

# Is ICT a Magic Wand as a Teaching Tool?

— From Observation of Classrooms in Helsinki

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## Abstract

OECD (Organisation for Economic Co-operation and Development) surveys conducted over the years have shown Finnish education to be one of the best in the world. Countless publications in Japanese in the 2000s attempted to uncover the secrets through class observations. However, teaching appears to have shifted from the blackboard to ICT devices. Are there any classroom management styles that Japanese teachers can learn from the Finnish classroom? In 2018 the author of this study observed classes at a secondary school in Helsinki that specializes in foreign language education. Finland is in the process of eliminating all paperwork at schools by 2020 and having students use only ICT devices. Class observations and interviews with teachers focused on classroom techniques and active learning methods. The advantages and disadvantages of the use of ICT in the classroom are then discussed with a reference to the two cultures.

## Introduction

The author of this study visited a secondary school in Helsinki for four days in March 2018<sup>1)</sup>. The trip was organised with another Japanese college English teacher, Ms. Y. The considerable geographical distance between Finland and Japan was a good analogy of the differences observed during the visit. Finnish education is known as “free” and based on Active Learning. Even so, the Japanese observers were surprised by some student behaviour in the classroom. One female student was watching a make-up YouTube on a laptop PC, a few male students were wearing headphones, and some other students were looking at a shopping site. Even more surprising was the fact that teachers and other students did not appear concerned about their behaviour. In this paper, other Japanese researchers’ views are referenced as much as possible.

## History of Finland

Takahashi of The Open University of Japan expresses a strong compassion for Finland and the trials and tribulations it endured over its history from assaults by neighbouring superpower states (2015, Chap. 2). He also shows approval of Finland’s dignified and thoughtful decisions made before and after the battles and its resurrection of the country as a high-tech and welfare state (Chap. 1 and 3) in the late 1990s influenced by the political collapse of the

superpowers. He implies that times have changed and small countries like Finland can be more “powerful” in this era.

## Finnish Education

For most other Japanese, the initial interest in Finland may have been its emergence at the top of PISA (Programme for International Student Assessment) conducted by the OECD since 2000. While schools in Japan, Korea, and other Asian countries have to put their students through severe competition to catch up to the top tier, Finnish education seems more relaxed with less school hours. It was therefore natural for educators to want to learn the secret of Finland’s academic success. Takeuchi (2016, p.71) from Kyoto Graduate University states that Japanese educators “flooded” into Finland on inspection tours and the expression “pilgrimage to the holy site” (“フィンランド詣で” in Japanese) was coined in late 2004. As a result, over 300 Japanese educators visited schools in 2006 alone (Fukuta 2007, p.259). In fact, Takeuchi finds that there were no articles related to Finnish education in the Asahi newspaper before 2004. The number of articles reached a peak in 2008, when 18 articles out of 37 on Finland in general appeared (p.79–80). The popularity of Finland in Japan was also evidenced by the numerous books published on Finnish primary school education, many of which used classroom observations as a reference point in comparing Japanese education with that of Finland (Fukuta, 2007; Kobayashi 2008; Matsumoto & Keskinen 2013; and Ito 2010, 2014; to name a few).

As for teaching hours, Table 1 shows that Finns spend less hours per year for primary and lower secondary education than Japanese. For example, hours taught at Finnish primary schools in 2017 were 673.2, compared with 742.1 in Japan. Moreover, as indicated by the arrows at the end of each row, hours taught at the three levels of education (primary, lower and upper secondary schools) have declined compared with 2010 in Finland, whereas they have increased in Japan.

Table 1: Teaching hours per year in Finland and Japan 2010–17

	2010	2011	2012	2013	2014	2015	2016	2017	
<b>Primary School</b>									
Finland	680.4	680.4	673.2	673.2	673.2	676.8	680.4	673.2	↘
Japan	706.8	731.4	731.4	736.3	742.3	742.1	742.1	742.1	↗
<b>Lower Secondary</b>									
Finland	595.35	595.35	589.05	589.05	589.05	592.2	595.35	589.05	↘
Japan	601.5	602.42	602.42	607.86	611.25	609.91	609.91	609.91	↗
<b>Upper Secondary</b>									
Finland	553	553	547.2	547.2	547.2	550.1	553	547.2	↘
Japan	500.3	509.7	509.7	513.4	513.4	510.8	510.8	510.8	↗

