International Comparative Survey on Global Mindset, Competencies and PPDAC for High School Students among 10 Countries

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Education Bureau of the Laboratory Schools
University of Tsukuba

Forward

Throughout the last two and half years of the SGH program activities, goals of developing the high school students' awareness and deed knowledge of social issues, communication ability and problem-solving skills seems to have been steadily achieving through various attractive and insightful activities with continuous efforts by the SGH designated schools and associates.

This report is based on the international research project conducted by the Tsukuba SGH Research Team in collaboration with international researchers. The common goal of this international project is to discover similarities and differences of the high school students' psychological and behavioral characteristics among 10 countries, as well as to search for the best practice model of developing future global leaders.

We are bringing up the future global leaders who can solve the problems that no one ever had experienced before. Things and systems never existed until now cannot come out only in Japan. Our goal of developing next generation of global leaders should be achieved in collaboration with the trans-border society in a global network.

I do hope this research report will provide all the SGH designated schools and associates useful information for advancing each school's SGH program, but also it will contribute to the progress of this important area of international research subject.

Vice President, Professor Shinya Miyamoto, M.D. Ph.D.
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巻頭言

これまで二年半のスーパーグローバルハイスクールの活動を通して、「生徒の社会課題に対する関心と深い教養、コミュニケーション能力、問題解決力等の国際的素養を育成する」という目標は、指定校およびアソシエイトによる多様な魅力的かつ洞察に富む活動の継続的なご尽力を通して、着実に達成されていると思われます。

本報告書は、筑波SGH研究班による海外研究者との国際共同プロジェクトにもとづくものです。この国際プロジェクトの共通目標は、10か国間の高校生の心理的かつ行動的特性の共通点と相違点を明らかにするとともに、将来のグローバルリーダー育成にむけたベストプラクティスモデルを探求することにあります。

私たちは、これまで誰も経験したことがない課題を解決しなければならない将来のグローバルリーダーを育成しています。これまでなかったものやシステムは日本の中だけから生まれてくるものではないでしょう。次世代のグローバルリーダー育成は、グローバルネットワークにおけるトランスボーダー社会との協働作業を通して実現するといえます。

本研究報告書がすべてのSGH指定校、アソシエイト各校のさらなるSGHプログラムの進展に有益な情報を提供するとともに、グローバル社会におけるこの重要な研究領域の前進に寄与することを切に願っています。

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Contents

Part II Country Report

China

Finland

Germany

Japan

Korea

New Zealand

Singapore

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日本語要約 (Summary in Japanese), Overview of the Survey, Part I Results of International Comparative Survey among 10 Countries

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日本語要約

1. 序論

次世代グローバルリーダーの育成は、国際社会に共通する重要かつ緊急な課題といえる。発達心理学者の E. H. エリクソンによれば、高校生は『青年期』（13 歳～19 歳）の発達段階の後期に属し、この時期の発達課題は、対人関係を通して個人のアイデンティティを確立することである。したがって、この時期における国際教育や異文化経験は、高校生のグローバルマインドセットやコンピテンシー育成にとって極めて重要といえる。

2. 研究目的

本研究の目的は、10 ヵ国（オーストラリア、中国、フィンランド、ドイツ、日本、韓国、ニュージーランド、シンガポール、タイ、米国）における高校生の心理的かつ行動的特性に関する国別特徴を明らかにすることである。主要な調査項目として、グローバルマインドセット、グローバルリーダーシップ・コンピテンシー、PPDAC（Problem:問題－Plan:立案－Data:データ—Analysis:分析－Conclusion:結論）を用い、各国の特徴を明らかにする。

3. 結果の適用可能性

本調査結果は、将来を見据えて複数かつ実践的な役割を果たすものといえる。第一に、国際比較調査を通して、グローバルな能力に関する各国の特徴、「強み」と「弱み」を浮き彫りにすることにより、どの側面を強化、育成することが重要なのかを明らかにすることができる。第二に、各国に共通して得点が高く、分散が少ない項目を知ることにより、将来的な高校生のグローバルリーダー研修の国際標準プログラムの開発に役立つことが期待される。第三に、本調査結果をエリクソンによる次の発達段階である『初期成年期』（20 歳～39 歳）と比較することにより、発達課題の到達状況の把握に役立つ連続性のあるモデル構築に役立つと思われる。

4. 調査方法

a. 対象とサンプル数

本調査の対象となるのは、10 ヵ国（オーストラリア、中国、フィンランド、ドイツ、日本、韓国、ニュージーランド、シンガポール、タイ、米国）の 14 歳から 18 歳＋の高校生である。一ヵ国あたり複数の高校が参加し、一校あたり 20 名程度を目標に実施した。

b. 質問項目

質問項目は、以下の 6 項目から構成されている。（1）個人属性、（2）異文化経験、（3）グローバルリーダーシップ・コンピテンシー、（4）グローバルマインドセット、（5）PPDAC、（6）将来的に期待される国際プログラムについての自由記入。質問票は、最初に日本語で作成され、次に、英語版に翻訳され（バックトランスレーション）、その後、英語版から 5 ヵ国語版（中国語、韓国語、タイ語、フィンランド語、ドイツ語）に翻訳された。

c. データ収集

筑波大学東京キャンパスにおける調査班によって Web アンケート調査が実施され、各校には、調査ウェブサイトに接続するための ID が配布された。

5. 本レポートの構成

本レポートの本体（英語版）は、二部構成となっており、第一部は、クロス集計による調査結果の 10 ヵ国比較が掲載されている。第二部には、各国カントリーレポートが掲載されており、主要な3つの調査項目（グローバルリーダーシップ・コンピテンシー、グローバルマインドセット、PPDAC）に焦点を当てた分析が加えられ、その背景にある各国の教育システ

ムおよび、調査結果にもとづく各国のグローバルリーダー人材育成の課題が提示されている。なお、巻末には、本調査で用いた英語版の調査票が補遺として添付されている。
※日本語版調査票については、「SGH グローバルリーダーシップ調査報告書 2015 年度」（筑波大学附属学校教育局・筑波大学附属高等学校）に収録されているので、そちらを参照されたい。

6. 調査結果の概要（要点）

Q1. 個人属性

・10 ヵ国全体の回答数は、2,863 名であり、最大は、日本（n=1,911）最小は、フィンランド（n=25）であった。（Table Q1a）
・年齢は、16 歳をピークとして、14 歳以下から 18 歳以上の間に分布している。
・性別は、全体としては、女子（57.3%）の方が、男子（42.7%）よりも若干多い。
・第一言語は、サンプル数を反映して、日本語を除くと、英語（34.6%）、ドイツ語（19.1%）、タイ語（14%）、中国語（13.1%）が上位を占める。
・教育制度は、全体サンプルとしては 9 割が共学、女子校（8%）、男子校（2%）である。
・海外経験については、全体で 63.5%が渡航経験をもち、上位 3 か国は、シンガポール（97.3%）、ドイツ（95.0%）、フィンランド（94.6%）、下位 3 か国は、韓国（40.4%）、日本（55.5%）、中国（59.8%）であった。

Q2a. 海外経験

海外経験の高い生徒が多い国は、シンガポール（97.3%）、ドイツ（95.0%）、フィンランド（94.6%）であり、一方、低い生徒が多い国は、韓国（40.4%）、日本（55.5%）、中国（59.8%）であった。

Q2b-1. 海外渡航国数

海外訪問国数について、“1か国のみ”と回答した高校生は、日本（38.2%）、韓国（30.6%）で高く、ドイツ（4.7%）、シンガポール（2.8%）、ニュージーランド（0%）では低い。一方、“10 か国以上”と回答した高校生は、ニュージーランド（42.9%）、シンガポール（32.1%）、ドイツ（29.8%）、タイ（20.5%）で高い。

Q2b-2. 一番長く滞在した国名

回答者数が一番長く滞在した国名の上位2か国は、米国 （20.3%）、中国 （15.6%）であり、シンガポール（7.0%）、英国（7.0%）、ニュージーランド （5.5%）が続いている。

Q2b-3. 一番長く海外滞在した期間

ほとんどの国で、海外滞在期間は、1週間から1か月が中心であった。韓国（33.3%）、日本（29.5%）は、「1週間以内の滞在」の回答比率が他国に比べると多く、滞在期間が短い傾向がある。

Q3. 異文化経験

韓国（42.7%）とタイ（24.8%）では、異文化経験が「ない」、もしくは「まれ」と回答した比率が高い。一方、ニュージーランドでは、異文化経験が「頻繁」、「非常に頻繁」のいずれかを回答した割合は7割を超えている。

Q4. 異文化能力

異文化環境における知識の活用や獲得、対人関係の構築など7つの能力項目について、全般的に、オーストラリア、中国、ニュージーランド、シンガポール、米国は、ドイツ、フィンランド、日本、韓国より高い傾向を示している。また、日本（3.81）、タイ（3.87）は「ノンバーバル（非言語）コミュニケーション」（全体平均 3.98）、ドイツ（3.83）は「初めて訪れた国でも楽しく過ごすこ

とができる」（全体平均 4.09）という項目の得点について他国より低い傾向が見られる。

Q5. 異文化問題の経験
異文化問題の経験について、オーストラリア（80%）、韓国（71.9%）、米国（77.6%）が、中国（61.7%）、ドイツ（57.7%）、フィンランド（68.0%）、日本（61.3%）、ニュージーランド（58.1%）、シンガポール（58.9%）、タイ（62.4%）に比べて、「経験なし」の比率が高い傾向を示している。

Q6-1. クリティカルインシデント（危機的状況）の新規性
異文化クリティカルインシデントにおいて「新規性がある」、「大変新規性が高い」と回答した上位3ヵ国は、日本（52.1%）、韓国（48%）、シンガポール（32.6%）であり、下位3ヵ国は、米国（19.5%）、ドイツ（16.5%）、フィンランド（0%）であった。

Q6-2.& Q7.グローバルリーダーシップ・コンピテンシーの活用
異文化クリティカルインシデントの解決に向けた、グローバルリーダーシップ・コンピテンシーの活用について、「実際に経験した」高校生（Q6-2）と、「実際に経験したことはないが、そのような状況に置かれた場合を想定した」高校生（Q7）について、同じコンピテンシーの種類をどの程度用いることができるのかについて質問を行った。

異文化クリティカルインシデントを「実際に経験した」高校生のグローバルリーダーシップ・コンピテンシーの活用度について、10 ヵ国間で比較した結果、「自分と異なる立場の人の価値観を尊重した。」、「反対意見にも耳を傾けた。」、「今回の出来事から、学んだことを振り返った。」という3項目は、平均点が高く、分散が小さいことから、国際的に共通して重要な項目であることが確認された。一方、日本は、5 つの項目（「反対意見にも耳を傾ける」、「自分の得意な能力を活かす行動をとる。」、「自分の意見を効果的に述べて相手に説明する。」、「解決が進んでいるか、途中で確認する。」、「解決に向けて強い情熱を持ち続ける。」でとくに得点の低いことが確認された。

分析の結果、全ての項目について、「経験したことはない」生徒の方が、「実際に経験した」生徒に比べて、実施可能と考える傾向が高い結果が示された。このことから、実際に経験している生徒の方が、経験したことがない生徒に比べて、コンピテンシーを発揮することの難しさを感じているといえる。

SQ6-3. クリティカルインシデントの経験が、その国の文化についての考えに与える影響
クリティカルインシデントを経験することが、その国の文化についての考えに与える影響については、日本（72.2%）が最も高く、フィンランド（0%）、中国（12.2%）、ドイツ（29.4%）は比較的低い影響を示している。

SQ6-4. クリティカルインシデント経験後におけるものの見方や行動の変容
「外国の文化を理解することの大切さを感じた。」という項目については、中国（100%）が全員賛同しており、日本（69.2%）、韓国（69.2%）、ニュージーランド（68.8%）、タイ（66.7%）、米国（75%）と続く。「外国の文化に対する興味や関心が高まった。」という項目については、米国（62.5%）、中国（60.0%）で高く、ニュージーランド（25%）では低い。「異文化に対する自分の行動を変えるきっかけになった。」は、オーストラリア（80%）で高く、ドイツ（64%）、ニュージーランド（62.5%）が続く。「異文化における新しい行動パターンを身に着けた。」という項目については、シンガポール（68.4%）で高く、韓国（23.1%）と日本（28.4%）では低い。

SQ6-5. クリティカルインシデント後の当該国に対する理解
クリティカルインシデントを経験した後のその国に対する理解レベルが「高い」または「非常に高い」と回答した比率が高い国は、フィンランド（50%）、オーストラリア（40%）、米国（27.8%）

の3ヵ国であった。一方、「低い」、もしくは「非常に低い」と回答した比率が高い国は、日本（28.6%）、韓国（20.0%）であった。

SQ6-6. クリティカルインシデントの解決度
経験したクリティカルインシデントが解決したかどうかについて、「ほぼ解決した」、「完全に解決した」を合わせた回答率が高いのは、中国（58.5%）および、ニュージーランド（54.8%）であり、一方、ドイツ（23.5%）は低い値を示している。日本（41.9%）は中間グループに位置している。

Q8. 外国のことについて説明する能力（6 点尺度）
外国のどこか一つの国の「政治」、「経済」、「貧困問題」、「歴史」、「宗教」について、どの程度説明できるかについての質問について、日本は全ての項目について他国を下回っている。
項目別に見ていくと、「政治」について、中国（3.64）、ニュージーランド（3.55）が高い得点を示している。同様に、「経済」についても中国（3.95）、ニュージーランド（3.57）の得点が高い。「貧困問題」については、ニュージーランド（4.15）、オーストラリア（4.12）の得点が高く、「歴史」に関しては、フィンランド（4.20）、米国（4.16）、中国（4.08）、オーストラリア（4.04）で高く、オーストラリア（4.04）、タイ（3.59）、ドイツ（3.43）、日本（3.17）が低い値を示している。

Q9. グローバルマインドセット
36 項目のグローバルマインドセット項目を集約するために因子分析をかけたところ、第 1 因子「多文化理解」、第 2 因子「国際志向」、第 3 因子「国際関係」、第 4 因子「国際情報」、第 5 因子「将来選択」、第 6 因子「自信」の 6 因子に分類することができた。

第 1 因子「多文化理解」については、ニュージーランド、シンガポール、および米国で全ての構成項目が高い得点を示している。逆に、フィンランドは、全ての項目について低い傾向を示し、それ以外の国々は、両者の中間に位置する。

第 2 因子「国際志向」についても、ニュージーランド、シンガポール、および米国が全ての構成項目において得点が高く、ドイツは得点が低い。日本は中間に位置する。

第 3 因子「対人関係」においては、オーストラリア、中国、ニュージーランド、シンガポール、および米国が日本、中国、タイに比べて高い値を示している。

第 4 因子「国際情報」については、中国が全ての項目において高く、日本が低い傾向がある。また、「外国語で自国の政治や経済について外国人に説明できる」という項目について、オーストラリアと日本は、中国を大きく下回っている。

第 5 因子「将来選択」について、中国、ニュージーランド、シンガポール、および米国は高い数値を示す。海外留学について、ニュージーランドは高い一方、ドイツと日本は低い傾向が見られる。

第 6 因子「自信」について、中国、ニュージーランド、シンガポールでは高く、日本は全ての項目において低い。

6 因子について、10 ヵ国間の得点を比較した結果、第 1 因子「多文化理解」および第2因子「国際志向」については、平均値が高く、分散も低いことから、国際的に共通して重要な因子であることが確認された。一方、第 3 因子「対人関係」、第 4 因子「国際情報」、第 6 因子「自信」について、他国にくらべて日本の得点が顕著に低いことが確認された。

Q10. PPDAC（科学的思考法）
PPDAC（Problem:問題－Plan:計画－Data:データ—Analysis:分析－結論:Conclusion）における「問題発見スキル」の得点は、中国、ニュージーランド、シンガポール、および米国において高く、フィンランド、日本、タイで低い。同様の傾向は、「解決計画の策定」、「データ収集」、「提案作成能力」においても確認される。オーストラリア、韓国、フィンランド、日本、タイの「分析能力」は、中国、ニュージーランド、シンガポール、米国、ドイツに比べて、低い得点に留まっている。

PPDAC の得点を 10ヵ国で比較した結果、いずれの5項目についても他国に比べて日本の得点が非常に低いことが確認された。

Overview of the Survey

1. Introduction

There is no doubt that developing the future global leaders is one of the most important and urgent agendas for the current world society. Next generation of leaders should possess the abilities such as cross-cultural communication, team building for the multinational members, and problem solving for the unknown issues to lead the diversified global organization.

According to the Erikson's stages of psychosocial development theory, ages of the high school students is categorized as "Adolescence (13-19 years old)" the fifth stage of eight stages and transition from childhood to adulthood. At this stage, an adolescent has to face the struggles to find his or her own identity by having social interactions including the people besides family members. Those experiences are also expected to develop a sense of morality at the same time. Therefore, international education and cross-cultural experience will be significantly meaningful for high school students to develop their global mindset and competencies.

2. Research objectives

Objectives of this research project is to identify the common as well as the country-specific psychological and behavioral traits of the high school students among 10 countries (Australia, China, Finland, Germany, Japan, South Korea, New Zealand, Singapore, Thailand, USA). Constructs of global mindset, global leadership competencies and the PPDAC (Problem-Plan-Data-Analysis-Conclusion: scientific thinking for problem solving) were used to depict the features of profile in each country. Web-based questionnaire survey was administrated in collaboration with the international research partners.

3. Implication of the survey

Implication of this survey will be multifold and practical looking toward future. First, the result of this survey shall discover the strength and the weakness of global abilities of high school students in each county by comparing the profile with the other countries. It will provide the information of which area of abilities need to be developed in each country.

Second, the result of this survey shall reveal the commonly important global abilities for high school students among 10 countries which shows the higher average scores and the smaller variance. It will help to develop an internationally standardized global leaders training program for high school student in the future.

Finally, the result of this survey could be compared with that of the next stages of psychosocial development stage (Early adulthood, 20-39 years old) by using the same scale. This comparison shall construct a continuous model for measuring the level of developments in global abilities from the Adolescence stage to the Early adulthood stage.

4. Methodology

a. Target and size of samples

Target of this survey is high school students of age 14-18+ (based on the school system of the country) in 10 countries (Australia, China, Finland, Germany, Japan, South Korea, New Zealand, Singapore, Thailand, the USA). Multiple high schools in each country were approached directly by the research project team or through collaboration with the international researchers of the target country. Each school participated in the research is requested to contribute around 20 students of which demographics (ex. gender and school year) represents the average profile of students in the school.

b. Question items

Survey questions are composed of the following six sections: (1) Individual demographics, (2) experience of the cross-cultural incidents, (3) global leadership competencies to solve the cross-cultural incidents, (4) global mindset, and (5) PPDAC (Problem-Plan-Data-Analysis-Conclusion): problem solving skills based on the scientific thinking, and (6) free answer to the expected future international programs. Question items were originally created in Japanese and translated into English (with back translation). International questionnaire survey was conducted by seven languages, Japanese, English and the other five languages (Chinese, South Korean, Thai, Finnish, German) which are translated from the English version of the questionnaire.

c. Data collection

Web-based questionnaire surveys were administrated by the research headquarters in the University of Tsukuba, Tokyo campus. Each school was assigned an ID to connect to the questionnaire website. Respondents answered the questionnaire anonymously. Survey period was between Jan-Mar, 2015 for Japan survey and April-October, 2015 for the other nine countries based on the school calendar of each country.

5. Structure of this report

This report is composed of two parts. The first part introduces the results of international comparative survey among 10 countries based on the cross-tabular analysis. The second part presents the country specific research results focused on the three key constructs, global leadership competencies, global mindset, and PPDAC. Those country based reports also include the section of the education system of the country to understand the background of the survey results. English version of questionnaire is attached as an appendix at the end of the paper.

Part I

Results of International Comparative Survey among 10 countries

Q1. Demographics

α. Number of the collected samples (Table Q1a)

Total 2,863 sample from 10 countries was collected through this web survey. The largest number of sample is Japan (n=1,911) and the smallest one is Finland (n=25.)

Table Q1α. Number of collected samples by country

	Analysis unit	
	n	%
Australia	50	1.7%
China	107	3.7%
Germany	201	7.0%
Finland	25	0.9%
Japan	1911	66.7%
South Korea	89	3.1%
New Zealand	74	2.6%
Singapore	112	3.9%
Thailand	133	4.6%
USA	161	5.6%
Total	**2863**	**100.0%**

a. Age (Table Q1a)

The age group is distributed in a shape of normal distribution curve with the largest age group is found at 16 years old (34.5%).

Table Q1a. Age

	Q1a. Age	
	n	%
<=14 years old	82	2.9%
15 years old	913	31.9%
16 years old	987	34.5%
17 years old	696	24.4%
>=18 years old	180	6.3%
Total	**2858**	**100.0%**

b. Gender (TQ1b)

Average of female proportion is 57.3%, the largest is Singapore (88.4%) and the smallest is Korea (0%).

Table Q1b. Gender ratio

		Q-01b		
		Female	Male	Total
Australia	Count	28	22	50
	% within country	56.0%	44.0%	100.0%
China	Count	58	47	105
	% within country	55.2%	44.8%	100.0%
Germany	Count	108	91	199
	% within country	54.3%	45.7%	100.0%
Finland	Count	16	9	25
	% within country	64.0%	36.0%	100.0%
Japan	Count	1143	768	1911
	% within country	59.8%	40.2%	100.0%
Korea	Count	0	89	89
	% within country	0.0%	100.0%	100.0%
New Zealand	Count	36	38	74
	% within country	48.6%	51.4%	100.0%
Singapore	Count	99	13	112
	% within country	88.4%	11.6%	100.0%
Thailand	Count	64	69	133
	% within country	48.1%	51.9%	100.0%
USA	Count	87	73	160
	% within country	54.4%	45.6%	100.0%
Total	Count	1639	1219	2858
	% within country	57.3%	42.7%	100.0%

c. First language (Q1c)

Although target student could choose the language to answer the questions on the questionnaire site, first language of the respondents basically represents the number of students who participated in the survey from each country.

Besides Japanese, English (34.6%) constitutes the largest portion of the first language of the respondents, and it is followed by German (19.1%), Thai (14%) and Chinese (13.1%)

Table Q1c. First language (except Japanese sample)

	Q1c. First language	
	n	%
English	328	34.6%
French	2	0.2%
German	181	19.1%
Korean	99	10.5%
Simplified Chinese	124	13.1%
Thai	133	14.0%
Other	80	8.4%
Total	**947**	**100.0%**

d. School system (Q1d)
The largest school system of the samples is co-ed (90.0%) and all girls' school (8%) is larger than all boys' school (2%).

Table Q1d. School system

		Q-01d			
		Coed	All Girls	All Boys	Total
Australia	Count	50	0	0	50
	% within country	100.0%	0.0%	0.0%	100.0%
China	Count	105	0	0	105
	% within country	100.0%	0.0%	0.0%	100.0%
Germany	Count	198	0	0	198
	% within country	100.0%	0.0%	0.0%	100.0%
Finland	Count	25	0	0	25
	% within country	100.0%	0.0%	0.0%	100.0%
Japan	Count	1760	140	1	1901
	% within country	92.6%	7.4%	.1%	100.0%
Korea	Count	34	0	55	89
	% within country	38.2%	0.0%	61.8%	100.0%
New	Count	74	0	0	74
	% within country	100.0%	0.0%	0.0%	100.0%
Singapore	Count	22	88	0	110
	% within country	20.0%	80.0%	0.0%	100.0%
Thailand	Count	133	0	0	133
	% within country	100.0%	0.0%	0.0%	100.0%
USA	Count	159	0	0	159
	% within country	100.0%	0.0%	0.0%	100.0%
Total	Count	2560	228	56	2844
	% within country	90.0%	8.0%	2.0%	100.0%

Q2a. Overseas experience

Top three countries show the high overseas experience are Singapore (97.3%), Germany (95.0%) and Finland (94.6%). Bottom three countries are South Korea (40.4%), Japan (55.5%) and China (59.8%).

Table Q2a. Overseas experience

		Q2.a.		Total
		No	Yes	
Australia	n	10	39	**49**
	%	20.4%	79.6%	**100.0%**
China	n	43	64	**107**
	%	40.2%	59.8%	**100.0%**
Germany	n	10	191	**201**
	%	5.0%	95.0%	**100.0%**
Finland	n	1	24	**25**
	%	4.0%	96.0%	**100.0%**
Japan	n	849	1061	**1910**
	%	44.5%	55.5%	**100.0%**
South Korea	n	53	36	**89**
	%	59.6%	40.4%	**100.0%**
New Zealand	n	4	70	**74**
	%	5.4%	94.6%	**100.0%**
Singapore	n	3	109	**112**
	%	2.7%	97.3%	**100.0%**
Thailand	n	21	112	**133**
	%	15.8%	84.2%	**100.0%**
USA	n	49	112	**161**
	%	30.4%	69.6%	**100.0%**
Total	**n**	**1043**	**1818**	**2861**
	%	**36.5%**	**63.5%**	**100.0%**

Q2b-1. Number of foreign countries visited in total

Japanese (38.2%) and South Korean (30.6%) students who have been to "one country" were much higher than German (4.7%), Singaporean (2.8%) and New Zealander (0%) students. As the number of visited foreign country increased, the proportion decreased in that order. However, 12.6% of students have visited “more than 10 countries”. Higher responses rate in visited "more than ten counties" was found in New Zealand (42.9%), Singapore (32.1), Germany (29.8%), and Thailand (20.5%).

Table Q2b-1. Number of foreign countries visited in total

		Q2.b-1.										Total
		1	2	3	4	5	6	7	8	9	10+	
Australia	n	4	9	2	6	6	1	4	0	0	7	**39**
	%	10.3%	23.1%	5.1%	15.4%	15.4%	2.6%	10.3%	0.0%	0.0%	17.9%	**100.0%**
China	n	15	13	10	5	4	5	4	1	1	6	**64**
	%	23.4%	20.3%	15.6%	7.8%	6.3%	7.8%	6.3%	1.6%	1.6%	9.4%	**100.0%**
Germany	n	9	10	22	12	28	14	19	13	7	57	**191**
	%	4.7%	5.2%	11.5%	6.3%	14.7%	7.3%	9.9%	6.8%	3.7%	29.8%	**100.0%**
Finland	n	1	3	3	2	3	4	2	2	2	2	**24**
	%	4.2%	12.5%	12.5%	8.3%	12.5%	16.7%	8.3%	8.3%	8.3%	8.3%	**100.0%**
Japan	n	405	220	150	89	62	32	30	11	6	56	**1061**
	%	38.2%	20.7%	14.1%	8.4%	5.8%	3.0%	2.8%	1.0%	0.6%	5.3%	**100.0%**
South Korea	n	11	10	7	1	4	1	0	0	0	2	**36**
	%	30.6%	27.8%	19.4%	2.8%	11.1%	2.8%	0.0%	0.0%	0.0%	5.6%	**100.0%**
New Zealand	n	0	5	6	3	6	9	4	4	3	30	**70**
	%	0.0%	7.1%	8.6%	4.3%	8.6%	12.9%	5.7%	5.7%	4.3%	42.9%	**100.0%**
Singapore	n	3	7	10	6	16	10	11	9	2	35	**109**
	%	2.8%	6.4%	9.2%	5.5%	14.7%	9.2%	10.1%	8.3%	1.8%	32.1%	**100.0%**
Thailand	n	20	14	9	16	9	8	2	8	3	23	**112**
	%	17.9%	12.5%	8.0%	14.3%	8.0%	7.1%	1.8%	7.1%	2.7%	20.5%	**100.0%**
USA	n	26	23	13	14	7	9	4	4	1	11	**112**
	%	23.2%	20.5%	11.6%	12.5%	6.3%	8.0%	3.6%	3.6%	0.9%	9.8%	**100.0%**
Total	**n**	**494**	**314**	**232**	**154**	**145**	**93**	**80**	**52**	**25**	**229**	**1818**
	%	**27.2%**	**17.3%**	**12.8%**	**8.5%**	**8.0%**	**5.1%**	**4.4%**	**2.9%**	**1.4%**	**12.6%**	**100.0%**

Q2b-2. Name of country stayed longest

The top five countries in which students stayed the longest were the USA (20.3%), China (15.6%), Singapore (7.0%), United Kingdom (7.0%), and New Zealand (7.0%).

Table Q2b-2. Name of country stayed longest

Code		Q2.b-2. (Longer than 1 year)		
		n	%	Cum. %
United States	231	52	20.3%	20.3%
China	045	40	15.6%	35.9%
Singapore	197	18	7.0%	43.0%
United Kingdom	230	18	7.0%	50.0%
New Zealand	158	14	5.5%	55.5%
Germany	081	9	3.5%	59.0%
Japan	110	8	3.1%	62.1%
Hong Kong	098	7	2.7%	64.8%
Thailand	216	7	2.7%	67.6%
Australia	014	6	2.3%	69.9%
Malaysia	133	6	2.3%	72.3%
Philippines	174	6	2.3%	74.6%
Indonesia	102	5	2.0%	76.6%
South Korea	117	5	2.0%	78.5%
Taiwan	213	5	2.0%	80.5%
Viet Nam	237	5	2.0%	82.4%
Netherlands	155	3	1.2%	83.6%
American Samoa	005	2	0.8%	84.4%
Chile	044	2	0.8%	85.2%
France	074	2	0.8%	85.9%
Italy	108	2	0.8%	86.7%
Mongolia	146	2	0.8%	87.5%
Nigeria	161	2	0.8%	88.3%
Poland	176	2	0.8%	89.1%
Russian Federation	182	2	0.8%	89.8%
Spain	204	2	0.8%	90.6%
Afghanistan	001	1	0.4%	91.0%
Austria	015	1	0.4%	91.4%
Brazil	031	1	0.4%	91.8%
Cambodia	037	1	0.4%	92.2%
Canada	039	1	0.4%	92.6%
Czech Republic	058	1	0.4%	93.0%
Dominican Republic	062	1	0.4%	93.4%
Guam	088	1	0.4%	93.8%
India	101	1	0.4%	94.1%
Israel	107	1	0.4%	94.5%
Kazakhstan	113	1	0.4%	94.9%
Mexico	142	1	0.4%	95.3%
Myanmar	151	1	0.4%	95.7%
Panama	170	1	0.4%	96.1%
Portugal	177	1	0.4%	96.5%
Romania	181	1	0.4%	96.9%
Senegal	193	1	0.4%	97.3%
South Africa	202	1	0.4%	97.7%
Sri Lanka	205	1	0.4%	98.0%
Sweden	210	1	0.4%	98.4%
Togo	218	1	0.4%	98.8%
Turkey	223	1	0.4%	99.2%
United Arab Emirate	229	1	0.4%	99.6%
United States Minor Outlying Islands	232	1	0.4%	100.0%

Q2b-3. Length of stay in country stayed longest

Responses were concentrated in "1 week-3 months" in Australia, China, and Thailand, and "1 week-1 month" in Germany, Finland, Singapore, and the USA. Finland had no students who stayed in a foreign country longer than 6 months. South Korean (33.3%) and Japanese (29.5%) students responded stayed in a foreign country “shorter than 1 week”.

Table Q2b-3. Length of stay in country stayed longest

		Q2.b-3.											Total
		Shorter than 1 week	1-2 weeks	2 weeks -1 month	1-3 months	3-6 months	6 months -1 year	1-2 years	2-3 years	3-4 years	4-5 years	Longer than 5 years	
Australia	n	1	11	14	9	0	1	3	0	0	0	0	**39**
	%	2.6%	28.2%	35.9%	23.1%	0.0%	2.6%	7.7%	0.0%	0.0%	0.0%	0.0%	**100.0%**
China	n	7	31	13	7	0	0	1	1	1	0	3	**64**
	%	10.9%	48.4%	20.3%	10.9%	0.0%	0.0%	1.6%	1.6%	1.6%	0.0%	4.7%	**100.0%**
Germany	n	4	74	66	14	10	11	2	1	0	2	7	**191**
	%	2.1%	38.7%	34.6%	7.3%	5.2%	5.8%	1.0%	0.5%	0.0%	1.0%	3.7%	**100.0%**
Finland	n	2	12	7	2	1	0	0	0	0	0	0	**24**
	%	8.3%	50.0%	29.2%	8.3%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**100.0%**
Japan	n	313	376	147	37	12	37	20	19	27	18	55	**1061**
	%	29.5%	35.4%	13.9%	3.5%	1.1%	3.5%	1.9%	1.8%	2.5%	1.7%	5.2%	**100.0%**
South Korea	n	12	7	7	3	1	0	2	1	0	1	2	**36**
	%	33.3%	19.4%	19.4%	8.3%	2.8%	0.0%	5.6%	2.8%	0.0%	2.8%	5.6%	**100.0%**
New Zealand	n	0	5	13	2	0	4	6	7	4	6	23	**70**
	%	0.0%	7.1%	18.6%	2.9%	0.0%	5.7%	8.6%	10.0%	5.7%	8.6%	32.9%	**100.0%**
Singapore	n	7	36	37	7	1	7	3	4	0	1	6	**109**
	%	6.4%	33.0%	33.9%	6.4%	0.9%	6.4%	2.8%	3.7%	0.0%	0.9%	5.5%	**100.0%**
Thailand	n	21	32	25	23	1	2	2	1	0	2	3	**112**
	%	18.8%	28.6%	22.3%	20.5%	0.9%	1.8%	1.8%	0.9%	0.0%	1.8%	2.7%	**100.0%**
USA	n	3	31	37	15	3	1	3	3	0	1	15	**112**
	%	2.7%	27.7%	33.0%	13.4%	2.7%	0.9%	2.7%	2.7%	0.0%	0.9%	13.4%	**100.0%**
Total	**n**	**370**	**615**	**366**	**119**	**29**	**63**	**42**	**37**	**32**	**31**	**114**	**1818**
	%	**20.4%**	**33.8%**	**20.1%**	**6.5%**	**1.6%**	**3.5%**	**2.3%**	**2.0%**	**1.8%**	**1.7%**	**6.3%**	**100.0%**

Q3. Frequency to experience a different culture

In South Korea and Thailand, total of "None" or "Rarely" (South Korea: 42.7% Thailand: 24.8%) experienced a different culture exceeded that of "Frequently" or "Very frequently" (South Korea: 21.5% Thailand: 21.1%). In New Zealand, more than 70% of students responded "Frequently" or "Very frequently" (77.0%).

Table Q3. Frequency to experience a different culture

		Q3.					Total
		None	Rarely	Neither frequently nor rarely	Frequently	Very frequently	
Australia	n	0	4	22	17	6	**49**
	%	0.0%	8.2%	44.9%	34.7%	12.2%	**100.0%**
China	n	4	19	48	30	6	**107**
	%	3.7%	17.8%	44.9%	28.0%	5.6%	**100.0%**
Germany	n	8	42	62	70	19	**201**
	%	4.0%	20.9%	30.8%	34.8%	9.5%	**100.0%**
Finland	n	0	3	9	9	4	**25**
	%	0.0%	12.0%	36.0%	36.0%	16.0%	**100.0%**
Japan	n	79	602	466	580	183	**1910**
	%	4.1%	31.5%	24.4%	30.4%	9.6%	**100.0%**
South Korea	n	12	26	31	12	8	**89**
	%	13.5%	29.2%	34.8%	13.5%	9.0%	**100.0%**
New Zealand	n	1	4	12	39	18	**74**
	%	1.4%	5.4%	16.2%	52.7%	24.3%	**100.0%**
Singapore	n	1	11	36	52	12	**112**
	%	0.9%	9.8%	32.1%	46.4%	10.7%	**100.0%**
Thailand	n	4	29	72	25	3	**133**
	%	3.0%	21.8%	54.1%	18.8%	2.3%	**100.0%**
USA	n	3	24	42	67	25	**161**
	%	1.9%	14.9%	26.1%	41.6%	15.5%	**100.0%**
Total	**n**	**112**	**764**	**800**	**901**	**284**	**2861**
	%	**3.9%**	**26.7%**	**28.0%**	**31.5%**	**9.9%**	**100.0%**

Q4. Cross-cultural abilities

Comparing among countries, Australia, China, New Zealand, Singapore, and the USA showed the higher mean scores than those of Germany, Finland, Japan, and South Korea. Japanese (3.81) and Thai (3.87) students scored "the use of nonverbal communication" lower, and for German students (3.83) showed a low score in "Even in a country that I visit for the first time, I can probably enjoy living there".

