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In-service teachers' attitudes toward and usage of information communication technology (ICT) tools in professional practice; a study of an international school in Bangkok, Thailand

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Abstract

Information Communication technology (ICT) tools are referred by each and every invention of the modern society that have been considered as the key strand for teaching and learning process. Using ICT tools in their professional practice, countless in-service teachers are developing their students' learning process effectively in many countries around the world. The purpose of this study is: a) to explore the attitudes toward ICT tools of in-service teachers of an international school in Bangkok and b) to analyze the usage of ICT tools in their professional practice. The study revealed that, majority of the in-service teachers cherishing positive attitude toward ICT tools, but significant number of in-service teachers are not using ICT tools adequately in their professional practice. Plausible reasoning for this discrepancy is discussed.

Keywords

In-service teachers, information communication technology (ICT) tools, attitudes and usages, professional practice.

1. Introduction

Even though, there is no precise defining of ICT, but the consensus assertion of researchers and educators are; it includes all that invention that make any task being accomplished more efficiently, it is the cost-effective agent for solving problems, it is the combination of communication and technology on which every step of our life are directly or indirectly dependent on. From wake up in the morning till going back to sleep, all our activities are colored by ICT, and these are emblazoned all the time, sequences of life are being changed every day, speed of life are being accelerated every moment. Moreover, new and innovative inventions are being add up every day, broaden up the past limitations, opportunities are being spread-out, form personal to state level, family to society, education to profession, medicament to entertainment, nothing is left behind from the ICT's blessing shower. For the last several eras, Information communication technology (ICT) is considered as the ongoing key accelerator of the dramatic development of every dimension of our daily life. Using of ICT tools in teaching and learning process is proven to boost up the digital competencies for both teachers and learners(UNESCO, 2014),(UNESCO, 2016). Many countries around the glove have already kicked off the initiatives by setting up the ICT infrastructure as well as, ensuring other related facilities and a numbers are obtaining fruitful achievements (Nikian, Nor, & Aziz, 2013). For this very sensible demand of time, teachers are expected to use ICT tools in their teaching practice to guaranty 21st century teaching environment (Yilmaz & Bayraktar, 2014). Hence their attitudes towards using ICT tools in their professional practice are very much crucial. This study revealed the atti-

tudes of teachers' attitudes toward and usage of information communication technology (ICT) tools in professional practice of an international school in Bangkok, Thailand.

Background

The purpose of education is not only transferring knowledge form one source to another or pouring information from teacher's brain to student's brain but also ensuring a sustainable innovative society, Naser Jamil Al-Zaidiyeen, Leong Lai Mei, and Fong Soon Fook (2010) Only scientifically literate citizen can ascertain a modern civilization which is the ultimate goal of science education (American for the Advancement of Science ((AAAS), 1993), Abedin, F. Z., & Khajornsak, B. (2013) To establish a modern civilization with adequate knowledge of science and technology, the particular strategies and stepwise implementations of those roadmaps are obligatory, Rizza (2011). The Application of the knowledge in the field of professional practice is the reflections of proper comprehension and acquired guidelines, Albirini (2006). The more the end user uses the instruction, the more benefit they are pledged to get.

According to a numbers of study, teachers' attitude has direct and indirect impact upon their teaching as well as their classroom practice INFODEV (2005); Ziaul Abedin Forhad (2013). Teaches can deliver knowledge according to their own knowledge, they able to approach active learning to the students as of their individual skills and experiences. Similarly, teachers are ready to practice ICT tools based on their acceptance of technology towards teaching and learning which are the attributes and significance of ICT tools in learning progression. Hence, The International Computer and Information Literacy Study (ICILS), (2013), had pointed the spotlight towards the teachers and emphasized their attitudes, their competency and "pedagogical" knowledge for practicing ICT. The result of the European study also suggested that, action plan needed to guarantee the adjustment of curriculum so that use of ICT might be the "core element" of teachers' education as well as for ongoing professional development program.

Many countries of different continents have already kicked off such policies and measuring the effectiveness of practicing ICT tools in teaching and learning. As of several studies, Turkey government has been attempting to get the most advantages of ICT tools by investing a big percentage in teaching and learning as its proven to be an effective tool though. (Demir & Yurdugül, 2015), Cavas, Cavas, Karaoglan, and Kilsa (2009),(Suleyman, 2015) Study in elementary schools in the U.S.A and Japan, Kusano et al. (2013) supported that, ICT tools are mostly useful in students' engagement in collaborative learning.

Cherishing the impression of Technology tools' attributes and its true benefits, the government of Jordan have been testifying its reinforcements "tremendous" improvements in education since early 1980s Naser Jamil Al-Zaidiyeen et al. (2010).

By using of technology in teaching-learning tactic, Nigerian preservice teachers are developing their understanding and critical thinking as well as problem solving skills, Yusuf and Balogun (2011), Garba, Singh, and Yusof (2013). In Australia, It has been proven long before and widely being accepted the fact that "Technological devices and networks have changed the schools and Classrooms"(Eady & Lockyer, 2013). Study conducted in Taiwan (Hsu, 2011) revealed that, teachers using ICT tools frequently in classroom are significantly engaging their students by assigning multimedia ICT activities and thus assuring 21st century teaching environment (Yilmaz & Bayraktar, 2014). In Malaysia, teachers are trying to overcoming the obstacles that they are facing everyday as they getting prolific returns of using in classroom (Nikian et al., 2013),(Alazam, Bakar, Hamzah, & Asmiran, 2012).

Even though, technology integrated education was considered roughly, Thailand has started walking straightly on its focus by establishing the Ministry of ICT in 2002. "Schoolnet Thailand" project was initially kicked off as a part of its ICT Master plans by Ministry of education. From setting up internet backbone for the country, it ensure the schools to access information resources all around the county (Makaramani, 2013). Using of Internet technology in teaching and learning was promoted through numerous ways including "content creation programs". During the past fifteen years, the master plan was revised, policy and new budget were allocated as well as distinctive ICT integrated project were implemented, as a following step to gear up this strategy, by reformation of the classroom with "one tablet per child(OLPC)" scheme was initiated by the government in 2012 (*ICT in the Thai classroom An assessment of teacher capabilities and attitudes towards the 'One Tablet Per Child' policy in Thailand*, 2015). Because of some biasness towards OLPC, "Smart Classroom" policy was substituted later.