Source: created from OECD (2018a) data

## Digital Project in Helsinki

Helsinki aims to be the world's best city in utilising digitisation and all city documents have been stored electronically (Helsinki City official home page). Digital Agenda for 2011-2020 was published by the Ministry of Transport and Communications in 2011 and advocates that the city should “incorporate the civic and media skills needed in an information society as an integral part of the Finnish education system” (p.38). ScienceNordic, an online news site, reported that a primary school in eastern Finland has instituted a non-paper project and abandoned printed books altogether, and instead uses PC tablets in classrooms (2013, October 4). The Helsinki high school in this study was also in the process of going paperless (and even deskless), aiming to achieve the goal by 2020.

However, there are downsides to a digitised society, as reported in the Washington Post (2016). The article cited that “Most teenagers in Finland spend more than four hours a day on the Internet,” excluding time watching TV. It also noted that heavy users spend more than eight hours a day on the Internet, and suggested that digital distraction may be one of the reasons why Finland had more low-performing students in the 2015 PISA compared with earlier assessments. Using Japanese teenagers' mobile use as a reference, Yomiuri online news cited (2017) that 94.8% of high school students possessed a mobile phone in 2016 based on research conducted by the government that year. It also cited data from “Digital Arts,” reporting the average use per day for all teenagers of 3.2 hours, including 6.1 hours for female high school students and 4.8 hours for male high school students. These news reports would indicate that Finnish students spend more time on ICT devices than Japanese students. Whether this reflects Finland's more advanced digitised society is unclear, but there may be some influence.

## ICT Education

The Japanese government is taking a more cautious approach to internet classroom use. The Ministry of Education, Culture, Sports, Science and Technology (MEXT) announced in December 2018a guidelines for digital textbook use in primary and junior high school education, recommending that teachers use paper textbooks as their main source. It also recommends that use of digital devices be limited to less than half that of paper books and that students' devices be switched off when not in use to prevent distraction or the viewing of unrelated content.

So, is the stance on ICT use for or against? Malaysian educators did a project-based research on ICT use in ESL classrooms, interviewing 23 English teachers (Yunus et al., 2013). The outcome showed more advantages than disadvantages based on variation (not qualitative comparison), such as attracting students' attention, facilitating their learning process, information sharing, creation of graphics and multimedia projects, and improving teachers' instructional process. The drawbacks were time and place constraints, internet connection problems, and students' distraction by non-assigned websites. The study suggests enforcing stricter ground rules and controlling computers from a central location as possible ways to

mitigate these drawbacks. Australian researchers Ainley and Enger (2007) describe that students' emotional and cognitive engagements are crucial for its effective use. The conclusion is that positive and negative outcomes vary among learners and learning tasks.

## Matriculation Exam

The school website of this study specifies that a high school diploma refers to a high school graduation diploma that is awarded by matriculation exam held twice a year. The diploma is necessary when applying to a university and the exam result can be included as part of the university entrance evaluation. According to the teachers, students who fail the exam or do not finish the programme usually go on to a vocational or adult school (study at the Helsinki high school is limited to four years). The exam is monitored closely by invigilating teachers and students' belongings are strictly controlled. Although students looked relaxed and free in classrooms, they are expected to study autonomously in order to pass the matriculation exam.

## Immigrants

Japan's "Immigration Control and Refugee Recognition Act" was partially revised in December 2018, opening the way for the acceptance of more foreign workers from April 2019. The government website (e-stat) indicates there were 2.6 million non-Japanese in the country in 2017, accounting for about 2% of the population. Finland had 380,000 foreign residents in 2017, roughly 7% of the population (OECD, 2018b). The OECD 2012 survey shows these percentages were 1.6% and 5.3%, respectively, in that year, and indicates the world now has more immigrants.

Table 2 shows immigration to Finland by the top 15 nationalities over the period 2006-2016.