Table Q4. Cross-cultural abilities

		Q4.		
		n	Mean	SD
a. If there is an opportunity to interact with internationals, I would like to actively use the knowledge I have of that country's culture.	Australia	49	4.63	1.24
	China	107	5.00	1.33
	Germany	201	3.99	1.28
	Finland	25	4.20	1.22
	Japan	1910	4.68	1.24
	South Korea	89	4.63	1.28
	New Zealand	74	5.00	0.91
	Singapore	112	4.99	0.80
	Thailand	133	4.15	1.17
	USA	161	4.99	1.07
	Total	**2861**	**4.65**	**1.24**
b. If there is an opportunity to interact with internationals, I would like to verify if the knowledge I have of that culture is correct or not.	Australia	49	4.69	1.21
	China	107	4.93	1.33
	Germany	201	4.21	1.50
	Finland	25	4.44	1.33
	Japan	1910	4.70	1.21
	South Korea	89	4.66	1.31
	New Zealand	74	4.95	1.07
	Singapore	112	5.12	0.81
	Thailand	133	3.86	1.32
	USA	161	5.18	1.01
	Total	**2861**	**4.68**	**1.25**
c. I would like to know more about the culture of people from a country I do not know much about.	Australia	49	4.92	1.24
	China	107	4.96	1.36
	Germany	201	4.31	1.50
	Finland	25	4.72	1.10
	Japan	1910	4.89	1.24
	South Korea	89	4.64	1.38
	New Zealand	74	4.97	0.98
	Singapore	112	5.28	0.81
	Thailand	133	4.45	1.29
	USA	161	5.22	1.09
	Total	**2861**	**4.86**	**1.26**
d. I can use nonverbal communication (i.e., tone of voice, expression, and gestures) with foreigners.	Australia	49	4.53	1.31
	China	107	4.43	1.37
	Germany	201	4.06	1.41
	Finland	25	4.44	1.08
	Japan	1910	3.81	1.36
	South Korea	89	4.24	1.25
	New Zealand	74	4.58	1.11
	Singapore	112	4.55	0.98
	Thailand	133	3.87	1.38
	USA	161	4.63	1.15
	Total	**2861**	**3.98**	**1.36**
e. I am interested in interacting with people from various countries.	Australia	49	4.86	1.08
	China	107	4.63	1.44
	Germany	201	4.37	1.45
	Finland	25	4.68	1.28
	Japan	1910	4.75	1.32
	South Korea	89	4.40	1.31
	New Zealand	74	5.19	0.95
	Singapore	112	5.19	0.94
	Thailand	133	4.05	1.32
	USA	161	5.19	0.99
	Total	**2861**	**4.73**	**1.31**
f. I am interested in interacting with people from various countries.	Australia	49	4.94	0.99
	China	107	4.59	1.34
	Germany	201	5.03	1.37
	Finland	25	5.04	0.84
	Japan	1910	3.64	1.44
	South Korea	89	4.29	1.32
	New Zealand	74	5.07	1.01
	Singapore	112	4.85	0.93
	Thailand	133	4.35	1.27
	USA	161	5.07	1.04
	Total	**2861**	**4.03**	**1.48**
g. Even in a country that I visit for the first time, I can probably enjoy living there.	Australia	49	4.41	1.26
	China	107	4.73	1.20
	Germany	201	3.83	1.61
	Finland	25	4.24	1.20
	Japan	1910	4.00	1.43
	South Korea	89	4.07	1.44
	New Zealand	74	4.34	1.17
	Singapore	112	4.63	1.15
	Thailand	133	4.17	1.19
	USA	161	4.38	1.27
	Total	**2861**	**4.09**	**1.41**

Q5. Experience of cross-cultural issues

Australia (80%), South Korea (71.9%), and the USA (77.6%) showed higher ratios of "no" responses than those of China (61.7%), Germany (57.7%), Finland (68.0%), Japan (61.3%), New Zealand (58.1%), Singapore (58.9%), and Thailand (62.4%).

Table Q5. Experience of cross-cultural issues

		Q5.		Total
		No	Yes	
Australia	n	40	10	**50**
	%	80.0%	20.0%	**100.0%**
China	n	66	41	**107**
	%	61.7%	38.3%	**100.0%**
Germany	n	116	85	**201**
	%	57.7%	42.3%	**100.0%**
Finland	n	17	8	**25**
	%	68.0%	32.0%	**100.0%**
Japan	n	1171	740	**1911**
	%	61.3%	38.7%	**100.0%**
South Korea	n	64	25	**89**
	%	71.9%	28.1%	**100.0%**
New Zealand	n	43	31	**74**
	%	58.1%	41.9%	**100.0%**
Singapore	n	66	46	**112**
	%	58.9%	41.1%	**100.0%**
Thailand	n	83	50	**133**
	%	62.4%	37.6%	**100.0%**
USA	n	125	36	**161**
	%	77.6%	22.4%	**100.0%**
Total	**n**	**1791**	**1072**	**2863**
	%	**62.6%**	**37.4%**	**100.0%**

SQ6-1. Novelty of the critical incident

Top three countries showed the higher proportions in a total "Novel" or "Very novel" were Japan (52.1%), South Korea (48.0%), Singapore (32.6%), and the bottom three countries were the US (19.5%), Germany (16.5%), and Finland (0%).

Table SQ6-1. Novelty of the critical incident

		SQ6-1.						Total
		Not novel at all	Not novel	Slightly not novel	Slightly novel	Novel	Very novel	
Australia	n	3	2	0	2	2	1	**10**
	%	30.0%	20.0%	0.0%	20.0%	20.0%	10.0%	**100.0%**
China	n	6	5	9	10	10	1	**41**
	%	14.6%	12.2%	22.0%	24.4%	24.4%	2.4%	**100.0%**
Germany	n	13	29	14	15	9	5	**85**
	%	15.3%	34.1%	16.5%	17.6%	10.6%	5.9%	**100.0%**
Finland	n	0	3	3	2	0	0	**8**
	%	0.0%	37.5%	37.5%	25.0%	0.0%	0.0%	**100.0%**
Japan	n	29	62	80	183	237	149	**740**
	%	3.9%	8.4%	10.8%	24.7%	32.0%	20.1%	**100.0%**
South Korea	n	0	1	3	9	6	6	**25**
	%	0.0%	4.0%	12.0%	36.0%	24.0%	24.0%	**100.0%**
New Zealand	n	1	7	3	13	6	1	**31**
	%	3.2%	22.6%	9.7%	41.9%	19.4%	3.2%	**100.0%**
Singapore	n	3	8	5	15	11	4	**46**
	%	6.5%	17.4%	10.9%	32.6%	23.9%	8.7%	**100.0%**
Thailand	n	4	4	11	16	10	5	**50**
	%	8.0%	8.0%	22.0%	32.0%	20.0%	10.0%	**100.0%**
USA	n	8	8	4	9	6	1	**36**
	%	22.2%	22.2%	11.1%	25.0%	16.7%	2.8%	**100.0%**
Total	**n**	**67**	**129**	**132**	**274**	**297**	**173**	**1072**
	%	**6.3%**	**12.0%**	**12.3%**	**25.6%**	**27.7%**	**16.1%**	**100.0%**

SQ6-2 & Q7 Use of global leadership competencies

Examining whether the respondents can perform competency-based behaviors when facing difficult (problematic) situations arising from cultural differences between countries, respondents rated all items higher for those "expected to the experience" (Q7) the incident than those who reflected their "actual experiences." (SQ6-2)

Differences among countries were found smaller in "expectations" than "actual experiences" mean scores. Comparing among countries, Thailand (10 out of 13 items), South Korea (7 items), Japan (1 item), and Germany (1 item) showed that "expectations" mean scores were lower than "actual experiences".

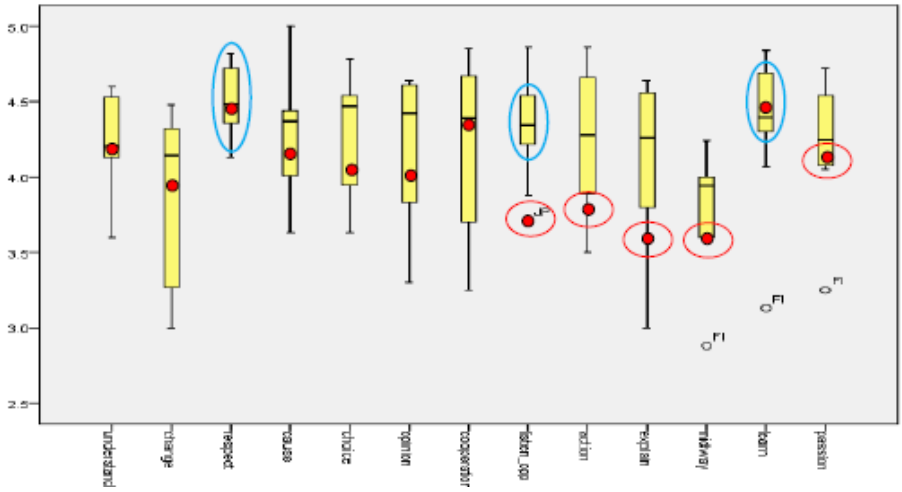
Figure SQ6-2 & Q7 Use of global leadership competencies

		SQ6-2.			Q7.		
		n	Mean	SD	n	Mean	SD
a. I will try to understand the position of the other person and their feelings.	Australia	10	3.60	1.90	40	4.95	1.08
	China	41	4.56	1.50	66	5.30	1.02
	Germany	85	3.89	1.46	116	4.71	1.15
	Finland	8	4.25	1.16	17	4.59	1.06
	Japan	740	4.15	1.44	1171	4.44	1.06
	South Korea	25	4.60	1.00	64	4.58	1.11
	New Zealand	31	4.16	1.49	43	5.23	0.72
	Singapore	46	4.13	1.02	66	5.08	0.85
	Thailand	50	4.32	1.17	83	4.46	1.12
	USA	36	4.53	1.52	124	5.21	0.83
	Total	**1072**	**4.17**	**1.42**	**1790**	**4.60**	**1.08**
b. If necessary, I will change what I had decided first.	Australia	10	3.10	1.79	40	4.53	1.09
	China	41	4.15	1.44	66	4.65	1.13
	Germany	85	3.27	1.44	116	4.06	1.28
	Finland	8	3.00	1.69	17	4.29	0.85
	Japan	740	3.85	1.57	1171	4.59	1.07
	South Korea	25	4.48	0.96	64	4.42	1.15
	New Zealand	31	4.32	1.35	43	4.81	0.82
	Singapore	46	4.20	1.19	66	4.97	0.96
	Thailand	50	4.34	0.96	83	4.08	0.99
	USA	36	4.14	1.51	124	4.62	1.02
	Total	**1072**	**3.88**	**1.52**	**1790**	**4.55**	**1.08**
c. I will respect the values of people who were in a different position from my own.	Australia	10	4.20	2.04	40	5.05	1.11
	China	41	4.44	1.42	66	5.36	0.87
	Germany	85	4.52	1.46	116	5.14	1.06
	Finland	8	4.13	1.55	17	4.71	1.45
	Japan	740	4.36	1.44	1171	4.66	1.01
	South Korea	25	4.68	0.95	64	4.55	1.25
	New Zealand	31	4.45	1.52	43	5.40	0.66
	Singapore	46	4.74	1.06	66	5.42	0.75
	Thailand	50	4.82	1.08	83	4.70	1.09
	USA	36	4.72	1.37	124	5.43	0.75
	Total	**1072**	**4.43**	**1.41**	**1790**	**4.82**	**1.04**
d. I will try to think of the cause of the problem from various perspectives.	Australia	10	3.80	1.48	40	4.73	1.06
	China	41	4.51	1.34	66	5.26	0.90
	Germany	85	4.13	1.51	116	4.48	1.33
	Finland	8	3.63	1.85	17	4.71	1.05
	Japan	740	4.01	1.48	1171	4.36	1.11
	South Korea	25	4.44	1.04	64	4.48	1.20
	New Zealand	31	4.35	1.36	43	5.23	0.65
	Singapore	46	4.39	1.04	66	5.12	0.95
	Thailand	50	4.44	1.28	83	4.55	0.97
	USA	36	5.00	1.20	124	5.15	0.88
	Total	**1072**	**4.13**	**1.45**	**1790**	**4.53**	**1.12**

e. I will think of various choices.	Australia	10	4.50	1.08	40	4.58	1.03
	China	41	4.54	1.45	66	5.18	0.93
	Germany	85	3.68	1.44	116	4.24	1.30
	Finland	8	3.63	1.69	17	4.53	1.28
	Japan	740	3.95	1.48	1171	4.52	1.04
	South Korea	25	4.44	1.00	64	4.38	1.19
	New Zealand	31	4.58	1.12	43	5.05	0.72
	Singapore	46	4.50	1.13	66	5.06	0.96
	Thailand	50	4.42	1.26	83	4.49	1.14
	USA	36	4.78	1.15	124	5.03	0.87
	Total	**1072**	**4.06**	**1.44**	**1790**	**4.59**	**1.07**
f. I will aim to make it easy for the other person to state their opinion.	Australia	10	3.30	1.49	40	4.78	1.05
	China	41	4.63	1.34	66	5.27	0.92
	Germany	85	3.44	1.33	116	4.11	1.40
	Finland	8	3.88	1.46	17	4.65	0.93
	Japan	740	3.83	1.53	1171	4.60	1.08
	South Korea	25	4.44	1.00	64	4.38	1.21
	New Zealand	31	4.52	1.46	43	5.26	0.76
	Singapore	46	4.41	1.13	66	5.08	0.85
	Thailand	50	4.64	1.17	83	4.49	1.07
	USA	36	4.61	1.34	124	5.16	0.78
	Total	**1072**	**3.95**	**1.49**	**1790**	**4.66**	**1.10**
g. I will aim to build a cooperative relationship with the other person.	Australia	10	3.70	1.89	40	4.88	1.14
	China	41	4.85	1.26	66	5.29	0.91
	Germany	85	3.39	1.49	116	4.20	1.21
	Finland	8	3.25	1.49	17	4.65	1.11
	Japan	740	4.21	1.58	1171	4.81	1.00
	South Korea	25	4.56	1.00	64	4.53	1.31
	New Zealand	31	4.35	1.62	43	5.21	0.71
	Singapore	46	4.43	1.24	66	5.33	0.75
	Thailand	50	4.78	1.06	83	4.51	1.02
	USA	36	4.67	1.29	124	5.21	0.86
	Total	**1072**	**4.22**	**1.54**	**1790**	**4.82**	**1.03**
h. I will also listen to viewpoints that were opposite to mine.	Australia	10	4.30	1.64	40	4.78	1.05
	China	41	4.54	1.29	66	4.91	1.13
	Germany	85	4.22	1.45	116	4.88	1.12
	Finland	8	3.88	1.89	17	4.88	1.17
	Japan	740	3.70	1.63	1171	4.74	1.01
	South Korea	25	4.40	0.87	64	4.48	1.15
	New Zealand	31	4.39	1.38	43	5.02	0.83
	Singapore	46	4.28	1.09	66	5.27	0.71
	Thailand	50	4.70	1.16	83	4.49	1.09
	USA	36	4.86	1.33	124	5.21	0.89
	Total	**1072**	**3.92**	**1.57**	**1790**	**4.80**	**1.03**
i. I will take actions taking advantage of the skills I' m good at.	Australia	10	4.40	1.90	40	4.93	0.92
	China	41	4.51	1.31	66	5.03	0.98
	Germany	85	3.89	1.30	116	4.45	1.21
	Finland	8	3.50	1.20	17	4.06	1.09
	Japan	740	3.74	1.62	1171	4.35	1.15
	South Korea	25	4.16	1.21	64	4.63	1.23
	New Zealand	31	4.74	1.21	43	5.33	0.71
	Singapore	46	4.13	1.28	66	4.92	0.85
	Thailand	50	4.66	1.14	83	4.49	1.00
	USA	36	4.86	1.20	124	5.20	0.84
	Total	**1072**	**3.92**	**1.55**	**1790**	**4.51**	**1.14**
j. I will explain my own opinions effectively.	Australia	10	3.80	1.48	40	4.75	1.13
	China	41	4.56	1.27	66	5.05	1.01
	Germany	85	4.59	1.34	116	4.40	1.14
	Finland	8	3.00	1.69	17	4.06	1.34
	Japan	740	3.58	1.61	1171	4.00	1.14
	South Korea	25	4.32	1.07	64	4.36	1.29
	New Zealand	31	4.32	1.17	43	5.16	0.65
	Singapore	46	3.83	1.06	66	4.83	0.97
	Thailand	50	4.20	0.97	83	4.07	1.17
	USA	36	4.64	1.22	124	5.03	0.97
	Total	**1072**	**3.81**	**1.55**	**1790**	**4.23**	**1.18**
k. I will confirm midway whether we were reaching a resolution.	Australia	10	3.60	1.65	40	4.20	1.11
	China	41	4.24	1.32	66	5.12	0.98
	Germany	85	3.91	1.44	116	4.42	1.12
	Finland	8	2.88	1.36	17	4.41	1.00
	Japan	740	3.58	1.58	1171	4.12	1.13
	South Korea	25	4.00	1.32	64	4.41	1.19
	New Zealand	31	3.90	1.42	43	4.51	0.83
	Singapore	46	3.98	1.24	66	4.74	1.00
	Thailand	50	3.98	1.10	83	3.75	1.01
	USA	36	4.03	1.44	124	4.72	1.11
	Total	**1072**	**3.70**	**1.52**	**1790**	**4.24**	**1.14**
l. I will reflect on what I learned from the event.	Australia	10	4.70	0.95	40	4.30	1.20
	China	41	4.54	1.40	66	4.91	1.02
	Germany	85	4.07	1.46	116	4.49	1.23
	Finland	8	3.13	1.55	17	4.35	1.41
	Japan	740	4.42	1.48	1171	4.38	1.17
	South Korea	25	4.36	1.11	64	4.39	1.28
	New Zealand	31	4.84	1.21	43	4.47	0.80
	Singapore	46	4.37	1.29	66	4.74	1.00
	Thailand	50	4.30	1.04	83	4.06	1.00
	USA	36	4.69	1.39	124	4.84	1.07
	Total	**1072**	**4.40**	**1.43**	**1790**	**4.44**	**1.16**
m. I will have strong passion that I	Australia	10	4.10	1.66	40	4.48	1.22
	China	41	4.54	1.27	66	4.85	0.98
	Germany	85	4.08	1.41	116	4.54	1.36
	Finland	8	3.25	1.04	17	4.18	1.51
	Japan	740	4.05	1.60	1171	4.31	1.17
	South Korea	25	4.32	1.14	64	4.31	1.25
	New Zealand	31	4.52	1.52	43	4.91	0.81
	Singapore	46	4.17	1.29	66	4.88	0.94
	Thailand	50	4.70	1.05	83	4.13	0.98
	USA	36	4.72	1.41	124	4.88	1.03
	Total	**1072**	**4.14**	**1.53**	**1790**	**4.42**	**1.17**

Figure A shows distribution of Global Leadership Competency among 10 countries by box plot chart. This figure shows high score and small variance in “I respected the values of people who were in a different position from my own.”, “I also listened to viewpoints that were opposite to mine.”, and “I reflected on what I learned from the event.” Therefore, those three competencies are regarded as important ones among 10 countries. On the other hand, Japanese sample shows particularly lower scored competencies in five competencies of which average scores are indicated by red circles.

Figure A. Global Leadership Competency



SQ6-3. Impact of critical incident to the way of thinking about that country’s culture
Japan had the highest proportion of "yes" responses (72.2%). On the other hand, Finland (0.0%), China (12.2%), and Germany (29.4%) showed fewer "yes" responses. There was also a large gap when comparing them to the USA (47.2%), Thailand (48.0%), New Zealand (51.6%), South Korea (52.0%), and Australia (60.0%).

Figure SQ6-3. Impact of critical incident to the way of thinking about that country’s culture

		SQ6−3.		Total
		No	Yes	
Australia	n	4	6	**10**
	%	40.0%	60.0%	**100.0%**
China	n	36	5	**41**
	%	87.8%	12.2%	**100.0%**
Germany	n	60	25	**85**
	%	70.6%	29.4%	**100.0%**
Finland	n	8	0	**8**
	%	100.0%	0.0%	**100.0%**
Japan	n	206	534	**740**
	%	27.8%	72.2%	**100.0%**
South Korea	n	12	13	**25**
	%	48.0%	52.0%	**100.0%**
New Zealand	n	15	16	**31**
	%	48.4%	51.6%	**100.0%**
Singapore	n	27	19	**46**
	%	58.7%	41.3%	**100.0%**
Thailand	n	26	24	**50**
	%	52.0%	48.0%	**100.0%**
USA	n	19	17	**36**
	%	52.8%	47.2%	**100.0%**
Total	**n**	**413**	**659**	**1072**
	%	**38.5%**	**61.5%**	**100.0%**

SQ6-4. Changes of perspectives or behavior after the incident

Among countries, "I learned the importance of learning about foreign cultures" was the most common response in China (100%), Japan (69.2%), South Korea (69.2%), New Zealand (68.8%), Thailand (66.7%), and the USA (75%). "My curiosity and interest toward foreign cultures increased" was relatively high in the USA (62.5%) and in China (60.0%), whereas lower in New Zealand (25.0%). "My values toward foreign cultures have changed" was common among Australia (80%) and followed by Germany (64%) and New Zealand (62.5%). "It became an impetus for me to change my behavior toward foreign cultures" was lower than other items overall, especially in Germany (8%). "I acquired new behavior patterns in relation to foreign cultures" was higher in Singapore (68.4%) but lower in South Korea (23.1%) and Japan (28.4%).

Table SQ6-4. Changes of perspectives or behavior after the incident

		SQ6-4.				
		1	2	3	4	5
		I learned the importance of learning about foreign cultures.	My curiosity and interest toward foreign cultures increased.	My values toward foreign cultures have changed.	It became an impetus for me to change my behavior toward foreign cultures.	I acquired new behavior patterns in relation to foreign cultures.
Australia	n	4	3	5	2	3
	%	66.7%	50.0%	83.3%	33.3%	50.0%
China	n	5	3	2	1	2
	%	100.0%	60.0%	40.0%	20.0%	40.0%
Germany	n	14	6	16	2	13
	%	56.0%	24.0%	64.0%	8.0%	52.0%
Finland	n	NA	NA	NA	NA	NA
Japan	n	366	286	232	208	150
	%	69.2%	54.1%	43.9%	39.3%	28.4%
South Korea	n	9	7	4	5	3
	%	69.2%	53.8%	30.8%	38.5%	23.1%
New Zealand	n	11	4	10	4	9
	%	68.8%	25.0%	62.5%	25.0%	56.3%
Singapore	n	11	9	11	5	13
	%	57.9%	47.4%	57.9%	26.3%	68.4%
Thailand	n	16	11	9	13	10
	%	66.7%	45.8%	37.5%	54.2%	41.7%
USA	n	12	10	6	5	8
	%	75.0%	62.5%	37.5%	31.3%	50.0%
Total	**n**	**448**	**339**	**295**	**245**	**211**
	%	**68.6%**	**51.9%**	**45.2%**	**37.5%**	**32.3%**

SQ6-5. Level of understanding of the country after the critical incident
Countries having higher proportions of "High" or "Very high" responses were Finland (50.0%), Australia (40.0%), and the USA (27.8%). They had low portions of "Low" and "Very low" responses. China had higher portions of "High" or "Very high" responses, but the most common response was "Slightly low (48.8%)".

Countries having higher proportions of "Low" or "Very low" responses were Japan (28.6%) and South Korea (20.0%).

Table SQ6-5. Level of understanding of the country after the critical incident

		SQ6-5.						Total
		Very low	Low	Slightly low	Slightly high	High	Very high	
Australia	n	1	0	1	4	3	1	**10**
	%	10.0%	0.0%	10.0%	40.0%	30.0%	10.0%	**100.0%**
China	n	1	0	20	9	8	3	**41**
	%	2.4%	0.0%	48.8%	22.0%	19.5%	7.3%	**100.0%**
Germany	n	5	10	18	32	15	5	**85**
	%	5.9%	11.8%	21.2%	37.6%	17.6%	5.9%	**100.0%**
Finland	n	0	0	1	3	4	0	**8**
	%	0.0%	0.0%	12.5%	37.5%	50.0%	0.0%	**100.0%**
Japan	n	72	140	309	164	42	13	**740**
	%	9.7%	18.9%	41.8%	22.2%	5.7%	1.8%	**100.0%**
South Korea	n	1	4	6	10	1	3	**25**
	%	4.0%	16.0%	24.0%	40.0%	4.0%	12.0%	**100.0%**
New Zealand	n	1	4	8	12	6	0	**31**
	%	3.2%	12.9%	25.8%	38.7%	19.4%	0.0%	**100.0%**
Singapore	n	1	4	15	16	8	2	**46**
	%	2.2%	8.7%	32.6%	34.8%	17.4%	4.3%	**100.0%**
Thailand	n	2	2	14	27	5	0	**50**
	%	4.0%	4.0%	28.0%	54.0%	10.0%	0.0%	**100.0%**
USA	n	2	1	7	16	6	4	**36**
	%	5.6%	2.8%	19.4%	44.4%	16.7%	11.1%	**100.0%**
Total	**n**	**86**	**165**	**399**	**293**	**98**	**31**	**1072**
	%	**8.0%**	**15.4%**	**37.2%**	**27.3%**	**9.1%**	**2.9%**	**100.0%**

SQ6-6. Degree of the critical incident solved

For combination of “Somewhat resolved” and “Completely resolved”, China (58.5%) and New Zealand (54.8%) showed the higher proportions, whereas Germany (23.5%) showed the lowest degree of solution. Japan (41.9%) is ranked in the middle group among the countries.

SQ6-6 Degree of the critical incident solved

		SQ6-6.						Total
		Not at all resolved	Not much resolved	Slightly unresolved	Moderately resolved	Somewhat resolved	Completely resolved	
Australia	n	1	3	3	0	1	2	**10**
	%	10.0%	30.0%	30.0%	0.0%	10.0%	20.0%	**100.0%**
China	n	0	5	4	8	18	6	**41**
	%	0.0%	12.2%	9.8%	19.5%	43.9%	14.6%	**100.0%**
Germany	n	14	11	28	12	15	5	**85**
	%	16.5%	12.9%	32.9%	14.1%	17.6%	5.9%	**100.0%**
Finland	n	0	1	2	2	1	2	**8**
	%	0.0%	12.5%	25.0%	25.0%	12.5%	25.0%	**100.0%**
Japan	n	62	72	84	212	177	133	**740**
	%	8.4%	9.7%	11.4%	28.6%	23.9%	18.0%	**100.0%**
South Korea	n	0	2	5	6	8	4	**25**
	%	0.0%	8.0%	20.0%	24.0%	32.0%	16.0%	**100.0%**
New Zealand	n	4	2	1	7	9	8	**31**
	%	12.9%	6.5%	3.2%	22.6%	29.0%	25.8%	**100.0%**
Singapore	n	4	7	4	14	13	4	**46**
	%	8.7%	15.2%	8.7%	30.4%	28.3%	8.7%	**100.0%**
Thailand	n	1	5	8	17	14	5	**50**
	%	2.0%	10.0%	16.0%	34.0%	28.0%	10.0%	**100.0%**
USA	n	5	4	2	9	7	9	**36**
	%	13.9%	11.1%	5.6%	25.0%	19.4%	25.0%	**100.0%**
Total	**n**	**91**	**112**	**141**	**287**	**263**	**178**	**1072**
	%	**8.5%**	**10.4%**	**13.2%**	**26.8%**	**24.5%**	**16.6%**	**100.0%**

Q8. Capability to explain about foreign country

Japan showed the lowest mean score for all items, and they were far behind the second lowest scores. China (3.64) and New Zealand (3.55) had higher mean scores in “Politics”. China (3.95) also showed the highest mean score, and it was beyond the second highest country, New Zealand (3.57) in “Economy”. Oceanian countries like Australia (4.12) and New Zealand (4.12) showed higher mean scores in "Poverty issues". As for "History", while mean scores of Australia (4.04), China (4.08), Finland (4.20), and the USA (4.16) were relatively high, Germany (3.43), Japan (3.17), and Thailand (3.59) showed the lower mean scores.

Table Q8. Capability to explain about foreign country

		Q8.		
		n	Mean	SD
a Politics	Australia	50	3.38	1.28
	China	107	3.64	1.32
	Germany	201	3.00	1.22
	Finland	25	3.36	1.38
	Japan	1910	2.56	1.25
	South Korea	89	3.07	1.39
	New Zealand	74	3.55	1.36
	Singapore	112	3.29	1.39
	Thailand	133	2.98	1.27
	USA	161	3.20	1.41
	Total	**2862**	**2.78**	**1.32**
b Economy	Australia	50	3.48	1.20
	China	107	3.95	1.21
	Germany	201	3.12	1.12
	Finland	25	3.36	1.47
	Japan	1910	2.62	1.28
	South Korea	89	3.22	1.25
	New Zealand	74	3.57	1.36
	Singapore	112	3.56	1.28
	Thailand	133	3.23	1.11
	USA	161	3.32	1.39
	Total	**2862**	**2.88**	**1.33**
c Poverty issues	Australia	50	4.12	0.87
	China	107	3.83	1.17
	Germany	201	3.98	1.09
	Finland	25	3.52	1.29
	Japan	1910	3.12	1.35
	South Korea	89	3.70	1.19
	New Zealand	74	4.15	1.17
	Singapore	112	3.90	1.26
	Thailand	133	3.51	1.22
	USA	161	3.59	1.39
	Total	**2862**	**3.34**	**1.35**
d History	Australia	50	4.04	1.14
	China	107	4.08	1.18
	Germany	201	3.43	1.32
	Finland	25	4.20	1.22
	Japan	1910	3.17	1.36
	South Korea	89	3.70	1.19
	New Zealand	74	3.93	1.26
	Singapore	112	3.81	1.30
	Thailand	133	3.59	1.31
	USA	161	4.16	1.23
	Total	**2862**	**3.38**	**1.37**
e Religion	Australia	50	3.86	1.23
	China	107	3.66	1.37
	Germany	201	3.80	1.30
	Finland	25	3.92	1.19
	Japan	1910	3.04	1.34
	South Korea	89	3.74	1.25
	New Zealand	74	3.82	1.26
	Singapore	112	3.91	1.20
	Thailand	133	3.83	1.23
	USA	161	3.86	1.40
	Total	**2862**	**3.30**	**1.37**

Q9 Global mindset

Factor analysis was performed to classify a total 36 items of global mindset scale into factors. The result showed six factors, F1: multi-cultural understanding, F2: International Orientation, F3: Interpersonal Relationship, F4: International Information, F5: Selection of future and F6: Self-confidence.

F1: multi-cultural understanding

New Zealand, Singapore, and the USA shows higher mean scores for all items. Finland, on the other hand, showed lower mean score for any of the listed items. Mean scores varied item to item for Australia, China, Germany, Japan, and Thailand.

F2: International Orientation

New Zealand, Singapore, and the USA shows higher mean scores for all items, whereas Germany shows lower mean scores for each item.
Looking at the two items: "I would like to go to many foreign countries" and "I think it is fun to experience various foreign cultures ", all ten countries scored higher than 5.0 in the 6-point scale, and gaps among these countries were not so significant.

However, there were significant gaps in responses to three items among countries. Germany shows the lowest means in "I would like to live abroad (3.69)" and "I would like to interact with many foreigners" (4.18), New Zealand shows the remarkably high score for “I would like to live abroad (5.20)”. To the item "I would like to attempt many things without fear of failure" mean scores of Finland (4.52) and South Korea (4.54) were low.

F3: Interpersonal Relationship

Australia, China, New Zealand, Singapore, and the USA shows higher mean scores for "interpersonal relationship" than Japan, China, and Thailand.

F4: International Information

China shows high mean scores for all items regarding "international information", but Japan had lower scores in these items. The mean score of Finland to the item "I can actively collect information related to topics that interest me by using resources (i.e., newspaper and news reports) in foreign languages" was high (4.72). For item "I can recount my own country's politics and economy to foreigners in a foreign language", while both Australia and Japan shows lower mean scores of 2.73, China scored it high, 4.23.

F5: Selection of future

China, New Zealand, Singapore, and the USA shows higher mean scores in items in this factor.

Germany and Finland shows lower mean scores compared to the other eight countries. However, Finland indicates higher mean scores than Germany for the following two items: "I would like to select my career by including the possibility of working abroad" and "I would like to consider the option of studying abroad at foreign universities or graduate schools in the future". It seems like that respondents in these two countries do not have much desire about working around the world as a global leader, but Finnish respondents hold more desire than German respondents regarding studying and working abroad.

Regarding item on “I would like to consider the option of studying abroad at foreign universities or graduate schools in the future”, mean scores differ from country to country. While New Zealand had the highest mean score (5.36) Germany shows the lowest (3.62).

F6: Self-confidence

As for "self-efficacy," China, New Zealand, Singapore shows higher mean scores. On the other hand, Japan scored all items less than 4.0 in the 6-point scale, and they were the lowest in each item.

Figure Q9 shows distribution of Global Mindset scores by boxplot chart. This indicates that F1" Multi-cultural understanding" and F2" International Orientation" have higher scores and smaller variance. Therefore, those Global Mindset could be regarded as globally important mindsets. On the other hand, Japanese sample shows significantly lower scores in Global Mindset of F3: Interpersonal Relationship, F4: International Information and F6: Self-confidence which are indicated by red circles.

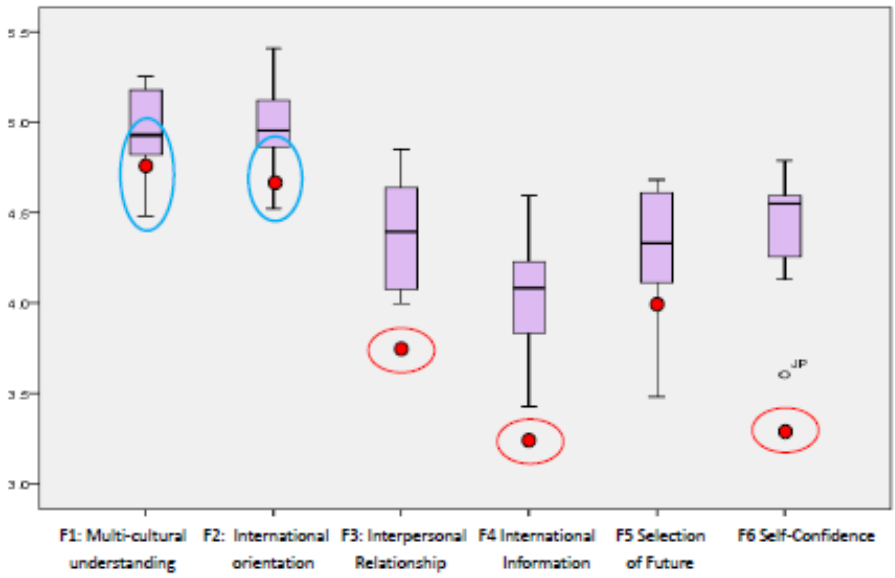


Figure Q9 Distribution of Global Mindset Scored among 10 Countries

Table Q9. F1: Multi-cultural understanding

		Q9. (Multi-culture		
		n	Mean	SD
Ⅱ f	Australia	49	4.94	1.07
	China	107	4.88	1.10
	Germany	199	4.45	1.11
	Finland	25	4.64	1.11
	Japan	1911	4.76	1.22
	South Korea	89	4.80	1.00
	New Zealand	74	5.15	0.93
	Singapore	112	5.21	0.79
	Thailand	133	4.39	1.08
	USA	161	5.11	1.05
	Total	**2860**	**4.78**	**1.17**
Ⅲ a	Australia	49	4.49	1.21
	China	107	4.98	1.08
	Germany	199	4.41	1.21
	Finland	25	4.64	1.08
	Japan	1911	4.85	1.14
	South Korea	89	4.69	0.96
	New Zealand	74	5.09	0.91
	Singapore	112	5.10	0.86
	Thailand	133	4.43	1.14
	USA	161	5.06	1.02
	Total	**2860**	**4.82**	**1.13**
Ⅲ b	Australia	49	4.88	1.05
	China	107	5.13	1.03
	Germany	199	4.70	1.12
	Finland	25	4.88	0.97
	Japan	1911	5.23	1.00
	South Korea	89	4.93	0.93
	New Zealand	74	5.45	0.72
	Singapore	112	5.30	0.78
	Thailand	133	4.83	1.18
	USA	161	5.35	0.92
	Total	**2860**	**5.17**	**1.01**
Ⅲ c	Australia	49	4.55	1.40
	China	107	5.11	1.04
	Germany	199	4.96	1.20
	Finland	25	4.44	1.16
	Japan	1911	5.01	1.07
	South Korea	89	4.72	0.98
	New Zealand	74	5.04	0.88
	Singapore	112	5.16	0.82
	Thailand	133	4.46	1.12
	USA	161	5.02	1.10
	Total	**2860**	**4.97**	**1.09**
Ⅲ d	Australia	49	4.73	1.04
	China	107	4.97	1.02
	Germany	199	4.48	1.15
	Finland	25	4.52	1.12
	Japan	1911	4.88	1.05
	South Korea	89	4.63	1.07
	New Zealand	74	5.12	0.84
	Singapore	112	5.13	0.77
	Thailand	133	4.49	1.08
	USA	161	4.98	1.01
	Total	**2860**	**4.85**	**1.06**
Ⅳ a	Australia	49	4.90	1.19
	China	107	4.96	1.17
	Germany	199	5.18	1.01
	Finland	25	3.96	1.37
	Japan	1911	5.01	1.10
	South Korea	89	4.88	1.11
	New Zealand	74	5.18	0.76
	Singapore	112	5.19	0.77
	Thailand	133	4.91	1.08
	USA	161	5.14	0.88
	Total	**2860**	**5.02**	**1.08**
Ⅳ b	Australia	49	5.08	1.13
	China	107	4.95	1.08
	Germany	199	4.94	1.03
	Finland	25	4.64	1.29
	Japan	1911	5.25	1.00
	South Korea	89	5.03	0.95
	New Zealand	74	5.39	0.70
	Singapore	112	5.20	0.76
	Thailand	133	4.95	1.08
	USA	161	5.32	0.81
	Total	**2860**	**5.20**	**0.99**
Ⅳ f	Australia	49	4.86	1.14
	China	107	4.92	1.17
	Germany	199	4.87	1.15
	Finland	25	3.96	1.21
	Japan	1911	5.03	1.12
	South Korea	89	4.65	1.13
	New Zealand	74	5.22	0.91
	Singapore	112	5.02	0.81
	Thailand	133	4.74	1.09
	USA	161	5.01	1.13
	Total	**2860**	**4.98**	**1.11**
Ⅳ g	Australia	49	5.31	0.98
	China	107	5.06	1.19
	Germany	199	5.05	1.08
	Finland	25	4.80	1.35
	Japan	1911	5.28	1.02
	South Korea	89	5.08	0.96
	New Zealand	74	5.54	0.69
	Singapore	112	5.44	0.74
	Thailand	133	5.15	1.05
	USA	161	5.58	0.79
	Total	**2860**	**5.27**	**1.01**
Ⅳ j	Australia	49	5.08	1.10
	China	107	4.70	1.28
	Germany	199	4.15	1.44
	Finland	25	3.80	1.38
	Japan	1911	4.74	1.30
	South Korea	89	4.92	1.02
	New Zealand	74	5.15	1.04
	Singapore	112	5.04	1.08
	Thailand	133	4.53	1.20
	USA	161	5.20	1.11
	Total	**2860**	**4.74**	**1.29**

