, it can be said that different schools focus on different aspects according to the school culture or the school type.

The fifth research question also explores Student Engagement and Teacher Support as two student-centered strategies used in TOK. For the Student Engagement



subscale, it was explored that students in Lebanese School feel like they engage in their TOK classes more than the students in other participant schools. Their ratings indicate that they pay attention, show interest, passion and are curious. When the other findings about Lebanese School are considered, it can be said that students in Lebanese School had the most experience in culturally diverse schools, and they also had higher ratings in their schools' supports for Global Engagement and TOK aims. In addition, they had an experienced TOK teacher and it is one of the international schools in the sample. All of these factors may be combining to help support the students in a way that provide opportunities and encourage the students to be more motivated toward engaging in TOK and improving themselves.

In addition to the Student Engagement, Teacher Support subscale was also analyzed, and it was seen that schools had different mean scores. Even though post hoc tests were not able to identify any significant mean differences among the schools, again Lebanese School had the highest mean score. This shows that students in Lebanese School feel that they are supported by their teachers in TOK classes and they become a part of the classroom discussions with the help of their TOK teachers.

When the results of Student Engagement, Teacher Support and TOK achievement scores were analyzed, it was observed that students in Lebanese School feel highly competent in their TOK course. This may be due to the fact that Lebanese School is an international school and has an experienced teacher who has been teaching IB for 20 years and TOK for 13 years, along with an array of other strengths, as revealed by this research, that the Lebanese School demonstrates, which may well function together in a synergistic way toward also supporting TOK. These qualities may affect students' perspectives and the outcomes that they are able to reach in the TOK

course, as they are encouraged by their teacher to reflect on their cultural experiences and take responsibilities in their lives.

The final part of the fifth research question also aimed to understand the TOK's Areas of Knowledge and Ways of Knowing that may stimulate discussions and encourage students to actively engage in discussions to challenge the basis of knowledge. In that sense, all of the AOKs and WOKs are beneficial for students. In order to see which AOKs and WOKs guide discussion that develop students' intercultural understanding, a frequency analysis was conducted. The results showed that Human Sciences, Ethics and History are the top three Areas of Knowledge disciplines that guide discussions in participant TOK classes. One interpretation why students' think specifically that these three humanities-oriented AOKs guide discussion to develop intercultural understanding can be related to how these topics stimulate awareness of their multicultural environment, even subtle differences with sub-cultures that are more homogenous. Since some of the participant schools are international schools and the rest is national schools with students from different cultural backgrounds, discussions on Human Sciences, Ethics and History can help them to discover more about differences within similar human cultures and between diverse human cultures.

In addition to AOKs, it was seen that Language, Reason and Emotion are the top three Ways of Knowing traits that guide discussions in the TOK classrooms of the participant schools. Again, one interpretation why these WOKs guide discussions in the participant TOK classrooms can be due to how they stimulate understanding of the multicultural school environments or their surrounding local environments. Since there are bilingual and multilingual students in these schools, Language is an

effective WOK. Additionally, Emotion and Reason may help students to develop empathy and logical thinking in their interactions with people from different cultural backgrounds.

### **Aspects of intercultural understanding that influence perspectives on the TOK course**

In the official guides, IBO states that “The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world” (IBO). Since the aims of the TOK are also in line with this general aim of IB programmes, the link between TOK and international mindedness is important to explore. So, the sixth research question examined whether students who rate stronger in intercultural sensitivity have more positive attitudes about the implementation of TOK by using an independent samples  $t$  test. The results of the test indicated a difference between the TOK attitudes of the students who had stronger international sensitivity scores and those who had weaker international sensitivity scores. The reason behind this important finding may be as a result of the similar aims of TOK and international mindedness. Since they both focus on the development of self, it is worthwhile to see that TOK and international mindedness complement each other to contribute to the development of self. At the same time, this could also mean that students who have stronger IS scores due in part to having more intercultural travel experiences may have an unfair advantage in the TOK course.

As it was explored in research question 2b, cultural experience is an influencing factor in intercultural sensitivity. So, the sixth research question, tested whether the same factor also affects students’ attitudes towards their TOK classes. The results

show that cultural experience does not significantly affect students' attitudes about the implementation of TOK course.

In question 2c, students' IS scores were compared according to their school type and it was discovered that students in national schools had higher IS scores. Therefore, in the final analysis of the sixth question, students' TOK attitudes were also compared among two school types, national and international schools. The results of the independent samples *t* test, showed there is no statistically significant mean difference between the perceived TOK outcomes of the students in national schools and students in international schools. This may be due to the fact that both the students in national schools and international schools have diversity in their TOK classrooms. Even though national schools do not have international students, this does not mean that students in national schools do not have any communications with people from different cultures as students in the sample national schools come from different cultural backgrounds. In addition to this, various AOKs and WOKs stimulate discussion in the TOK classrooms of the participant schools, which contributes to develop intercultural sensitivity. When the students become aware of cultural differences among groups and learn to respect each other, they also develop intercultural sensitivity. Therefore, the reason why students in national schools and international schools have similar TOK attitudes may be because of the variety of AOKs and WOKs in their TOK classrooms.

### **Implications for practice**

TOK is a very unique course and it aligns with the qualities outlined by the IB Learner Profile. Since IB aims to develop learners who strive to be inquirers, thinkers, open-minded, and reflective, these aims are also integrated in the TOK

course as well. Students are expected to be high academic achievers as well as developing intercultural understanding towards cultural differences. Therefore, TOK is an important course for students and more consideration should be given to the TOK classrooms with respect to how it fosters intercultural understanding especially.

Since the TOK course includes different Areas of Knowledge and Ways of Knowing, students are provided with skills that help them to question, debate, analyze and reform their opinions about knowledge claims. Especially AOKs combined with the TOK questioning practices may lead students to question their knowledge, debate and discuss. Most of the times, students are encouraged to use their previous experiences in order to understand how they gain knowledge. Teachers provide opportunities where students can use their experiences and focus on real-life situations in order to discover different ways that people gain knowledge. By using different AOKs and WOKs, teachers encourage students to focus on multiple personal, local and global issues, which facilitate cultural sensitivity.