To measure the intended outcome several studies were conducted, most of the research found similar findings that ICT integrated learning and teaching are welcomed and appreciated by the learners and teachers (Laohajaratsang, 2010). But the obstacles and barriers from the teachers' side were inline too. In order to eliminate this, different universities embed-

ded ICT related 'required courses' in curriculum for prospective teachers and training program for the in-service teachers as well.
As of Thai current Education policies and reform summery presented by Singhadechakul (2015), it is explicitly mentioned that, developed and modern "ICT systems" must be used in learning and teaching.

Methods

This descriptive study is conducted with a survey research, the purpose is to explore in-service teachers' attitude towards ICT tools. The survey carried on with ICT Attitude Questionnaire (ICTAQ) adopted from and guided by "Computer Attitude Questionnaire"(CAQ), a highly reliable and identically validated instrument which was developed from encompassing literature review, Albirini (2006). The original instrument was developed from a number of study conducted in different context,(Al-Oteawi, 2002); (George G. Bear, 1987; Susan H. Bannon, 1985); (George G. Bear, 1987); (Allison W. Harrison, 1992);(Mohammed I. Isleem, 2003); (T.Meier, 1988);(S.Ian Robertson, 1995); (Prahalad Sooknanan, Srinivas R. Melkote, & Skinner, 2002); (Swadener M., 1987). The content and face validity of the questionnaire was evaluated by panel of high profile research expatriate. Modifications were done according to their feedback before distribution of the final questionnaire to the participants.
The survey questionnaire was converted into Google form and distributed to all 60 teachers through their individual email address and requested to response and submit from their email. 57 teachers respond by replying the email and submitted the filled form. It took around two weeks to get all the responses from the participants. The response rate was calculated as 95%.
The questionnaire designed in three parts and included 31 items altogether, the first part consists of six items used for demographic data collection. It is used to gather data of gender, age range, teaching level, experience and further training or professional development perceived.
The second part comprise of 19 items to fulfill the target of getting participants responses for five main variables of attitude towards ICT tools, this Part intended for a) teachers' perceptions (belief), b) teachers' competency (knowledge) c) teachers' view on ICT attributes d) teachers' accessibility (practice), and e) teachers' views on significances of ICT tools towards teaching and learning. The last part consists of 6 items aimed to gather the participants' exercise and usages of ICT tools; for instances, computer application and internet technologies for their professional practice, which reflected the second objective of this study.
The breakdown of the second part are; the first 5 Items (Item1 to Item 5) aimed to get the reflections of teachers' perceptions (belief), the following 5 Items (Item 6 to Item 10) used to measure teachers' competency; knowledge or ability towards ICT tools, the next 5 Items (Item 11 to Item 15) meditated teachers' views on ICT attributes, easiness, and the way they handle the ICT tools when needed, and the rest of the items (16 to Item 19) dealt about the teachers' views towards the significances of ICT tools in teaching and learning.
To accomplish the second goal of this study, last section (Part 3) were comprises of 6 items designed to penetrate the participants' exercise and practical usages of ICT tools (e.g. computer application and internet technologies) for their professional practice. Several computer application programs and popular search engines were optioned to distinguish the participants' specific usage. Teachers' pattern and nature of using ICT tools both for general purpose as well as teaching purpose were reviewed. Finally, the participants' frequency of using ICT tools in teaching practice were immersed
Among the participants, thirty-seven teachers (65%) were female and twenty teachers (35%)were male. The number of the teachers according to their age range are 25% in 26 to 30 years, 53 % are in 31 to 35 years range and 16% are in more than 36 years' age and rest (4% each) are below 25 years' as well as above 40 years' age.
According to the teaching level, 42% of the participants are teaching 'below primary' level (age group from 2.5 years to 4 years) and primary level (age group from 5 years to 10 years). 58% of the participants are from secondary level (age group from 11 years to 13 years) and higher secondary level (age group from 14 years to 16 years). As of their subject area of specializations, 16% of the participants from mathematics, 15% of the participants from physics, 26% of the participants from general science, 7% of the them from ICT / Computer technology, 31% of them are from social science, literature and cultures and rest (5%) of the participants are from arts and crafts. The maximum numbers (67%) of them are with teaching experience of 2 to 4 years, there are 7 % of the teachers with 5 to 7 years of teaching experience, 12% of them with 8 to 10 years of teaching experience, 11% of them with more than 10 years and 4% of them having below 2 years of teaching experience. During the teaching period, Professional development (PD) Program is mandatory to maintain the status of standardized teaching environment especially in international schools, hence; 65% of them are

having at least 1 to 3 days of attending PD related to ICT or technology in Education. 25% of them are with 4 to 6 days of PD experience.

Figure 1(Part2): ICT Attitude Questionnaire (ICTAQ)

Information Communication Technology (ICT) is a broader term that includes each invention of the modern society. In this questionnaire, ICT and ICT tools refers to the technological Instruments, such as computer, laptop, projectors, whiteboard, handheld devices, internet, software programs, educational websites etc.
Directions: Please select each of the following that fits the most.