Table 2: Inflows of foreign population to Finland, 2006-16, Top 15 nationalities

Nationality	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Iraq</b>	129	358	520	907	1,057	719	584	910	776	754	3,235
<b>Estonia</b>	2,468	2,896	3,038	3,176	3,909	4,704	6,041	5,856	4,663	3,355	2,596
<b>Russia</b>	2,146	2,488	2,950	2,336	2,297	2,795	3,050	2,875	2,420	2,086	2,540
<b>Afghanistan</b>	261	242	219	226	321	373	593	627	515	394	1,864
<b>Syria</b>	13	19	26	13	21	46	150	173	570	578	1,716
<b>Vietnam</b>	209	262	317	300	272	360	379	402	506	679	942
<b>China</b>	512	727	963	771	566	763	748	807	696	732	768
<b>Somalia</b>	287	583	601	840	1,041	745	445	724	633	654	693
<b>India</b>	504	534	623	612	486	573	572	676	826	821	676
<b>Sweden</b>	749	741	884	836	671	674	593	624	604	547	579
<b>Ukraine</b>	141	196	249	236	203	271	333	368	445	502	517
<b>Thailand</b>	443	569	562	628	599	625	589	602	552	576	511
<b>Iran</b>	221	189	231	150	209	268	333	403	414	265	440
<b>Romania</b>	111	211	197	164	206	258	302	257	400	355	440
<b>Poland</b>	221	443	562	321	250	325	538	506	513	395	432
<b>Others</b>	4,453	7,046	7,964	6,571	7,145	6,917	8,084	8,063	9,114	8,721	9,325
<b>Total</b>	13,868	17,504	19,906	18,087	18,212	20,416	23,334	23,873	23,647	21,414	27,274

Source: Statistics Finland

The number of immigrants nearly doubled during this period, likely having some impact on a country with a population of 5.5 million. Japan may be able to learn from Finland's experience, especially in the field of education.

Following is an excerpt from Finland's Digital Agenda 2011-20 mentioned previously that refers to immigrants (p.37):

Well-designed digital services and learning materials (e.g. games and simulations) can help to stimulate learning motivation. Electronic services and materials could also be designed for use in teaching and learning that supports the integration of immigrants.

This generous support and embracing attitude may be the key to Finland's success in overcoming countless challenges throughout its history.

### **Previous Studies and the Purpose of This Study**

As noted earlier, countless research papers and books have been published worldwide on Finland's ranking in PISA and CLIL (Content and Language Integrated Learning), its plurilingualism, and other teaching methods in an attempt to shed light on its special education systems. To give an example, Ito compiled in his papers in 2010 and 2014 the outcomes of his field study for English education in Finnish primary schools conducted over six months in 2005, as well as a series of studies from 2006. He attributes the success of Finnish English education in primary schools to its "diversity and consistency" in his 2010 paper. He argues the courses, instruction, and teachers' distinctive positions (e.g., classroom teachers, subject teachers) offer diversity, but learners' needs (such as small class sizes with teaching assistants), target and evaluation standards (use of CEFR, Common European Framework of Reference for Languages), educational quality through equality, and student autonomy are all promised or prioritised.

Garant's voluminous study (1997) compares Finnish and Japanese English language teaching through the analysis of filmed classroom activities at junior high schools in both countries. He points out that Japanese classrooms are identical regardless of the teacher. Japanese English language teachers remain at the front of the classroom and are concerned with covering the syllabus in order for students to pass entrance examinations (p.153-177). In contrast, Finnish classrooms are fast paced and involve various activities. They are communicative and relaxed (p.178-191), with students "getting up and walking around during the lesson" (p.190).

None of these studies refer to recent classroom observations involving ICT. This paper therefore aims to find how Finnish teachers and students cope with ICT devices in the classroom.

1) Researcher's classroom observations and 2) teachers' interviews were used to examine this question.

## Method

### Helsinki Upper Secondary School of Languages

The school is located in eastern Helsinki and programmes are designed to be completed in three years. According to the official website, there are about 580 students aged 16-19 in the school. Every year it accepts 70 students into the language programme and 121 students into the general studies programme. The former requires a higher score on the entrance exam. As of December 2018, thirteen languages are available, including ones rarely taught at the high school level such as Arabic, Chinese, Japanese, and Suomi (or Lapp). The classes meet three times a week for 75 minutes each. Each term lasts for six weeks. Judging from the photographs on the teachers' lounge door, there are 28 teachers including director and principal.

According to the Japanese language teacher, 30% of the students are immigrants or foreign-based, and most of them are in the general studies programme. Several female Somalian and Arab students were observed based on cultural dress, but the nationality of male students could not be identified in this way. It appears the school regularly accepts immigrant students on the basis of entrance exam results.