In addition, this study suggests some practices that can be applied in TOK classrooms. As one of the findings shows, students in national schools have higher self-rated TOK achievement scores and their IS scores are also higher than the students in international schools. This may indicate that international schools do not explicitly focus on intercultural understanding, and maybe they assume that the cultural environment of the school facilitates intercultural understanding. However, both international and national schools should put emphasis on intercultural understanding, and make connections between intercultural understanding and TOK, rather than merely counting on the school environment, or cultural backgrounds of the teachers and students.

### **Implications for further research**

This study focuses on students' and teachers' perspectives on their TOK courses. Since TOK is a complex course, there may be various factors that affect students' TOK outcomes. In this study, factors like students' intercultural sensitivity scores, international travel experience and school type were used to explore if they influence students' self-rated TOK achievements. This study points to how a variety of factors may affect students' self-rated IS scores and TOK achievements. Further classroom studies that explore TOK outcomes in relation to weekly experiences in the TOK classroom may also be helpful for investigating how exemplary TOK teachers contribute to the development of students' intercultural sensitivity in TOK classrooms.

The factor that this analysis has pointed out as being especially likely to contribute was students' self-rated intercultural sensitivity scores. In addition to this, the school type and students international travel experience may indirectly affect self-rated TOK achievements. Even though this study could not identify any differences between the self-rated TOK achievements of the students in national and international schools; and the self-rated TOK achievements of the students who had more travel experience and who had less travel experience, further studies may discover differences.

Again in this study, participant school cultures were analyzed in order to have a better understanding of students' and teachers' perspectives on IM related features that participant schools emphasize while quantitative analysis demonstrated how the students rate their schools in terms of their supports for intercultural pedagogy, global engagement TOK aims. However, future research may be needed to explore

students' perspectives on these attitudes in relation to their learning in TOK classrooms.

The demographic characteristics of students were analyzed and both positive and negative traits of the participant school cultures were described by students. By focusing on these traits, some interpretations were made. However, more analysis can be done about if school cultures can be improved to facilitate intercultural understanding better by creating a school culture that promotes intercultural understanding.

Also, this study used the data about the time that students spent in IB programmes and the teachers' experience in teaching TOK in order to have a better understanding of the participant students and teachers. However, these two factors may also affect students' self-rated TOK outcomes because spending more time in IB programmes and having an experienced TOK teacher can be an advantage for students. Therefore, a future exploratory research into TOK and international mindedness might also want to consider if these factors contribute to developing international mindedness and lead to higher self-rated TOK outcome scores, or even to actual achievement scores on TOK essays or presentations.

### **Limitations**

The research scope is limited to the six selected schools in Turkey, one in Lebanon, and one in Sweden, which means that only the schools in the European-Middle East region of the world (and mostly Turkey) are presented in the sample. This selective sample compares schools in Istanbul with those in other parts of Turkey, as well as comparing national (IB/MEB) schools serving Turkish students with international

schools that have a population of students from many countries. As an exploratory survey, the study should not make generalizations beyond the countries sampled. However, it points to some trends worth considering in the broader context of national and international schools, especially for schools in countries like Turkey where English is not the native language.

This study has a small sample size, 171 participant students from national schools and 134 from international schools. In some of the questions, even though ANOVA tests identified differences across schools, post hoc test could not detect which schools are different. Therefore, using a larger sample size may be more helpful to identify the differences across schools, which could inform how varying features of being more/less international/intercultural in the schools may influence students' views of TOK as well as their learning to be more interculturally sensitive.

The research is also limited to the attitudes and viewpoints given by teachers and students in each of the participant schools. The findings of this study can provide a foundation for doing further in-depth case studies about actual classroom practices and eventually impact studies in classrooms with strong TOK implementation.

Validity can be another limitation of this study because the subscales that are used in Likert item scales had not been used previously, so new scales were developed.

However, as will be described in Chapter 3, measures of item consistency within all scales and subscales were positively calculated. In addition, the face validity of the survey was checked with the pilot study and some of the questions were revised according to the feedback from pilot test participants.

Another limitation can be related to the neutral options in the Likert scales. Since students and teachers were provided with a neutral option, they sometimes reflected



that they were neutral about some of the given statements. This may mean that the students were not sure about their answer, or that they did not have any opinion about the questions.



## REFERENCES

- Ateşkan, A., Dulun, Ö., & Lane, J.F. (2016). *Middle Years Programme (MYP) Implementation in Turkey* (project report), International Baccalaureate Organization.
- Bennett, M. J. (1986). A developmental approach to training for intercultural sensitivity. *International Journal of Intercultural Relations*, 10, 179-196.
- Bennett, M. J. (1993). Towards ethnorelativism: A developmental model of intercultural sensitivity. In R. M. Paige (Ed.), *Education for the intercultural experience*. Yarmouth: ME, Intercultural Press.
- Bergeron, L., & Rogers, L. (2015). *Teaching the theory of knowledge course in IB world schools*. Wisconsin: University of Wisconsin-La Crosse.
- Castro, P., Lundgren, U., & Woodin, J. (2013). *Research report: Conceptualizing and assessing international mindedness (IM): An exploratory study*. Retrieved from <http://www.ibo.org/globalassets/publications/ib-research/imeufullreportfinal.pdf>
- Castro, P., Lundgren, U., & Woodin, J. (2015). International mindedness through the looking glass: Reflection on a concept. *Journal of Research in International Education*, 14(3), 187-197.
- Chen, G. M. (1995). *International e-mail debate and intercultural awareness*. Manuscript prepared for a grant project sponsored by the Fund for the Improvement of Postsecondary Education (PIPSE).
- Chen, G.M., & Starosta, W. J. (1996) Intercultural communication competence: A synthesis. *Communication Yearbook*, 19, 353-383.