1. Using ICT is enjoyable.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

2. ICT motivates students to do more study.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

3. Using ICT in the classroom make the subject matter more interesting for students.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

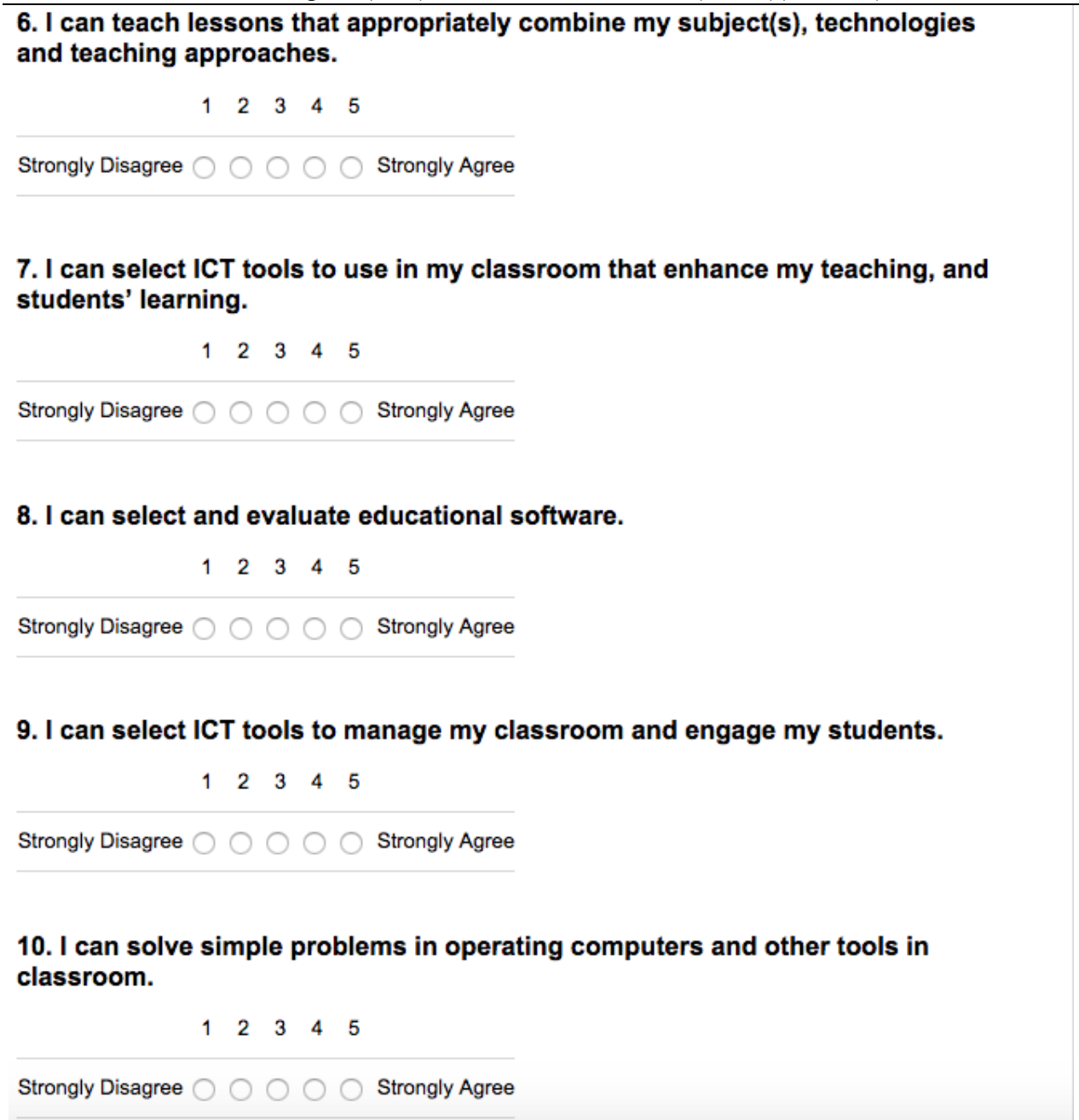
4. ICT improves education.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

5. ICT should be a priority in education.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Figure 1(Part2): ICT Attitude Questionnaire (ICTAQ)(continued)



6. I can teach lessons that appropriately combine my subject(s), technologies and teaching approaches.

1 2 3 4 5

Strongly Disagree ○ ○ ○ ○ ○ Strongly Agree

7. I can select ICT tools to use in my classroom that enhance my teaching, and students' learning.

1 2 3 4 5

Strongly Disagree ○ ○ ○ ○ ○ Strongly Agree

8. I can select and evaluate educational software.

1 2 3 4 5

Strongly Disagree ○ ○ ○ ○ ○ Strongly Agree

9. I can select ICT tools to manage my classroom and engage my students.

1 2 3 4 5

Strongly Disagree ○ ○ ○ ○ ○ Strongly Agree

10. I can solve simple problems in operating computers and other tools in classroom.

1 2 3 4 5

Strongly Disagree ○ ○ ○ ○ ○ Strongly Agree

Figure 1(Part2): ICT Attitude Questionnaire (ICTAQ)(continued)

11. ICT tools save time and effort.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

12. ICT tools are fast and efficient means of getting information.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

13. ICT tools enhance student learning.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

14. Teaching with ICT tools offers real advantages over traditional methods of instruction.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

15. ICT tools have proved to be effective learning tools worldwide.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Figure 1(Part2): ICT Attitude Questionnaire (ICTAQ)(continued)

16. Students must use ICT tools in all subjects.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

17. My class room is equipped with ICT Tools.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

18. I would like to learn more about ICT tools.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

19. Class time is too limited to use ICT tools in my teaching.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Figure 1(Part3): ICT Attitude Questionnaire (ICTAQ)

1. I use computer applications / software programs often, in my teaching practice.

- ☐ Word Processing (e.g. MS Word)
- ☐ PowerPoint (e.g. MS PowerPoint)
- ☐ Spreadsheet (e.g. MS Excel)
- ☐ I don't use computer applications / software programs in my teaching practice.

2. I use websites / search engine to access different types of information.

- ☐ Google
- ☐ Yahoo
- ☐ YouTube
- ☐ Others
- ☐ I don't use websites / search engine for accessing information.