### Classroom Observations

Six classes in the general studies programmes were observed (three English language, one mathematics, one Finnish literature, and one philosophy with a reference to religions) involving four different teachers and English coordinator in the four-day visit. The latter three classes are not taught in English, but the teachers and students used English or switched from Finnish to English for the benefit of the observers. The classes observed were determined by the English language course coordinator and by agreement between the class teachers and observers. Each Finnish teacher offered to answer post-class questions. Table 3 shows the teacher, the subject and the class size.

Class size is limited to 30. In all the classrooms, the desks were arranged in groups of four to six to allow for communal study. Most students sat with others, but some seemed to prefer to study alone. Teachers did not discourage this, showing understanding for their preference and for overall class harmony. Students bring their own laptop to school, but classrooms have spares in case students forget theirs or there are breakdowns.

**Table 3: Classes observed by teacher, subject and class size**

Teacher	Subject	Class size
A (coordinator)	English	21 + 27 (2 classes)
B	English	26
C	Mathematics	20
D	Philosophy	16
E	Finnish Literature	25

The following are summaries of the researchers' classroom observations and interviews.

1) Teacher A class-1: English, Vocabulary and Grammar exercise using textbook

Textbook "Insight" (MacMillan) was used. Classroom seating arrangements for pair work created by Excel were shown on the classroom overhead projector. The students sat accordingly, relaxed and talking to their friends. Quiz sheets with vocabulary and grammar exercises were distributed. Fronter (Figure 1), a learning platform similar to Moodle that is used in schools in Helsinki, was shown on the overhead projector, and a short video was played. The teacher believes in the positive effect of pair work and put on music to facilitate learning. The paired students were instructed to do the exercise on the sheet together. Teacher A walked around the classroom giving hints and answering students' questions for more than 30 minutes. He spoke mainly in English, but occasionally used Finnish to confirm meanings. He casually asked a student who was playing with his phone, "Is this what your textbook looks like? You need the book." Once each pair finished and submitted their sheet to the teacher, they opened their own laptop and checked their reading homework. A few students were observed using their PC or phone to search for answers, although the teacher did not scold them or seemed to mind as quizzes account for a small percentage of a student's overall evaluation. The students looked relaxed throughout the class.

2) Teacher A class-2: English, Vocabulary and Grammar exercise using textbook

Textbook "Insight" (MacMillan) was used. Smart board notebook and fronter were used and shown on the classroom overhead projector. The students were supposed to sit with other students, but a few chose to sit alone and the teacher let them. The class was rather noisy and not many students looked ready to study. The instructions were shown on the overhead projector and the students were supposed to work individually on the exercise



Figure 1: fronter initial screen (As you can see, fronter supports many languages).

Source: fronter web page



on their PCs first, then work with a partner, but most of them were not focused. The researchers observed various distractions: some students talked to their friends, while others listened to music, looked at their mobile phones, ate chocolates, or even left the classroom (presumably to go to the toilet). One of the students near an observer was watching a YouTube video, while another male student was drawing a copy of a picture on his PC. Without telling them off, the teacher changed the exercise after a while and asked the students to do a more specific exercise of checking the meaning of a reading text on the frontier system. Then the teacher asked the class to name some world festivals, and a group of three students chose one to make a presentation in the next class. The teacher instructed them on what slides should be made and told them to send their PPT file to him as an assignment. The rest of the class time was used to prepare slides on their PCs. Later, in the post-class interview, the teacher said he believed in his students' autonomy, so he never raised his voice. There was a male student who did not look focused and was just staring at his notebook. His partner student, who had her legs lying across his lap, looked even in worse condition. The teacher A expressed understanding and sympathy toward this student in the post-class interview, explaining that he was a recent immigrant and is usually very polite to him. He also did not seem to mind the various behaviour of students in the classroom, seeing them as making an effort to study.

3) Teacher B: English, Vocabulary and Grammar (paraphrasing) exercise

Textbook "Insight" (MacMillan) was used. Students first handed in their written homework (typed on paper) to the teacher. They all sat in groups of four or five with their PCs. The class was told to check the meanings of words shown on the classroom overhead projector and their PC screens. Then frontier was used. The teacher provided Finnish translations to confirm. A student was using his mobile phone and told by the teacher to put it away. She told the class to quiet down when it became a bit noisy. She then instructed the class to do the next exercise on the system individually. Once they finished, they played with their PCs. The teacher checked the answers with the class rather than by pair or group work while showing a vocabulary list on the overhead projector. Lastly, the teacher showed some pages where to review for the test and assigned written homework for the next class. Teacher B's class may not have been as fun or relaxed as teacher A's, but the quieter and more controlled environment might be better suited to some students.

