SINGAPORE TABLET PC PROGRAM STUDY

EXECUTIVE SUMMARY AND FINAL REPORT

VOLUME 2: TECHNICAL APPENDICES

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Prepared for: Microsoft Operations Pte. Ltd.

Prepared by: Center for Technology in Learning
Marie A. Bienkowski
Geneva Haertel
Ryoko Yamaguchi
Reina Fujji
Bowyee Gong
Andres Molina
Frank Adamson
Lynne Peck-Theis

SRI International
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Appendix A: Interview Questions: Principals, Teachers, and Students

Principals in Schools Using the Tablet PCs

- Tell me your favorite story about a student or teacher using a Tablet PC, perhaps something that surprised you.
- Tell me about a time when you felt that the Tablet PCs were working really poorly—when things just didn't work out.
- Why did you decide to adopt the Tablet PCs in your school?
- How did the students' parents react to the news?
- What challenges did you foresee for the teachers using the Tablet PC? Did those challenges actually happen?
- Tell me about the reaction from the business leaders in Singapore. Do they see this program as developing necessary job skills?
- Do you foresee a cost-savings in delivering a curriculum in electronic form (e.g., electronic textbooks)?
- What questions do you get most asked by visitors about Tablet PCs?
- What do you wish they would ask you?
- Is there anything you would like to add about your experience with the Tablet PC program?

Teachers Using Tablet PCs

- Tell me about a time when you felt that the Tablet PCs were working really well.
- Tell me about a time when you felt that the Tablet PCs were working really poorly—when things just didn't work out.
- Are the Tablet PCs working out as you expected? What did you think would be different? What turned out as you expected?
- Do the students use the Tablet PC different than they use laptops or desktops?
- Tell me about a time when students collaborated around the Tablet PC
- Do you let your students use the Tablet PCs whenever they want?
- Have you ever used an electronic whiteboard? If so, how is it different from the Tablet PC (if you have a projector with the Tablet PC).
- Is casual use by the students distracting?
- Is it easier to manage work in your classroom with the Tablet PC?
- What claims are you confident about saying about the relationship between the Tablet PC and student's learning?

- What type of student does best with the Tablet PC?
- What type of student does the worst with the Tablet PC?
- Does the Tablet PC restrict more gifted students or enable disabled students?
- Are there ways that the students use the Tablet PC that interferes with your management of the classroom?
- What was the most creative activity you ever saw a student doing with the Tablet PC?
- Briefly describe the training you had on the Tablet PC before you began using it? Did that training make you feel more prepared to teach using the Tablet PC?
- Do you think most of the teachers using the Tablet PC feel comfortable teaching with them? For those who are not as comfortable, what do they not like?
- What questions do you get most asked by visitors about Tablet PCs?
- What do you wish they would ask you?
- Is there anything you would like to add about your experience with the Tablet PC?

Students Using Tablet PCs

- What was your favorite activity with the Tablet PC?
- What was the best class presentation you did using the Tablet PC?
- Do you take your Tablet PCs home? How do you use it at home?
- Do you feel that sometimes the teacher wants you to use the Tablet PC one way and it seems more natural to use it another way?
- What would you change about the Tablet PC? For example, make it lighter, smaller, or easier to carry?
- Tell me about reading books using the Tablet PC?
- How do you decorate your Tablet PC?
- Can you use your Tablet PC during school whenever you want?
- Does the battery last long enough? Do you feel that you need to be near a power source?
- How do you study using the Tablet PC?
- Are group projects different now that you have Tablet PCs?
- How is your classroom different since you've been using the Tablet PC? Do you like it more or less?

Appendix B: Definition of Codes for Open-Ended Student Responses

Part of the survey taken by Catholic High School and Crescent Girls' School students contained open-ended questions about the different ways students used the Tablet PC and what they liked and disliked about it. This appendix provides the coding categories that were devised during analysis of the responses. These categories were used to produce summary statistics for the different student responses.

Briefly describe 5 different ways in which you plan to use the Tablet PC in the future