- Chen, G. M. (2010). *A study of intercultural communication competence*. Hong Kong. China Review Academic Publishers.
- Chen, G. M., Starosta, W. J. (2000). The development and validation of the intercultural sensitivity scale. *Human Communication, 3*, 1-15
- Chen, G. M., & Young, P. (2012). Intercultural communication competence. In A. Goodboy & K. Shultz (Eds.), *Introduction to communication: Translating scholarship into meaningful practice* (pp. 175-188). Dubuque, IA: Kendall-Hunt.
- Chocce, J., Johnson, D.A., & Yossatorn, Y. (2015). Predictive factors of freshmen's intercultural sensitivity. *International Journal of Information and Education Technology, 5*(10), 778-782.
- Cole, D., Gannon, S., Ullman, J., & Rooney, P. (2014). Theory of knowledge (TOK): Exploring learning outcomes, benefits and perceptions. Sydney:University of Western Sydney. Retrieved from [http://www.ibo.org/globalassets/publications/ib-research/dp/tokfinalreport\\_000.pdf](http://www.ibo.org/globalassets/publications/ib-research/dp/tokfinalreport_000.pdf)
- Cruse, B. (2011). Internalization of the higher education classroom: Strategies to facilitate intercultural learning and academic success. *International Journal Teaching and Learning in Higher Education. Harrison College, 23*(3), 388-395.
- Cupach, W. R., & Imahori, T. T. (1993). Identity management theory: Communication competence in intercultural episodes and relationships. In R. L. Wiseman, & J. Koester (Eds.), *Intercultural communication competence* (pp. 112-131). Newbury Park, CA: Sage.

- Hacking, E.B., Blackmore, C.B., Bullock, K., Bunnell, T., Donnelly, M., & Martin, S. (2017). The international mindedness journey: School practices for developing and assessing international mindedness across the IB continuum. Department of Education, University of Bath. Retrieved from <http://www.ibo.org/research/programme-impact-research/continuum-studies/>
- Hammer, M.R., Bennett, M.J., & Wiseman, R. (2003). Measuring intercultural sensitivity: The intercultural development inventory. *International Journal of Intercultural Relations*, 27, 421-443. doi:10.1016/S0147-1767(03)00032-4.
- Hammer, M.R. (2012). The intercultural development inventory: A new frontier in assessment and development of intercultural competence. In M. Vande Berg, R.M. Paige, & K.H. Lou (Eds.), *Student learning abroad* (pp. 115-136). Sterling, VA: Stylus Publishing.
- Hayden, M. & Thompson, J. J. (1998). International education: Perceptions of Teachers in International Schools. *International Review of Education*, 44(5-6), 549-568
- Hill, I. (2006). Student types, school stypes and their combined influence on the development of intercultural understanding. *Journal of Research in International Education*. 5(1), 5-33. doi: 10.1177/1475240906061857.
- Hill, I. (2012). Evolution of education for international mindedness. *Journal of Research in International Education*. 11(3), 245–261
- International Baccalaureate (IB). (2012). *What is an IB education?* Cardiff, Wales.
- International Baccalaureate Organisation (IBO). (2013). *Theory of knowledge guide (First assessment 2015)*. Cardiff, Wales.

- Martin, J. N., & Hammer, M. R. (1989). Behavioral categories of intercultural communication competence: Everyday communicators' perceptions. *International Journal of Intercultural Relations*, 13, 303-332.
- Medina-Lopez-Portillo, A. (2004). Intercultural learning assessment: The link between program duration and the development of intercultural sensitivity. *Frontiers: The Interdisciplinary Journal of Study Abroad* 10, 179–200.
- Mohsenin, J. (2010). *The intersection of community and culture: A model to develop culturally diverse online learning communities in U.S. distance education* (Unpublished doctoral dissertation). Walden University, Minneapolis, MN.
- Neuendorf, K. A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage.
- Olson, C. L., & Kroeger, K. R. (2001). *Global competent and intercultural sensitivity*. *Journal of Studies in Intercultural Education*, 5(2), 116-137.
- Portalla, T., & Chen, G. M. (2010). The development and validation of the intercultural effectiveness scale. *Intercultural Communication Studies*, 19(3), 21-37.
- Rader, D. (2015). Valuing languages and cultures: The first step towards developing intercultural understanding. *International Schools Journal*, 34(2), 17-22.
- Ruokonen, I., & Kairavuori, S. (2012). Intercultural sensitivity of the Finnish ninth graders. *Social and Behavioral Sciences*, 45, 32-40.
- Singh, M., & Qi, J. (2013). *21st century international-mindedness: An exploratory study of its conceptualization and assessment*. Australia: Centre for Educational Research University of Western Sydney.

- Straffon, D. A. (2003). Assessing the intercultural sensitivity of high school students attending an international school. *International Journal of Intercultural Relations*, 27, 487-501.
- Summers, M. & Volet, S. (2008). Students' attitudes towards culturally mixed groups on international campuses: Impact of participation in diverse and non-diverse groups. *Studies in Higher Education*, 33(4), 357-370.
- Triandis, H.C. (1977). Subjective culture and interpersonal relations across cultures. In D.K. Deardorff (Ed.), *Issues in cross-cultural research*. (pp. 418-434). Annals of the New York Academy of Sciences, 285.
- Wiseman, R. L., & Abe, H. (1986). Explication and test of a model of communicative competence. *Human Communication Research*, 13, 3-33.
- Wu, J.F. (2015). Examining Chen and Starosta's model of intercultural sensitivity in the Taiwanese cultural context. *I.J. Modern Education and Computer Science*, 6, 1-8.
- Yum, J. O. (1989). *Communication sensitivity and empathy in culturally diverse organizations*. Paper presented at the 75<sup>th</sup> Annual Conference of the Speech Communication Association, San Francisco.