Teacher B revealed in the post-class interview that she used to teach English through drama performances, but had to change her method with the introduction of ICT. She was reluctant to use ICT devices and also concerned about the effects of ICT use on students' brains.



4) Teacher C: Mathematics, integral composite function

The teacher showed several mathematics problems on the classroom overhead projector while explaining briefly about them. All the students had their own PC and the mathematics problems were also displayed on them. Some students sat in groups and helped each other solve the problems while others sat by themselves. A few students listened to music on headphones during the class to better concentrate on their work (Figure 2). The teacher walked around helping the students. The class was quiet as the students focused on their work. About an hour later, the teacher showed formulas and answers on the projector screen with explanations. The combination of the students' autonomy and concentration made the class a success, and there also seemed to be a rapport between the teacher and the class. How the students worked (e.g., listening to music) was not a concern for him. The teacher planned to give some practice tests to help students prepare for the matriculation exam.

5) Teacher D: Philosophy, with references to religions and cultures

The teaching platform "TabletSchool" designed by Finnish teachers was used. Teacher D said the system is useful for teachers, as students' essays and other work can be evaluated continuously. The students were divided in three groups and the observers were also asked to join the groups. The teacher first showed essays and quizzes submitted by the students to confirm their completion. No laptop PCs were used in class. Next, pictures related to Buddhism and Japanese pop culture were shown on the classroom overhead projector one after another, and the class discussed what they saw in response to the teacher's questions.

Discussions were meant to take place within each group, but in the end it became one class discussion. Some students did not express their opinions but only listened to others. The class went smoothly despite a seeming lack of clear objectives or procedure on the day. The observer attributed this to the small class size (16 students) and absence of laptops on the desks.



Figure 2: Math class (1st and 3rd students from the left are wearing a headphone while working).

Photo taken by the author

#### 6) Teacher E: Finnish Literature

The paper textbook “SARMA: edge” was used. The class was for second year students, most of whom were relaxed and talking with classmates while opening their PCs. A male student sitting near an observer was openly playing a PC game, while a female student was looking at an online shopping site. Without bringing the class to attention, the teacher started by introducing a Finnish literature and the era when it was written. She used “OneNote” (Windows) and shared her page with the class. The textbook was thick and heavy, so she provided the online info for the class. The previous class time was spent reading this literature, and the students were told to write an essay about it as homework. A film was had been made about the life of the author of this literature and a song was also had been composed. Teacher E played a part of both works. The class overhead projector displayed a photograph of the author and some scenes from the movie, and a YouTube video played the song. The rest of the class time was used to prepare the homework essay. Some students started writing on their PCs, some searched for relevant information on their PCs, some sang songs together, and some looked at shopping sites. The students looked relaxed throughout the class, but nonetheless were more or less involved in the topic, because of the benefit of audio effects and assignment.

### Discussion

The aim of this paper is to show through observation and interviews ICT usage in the classroom. The teachers used various learning systems, such as frontier, smart board notebook, TabletSchool and OneNote, for multiple purposes. All the teachers chose these platforms mainly for their visual effects; for example, to show lists of “problems” (such as the meanings of words) and confirm the answers in front of the class. The math teacher combined both projector and digital notebook, sharing files of math problems with the students and showing solutions on the screen. The teachers chose TabletSchool primarily because of its convenience for student evaluation, even though the platform looked as effective as others. In this study, the purpose for choosing an ICT tool was 1) the visual and audio effects for students, 2) user-friendliness in the classroom for both teachers and students, and 3) student evaluation convenience.

On the other hand, when the use of these tools is mandatory, teachers may have to change their teaching methods. Classes such as drama and public speaking require a high level of student participation; therefore, the use of ICT may change the way the class is structured. It reduces the amount of time students are actively involved, negatively affecting classroom dynamics. Experienced teachers might have to discard their long established classroom techniques and be flexible to adopt new ones.