- Internet Research: It involves any kind of online research. Usually, when students say that they use the computer to do research for homework, they refer to online research, like "gathering information" or "researching on info for homework."
- Homework/Project: It refers to computer use for any kind of work that students do for school, like "researching for projects" or "working on book reports."
- Design Web site: It includes answers that mention the creation or design of a personal Web site or a Web site for a project, like "I can design a Web site for PBL."
- Art: It refers to any kind of computer skill oriented to design anything that involves aesthetic creativity, like anime, music videos and drawings. Some examples are "make a music video" and "creating, editing videos/movies."
- Presentations: It refers to the explicit mention of students to use the computer to show their work to others in the school.
- Note-taking: It includes any mention of the use of the Tablet PC for note taking in class.
- IT Skills: It includes any mention of improving students' capacity to work with computers, like "learning independently and broaden my small horizon" and "programming."
- Games: It refers to the specific use of the Tablet PC to play any kind of game.
- Study: It includes any mention of studying using the Tablet PC, or doing any reading or writing for school.
- Communication/Relationship: It refers to the use of the Tablet PC to communicate and/or to improve relationships with others. This category includes e-mailing, chatting and finding people online. Some examples are "interacting with my friends" and "talking to friends online."
- Organize: It refers to any mention of using the Tablet PC to organize schoolwork and/or personal files into folders, like "planning my timetable" and "using it to organize my information."
- Collaboration: It includes statements that refer to collaboration with others as a means to produce school related or personal related work, not just as a means to improve relationships. Some examples are "help my friends in learning" and "do more group work."
- Music: It refers to the act of listening to music. The creation of music or music videos fall under the Art category.

- Writing: It refers to specific activities on the computer that aim to increase writing skills, like writing a document, a story, a journal article, a poem, etc. An example is "writing proposal reports."
- Other: It includes activities like "draw mathematical graphs," "turn the Tablet PC into a server," "using it to check the stocks."

Briefly describe 2 things that you like about using the Tablet PC

- Portable/Convenient: It refers to any mention to define the Tablet PC as easy to carry around and/or as convenient.
- Fast Work/Efficiency/Ease of Use: This code refers to any definition of the Tablet PC as easy to use, useful to save time, and for working faster. An example is "research can be done more easily."
- Research on Internet: It refers to the use of Internet for research for schoolwork, not just surfing the web.
- Note-taking: It includes any mention to the use of the Tablet PC for note taking in class.
- Improved Learning: It includes answers that mention the Tablet PC as useful for students to produce better quality of schoolwork, like "it makes learning more interesting… it makes learning more fun."
- Internet Access/Wireless: It refers to any mention of the possibility to access the Internet with the Tablet PC, like "I like the easy access to the Internet."
- Homework/Presentations: It refers to the use of computer for any kind of work that students do for the school and/or to the explicit mention of students to use the computer to show their work to others in the school.
- Entertainment: It refers to the use of computer for entertainment, such as surfing the web, playing games, watching videos, listening to music.
- Communication/Relationship: It refers to the use of the Tablet PC to communicate and/or to improve relationships with others. This category includes e-mailing, chatting and finding people online.
- IT Skills: It includes any mention to improve students' capacity to work with computers.
- Other: It includes answers like "different media types are available," "to store information," "fun to use," and "it improves my handwriting."

Briefly describe 2 things that you dislike about using the Tablet PC

- Battery Life: It includes answers that mention that the battery life of the Tablet PC is too short or a problem.
- Freezes/Does not work/Technical Issues: This category includes answers that mention technical problems as things students do not like about their Tablet PC, like errors on browsers, Windows problems, and when the computer freezes or "hangs."
- Weight: This code includes any answer that refers to the Tablet PC as being too heavy.

- Physical Discomfort: It refers to any kind of physical discomfort that students mention as being something that they do not like. Examples are itching eyes, back pains because of the position they adopt, and aching hands.
- Inefficient: It refers to the productivity that students reach using the Tablet PC, and it relates to the time they spend doing their work and the quality of the work they are able to produce.
- Slow: This code includes answers that mention that the Tablet PC is too slow.
- Lack of Applications/Features: It refers to answers that mention that the Tablet PC does not have enough hardware and software, like a Firewire port, built in CD ROM, and small memory.
- Wireless Coverage: This code includes answers that mention the lack of connectivity of Tablet PCs due to a lack of routers or wireless connections as something that students do not like.
- Distracting: This category refers to answers that mention that it is difficult to concentrate in the class when the Tablet PC is on.
- Reading/Studying: It includes the explicit mention of studying using the Tablet PC, or doing any reading or writing for school.
- Static Electricity: It refers to answers that mention that the Tablet PC has static energy that hurts the students' hands.
- Administration: It includes answers that mention that the rules in the school control students' use of the Tablet PC, like restricted Internet connection and limited software installation.
- Note Taking: It includes any mention to the use of the Tablet PC for note taking in class.
- Other: This category includes answers like "less interaction with classmates," "the screen gets scratched easily," and "it gets too hot after a while."

Do you have any suggestions for new ways Tablet PCs could be used to improve the learning experience at school?