Table Q9. F2: International Orientation

		Q9. (International orientation)		
		n	Mean	SD
Ⅱ a	Australia	49	5.29	1.14
	China	107	5.15	1.25
	Germany	199	5.25	1.18
	Finland	25	5.32	1.03
	Japan	1911	5.21	1.28
	South Korea	89	5.25	1.03
	New Zealand	74	5.59	0.83
	Singapore	112	5.54	0.75
	Thailand	133	5.31	1.10
	USA	161	5.31	1.14
	Total	**2860**	**5.25**	**1.22**
Ⅱ b	Australia	49	5.10	1.28
	China	107	5.19	1.15
	Germany	199	4.97	1.23
	Finland	25	5.44	0.87
	Japan	1911	5.16	1.19
	South Korea	89	5.22	0.99
	New Zealand	74	5.61	0.76
	Singapore	112	5.55	0.73
	Thailand	133	5.17	1.12
	USA	161	5.42	1.00
	Total	**2860**	**5.19**	**1.15**
Ⅱ c	Australia	49	4.39	1.64
	China	107	4.41	1.55
	Germany	199	3.69	1.72
	Finland	25	4.44	1.36
	Japan	1911	4.67	1.54
	South Korea	89	4.33	1.43
	New Zealand	74	5.20	1.09
	Singapore	112	4.72	1.36
	Thailand	133	4.21	1.57
	USA	161	4.70	1.47
	Total	**2860**	**4.57**	**1.56**
Ⅱ d	Australia	49	4.78	1.25
	China	107	4.72	1.29
	Germany	199	4.18	1.44
	Finland	25	5.16	0.90
	Japan	1911	4.94	1.34
	South Korea	89	4.84	1.11
	New Zealand	74	5.24	1.02
	Singapore	112	5.22	0.92
	Thailand	133	4.66	1.18
	USA	161	5.07	1.20
	Total	**2860**	**4.89**	**1.31**
Ⅱ e	Australia	49	5.04	1.06
	China	107	4.82	1.18
	Germany	199	4.82	1.26
	Finland	25	4.52	1.36
	Japan	1911	4.74	1.28
	South Korea	89	4.54	1.22
	New Zealand	74	5.16	1.02
	Singapore	112	5.28	0.83
	Thailand	133	4.80	1.15
	USA	161	5.12	1.18
	Total	**2860**	**4.80**	**1.24**

Figure Q9. F3: Interpersonal Relationship

		Q9. (Interpersonal Relationship)		
		n	Mean	SD
Ⅲ e	Australia	49	4.86	1.17
	China	107	5.07	1.09
	Germany	199	4.64	1.04
	Finland	25	4.36	1.19
	Japan	1911	4.27	1.24
	South Korea	89	4.46	1.21
	New Zealand	74	4.95	1.03
	Singapore	112	4.67	1.06
	Thailand	133	4.36	1.16
	USA	161	4.74	1.13
	Total	**2860**	**4.41**	**1.22**
Ⅲ f	Australia	49	4.63	1.15
	China	107	4.78	1.08
	Germany	199	4.36	1.19
	Finland	25	4.12	1.42
	Japan	1911	3.97	1.45
	South Korea	89	4.15	1.32
	New Zealand	74	4.82	1.11
	Singapore	112	4.46	1.09
	Thailand	133	3.84	1.16
	USA	161	4.40	1.28
	Total	**2860**	**4.11**	**1.39**
Ⅲ g	Australia	49	4.69	1.21
	China	107	4.95	1.01
	Germany	199	4.34	1.15
	Finland	25	4.32	1.41
	Japan	1911	4.13	1.33
	South Korea	89	4.40	1.20
	New Zealand	74	4.78	1.11
	Singapore	112	4.64	0.98
	Thailand	133	4.16	1.24
	USA	161	4.54	1.20
	Total	**2860**	**4.25**	**1.29**
Ⅲ h	Australia	49	4.41	1.27
	China	107	4.65	1.13
	Germany	199	3.89	1.29
	Finland	25	3.68	1.11
	Japan	1911	3.95	1.41
	South Korea	89	4.31	1.19
	New Zealand	74	4.51	1.16
	Singapore	112	4.39	1.20
	Thailand	133	3.92	1.18
	USA	161	4.18	1.38
	Total	**2860**	**4.03**	**1.37**
Ⅲ i	Australia	49	4.61	1.17
	China	107	4.81	1.10
	Germany	199	4.40	1.24
	Finland	25	3.80	1.41
	Japan	1911	3.66	1.44
	South Korea	89	4.24	1.28
	New Zealand	74	4.66	1.19
	Singapore	112	4.58	1.08
	Thailand	133	4.11	1.24
	USA	161	4.48	1.36
	Total	**2860**	**3.92**	**1.42**
Ⅲ j	Australia	49	4.88	1.03
	China	107	5.07	0.96
	Germany	199	4.85	1.05
	Finland	25	4.68	1.18
	Japan	1911	4.50	1.15
	South Korea	89	4.78	1.03
	New Zealand	74	5.09	0.91
	Singapore	112	5.01	0.84
	Thailand	133	4.49	1.22
	USA	161	4.99	1.02
	Total	**2860**	**4.62**	**1.13**

Figure Q9. F3: International Relationship

		Q9. (International Information)		
		n	Mean	SD
I a	Australia	49	4.31	1.54
	China	107	4.63	1.23
	Germany	199	4.21	1.39
	Finland	25	4.72	1.21
	Japan	1911	3.47	1.36
	South Korea	89	3.83	1.40
	New Zealand	74	4.26	1.09
	Singapore	112	4.00	1.28
	Thailand	133	4.07	1.13
	USA	161	4.16	1.31
	Total	**2860**	**3.71**	**1.39**
I b	Australia	49	4.78	0.98
	China	107	4.87	1.01
	Germany	199	4.64	1.10
	Finland	25	4.44	1.16
	Japan	1911	3.87	1.22
	South Korea	89	4.17	1.15
	New Zealand	74	4.77	1.05
	Singapore	112	4.71	0.89
	Thailand	133	4.22	0.92
	USA	161	4.88	0.96
	Total	**2860**	**4.12**	**1.22**
I c	Australia	49	4.65	0.97
	China	107	4.81	1.05
	Germany	199	4.14	1.09
	Finland	25	3.96	1.14
	Japan	1911	3.75	1.16
	South Korea	89	4.20	1.18
	New Zealand	74	4.69	0.95
	Singapore	112	4.46	0.94
	Thailand	133	4.03	1.01
	USA	161	4.76	1.01
	Total	**2860**	**3.97**	**1.18**
I d	Australia	49	4.35	0.95
	China	107	4.64	1.06
	Germany	199	4.14	1.09
	Finland	25	3.96	1.14
	Japan	1911	3.52	1.20
	South Korea	89	3.93	1.22
	New Zealand	74	4.58	0.97
	Singapore	112	4.35	0.99
	Thailand	133	3.83	1.11
	USA	161	4.40	1.17
	Total	**2860**	**3.76**	**1.22**
I e	Australia	49	3.47	1.63
	China	107	4.39	1.22
	Germany	199	3.98	1.35
	Finland	25	4.16	1.28
	Japan	1911	3.25	1.34
	South Korea	89	3.48	1.51
	New Zealand	74	3.80	1.52
	Singapore	112	4.11	1.50
	Thailand	133	3.53	1.26
	USA	161	3.76	1.46
	Total	**2860**	**3.45**	**1.40**
I f	Australia	49	2.73	1.50
	China	107	4.23	1.29
	Germany	199	3.35	1.47
	Finland	25	3.32	1.11
	Japan	1911	2.73	1.25
	South Korea	89	3.17	1.59
	New Zealand	74	3.34	1.48
	Singapore	112	3.74	1.47
	Thailand	133	3.32	1.26
	USA	161	3.36	1.49
	Total	**2860**	**2.97**	**1.37**

Figure Q9. F4: Selection of future

		Q9. (Selection of future)		
		n	Mean	SD
Ⅳ c	Australia	49	4.78	1.23
	China	107	4.85	1.20
	Germany	199	3.97	1.52
	Finland	25	4.52	1.16
	Japan	1911	4.23	1.55
	South Korea	89	4.47	1.28
	New Zealand	74	5.09	1.04
	Singapore	112	4.77	1.12
	Thailand	133	4.53	1.26
	USA	161	4.73	1.19
	Total	**2860**	**4.34**	**1.48**
Ⅳ d	Australia	49	4.57	1.46
	China	107	4.75	1.21
	Germany	199	3.65	1.59
	Finland	25	3.84	1.34
	Japan	1911	4.09	1.47
	South Korea	89	4.34	1.28
	New Zealand	74	4.76	1.28
	Singapore	112	4.97	0.95
	Thailand	133	4.05	1.38
	USA	161	4.60	1.37
	Total	**2860**	**4.18**	**1.46**
Ⅳ e	Australia	49	4.45	1.44
	China	107	4.84	1.23
	Germany	199	3.62	1.74
	Finland	25	4.12	1.48
	Japan	1911	3.72	1.64
	South Korea	89	4.24	1.39
	New Zealand	74	5.36	0.84
	Singapore	112	5.07	1.14
	Thailand	133	4.50	1.28
	USA	161	4.69	1.38
	Total	**2860**	**3.97**	**1.63**
Ⅳ h	Australia	49	3.71	1.68
	China	107	4.22	1.45
	Germany	199	3.16	1.46
	Finland	25	3.16	1.28
	Japan	1911	3.80	1.49
	South Korea	89	4.16	1.33
	New Zealand	74	4.30	1.31
	Singapore	112	4.36	1.27
	Thailand	133	3.75	1.36
	USA	161	4.05	1.41
	Total	**2860**	**3.82**	**1.48**
Ⅳ i	Australia	49	4.53	1.32
	China	107	4.80	1.23
	Germany	199	4.03	1.34
	Finland	25	3.92	1.32
	Japan	1911	4.35	1.40
	South Korea	89	4.48	1.22
	New Zealand	74	5.04	1.18
	Singapore	112	4.88	1.00
	Thailand	133	4.35	1.33
	USA	161	5.01	1.12
	Total	**2860**	**4.42**	**1.37**
Ⅳ k	Australia	49	4.10	1.50
	China	107	4.81	1.18
	Germany	199	3.45	1.42
	Finland	25	3.36	1.38
	Japan	1911	4.42	1.35
	South Korea	89	4.66	1.17
	New Zealand	74	4.50	1.22
	Singapore	112	4.81	1.06
	Thailand	133	4.59	1.31
	USA	161	4.59	1.31
	Total	**2860**	**4.39**	**1.36**

Figure Q9. F6: Self-confidence

		Q9. (Self-Confidence)		
		n	Mean	SD
Ⅱ g	Australia	49	4.49	1.24
	China	107	4.70	1.19
	Germany	199	4.22	1.30
	Finland	25	4.04	1.21
	Japan	1911	3.38	1.44
	South Korea	89	4.54	1.20
	New Zealand	74	4.51	1.14
	Singapore	112	4.54	1.16
	Thailand	133	4.27	1.26
	USA	161	4.55	1.43
	Total	**2860**	**3.73**	**1.47**
Ⅱ h	Australia	49	4.27	1.24
	China	107	4.55	1.23
	Germany	199	4.10	1.18
	Finland	25	3.84	1.18
	Japan	1911	3.64	1.46
	South Korea	89	4.45	1.17
	New Zealand	74	4.22	1.16
	Singapore	112	4.34	1.06
	Thailand	133	4.16	1.15
	USA	161	4.28	1.34
	Total	**2860**	**3.85**	**1.41**
Ⅱ i	Australia	49	4.88	0.99
	China	107	5.11	1.05
	Germany	199	4.76	1.12
	Finland	25	4.52	1.26
	Japan	1911	3.79	1.35
	South Korea	89	4.80	1.16
	New Zealand	74	5.12	0.96
	Singapore	112	4.79	0.91
	Thailand	133	4.34	1.21
	USA	161	4.95	1.12
	Total	**2860**	**4.13**	**1.36**

Q10. PPDAC (Scientific thinking)
Mean scores for "problem detection skill" were lower in Finland, Japan, and Thailand compared to those of China, New Zealand, Singapore, and the USA. For most items, Australia and Germany shows mean scores that were intermediate between the two extremes. A similar tendency was seen for "ability to plan resolution measures", "data/information gathering capacity", and "abilities to make proposals." For "analytical capability," mean scores of Australia and South Korea in addition to Finland, Japan, and Thailand were lower than that of China, New Zealand, Singapore, the USA. Germany had a mean score which was intermediate between the two extremes.

Figure 10 shows the distribution of PPDAC scores among 10 countries by boxplot chart. It shows significantly lower scores of PPDAC for Japanese sample.

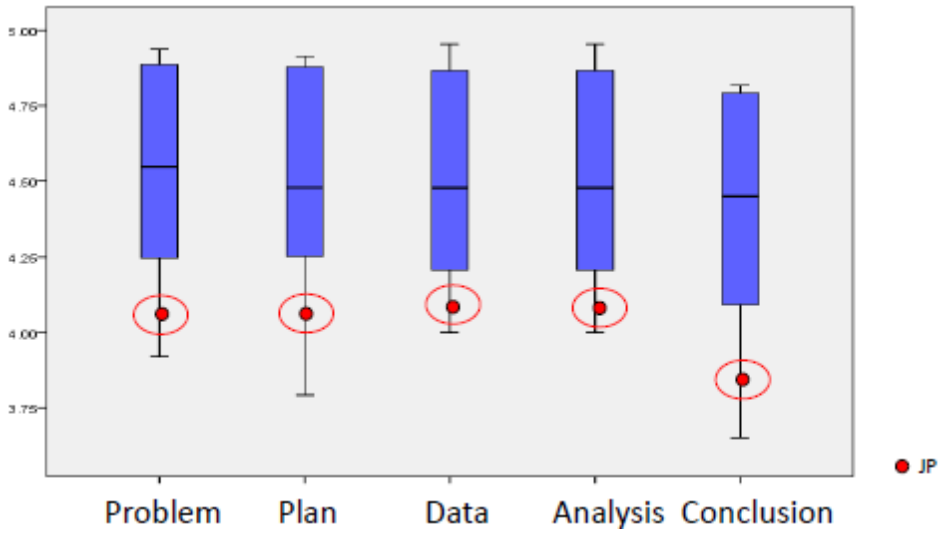


Figure Q10. Distribution of PPDAC scores among 10 countries

Table Q10. PPDAC

			Q10		
			n	Mean	SD
A a	Australia	1	50	4.48	1.03
	China	2	107	4.97	1.01
	Germany	3	199	4.47	1.05
	Finland	4	25	3.80	1.00
	Japan	5	1911	3.95	1.12
	South Korea	6	89	4.37	1.10
	New Zealand	7	74	4.76	0.89
	Singapore	8	112	4.66	0.83
	Thailand	9	132	4.24	1.01
	USA	10	161	4.86	0.95
	Total		**2860**	**4.16**	**1.13**
A b	Australia	1	50	4.76	0.98
	China	2	107	4.95	0.96
	Germany	3	199	4.50	0.95
	Finland	4	25	4.00	0.96
	Japan	5	1911	4.26	1.05
	South Korea	6	89	4.54	1.07
	New Zealand	7	74	5.04	0.80
	Singapore	8	112	4.74	0.84
	Thailand	9	132	4.23	0.99
	USA	10	161	5.00	0.84
	Total		**2860**	**4.40**	**1.04**
A c	Australia	1	50	4.56	0.93
	China	2	107	4.89	0.97
	Germany	3	199	4.51	0.91
	Finland	4	25	3.96	0.93
	Japan	5	1911	4.01	1.10
	South Korea	6	89	4.51	1.06
	New Zealand	7	74	4.91	0.83
	Singapore	8	112	4.64	0.87
	Thailand	9	132	4.27	1.00
	USA	10	161	4.80	0.92
	Total		**2860**	**4.21**	**1.09**
B a	Australia	1	50	4.44	1.01
	China	2	107	4.90	0.95
	Germany	3	199	4.32	1.00
	Finland	4	25	3.88	1.01
	Japan	5	1911	4.09	1.06
	South Korea	6	89	4.48	1.10
	New Zealand	7	74	5.00	0.70
	Singapore	8	112	4.79	0.87
	Thailand	9	132	4.25	0.98
	USA	10	161	4.84	0.92
	Total		**2860**	**4.26**	**1.07**
B b	Australia	1	50	4.46	1.03
	China	2	107	4.88	0.98
	Germany	3	199	4.28	1.05
	Finland	4	25	3.72	1.10
	Japan	5	1911	3.96	1.12
	South Korea	6	89	4.52	1.05
	New Zealand	7	74	4.89	0.87
	Singapore	8	112	4.71	0.88
	Thailand	9	132	4.30	0.99
	USA	10	161	4.85	0.97
	Total		**2860**	**4.16**	**1.13**
B c	Australia	1	50	4.80	1.09
	China	2	107	4.97	1.00
	Germany	3	199	4.48	1.06
	Finland	4	25	3.64	0.99
	Japan	5	1911	4.08	1.15
	South Korea	6	89	4.44	1.08
	New Zealand	7	74	4.96	0.87
	Singapore	8	112	4.90	0.87
	Thailand	9	132	4.32	1.07
	USA	10	161	4.98	0.96
	Total		**2860**	**4.28**	**1.15**
B d	Australia	1	50	4.44	1.01
	China	2	107	4.86	1.03
	Germany	3	199	4.43	1.04
	Finland	4	25	3.88	0.97
	Japan	5	1911	4.04	1.10
	South Korea	6	89	4.46	1.07
	New Zealand	7	74	4.88	0.79
	Singapore	8	112	4.71	0.91
	Thailand	9	132	4.14	0.96
	USA	10	161	4.94	0.97
	Total		**2860**	**4.22**	**1.10**
B e	Australia	1	50	4.38	1.07
	China	2	107	4.79	0.99
	Germany	3	199	4.33	1.12
	Finland	4	25	3.84	1.07
	Japan	5	1911	3.91	1.13
	South Korea	6	89	4.36	1.11
	New Zealand	7	74	4.84	0.88
	Singapore	8	112	4.66	0.94
	Thailand	9	132	4.25	0.97
	USA	10	161	4.80	1.08
	Total		**2860**	**4.11**	**1.14**
C a	Australia	1	50	4.46	1.05
	China	2	107	4.91	1.01
	Germany	3	199	4.43	1.12
	Finland	4	25	4.12	1.05
	Japan	5	1911	4.19	1.14
	South Korea	6	89	4.45	1.06
	New Zealand	7	74	4.88	0.81
	Singapore	8	112	4.77	0.83
	Thailand	9	132	4.09	1.02
	USA	10	161	5.01	0.96
	Total		**2860**	**4.33**	**1.12**
C b	Australia	1	50	4.44	0.99
	China	2	107	4.91	0.95
	Germany	3	199	4.51	1.07
	Finland	4	25	3.84	1.21
	Japan	5	1911	4.18	1.10
	South Korea	6	89	4.53	1.00
	New Zealand	7	74	4.91	0.80
	Singapore	8	112	4.74	0.87
	Thailand	9	132	4.30	1.03
	USA	10	161	4.88	0.98
	Total		**2860**	**4.33**	**1.09**
C c	Australia	1	50	4.48	1.05
	China	2	107	4.79	0.98
	Germany	3	199	4.28	1.06
	Finland	4	25	4.04	1.02
	Japan	5	1911	3.89	1.11
	South Korea	6	89	4.51	1.01
	New Zealand	7	74	4.91	0.88
	Singapore	8	112	4.71	0.83
	Thailand	9	132	4.23	0.97
	USA	10	161	4.98	1.00
	Total		**2860**	**4.12**	**1.13**
D a	Australia	1	50	4.14	0.95
	China	2	107	4.84	1.01
	Germany	3	199	4.34	1.18
	Finland	4	25	3.92	1.19
	Japan	5	1911	4.06	1.20
	South Korea	6	89	4.30	1.12
	New Zealand	7	74	4.77	0.88
	Singapore	8	112	4.78	0.90
	Thailand	9	132	3.85	1.29
	USA	10	161	4.88	1.10
	Total		**2860**	**4.20**	**1.20**
D b	Australia	1	50	4.12	1.04
	China	2	107	4.92	1.03
	Germany	3	199	4.44	1.13
	Finland	4	25	4.04	1.21
	Japan	5	1911	4.03	1.17
	South Korea	6	89	4.28	1.10
	New Zealand	7	74	4.74	0.89
	Singapore	8	112	4.76	0.93
	Thailand	9	132	4.04	1.27
	USA	10	161	4.95	1.02
	Total		**2860**	**4.20**	**1.18**
D c	Australia	1	50	4.32	1.08
	China	2	107	4.94	0.97
	Germany	3	199	4.48	1.11
	Finland	4	25	3.88	1.09
	Japan	5	1911	3.95	1.11
	South Korea	6	89	4.48	0.98
	New Zealand	7	74	4.95	0.89
	Singapore	8	112	4.77	0.94
	Thailand	9	132	4.23	1.20
	USA	10	161	4.94	1.01
	Total		**2860**	**4.17**	**1.14**
E a	Australia	1	50	4.42	0.88
	China	2	107	4.79	0.98
	Germany	3	199	4.17	1.17
	Finland	4	25	3.84	0.94
	Japan	5	1911	3.88	1.16
	South Korea	6	89	4.38	1.07
	New Zealand	7	74	4.82	0.96
	Singapore	8	112	4.65	0.85
	Thailand	9	132	3.88	1.19
	USA	10	161	4.73	1.05
	Total		**2860**	**4.06**	**1.17**
E b	Australia	1	50	4.54	0.97
	China	2	107	4.80	0.92
	Germany	3	199	4.46	1.23
	Finland	4	25	3.72	1.17
	Japan	5	1911	3.86	1.29
	South Korea	6	89	4.37	1.09
	New Zealand	7	74	4.77	0.84
	Singapore	8	112	4.78	0.89
	Thailand	9	132	4.12	1.15
	USA	10	161	4.75	1.11
	Total		**2860**	**4.08**	**1.27**
E c	Australia	1	50	4.60	1.03
	China	2	107	4.79	1.03
	Germany	3	199	4.46	1.08
	Finland	4	25	3.44	1.16
	Japan	5	1911	3.77	1.17
	South Korea	6	89	4.40	1.09
	New Zealand	7	74	4.81	0.89
	Singapore	8	112	4.67	0.91
	Thailand	9	132	4.14	1.23
	USA	10	161	4.83	1.02
	Total		**2860**	**4.03**	**1.20**
E d	Australia	1	50	4.48	1.03
	China	2	107	4.80	0.91
	Germany	3	199	4.35	1.17
	Finland	4	25	3.60	1.35
	Japan	5	1911	3.77	1.20
	South Korea	6	89	4.39	1.11
	New Zealand	7	74	4.86	0.78
	Singapore	8	112	4.69	0.99
	Thailand	9	132	4.23	1.21
	USA	10	161	4.87	1.04
	Total		**2860**	**4.03**	**1.22**

Part II
Country Reports

China

1. Current status and the demand for developing future global leaders

In step with China's increasing presence in the global economy, it is playing a more significant role than ever before. Since economic reform in 1978, China has taken efforts to showcase its strong economic power. Since joining the World Trade Organization in 2001, its economy has become integrated with the global economy. China's economy has grown by around 10% annually for over three decades; it is now the world's second largest economy. According to the International Monetary Fund, China's gross domestic product was $17.6 trillion in 2014, outstripping US output of $17.4 trillion. China attracts substantial foreign investment as one of the largest markets and it is increasingly playing an influential role as a global leader rather than as simply the country with the largest manufacturers.

In addition to its strong economic presence, China is globally influential in various ways. For instance, the establishment of the Chinese-led Asian Infrastructure Investment Bank in 2014 instigated concerns that China had emerged as another imperialist power beside the United States and was asserting its independent interests. China's substantial carbon emissions and bad air quality (such as the problem of PM 2.5 pollution) have also garnered attention; emissions have been regarded as one of the most crucial challenges to emerge from the country's rapid industrialization. Moreover, territorial disputes in the South China Sea have caused serious tensions with several sovereign states within the region and have influenced other countries as well.

Hence, China has had a rising global presence not only in the economic sector but also in other aspects. To build a strong and powerful country, it is necessary for China to educate and gain talent with the ability to realize the country's goals. In the economic sector, in step with the increase in competition with foreign companies in China and with the aggressive expansion of Chinese companies overseas, China urgently needs talent with an international mindset and experiences, the ability to communicate efficiently with overseas clients and offices, and the skills to implement strategic plans and actions. China also needs good minds to resolve problems such as environmental issues. In the political context, China needs groups of professionals with a deep knowledge of foreign policy and the ability to get what the country wants.

Although China has pressing needs regarding the pool of international talent, the country has insufficient talent for asserting itself in the international context. It remains quite challenging for global Chinese companies to recruit employees as few people have had overseas experience; the huge gap between developed and undeveloped cities in terms of getting global talent is also a crucial matter for many Chinese companies. Chinese education, with its traditionally less argumentative culture, has to some extent resulted in reduced effectiveness among Chinese in making presentations and debating in global settings.

To overcome these weaknesses, China has initiated a series of global education programs aimed at cultivating talent. The first program has intended to attract Chinese with overseas experience to return to China. Figures from China's Ministry of Education indicate that among 460,000 Chinese outbound students in 2014, 79.3% returned to China to pursue careers, constituting an increase of 3.2% compared to the previous year. It may be possible for Chinese outbound students to fulfill the demand for bilingual and bicultural talent, which is necessary to facilitate China's integration into the global business market.

The second program has aimed to open international programs at various educational institutions to train domestic Chinese students to acquire global competencies. Many

international programs were opened at both basic and higher educational institutions. The number of international programs attached to prestigious Chinese junior and high schools has increased and more universities have invested money to attract foreign teachers and students to increase campus diversity. In the following section, this report further discusses changes that have taken place in high schools.

China has become increasingly influential in various aspects in the international setting. To enhance the country's power by enhancing its global presence, China needs to educate and to gain more talent with global competencies to enable the country could achieve its goals. The next section focuses on how high school education in China has changed in the context of globalization.

2. Global education in the high school system and curriculum

China has the largest education system and the number of students enrolled in basic education is rapidly increasing. In 2015, according to the China Education Center, approximately 9.42 million students took the *gaokao* (university entrance examination). After the Chinese government released guidelines in 2010 stating that internationalization is one of the most important future missions pertaining to national education, educational institutions have been enhanced to increase their international weight.

Global education in China aims to teach cultural diversity and to cultivate students' global competencies. There are three types of educational institution with international elements. The first type comprises English-only international schools, which mainly target the children of foreign residents in China and relatively wealthy locals. The second are Japanese-language-focused schools that are mostly located in northeastern China; their major goal is for students to enroll in prestigious Japanese universities. The last type are international divisions (*guoji-ban* or *guoji-bu*) attached to Chinese high schools, where most students aim to attend prestigious higher education institutions in English-speaking countries. This section focuses on one of the major leading forces in global education in China: international divisions of Chinese high schools, which target the majority of Chinese students.

Data obtained by the Chinese government show that as of 2009, around 62 Chinese high schools in 11 cities had established international divisions among China's 747 high schools. A majority of these international divisions were the result of collaborations with foreign educational institutions. Most of them had implemented curricula such as the UK A-levels, International Baccalaureate (IB), and Advanced Placement (AP). Comparing international divisions attached to Chinese high schools with international schools, one of the major differences is that while the former includes a Chinese curriculum for domestic university entrance examinations, the latter do not. This double curriculum is intended to help students by offering them the opportunity to choose between domestic and overseas universities.

The development of international education in Chinese high schools has exhibited unique features. First, the number of high schools with international divisions has gradually become larger. According to 2014 statistics from CERNET Corporation, from 2009 to 2013, the number of Chinese high schools with international divisions has tripled. This phenomenon is not limited to first-tier cities such as Beijing and Shanghai; there are international divisions in second- and third-tier cities. This has facilitated an increase in the number of young people able to study overseas.

Second, the competition among Chinese students to get into international divisions has become keen. For instance, Beijing 101 High School, a prestigious institution, received more than 2,000 applicants for only 60 available spaces in 2015. Because of this intense

popularity, the school has had to set a higher minimum score, increasing pressure on students as well as on their competition.

Third, international divisions in Chinese high schools seem to have lost their direction in terms of aims. Many international divisions in China promote themselves as teaching students about diversity and as using various learning methods; however, most of them are simply preparatory schools for going overseas. Therefore, the teaching styles in most of these schools are more in line with the traditional Chinese style, focused on memorization; there is less of a focus on argumentation and debate.

Fourth, some international divisions have not been of sufficient quality. Some international divisions have been established without having followed the appropriate legal processes beforehand; this could exert a negative influence on the quality of the education they provide. Another concern is the unbalanced budget distribution between the general and international curricula: many schools tend to allocate more of their budgets to their international divisions due to the higher costs of operating such divisions.

Lastly, the financial burden on Chinese parents has increased. In general, tuition fees range from 80,000 RMB to 100,000 RMB (from $12,158 to $15,198 at 1 RMB = $0.15). Through the “one plus two” program, some high schools in Shanghai allow students to study for one year in China and two subsequent years overseas; the program costs around 700,000 RMB ($106,368). This tuition standard is quite high if we compare it with the average yearly wages in China, which were around 56,339 RMB ($8,560) in 2015 according to data from the Chinese Ministry of Human Resources and Social Security.

Several important factors have led to the current situation of international divisions at Chinese high schools. One of the major factors is the strong competition for the domestic university entrance examination. Students have not completely lost confidence in their abilities, but most believe that they can receive better educations overseas. Another China-specific factor is the *hukou* (household registration) system in China. High school students are required to take their domestic university entrance examinations where their *hukou* is registered. Because levels of educational achievement differ by region, required minimum scores for the same university may differ based on *hukou* location. Some parents have claimed that they have had no choice but to “force” their children to go overseas.

The establishment and expansion of international divisions have been influential in various ways. First, high schools have been enabled to build up their brands by showing the public that they have a strong ability to educate global talent. Some prestigious high schools have not increased their number of accepted students in order to retain higher quality students. Students able to enroll in these schools may have greater opportunities to receive high-quality education. Second, income from tuition fees is beneficial for addressing high schools’ insufficient budgets; high schools are responsible for funding more than 35% of their own budgets without government support. Relatively higher tuition fees for international divisions have surely contributed to this. Third, students have gained more opportunities to learn about various topics. Certain schools, such as Shanghai Datong High School, have introduced Theory of Knowledge, one of the core curricula in the IB program.

This section summarizes the current situation of Chinese high schools—in particular, the development of international divisions. Chinese students have shown a strong desire to study overseas; this has been facilitated and supported by the opening of more international divisions. At the current stage, Chinese high schools and students equate global education with studying abroad, in particular, in English-speaking countries,

where they believe that they can receive a better education although few of them know well about the education system in English-speaking countries. In the following, the implications of this research project, which was conducted at several prestigious Chinese high schools with international divisions, are discussed. These results aim to reflect the positive and proactive attitudes among Chinese high school students who are strongly confident that they will become global leaders.

3. Implications of the research

This section aims to provide some insights on Chinese students' global competencies based on an analysis of global competencies (SQ6-2), global mindset (Q9), and PPDAC (problem, plan, data, analysis, and conclusions, Q10). Prestigious, well-known Chinese high schools with international divisions were included in this research project.

3.1 Global Competencies (SQ6-2)

The section on global competencies (SQ6-2) asked students how they would handle difficult (problematic) situations arising from cultural differences between countries; the data were analyzed based on the distribution of the median. One of the distinctive features of the data was the high ranking of China's median among all the countries in almost every question. From this perspective, it can be suggested that these Chinese students believed they possessed a relatively greater ability to deal with various cultural scenarios (see Table 1).

Table 1. Global competencies of Chinese students (SQ6-2)

Item		Ranking	Country	Median
a	I tried to understand the position of the other person and their feelings.	1	South Korea	4.60
		2	**China**	**4.56**
		3	USA	4.53
d	I tried to think of the cause of the problem from variuos perspectives.	1	USA	5.00
		2	**China**	**4.51**
		3	South Korea	4.44
e	I thought of various choices.	1	USA	4.78
		2	New Zealand	4.58
		3	**China**	**4.54**
f	I aimed to make it easy for the other person to state their opinion.	1	Thailand	4.64
		2	**China**	**4.63**
		3	USA	4.61
g	I aimed to build a cooperative relationship with the other person.	**1**	**China**	**4.85**
		2	Thailand	4.78
		3	USA	4.67
h	I also listened to viewpoints that were opposite to mine.	1	USA	4.86
		2	Thailand	4.70
		3	**China**	**4.54**
j	I explained my own opinions effectively.	1	USA	4.64
		2	Germany	4.59
		3	**China**	**4.56**
k	I confirmed midway whether we were reaching a resolution.	**1**	**China**	**4.24**
		2	USA	4.03
		3	South Korea	4.00
m	I had strong passion that I need to resolve the issue.	1	USA	4.72
		2	Thailand	4.70
		3	**China**	**4.54**

In the following, two items (G and K) that gained the highest median scores and one item (C) that resulted in a relatively lower median score (which was uncommon in the questionnaire) are analyzed.

The higher medians for Items G and K suggest that Chinese students place an emphasis on constructing cooperative relationships with others and on receiving confirmation midway through the resolution process.

The higher median score for Item G may have largely resulted from Chinese social norms. By convention, Chinese people avoid direct conflict with other people and seek to be cooperative to maintain harmony and to save their *mianzi* (face); this idea has

been considered and passed from generation to generation as an ideal virtue. From this perspective, the higher median for Item G suggests that Chinese students still hold to this idea and that some of them practice it in actual scenarios.

The higher median score for Item K suggests that Chinese students have a stronger tendency to make sure that their discussion is heading toward a resolution. This result might be influenced by the specific socioeconomic situation in China. Many people have realized that in China, there are many things that change suddenly without notifications being issued beforehand. Surrounded by such a fast changing environment has cultivated people's skill for adaptation. This has also resulted in cultivating people less obsessed with the long-term perspective who place a priority on short-term, "win-win" situations. Such circumstances might have strongly influenced Chinese students' attitude to constantly seek to confirm the direction they are heading to ensure flexible adaptation to ongoing situations.

It is also worth examining Item C, which asked students whether they respect different values. This result can be interpreted from the perspective of traditional education in China. Conventional Chinese education spent more time on teaching unified, singular values than on discussing the diversity of cultures. The textbooks for compulsory education state that China has a rich and diverse culture, with a population that is more than 90% Han Chinese but also encompasses 55 ethnic minorities. However, opportunities to learn and discuss the cultures of ethnic minorities in the classroom have been limited. Students, regardless of their ethnicity, may have fewer opportunities to realize that there are differences among them.

To sum up, the higher median score for Chinese students in the data pertaining to global competencies (SQ6-2) shows that they have great potential to gain global competencies, but may need more opportunities to learn and to respect diverse values.

3.2 Global Mindset (Q9)

This section reviews the extent to which Chinese students possess a global mindset by analyzing answers to Question 9, which included four sections: "International Knowledge/Information" (Section I); "About Myself" (Section II); "My Involvement with Society" (Section III) and "The Future" (Section IV). The factor analysis method was used to better understand the data. There were six factors: cross-cultural understanding and self-understanding (Factor 1), overseas aspirations (Factor 2), interpersonal relationships (Factor 3), international knowledge (Factor 4), career choices (Factor 5), and self-efficacy (Factor 6).

Factor 1 (cross-cultural and self-understanding) shows that Chinese students seem to be more concerned with cross-cultural differences compared to students in other countries. Many Chinese students who answered the questionnaire seemed to believe that social problems in different cultures need to be examined in the context of their specific culture (Section III, Item C), showing that they are conscious of the fact that every culture has a specific background. This could be one of the reasons that many Chinese have claimed to be reluctant to learn from other countries' experiences, as it could have facilitated a strong belief that China is "distinctive" in many ways.

Answers to the questions pertaining to self-understanding indicated quite different results. According to the results, most Chinese students replied in the negative regarding questions such as whether they could visualize their future (Item A), find their objective (Item F), or think specifically about their future career (Item B). These echo some studies that have indicated that many Chinese are unsure about their future because they believe it is not up them to decide or because they believe the future is predetermined. This reflects a problem in traditional teaching, which encourages

students to follow one ideal career path: attaining a high score, enrolling in a highly ranked university, finding a “good” job, and enjoying life. However, it seems that many Chinese students have not been given many opportunities to think about what they really want to pursue. This type of teaching implies that if you are outside of the ideal route, you might be outside of the opportunity to enjoy the rest of your life as well.

The data for Factor 2 (overseas aspiration) show that many Chinese students have a strong desire to go overseas. The results correspond with the current situation in China: a greater number of increasingly younger high school students have the desire to receive education overseas. Among all the items, it seems that many Chinese students are less interested in interacting with foreigners (Section II, Item 2) although as the median was generally high for the case of China, we concluded that the level of overseas aspirations was high.

Many Chinese students showed strong feelings toward Factor 3 (interpersonal relationships). This result was not surprising, given the fact that many studies have supported that Chinese place an emphasis on relationships. The data from Section III gave some hints regarding this issue. For instance, Chinese students believe that they could interact with others in a good way (Section III, Item E), will actively seek help if necessary (Section III, Item G). They were also strongly agreed that they could take charge as a leader (Section III, Item I). Not only Chinese students believe in their strong social skills but they also had quite a confidence on taking a leadership role in the group.