3. I use ICT device or computer for my teaching practice.

- ☐ My school provides me adequate Internet facilities with desktop computer in classroom or library.
- ☐ I use my personal computer in classroom or library.
- ☐ I use my personal computer at home to prepare for the class
- ☐ I don't use ICT device or computer for my teaching practice

4. I use ICT device or computer.

- ☐ For creating presentation for the class
- ☐ For grade keeping
- ☐ For storing my teaching materials, in organized files and folders.
- ☐ I don't use ICT device or computer for my teaching
- ☐ Other:

5. I use the Internet.

- ☐ For communication (e.g., email)
- ☐ For searching information
- ☐ For entertainment
- ☐ Other:

6. I use ICT device or computer, application and search engine in my work.

- ○ Daily
- ○ 3 to 4 days / week
- ○ 2 days or less / week
- ○ Never

Findings

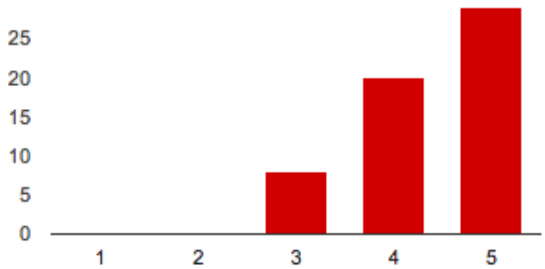
Outcomes from this study are presented in detail in two parts; (a) in-service teachers' attitude towards ICT tools, and (b) in-service teachers' usages of ICT tools in their professional practice.

Part 2: In-service Teachers' Attitude towards ICT Tools

The elaborated item-wise findings of the in-service teachers' Attitude towards ICT Tools are presented graphically. All figures were generated by Google Forms;

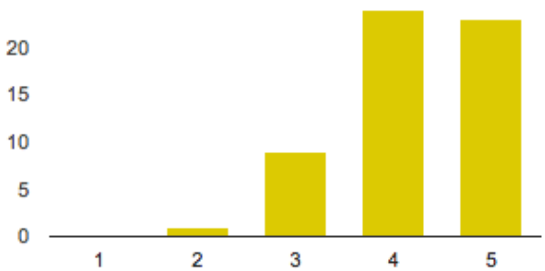
Figure 2(Part 2): In-service Teachers' Attitude towards ICT Tools

1. Using ICT is enjoyable.



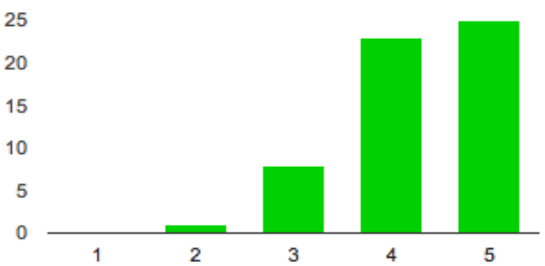
Strongly Disagree: 1	0	0%
2	0	0%
3	8	14%
4	20	35.1%
Strongly Agree: 5	29	50.9%

2. ICT motivates students to do more study.



Strongly Disagree: 1	0	0%
2	1	1.8%
3	9	15.8%
4	24	42.1%
Strongly Agree: 5	23	40.4%

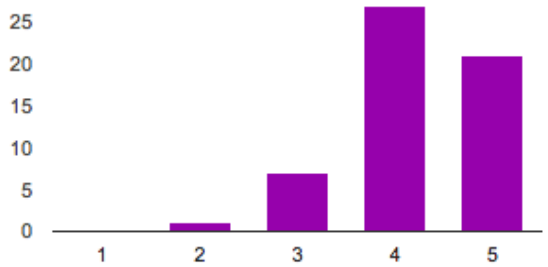
3. Using ICT in the classroom make the subject matter more interesting for students.



Strongly Disagree: 1	0	0%
2	1	1.8%
3	8	14%
4	23	40.4%
Strongly Agree: 5	25	43.9%

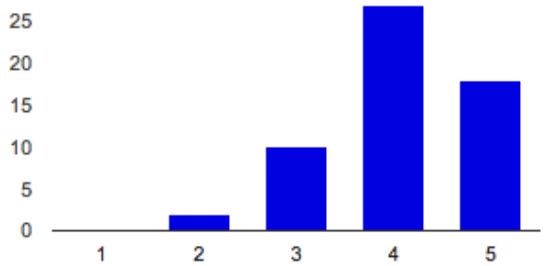
Figure 2(Part1): In-service Teachers' Attitude towards ICT Tools (Continued.)

4. ICT improves education.



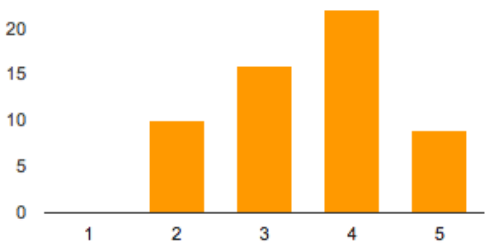
Strongly Disagree: 1	**0**	0%
2	**1**	1.8%
3	**7**	12.5%
4	**27**	48.2%
Strongly Agree: 5	**21**	37.5%

5. ICT should be a priority in education.



Strongly Disagree: 1	**0**	0%
2	**2**	3.5%
3	**10**	17.5%
4	**27**	47.4%
Strongly Agree: 5	**18**	31.6%

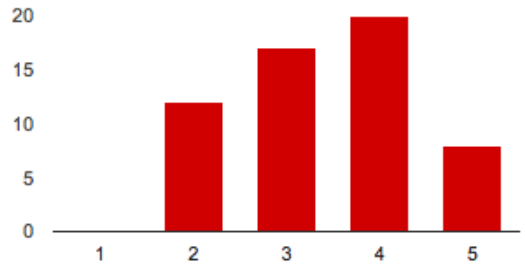
6. I can teach lessons that appropriately combine my subject(s), technologies and teaching approaches.



Strongly Disagree: 1	**0**	0%
2	**10**	17.5%
3	**16**	28.1%
4	**22**	38.6%
Strongly Agree: 5	**9**	15.8%

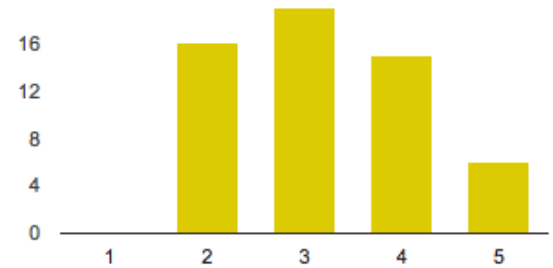
Figure 2(Part1): In-service Teachers' Attitude towards ICT Tools (Continued.)