## APPENDICES

### Appendix A: TOK Practices: A Survey for IBDP Teachers

*This survey was developed by the researcher especially for this research. The fourth section of the survey also includes the adaptation of Intercultural Sensitivity Scale developed by Chen and Starosta (2000), which we have been given permission to use.*

The online English version of the teacher survey is located here:

[https://docs.google.com/forms/d/1xHnvaCY\\_qR3-KMHx2VC0uzcLvFQY06U9cNdGhTJLi5o/viewform](https://docs.google.com/forms/d/1xHnvaCY_qR3-KMHx2VC0uzcLvFQY06U9cNdGhTJLi5o/viewform)

Thank you for completing this survey. 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

1. For TOK which grade levels do you teach?
  - Grade 11 (or IBDP, year 1)
  - Grade 12 (or IBDP, year 2)
2. Including this year, how many years have you been a teacher? \_\_\_\_\_
3. Including this year, how many years have you taught the IBDP? \_\_\_\_\_
4. What is your gender?
  - Female
  - Male
5. What is the highest degree you have earned?
  - High school diploma
  - Associate's degree (2 years or less in college)
  - Bachelor's degree
  - Master's
  - Doctorate

6. Including this year, how many years have you worked in schools whose students come from a variety of cultures? (Enter a number.) \_\_\_\_\_

7. 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:  
\_\_\_\_\_

8. In how many languages would you rate yourself as beginning or intermediate?  
\_\_\_\_\_

9. Which of the following roles do you play in your school? Mark all that apply.

- IBDP coordinator
- TOK teacher
- CAS coordinator
- Extended essay supervisor
- Teacher of IBDP subject areas
- Other: \_\_\_\_\_

10. What is your main subject area for teaching?

- English as a first language (Language A)
- English as a second or foreign language (Language B)
- Mathematics
- Science
- Social sciences
- Arabic, French, or other local languages
- Turkish Language and literature
- Other: \_\_\_\_\_

11. Including this year, how many years have you taught Theory of Knowledge (TOK)? (Enter a number.) \_\_\_\_\_



## Section 2: Your School culture and International Mindedness

Review the following statements and circle the response that best reflects your beliefs.

M / C: IB Mission/Community Values

ICP: Intercultural Pedagogy – Supports for Intercultural Competence/Understanding

ML: Supports for Multilingualism / English Supports

GE: Supports for Global Engagement

TOK: Supports for TOK Aims

Item	I believe that my school...	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2.1	Communicates a sense of purpose that reflects the IB learner profile. [M / C]	1	2	3	4	5
2.2	Gives attention to the IB mission. [M / C]	1	2	3	4	5
2.3	Creates a supportive and inviting place for students to learn about other cultures. [ICP]	1	2	3	4	5
2.4	Sets high standards for engaging in community services. [GE]	1	2	3	4	5
2.5	Encourages students to speak English outside of classrooms. [ML]	1	2	3	4	5
2.6	Translates school documents into at least two common languages. [ML]	1	2	3	4	5
2.7	Encourages students to make connections to the construction of knowledge, the academic disciplines, and the wider world. [TOK-1]	1	2	3	4	5
2.8	Encourages student interests in a diversity and richness of cultural perspectives, including an awareness of	1	2	3	4	5

	personal and ideological assumptions. <b>[TOK-3]</b>					
2.9	Emphasizes global issues that are especially seen in our local community. <b>[GE]</b>	1	2	3	4	5
2.10	Gives all students equal opportunity to participate in numerous extracurricular and enrichment activities. <b>[M / C]</b>	1	2	3	4	5
2.11	Promotes intercultural understanding by helping all students to understand their differences. <b>[ICP]</b>	1	2	3	4	5
2.12	Helps students understand the views of people who are different from them. <b>[ICP]</b>	1	2	3	4	5
2.13	Helps students develop language proficiency in all classes, not just language classes. <b>[ML]</b>	1	2	3	4	5
2.14	Values more than just two languages, as shown by multi-lingual activities in drama, music, or other areas. <b>[ML]</b>	1	2	3	4	5
2.15	Embraces the IBDP's emphasis on international mindedness. <b>[M / C]</b>	1	2	3	4	5
2.16	Mentors students toward understanding a variety of cultural perspectives. <b>[ICP]</b>	1	2	3	4	5
2.17	Recognizes international achievements and accomplishments of teachers and students. <b>[ICP]</b>	1	2	3	4	5
2.18	Helps students become aware of how individuals and communities construct knowledge and how this is critically examined. <b>[TOK-3]</b>	1	2	3	4	5
2.19	Encourages critical reflection on beliefs and assumptions, leading to more thoughtful, responsible, and purposeful lives. <b>[TOK-4]</b>	1	2	3	4	5
2.20	Gives students opportunities to "make a difference" by helping other people, the	1	2	3	4	5

	school, or the community. <b>[GE]</b>					
2.21	Provides materials, resources, and professional development needed for teaching multi-lingual students. <b>[ML]</b>	1	2	3	4	5
2.22	Encourages students in CAS projects that benefit the school and community. <b>[GE]</b>	1	2	3	4	5
2.23	Encourages teachers to integrate intercultural news and topics relevant to global citizenship. <b>[GE]</b>	1	2	3	4	5
2.24	Supports students in their understanding that knowledge brings responsibility, which leads to commitment and action. <b>[TOK-5]</b>	1	2	3	4	5

*Open-ended questions:*

2.25: What three adjectives would you use to describe your school culture?

2.26: How would you describe your school supports for international mindedness?

### Section 3: TOK Classrooms and Language Development

Review the following statements and circle the response that best reflects your beliefs.

SE: Student Engagement

TS: Teacher Support

LS: Language Support

TOK: Meetings Aims of TOK

Item	During my TOK classes...	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.1	Most students try very hard. [SE]	1	2	3	4	5
3.2	Many students enjoy TOK discussion activities. [TS]	1	2	3	4	5
3.3	Students who are not as good at English have plenty of opportunity to participate. [LS, reverse coded]	1	2	3	4	5
3.4	Most students participate actively in discussions. [SE]	1	2	3	4	5
3.5	Most students make connections to the construction of knowledge, the academic disciplines, and the wider world. [TOK-1]	1	2	3	4	5
3.6	Most students come to see how TOK concepts relate with the wider world. [TOK-2]	1	2	3	4	5
3.7	Most students become aware of how individuals and communities construct knowledge and how this is critically examined. [TOK-3]	1	2	3	4	5
3.8	All students are encouraged to express their preferences and opinions. [TS]	1	2	3	4	5
3.9	Strong oral skills are important for doing TOK presentations, so oral skills are supported through a variety of practice in class. [LS]	1	2	3	4	5