The above discussion was from the standpoint of administrators. Now we turn to that of students. Despite the fairly small class sizes, student distractions were observed in various forms. In teacher B’s class, most of the students were looking at their laptops, but there was

one student who was openly using his mobile phone, and the teacher sternly told him to put it away. The Malaysian researchers mentioned earlier found that enforcing strict rules can be employed, but when ICT is an integral part of teaching, especially to the digital native generation, teachers still need to find ways to motivate students to learn. The matriculation exam appears to be one personal motivator, but efforts by teachers to make classes interesting and engage the students are still crucial. In this respect, teaching techniques in an ICT environment may not have advanced that far from traditional blackboard-style teaching, and relying too much on ICT may not be a good idea.

The author’s initial reaction was uneasiness to see such indiscipline in relatively small class sizes. Ms. Y, who accompanied the author to all the class observations felt the same. On top of that, students sitting near the author looked unconcerned and classes proceeded as if every student were paying attention.

What was it that made the author so uneasy? Why did students sitting close by not tell them to stop? To try and answer these questions, Finnish and Japanese cultures are examined and compared. According to the Japanese teacher in the school, who had lived in Helsinki for 11 years at the time, this “no interference” attitude is typical of Finnish culture. People value individualism and students are not concerned or affected by those who play PC games or watch YouTube videos, even if they sit in close proximity. She also thinks that Finnish communication is fundamentally through language. So if people are annoyed by a situation, they will say something, but if they are not, they will not say anything. The fact that the students in the classrooms did not say anything about other students’ behaviour indicates that they did not mind.

A comparison of intercultural distinctions is instructive in this case. The following diagram (Figure 3) contrasting seven aspects of Finnish and Japanese cultures was obtained from the official homepage of Erin Meyer, an American researcher. (Her cultural analysis consists of

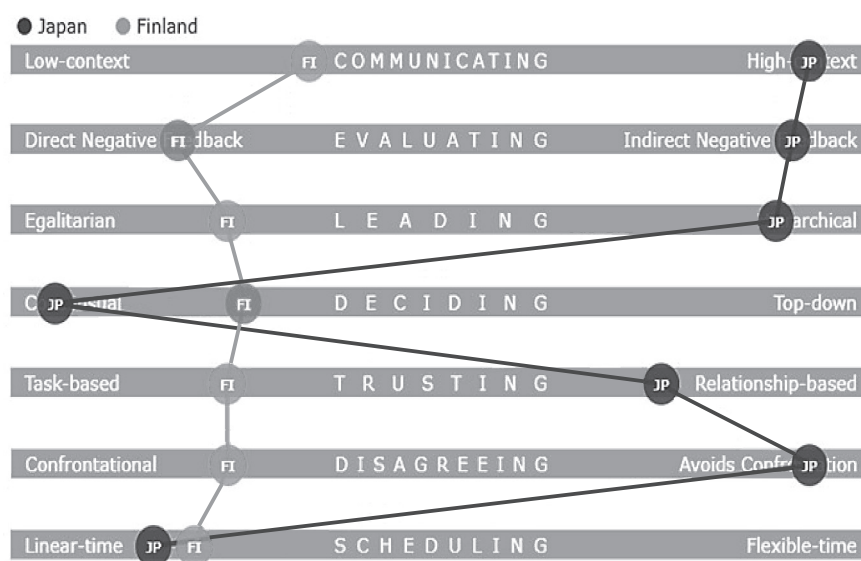


Figure 3: Erin Meyer Culture Map; Finland and Japan

Source: Erin Meyer’s official homepage

eight dimensions, but one (Persuading; Principles or Applications first) was missing at the time the diagram was retrieved.)

Two dimensions (Deciding and Scheduling) are similar, but the other five suggest the two cultures' perspectives and tendencies are very different. For example, Finnish communicating (the top dimension) is Low-context based but Japanese is High-context. This means Finnish people prefer explicit expressions (whether giving or receiving), whereas Japanese prefer language that hints or implies. When disagreeing (the dimension positioned at the second from the bottom), Finnish use a Confrontational approach while Japanese avoid Confrontation and use mild implication instead. In fact, Erin Meyer experienced Japanese uncertainty at a conference in Japan and introduces her observation in her official video. There is an expression called *kuuki-o-yomu*, which literally means “reading the air or atmosphere” of the situation. This expression is often used among young people in Japan, and those who do not notice the “air” of the occasion or read the eyes of others are treated as insensitive or inconsiderate. In a Japanese classroom, if a student is openly watching a video, others sitting nearby would “read the air” and feel a dilemma between the students and teacher and get distracted from their class activity. At the same time, they would not confront the student causing the disturbance, preferring to “Avoid Confrontation.” Unfocused students do exist, but they are usually discreet, using their mobile phones under their desks or pretending to listen to the teacher to avoid the ire of their fellow students. The two Japanese observers' feeling of uneasiness probably arose from this cultural difference.