7. I can select ICT tools to use in my classroom that enhance my teaching, and students' learning.



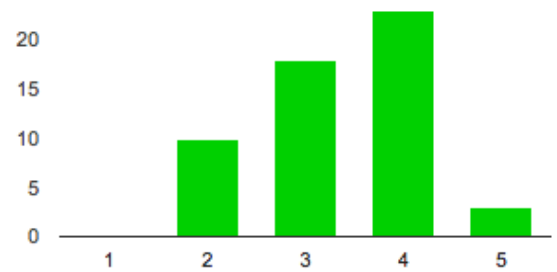
Strongly Disagree: 1	**0**	0%
2	**12**	21.1%
3	**17**	29.8%
4	**20**	35.1%
Strongly Agree: 5	**8**	14%

8. I can select and evaluate educational software.



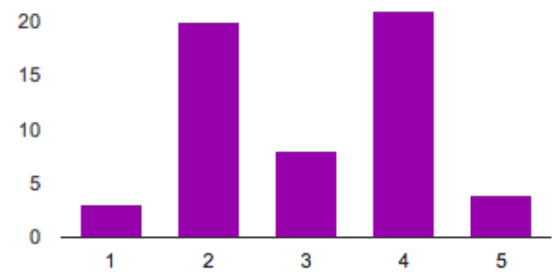
Strongly Disagree: 1	**0**	0%
2	**16**	28.6%
3	**19**	33.9%
4	**15**	26.8%
Strongly Agree: 5	**6**	10.7%

9. I can select ICT tools to manage my classroom and engage my students.



Strongly Disagree: 1	**0**	0%
2	**10**	18.5%
3	**18**	33.3%
4	**23**	42.6%
Strongly Agree: 5	**3**	5.6%

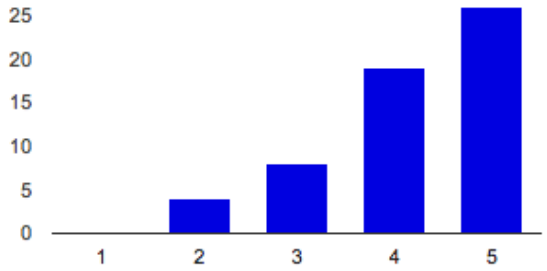
10. I can solve simple problems in operating computers and other tools in classroom.



Strongly Disagree: 1	**3**	5.4%
2	**20**	35.7%
3	**8**	14.3%
4	**21**	37.5%
Strongly Agree: 5	**4**	7.1%

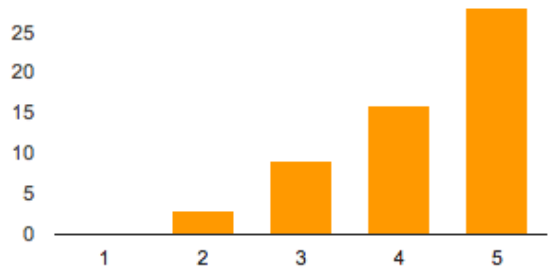
Figure 2(Part 2): In-service Teachers' Attitude towards ICT Tools (Continued.)

11. ICT tools save time and effort.



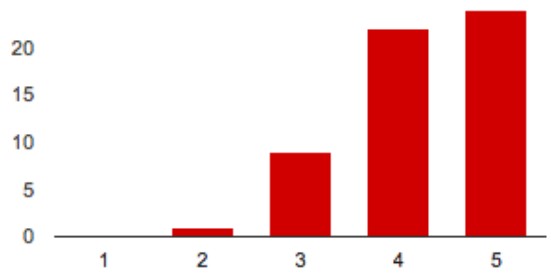
Strongly Disagree: 1	**0**	0%
2	**4**	7%
3	**8**	14%
4	**19**	33.3%
Strongly Agree: 5	**26**	45.6%

12. ICT tools are fast and efficient means of getting information.



Strongly Disagree: 1	**0**	0%
2	**3**	5.4%
3	**9**	16.1%
4	**16**	28.6%
Strongly Agree: 5	**28**	50%

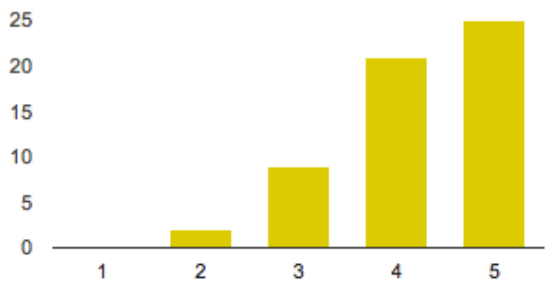
13. ICT tools enhance student learning.



Strongly Disagree: 1	**0**	0%
2	**1**	1.8%
3	**9**	16.1%
4	**22**	39.3%
Strongly Agree: 5	**24**	42.9%

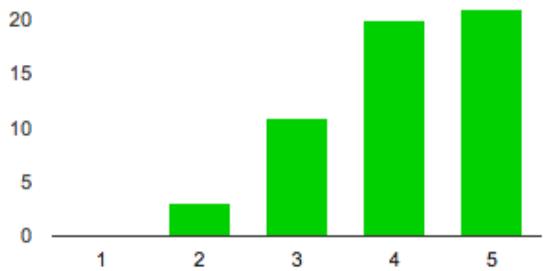
Figure 2(Part 2): In-service Teachers' Attitude towards ICT Tools (Continued.)