3.10	Essay writing skills needed for TOK are developed through practice and feedback, including individualized feedback. <b>[LS]</b>	1	2	3	4	5
3.11	Each session is designed so that TOK concepts contribute to students' positive learning experience. <b>[TS]</b>	1	2	3	4	5
3.12	Most students develop interests in a diversity and richness of cultural perspectives, including an awareness of personal and ideological assumptions. <b>[TOK-3]</b>	1	2	3	4	5
3.13	I guide students to reflect critically on beliefs and assumptions, leading to more thoughtful, responsible, and purposeful lives. <b>[TOK-4]</b>	1	2	3	4	5
3.14	Many students show interest in TOK ways of knowing and areas of knowledge. <b>[SE]</b>	1	2	3	4	5
3.15	I support my students' language learning through scaffolding techniques at needed levels of language development. <b>[LS]</b>	1	2	3	4	5
3.16	Most students understand that knowledge brings responsibility, which leads to commitment and action. <b>[TOK-5]</b>	1	2	3	4	5
3.17	I provide students with choices and options regarding coursework. <b>[TS]</b>	1	2	3	4	5
3.18	Students pay attention, and contribute to a healthy classroom atmosphere for learning from each other. <b>[SE]</b>	1	2	3	4	5
3.19	Most students are actively engaged in TOK discussions on any given day. <b>[SE]</b>	1	2	3	4	5
3.20	All students get an opportunity to share their perspectives, even students who are	1	2	3	4	5

	generally more shy or reserved. <b>[TS]</b>					
3.21	Some students with weaker English skills struggle to communicate verbally. <b>[LS, reverse coded]</b>	1	2	3	4	5
3.22	When needed, I provide supports for helping students with lower level English skills to communicate. <b>[LS]</b>	1	2	3	4	5
3.23	Throughout the year, I actively encourage students to pose and explore their own TOK questions. <b>[SE]</b>	1	2	3	4	5
3.24	When students struggle with writing their TOK essays, I give extra help. <b>[LS]</b>	1	2	3	4	5

*Open-ended questions:*

3.25 - What other aspects of your TOK course help to foster international mindedness?

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 MOST 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?

## Section 4: Intercultural understanding in TOK classrooms

### Intercultural Sensitivity Scale

**Direction:** Below is a series of statements concerning intercultural communication. There are no right or wrong answers. Please work quickly and record your first impression by indicating the degree to which you agree or disagree with the statement. Thank you for your cooperation.

- 5 = strongly agree
- 4 = agree
- 3 = uncertain
- 2 = disagree blank before the statement
- 1 = strongly disagree

1. I enjoy interacting with people from different cultures.
2. I think people from other cultures are narrow-minded.
3. I am pretty sure of myself in interacting with people from different cultures.
4. I find it very hard to talk in front of people from different cultures.
5. I always know what to say when interacting with people from different cultures.
6. I can be as sociable as I want to be when interacting with people from different cultures.
7. I don't like to be with people from different cultures.
8. I respect the values of people from different cultures.
9. I get upset easily when interacting with people from different cultures.
10. I feel confident when interacting with people from different cultures.
11. I tend to wait before forming an impression of culturally-distinct peers.
12. I often get discouraged when I am with people from different cultures.
13. I am open-minded to people from different cultures.
14. I am very observant when interacting with people from different cultures.
15. I often feel useless when interacting with people from different cultures.
16. I respect the ways people from different cultures behave.
17. I try to obtain as much information as I can when interacting with people from different cultures.
18. I would not accept the opinions of people from different cultures.
19. I am sensitive to my culturally-distinct peer's subtle meanings during our interaction.
20. I think my culture is better than other cultures.
21. I often give positive responses to my culturally different peer during our interaction.
22. I avoid those situations where I will have to deal with culturally-distinct persons.
23. I often show my culturally-distinct peer my understanding through verbal or nonverbal cues.
24. I have a feeling of enjoyment towards differences between my culturally-distinct peer and me.

**Note:** Items 2, 4, 7, 9, 12, 15, 18, 20, and 22 are reverse coded before summing the 24 items (i.e., 5=1, 4=2, 2=4, 1=5). Interaction Engagement items are 1, 11, 13, 21, 22, 23, and 24, Respect for Cultural Differences items are 2, 7, 8, 16, 18, and 20, Interaction Confidence items are 3, 4, 5, 6, and 10, Interaction Enjoyment items are 9, 12, and 15, and Interaction Attentiveness items are 14, 17, and 19.

*Part 2: Your Intercultural Communications in TOK Classrooms*

4.1 - Which ways of knowing are MOST helpful for guiding discussions that develop students' intercultural understanding? (Mark all that apply.)

- Sense Perception
- Reason
- Emotion
- Faith
- Imagination
- Intuition
- Memory
- Language

4.2 - Which areas of knowledge are MOST helpful for guiding discussions that develop students' intercultural understanding? (Mark all that apply.)

- Mathematics
- Natural Sciences
- Human Sciences
- History
- Religious Knowledge Systems
- Indigenous Knowledge Systems
- The Arts
- Ethics

4.3 - In your TOK classroom, how are your students culturally different from you?

4.4 - What specific topics stimulate discussions that help students to understand the diversity and richness of cultural perspectives?

4.5 - What are others ways that you integrate international mindedness in your TOK classes?