Factor 4 (international knowledge) indicates that Chinese students believe they have a strong ability to conduct research on topics (Section I: Item A), that they have sufficient knowledge of their own country, and that they are able to share such knowledge with foreigners when necessary (Section I, Items E and F). Comparing the data from Factor 4 among China and other Asian countries such as Singapore, South Korea, Japan, and Thailand, we found that China scored highest for almost all questions. The affirmative attitude among Chinese students regarding international knowledge corresponded to that of US students, which shows that students in both countries may have a strong consciousness of living in the world’s two most powerful countries.

Factor 5 (career choices) shows Chinese students’ strong desire to participate in international activities, to study or work abroad, and to become international leaders (Section IV, Items D, E, and H). It seems that Chinese students had a relatively stronger desire to elevate China’s international presence in the world (Section IV, Item K). This result to some extent reflects how Chinese students felt that they were tasked with such responsibilities.

Factor 6 (self-efficacy) shows the extent to which Chinese students were strongly confident in their abilities. For instance, they tended to focus more on their strengths than their weaknesses (Section II, Items G and H) and they believed that they could do good for others (Section II, Item I).

This session reviewed data from Question 9 (global mindset) according to six factors. Chinese students have strong overseas aspirations and also hope for China’s presence to be elevated in the global setting. If we consider the fact those Chinese interviewees were from prestigious high schools after the fierce competition, we could suggest that they cultivated such strong confidence in the context of Chinese education where people believe the grade directly determines one’s life. Contrary to their strong confidence, the data also shows they were less certain about their own careers, which has also been developed in the context of Chinese culture.

3.3 PPDAC (Problem, Plan, Data, Analysis, and Conclusions, Q10)

This section discusses the skills of Chinese students in regard to five areas: problem-detection skills (Section A), the ability to plan resolution measures (Section B), data-/information-gathering capacity (Section C), analytical capability (Section D), and ability to make proposals (Section E). The PPDAC model is used to analyze data obtained from Chinese students.

One of the characteristics of the collected data for Question 10 is that median scores for a particular group of countries, comprising countries such as China, the United States, New Zealand, and Singapore, were consistently highest for almost every question. This means that among five Asian countries (China, South Korea, Singapore, Thailand, and Japan), only students in China and Singapore agreed strongly with the questions they were asked.

Similar to the results for global competencies (SQ6-2), the median score for Chinese students was relatively high. Among the 18 questions in Sections A to E, China's median scores were highest for 3 questions and ranked second for 9 questions. From this data, it may be suggested that Chinese students believe they have the skills to solve the problems in strategic ways. In the following, certain features are selected in order to further explore China's distinctiveness.

In Section B (ability to plan resolution measures), Chinese students replied that they were quite confident in their ability to examine various reasons behind problems (Item A) and list and summarize causes as part of a team (Item C, see Figure 2). This corresponded to the data from the global competencies (SQ6-2) section, which indicated that many Chinese students agreed that they would try to think of the origin of problems from various perspectives (Item D) and that Chinese students have high levels of cooperative spirit (Item G).

The data from Section C (data-/information-gathering capacity) and Section E (ability to make proposals) demonstrated similar results. Many Chinese students are strongly confident that they possess the relevant skills. Most believed that they could select data and information suitable for problem resolution (Section C, Item B) and that they could appropriate present their proposals (Section E, Item B).

The data for Question 10 show that most Chinese respondents have higher levels of consciousness regarding their possession of the skills to find problems, plan, gathering data for analysis, and make conclusions.

The data from this research project show that Chinese students who study at prestigious high schools in China have stronger overseas aspirations, a willingness to learn from others, and a belief that they can become group leaders. These results imply that Chinese youth have a strong potential to attain global competencies and a global mindset as well as acquire the skills to advance through the PPDAC cycle. However, the data also show that they seem to be less interested in respecting the cultures of others and that they have less confidence in their futures and goals.

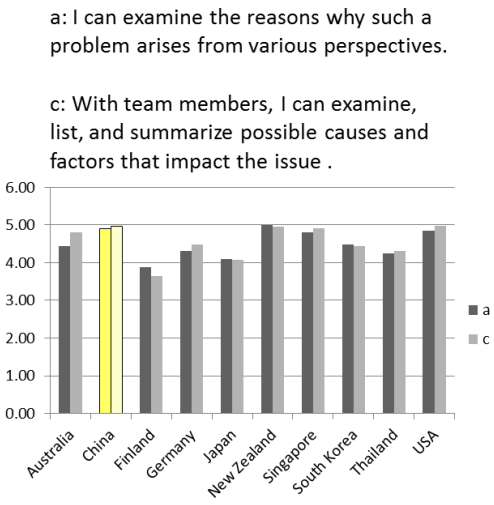


Figure 1. Strong ability to plan resolution measures (Section B, Items a and c)

4. Agenda for developing future global leaders in China in the next decade

This research project shows that compared to students in other countries, many Chinese high school students have a great potential to attain global competencies and global mindsets to become future global leaders. The world has also observed the emergence of many Chinese as global leaders on the international stage. In his new edition of *Discover Your True North*, Bill George writes that Jack Ma of Alibaba, one of the most well-known Chinese e-commerce companies, has emerged as "China's first truly global leader, the face of the new China." In the not-so-distant future, more Chinese will become global leaders. However, China also needs to face certain challenges.

The first challenge is the overemphasis on the traditional curriculum. Many international divisions in Chinese high schools have introduced overseas programs, but the teaching methods in such programs remain conventional. Such programs tend to place more emphasis on memorizing the "correct" answers, encouraging students to get better scores on examinations rather than learning about what is going on in society and various cultures in the world.

Because of this education system, students can hardly find their passions because of a lack of sufficient brainstorming and discussion time. It seems that the goal for many Chinese students in international divisions is to master examinations through the traditional teaching method. This implies that the global education in China is oriented toward going abroad, in particular, to English-speaking countries.

This type of education negatively influences the "ultimate" goal of many Chinese students—to enroll in prestigious higher education institutions—because it leads to a lack of social skills. This has also affected high school students who study in "one plus two" program that allows them to study overseas from the second year: adapting to a different teaching style, for them, becomes a more serious issue than the language barrier.

Traditional education has its advantages; however, in order to cultivate global leaders, it is necessary for China to reexamine its current international education system according to students' long-term interests. There is a significance in Chinese students realizing that

various cultures exist in this world and that it is not only examination scores that determine their future.

The second challenge is that the quality of education must be maintained or improved. The unbalanced allocation of budgets between international and general curricula has been considered one of the crucial problems at Chinese high schools at present. At Chinese high schools, students in the international divisions comprise a smaller portion of students compared to those in the general curriculum; however, resources are in general distributed to the former because of heavy labor and facility costs.

Some high schools even have to move highly effective teachers from the general curriculum to cover costs. The distortion of resource allocation prevents students enrolled in the general curriculum from enjoying the high-quality teaching that they deserve. This problem may be common in other countries where students enrolled in international curricula comprise a minority, but the government has spent a huge amount of money on promoting global education.

China is changing at a rapid speed; the global education system is as well. The Chinese government and Chinese high schools need to improve the education system from the perspective of students. We should value the proactive attitudes among aspirational Chinese youth to ensure that more students can learn about the diversity of cultures and receive high-quality education.

Finland

1. Current status and demands for developing future global leaders in Finland

Finland is a small (with a population of 5,5 million), culturally and ethnically rather homogenous country in Northern Europe. It borders Sweden, Norway and Russia. Since its independence in 1917, Finland has fostered sensitivity to minority languages. Currently it is a bilingual country where Finnish and Swedish are the official languages. Additionally, individual municipalities may also have other official languages, such as Sámi. The Finnish language, which is the mother tongue of 90% of the population, is Ural-Altaic and thus quite different from the Indo-European languages spoken in other parts of Europe.

The largest language and ethnical minorities in Finland are Russian, Estonian and Somali. The diversification of Finnish society since the mid-1990s has been the fastest in Europe. Yet in 2010 the proportion of foreign-born citizens in Finland was only 4,7%. It remains to be seen what the situation is after the recent refugee immigration.

Since the domestic market is small, Finland's economy is highly dependent on export. The country is a member of the European Union (EU) and uses euro as currency. The free movement of people and goods within the EU means that also Finns can freely travel to and work in most European countries.

Although there are some notable global leaders from Finland, such as Mr. Martti Ahtisaari (Nobel Peace Prize Laureate 2008, President of Finland 1994-2000, UN diplomat and mediator) there are not that many Finns in global leadership positions. However, there are many Finns in international positions in EU organizations and several specialists (such as conductors and opera singers) have become internationally leading in their own fields.

There are no special programs or schools to train global leaders in Finland. On the contrary, the Finnish education system is freely accessible for everyone and there are no schools for especially gifted students. The underlying values that the Finnish education is based on today, are "*cultivating trust, enhancing autonomy, and tolerating diversity*" (Sahlberg 2011).

The path towards a global career can thus start in any location in Finland, since the equal and free public education provides equal opportunities for everyone. One example is the former Prime Minister of Finland, Mr. Jyrki Katainen, who is currently the European Commission Vice-President. He gained the basis for his international career already at the comprehensive school and matriculated from a public 300 students' high school in Siilinjärvi, a small town (with a population of 22 000) in northeastern Finland. He joined politics when still in high school and studied Political Science at Tampere University in Tampere (with a population of 216 000). His mother tongue is Finnish and he also speaks English, French and Swedish.

Another example is the internationally acknowledged Finnish Opera soprano Ms. Karita Mattila, who noted in an interview that her high school language education in Perniö (with a population of 9 000) gave her a firm foundation for her international career.

In Finland, it is believed that everybody should have foreign language skills. Foreign language education is part of the curriculum also in secondary vocational schools.

2. Arctic Exposure in Global Leadership: global education in the high school system and curriculum, including a case in Lapland, Finland

In Finland the education system is based on equality. Education in Finland is free of charge for the students even up to the doctorate level. There is very small variation in student performance between schools in different parts of Finland at any given time. In the Finnish welfare state, education is commonly seen as a public good and it is protected as a basic human right to all in the Constitution. (Sahlberg 2011)

In Finland, lifelong language learning starts at the basic education level. The objectives are not only linguistic competence but also strategic competencies, both in communication and learning strategies, and also in cultural skills. Also, the overall aims of basic education are reflected in foreign language education. These include among others the goal of developing a healthy self-esteem as well as the knowledge and skills needed for active involvement in the present and future democratic society. (Hildén & Kantelinen 2012)

The aim of language education at all school levels in Finland is to support the linguistic and cultural identity of a pupil, as well as to foster her/his intercultural competences and strategic skills (Hildén & Kantelinen 2012). Foreign language education starts at the latest on the 3rd grade at primary school and the first foreign language is most commonly English. On the 7th grade (the 1st grade at junior high school) studies of the second domestic language (usually Swedish) begin and there is also a selection of other foreign languages (including German, French, Russian etc. depending on individual schools) for optional language studies at that school level. Thus when about 50% of junior high school graduates continue in senior high school education (about 40% proceed to secondary vocational education which also has foreign language education), they have typically reached a high level of English competency by then.

At the university level, English is not only one of the required subjects in degree programs but also widely used both in course books and written assignments in different fields. All Finnish universities offer subject courses in English and many also have degree programs fully in English. This means that international exchange for staff and students is a natural part of university life.

Arctic case: The School A

The students participating in this study came from the school A, which is located in Inari, the northernmost municipality of Lapland, Finland. Destination to the capital, Helsinki, is 1 100 km. Ivalo has a land surface area of over 15 000 km² and with a population of only 6 814 (2014), it has the population density of 0,45 inhabitants per km².

The school A has less than 100 students and it offers in addition to mandatory Swedish (the 2nd official language in Finland) also English, German, French and Russian languages. The school has participated in several Comenius (EU) projects and currently has cooperation with a Norwegian school. These projects give students a chance to gain experience in traveling and participate in intercultural meetings.

Ivalo is the administrative center of Inari and also the largest population center (about 4 000 inhabitants). It has three sámi languages as official languages in addition to Finnish. It is located about 300 km north of the Artic circle and enjoys night less summers and extremely cold (even -40°C) winters with Northern lights. Inari has the northernmost official border crossing points in the European Union: to neighboring Norway and Russia.

Despite its remote location, Ivalo is exposed to international encounters. Finland's northernmost international airport is located in Ivalo, and 30 km from Ivalo there is a

skiing resort called Saariselkä. There are winter charter flights from Great Britain and some other countries. Most tourists to Finland come from Russia, Sweden, Germany, United Kingdom and Japan (in that order). In the popular resort area of Saariselkä you can find menus even in Japanese in all restaurants. Tourism is an important source of livelihood for Saariselkä (with over 375 000 overnight stays each year) and over 80% of the populace work in the service sector (8% in primary production, mostly reindeer herding).

International outlook of this remote place is manifested by the Inari municipality webpage (www.inari.fi), which provides information in Finnish, Swedish, English, Russian and three Sámi languages.

3. Comments on the research results

There are many problematic issues with conducting cross-cultural questionnaires. One of these issues involves the translation of the questions and finding corresponding concepts and vocabulary in another language. In this study, some countries used a questionnaire, which was translated to their own language. In the case of Finland, the research questionnaire was in English. Although the level of English fluency was relatively high among the respondents, one cannot disregard the influence of unfamiliar words and concepts, or that of quite complicated and long sentences in a foreign language.

Another issue is the culturally specific way of using scales in an evaluation. Some cultures, such as the Finnish, typically avoid using extreme ends of the scale. This may have affected the way the respondents in the Finnish sample answered. Also, the answers were based on self-evaluation of global skills, while it is part of the Finnish culture to downplay one's own skills.

All in all, it is important to bear in mind that the results from Finland are based on 25 respondents, so it is impossible to generalize the results of such a small amount of data.

Although the sample of Finnish students came from a remote, small village in Finland, most students (24/25) had been abroad, with two even reporting having been in 10 countries or more. However, Finland was the only country in the study where nobody had stayed over half a year in a foreign country. The background of the parents may explain this; there are no international companies in the area, so the parents are working in local businesses or for the municipality and are unlikely to go on expatriate assignments abroad. Although some students may enroll in foreign exchange programs already at senior high school level even in remote areas of Finland, in this sample there were none who did so.

When asked about how often they had opportunities to experience a different culture, 72% of the Finnish respondents answered "neither frequently nor rarely" or "frequently". They were also the second largest group in the study to reply "very frequently". This reflects the environment that they are living in: although Ivalo is a small village, it is close to a popular tourist resort and students have exposure to the foreign tourists visiting the area. However, tourists typically stay only for a few days and engage in programmed activities. This makes the intercultural encounters between them and locals rather short and superficial. There are only a few foreigners living in the local area.

3-1. Global Competency (SQ6-2)

When asked to recall an incident of a difficult cross-cultural situation, only 8 students (32%) in the Finnish sample had encountered such a situation. Thus the majority had not had problematic situations arising from cultural differences, although they must be exposed to meeting foreign tourists in their local environment.

The incidents described by the respondents seemed to be very simple encounters where, for example, the student didn't understand Russian spoken by some tourist. It seems that based on these kinds of simple situations, it was difficult to select from the possible choices in the questionnaire for resolving a difficult situation. Thus the mean scores of Finland's students are generally quite low on any of the suggested items. Furthermore, they didn't choose to change their perspectives or behavior, which could be interpreted as reluctance to generalize based on one incident. On average, the Finnish respondents seemed to consider to possess a higher than average understanding of the culture in question. They also seemed to be to some extent ready to try to solve a difficult situation rather than avoiding solving it.

3-2. Global Mindset (Q9)

In evaluating their knowledge of foreign countries, Finnish students ranked highest in knowledge about history and religion. This reflects the curriculum of Finnish schools where world history and comparative religion have a central role. Politics, economy and poverty issues may be areas where individual interest plays a bigger role than the school curriculum.

Finland had the highest mean score on collecting information in foreign languages and the second highest on recounting their own history and culture in a foreign language. This is not surprising, considering the extensive foreign language education in Finland. The students are capable of using English or other foreign languages in real life situations. When reflecting about themselves, the Finnish students showed a high interest in foreign countries and cultures, with average willingness to live there.

Finland ranked very low in self-confidence and self-image in global mindset. This may be linked to the core values of their society: "*Small is beautiful", "don't talk unless you have something to say*" and "*less is more*" are typical descriptors of good life and everyday culture in Finland (Sahlberg 2012). However, they could have been expected to display perseverance, called "s*isu*" in Finnish, since it is also part of the values in child rearing.

When asked about involvement with society, Finns seemed surprisingly inactive. Also their aspirations for their future were quite low. Finland ranked lowest in their perception of ability of speaking in front of many people (Q III h). Although this was a small sample, the results could be explained by the nature of Finnish society and culture. Finns are relatively shy and the communication style in Finland is very different from Indo-European cultures; it stresses silence over talk, and a small population means that you don't get into contact with other people that often (this is especially true in scarcely populated areas like Lapland). In a welfare state there may be less motivation to deal with social problems.

The autonomy of young people to select their own career and future emphasizes individual growth process and finding your own interest areas in life. Parents rarely interfere with the offspring's future plans; after all, they are not financially responsible either.

3-3. PPDAC (Q10)

In perception of their abilities to use various methods to resolve problems in a society, Finland ranked notably lowest in most items. One possible explanation may be that most of the sentences started with "*I can*". This type of self-assertive behavior is not part of the traditional Finnish culture.

Also, this part of the questionnaire stressed the verbal ability to theoretically ponder

about one's skills. It may be that Finns need more practical and concrete cases that they could reflect upon. They aim at solving problems rather than discussing about them, and do what they think is the rational thing to do. In the last question of the study about the skills that would be necessary to be globally active, Finns were able to give very concrete answers such as "*language skills and cultural knowledge"*.

4. Agenda for developing future global leaders in Finland in the next decade

In the foreign language curricula since 1994 in Finland, pedagogical freedom is left to teachers and teaching is based on principles of activity theory and cognitive theories of language learning. There are no standardized templates for language lessons, but only a set of broadly agreed basic guidelines for structuring a language lesson for new teachers. The focus is on communicative language teaching and the shift has been from studying the structure of language to studying the use of languages for real life situations.

Already the primary school foreign language education starts from raising a growing awareness of cultural diversity and languages. It aims at motivating the students to value their own language and cultural background as well as the diversity of global languages and cultures. A Finnish education expert summarized the values of Finnish culture by *"Fairness, honesty, and social justice are deeply rooted in the Finnish way of life. People have a strong sense of shared responsibility, not only for their own lives, for those of others.*" (Sahlberg 2011, 10)

The emphasis on individuality and traditional willingness to work with others is accompanied by low hierarchy in the Finnish society. Thus in Finland there is no need for specific education for global leaders. It is believed that all citizens need to have foreign language competence and intercultural skills. Moreover, respect for autonomy of an individual means that young people select their own individual development path by themselves. Since education is free, young people do not have to be pressured by their parents when deciding their future career or studies. Belief in life-long education on all levels of the society also creates opportunities to change one's career later in life.

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Germany

1. Introduction

Germany is the fourth largest economy in the world, and the largest economy in Europe. Germany produces 5 % of worldwide GDP (2014), and 21% of the European Union's GDP. Germany's GDP is 16 % larger than Europe's second largest economy, the United Kingdom, and 39% larger than the third largest, France. Germany's products are recognized for quality, reliability, engineering expertise, and performance, and the global appetite for "made in Germany" led to a 2014 German trade surplus of $258B. China's 2014 trade surplus for comparison was $150B.

Germany's rise to a European economic and political power started under Otto von Bismarck (1815-1898), a Prussian statesman, who unified German states in the second half the 19th century. Rebuilding after two wars, the Marshall Plan (1946) laid the groundwork for the German Economic Miracle (Wirtschaftswunder), taking Germany from the ruins of WW II back to a global economic powerhouse. After WW II, Germany pursued a policy of peaceful European political and economic integration, and was a founding member of the European Community in 1957 (now the European Union). German reunification in 1990 vastly strengthened its economic, political and military power. Abandoning the Deutsche Mark, the currency that Germans emotionally most closely link with the Economic Miracle, for the Euro, and ceding fiscal authority to the newly created European Central Bank (ECB) set Germany further on its path towards closer peaceful European integration.

The 2002 PISA scores, ranking Germany near OECD averages, came as a surprise to many in Germany who thought that the economic ascent, comprehensive social welfare, and prosperity must be the result of an outstanding education system. It triggered a strong national debate about Germany's secondary education, led to education reforms, and the latest scores rank Germany well above OECD averages.

2. The German Education System

The German education system traces its roots to 1763 when Frederick the Great of Prussia mandated regular attendance in municipality-funded public schools from the ages 5 to 13[1]. This system quickly developed into compulsory primary and voluntary secondary education, and the Abitur, the German Secondary Education Final Examination, was introduced in Prussia in 1788 (*Abiturreglement* 1788)[2].
Germany transitioned the former East German to the West German school system in 1992/3. In 2014/15, 752,358 teachers were teaching app. 8.33 million students at 33,635 schools in Germany[3]. Responsibility for education and schooling in Germany rests with the 16 German federal states, not with the federal government[4]

The current German education system teaches four years of Primary Education at Unified Elementary Schools (Volksschule); upon completion of Primary School, and typically at age 9 to 10, students decide on either (i) five-year Primary School (Hauptschule), (ii) six-year Middle School (Realschule), (iii) eight-year Specialized Upper Secondary School (Fachoberschule), or (iv) eight-year High School (Gymnasium). A

[1] Königlich-Preußisches General-Land-Schul-Reglement, wie solches in allen Landen Seiner Königlichen Majestät von Preussen durchgehends zu beobachten, 1763, Friedrich II, Berlin

[2] Abitureglement 1788, Reglement fuer Pruefung an den Gelehrten Schulen December 23, 1788, Karl Abraham von Zedlitz, Berlin

[3] DESTATIS, Statistisches Bundesamt, Zahlen und Fakten, Gesellschaft & Staat, Bildung, Forschung, Kultur, Schulen, Daten fuer 2014/15

[4] Grundgesetz 1949, Artikel 30

total of 9 years of school education are compulsory in Germany.

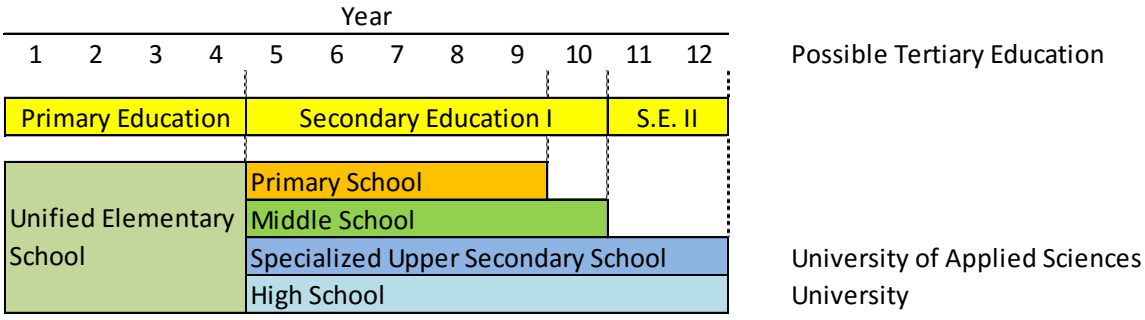

Figure 1: German Primary and Secondary Education

Primary to Secondary I education aims primarily at teaching students practical, job-related skills in preparation for their entry into the workforce, often followed by an apprenticeship program. Middle Schools provide a more comprehensive and academically more challenging curriculum.

Specialized Upper Secondary Schools focus on practical, job-related applications of academic concepts. Year 11 year has a mandatory six-month internship, year 12 is entirely taught in a classroom setting. Students can choose from technical/engineering disciplines, sciences, business, civil administration, pedagogy, health, nutrition, or design. Upon graduation (Fachabitur), most students continue tertiary education at universities of applied sciences (Fachhochschulen).

The objective of German High School education is defined as "an in-depth, general education, building the general ability to independent study, and propaedeutic scientific knowledge … in the German language, foreign languages, and Mathematics". Every class has to contribute to "creating fundamental, general knowledge to understand the relationship between different sciences, to different approaches to the systematic generation, structuring and use of information or materials, to learning strategies, independence, individual responsibility, and team and communication skills". The curriculum guidelines further mandate classes to be "subject-specific, interdisciplinary, and subject connecting". The curriculum has five key areas (i) languages/literature, (ii) social studies, (iii) mathematics/natural sciences, (iv) religion or a replacement subject, (v) physical education. Two foreign languages are mandatory, but choices beyond English and France as 3rd foreign language are often limited[5].
During the last 2 years of High School, students take one trip to a European city for an in-depth study of their core subjects. Many schools have European partner schools, and coordinated curricula allow 2-3 week class exchanges. Group assignments start in Year 10. In some classes, students have the choice between written exams and presentations for grading.
Responsibility for education and schooling in Germany rests with the federal states. Federal states implement education guidelines differently, with varying degrees of responsibility delegation to the school level. This leads to variations in high school curricula, and without additional information on schools surveyed, makes comparisons between high schools, or generalizations on "one German" curriculum, more complicated.

[5] Kulturministerkonferenz 2006, *Vereinbarung zur Gestaltung der gymnasialen Oberstufe in der Sekundarstufe II vom 02.06.2006,* Sekretariat der staendigen Konferenz der Kluturminister der Laender in der Bundesrepublik Deutschland, Berlin

Tertiary Education
There are currently 427 universities certified in Germany to teach tertiary education.[6] Curricula, education levels, and GPAs at German universities are comparable, and have a narrow quality bandwidth when compared to schools in France, the UK or the US. The majority of Universities are publicly funded, and the German government provides financial support including free financial aid (BAFOEG) to students from low-income families.

3. Research Results

3.1 Global Competencies (SQ6-2)

Global Competency was assessed in Question 6 on 13 items. German Global Competency scores show more variability across the 13 items surveyed than other countries surveyed.

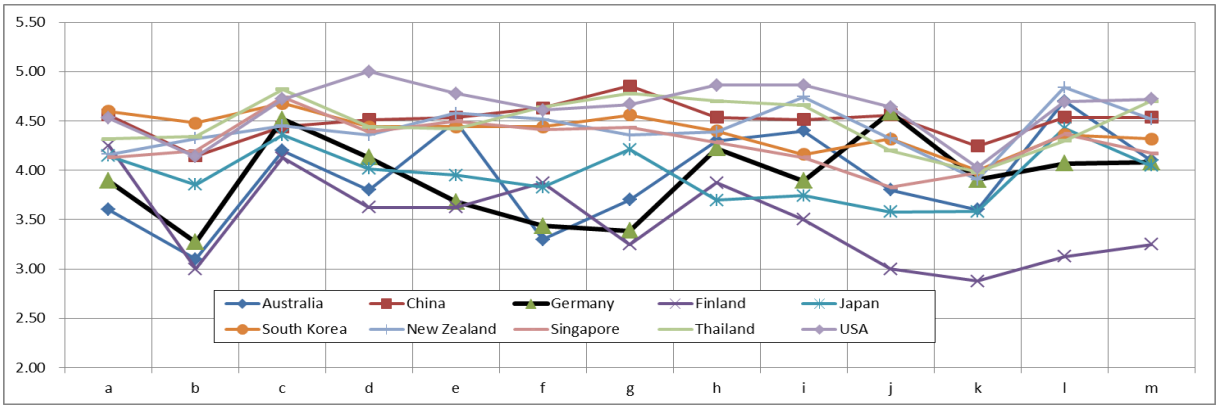

Figure 1: Country Comparison on Global Competency

German respondents score very high on questions that require a constructive, subject related discussion as emphasized by the German High School Curriculum, Item j, "I explained my own opinions effectively", and item c, "*I respected the values of people who were in a different position from my own*. "German respondents score low on flexibility and team integration, item b "*If necessary, I changed what I had decided first*", item f, "*I aimed to make it easy for the other person to state their opinion", and item* g, "*I aimed to build a cooperative relationship with the other person"*.

3.2 Global Mindset (Q9)

Global Mindset was assessed in Question 9 with 36 items clustered on four country comparison dimensions on (i) International Knowledge and Information, (ii) Self, (iii) Involvement with Society, and (iv) Future.

<u>Country Comparison on International Information and Knowledge</u>

German students' responses show no distinguishable differences to other countries in the International Knowledge and Information Dimension.

[6] DESTATIS, Statistisches Bundesamt, Zahlen und Fakten, Gesellschaft & Staat, Bildung, Forschung, Kultur, Hochschulen, Daten fuer 2014/15

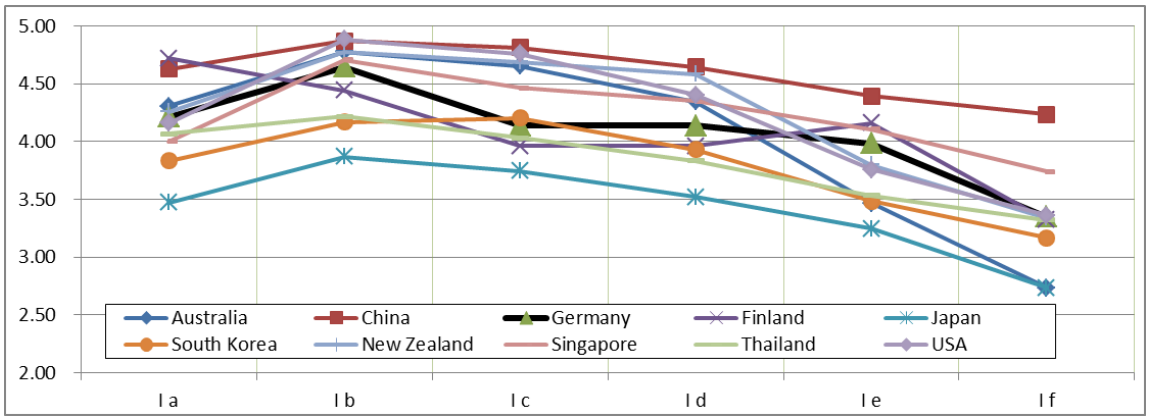

Figure 2: Country Comparison on International Knowledge and Information

German respondents score relatively high on Item I b, "*I am able to resolve a difficult task by thinking it through, research resources if necessary, and ask people.",* and item I e, *I can recount my own country's history and culture to internationals in a foreign language*.". German students assess themselves low on Item I c, *Even if I face a difficult situation, I can examine it by organizing the key points and structure of the problem*.
The results indicate that the German High School curriculum prepares students well for building and applying International Information and Knowledge.

Country Comparison on Self

German respondents' scores on Self-Evaluation are slightly lower than students from other countries. They show high interest in learning more about cultures, but have the least interest in a more active integrating with other cultures.

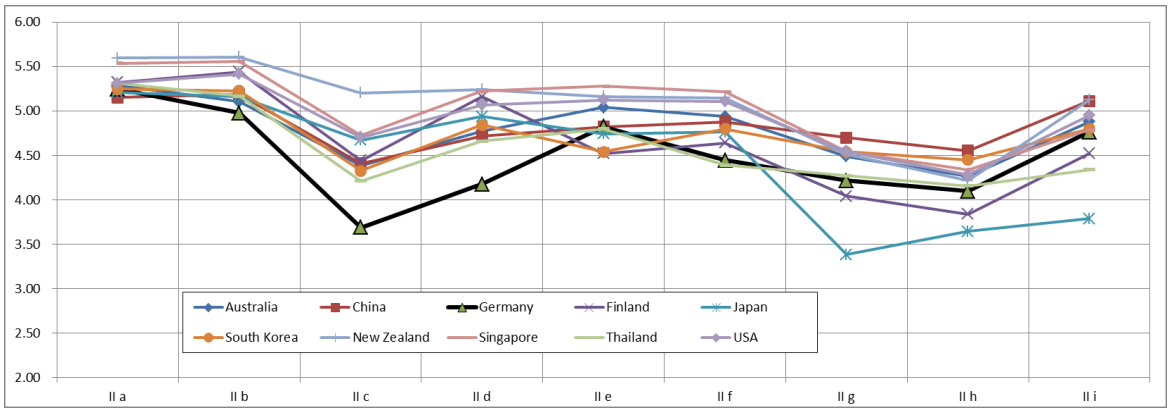

Figure 3: Country Comparison on Self

A surprising outcome is German students' lack of interest in living in foreign countries (item IIc), and interacting with many foreigners (item II d), not only with the lowest score, but with a large interest gap to all other countries surveyed. This is somewhat contradictory to data from the German Statistics Bureau, projecting the total number of students studying abroad rising from 58,000 in 2002 to 139,000[7], or OECD data showing that Germany is one of the largest emigrant countries in the OECD[8]. Consistent with documented German interest in foreign countries, German students have high interest in

[7] DESTATIS, Statistisches Bundesamt, Deustche Studierende im Ausland, Statistischer Ueberblick 2002-2012, December 6, 2014

[8] OECD 2015, OECD – Home – Newsroom – More than 3 Million German emigrants living in OECD countries, June 1, 2015

travelling to foreign countries (item IIa), and enjoy experiencing foreign cultures (item II b). German students have after New Zealand and Singaporean students visited on average the most countries in this survey. With regards to challenging themselves, German students feel as self-assured as their counterparts in the study (Item IIe).
The results indicate that the German system meets objectives for broadening the individual's general ability, self-confidence, and interest in other countries and cultures. The low scoring items will need more research to draw conclusions of a potentially new trend starting in high school impacting future generations, or simply a non-representative data set.

Country Comparison on Involvement with Society

German respondents' Involvement with Society scores are low, indicating a more individualistic, less integrative social environment.

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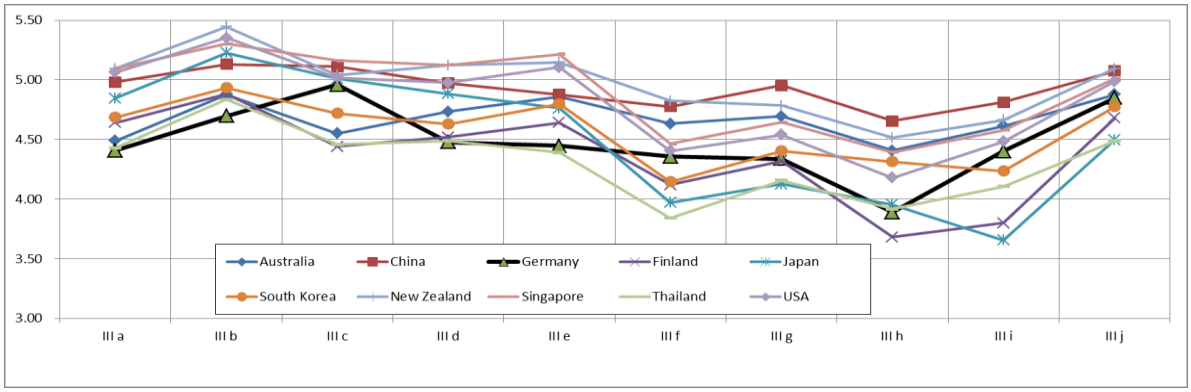

Figure 4: Country Comparison on Involvement with Society

German respondents scored high on item IIIc, *examining social problems under cultural aspects*, and III j, *being able to listen in discussions*, reflecting German students' openness to factual, or subject related discussions, as taught in their curriculum. German students score lowest on items III a, *Trying to understand foreigners*, and item III d, *Thinking flexibly about cultural differences between people*, showing lower interest in multi-cultural integration. This is consistent with data published by the EU showing 23-29% German's are welcoming non-EU immigration[9], likely impacted by the currently unfolding European migrant crisis with a lack of a comprehensive political and economic situation. German students leadership skills, item III i, T*aking leadership responsibility to help a group succeed*, is relatively high, reflecting their self-confidence to become successful leaders.

Country Comparison on Future

German respondents' show a dichotomy in their view of the future objectives, with high scores on a fulfilling professional career and low scores on global professional engagement.

[9] European Commission, Standard Eurobarometer 82, Autumn 2014

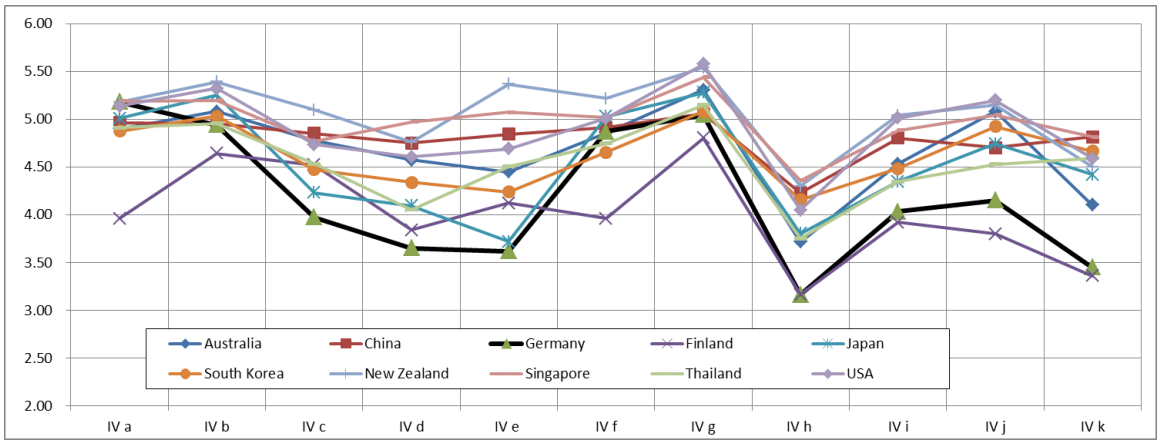

Figure 5: Country Comparison on Future

German students clearly distinguish between fulfilling career and personal goals, and the desire to pursue a global future. Their scores are high on questions that relate to their job success and personal satisfaction, item IV a, "*Future profession close to ideal self*", item IV b, "*selecting my career with a long-term goal"*, item IV f, "*Always having an objective and challenging myself towards it"*, and item IV g, "*Finding what I'd like to do and apply my passion to it"*. Global career aspects take a secondary role, living broad (IV c), international volunteering (IV d), studying abroad (IV e), becoming an international leader (IV h), or raising Germany's global profile (IV k) show consistently lower scores for German students.
This data is consistent with German university graduate career decision criteria, ranking as most important "friendly work atmosphere" (57%), followed by work-life balance (48%), and job security (42%). "International Development" is ranked 14th with only 23% of Germans ranking this as very important[10].