Regarding cultural differences, the following Table 4 was extracted and reconfigured from

**Table 4: Percentage of students who reported engaging in each activity at least once a week**

	OECD average	Top country/economy		Bottom country/economy	
	%	%	Country	%	Country
Browse the Internet for fun	87.7	95.8	Estonia	57.6	Jordan
Participate in social networks	82.6	93.3	Denmark	43.2	<b>JAPAN</b>
Download music, films, games or software from the Internet	69.6	84.1	Czech Republic	48.0	<b>JAPAN</b>
Chat on line	68.8	88.9	Estonia	36.0	<b>JAPAN</b>
Obtain practical information from the Internet	65.7	80.8	Czech Republic	47.2	Costa Rica
Use e-mail	63.6	83.1	Liechtenstein	23.7	Korea
Read news on the Internet	63.1	86.4	Iceland	32.2	Costa Rica
Play one-player games	40.4	59.7	Serbia	23.2	Mexico
Play collaborative online games	35.7	53.7	Serbia	16.8	Mexico
Upload one's own created contents for sharing	30.8	52.9	Jordan	12.3	<b>JAPAN</b>

Source: OECD, PISA 2012 database, extracted from Table 1.6. Use of ICT for leisure 2015.

an OECD report (2015) and shows frequencies of ICT use outside school by 15-year olds in 64 countries.

Japan was ranked last in four out of ten activities, an indication that Japanese 15-year olds are not as accustomed to using ICT devices as their counterparts in Eastern European countries. The guidelines for digital textbook use announced by MEXT mentioned earlier still rely to a great extent on paper textbooks and indicate Japan could continue to lag behind other countries in the use of ICT. Greater flexibility on the use of ICT might be more appropriate, accommodating teachers and students who are more comfortable using apps and those that are not. Schools should be the place where students experience both the positive and negative effects of ICT and the consequences of its use. Restrictions on the use of ICT might hinder Japanese students' uptake of necessary skills to compete in an increasingly global age. The 2017 OECD report considers the adverse consequences of excessive use of ICT by teenagers, not only in terms of harmful content and links but also family and interpersonal problems and physical weakness (p.43). That said, the use of ICT in people's daily lives and work going forward is inevitable, and it will be up to educators to show students how to responsibly use ICT to lessen these negative effects (p.50-51).

Lastly, the education of immigrants is examined. In the classes we observed, immigrant students chose to sit together, were quiet, and did not openly ask the instructor questions. No conflict whatsoever was observed between Finnish students and the newcomers, possibly a reflection of the preference for individualism in Finnish culture noted earlier. It appeared that the teachers knew their background and kept a watch over them. The picture of Somali and Arab female students in their cultural dress studying alongside Finnish students in the snowy landscape of Finland was almost idyllic, the creation by education of "a peaceful global society" in miniature. However, there are downsides. The Washington Post reported (2016) that the increase in immigrants is one of the reasons for Finland's lower PISA results in 2015. It also cited as another reason tighter financial conditions, which reduced the number of classroom assistants and support staffers that low-performing students rely more heavily on.

The immigrant students have to adopt to a completely different environment while at the same time learn a new language and cultural norms, a tremendous burden for anyone in their position. But in the long run they will help revitalize the nation and enrich the social fabric. It is therefore in the government's interest not only to allow in more immigrants but facilitate their assimilation into society by providing adequate support for language learning and basic social services for families.