## Appendix B: TOK Practices: A Survey for IBDP Students

*This survey was developed by the researcher especially for this research. The fourth section of the survey also includes the adaptation of Intercultural Sensitivity Scale developed by Chen and Starosta (2000), which we have been given permission to use.*

The online English version of the student survey is located here:  
[https://docs.google.com/forms/d/1VXpCNbsWLw87abfib-yRrBXLOHRX3BMQw8O\\_CyM5f4U/viewform](https://docs.google.com/forms/d/1VXpCNbsWLw87abfib-yRrBXLOHRX3BMQw8O_CyM5f4U/viewform)

Thank you for completing this survey. 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 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

1. Which IB grade level you are in?  
 Grade 11 (or IBDP, year 1)  
 Grade 12 (or IBDP, year 2)
2. Including this year, how many years have you been in an IB school? \_\_\_\_\_
3. How many years have you attended a school with many students of different nationalities? (Enter a number only.) \_\_\_\_\_
4. What is your gender?  
 Female  
 Male
5. In how many languages would you rate yourself as fluent in speaking?  
\_\_\_\_\_  
List your native language: \_\_\_\_\_  
List your other fluent languages: \_\_\_\_\_
6. In how many languages would you rate yourself as beginning or intermediate?  
\_\_\_\_\_  
List your other languages: \_\_\_\_\_

7. About how many times have you taken trips outside of your native country?
- Never
  - Once or twice
  - A few times (3-5)
  - Many times (more than 5)
8. How would you describe the nature of your travels abroad? (Mark all that apply.)
- Have never traveled outside of my home country
  - Short travel with family, a few weeks or less
  - Extended travel with family, a month or more
  - Independent travel, a few weeks or less
  - Independent travel, a month or more
9. 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
10. What is your main subject area in which you might want to major at university?
- Business or administration
  - Engineering
  - Foreign languages
  - History
  - Language studies in my native tongue
  - Law or legal professions
  - Mathematics
  - Medicine or health professions
  - Sciences (biology, chemistry, neuroscience, etc.)
  - Social sciences (economics, psychology, social science, etc.)
  - Other: \_\_\_\_\_
11. Which of the following best describe your long-term career goals?
- Study and work in places around the world
  - Work in my home country in an international business or field
  - Work in my home country in a specialty area, not necessarily international work
  - Uncertain

*Section 2: Your School Culture and International Mindedness*

Review the following statements and circle the response that best reflects your beliefs.

M / C: IB Mission/Community Values

ICP: Intercultural Pedagogy – Supports for Intercultural Competence/Understanding

ML: Supports for Multilingualism / English Supports

GE: Supports for Global Engagement

TOK: Supports for TOK Aims

Item	I believe that my school...	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2.1	Communicates a sense of purpose that reflects the IB learner profile. [M / C]	1	2	3	4	5
2.2	Gives attention to the IB mission. [M / C]	1	2	3	4	5
2.3	Creates a supportive and inviting place for me to learn about other cultures. [ICP]	1	2	3	4	5
2.4	Sets high standards for engaging in community services. [GE]	1	2	3	4	5
2.5	Encourages me to speak English outside of classrooms. [ML]	1	2	3	4	5
2.6	Translates school documents into at least two common languages. [ML]	1	2	3	4	5
2.7	Encourages me to make connections to the construction of knowledge, the academic disciplines, and the wider world. [TOK-1]	1	2	3	4	5
2.8	Encourages my interests in a diversity and richness of cultural perspectives, including an awareness of personal and ideological assumptions. [TOK-3]	1	2	3	4	5

2.9	Emphasizes global issues that are especially seen in our local community. <b>[GE]</b>	1	2	3	4	5
2.10	Gives all students equal opportunity to participate in numerous extracurricular and enrichment activities. <b>[M / C]</b>	1	2	3	4	5
2.11	Promotes intercultural understanding by helping all students to understand their differences. <b>[ICP]</b>	1	2	3	4	5
2.12	Helps me understand the views of people who are different from me. <b>[ICP]</b>	1	2	3	4	5
2.13	Helps me develop language proficiency in all classes, not just language classes. <b>[ML]</b>	1	2	3	4	5
2.14	Values more than just two languages, as shown by multi-lingual activities in drama, music, or other areas. <b>[ML]</b>	1	2	3	4	5
2.15	Embraces the IBDP's emphasis on international mindedness. <b>[M / C]</b>	1	2	3	4	5
2.16	Helps me understand a variety of cultural perspectives. <b>[ICP]</b>	1	2	3	4	5
2.17	Recognizes international achievements and accomplishments of teachers and students. <b>[ICP]</b>	1	2	3	4	5
2.18	Helps me become aware of how individuals and communities construct knowledge and how this is critically examined. <b>[TOK-2]</b>	1	2	3	4	5
2.19	Encourages critical reflection on beliefs and assumptions, leading to more thoughtful, responsible, and purposeful lives. <b>[TOK-4]</b>	1	2	3	4	5
2.20	Gives me opportunities to "make a difference" by	1	2	3	4	5

	helping other people, the school, or the community. <b>[GE]</b>					
2.21	Provides materials, resources, and professional development needed for teaching multi-lingual students. <b>[ML]</b>	1	2	3	4	5
2.22	Engages students in CAS projects that benefit the community. <b>[GE]</b>	1	2	3	4	5
2.23	Encourages me to read intercultural news and topics relevant to global citizenship. <b>[GE]</b>	1	2	3	4	5
2.24	Supports me in my understanding that knowledge brings responsibility, which leads to commitment and action. <b>[TOK-5]</b>	1	2	3	4	5

*Open-ended questions:*

2.25: What three adjectives would you use to describe your school culture?

2.26: How would you describe your school supports for international mindedness?

### Section 3: TOK Classrooms and Language Development

Review the following statements and circle the response that best reflects your beliefs.