3.3 PPDAC Cycle

The PPDAC Cycle, measured with 18 questions, shows German students score higher than Finland, Japan, and Thailand, but much lower than China, the US or Singapore.

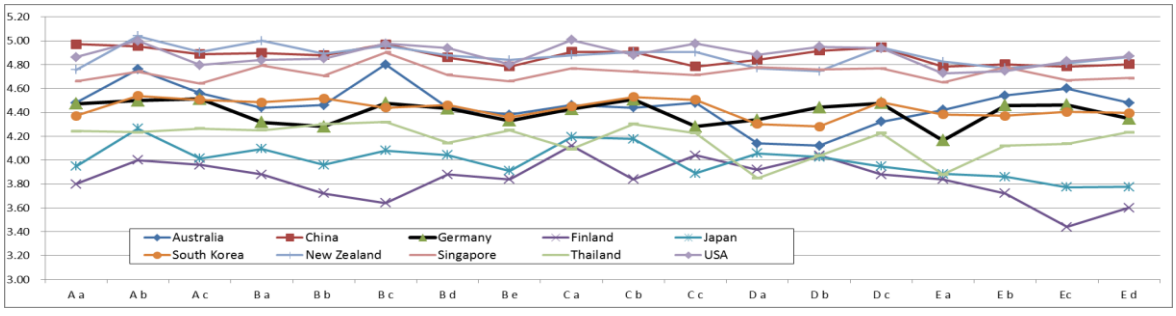

Figure 6: Country Comparison on PPDAC Cycle

The German mathematical curriculum system is not using the PPDAC system. As such, German respondents' PPDAC scores, almost consistently oscillating on all 13 questions around 4.4, above "slightly able (4.0)" but well below "able (5.0)" indicate more unfamiliarity with the concept than possible weaknesses in the mandatory German core curriculum aiming at high problem resolution skills.

[10] Statista, Das Statistik Portal, Branchen – Medien & Marketing – Werbing & Marketing – Kriterien fuer die Wahl des Arbeitgebers,2016

4. Conclusion

In an increasingly global marketplace, national prosperity will much more than in the past depend on today's students' ability to conquer the challenges of tomorrow. Global Champions have replaced National Champions, and Global Leadership has replaced Local Leadership. Future global leaders are being educated today in every stage of the education system, and this survey allows a valuable comparative snapshot of the Secondary Education systems of 10 countries' high school students' progress towards future global leaders.

German students have solid global competencies, not very different from the other countries surveyed, indicating that the German education system provides the framework for a global mindset. They feel well equipped to place problems into a global framework and to provide effective solutions. The Global Mindset dimensions showed German students' clear pursuit of personal objectives, a satisfying career, engagement with other cultures and countries, but far less interest in pursuing a global career or integrating multi-culturally. German PPDAC Cycle scores showed students feeling less competent to sketch problems in the PPDAC model, but this dimension is likely not representative as Germany is not employing the PPDAC model.

These results, if confirmed with a larger size and across all Federal States, could indicate the need for curriculum change, starting with a possible PPDAC cycle classes, and improvement to Global Competencies through new core or elective courses. The German students' willingness to more global and cultural engagement will need a broader, political and societal platform. Germany's commitment to European political and economic integration will play a key role in this dimension's future path of a new generation of German Global Leaders.

JAPAN

1. Current status and demand for developing future global leaders in JAPAN

Since Japan is an island, it does not have any bordering countries. Therefore, it is difficult to have cross cultural experience unless you go outside of Japan. The Japanese economy however, is deeply dependent on imports from other countries. Japanese food self-sufficiency ratio on a calories supply basis is 39% and food self-sufficiency ration on a production value basis is 65% (Ministry of Agriculture, Forestry and Fisheries, 2014).

The automobile industry, precision equipment, and robot industry are very successful and these industries support the Japanese economy. Japan has group of companies called “Keiretsu,” and for those who work in these companies, global competence in English is essential for their business. Most of these employees do obtain the necessary skills and knowledge and are placed in a position where they must use English and global abilities to communicate with foreign partners.

Along with economic needs, it is necessary for us to work together in order to deal with issues such as global warming and the war on poverty. As globalization moves farther and farther, and the distance between countries is reducing, in todays’ world, if something happens in one country, the effect is felt by other countries very quickly. Presently, Japan is facing a natural decrease in its population caused by an increase in the number of elderly people (population over 65 years old, 21.5%) and a decrease in the birth rate (total fertility rate、1.43%, Ministry of Health, Labor and Welfare, 2013).

Japan is now focusing on its tourism industry. Within a few years, Japan is expecting the entrance of a large new foreign labor force, and the number of foreigners visiting Japan last year reached a new record, 19,737,000 (Japan National Tourism Organization, 2016). The Olympics and Paralympics to be held in Tokyo in 2020, is also expected to bring a large number of foreign visitors to Japan. To sum up, global competence and English as a communication tool is not only necessary for business people in the future, but also for the Japanese general public.

2. Global high school education system and the curriculum in Japan

A global education system and curriculum are now in the process of being created. English education has not been very successful in the Japanese education system and much improvement is needed. As high school students in Japan have to pass college entrance exams, so much of the studying is directed toward preparation for the exams.

There are two types of college entrance exams: The Center Exam and one offered by each university. For the Center Exam, over 500,000 high school students take it each year and all the questions are given in multiple choice format. Typical questions may include memorizing the meaning of words, accent marks, the international phonetic alphabet, grammar, and idioms. This learning is not considered “active English (English as communication tool)”.

In order to deal with the problem, the Ministry of Education and Science adopted a program called the JET program, and almost 20 years ago it began to send native English speakers (often called “ALT: assistant language teachers”) to junior high schools and high schools. However, since ALTs do not have a teacher’s license in the Japanese education system, they are not allowed to teach English by themselves. Japanese students are not yet at the point where they can only listen to native English speakers or experience the kind of English instruction received in other countries.

Japanese students’ English ability is not considered high in comparison to other Asian countries. Presently, the TOEFL scores of Japanese high school students are ranked at

the bottom or second or third from the bottom among thirty Asian countries. The new TOEFL puts more emphasis on speaking and writing and Japanese students tend to get lower scores on these measures. Compared to the last two decades, the number of Japanese students studying abroad is decreasing Business people and educators are worrying about the tendency of Japanese youngsters to be “moving inward” instead of looking outside of Japan. Certainly, if Japanese youngsters are staying inside Japan, Japan cannot be as competitive at an international level as it was before.

Speaking and writing is not only a problem seen in English. In Japanese schools, a typical classroom size is 40 students and students take almost all classes in the same classroom. Instructions are conducted in lecture style and students spend most of their time listening to the teachers’ talk. Therefore, the instruction is not directed toward building communication skills and self-expression using speaking and writing. However, present new instruction methods such as active learning or project-based learning are spreading among Japanese schools. Although we still have a lot to do, a new education movement has started.

Along with this education movement, the Ministry of Education and Science has started some new projects. One of these is the appointment of Super Global High Schools (SGH). In this project, some high schools which have been working toward global education are appointed as SGH or SGH associates, and conduct projects such as programs on “global leaders” and programs on “global field work.”

The University of Tsukuba High School at Otsuka was appointed as the representative of all SGH schools and conducts information meetings a few times a year. The University of Tsukuba High School at Sakado has been working on global field work in education for sustainable development (ESD) and held a High School ESD summit in 2015. In addition, some high schools have adopted the international education program provided by International Baccalaureate (established in Switzerland), and the Ministry of Education and Science supports this program. We can see many seeds for the start of new **E**ducation for **E**nglish and **G**lobal competence (why are these with capital letters?

Are they a special name? Then it is ok, but you must also make Competence capitol letter too. Or just make them all small letters) and whether it will be successful or not depends partly on whether we can make the necessary changes in the college entrance exam. For English education, Japan is shifting forward to measuring four skill areas: speaking, reading, writing, and listening.

3. Comments on research results

3.1 Global Competencies (SQ6-2)

Item scores that are relatively high for Japanese students were “I reflected on what I learned from the event.” (Item l), “I respected the values of people who were in a different position from my own.” (Item c)” I aimed to build a cooperative relationship with the other person” (Item g) (Figure 1). The items that were relatively low were “I explained my own opinions effectively” (Item j),” I confirmed midway whether we were reaching a resolution” (Item k),” I also listened to viewpoints that were opposite to mine” (Item h),” I took actions taking advantage of the skills I have.” (Item i). Relatively high scored items matched with the values of Japanese culture.

Japan is considered collectivist on the measure of individualism-collectivism. Within a culture that values collectivism, we are expected to reflect on our own acts, to respect others, and cooperate. The items that scored low were items that dealt with communicating effectively with others and the ability to work independently. Japanese students do not have enough experience using these abilities. As these attributes are very important when people from different cultures work together, it is important to

incorporate these skills into instruction and to practice these abilities with the regular curriculum.

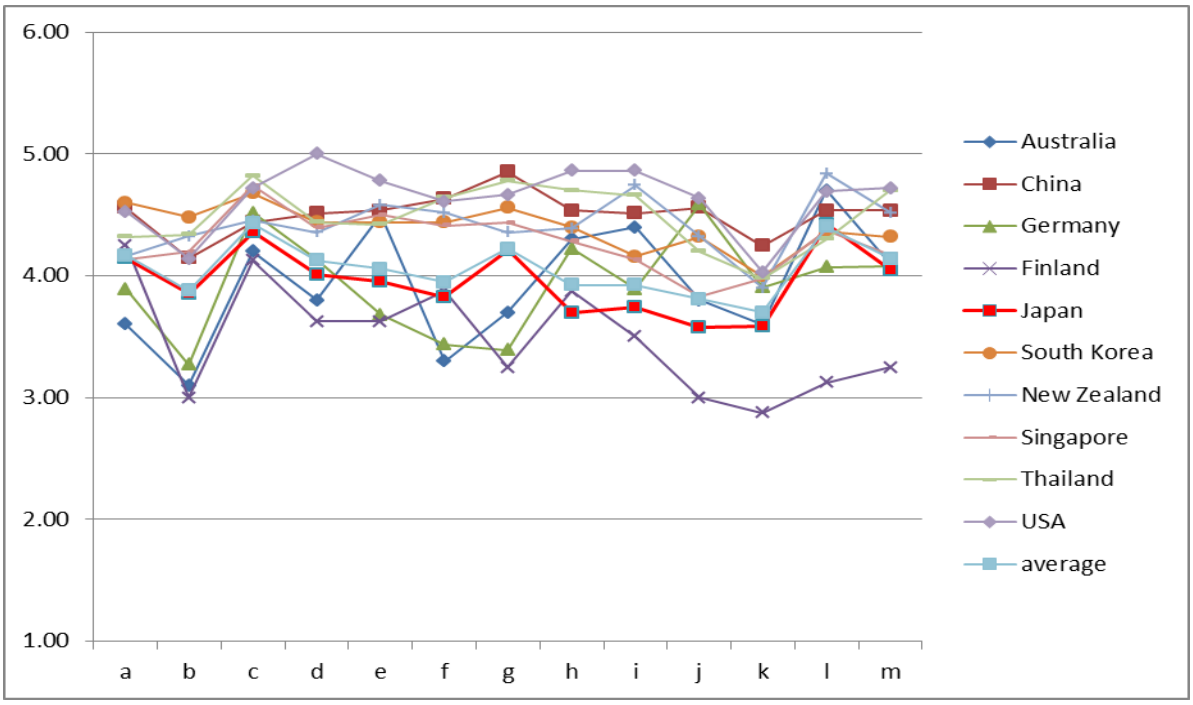

Figure 1. Country comparison on global competencies

3.2 Global Mindset (Q9)

Section I: International knowledge/information

For almost all the items, Japanese students rated lowest. Among these, "I can describe my own country's politics and economy to foreigners in a foreign language" (Item f) and "I can describe my own country's history and culture to internationals in a foreign language" (Item e) had lower scores compared to other items. Those two items were low for other countries, too. However, Japanese students' score on item f and e was lower than 3.5 (the mid-score), indicating they are not confident on those items. In Japan, it is considered a problem that young people do not go to elections and do not show interest in politics. This result reflects this phenomenon.

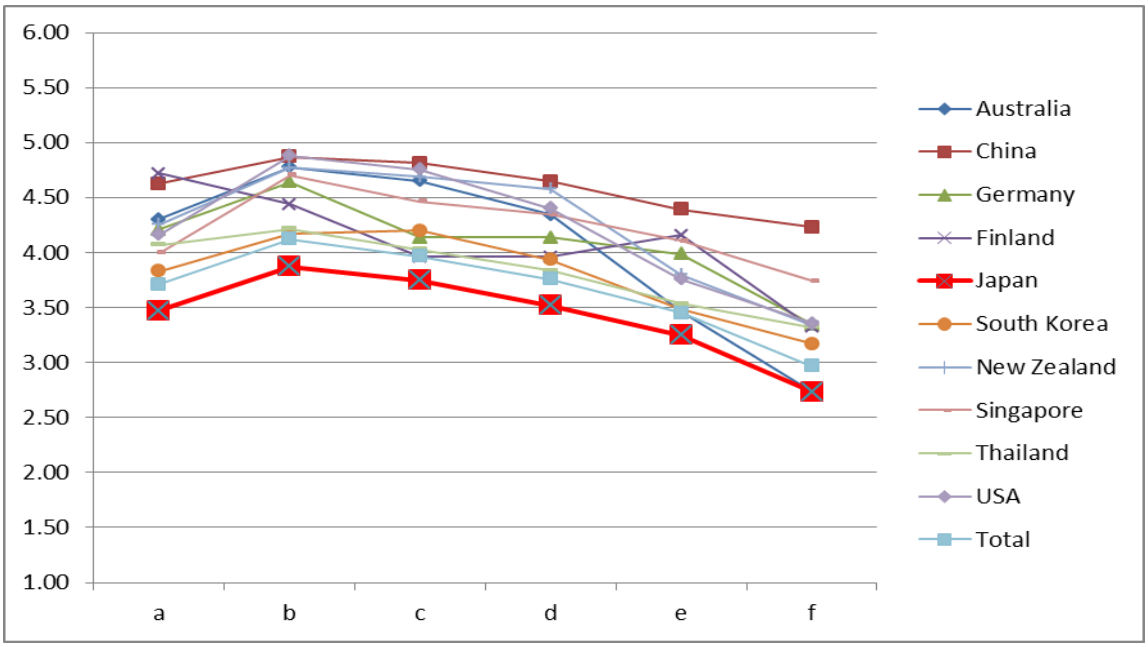

Figure 2. Country comparison on global mindset (section I)

Section II: Ideas/concepts/thoughts of themselves

In this section, the scores for items a-f were somewhere near the average, but the scores for items g-i were lower than for other countries. Items a-f measured interests toward foreign countries and challenging attitude toward difficulties, so Japanese students have these attributes. Items g-i, on the other hand, measured self-esteem, valuing strength, and competence. These results showed that Japanese students have a comparatively lower self-esteem.

This result matched the result showed by a date comparison between adolescents from America, China, Korea, and Japan few years ago (Japan Youth Research Institute, 2011). This result might stem from the tendency for Japanese to evaluate themselves lower because they value modesty. One other reason may be that that Japanese high school students take many exams to get into schools, and they receive constant feedback on how they rate with the national standard. Therefore, it might be difficult to maintain a high level of confidence and to find their strengths. It is important for Japanese educators not to discourage their students, but encourage them.

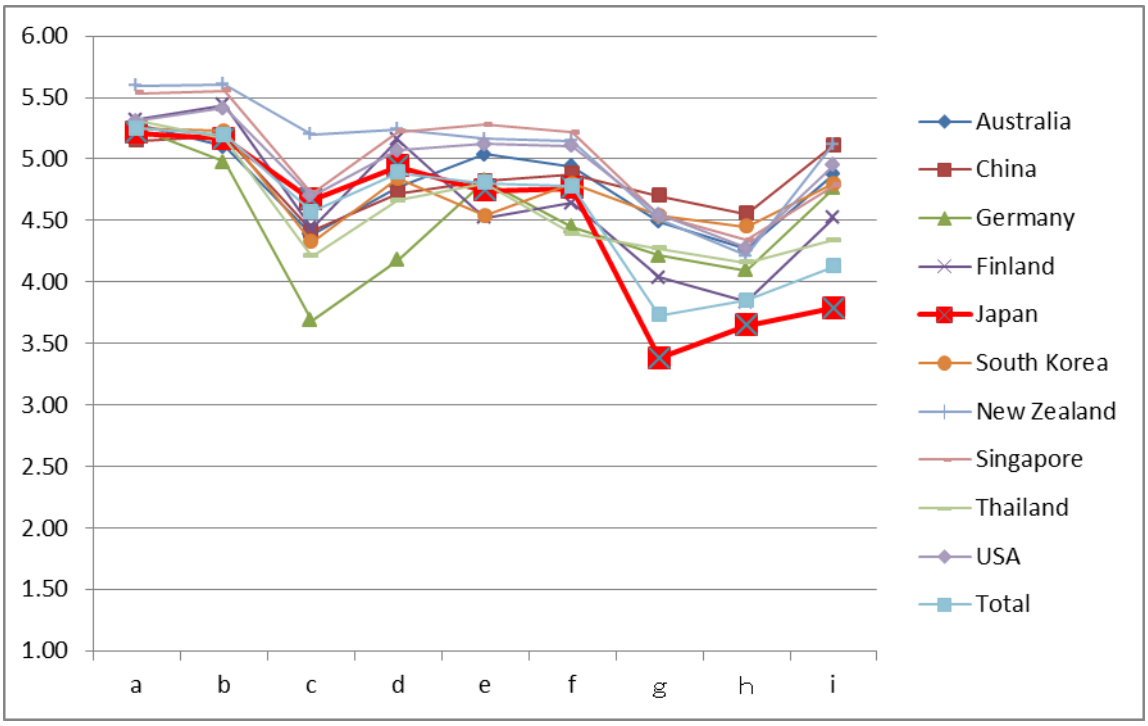

Figure 3. Country comparison on global mindset (section II)

Section III: Social relations

In this section, items a-f scored the same as the average, and items g-j scored low. Items a-d measure the beliefs and attitudes that students think they want to be open-minded and fair to people from different cultures. In Japan, moral education and human rights education are widely conducted from elementary school, and students learn to be fair and open-minded toward others. Also, because specific religious or political ideology is not strongly promoted in Japan, Japanese students have an ability to accept various cultures and different values. Items e-f measure interpersonal communication (approaching communication actively, asking questions, expressing opinions, and showing leadership). It is not so common to act in these ways in Japanese culture which values “conformity” and ”sameness”, so it is understandable that students scored low on those items.

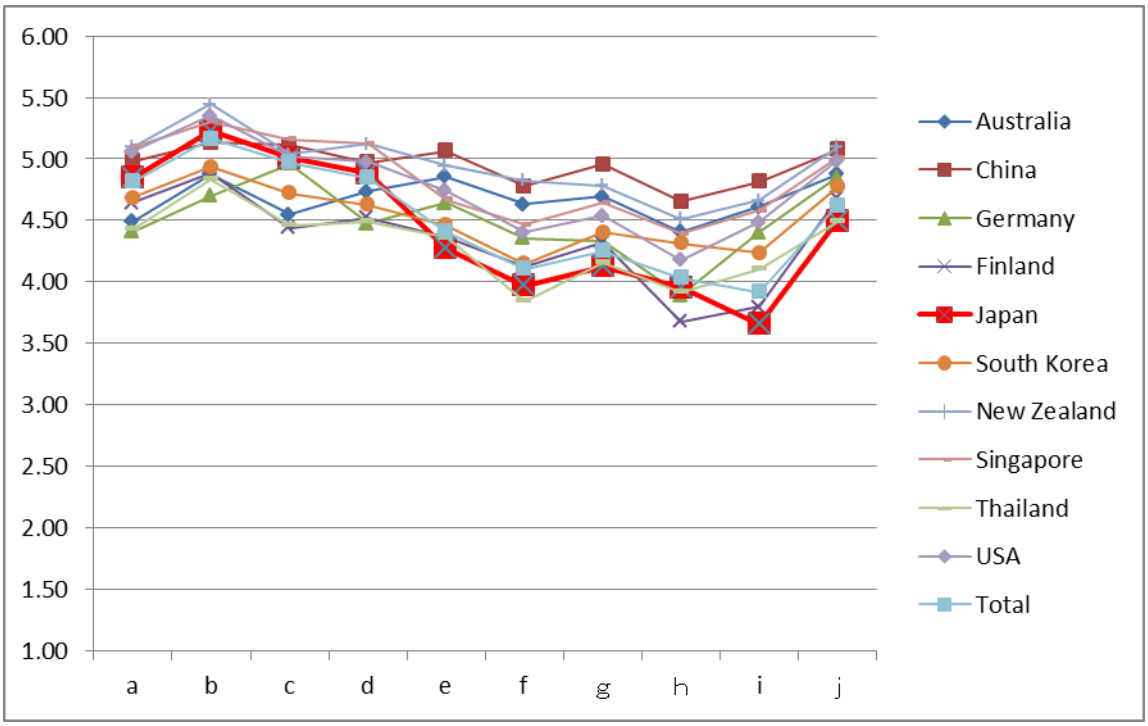

Figure 4. Country comparison on global mindset (section III)

Section IV: Future perspectives

In this section, scores for items a, b, f, & g were high, and scores for items c-e and h-k were low for Japanese students. The items a & b measure career awareness, and f & g measure challenging spirit and passion toward your goal. Students scored quite high on those items. Items c-e are asking about the intention to study abroad or work abroad, and h-k are asking about the intention to develop a future global network and to work for global issues. They scored low on these items. It is difficult to guess whether Japanese students' global competency will increase naturally by their contact with foreign people. Rather, we need effective strategies to deal with these present challenges.

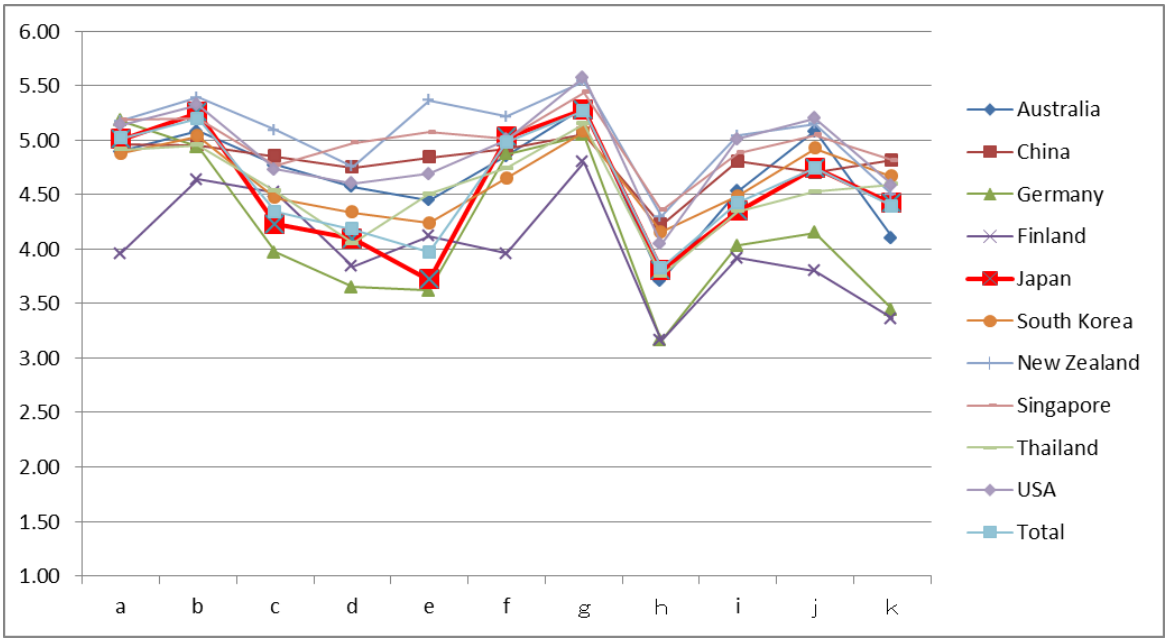

Figure 5. Country comparison on global mindset (section IV)

3.3 PPDAC (Q10)

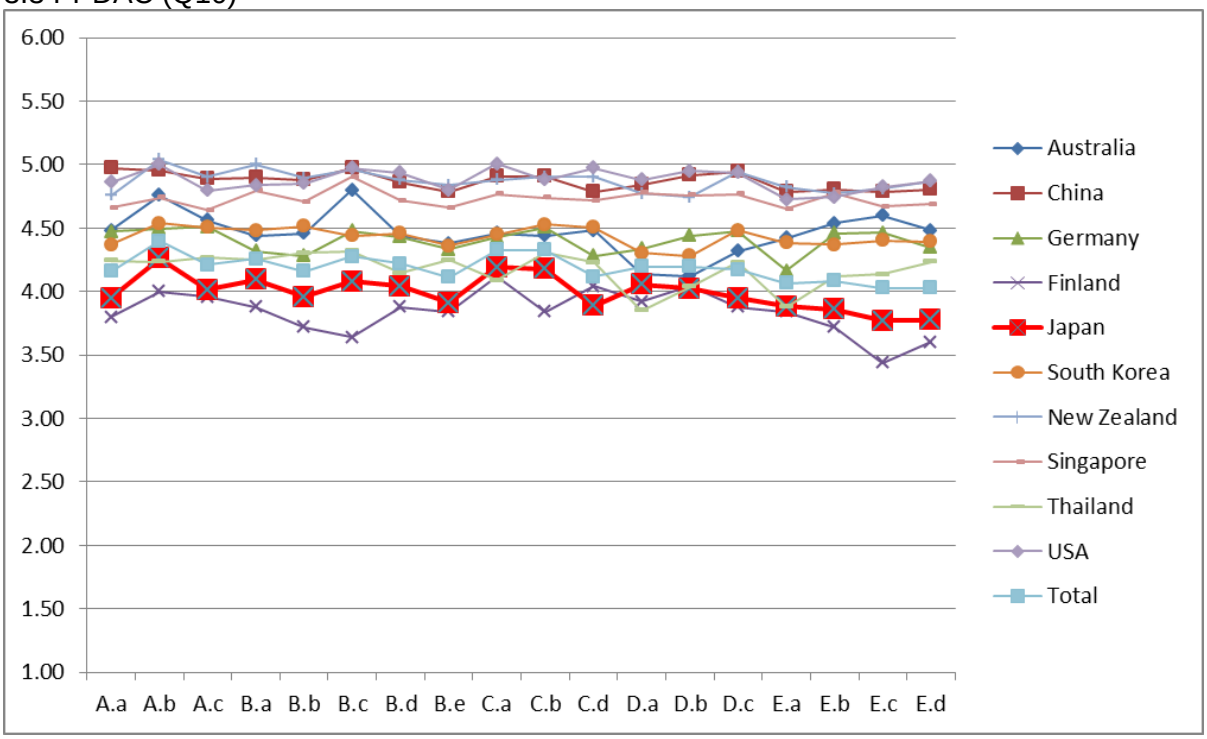

Figure 6. Country comparison on PPDAC

When asked whether students are able to find a way to resolve various problems in society using PPDAC methods, the finding shows that Japanese students ranked at the lower end for almost every item (Figure 5). In Japanese schools, the concept of PPDAC has not yet been introduced. Therefore, the reason students scored low on those items is because they have not experienced this learning style and do not have confidence in its use.

It is surprising to see that Finland, known for its high achievement on the PISA test which measures problem-solving abilities, scored low. However, the scores would have been different if students have experience these methods regularly but feel that they cannot perform well, then have not had experience using those methods. Presently, even though teachers in Japan want to use problem-solving methods, it is difficult since they have to cover so much material for the college entrance exams. To implement PPDAC for students' instruction, we will have to change the method of students' learning by first changing the college entrance exam system.

4. Agendas for developing future global leaders in Japan in the next decade

From the result above, I will make three suggestions for future global education in Japan. First of all, we need to cultivate global interests from an early age. The results showed that Japanese students' interest toward studying abroad at the undergraduate level and graduate level and awareness of global issues is lower than the scores of other countries' students. Developing student's interest from an early on will broaden their perspectives.

However, this does not mean that children have to go abroad from an early age. Recently, the number of foreign students and business persons in Japan has been increasing rapidly, so it may be possible to create opportunities for Japanese children to interact with them. A study showed that having contact with international students and business persons working abroad increased Japanese high school students' career

awareness and global interests (Iida et al., 2015). Also, with the wide spread of the internet, it is much now easier to have access to foreign TV programs and to get in touch with people who live in different countries. By providing this information and encouraging students to access international information, it is possible to cultivate cross-cultural interests and awareness, even within Japan.

In addition, increasing contact with foreign people will increase awareness of Japanese culture and society. The result of this study showed that Japanese high school students are not confident enough to explain about Japanese history, culture, politics or economy to foreign people. Many students have never considered why they learn history, culture, politics or economics. However, if they have the chance to connect with foreign people and are asked "What kind of country is Japan?", they will start thinking more about Japan. In a previous study which asked about the experience students had abroad, many reported that they were asked about Japan but could not answer the questions, so they realized the importance of learning about Japan (SGH global leadership report, 2015). Learning about students' own culture will not prevent them from learning about other countries. They have a positive effect on each other.

The second suggestion is regarding attitude toward communication. The results showed that Japanese students are good at accepting other people's opinion and culture. This might be taken as an indication that they are passive in their communication, however listening to and accepting other people's opinion and accepting their culture is an important part of successful communication. Therefore, these attributes are strengths of Japanese high school students.

Being active in communication is also important, such as asking questions if something is not clear, being assertive, and taking a leadership role. Japan is known as having high context communication where communication is highly dependent on prior knowledge of the context. We have expressions such as "*The nail that sticks out gets hammered down*" and emphasize the phrase "*silence is golden*" indicating that being silent is something that is valued in Japanese society. It is important to learn cultural differences in communication and to learn how to switch modes in a different culture. These practices have been conducted by foreign students studying in Japan and Japanese students going abroad (Shimada & Suzuki, 2014). This element of bilingual education is needed from the start of high school education.

The third recommendation is implementing problem solving methodology such as PPDAC for Japanese education. As I mentioned before, Japanese education places a strong emphasis on memorizing and solving problems. Therefore, the opportunity to find your own problem, collect information and data, and write reports is very limited. Many students will experience this learning style in their undergraduate thesis for the first time.

For those students, the undergraduate thesis might be the first and last time they experience this type of problem solving methodology. Some high schools in Japan have started to realize the problem of the traditional learning style, and have implemented seminar-style classes and require that students write scientific reports. Now many countries are adopting PPDAC from the early stages of education, starting from junior high school or high school. In order to implement a new instruction style, teachers have to learn and adapt to new way of teaching. Recent comparative data showed that Japanese teachers are working longer hours than other teachers in the world and much of their time is allocated outside of teaching (OECD, 2014). To develop global leaders nationwide, it is necessary to support teachers with more resources and training opportunities.

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Korea

1. Current status and demands for developing future global leaders in Korea

Korea is a mid-sized country which is endowed with scarce natural resources. Due to her limited domestic market size, most large Korean firms had to go overseas markets to be able to continue to grow. Korean government has also relied on export to promote economic growth since 1961. One of the critical factors contributing to Korean economic development during the last five decades has been education.

Development of human resources through education is and will be important for Korean economy. The educational zeal in Korea is high. Among OECD countries Korea has the highest high school graduation rate (98%) and the highest college graduation rate (66%) for the people aged between 25 and 32. Demands for developing future global leaders are still strong, because there will be more international business operations expected for Korean companies, and the Korean society will be more global with many foreign families and employees. Such Korean firms as Samsung Electronics and Hyundai Motor generate more revenue in overseas markets than in Korea. With more than 1.5 million foreigners living in Korea, Korea has slowly become a multi-racial, and multi-cultural society.

However, there have been criticisms that Korean high school academic programs lack in global education. Most Korean high schools have been focusing on preparing students for college entrance examination, emphasizing on a few subjects such as Korean, Math, English subjects in curriculum. Successful future global leaders should not only possess foreign language proficiency but also have sound cross cultural capabilities to understand foreign culture and communicate with foreigners.

2. Global education in high school system, curriculum, including cases

There are two types of high schools in Korea: regular and special schools. Global mindset and competencies could be developed for high school students through regular curriculum, extracurricular activities, and special international programs such as foreign exchange program. In regular Korean high schools, international mindset is cultivated mainly through regular curriculum such as foreign language, society and history subjects where students can be exposed to foreign cultures and arts.

Sometimes foreign instructors can provide basic information and knowledge to students. Even though there are some students who lived in a foreign country with their parents for an extended period, the majority of the high school students in Korea have quite limited foreign exposure. Also main focus of Korean high school education is on college entrance examination, and opportunities to learn foreign cultures and histories are quite limited. Opportunities even to meet foreigners are also very limited during their high school years.

Besides regular high schools, there are two types of special high schools which aim to provide more advanced foreign language education. The first type is Foreign Language High School (FLHS). There are 31 FLHS approved by Korean Ministry of Education. There are about 6,200 new students admitted each year and normally top 4 percent of middle school graduates are admitted to FLHS.

31 FLHS were established mainly to foster young future leaders who are proficient in foreign languages such as English, Chinese, Japanese, French, German, and Spanish. The curriculum is designed to provide students intensive foreign language education. For example, in Daewon FLHS which is the oldest FLHS, there are 205 academic units required for graduation out of which 90 units are allocated in foreign language courses.

The second type is International High School (IHS) for Korean nationals. There are seven IHS approved by Korean Ministry of Education. The key educational objective of IHS is to foster future global leaders in various professions such as law, business, academics, and international communities, and the curriculum is developed with a special emphasis on many international courses such as international history, culture, politics, and economy. Even though both FLHS and IHS offer better international programs than regular Korean high schools, they also focus on college entrance examination.

3. Major findings on the research results

3-1. Korean sample characteristics

The survey was conducted for high school students in one public and two private regular high schools located in Seoul. Even though the public school is co-ed, all the 89 participants were male students aged between 16 and 18. Among the 10 country samples, Korean students had the lowest level of foreign experience. Only 36 out of 89 (40.4 %) have been abroad in the past. In the case of other Asian countries, the same ratios were 97.3 (Singapore), 84.2% (Thailand), 59.8% (China), and 55.5 % (Japan). The majority of those Korean students who have been abroad visited only one or two countries less than a week. Many of them also responded that they did not frequently have the opportunities to experience a different culture. Despite their limited foreign experience, however, the Korean students expressed that they would be interested in knowing foreign culture or meeting foreigners.

3-2. *Global Competency (SQ6-2)*

25 students responded that they experienced the difficult incidents arising from cultural differences in the past. Most incidents they experienced were related to difficulties or misunderstandings in interpersonal communications with a foreigner. And six students (24%) said that those incidents were ‘very novel.’ The ratio (24%) was also the highest among 10 countries. However, Korean students in general actively searched for various ways to resolve those incidents. Specifically, they tried to understand the position of the other person and their feelings (SQ6-2a), respecting the values of others in different position from their own (SQ6-2c). They also aimed to build a cooperative relationship with the other person (SQ6-2g). They also tried to think of the cause of the problem from various perspectives (SQ6-2d), and if necessary, they changed what they had decided first (SQ6-2b). Relative to other country samples, the Korean students were actively adopting various measures to solve cross cultural incidents, and they think they realized the importance of learning about foreign cultures, and their curiosity and interest toward foreign cultures increased after the incidents. However, regarding the question about future cross cultural incidents, most means (SQ7a-SQ7m) for the Korean respondents (67) were lower than the total average means. The reason may be due to responses of many Korean students who never experienced cross cultural incidents.

3-3. Global Mindset (Q9)

Regarding the global mind questions (Q9), the Korean students generally showed a wide range of responses in agreement depending on the question. They generally indicated either similar or higher levels of agreement on the questions relating **communication ability** (Q9 IIIe-j), relative to other samples. They generally feel comfortable with expressing themselves in front of many people (Q9 IIIh), asking other people for help if needed (Q9 IIIg), interacting with other people (Q9 IIIe), and actively communicating even with someone they meet for the first time (Q9 IIIf). Also they had positive **attitudes about themselves** (Q9 IIg-i). They were confident about themselves, and focus more on their strengths than weaknesses. They also believe that they can do good for others.

With respect to questions about their **interest in foreign cultures and people** (Q9 IIa-e), they showed the similar levels of agreement, relative to other country samples. They want to go to foreign countries and experience various foreign cultures. They want to interact with many foreigners. However, it is interesting to see that many of them did not want to live abroad (Q9 IIc), nor did they wish to try many things without fear of failure (Q9 IIe). It appears that the Korean students are very much hesitant to take risks in their lives.

Likewise, the Korean students expressed similar levels of agreement, relative to other samples regarding **future plan** related questions (Q9 IV c-e, h-I, k) such as working abroad, participating in international volunteering activities, studying abroad, and becoming an international leader. It is interesting to see that Korean students show a very high level of agreement (4.66) on the question '*I would like to elevate my country's international presence by actively conveying its cultures, technology, and attitude to the world and foreigners* (Q9 IV-k),' like Chinese (4.81) and Singaporean (4.81) students.