14. Teaching with ICT tools offers real advantages over traditional methods of instruction.



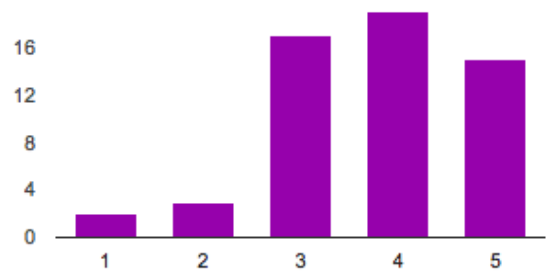
Strongly Disagree: 1	**0**	0%
2	**2**	3.5%
3	**9**	15.8%
4	**21**	36.8%
Strongly Agree: 5	**25**	43.9%

15. ICT tools have proved to be effective learning tools worldwide.



Strongly Disagree: 1	**0**	0%
2	**3**	5.5%
3	**11**	20%
4	**20**	36.4%
Strongly Agree: 5	**21**	38.2%

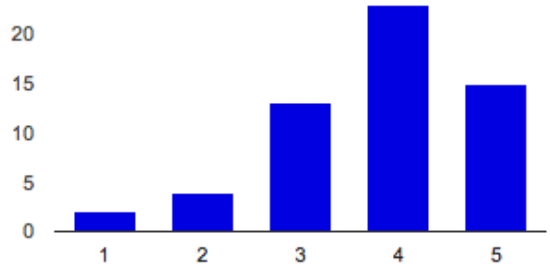
16. Students must use ICT tools in all subjects.



Strongly Disagree: 1	**2**	3.6%
2	**3**	5.4%
3	**17**	30.4%
4	**19**	33.9%
Strongly Agree: 5	**15**	26.8%

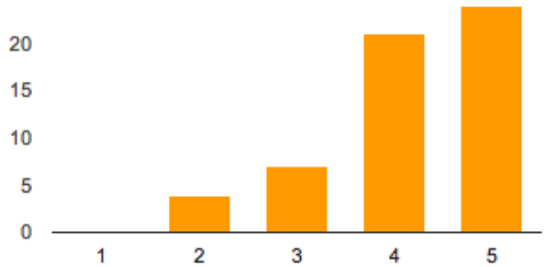
Figure 2(Part 2): In-service Teachers' Attitude towards ICT Tools (Continued.)

17. My class room is equipped with ICT Tools.



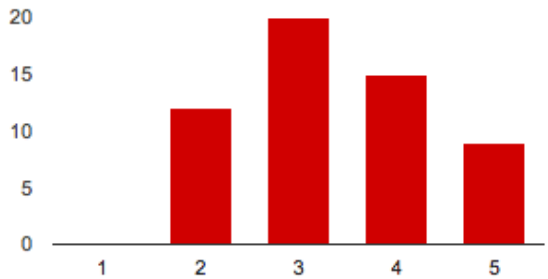
Strongly Disagree: 1	**2**	3.5%
2	**4**	7%
3	**13**	22.8%
4	**23**	40.4%
Strongly Agree: 5	**15**	26.3%

18. I would like to learn more about ICT tools.



Strongly Disagree: 1	**0**	0%
2	**4**	7.1%
3	**7**	12.5%
4	**21**	37.5%
Strongly Agree: 5	**24**	42.9%

19. Class time is too limited to use ICT tools in my teaching.



Strongly Disagree: 1	**0**	0%
2	**12**	21.4%
3	**20**	35.7%
4	**15**	26.8%
Strongly Agree: 5	**9**	16.1%

According to the Figure 2(Part1), Item 1, more than half (51%) of the participants believe that using ICT is enjoyable, and none of them think that ICT is not enjoyable. In Item 2, nearly half (42%) of the participants agree and another 40% strongly belief that ICT motivates students to more study. Similarly, more than four fifth of the responses indicated in Item 3 that, subject matter is more interesting where ICT tools are used in the classroom. In Item 4, nearly half (48%) of the participants believe that ICT improves education. Majorities (47%) of the participants agree and second most majority (32%) participants strongly agree that ICT should be priority in Education. These Items (Item 1-Item 5) reflect the in-service teachers' perception and belief regarding ICT tools in education and it's concluded that the participants indicate a positive view about ICT tools in education.

In Item 6, even many of the participants responded neutral, but more than average of them indicated that they are able to teach lessons that appropriately combine their subjects(s), technologies and teaching approaches. As of Item 7, more than one third of the participants can select ICT tools to use in their classroom that enhance their teaching and students' learning, although one fifth of the participants are not able to select ICT tools to use in their classroom. In Item 8, one third of the

participants are not sure and more than one fourth (29%) participants respond that they are unable to select and evaluate educational software. On the other hand, one fourth (27%) mentioned that they can select and evaluate educational software. Surprisingly, more than two fifth (43%) of participants are capable of selecting ICT tools to manage the classroom and engage the students even one third still showing in the middle position in Item 9. According to Item 10, more than one third (38%) indicated that they can solve simple problems in operating computers and other tools in classroom and in the same time 36% of them declared that they are not able to solve simple problems related to computers and ICT tools in classrooms. In summary of these 5 Items (Item 6 to Item 10), its concluded that, despite of having deep knowledge, most of the in-service teachers' competency regarding using ICT tools in class room is more than average which indicating their positivity towards ICT tools in Class room.

In Item 11, nearly half (47%) of the participants strongly agree and one third of them agree that ICT tools save time and effort. Similarly, in Item 12, half of the participants strongly believe that, ICT tools are fast and efficient means of getting information. The highest number of participant (43%) highly support and the second highest number of them (33%) support that ICT tool enhance students' learning. Surprisingly similar responses found in both Item 13 as well as 14. A number of participants (43%) highly agree with the statement that "ICT tools enhance student learning" are almost same with the number of participants strongly accord that teaching with ICT tools offer real advantages over traditional methods of instruction. In both Items, total number of participants responded "agree" and "strongly agree" are more than eighty percent. According to the majority of the participants' (38%) extremely support, and the second majority (36%) of them also endorsed the same belief in Item 15 that ICT tools are proven effective learning tools accepted worldwide. the summery of third five Items (Item 11 to Item 15) is the reflection of the participants' (in-services teachers') views on ICT attributes in teaching and learning. From the graphs, it's easily noticeable that majority of the participants holding positive view towards the attributes of ICT tools in learning and teaching.