SE: Student Engagement

TS: Teacher Support

LS: Language Support

TOK: Meetings Aims of TOK

Item	During my TOK classes...	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
3.1	I try very hard. [SE]	1	2	3	4	5
3.2	I enjoy TOK discussion activities. [TS]	1	2	3	4	5
3.3	Students who are not as good at English have plenty of opportunity to participate. [LS, reverse coded]	1	2	3	4	5
3.4	I participate actively in discussions. [SE]	1	2	3	4	5
3.5	I'm learning to link the construction of knowledge with academic disciplines. [TOK-1]	1	2	3	4	5
3.6	I see how TOK concepts relate with the wider world. [TOK-2]	1	2	3	4	5
3.7	I'm learning how individuals and communities construct knowledge and how this is critically examined. [TOK-3]	1	2	3	4	5
3.8	All students are encouraged to express their preferences and opinions. [TS]	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. [LS]	1	2	3	4	5
3.10	Essay writing skills needed for TOK are developed through practice and feedback. [LS]	1	2	3	4	5

3.11	Each session is designed so that TOK concepts contribute to my positive learning experience. <b>[TS]</b>	1	2	3	4	5
3.12	I'm developing interests in a diversity and richness of cultural perspectives, such awareness of personal and ideological assumptions. <b>[TOK-3]</b>	1	2	3	4	5
3.13	Together we reflect critically on beliefs and assumptions, leading to more thoughtful, responsible, and purposeful lives. <b>[TOK-4]</b>	1	2	3	4	5
3.14	I've become interested in TOK ways of knowing and areas of knowledge. <b>[SE]</b>	1	2	3	4	5
3.15	Language learning is supported through techniques that help me at my level of language development. <b>[LS]</b>	1	2	3	4	5
3.16	I understand that knowledge brings responsibility, which leads to commitment and action. <b>[TOK-5]</b>	1	2	3	4	5
3.17	My teacher provides me with choices and options regarding coursework. <b>[TS]</b>	1	2	3	4	5
3.18	I pay attention, and contribute to a healthy classroom atmosphere for learning from my peers. <b>[SE]</b>	1	2	3	4	5
3.19	Most of us are actively engaged in TOK discussions on any given day. <b>[SE]</b>	1	2	3	4	5
3.20	We all get an opportunity to share their perspectives, even students who are generally more shy or reserved. <b>[TS]</b>	1	2	3	4	5
3.21	Some students with weaker English skills struggle to communicate verbally. <b>[LS, reverse coded]</b>	1	2	3	4	5
3.22	When needed, my teacher provides supports for helping students with lower level English skills to communicate. <b>[LS]</b>	1	2	3	4	5

3.23	Throughout the year, we actively pose and explore our own TOK questions. [SE]	1	2	3	4	5
3.24	When I struggle with writing my TOK essays, my teacher gives extra help. [LS]	1	2	3	4	5

*Open-ended questions:*

3.25 - What other aspects of your TOK course foster international mindedness?

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
- Q&A sessions
- Visuals and videos
- Whole class discussion
- Bringing up personalized discussion topics

3.27 - How does your teacher support you to write the TOK essay? (Check all that apply)

- Gives advice
- Supplies extra readings/materials
- Gives written feedback
- Gives oral feedback
- Helps me explore the topic by asking further questions

3.28 - Which techniques are MOST effective for supporting your oral English skills?

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



#### **Section 4: Intercultural understanding in TOK classrooms**

##### **Intercultural Sensitivity Scale**

Direction: Below is a series of statements concerning intercultural communication. There are no right or wrong answers. Please work quickly and record your first impression by indicating the degree to which you agree or disagree with the statement. Thank you for your cooperation.

- 5 = strongly agree
- 4 = agree
- 3 = uncertain
- 2 = disagree blank before the statement
- 1 = strongly disagree

1. I enjoy interacting with people from different cultures.
2. I think people from other cultures are narrow-minded.
3. I am pretty sure of myself in interacting with people from different cultures.
4. I find it very hard to talk in front of people from different cultures.
5. I always know what to say when interacting with people from different cultures.
6. I can be as sociable as I want to be when interacting with people from different cultures.
7. I don't like to be with people from different cultures.
8. I respect the values of people from different cultures.
9. I get upset easily when interacting with people from different cultures.
10. I feel confident when interacting with people from different cultures.
11. I tend to wait before forming an impression of culturally-distinct peers.
12. I often get discouraged when I am with people from different cultures.
13. I am open-minded to people from different cultures.
14. I am very observant when interacting with people from different cultures.
15. I often feel useless when interacting with people from different cultures.
16. I respect the ways people from different cultures behave.
17. I try to obtain as much information as I can when interacting with people from different cultures.
18. I would not accept the opinions of people from different cultures.
19. I am sensitive to my culturally-distinct peer's subtle meanings during our interaction.
20. I think my culture is better than other cultures.
21. I often give positive responses to my culturally different peer during our interaction.
22. I avoid those situations where I will have to deal with culturally-distinct persons.
23. I often show my culturally-distinct peer my understanding through verbal or nonverbal cues.
24. I have a feeling of enjoyment towards differences between my culturally-distinct peer and me.

**Note:** Items 2, 4, 7, 9, 12, 15, 18, 20, and 22 are reverse coded before summing the 24 items (i.e., 5=1, 4=2, 2=4, 1=5). Interaction Engagement items are 1, 11, 13, 21, 22, 23, and 24, Respect for Cultural Differences items are 2, 7, 8, 16, 18, and 20, Interaction Confidence items are 3, 4, 5, 6, and 10, Interaction Enjoyment items are 9, 12, and 15, and Interaction Attentiveness items are 14, 17, and 19.

*Part 2: Your Intercultural Communications in TOK Classrooms*

4.1 - Which ways of knowing are MOST helpful for guiding discussions that develop students' intercultural understanding? (Mark all that apply.)

- Sense Perception
- Reason
- Emotion
- Faith
- Imagination
- Intuition
- Memory
- Language

4.2 - Which areas of knowledge are MOST helpful for guiding discussions that develop students' intercultural understanding? (Mark all that apply.)

- Mathematics
- Natural Sciences
- Human Sciences
- History
- Religious Knowledge Systems
- Indigenous Knowledge Systems
- The Arts
- Ethics

4.3 - In your TOK classroom, how are your peers culturally different from you?

4.4 - In your TOK classroom, what specific topics stimulate discussions that help you to understand the diversity and richness of cultural perspectives?

4.5 - What three adjectives would you use to describe the integration of international-mindedness into your TOK course?

## Appendix C: Parent Permission for Students to Participate

### Theory of Knowledge (TOK) Research in IBDP Schools Spring 2016

Your child's school is part of a research study to help us learn about how TOK works in schools. We invite your child to participate in a 60-minute survey that will be given during the school day.