However, they generally showed lower levels of agreement to the questions on their **ability to collect international knowledge and information**, as in Japanese sample. They think they lack in their ability to actively collect information by using foreign newspapers (Q9 Ia). Many Korean students also indicated lower levels of agreement in their **problem solving abilities**, compared with other samples. Many of them were not sure of resolving a difficult task by thinking it through research resources (Q9 I-b), nor were they sure of understanding key points and explaining the topic to other people in an easy-to-understand manner (Q9 I-d).

In addition, the Korean students indicated lower levels of agreement than other samples in two other aspects. First, they tend to feel less **need or willingness to understand foreign cultures and to resolve cross cultural incidents** (SQ9 IIIa-d), compared with other country samples, probably due to limited prior exposure to foreign culture. Second, the Korean students tend to have somewhat narrow views and perspectives in **choosing their future careers** (SQ9 IVa-b).

3-4. PPDAC(Q10)

Regarding the questions relating to their abilities to use various methods to resolve social problems (Q10), the Korean sample generally showed mid to high levels of agreement in terms of problem detection skill, ability to plan resolution measures, data gathering capacity, analytical capability, and abilities to make proposals.

4. Agendas for developing future global leaders in Korea in the next decade

Based on the research results, Korean high school students lack global mindset and cross cultural competencies, compared with their counterparts in other countries. There may be a few general suggestions made.

First, it would be important to include as many international contents as possible into regular subjects so that students can be naturally exposed to various foreign cultural settings. For example, more stories on foreign families in 'Society' subject would help students to understand them and their problems in Korean society. More experience-based learning rather teaching-based learning would be encouraged in global educational program. For example, a school homework requiring an interview with a foreigner would provide excellent opportunities for students to understand the importance of cross cultural experience as well as foreign language.

Secondly, it is desirable to develop some kinds of Global Mindset Index (GMI) for high school students and regularly measure the level of GMI and monitor how the school could improve global education programs.

Thirdly, each school or region may have different needs and educational environments. Thus more delegation in developing appropriate global educational programs should be allowed to regional, or even municipal school level.

New Zealand

1. Introduction

New Zealand, also known as Aotearoa, is a wealthy democratic country of 4.6 million people. Historically, two key cultural groups, European (75% of the population (Statistics New Zealand 2015)) and Māori (16%), have shaped the heritage of the nation, however this is changing with other migrant groups from Asia (12%) and the Pacific (8%) playing a major role in shaping New Zealand into a true multicultural society. The interests of the first peoples to the country, the Māori, have been enshrined in the foundation treaty, the Treaty of Waitangi, 1840, the principles of which guide all aspects of policy. Māori, along with English and sign language, is an official language of New Zealand.

New Zealand's economic environment has traditionally been agriculturally commodity based, although significant manufacturing, tourism and other service based industries have emerged to offset the overreliance on the commodity cycle. The government is encouraging the development of more knowledge based industries and services, with a strong emphasis on the education sector to provide the relevant skills. Among the economic sectors to emerge strongly is the education export industry. New Zealand relies heavily international trade, especially with Australia, China, the European Union, and the United States (Statistics New Zealand 2015). A number of free trade agreements have been signed, including the first developed country (OECD member) FTA with China, 2008; these help trading relationships as well as encourage New Zealand business to diversify their international markets. The expanding international economic focus has underscored the need for New Zealanders to have a global focus.

Although the government has been instrumental in directing economic focus, government has stepped aside from being too intrusive in economic policy since the country went through major structural reforms in the 1980s and 90s. An economy which is more liberalized and deregulated has resulted from one which was highly reliant on government regulation, protection and subsidies. This devolved approach to the economic sector has been increasingly used in other sectors such as education. In 1989, the Tomorrow's Schools reforms restructured the New Zealand education system making it one of the most devolved education systems in the world (Nusche et al. 2012). Under these reforms, management of schools is tasked to the school's individual Board of Trustees. Policy decision making however is still centralized with the Ministry of Education.

The New Zealand education system is well regarded and successful. The 2012 OECD PISA report indicated that New Zealand was significantly higher than the OECD average in mathematics, reading and science (OECD 2014). There are some concerns, however, that the poor performers are performing worse resulting in greater variation between the high and low performers, with future work needing to be undertaken to address this issue (Viviane et al. 2011). This notwithstanding, there is real motivation among New Zealand educators and administrators generally to proactively seek, analyse and implement new programs to increase the academic excellence of their charges. New Zealand educators for example participate regularly in international benchmarking studies such as PISA (Nusche et al. 2012; Viviane et al. 2011).

The aim of this report is to present the New Zealand results from the Global Leadership Survey. After giving a brief overview of the New Zealand education system, results are presented on the global and analytical skills of the New Zealand student sample.

2. New Zealand's Education System

Education is a key priority of the New Zealand government to achieve the nation's economic and social goals. To meet these, the following national education goals (NEGs) have been set (Ministry of Education 2016):

1. The highest standards of achievement, through programmes which enable all students to realise their full potential as individuals, and to develop the values needed to become full members of New Zealand's society.
2. Equality of educational opportunity for all New Zealanders, by identifying and removing barriers to achievement.
3. Development of the knowledge, understanding and skills needed by New Zealanders to compete successfully in the modern, ever-changing world.
4. A sound foundation in the early years for future learning and achievement through programmes which include support for parents in their vital role as their children's first teachers.
5. A broad education through a balanced curriculum covering essential learning areas. Priority should be given to the development of high levels of competence (knowledge and skills) in literacy and numeracy, science and technology and physical activity.
6. Excellence achieved through the establishment of clear learning objectives, monitoring student performance against those objectives, and programmes to meet individual need.
7. Success in their learning for those with special needs by ensuring that they are identified and receive appropriate support.
8. Access for students to a nationally and internationally recognised qualifications system to encourage a high level of participation in post-school education in New Zealand.
9. Increased participation and success by Māori through the advancement of Māori education initiatives, including education in *Te Reo Māori* (Māori language), consistent with the principles of the Treaty of Waitangi.
10. Respect for the diverse ethnic and cultural heritage of New Zealand people, with acknowledgment of the unique place of Māori, and New Zealand's role in the Pacific and as a member of the international community of nations.

Equity is a central driving force of the education system, which appropriately raises the expectations of students and is inclusive and values the nation's cultural diversity, and in particular respects the Treaty of Waitangi. The overall goals of the education system have been articulated in the Government's statement of intent for the system in which they state: "Achievement in education is key to better social and economic outcomes for our children and the economy as a whole. Those who achieve success in education are far more likely to enjoy better health, wellbeing and standard of living than those who do not. This ultimately leads to New Zealand being a more vibrant and internationally competitive nation" (Ministry of Education 2014, p.8).

New Zealand: structure of the education system

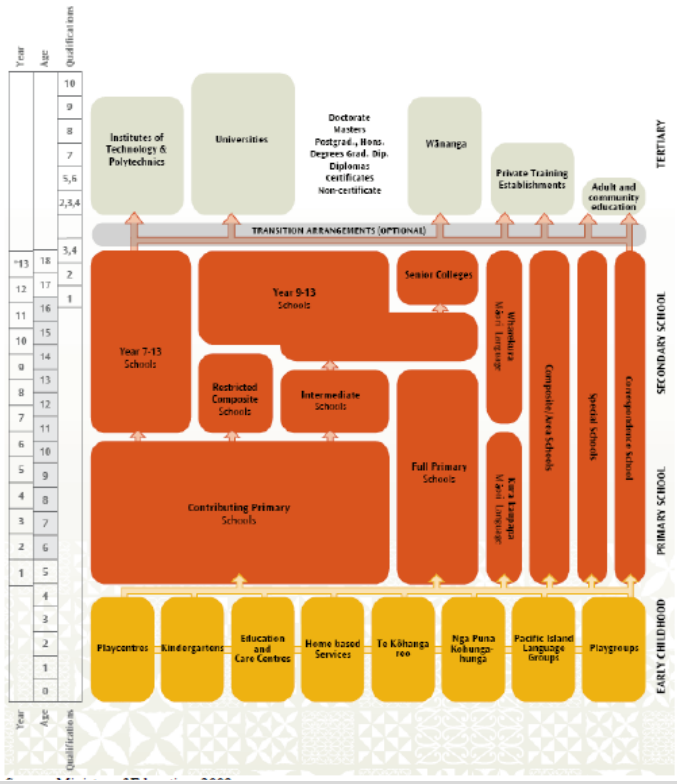

Figure 1 International Bureau of Education of UNESCO 2011

The Education Act New Zealand 1989 and its amendments provide the framework for education in New Zealand, including (through the NEGs) driving the directions and obligations of schools (stated earlier). School is compulsory from the age of 6 to 16, although most students begin at the age of 5. The Act provides for free education in state primary and secondary schools for students between the ages of 5 and 19 (age of 21 for special needs students). The majority of students attend state schools (approximately 85%), although they do have a choice of state-integrated (10%), former private schools which have integrated into the state system but have special character, e.g. run by a religious group, and private schools (Ministry of Business Innovation and Employment 2016). Although all schools must operate under the Act, only state or state-integrated schools are guided in their management, as follows. Three main tiers make up the education structure (figure 1).

In 1989 extensive reforms of the management and administration of the New Zealand education system were implemented on the recommendations of a Government appointed task force. Specifically, the task force found the incumbent system inflexible, too centralised, and unable to respond to the changing requirements of the modern world. Importantly it found that there was little opportunity for schools and their communities to have input in the running of their school (International Bureau of Education of UNESCO 2011; Viviane et al. 2011). The recommendations, named "Tomorrow's Schools," provided a plan for change which included restructuring the management of schools and education, giving schools responsibility to manage themselves in partnerships with their communities through a Board of Trustees. These Boards develop a charter for their school, which conforms to the requirements of the Act and NEGs, and must be developed in consultation with their community. The Board is accountable for meeting the objectives of the charter and must report annually to the

Ministry of Education.

The current curriculum NZC2007, developed in 2007, is outcomes-focused, therefore with details on what the student is expected to know and be able to do. Although this is a national curriculum, it allows adaptation to circumstances of a school's students and community (International Bureau of Education of UNESCO 2011; Ministry of Education 2007). However, all school curriculum decisions must adhere to the following eight student centred principles to ensure a curriculum which is engaging, challenging, forward looking, inclusive, and affirming New Zealand's unique identity (Ministry of Education 2007):

1. High Expectations: The curriculum supports and empowers all students to learn and achieve personal excellence, regardless of their individual circumstances.
2. Learning to Learn: The curriculum encourages all students to reflect on their own learning processes and to learn how to learn.
3. Treaty of Waitangi: The curriculum acknowledges the principles of the Treaty of Waitangi, and the bicultural foundations of Aotearoa New Zealand. All students have the opportunity to acquire knowledge of *te reo Māori me ōna tikanga* (Māori language and culture).
4. Community engagement: The curriculum has meaning for students, connects with their wider lives, and engages the support of their families, *whānau*, and communities.
5. Cultural Diversity: The curriculum reflects New Zealand's cultural diversity and values the histories and traditions of all its people.
6. Coherence: The curriculum offers all students a broad education that makes links within and across learning areas, provides for coherent transitions, and opens up pathways to further learning.
7. Inclusion: The curriculum is non-sexist, non-racist, and non-discriminatory; it ensures that students' identities, languages, abilities, and talents are recognised and affirmed and that their learning needs are addressed.
8. Future Focus: The curriculum encourages students to look to the future by exploring such significant future-focused issues as sustainability, citizenship, enterprise, and globalisation.

There is a Māori version of the Curriculum guidelines and principles *Te Marautanga o Aoteoroa* which is not a direct translation, rather developed on the basis of Māori principles and philosophies (Nusche et al. 2012).

Relevant to this study, the principles highlight the need for the curriculum to incorporate the principles for globalisation and self-learning. This is further espoused in the curriculum value guidelines which states, among others, that the curriculum should encourage innovation, inquiry, and curiosity, by thinking critically, creatively, and reflectively; and to embrace diversity, including cultural and language (International Bureau of Education of UNESCO 2011).

In line with all other aspects of the education system, New Zealand has its own model for student evaluation and assessment which requires high levels of trust in schools and their teachers. From years 1 through 10, all student assessment is done internally within the school, with schools having the ability to develop their own assessment policies. Teachers are expected to make judgements of their students' performances using a range of evidence which is then compared to external reference points provided by the national curriculum documents, numeracy progressions and national standards (Nusche et al. 2012; Ministry of Education 2007). There are no national examinations until years 11 through 13. At year 11, students work towards attaining the first level of the NCEA (National Certificate of Educational Achievement) in which students are

assessed on their ability to meet national standards and criteria set out by the New Zealand Qualifications Framework. Some of these standards are assessed externally through national exams, whereas others are assessed internally although monitored to ensure reliability.

At the heart of the New Zealand evaluation and assessment procedure is a collaborative bottom-up rather than a prescriptive top-down approach. The bottom-up approach recognises the expertise and professionalism of schools and their teachers as being experts in assessing their students. There is also a strong tradition for students to critically self-assess thereby increasing their "autonomy and meta-cognitive awareness" (Nusche et al. 2012, p.27) and to peer-assess, thereby increasing their "team spirit of collaborative work in the classroom" (Nusche et al. 2012, p.27).

In summary, therefore, the New Zealand education system has undergone massive change over the last three decades to make it more flexible and focused on the needs of the community, and it continues to evolve (Nusche et al. 2012; International Bureau of Education of UNESCO 2011). It is innovative and in the main has achieved its stated intentions. There are, however, challenges with such a devolved system, such as ensuring coherence across schools and educators, and ensuring that all students receive the same levels of required skills. The NEGs and principles underlying the New Zealand education system have carefully considered the skill sets required for New Zealand students to be successful in the future. The results reported in the next section show how a selected sample of New Zealand student respondents have assessed their abilities compared to their other national peers.

3. Results

3.1 Global Competencies (Q6-2)

The New Zealand respondents score their competencies highly compared to the other countries in the study (figure 2) indicating they possess fairly good global competencies for incident resolution. Specifically, the respondents rate themselves higher than other country samples on item (l) "I reflected on what I learned from the event," and rate themselves second on items (e) "I will think of various choices" and (i) "I took actions taking advantage of the skills I'm good at." Each of these items relate to the students' abilities to assess themselves and make their own choices. These skills are at the cornerstone of the New Zealand assessment framework, in which students are expected to take some responsibility for their own learning, therefore focusing not just on technical knowledge and skills, but other softer competencies (Nusche et al. 2012).

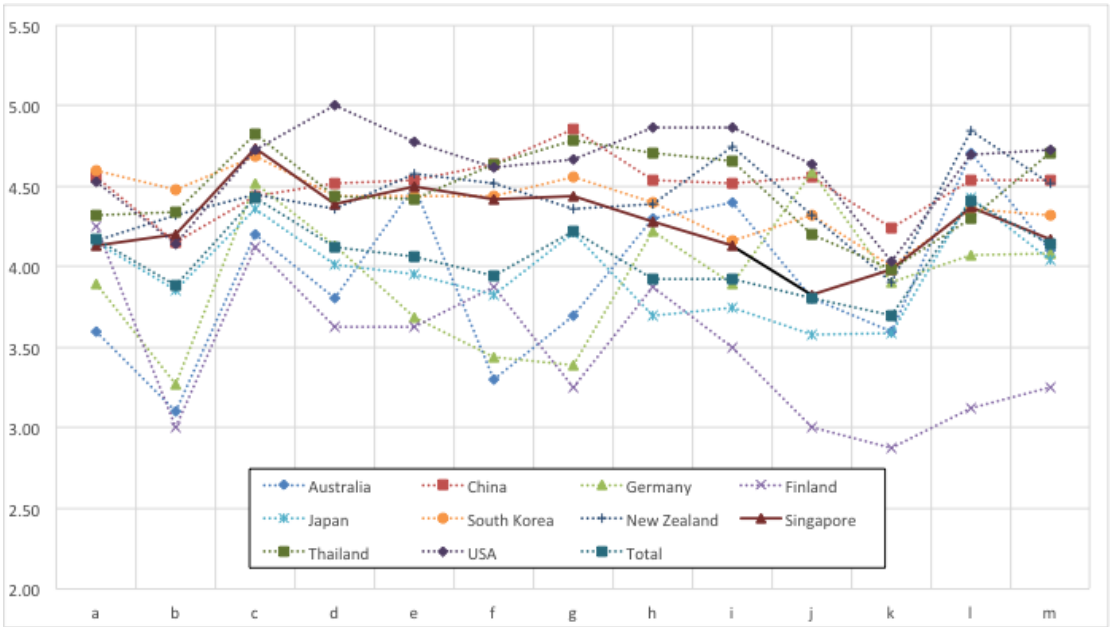

Figure 2: Country Comparison on Global Competencies

The items which the New Zealand respondents rank themselves relatively low (but not the lowest) are: (g) "I will aim to build a cooperative relationship with the other person," and (k) "I confirmed midway whether we were reaching a resolution." It is interesting that both of these competencies relate to the student's ability to work with others. New Zealand is an individualistic society which could indicate that working with others for conflict resolution may not come naturally (Hofstede 1984). There is a clear drive for more team work in the New Zealand curriculum, however this may be at slight odds with the national psyche.

3.2 Global Mind-set (Q9)

Four components are used to measure the student's global mind-set. The first, gauges the types and quality of international and national information collected and absorbed by the student (figure 3). The second assesses the international orientation of the student (figure 4). Third, the student's self-involvement with society is assessed (figure 5). Finally, the student's feelings towards the future are considered (figure 6). Overall, the New Zealand student sample scores high relative to other countries.

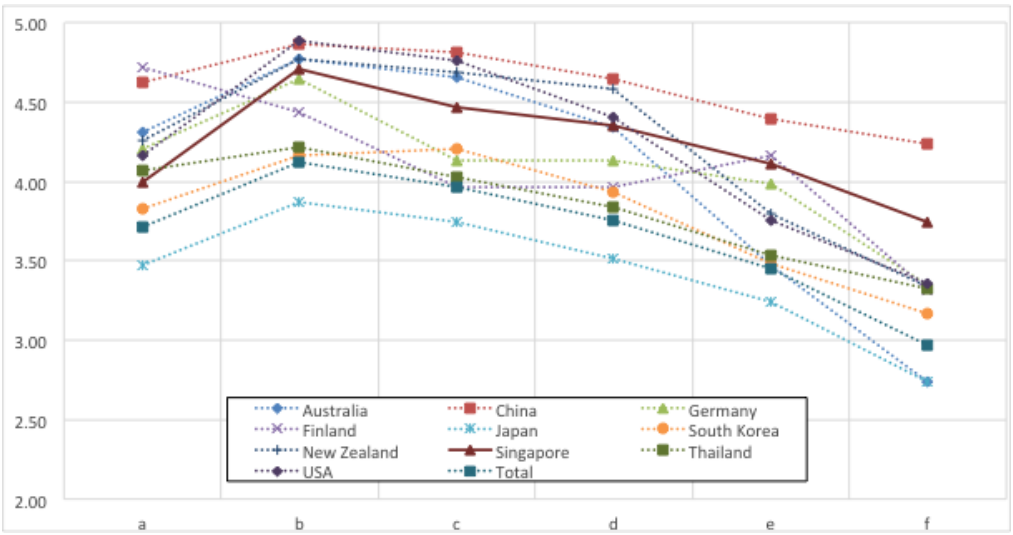

Figure 3: Country Comparison on International Knowledge/ Information

New Zealand students' international knowledge, information processing and dissemination abilities are relatively high, except for (a), (e) and (f), which relate to the student's foreign language ability; the student's utilization of information in foreign languages (a) and the student's ability to communicate in a foreign language (e and f) (figure 2). The low ability to communicate in a foreign language is not surprising as learning a foreign language is generally an elective subject with low uptake (Tan 2015). Research suggests however a positive attitude by students and their wider community to study foreign languages but barriers to studying foreign languages are in part due to the trade-off the student has to make for choosing a language over other subject areas, such as more specialized science subjects (Shearn 2003).

The high scoring items relate to the ease the students have to seek and organize complex knowledge according to its key principles. The highest scored item, (b), "I am able to resolve a difficult task by thinking it through, research resources if necessary, and ask people," for example relates to the student centred learning approach espoused by the assessment policy (Nusche et al. 2012; Ministry of Education 2007). This policy fosters the students' skills in analysing and solving problems.

When analysing themselves (figure 3), the respondents rated themselves highest or one of the highest on all items except items (g and h), "I am confident in myself" and "I focus more on my strengths than my weaknesses." The results indicate that generally the New Zealand respondents are eager to travel to and experience foreign cultures and are unafraid and persistent to get through new challenges or situations. The low scoring items (g and h), indicate students are less confident and are reticent about their abilities, relative to other self-assessment items.

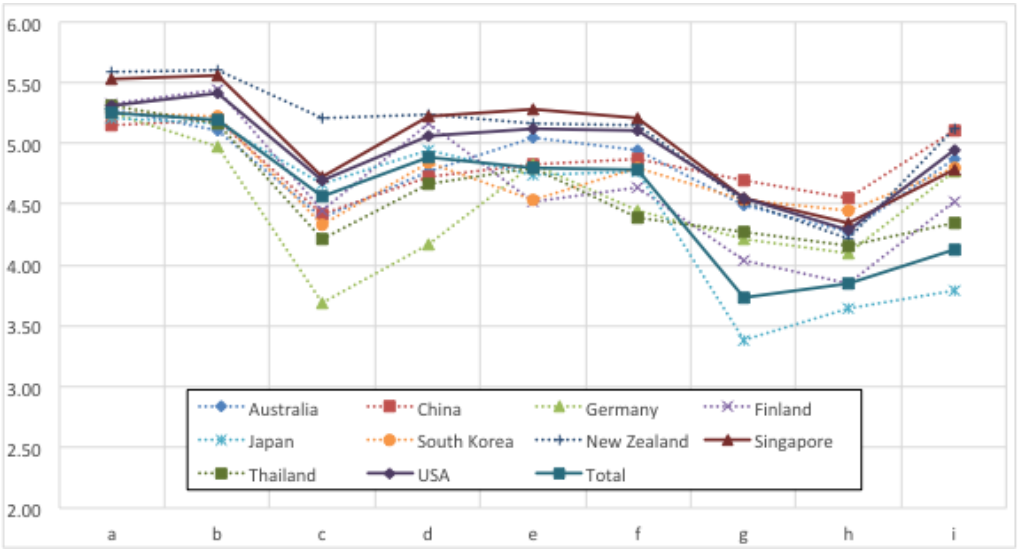

Figure 4: Country Comparison on Themselves

To travel abroad or to do their "OE" (Overseas Experience) is a well-known tradition for New Zealanders and has historically been a rite of passage for many once they have finished their education (Wilson et al. 2009). Normally an OE involves a working holiday over one to three years. Although Britain is a common destination, other parts of the world are becoming more popular, for example teaching English in East Asia. It would come as no surprise therefore that this is a highly scored response. Other reasons may be at play. Being a somewhat isolated island nation with travel costs being, until recently, relatively high, the chance to travel while young is limited. Although this is changing, there appears to be a hankering to see what is on the "other side of the fence" (Wilson et al. 2009).

One item specifically shows New Zealand as an outlier relative to the other countries (c), “I would like to live abroad.” Although discussion on the OE item may provide part explanation for this score, statistics show that New Zealand has one of the largest per capita diaspora in the world, with approximately 1 million New Zealanders living abroad (Statistics New Zealand 2012), corresponding to over 20% of the resident population of the country. Most live in Australia and the UK; however, similar to those going on OE, other parts of the world are becoming popular. Australia’s attractiveness has been due to a number of factors including its cultural and geographic proximity, the free access to live in the country, and perceived career opportunities. This latter point is one of the key motivations for many skilled New Zealanders to move to many countries, as overseas is perceived to offer much more than home (Philip 2013). Many New Zealanders however do come home to have families, particularly those who have travelled for culture or adventure reasons (Philip 2013).

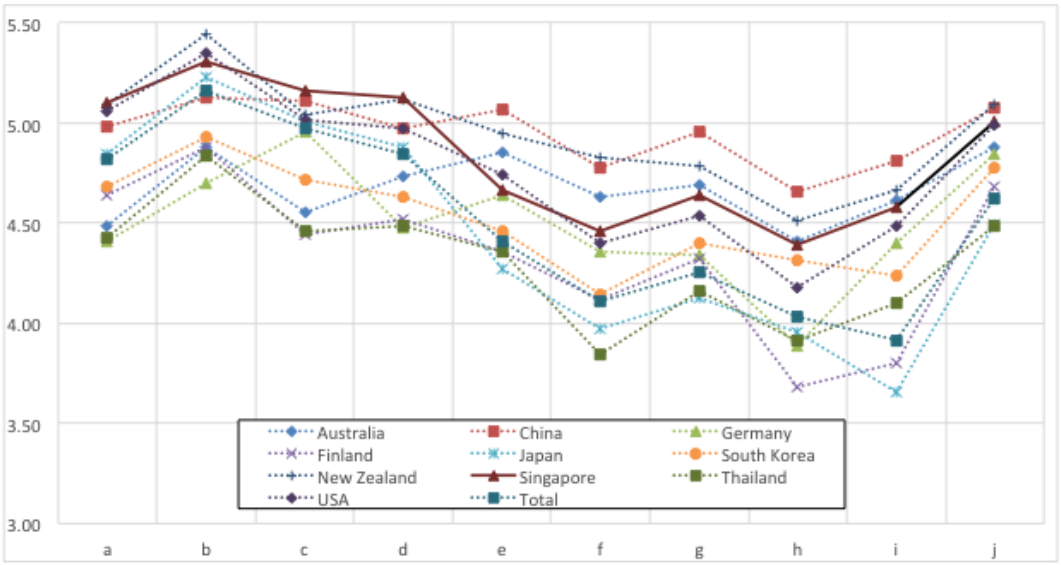

Figure 5: Country Comparison on Involvement with Society

The New Zealand respondents were consistently high scorers on the items relating to their involvement with society (figure 5). Specifically, they were highest on items (b) “I think that although there are cultural differences in the way people think, there are also individual differences,” and (f) “I can actively communicate even with someone I am meeting for the first time.”

The principles driving the New Zealand curriculum encourages cross-cultural interaction and communication with others. New Zealand is a relatively egalitarian society which takes away the status barriers which may impede communication with others (Hofstede 1984).

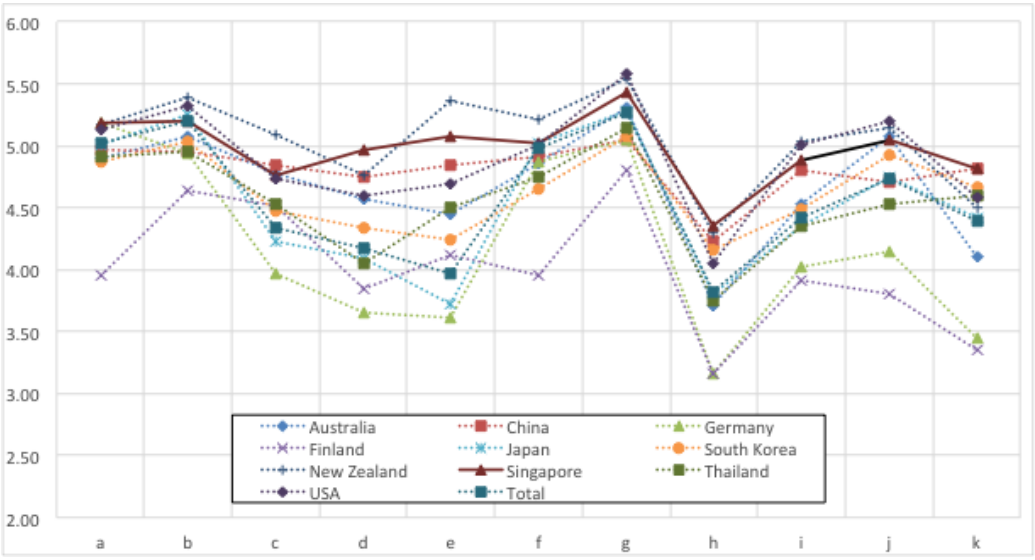

Figure 6: Country Comparison on Future

The New Zealand respondent's scores on country comparisons for their future (figure 6) were consistently high for all items, particularly, (c), "I would like to select my career path by including the possibility of working abroad according to my perspective," (e) "I would like to consider the option of studying abroad at foreign universities or graduate schools in the future," and (f) "I would like to live by always having an objective, and challenging myself toward achieving it." The respondents rated (d) "I would like to actively participate in international activities such as volunteering abroad," and (k) "I would like to elevate my country's international presence by actively conveying its culture, technology, and attitude to the world and foreigners" relatively low.

Similar to the discussion about working and travelling abroad the results for items (c) and (e) embed these results suggesting that this sample consistently sees more opportunity and adventure by either studying or working abroad, even on a temporary basis. Inconsistent with this global focus however is the low rating given to (d), which relates to doing activities which do not involve study or career and which are more philanthropic. Although low, New Zealand still scores second only to Singapore relative to other countries. Published statistics suggest New Zealand has high rates of donation and volunteering (Volunteering New Zealand 2016), although this may not be a future priority for students at this age. (K) is also inconsistent and surprising. Although above the average, there is no strong motivation among this sample to promote New Zealand. More research should be undertaken here. Could this be a factor of the relatively young age of the New Zealand culture, although there is an older Māori culture? Does the sample not identify with the Māori culture, even though it is a central part of the curriculum? Is there no pride in other achievements from New Zealand? Or is it reflective of a perceived egalitarianism leading to such activities being seen negatively, as boastful? Addressing this point could be a future consideration for New Zealand educators and policy makers. On a more positive note the high score for (f) suggests the curriculum encouraging self-motivation is working with the sample.

3.3 PPDAC (Q10)

Question 10 explores the respondents' adoption of the PPDAC cycle in resolving problems. Figure 7 compares the participating countries, with New Zealand in a group with China and the USA, who consistently have high scores in every item in the categories of problem detection (items Aa – Ac), planning of resolution measures (items Ba- Be), data and information gathering capacity (items Ca – Cc), analytical capability (items Da – Dc) and making proposals (items Ea – Ed) respectively.

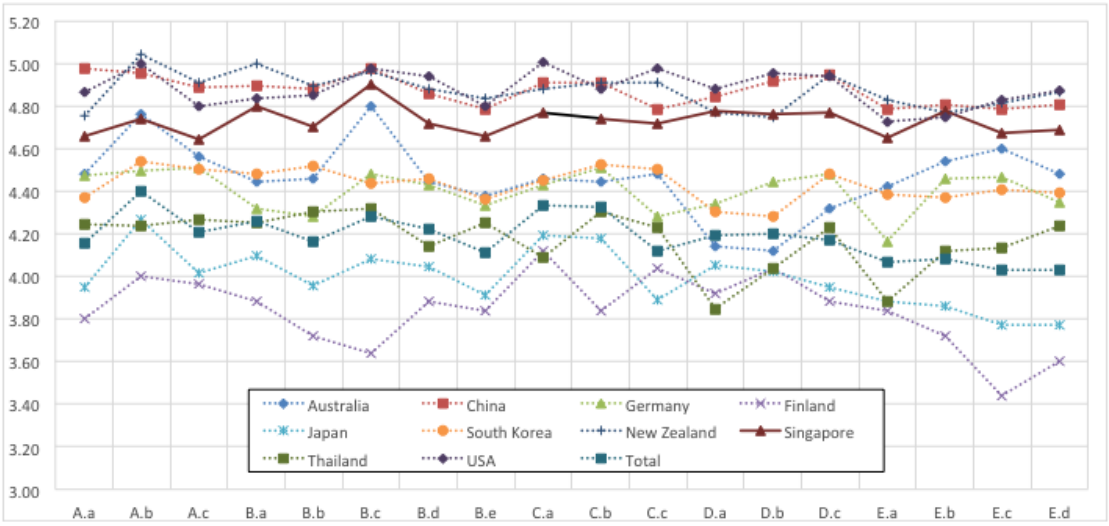

Figure 7: Country Comparison on the PPDAC Cycle

The principles behind the New Zealand curriculum encouraging self-learning and assessment appear to be working with this sample, demonstrating a confidence in the sample to do well.

4. Conclusion

The results of this study indicate that this New Zealand student sample generally rates itself highly in terms of its global competencies, mind-set and problem solving abilities. This indicates that for this sample, the New Zealand education system has been a success. Although on most items New Zealand was above average, there are some items that education decision makers should evaluate in more detail. Specifically, the willingness or ability of the students to work collaboratively with others, foreign language ability and their willingness to promote New Zealand abroad. The ability to work in a team is vital in an increasingly complex and changing world. The ability to communicate is also important, but having knowledge of a foreign language also demonstrates empathy and understanding of foreign societies and cultures. The challenge here is not the willingness of the student to learn a foreign language, rather the importance of learning it relative to other subjects (Tan 2015; Shearn 2003). Finally, New Zealand's uniqueness and ability to contribute to the world is also important to convey to the students. The advantages of our students wishing to travel, work, study, and live abroad would be lost if they are unwilling to elevate the country's international reputation. The potential to develop New Zealand's diaspora as an important international network would be undermined unless those abroad believe in the value of New Zealand as an international player.

However not all is lost. This study highlights that for some students the changes that have occurred to the New Zealand education system have been a success. For these students the education system is shaping them with the right skills to be successful in the global arena. Although the system has undergone massive change, the New Zealand Government, schools and teachers appear to be on the right track by continually adapting and innovating the system to ensure that it continues to be successful in producing the right students for the communities they represent. The Global Community is one such community to be represented!

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Singapore

"Education breeds confidence. Confidence breeds hope. Hope breeds peace."
-Confucius

1. Introduction

Singapore is one of the world's leading global players in various major fields such as education, commerce and finance. This city-state enjoys a thriving economy contributed by the strength and optimization of its human capital. Education is regarded as one of the core pillars of society. Hence, great emphasis is placed on developing and enriching skill-sets and knowledge to make further strides in innovation, competitiveness and excellence.

In the global arena, Singapore is the trade and economic hub of Southeast Asia (SEA) and has been named Silicon Valley of SEA. It always buzzing in Singapore as global and regional events, such as conferences and trade shows are held all-year round. An array multinational corporations flood to this city-state to set up operations, as businesses the world over acknowledge Singapore's place in the global stage. The city undergoes rapid changes as new skyscrapers embellish the skyline attracting tourists from the world over. All these activities add to the global experience that Singapore offers as people from all walks of life and various cultures come together, interact and coexist peacefully amongst the diversity. Whilst its presence as a commercial hub is indisputable, Singapore has also solidified itself as an international education hub where major leading universities around the world such as Duke University, INSEAD and the University of Chicago offer programmes in Singapore.

In 2015, Singapore's education system was ranked number one in the global school ranking in a report commissioned by OECD (Hanushek & Woessmann, 2015). The report, titled 'Universal Basic Skill: What countries stand to gain' ranked 76 countries based on the math and science test scores which is an expansion of the OECD's Pisa test scores. This achievement demonstrated the success of the various policies undertaken from the day Singapore obtained its independence in 1965 to becoming a global powerhouse.

2. Singapore's Education System

Confucianism shapes Singapore's social and economic policies, which was identified by the late Mr. Lee Kuan Yew[11] as one of the driving forces that made Singapore succeed. Confucian ethics and values placed on hard work, with emphasis on aspects such as education, and pragmatism have been the main factors that contributed to Singapore's economic rise (Dirlik, 1997; Kausikan, 1998). The importance of the Confucian philosophy is further established with the founding of the Institute of East Asian Philosophy at the National University of Singapore (NUS) in 1983 with the objective of promoting and understanding Confucianism in order for it to be reinterpreted and adapted according to the needs of present society (Tamney, 1996). In terms of education, one of the key tenets of Confucianism is respect for education and value has been shaping the foundation of the education policies and goals such as in the Character and Citizenship Education (CCE) (Marginson, 2011; Tan & Tan, 2014).

Secondary education which takes 4-5 years to complete, begins at age 13 where students are placed in the Express, Normal (Academic), or Normal (Technical) secondary school course based on their performance at the Primary School Leaving

[11] Excerpted from Lee Kuan Yew's interview with The New York Times on December 16, 1986 at Istana. For a full transcript of the interview, see The Straits Times, January 8, 1987, pg. 11.

Exam, known as the PSLE (MOE, 2015). Even though students enter one of the courses, they are still given the flexibility to switch among the three. Unlike the Normal (Academic and Technical) tracks, the Express leads directly to the GCE O Level examinations.

Post-secondary (or also known as Pre-University) education, which forms the stepping-stone to tertiary education basically, takes 1-3 years and students generally are from the ages of 16-19. Post-secondary education covers Junior colleges (JC)/ Centralized Institute, Polytechnics and Institute of Technical Education. Those attending Junior college / Centralized Institute have to sit for the GCE A Level national examination. This is a qualification to gain entry into universities both local and overseas.

There is also a programme that allows students to bypass the GCE O Level and take the A Level instead. This is the Integrated Programme (IP) that combines secondary and junior college education. The IP takes approximately 4-6 years and is only offered by 18 selected schools such as NUS High School, Hwa Chong Institution, and Raffles Institution/ Raffles Junior College. Under the Integrated Programme, there is more emphasis on co-curricular activities (CCA) and values in action (VIA) as opposed to JC/ Centralized Institute, Polytechnics and Institute of Technical Education that only requires students to take part in at least one CCA, which is considered for university admission. Values in Action (VIA) are core blocks in the education system that also starts from primary school. VIA focuses on developing students into socially responsible citizens who are able to meaningfully contribute to the community. Learning, application and reflection of skills, values and knowledge are key in VIA.