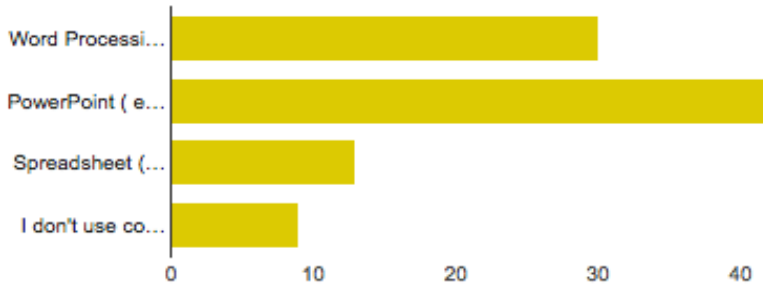
The consensus view of one third of the participant (34%) reflected in Item 16 that, "students must use ICT tools in all subjects" even though more than one fourth (30%) of them holding neutral position and a few of them completely disagree with this statement. The majority of the participants (40%) advocated that, their classroom is equipped with ICT tools in Item 17. As of Item 18, the maximum number of the teachers (43%) expressed their highest interest in "learning more" about ICT tools as well as the second largest number (38%) inquisitive to have more knowledge of ICT tools. In Item 19, the most significant numbers of participants (36%) responded neutral and cumulatively many of them (43%) are somehow raised their voice that they do not have enough time and the class time is tightly scheduled hence they are unable to use ICT tools in their teaching. These Items (Item 16 to Item 19) are representing the teachers' opportuneness and their interest towards ICT tools in teaching which is apparently more than average 3.70. Both Item 16 and 18 reflects the teachers' positive views on significances of ICT tools towards teaching and learning.

Part 3: In-Service Teachers' Usages of ICT Tools in Professional Practice.

The detailed findings about the participants' usages of ICT tools in their professional practice are graphically presented from Item 1 to Item 6. All graphs were produced by Google Forms;

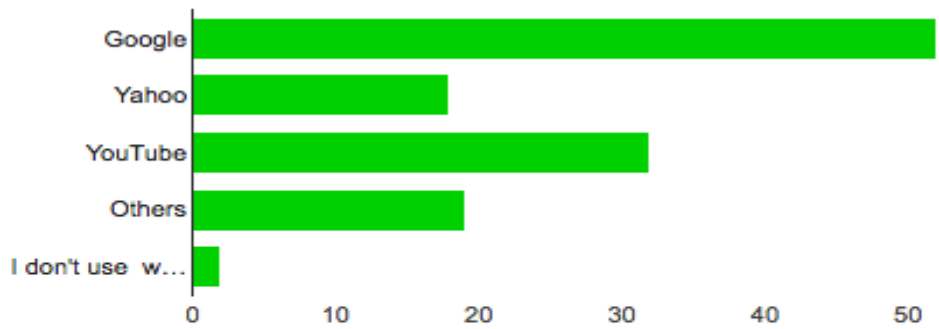
Figure 2(Part 3): In-Service Teachers' Usages of ICT Tools in Professional Practice

1. I use computer applications / software programs often, in my teaching practice.



Word Processing (e.g. MS Word)	**30**	52.6%
PowerPoint (e.g. MS PowerPoint)	**47**	82.5%
Spreadsheet (e.g. MS Excel)	**13**	22.8%
I don't use computer applications / software programs in my teaching practice.	**9**	15.8%

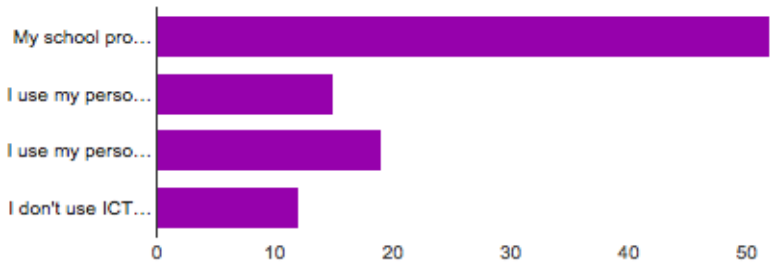
2. I use websites / search engine to access different types of information.



Google	**52**	91.2%
Yahoo	**18**	31.6%
YouTube	**32**	56.1%
Others	**19**	33.3%
I don't use websites / search engine for accessing information.	**2**	3.5%

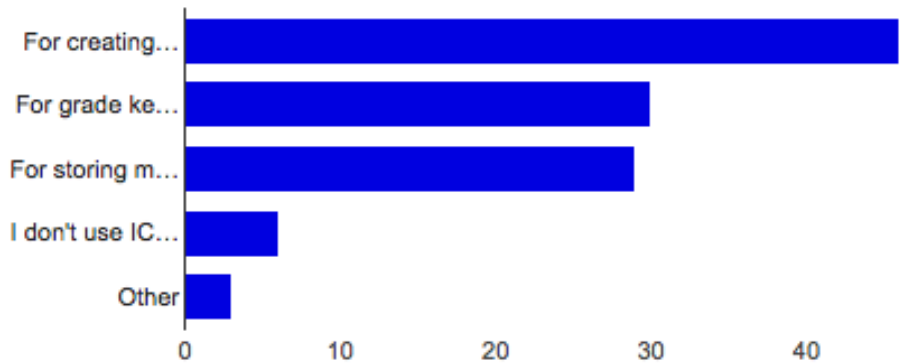
Figure 2(Part 3): In-Service Teachers' Usages of ICT Tools in Professional Practice (Continued.)