World Happiness Report 2018 (Helliwell, Layard, & Sachs 2018) included for the first time the happiness and well-being of foreign-born immigrants. Finland came out on top out of 117 countries. The Report is based on Gallup surveys covering 2005-2017 that used a self-reporting scoring system. The finding reveals that immigrants in Finland see the country as trustworthy, supportive and generous. Finland was also ranked first out of 156 countries by happiness level

of locally born citizens as measured by surveys undertaken from 2015–2017. The most striking finding of the report is “the remarkable consistency between the happiness of immigrants and the locally born” (p.29). This suggests life evaluations reported by immigrants converge towards those of other residents in their new countries and/or they gain from moving to countries that provide immigrants with conditions favourable to a satisfying and rewarding life. Japan ranked 54th by happiness level of locally born citizens and 25th of foreign born. Given the level of its GDP per capita, Japan should provide a reasonably high standard of living for all its citizens. The government has decided to accept more foreign workers from April 2019. It is hoped that the public and private sectors will prepare sufficient support services for the families of immigrants. It is said that happiness transcends the personal and that those who give to others will be rewarded in kind.

## Conclusion

This paper has examined the use of ICT in classrooms in Finland. Teachers can enhance classroom audio and visual effects through the use of ICT, but ultimately students’ cognitive engagement is the most important. The teachers chose the platforms and systems to help engage the students, but distractions can still occur and efforts should be made to prevent them. For example, teachers can restrict the use of students’ ICT devices to pertinent sites and information to keep them focused on the class. This discipline will help students control the impulse to use their devices for personal reasons. Students need to concentrate on their studies and have clear goals and a strong determination to learn at school. Making a clear distinction between free time and class time will help motivate them to learn. In other words, ICT use in the classroom could be more of a hindrance to learning than an aid.

The introduction of ICT is bringing about changes in traditional teaching methods, negatively affecting class dynamics. It is also changing the role of teachers, from a “master” who knows everything about a subject to a class “facilitator”, as ICT broadens learning opportunities outside of the classroom. As a class facilitator, teachers need to inspire students by introducing topics and themes that capture their attention and interests both emotionally and intellectually. Some of the same techniques used in the blackboard era can be applied here. Experienced teachers should continue to apply and polish their repertoire of teaching techniques.

Rapid changes in ICT have greatly increased accessibility to resources and enriched people’s lives and ICT should be integrated into classrooms to enhance teaching effects. At the same time, teachers should be aware of its negative consequences, such as weakening students’ self-control and ability to communicate face-to-face. In the secondary high school in Helsinki, some “loners” were observed. They sat by themselves and worked alone in the classroom even when teachers assigned pair work. Schools could provide more free time to allow students to communicate with others in class and motivate them to socialise and form healthy school lives.

In Japan, the Japanese government should be more flexible in introducing restrictions on the use of ICT in classrooms to allow for the uptake of ICT skills that will be necessary to compete in an increasingly global age. Teachers' ICT skills and preferences should also be utilised and prioritised.

When Finnish and Japanese cultures were compared, it was found that linguistic preferences, either low-context (more direct) or high-context (less direct), and disagreeing style (Confrontational and Avoids Confrontation) are distinctly different. This difference might be one reason why Japanese education has not changed much even after the publication of numerous studies and researches on Finnish education. When two very different cultures collide, new tricks can be hard to learn. Or, as Garant (1997) mentions in the Previous Studies part above, Japanese English teachers may be responsible for the lack of change as they have been paying too much attention in class to covering items for entrance exams. According to MEXT (2018b), the elimination of the common university English entrance exam and adoption of an alternate for other public English proficiency tests were discussed because the common exam cannot adequately judge speaking and writing skills. However, the review committees appeared to be too cautious, and the common exam system will be kept until 2023 while letting students choose either type of test. Many high schools will therefore be encouraged to prepare for both common exams and public English proficiency tests until 2023, which would cause a further deviation from Finnish education.

As Takahashi of the Open University describes, Finland successfully transformed itself into a high-tech and welfare state. Regarding the latter, the Happiness Report 2018 ranked Finland as the most hospitable country in the world from the standpoint of both locally and foreign born. Happiness transcends. The government's official policy stated earlier is to promote ICT use to ensure fairness and convenience for immigrants too. Finland is also in the process of becoming a paperless country by 2020. This seems to be a worthwhile goal, but the author spoke with someone who thinks it might be counterproductive. Mr. O of the Suomi tribe living in Lapland, in northern Finland, is concerned with the shrinking forest cover. According to him, more and more woods have been cut down to make PC printout sheets for personal use. Our lives have been inundated with information, the production of which has been accelerated by digitisation. Now is the time for us to rethink what information we should keep and use ICT wisely.

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