The emphasis on being innovative, creative, entrepreneurial, flexibility and committed to lifelong learning led to the 'Thinking Schools, Learning Nation' initiative that was launched in 1997 (Horsky & Chew, 2004). To further boost global multicultural citizenship education, Singapore's social studies curriculum adopted the use of international case studies (Ho, 2009). The Ministry of Education (MOE) has also made changes to the educational second language policy to move beyond bilingualism to the introduction of trilingualism that is imperative to globalization (Chua, 2011).

In the face of globalization, the recognition for the need to equip the future generation with the necessary skill sets has led the Ministry of Education to introduce changes to the school curriculum. In 2009, the global awareness competency was identified as part of the 21st century competencies framework (OECD, 2014) where global awareness and cross cultural skills were introduced as core learning areas beginning as early as primary school. The framework balances crucial intrapersonal skills that focus on social and emotional competencies as well as skills, such as critical and inventive thinking, collaboration, and global awareness required in order to flourish in a globalized world.

The Pre-University education curriculum comprises of three basic skill sets, namely life skills (that also cover non-academic activities), knowledge skills (encompassing skill-based subjects that encourage thinking and analysis as well as communication skills) and content-based subjects. Diversity, choice and creativity have become common key words in education (Horsky & Chew, 2004). Schools have also been encouraged to become entrepreneurial in order to attain higher level of skills and global competitiveness (Tan, 1998). Students are also given the opportunity to study abroad providing them the experience to apply the skills and knowledge acquired and at the same time, developing new skills and knowledge.

Among the notable Junior Colleges, Raffles Institution (RI) is renowned for churning out the cream of the crop where RI has been regarded as the gateway to the Ivy League. Raffles Institution emphasizes not only on math and science but also extra-curricular activities such as economic and current affairs, sports and charity work. Students also

have the opportunity to go abroad for internships to develop their global mindset and skills further. On top of that, student-initiated internship and attachment programmes are also highly encouraged. These activities are made available during the Gap Semester Programme, which is unique to only Raffles Institution. The Gap Semester Programme offers 120 different courses which allows 4th year students to have 9 weeks to explore and create their own learning through programmes such as industrial attachment, internship and sabbatical.

Like Raffles Institution, Hwa Chong Institution (HCI) also boasts of well-established academic, talent and leadership development programmes. HCI places emphasis on bilingualism and also offers a sabbatical programme from Secondary 1 to 4. Hwa Chong Institution is recognized as the top feeder school to Oxford University. HCI has also established a satellite campus in Beijing and students are offered the opportunity to study and carry out projects with Chinese students through exchange and mutual learning programmes. HCI students also get to participate in foreign exchange programmes across Asia Pacific such as the University of Tsukuba in Japan.

3. Research Results

3-1. Global Competencies (SQ6-2)

Based on the results of the survey shown in Figure 1, in general the Singaporean respondents indicated that they viewed that they possessed fairly solid global competencies however they did not rate themselves highest in any of the areas in comparison to the other countries. In item (c), having a multiracial society and emphasis on cross-cultural communication have contributed to Singaporeans scoring higher than most countries in respecting values of people who are in a different position from them. Respect is considered one of the core pillars and the most fundamental of Confucian values that are ubiquitous in the society.

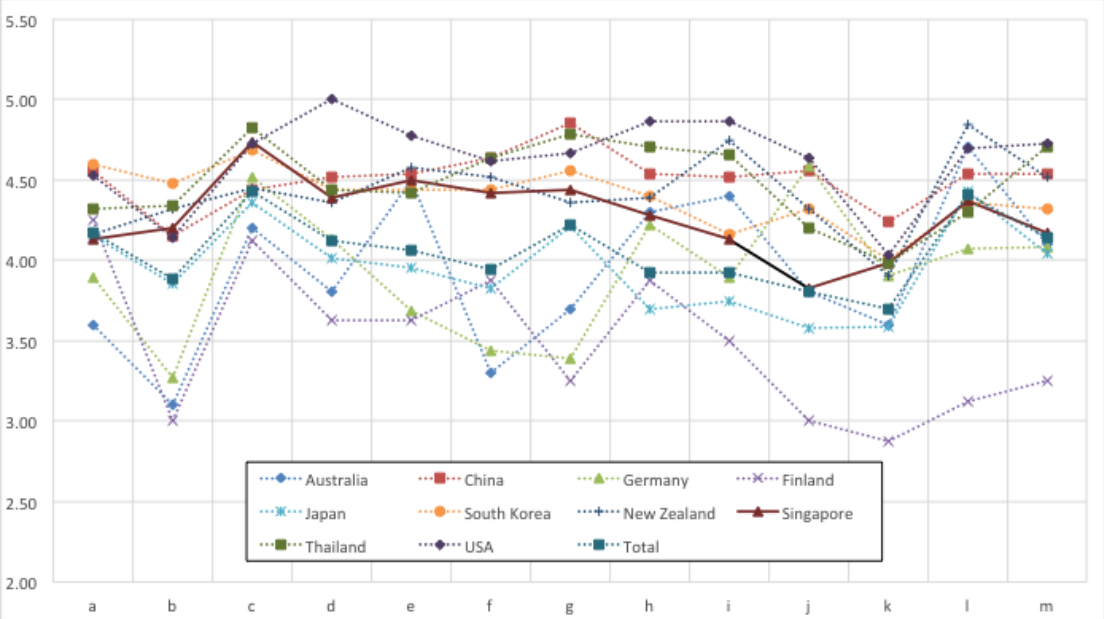

Figure 1. Country Comparison on Global Competencies

The respondents scored lower when it came to taking actions using the skills that they perceive themselves to have (under item i). This could be either due to the respondents having a higher expectation on themselves hence they view their actions insufficient or this is influenced by culture where Confucianism also stresses the importance of modesty and humility in sustaining a society while pride will bring destruction.

Respondents were not confident in explaining their own opinions effectively as this was reflected in the low mean score reflected in item j. As the education system placed great emphasis on math and science, students lacked the platform to be vocal. Students are more reserved and afraid to speak up versus students from the United States or Germany. The value of respect in Confucianism can also be translated to the perception of being vocal and challenging ideas as showing disrespect. This presents a challenge in getting students out of their comfort zone and to express their ideas effectively.

3-2. Global Mindset (Q9)

Respondents' global mindset was examined in Question 9. The questions were categorized into four distinct sections. The first section was on international knowledge and information, as illustrated in Figure 2. Respondents demonstrated fairly good scores when it came to dealing with resolving difficult tasks through various methods such as thinking or research resources (item c) or even explaining topics to other people in easy-to-understand manner (item d). An interesting point worth mentioning is that respondents scored themselves very highly in being able to recount Singapore's history and culture (item e) and economics and politics (item f) to foreigners in a foreign language. Clearly the Character and Citizenship Education (CCE) and bi(tri)lingual policy play key roles in shaping the respondents' high scores.

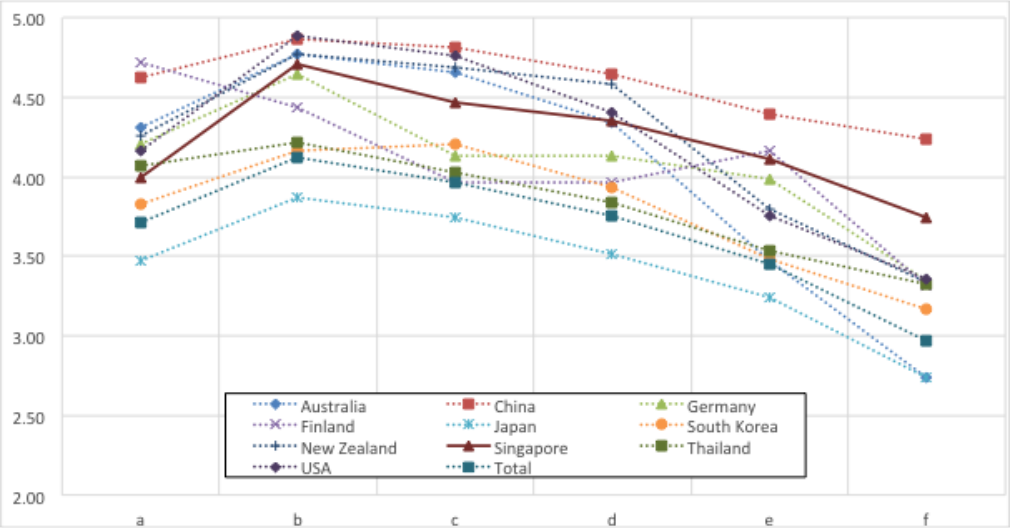

Figure 2. Country Comparison on International Knowledge/ Information

When it came to evaluating themselves, the respondents scored themselves very high. Singapore basically came in number two for wanting to go to many foreign countries (item a), thinking it is fun to experience various cultures (item b), would like to live abroad (item c) and would like to interact with many foreigners (item d). This demonstrates that Singaporean students are very open and keen to embrace various cultures and experiences. Respondents scored the highest among the list of countries in wanting to attempt many things without fear of failure (item e) and to overcome difficult situation through persistence regardless of how trying the situation was (item f). The various opportunities given by the schools such as exchange programs and even internships and placements provide students with an array of experiences that will further enrich their learning, skills and global mindset.

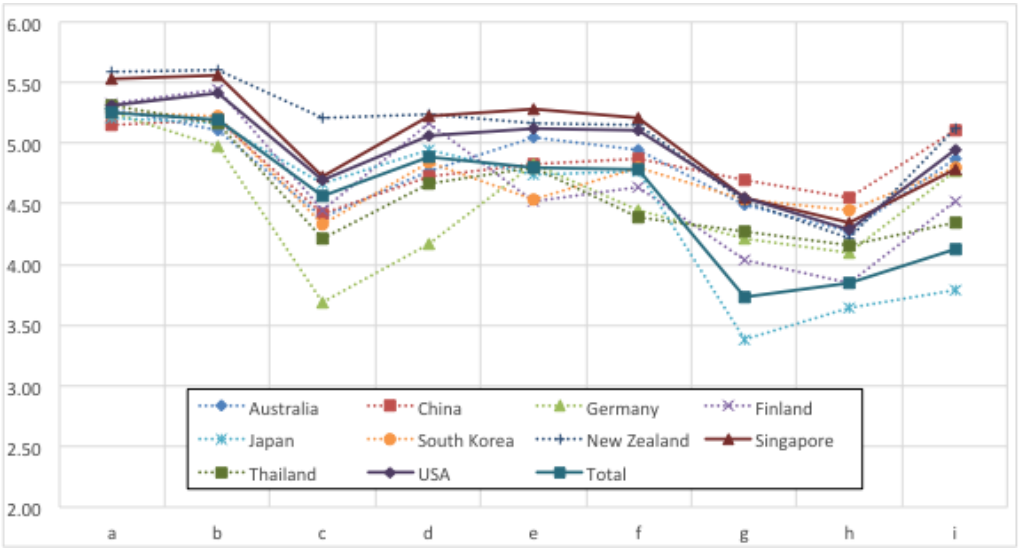

Figure 3. Country Comparison on Self

The education system as explained in the previous section, places importance on co-curricular activities (CCA) with Junior Colleges having a stronger emphasis on more CCA requirements including community and volunteer activities. The education policy also incorporates skills such as community and communication through the core blocks such as Values in Action (VIA). These avenues provide students with the opportunities to interact and communicate with people from different backgrounds. Section III addresses the respondents' involvement with society, with the results shown in Figure 4.

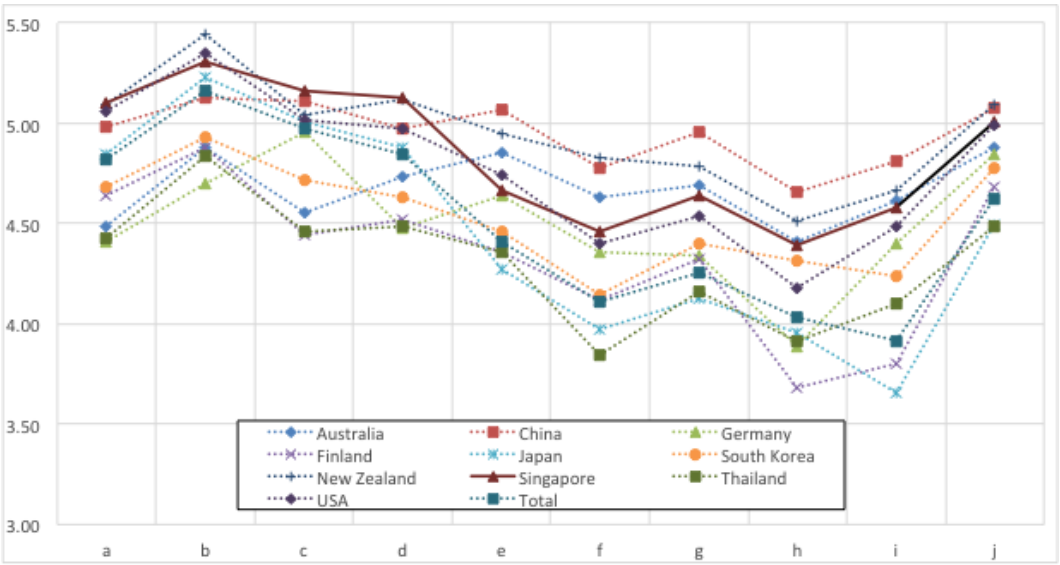

Figure 4. Country Comparison on Involvement with Society

Respondents charted the highest scores for wanting to correctly understand behaviors of foreigners and those from a different cultural background (item a). They also ranked the highest for both having the opinion that social problems should be examined based on the difference in culture (item c) and in wanting to think about the reasons for discrepancies when faced with someone who holds beliefs that are different in order to understand them better (item d). The results displayed that respondents view themselves as able to assimilate and effectively function in and contribute to society.

The fourth section addresses respondents' thoughts on the future. As with the other findings in the Global Mindset question, Singapore's respondents scored consistently

high in this section as well. Singapore scored the highest in following four aspects

1. (Item a) Would like to choose future profession by visualizing ideal self and considering various perspectives
2. (Item d) Would like to actively participate in international activities, such as volunteering abroad
3. (Item h) Would like to become an international leader in the future and contribute to the development of own and other countries
4. (Item k) Would like to elevate the country's international presence by actively conveying its culture, technology, and attitude to the world and foreigners.

The findings reflect that students in Singapore are ambitious and patriotic. They place importance on future career paths and at the same time, would like to contribute to the country. The education system that stresses on global citizenship and leadership as well as self-reflection and awareness plays an important role in shaping the answers of the students. Singapore's education policy emphasizes on creating well-rounded individuals who are able to contribute and excel globally through not only classroom education but also active involvement and global exposure provides solid building blocks to the young generation.

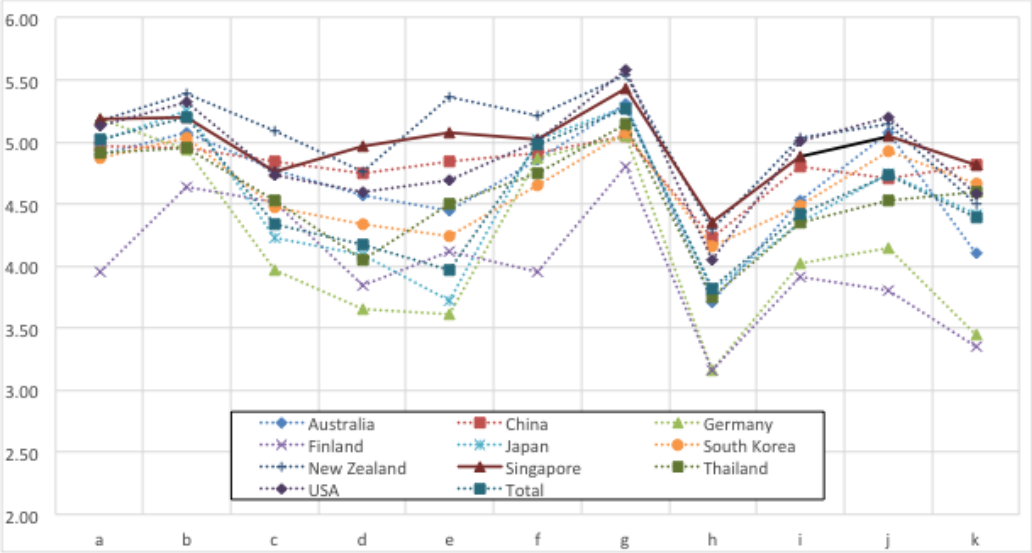

Figure 5. Country Comparison on Future

3-3. PPDAC (Q10)

Question 10 explored the respondents' adoption of the PPDAC cycle in resolving problems. Figure 6 illustrates the comparison between the different countries with Singapore demonstrating consistent high scores in every item in the categories of problem detection (items Aa – Ac), planning of resolution measures (items Ba- Be), data and information gathering capacity (items Ca – Cc), analytical capability (items Da – Dc) to making proposals (items Ea – Ed) respectively.

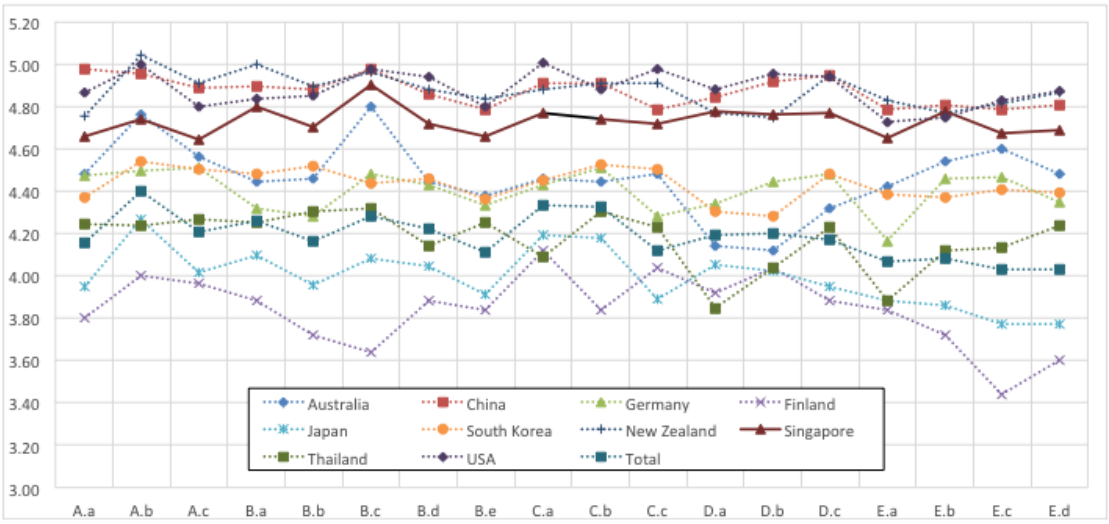

Figure 6. Country Comparison on the PPDAC Cycle

This demonstrates the effectiveness of Singapore's education system that emphasizes on scientific approaches towards problem solving. Students are exposed to structure in investigating issues and this encourages students to be analytical and logical in their approach in solving problems and generating solutions.

4. Conclusion

The results from the study demonstrate that Singapore's education system is to an extent successful in developing global minded people who hunger for global opportunities and experiences. While the current system seems to be working well, there are still identified areas that can further be improved for instance, developing the ability and skills to express opinions easily. Such skills are mandatory to succeed in the global arena. The education system should also look at fostering innovative thinking and creativity as these have been acknowledged as that need to be further inculcated and developed among students in Singapore. Global mindset has to be nurtured focusing on multiple core blocks that cover both interpersonal and intrapersonal aspects. Cultural exposure and immersion as well as sensitivity and awareness are also essential in ensuring a global mind.

Singapore celebrated its 50 years of independence in 2015, and continues to focus on continuous growth in ensuring competitiveness in the global arena. In terms of the economic direction, the key focus that has been identified is the need to shift from value adding to value creating, which basically rests on developing innovation (Lee, 2015). Five areas have been identified as core areas that will help shift the Singapore economy along the innovation ladder. The building of skills and talent management in future markets are pertinent and imperative to Singapore's future. Apart from the need to develop innovation and creativity further, Singapore also faces the challenges of both an aging population and a declining birth rate. These issues present a pressing need for a robust education system in place to continuously inculcate and groom global competencies and mindsets as these are skills required to address such challenges effectively in securing Singapore's future.

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Thailand

1. Current status and demands for developing future global leaders in Thailand

Demands for developing future global leaders who have competencies dealing with changes and cross-cultural working environments in Thailand are increasing. The growing size of the economy that has integrated itself almost completely into the globalized world, attracting a large sum of investment across the globe annually, along with the changes in the social structures as well as the education system in Thailand over the past decade, are major contributing factors that cause the increase of the aforementioned demands.

Thailand's growing economy in the past decade has been boosted by its integration into the international market. The doubling number of exports and the foreign direct investment herald that Thailand has become a major base for international production and trade. The promising future of Thai economy heightens the demands for a new generation of workforce that has a certain set of skills, i.e. global competencies and mindsets, needed in the international working sphere.

The demographic change in Thailand, now an aging society, where numbers of younger people become slender in the population pyramid, is also another contributing factor. The quality of the workforce becomes a subject of concern since the quantity of the population that will drive the economy in the future is going to drop significantly. Developing future leaders who have some valuable skills working in the global environments will increase the quality of the diminishing quantity of Thailand economic workforce.

Furthermore, the fact that Thailand is increasingly engaging into the global society, both in the broad sense; the international economy, and in the narrower meaning; e.g. joining into an economic community together with the ASEAN nations at the end of 2015, are instrumental to the change in the education system. Thailand's ministry of education has tried to implement more global skills into the current curriculum, intending to produce more efficient citizens who live and work better in the rapid changing world. This change in the curriculum, which will be elaborated further in the next section, is clearly seen as an attempt that signal the need for more global talents in Thailand.

2. Global education in high school system, curriculum, including cases in Thailand

Traditional Thai education focuses mainly on grooming a good 'Thai' citizen who possesses many good Thai qualities, i.e. being courteous, introvert, indifferent, and submissive. Thai students are taught to be good workers in the senses of these good Thai qualities from a very young age. Thinness has a strong force in almost every subject in the curriculum. Students study civic education mainly in order to obey the law and trust the government.

Focused too intensely on Thinness obstructs the wider view on the global changes. Thai students who grow up to be the labors and the leaders of the economic sectors lack some essential qualities needed for working in the cross-cultural environment. Thai workers lack even the fundamental global skill like the use of English language. It is worth noting that majority of Thai students graduated from high school do poorly on English test at the national level, with the national average mark as low as 20-25 percent, although the core national curriculum imposes English as the compulsory subject since grade 1.

However, due to Thailand's integration deeper into the global – and regional – economy and society, ministry of education amended and implemented some changes into the core national curriculum, giving birth instead to the new one in 2008. The novel curriculum was intended to build up characters and develop some skills Thai students still lack. Also in this curriculum, Thai schools and teachers are allowed to manage – amend, extend, and interpret – the written curriculum as they see fit to some degree. This change from a rather fixed curriculum with core contents and textbooks to a more adjustable curriculum according to the schools and teachers help create the way which the global education can integrate itself into the classroom of some schools in Thailand.

As a result for some schools in Thailand, students study subject such as geography more actively now than in the past. The students in some top- level high schools such as Triamudomsuksa School or Chulalongkorn University Demonstration School tend to have more discussion sessions over various topics concerning geography, i.e. climate change, the depletion of natural resources, the multifaceted culture of neighboring nations, or the international conflicts, in their lesson. The same change goes for other subjects like history, economics, and even English as well. The improving curriculum and the ways of teaching in these classroom reflex that developing skills and characters not only according to traditional Thai qualities but also the essential global skills such as discussing, thinking critically, and working as a team are also vital as well.

Apart from the typical schools, a number of international schools that blend the core national curriculum with their own designed international syllabuses are growing popular in the upper education market in Thailand. The English, or the international program, which is separated classrooms within the public high school, e.g. the E.P program in Samsenwittayalai School, providing the teaching on every subject according to the core national curriculum in English, is also in demand at a much lower cost. Since 2010, the ministry of education encourages potential schools in Bangkok and other major cities to open the English or the international program within their school. They call it the 'World Class Standard School' project. The ministry states that the project aims at generating more students who can speak bilingual, be a world citizen, be innovative, and grow up to be leaders in the society.

Another top secondary school, Saint Gabriel's College, has managed a separated classroom noteworthy in this report. The school invites voluntary best students who graduated from its primary section to attend the project called 'Por-Sor-Wor-Kor', which is a Thai abbreviation for Improving and Encouraging the Academic and Moral Competencies. The students in the program study only some selected subjects from the core national curriculum. They are instead designated to study some inventive subjects

like Global Citizenship, Leadership etc. The intention behind the project is crystal clear. The development of future global leaders who can live and work well in the integrated international society is a crucial agenda. And in order to achieve it, the school makes sure to carry out the development process from an early stage of education.

3. Comments on the research results

3-1. Global Competencies (SQ6-2)

Thai students seem to top all other countries participated in this research only in one aspect of the question. The finding, see figure 1, shows that they tend to respect to the value of other people who are in different position from their own compared to other countries (item c). The result of this top score is not a surprise considering that being courteous and respectful are fundamental Thai qualities every student had learnt since their childhood.

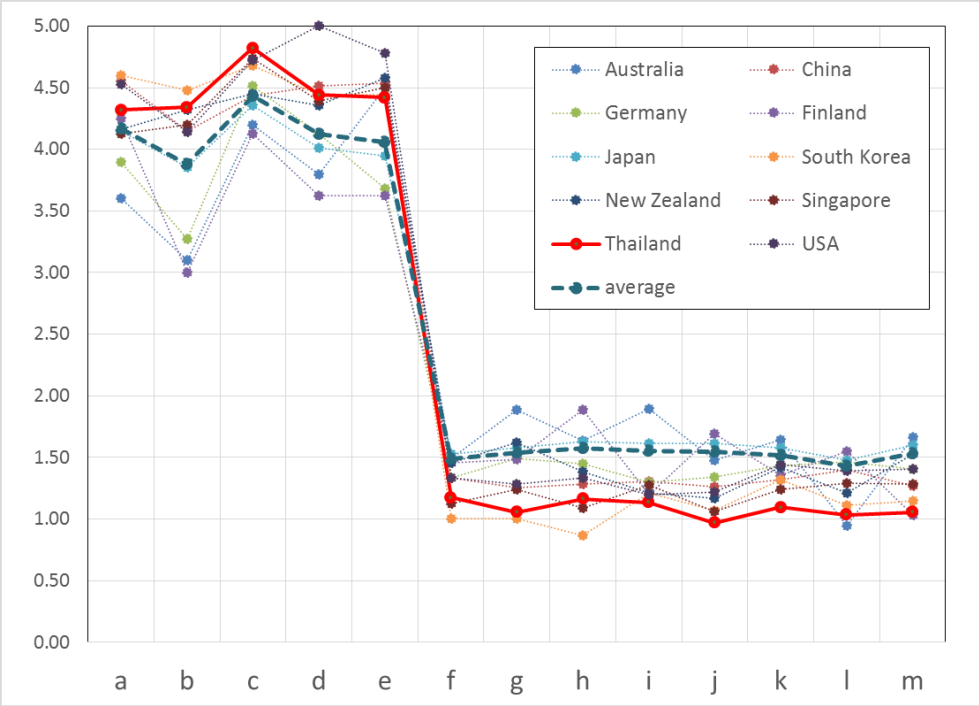

Figure 1.Country comparison on global competencies

But while there seems to be no problem for Thai students to respect other people, the finding shows that they tend to have some difficulty in creating a cooperative relationship with others. Thai students rank ninth from ten countries in the research at this point (item g). And it seems that, although they do respect people and understand their different positions, they don't know how to work cooperatively with them. Working cooperatively is something Thai students are not familiar with. The introvert nature of Thai students is a problem when they have to work together as a team. Thai students are not keen on communications. They don't like exchanging ideas. They are afraid of expressing opinion because they are taught to keep it to themselves since they are young. This problematic nature of the students is generally found in typical classroom, especially when teachers ask them a question, let them speak their mind, or order them to work in group. This same reason goes when asked about how good they are at explaining their ideas (item j).

Inactive nature of Thai students, stemming from Thai culture of being courteous, introvert and submissive, is major factors underlying the result in item i and m, which asked whether they are really good at taking actions according to their advantage of the skills they are good at (item i) and whether they have strong passion when they face any issue they need to resolve (item m). Ranking tenth in both items, it seems that these

basic cultural values of Thinness are, in fact, the obstacles to the development of global competencies.

3-2. Global Mindset (Q9)

Thai students rank a little above average on the international knowledge section in the question, see figure 2.

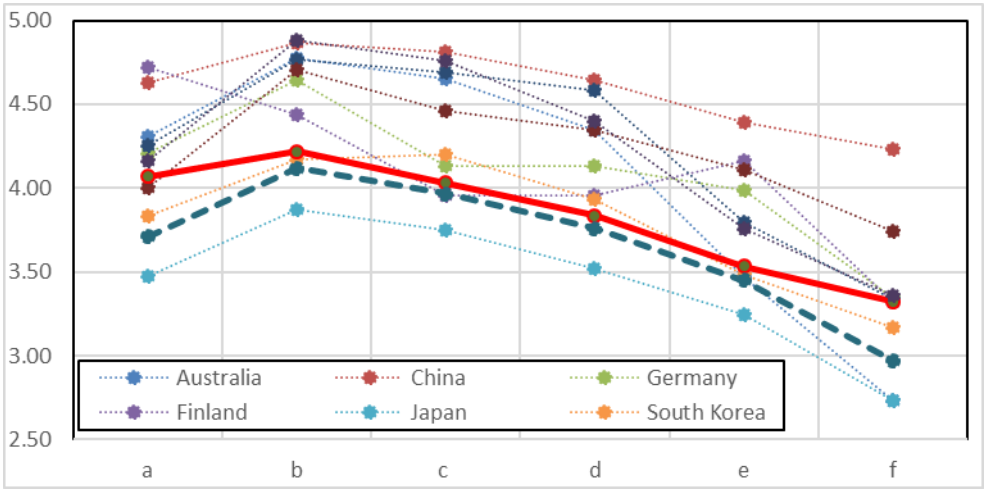

Figure 2. Country comparison on global mindset (section I)

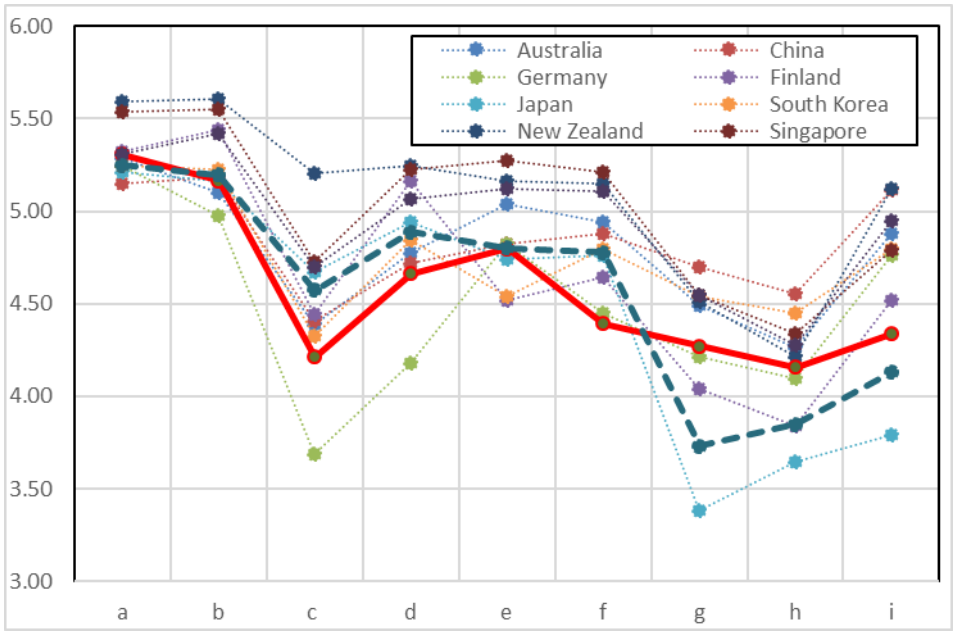

Figure 3. Country comparison on global mindset (section II)

However, in the section asked about the ideas of themselves, the finding shows that Thai students prefer not to live aboard and have almost lowest scores on persistence. (figure 3: item c, f in section II)

The reason for the lack of persistence could be explained the way we explain the inactive nature of Thai students in the previous question. Persistence is simply not in the common habit of Thai people since ancient time because they were easy-going and flexible in nature.

Major reason that could answer why Thai students don't want to live aboard is family

attachment. Thai people adhere to family values. Familial piety is a duty. So one cannot simply go out of the family and live elsewhere, not to mention living aboard. Thai adult hardly move out of their parents' house even if they'd graduated, they live with them until they get married. Some couples even move back into one of the parents' house after they get married or get first child.

For the part asked their involvement with the society, Thai students seem not so great at adaptation to the multicultural society and communications.

The finding shows, firstly, they wouldn't like to correctly understand the behaviors of foreigners and those who are culturally different. Secondly, they don't seem to agree that discrimination and prejudice among different cultures should be examined base on differences in the cultural values. Lastly, they don't seem to flexibly understand or believe that there is a discrepancy among those who are different in beliefs. These three questions (Figure 4, item a, c, d in section III) reflex the ignorant nature over the multicultural society and issues of Thai students. This reflection is actually not a surprise, as the current global education in Thailand still exists in a very weak form at the moment.

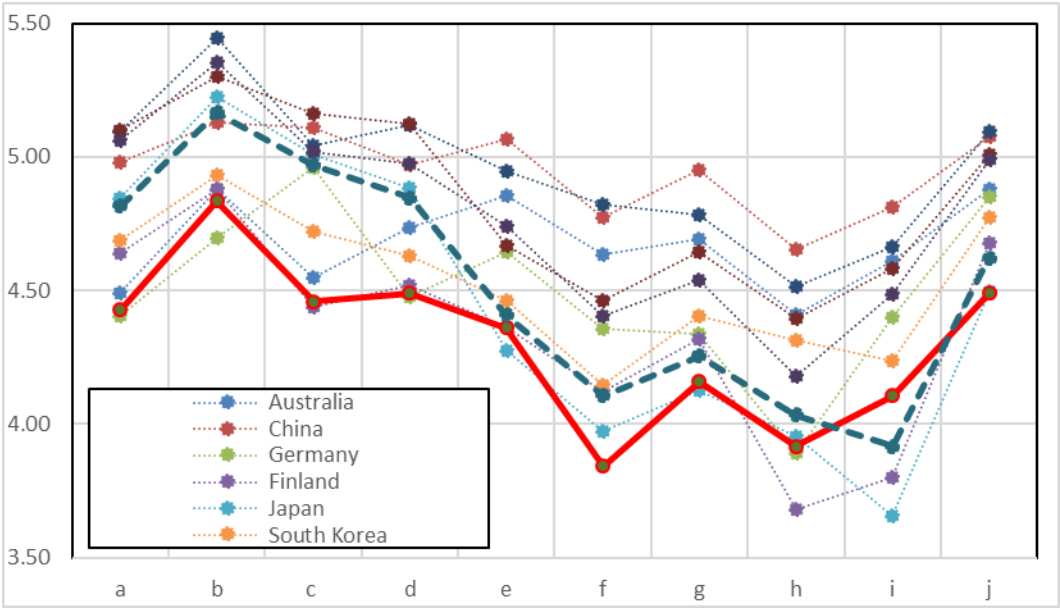

Figure 4. Country comparison on global mindset (section III)

The finding also shows that Thai students cannot actively communicate with someone they meet for the first time. They cannot actively ask for help if they face anything they do not understand. Also, they are quite poor in listening to someone else's opinions when they're engaging in a discussion. (item f, g, j in section III) These communications problems are usual inactive behaviors found plentifully in every Thai classroom. Asking, answering, discussing, listening are all the process Thai students are not yet familiar with. Engaging in a discussion is a learning process taken place once in a while only in some classes in the school. In Thai ordinary school, the teaching and learning process in the class still bound to the traditional-teacher-teaches process. This old fashioned way of learning can be considered a huge blow that obstructs the process of global mindsets development.

3-3. PPDAC (Q10)

Asked whether they are able to find the way to resolve various problems in the society using the PPDAC methods, the finding shows that Thai students rank averagely almost in every item (Figure 5). Nevertheless, Thai students seem to have problems with the process of gathering data and information to verify a hypothesis (item C.a), aggregating the collected data and summarizing them in a chart or a table (item D.a), and proposing an effective problem-solving measure using the results from the charts or the tables they've created (item E.a)

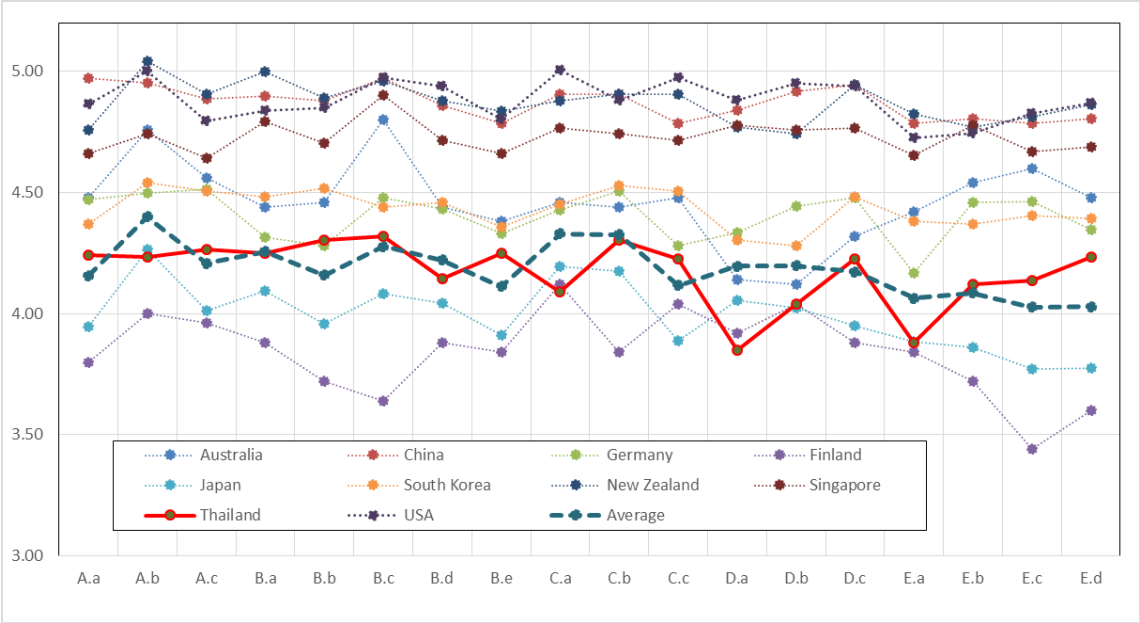

Figure 5. Country comparison on PPDAC

These results are due to the fact that problem-solving learning is a kind of teaching methods rarely found in Thai classroom. Traditional Thai learning process is still inactive, using the repetitive formulas of lecturing, a formal way of cognitive base teaching method that is easily prepared, operated, and evaluated.