3. I use ICT device or computer for my teaching practice.



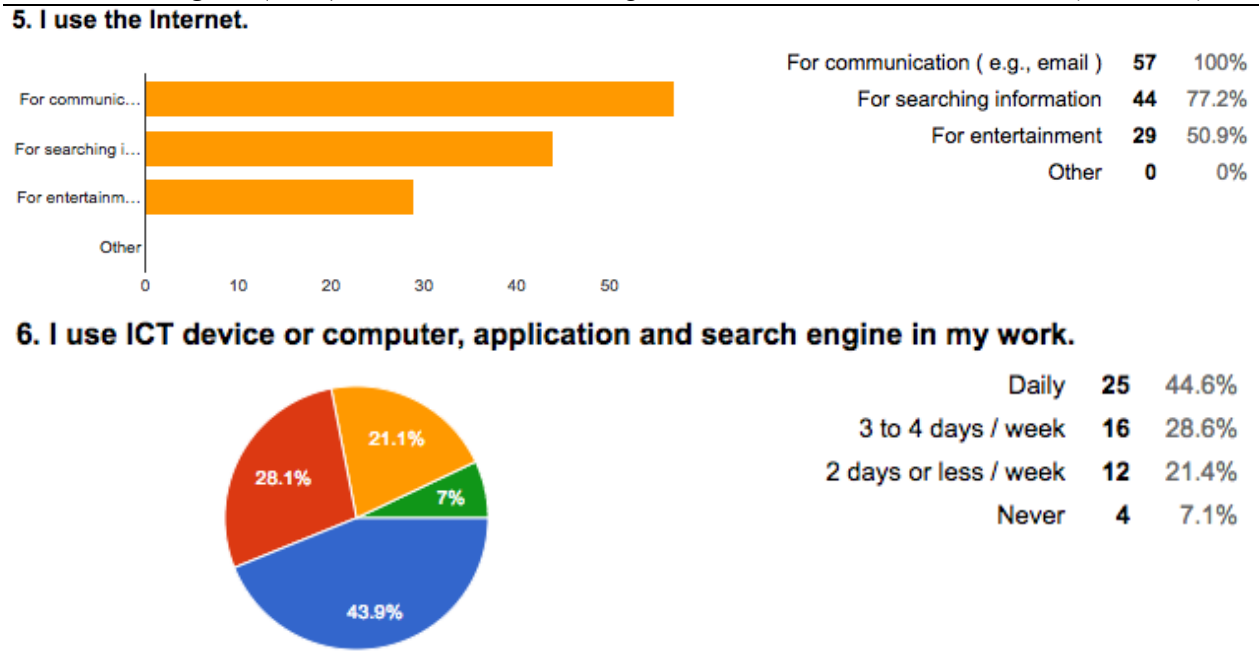
My school provides me adequate Internet facilities with desktop computer in classroom or library.	**52**	92.9%
I use my personal computer in classroom or library.	**15**	26.8%
I use my personal computer at home to prepare for the class	**19**	33.9%
I don't use ICT device or computer for my teaching practice	**12**	21.4%

4. I use ICT device or computer.



For creating presentation for the class	**46**	82.1%
For grade keeping	**30**	53.6%
For storing my teaching materials, in organized files and folders.	**29**	51.8%
I don't use ICT device or computer for my teaching	**6**	10.7%
Other	**3**	5.4%

Figure 2(Part 3): In-Service Teachers' Usages of ICT Tools in Professional Practice (Continued.)



Item 1, three basic office program and declaration of not using computer applications / software programs were offered to select for the participants and they were able to choose more than one choice. A significant number of the participants (16%) asserted that they do not use computer applications / software programs in their teaching practice, on the other hand, more than four fifth (83%) and more than half (53%) of the total participants who use computer applications / software programs in their teaching practice responded, "MS Power-Point" and "MS Word" respectively. As of Item 2, to reveal the teachers' habit of using websites or search engine for accessing information, several popular search engines were offered to choose along with a negative declaration. Majority of the participants stated their practice of using websites or search engine for accessing information. In Item 3, participants were asked to respond whether they use ICT device or computer for their teaching practice. The answers were prepared to reveal the participants' nature of using ICT device. More than one fifth of participants (21%) affirmed that they do not use ICT device or computers for their teaching practice. In Item 4 of this part, similar questions were asked to expose the participants' purpose of using of ICT device or computers. Some small but significant numbers of them (15%) any how do not use ICT tools in their teaching practice. The Item 5 was asked to disclose the teachers' objective of using internet. All of them (100%) confirmed that they are using internet for communication (e.g. email), majority (77%) are using it for searching information and more than half (51%) are using for entertainment. It can be assumed that nearly one fourth (~25%) of them do not use internet for teaching practice even majority (77%) are using for searching information for teaching purpose. The last question in Item 6 was designed to find out the frequency of the teachers' use of ICT device or computer, application and search engine in their work. Although maximum numbers of the participants asserted that they use daily but half of them (50%) indicated that they don't use ICT tools daily, moreover a little number denoted that they never use ICT tools for their teaching practice. In summary of the Part 3, teachers' usage of ICT Tools for teaching or in teaching both o directly or indirectly is obvious and alarming.

Discussion and Conclusion

This study exposed that in-service teachers' overall attitude towards ICT tools are positive. These findings are very similar to most of the study conducted around the world, for instance; Turkey, (Cavas et al., 2009), (Yilmaz & Bayraktar, 2014), (Tezci, 2009), (Alev, 2003) Syria (Albirini, 2006), Jordan (Naser Jamil Al-Zaidiyeen, Leong Lai Mei, & Fong Soon Fook, 2010), Dubai (Awan, 2011), Spain (Sanchez, Marcos, Gonzalez, & Guanlin, 2012), Japan and U.S (Kusano et al., 2013) even in South East Asian countries like Malaysia (Nikian et al., 2013), (Singh & Chan, 2014). All most all cases shown the likewise results that, most of the in-service teachers holding positive attitude toward ICT tools in professional practice. But

the point of worry is that, the teachers are not using the ICT tools as it supposed to (Sanchez et al., 2012) It's dreadfully challenging to imagine even a moment without the virtue of it in our conventional routine vitality. It has immersed with all aspects of our canonic necessitates.

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