#### **What is the purpose of this study?**

This study is examining the implementation of Theory of Knowledge (TOK) and international mindedness in IBDP schools. Findings will help us understand how TOK is implemented across schools, especially how it supports multilingualism and intercultural understanding. The research team will share the overall findings with each school, which may contribute to future decision making about TOK in schools.

#### **How long will the survey take?**

The survey will take about 45-60 minutes if your child fully responds to each survey question.

#### **What are the potential risks and benefits of taking part in this survey?**

We do not anticipate any risks. If there are any questions that students do not wish to answer, they may skip those items. Your child's participation will help us learn more about student experiences of TOK.

#### **Will my child's responses remain confidential?**

Yes. All responses will be anonymous and not associated with any particular student names.

#### **Who should I contact if I have questions?**

You may contact the supervising researcher, Dr. Robin Ann Martin at email: [RMartin@bilkent.edu.tr](mailto:RMartin@bilkent.edu.tr) or phone 0312-290-2922. If you would like to speak with someone in Turkish about this research, please call the Bilkent University Graduate School of Education, 0312-290-2950.

#### **Name and Signature**

I have read (or someone has read to me) the above information.

Student's name: \_\_\_\_\_

Parent's name: \_\_\_\_\_

Please check the appropriate box:

I agree for my child to participate in this study

I do *not* agree for my child to participate in this study

\_\_\_\_\_  
Parent signature

\_\_\_\_\_  
Date

## Appendix D: Permission to Use the ISS

*The e-mail version of the permission to use the adaptation of Intercultural Sensitivity Scale developed by Chen and Starosta (2000) is attached here.*

From: Guo-Ming Chen [mailto:gmchen@uri.edu]  
Sent: Sunday, November 29, 2015 5:41 PM  
To: Robin Ann Martin Subject:  
Re: Permission to use the Intercultural Sensitivity Scale

Hi, Robin. Thanks for the inquiry. You have permission the Intercultural Sensitivity Scale for your proposed research with MA students at Bilkent University. We didn't develop a new IS scale, because the original one continues to be stable and valid cross-culturally. I think ISS has been used in Turkey before, but not sure if it's published. It's ok to rephrase the items to fit the local culture, just to make sure the reliability is on the satisfactory level. I think the scale should be suitable for adolescents in high school. Attached is an article which may help to understand more about the concept of intercultural communication competence (ICC). Intercultural sensitivity is one of the dimensions of ICC.

Best,  
Guo-ming

\*\*\*\*\*

Guo-Ming Chen, Professor IAICS President/CMR Co-Editor  
Department of Communication Studies  
University of Rhode Island  
10 Lippitt Road, 310 Davis Hall  
Kingston, RI02881, USA  
Tel: 401-874-4731/Fax: 401-874-4722  
URL: <http://www.uri.edu/personal/gmchen/>  
URL: <http://www.uri.edu/iaics/>  
URL: <http://www.chinamediaresearch.net/>

\*\*\*\*\*

## Appendix E: Research Questions, Methods and Items

Question	Method	Items
1.a: Do students' prior experiences in international and IB schools differ across school?	One-way ANOVA	Section 1, Q2 Section 1, Q3
1.b: Do students' prior experiences in other countries and cultures differ across schools?	One-way ANOVA	Section 1, Q7
1.c: How do students describe themselves as being different from their peers?	Qualitative	Section 4, Q4.3

Question	Method	Items
2.a: What were students' overall self-ratings of intercultural sensitivity?	Descriptive	Section 4, ISS items
2.b: Do students with more experience in a variety of cultures have higher IS scores than those with fewer experiences across cultures?	Independent samples <i>t</i> test	Section 1, Q7 Section 4, ISS scores
2.c: Do students in schools with mostly international peers have higher ISS scores than those with peers who are from similar backgrounds?	Independent samples <i>t</i> test	Section 1, school type Section 4, ISS scores

Question	Method	Items
3.a: How do students describe their school culture?	Qualitative	Section 2, Q2.25
3.b: How do students describe their schools' supports for intercultural pedagogy, including the development of intercultural understanding and intercultural competence?	One-way ANOVA	Section 2, ICP items 2.3, 2.11, 2.12, 2.16, 2.17
3.c: How do students describe their schools' support for global engagement?	One-way ANOVA	Section 2, GE items 2.4, 2.9, 2.20, 2.22, 2.23
3.d: How do students describe their schools' supports for the aims of TOK, which all closely relates to IM?	One-way ANOVA	Section 2, TOK items 2.7, 2.8, 2.18, 2.19, 2.24

Question	Method	Items
4.a: What are teachers' relevant backgrounds for teaching TOK?	Descriptive	Section 1, Q2, 3, 5, 11 Section 2, Q2.26
4.b: What are the opportunities noted for developing intercultural competence?	Qualitative	

Question	Method	Items
5.a: What aspects of TOK foster IM?	Qualitative	Section 3, Q3.25
5.b: Which student-centered strategies are used while implementing TOK?	One-way ANOVA	Section 3, SE items 3.1, 3.4, 3.14, 3.18, 3.19, 3.23 and TS items 3.2, 3.8, 3.11, 3.17, 3.20
5.c: What are the students' perspectives on achieving the aims of TOK?	One-way ANOVA	Section 3, TOK items 3.5, 3.6, 3.7, 3.12, 3.13, 3.16
5.d: Which AOKs and WOKs guide discussions that develop students' intercultural understanding?	Qualitative	Section 4, Q4.1 and Q4.2

Question	Method	Items
6.a: Do students who rate stronger in intercultural sensitivity have more positive attitudes about the implementation of TOK than the ones who rate weaker in intercultural sensitivity?	Independent samples <i>t</i> test	Section 3, TOK items Section 4, IS scores
6.b: Do students with more experience in a variety of cultures have more positive attitudes about the implementation of TOK courses than those with fewer experiences across cultures?	Independent samples <i>t</i> test	Section 1, Q7 Section 3, TOK items
6.c: Do students in schools with mostly international peers have more positive attitudes about the implementation of the TOK courses than those with peers who are from similar backgrounds?	Independent samples <i>t</i> test	Section 1, School type Section 3, TOK items