4. Agendas for developing future global leaders in Thailand in the next decade

Although the ministry of education has shown its attempt in staging the 'World Class Standard School' by encouraging up to 500 potential schools in Thailand to set the separated classrooms in which the students will be taught every subjects according to the core national curriculum bilingually, the outcome of the project is still minute considering actual numbers of classrooms there are in Thailand overall education system. Even in the same school, for instance, in Samsenwittayalai School, the first public school in Thailand that has the English Program, there are only a small number of the EP classes, only two out of twelve classes in each grade.

Taking the rapid changes stated in the first section of this report into account, the need for global talents in Thailand is quite an urgent agenda with huge expectation of the prosperous economy of the country at the stake. The small number of classrooms set separately for only a group of students is not enough. Pushing the boundary of the project, letting more foreign teachers to participate not only in the EP program but also in the normal classroom and normal school activities, will give the students the chances to improve their global mindsets. Currently, Thai schools, even in the top-level ones, have few foreigners working full-time. And the foreign teachers who work in those schools have marginalized roles. Only the EP students have best chance interacting with them. It is also worth noting that the ministry itself has no concrete policy over employing foreigners as a full-time teacher. Schools often hire these foreign teacher as a temporary employee, using money collected, or requested from students' parents, to pay the salary.

While Thai society is integrating itself into the ASEAN community, pushing the boundary of the economy into the globalized world, the schools in Thailand, stating that they are ready for this integration, do, in fact, look quite the same. There are few degrees of integration founded in schools. The students are still Thai. The teachers are also Thai. They study in the class in the Thai manners, speaking Thai, learning about Thinness. Very few foreign students and foreign teachers are presented at schools. And if they are, they are groomed to be Thai as well. Multicultural society, now founded more frequent outside school, is not something we found in school, even in the top one. Without opening more space for foreigners, ASEAN people, Asians, and Westerners alike, Thai students will never get chance to improve their global view. The narrow space in school system limits students understanding of the changing world. Taking an immediate action by hiring more foreigners, letting them to have more roles both academically and recreationally in the school, will be the first and foremost thing the ministry of education should do.

Diversity make students learn to adapt, and understand different points of view. Making the school more diverse by letting diverse people to have the roles in school is one important thing. Besides, competencies dealing with changes, differences, and uncertainties can also be stemmed from diverse nature of human interaction. To support this diverse nature even more, encouraging classroom activities that let the students express their opinion, i.e. doing more discussion, discovering more truth, staging their own project etc. will be great ways to improve their global competencies. Schools in Thailand have to reinvent the classroom to let these activities happen more frequently giving the chance to students' diverse opinions and actions to grow and have the space to express and exchange between themselves. The interaction between these diverse

ideas will make Thai students be more competent with skills dealing with hardness among differences, hence having achieved more in the cross-cultural working sphere when they grow up.

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United States of America

1. High School Education in the United States

Government in the United States is a three level system: federal, state, and local. The cornerstone document of the federal government, the Constitution of the United States, does not, in any form, mention or define any policy relating to education. In line with the Tenth Amendment to the Constitution[12], which sets down the principle of Federalism, matters concerning education are traditionally seen as outside the federal jurisdiction and are instead delegated to state and local governments.

1-1. General Features of the United States Educational System

Public schools in the United States are generally administered at the local level by legal entities known as school districts.[13] These districts are usually managed by elected representatives of the community in an organization called a school board. School districts typically operate entirely independent of local level government and report directly to the state level education authority. Depending on the state or territory, this organizational structure may vary considerably.[14] For example, the State of Louisiana has 69 independent school districts while the State of Hawaii's single school district is directly operated as a branch of the state government. In total, as of 2012, there are 12,880 independent school districts within the United States.

Public high school education in the United States typically is three to four years in length depending on the school district and focuses on providing a broad general education rather than skilled or vocational training in a specific discipline or field. In 2010, 15,993 public high schools were in operation in the United States.[15] There is no tuition fee for students as funding for schools is provided at the local, state, and federal levels of government. However, students may be required to pay for school supplies, extracurricular clubs, or any other non-class activity.

The number of private high schools in the United States is 2,776 schools as of 2010.[16] The majority of these private schools are affiliated with religious organizations, and generally follow their own curriculum. Other private high schools are focused on special education, vocational education, or preparatory education.

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[12] The full text reads as follows: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."

[13] International Affairs Office United States Department of Education. *Organization Of U.S. Education: The Local Role*. 2008. url:https://www2.ed.gov/about/offices/list/ous/international/usnei/us/schoollevel.doc.

[14] Carma Hogue. *Government Organization Summary Report: 2012*. United States Census Bureau, 2013. url: http://www2.census.gov/govs/cog/g12_org.pdf.

[15] *Numbers And Types Of Public Elementary And Secondary Schools From The Common Core Of Data: School Year 2010–11*. National Center for Education Statistics, 2012. url: http://nces.ed.gov/pubs2012/2012325rev.pdf.

[16] *Table 4. Number And Percentage Distribution Of Private Schools, By Urbanicity Type And Selected Characteristics: United States, 2009-10*. National Center for Education Statistics, 2010. url: https://nces.ed. gov/surveys/pss/tables/table_2009_04.asp.

1-2. Debates over High School Curriculum

The public school curriculum has traditionally been determined at the state level of government without any federal intervention. This status quo, generally championed by conservatives, ensures that education is controlled locally so that it can adapt to the needs of the community rather than being controlled by Washington bureaucrats.

The liberals maintain, however, that public education should be the same for all Americans and requires a national standard written by the federal government to ensure consistency and quality for all schools.

This changed in 2010 when the Common Core State Standards Initiative, a language arts and math educational standard supported by the federal Department of Education, was released. The federal government encouraged and incentivized states to adopt this national standard by offering federal grants and waivers.

The Common Core standard received a mixed reaction from the public, media, and educators. It was deemed by most educators to be a radical, yet necessary, change to the US educational system and would bring the nation's system closer in line with the top ranking nations. In contrast, the standard became a political issue for conservatives as it was seen as a breach of state's rights by the federal government. In addition, many criticized the standard for relying too much on standardized testing, cost of implementation, and forcing the removal of nonessential subjects like art and music due to a decrease in funding. Due to this pressure, the federal government backed down from its promotion of Common Core after the passing of the 2015 Every Student Succeeds Act which prohibits the advocacy of a common curriculum at the federal level.

The core of current American education policy at the federal level can be traced back to the 1965 Elementary and Secondary Education Act which allocated government funding from the Department of Education to school districts with significant numbers of low income students. The provisions from this initial act have generally been renewed and/or amended every five years by Congress.

The No Child Left Behind Act of 2001 (NCLB), a reauthorization of the original 1965 act, was signed into law by President George W. Bush in January 2002. This revision significantly increased the federal government's role in public education by mandating states to create standardized testing and school/teacher assessment standards that would determine qualification for federal funding. Schools were required to show "Adequate Yearly Progress" (AYP) in standardized tests, or more simply, improved test scores every year. Those schools that did not show AYP were required to implement reforms. These reforms, depending on the number of years in AYP deficit, ranged from developing improvement plans and offering tutoring to students to the closing of the school in question. Because of these rigorous, "one size fits all" standards mandated at the federal level, NCLB proved to be controversial and ultimately ineffective. By 2012, over half of all states had been granted waivers to NCLB provisions.

In December 2015, NCLB was replaced by the Every Student Succeeds Act (ESSA), a law primarily written by the Republican majority in Congress to shift control of nearly all educational policy back to the state level. In addition, the act forbids the federal government from advocating or incentivizing any kind of national or regional educational standard to states.

There is no specific program or mandate on developing global leaders in the public high school system in the United States. As stated previously, essentially all US education standards are solely assessment based and generally cover only language arts (English, not foreign languages) and mathematics.

1-4. Remarks on High School Culture

The culture of the typical American high school may be the most differentiating and influential factor in a comparison of schools from other countries. Entering high school is generally the first step to independence and personal autonomy that students receive in the United States. Typically, in primary and middle school, the classes and subject matter are set and cannot be changed depending on a student's interest or skills. In most high schools, however, students have some choice on what classes to take provided that they meet certain subject requirements set by the school. This allows students to begin to develop professional interests or skills that might help choose a future career.

In addition, students tend to receive less supervision which leads to increased independence outside of the classroom. This allows students to develop either an acute self-resilience or a passive submissiveness as a strategy of survival in an ever competitive market society. Students who develop this self-resilience to survive, and in some cases thrive, in this potentially hostile environment tend to be more successful than those who do not. This environment, rather than the curriculum or policies of a school, may be the driving force to developing the leadership skills, perseverance, and ambition required in a global leader.

2. Survey Analysis

The Survey on Global Perspectives was conducted in seven high schools in three specific regions of the United States: San Francisco, Chicago, and Eastern Virginia. In short, American students claim that they would be relatively confident handling an international situation gracefully and diplomatically, but would probably not significantly alter their views on the country or culture.

Interestingly, for the questions in which the student was asked to rate a hypothetical experience or idea from 1 to 6 (Questions 4, 6-2, 7, 9, 10), the average response was nearly always in the range of 4 to 5 – a fairly strong positive answer. This may show the confidence, well-founded or not, that high school students show to a new or challenging situation. This confidence is a key to determining whether a student is seen as a leader or not within American culture, and is displayed even if a student is uncertain about a situation ("putting on a brave face"). Whether they would truly react in a positive manner if presented with a conflict or cultural problem in the real world is another matter.

The one significant exception to this pattern was Question 8 where the average responses to the question (How much would you be able to explain about politics/ economy/ poverty/ history/ religion of a specific foreign country?) were almost all a strong 3, or neutral. This might correlate to a characteristically American attitude, long dormant, but increasingly visible in the post 9/11 world. This attitude is best summed up by journalist and educator Sanford Unger who wrote:

> Whether motivated by exceptionalism, isolationism, triumphalism or sheer

> indifference – probably some of each over time – the United States has somehow failed to equip a significant percentage of its citizenry with the basic information necessary to follow international events, let alone participate in formulating and executing the foreign policy that is an essential component of self-government in a healthy modern democracy. This condition reflects the basic inadequacy of the educational system at every level, when it comes to understanding the world we live in. Americans of all ages have long scored lower than citizens of other countries on geography and current-events awareness quizzes and shown a stunning inability even to locate major countries on the map, let alone develop an appreciation for their cultures or their roles in global affairs.[17]

It may well be the case that the results collected from this survey probably are, due to the selection of schools and locations, skewed away from how the average American might have responded. A possible discrepancy was found in Question 2a (Have you been abroad in the past?), where the average percentage of students that responded "Yes" was 69.6%. This was a much higher average than the total number of Americans that travel abroad per year (see Tables 1 & 2) and appeared to signal an imbalance of the students surveyed.

School	Location	School District	Families in Poverty	Foreign Born %	Students Traveling Abroad
US00115	Fairfax, VA	Fairfax County Public Schools	3.8%	29.5%	78.9%
US00215	Fairfax, VA	Fairfax County Public Schools	3.8%	29.5%	75%
US00315	Virginia Beach, VA	Virginia Beach City Public Schools	6.1%	8.7%	50%
US00415	Los Gatos, CA	Los Gatos-Saratoga Joint Union High School District	2.7%	22.4%	83.7%
US00515	Chicago, IL	Chicago Public Schools	18.6%	21%	90.3%
US00615	Fairfax, VA	Fairfax County Public Schools	3.8%	29.5%	44.4%
US00715	San Francisco, CA	San Francisco Unified School District	8.2%	35.6%	23.1%

Travel data from the Office of Travel & Tourism Industries. http://travel.trade.gov/research/monthly/departures/index.html

Table 1: School Districts Surveyed

[17] Sanford Ungar. *Essay On The Problems Of American Ignorance Of The World*. Inside Higher Ed, Mar. 2015. url: https://www.insidehighered.com/views/2015/03/23/essay-problems-american-ignorance-world.

	US Citizens Traveling Abroad	US Passports in Circulation	Number of US Residents	Americans with US Passport	Americans with US Passport Traveling Abroad	Total Population Traveling Abroad
2015	61,322,698	125,907,176	318,857,056	39.5%	48.7%	19.2%
2014	68,303,358	121,512,341	318,857,056	38.1%	56.2%	21.4%
2013	61,569,800	117,443,735	316,497,531	37.1%	52.4%	19.5%
2012	60,722,794	113,431,943	314,112,078	36.1%	53.5%	19.3%
2011	58,496,587	109,780,364	311,721,632	35.2%	53.3%	18.8%
2010	37,354,842	101,797,872	309,347,057	32.9%	36.7%	12.1%
2009	38,844,301	97,597,368	307,006,550	31.8%	39.8%	12.7%
2008	40,259,650	92,038,623	304,374,846	30.2%	43.7%	13.2%
2007	40,798,278	82,100,668	301,579,895	27.2%	49.7%	13.5%
2006	39,758,010	70,598,794	298,593,212	23.6%	56.3%	13.3%

Passport data from the US State Department. https://travel.state.gov/content/passports/en/passports/statistics.html
Population data from the United States Census Bureau. https://www.census.gov/popest/data/historical/2000s/index.html
Travel data from the Office of Travel & Tourism Industries. http://travel.trade.gov/research/monthly/departures/index.html

Table 2: Americans Traveling Abroad

This discrepancy could stem from two major factors: the population of foreign born residents and the average family income of people in the school district. The three major areas surveyed (San Francisco, Chicago, and the Washington DC metropolitan area) have a significant foreign born population compared to the majority of the country (see Figure 1). Therefore, there is a natural connection for these students to outside of the US, and they would have more opportunities to travel abroad due to family connections. For the majority of schools surveyed, moreover, the percentage of families below the poverty line is very low which would make international travel a more realistic possibility.[18]

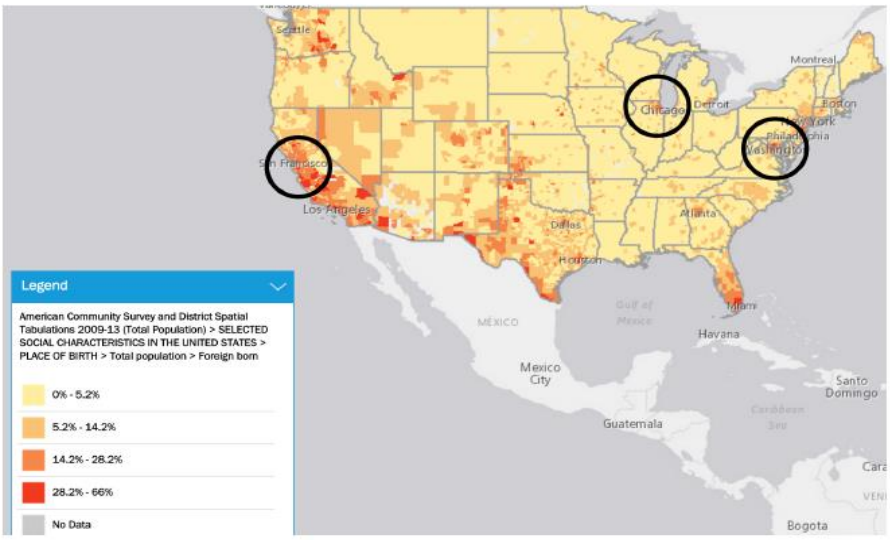

Figure 1: Foreign born population by school district with survey areas highlighted
Data from American Community Survey.
http://nces.ed.gov/programs/maped/

For a more balanced survey of American student views on their international experiences, a few modifications could be made. The United States cannot be

[18] The high percentage of families below the poverty line in Chicago can be attributed to the entire city being one unified school district. Economic statistics for the specific high school surveyed are not available.

adequately studied in the same way as smaller, more culturally homogeneous nations due to its size and diversity, both culturally and socioeconomically. Limiting the survey to only three areas with similar demographics will only show one small sliver of American high school students. A survey would need to be evenly distributed between urban and rural schools, schools with high and low levels of students in poverty, and schools in all geographical regions of the country. For example, if rural schools were added to the survey from Alabama, Montana, Nebraska, and New Mexico, a more balanced and realistic result might have been possible.

It is also important to recognize that while the United States as a whole is multicultural, certain sections of the country are more multicultural than others. Generally, most urban areas have achieved both mutual tolerance and integration, but many rural areas tend to remain divided along racial, religious, and ideological lines. Likewise, in the more integrated areas, American students do tend to have more opportunities for multicultural experiences than those students in monoculture societies. These opportunities, however, may be less common in the more rural regions of the country. This schism in American society is yet another reason to call for a more geographically even survey in the United States.

3. Discussion of Global Leader Development in the United States

3-1. Government Perspective on Global Leadership Development

Leaders in the United States are aware that a solution is needed to help foster development of more global-minded citizens, and education reform is at the forefront of this initiative. In 2000, President Clinton issued a "Memorandum of International Educational Policy" in which he stated:

> To continue to compete successfully in the global economy and to maintain our role as a world leader, the United States needs to ensure that its citizens develop a broad understanding of the world, proficiency in other languages, and knowledge of other cultures. America's leadership also depends on building ties with those who will guide the political, cultural, and economic development of their countries in the future. A coherent and coordinated international education strategy will help us meet the twin challenges of preparing our citizens for a global environment while continuing to attract and educate future leaders from abroad.[19]

Nine years later, President Obama reiterated this need for more global focused education:

> In a 21st-century world where jobs can be shipped wherever there's an Internet connection, where a child born in Dallas is now competing with a child in New Delhi, where your best job qualification is not what you do, but what you know.[20]

While the economic benefits to producing global-minded citizens are obvious due to the globalization of world business, national security is also an important incentive for the United States government to foster global-minded citizens. Since the September 11th

[19] William Clinton. *Memorandum On International Education Policy*. The American Presidency Project, Apr. 2000. url: http://www.presidency.ucsb.edu/ws/?pid=58389.

[20] Barack Obama. *Remarks of the President to the United States Hispanic Chamber of Commerce*. The White House, Mar. 2009. url: https://www.whitehouse.gov/the-press-office/remarks-presidentunited-states-hispanic-chamber-commerce.

attacks in 2001, cultural and linguistic awareness for diplomats and military has become essential to ensure diplomatic integrity and to effectively collect intelligence. International studies and foreign language education are keys to creating the next generation of US overseas representatives.

Finally, and perhaps most importantly, awareness of other cultures and languages is becoming a necessity in the everyday lives of most Americans due to increased migration to the United States. Businesses in the US must evolve to cater to these growing groups by providing services in other languages and respecting non-traditional cultural or religious practices. It is clearly in the interest of American leaders in both government and business to adapt to these changes. Not doing so could further fracture the country, harm the economy, create additional cultural and ethnic tension, etc.

The solution to developing a global-minded citizenry is to reform the US education system to focus on the skills necessary for Americans to compete in our globalized world. The Committee for Economic Development reports that just one third of middle and high school students study any foreign language.[21] Even fewer students study languages that the US government deems critical to national security (e.g., Arabic, Chinese, Farsi, Russian). In addition, courses in international studies in high schools are few or omitted from the curriculum. Improvements in these two areas of study are essential to ensure American students are global-minded and achieve a level of global competence for their future and the future of their country.

3-2. Global Competence

A 2010 report from the National Education Association (NEA) states "global competence in the 21st century is not a luxury, but a necessity. Whether engaging the world, or our culturally diverse homeland, the United States' future success will rely on the global competence of our people. Global competence must become part of the core mission of education—from K-12 through graduate school."[22]

Global competence has been defined in many different ways by researchers, but most definitions have four common criteria. First, a person must be actively aware of the world outside of their national borders. They must be familiar with international economics, history, and politics, and understand how one's actions can influence the greater world. Second, a person must appreciate, accommodate, and accept cultures other than their own. Third, a person must be able to effectively communicate in more than one language. And finally, a person must be a creative problem solver who can adapt to ever changing situations. In short, a person with global competence is "one who has knowledge, can empathize with others, demonstrates approval, and has an unspecified level of foreign language competence and task performance."[23]

3-3. Strengthening Global Competence in the US Education System

Researchers have identified two key improvements that can be made to promote global competence in American high school students.

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[21] *Education For Global Leadership*. Committee for Economic Development, 2006. url: https://www.ced.org/reports/single/education-for-global-leadership.

[22] *Global Competence Is a 21st Century Imperative*. National Education Association, 2010. url: http://www.nea.org/assets/docs/HE/PB28A_Global_Competence11.pdf.

[23] William D. Hunter. "Got Global Competency?" In: *International Educator* 13.2 (2004), pp. 6–12.

3-3-1 Increased Teacher Training Opportunities

Teachers have a pivotal role in the improvement of global competency in high school students. The NEA said in their 2010 report on global competence: “Clearly, global competence cannot be achieved without concerted efforts to train, recruit, and support globally competent teachers and principals for every classroom and every school.”[24] If students need to be thinking on a global scale, then teachers need to be trained to do the same. Existing teacher training programs in California, Delaware, Oklahoma, and Wisconsin are now providing teachers with the skills and knowledge to instill global competency in their students. Programs like these need to be expanded to other states to ensure that all American students receive the same educational opportunities from their instructors.

3-3-2 Modify the Curriculum

The curriculum in many American high schools will need to be expanded and improved in order to increase global competency in students. The two subject areas that should be focused on are improved foreign language and foreign culture education.[25] Schools need to provide training in strategically important, but less commonly taught languages like Arabic and Mandarin Chinese. An example of a school that has successfully integrated this kind of international education into the curriculum is John Stanford International School (JSIS) in Seattle, Washington.[26] Students spend half of their day learning subjects in a foreign language and global cultures are integrated into the curriculum at all levels. In all standardized tests in the state, JSIS students outperform the average in all categories. More schools following this model have opened in the city and have comparable results. This success should be replicated on a wider scale.

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[24] *Global Competence Is a 21st Century Imperative*.

[25] *Global Competence Is a 21st Century Imperative*.

[26] Vanessa Vega and Youki Terada. *Research Supports Global Curriculum*. 2013. url: http://www.edutopia.org/stw-global-competence-research.

Appendix: Questionnaire (English version)

Survey on the global perspectives and behaviors of high school students

SGH Research Group, University of Tsukuba,

This survey asks high school students (age 14-18+) in multiple countries about their perspectives, thoughts, and behaviors toward global issues.

- It will take approximately 20–25 minutes to complete.
- There is neither right nor wrong answers for each question. Answer the way you feel.
- If you stop midway through, the answers you have provided up to that point will be void. Please answer all the questions if you can.
- The personal information on the survey website is protected with Secure Socket Layer (SSL) encryption.
- Your responses will be managed strictly by university researchers. Personal names, as well as school names, shall never be released. Furthermore, the survey results are to be used for a global education program for high school students in multiple countries.
- Please respond before the deadline of September 30, 2015.
- Those who wish will receive the summary of the aggregated results around December 2015 (individual analysis using an individual's data will not take place in any form) are asked to leave their e-mail address in the "e-mail address" box at the end of the survey. (There is no need to write down your name. The e-mail address entered will only be used for the purpose of sending the summary of the survey result.)

  We would like to ask for your cooperation if you agree with the above method.

Q1. First, we would like to ask your personal background:

a. Age

○14 years old or younger
○15 years old
○16 years old
○17 years old
○18 years old or older

b. Gender

○Female
○Male

c. First Language ※Select your first language from the pull-down menu.

First Language	

d. School system

○Co-ed

○All girls' school
○All boys' school

e. Which of the following school activities do you participate in? Select all items that are applicable:
○Student council
○Extracurricular activities (arts)
○Extracurricular activities (sports)
○Student committee activities
○Do not participate in any of the above activities

Q2. International experience
a. Have you been abroad in the past?
○Yes
○No

If answered "yes" to the above question:
b-1. In total, how many foreign countries have you been to? ※Select your first language from the pull-down menu.

The number of foreign countries visited		countries

b-2. In which foreign country did you stay the longest? ※Select your first language from the pull-down menu.

Country name	

b-3. How long did you stay in the foreign country selected in b-2? ※Select your first language from the pull-down menu.

Length of stay	

Q3. How often have you had opportunities to experience a different culture (i.e., lifestyle, social customs, differences in values), either in your country or abroad?

1	○None
2	○Rarely
3	○Neither frequently nor rarely
4	○Frequently
5	○Very frequently

Q4. Select the number that corresponds to how you feel toward the following on a 6-point scale (1: Strongly disagree - 6: Strongly agree)

1	Strongly disagree
2	Disagree
3	Slightly disagree
4	Slightly agree
5	Agree
6	Strongly agree

	Items	1	2	3	4	5	6
a	If there is an opportunity to interact with internationals, I would like to actively use the knowledge I have of that country's culture.	○	○	○	○	○	○
b	If there is an opportunity to interact with internationals, I would like to verify if the knowledge I have of that culture is correct or not.	○	○	○	○	○	○
c	I would like to know more about the culture of people from a country I do not know much about.	○	○	○	○	○	○
d	I can use nonverbal communication (i.e., tone of voice, expression, and gestures) with foreigners.	○	○	○	○	○	○
e	I am interested in interacting with people from various countries.	○	○	○	○	○	○
f	I am confident that I can be friendly with people from countries I do not know much about.	○	○	○	○	○	○
g	Even in a country that I visit for the first time, I can probably enjoy living there.	○	○	○	○	○	○

Q5. Have you experienced difficult (problematic) situations arising from cultural differences between countries?

○Yes⇒The screen will jump to Q6.

○No⇒The screen will jump to Q7.

Q6. Recall one of those difficult (problematic) incidents vividly remains in your memory, and answer the following questions about it:

a. Where did this event occur?

○Your country ○Overseas (Country name) *Pull-down menu

b. About how long ago did that event occur? *Pull-down menu

c. Please explain the situation in brief.

SQ6-1. How novel would you say the experience was, on a 6-point scale (1: Not novel at all-6: Very novel)

1	○Not novel at all
2	○Not novel
3	○Slightly not novel
4	○Slightly novel
5	○Novel
6	○Very novel

SQ6-2. To resolve this event, how often did you use the following behaviors? Select a number that corresponds to the 6-point scale (1: Never- 6: All the time)

1	○Never
2	○Rarely

3	○Sometimes
4	○Often
5	○Frequently
6	○All the time

	Items	1	2	3	4	5	6
a	I tried to understand the position of the other person and their feelings.	○	○	○	○	○	○
b	If necessary, I changed what I had decided first.	○	○	○	○	○	○
c	I respected the values of people who were in a different position from my own.	○	○	○	○	○	○
d	I tried to think of the cause of the problem from various perspectives.	○	○	○	○	○	○
e	I thought of various choices.	○	○	○	○	○	○
f	I aimed to make it easy for the other person to state their opinion.	○	○	○	○	○	○
g	I aimed to build a cooperative relationship with the other person.	○	○	○	○	○	○
h	I also listened to viewpoints that were opposite to mine.	○	○	○	○	○	○
i	I took actions taking advantage of the skills I'm good at.	○	○	○	○	○	○
j	I explained my own opinions effectively.	○	○	○	○	○	○
k	I confirmed midway whether we were reaching a resolution.	○	○	○	○	○	○
l	I reflected on what I learned from the event.	○	○	○	○	○	○
m	I had strong passion that I need to resolve the issue.	○	○	○	○	○	○

SQ6-3. Has this event impacted the way you think about that country's culture?

○Yes⇒SQ6-4

○No⇒SQ6-5

SQ6-4. After the incident, how much did your perspectives or behavior toward international cultures change?

Select all numbers that apply (multiple answers are permitted).

1	○I learned the importance of learning about foreign cultures.
2	○My curiosity and interest toward foreign cultures increased.
3	○My values toward foreign cultures have changed.
4	○It became an impetus for me to change my behavior toward foreign cultures.
5	○I acquired new behavior patterns in relation to foreign cultures.

SQ6-5. What was your level of understanding of that country's culture before the incident? Select a number on the 6-point scale (1: Very low- 6: Very high).

1	○ Very low

2	○ Low
3	○ Slightly low
4	○ Slightly high
5	○ High
6	○ Very high

SQ6-6. Ultimately, to what extent did you resolve the incident that you experienced? Select a number on the 6-point scale.

1	○Not at all resolved
2	○Not much resolved
3	○Slightly unresolved
4	○Moderately resolved
5	○ Somewhat resolved
6	○Completely resolved

Q7. If you encounter a difficult (problematic) situation arising from cultural differences between countries, how often do you think you will act in the following ways? Select a number on the 6-point scale (1: Never- 6: All the time)

1	○Never
2	○Rarely
3	○Sometimes
4	○Often
5	○Frequently
6	○All the time

	Items	1	2	3	4	5	6
a	I will try to understand the position of the other person and their feelings.	○	○	○	○	○	○
b	If necessary, I will change what I had decided first.	○	○	○	○	○	○
c	I will respect the values of people who were in a different position from my own.	○	○	○	○	○	○
d	I will try to think of the cause of the problem from various perspectives.	○	○	○	○	○	○
e	I will think of various choices.	○	○	○	○	○	○
f	I will aim to make it easy for the other person to state their opinion.	○	○	○	○	○	○
g	I will aim to build a cooperative relationship with the other person.	○	○	○	○	○	○
h	I will also listen to viewpoints that were opposite to mine.	○	○	○	○	○	○
i	I will take actions taking advantage of the skills I'm good at.	○	○	○	○	○	○
j	I will explain my own opinions effectively.	○	○	○	○	○	○
k	I will confirm midway whether we were reaching a	○	○	○	○	○	○

	resolution.						
l	I will reflect on what I learned from the event.	○	○	○	○	○	○
m	I will have strong passion that I need to resolve the issue.	○	○	○	○	○	○

Q8. In detail, how much would you be able to explain about items (a) to (e) below of specific foreign country? Select the number that corresponds to your answer.

1	○Completely unable
2	○Unable
3	○Somewhat unable
4	○Somewhat able
5	○Able
6	○Completely able

		1	2	3	4	5	6
a	Politics	○	○	○	○	○	○
b	Economy	○	○	○	○	○	○
c	Poverty issues	○	○	○	○	○	○
d	History	○	○	○	○	○	○
e	Religion	○	○	○	○	○	○

Q9. Select the number that is closest to your feelings or thoughts for each sentence below.

1	○Completely disagree
2	○Disagree
3	○Slightly disagree
4	○Slightly agree
5	○Agree
6	○Completely agree

	I. International knowledge/information	**1**	**2**	**3**	**4**	**5**	**6**
a	I can actively collect information related to topics that interest me by using resources (i.e., newspaper and news reports) in foreign languages.	○	○	○	○	○	○
b	I am able to resolve a difficult task by thinking it through, research resources if necessary, and ask people.	○	○	○	○	○	○
c	Even if I face a difficult situation, I can examine it by organizing the key points and structure of the problem.	○	○	○	○	○	○
d	Even if a topic is difficult to explain, I can capture its key points and explain the topic to other people in an easy-to-understand manner.	○	○	○	○	○	○
e	I can recount my own country's history and culture to internationals in a foreign language.	○	○	○	○	○	○
f	I can recount my own country's politics and economy to foreigners in a foreign language.	○	○	○	○	○	○
	II. About myself	**1**	**2**	**3**	**4**	**5**	**6**
a	I would like to go to many foreign countries.	○	○	○	○	○	○
b	I think it's fun to experience various foreign cultures.	○	○	○	○	○	○

c	I would like to live abroad.	○	○	○	○	○	○
d	I would like to interact with many foreigners.	○	○	○	○	○	○
e	I would like to attempt many things without fear of failure.	○	○	○	○	○	○
f	No matter how difficult the situation is, I would like to overcome it through persistence.	○	○	○	○	○	○
g	I am confident of myself.	○	○	○	○	○	○
h	I focus more on my strengths than my weaknesses.	○	○	○	○	○	○
i	I think I'm a person who can do good for others.	○	○	○	○	○	○
Ⅲ. My involvement with society		**1**	**2**	**3**	**4**	**5**	**6**
a	I would like to correctly understand the behaviors of foreigners and those whose cultural roots are different from mine.	○	○	○	○	○	○
b	I think that although there are cultural differences in the ways people think, there are also individual differences.	○	○	○	○	○	○
c	Social problems such as discrimination and prejudice between different cultures should be examined based on differences in the cultural values that each person holds.	○	○	○	○	○	○
d	Even if I come face to face with someone who holds beliefs that are different from mine, I would like to think about why there is a discrepancy and understand others with more flexibility.	○	○	○	○	○	○
e	I can interact well with other people.	○	○	○	○	○	○
f	I can actively communicate even with someone I am meeting for the first time.	○	○	○	○	○	○
g	If there is something I don't understand, I can actively ask other people for help.	○	○	○	○	○	○
h	When I have to greet people or speak in front of many people, I can express myself effectively.	○	○	○	○	○	○
i	I can take charge and fulfill a leadership role when solving a problem in a group.	○	○	○	○	○	○
j	When engaging in a discussion, I can listen to each participant's opinions rather than simply stating my own.	○	○	○	○	○	○
IV. Future		**1**	**2**	**3**	**4**	**5**	**6**
a	I would like to choose my profession by visualizing my ideal self and considering various perspectives.	○	○	○	○	○	○
b	I would like to select my career path by sufficiently considering what type of job I would like to hold in the future.	○	○	○	○	○	○
c	I would like to select my career by including the possibility of working abroad according to my perspective.	○	○	○	○	○	○
d	I would like to actively participate in international activities, such as volunteering abroad.	○	○	○	○	○	○
e	I would like to consider the option of studying abroad at foreign universities or graduate schools in the future.	○	○	○	○	○	○
f	I would like to live by always having an objective, and challenging myself toward achieving it.	○	○	○	○	○	○
g	I would like to find what I like to do, and apply my passion to it.	○	○	○	○	○	○
h	I would like to become an international leader in the future and contribute to the development of my own and other countries.	○	○	○	○	○	○
i	I would like to become a talented person who can help solve various problems in the world.	○	○	○	○	○	○
j	I would like to become an excellent person who can serve as a role	○	○	○	○	○	○

	model.						
k	I would like to elevate my country's international presence by actively conveying its culture, technology, and attitude to the world and foreigners.	○	○	○	○	○	○

Q10. To what extent would you be able to use the following methods in order to find a way to resolve various problems that arise in society? Select the number that is the closest to your reality for each sentence below.

1	○Completely unable
2	○Unable
3	○Somewhat unable
4	○Somewhat able
5	○Able
6	○Completely able

	A. Problem detection skill	**1**	**2**	**3**	**4**	**5**	**6**
a	I can ascertain the true nature of the problem or explain the cause of matters that I have an interest in.	○	○	○	○	○	○
b	I can examine the significance of an issue.	○	○	○	○	○	○
c	I can find grounds for the significance of the issue.	○	○	○	○	○	○
	B. Ability to plan resolution measures	**1**	**2**	**3**	**4**	**5**	**6**
a	I can examine the reasons why such a problem arises from various perspectives.	○	○	○	○	○	○
b	I can explain the issue that is arising through my knowledge and experience.	○	○	○	○	○	○
c	With team members, I can examine, list, and summarize possible causes and factors that impact the issue.	○	○	○	○	○	○
d	I can list the causes of the problem and summarize their significance.	○	○	○	○	○	○
e	I can create hypotheses to move toward problem resolution.	○	○	○	○	○	○
C. Data/information gathering capacity		**1**	**2**	**3**	**4**	**5**	**6**
a	I can gather data and information to verify a hypothesis.	○	○	○	○	○	○
b	I can select data and information suited for problem resolution.	○	○	○	○	○	○
c	I understand the accuracy of collected data and information.	○	○	○	○	○	○
D. Analytical capability		**1**	**2**	**3**	**4**	**5**	**6**
a	I can aggregate collected data and summarize them in a chart or table.	○	○	○	○	○	○
b	I can use the charts and tables I created in a way that fits my need.	○	○	○	○	○	○
c	I can derive important conclusions from my analysis' results.						
E. Abilities to make proposals		**1**	**2**	**3**	**4**	**5**	**6**
a	I can propose an effective problem-solving measure using the analysis' results in the charts and tables that I created.	○	○	○	○	○	○
b	I can conduct an appropriate presentation of my proposal.	○	○	○	○	○	○
c	I can explain how effective the proposed details are.	○	○	○	○	○	○
d	I can answer questions about my presentation in an appropriate way.	○	○	○	○	○	○

Q11. What kind of skills do you think are necessary to be globally active in the future? Furthermore, what kind of educational programs would you like to receive to attain such skills?

Thank you for your cooperation.

Please leave your e-mail address below if you wish to receive the result (summary) of this study. The summary will be sent through email around December 2015.