- Amount of Software Available: This code refers to answers that mention that there should be more software packages included in the Tablet PC to make learning more effective and fun.
- Frequency of Use: This code includes answers that say that the Tablet PC should be used more often during class.
- Technical Computer Issues: This code includes answers that mention that technical issues should be improved, such as more memory capacity, software to prevent the computer hanging or freezing, and an anti-squint protection for the screen.
- Battery Life: It includes answers that mention that the battery life of the Tablet PC should be longer.
- Weight: This code includes any answer that refers to the Tablet PC as being too heavy and that it could be lighter.
- Location of Internet Access Points: This code includes answers that mention that the Internet connection should be better and more stable, with more routers connected.

- Work More Online: This code includes answers that say that students should work more online, use Virtual Classroom more fully, use interactive games, and come up with a system where students staying at home can interact with teachers online for consultations.
- Administration: It includes answers that mention that the rules in the school should not limit students' freedom and accessibility, but that at the same time ensure that students work during class and not do anything else.
- School Infrastructure: It refers to answers that mention that the school should have better facilities to ensure a better use of the Tablet PC, like a room where students can go to do work.
- Other: It includes answers like "more power bars should be given to each class."

Appendix C: Teacher Survey Questions and Summary Statistics

1. Introduction

This appendix provides teacher survey results in summary form for both schools. The online teacher survey asked questions regarding teacher's background, technology use, perceptions of Tablet PC use in their teaching and Tablet PC applications. The survey consisted of 54 questions which are listed, along with possible responses, in the survey codebooks in Appendix G (for Catholic) and Appendix H (for Crescent).

At Catholic High School, there were 15 teachers who completed the online survey, and 29 teachers completed it from Crescent Girls' School. Some teachers skipped a few survey questions, so the total number of responses can vary for each item. To determine how many teachers answered a particular survey question, see Appendix E of this report. Selected items that were judged irrelevant during survey administration are not reported in this document.

In this appendix, we represent the data for each survey question in graph or table form. The data are presented in the same order as presented in the survey. Section 2 contains demographic questions and reports on teachers' prior use of technology. The third section reports on teachers' use of the Tablet PC in teaching various subject areas. This section also includes data about frequency of Tablet PC use. The fourth section of the report takes a closer look at teachers' use of various applications for the Tablet PC. Section 5 focused on questions about teachers' classroom practices when using the Tablet PC, such as rating the effect of Tablet PCs for traditional, low- and high-achieving students. Section 6 contains questions about teachers' professional development experiences, in particular the training they received for the Tablet PC. The seventh section reports data about teachers' attitudes toward Tablet PC use for teaching and learning.

In the survey, teachers also completed open-ended questions about the different ways they used the Tablet PC and what they liked and disliked about using the technology. Teachers' responses on the open-ended items were incorporated into the qualitative results reported in Volume 1.

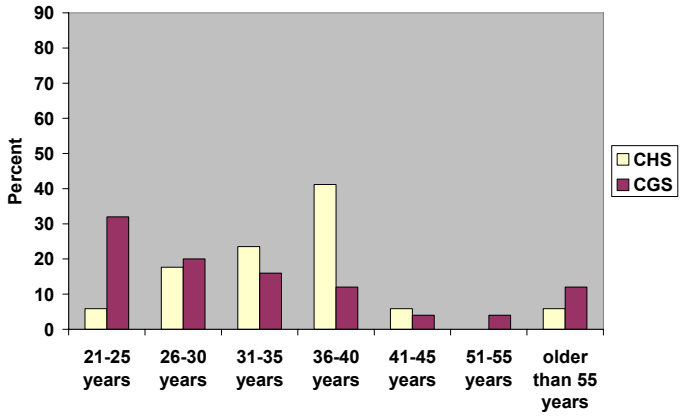
A note on formatting and data presentation: where percentages are listed, the number of responses is also given in parentheses after the percentage.

2. Background Information

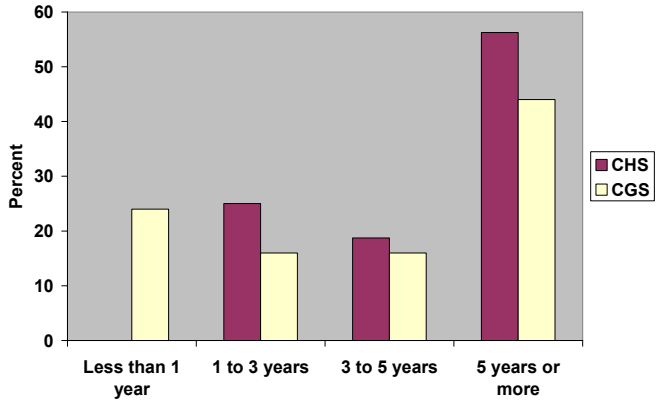
Gender

CHS		CGS	
Male	Female	Male	Female
41.2 % (7)	58.8 % (10)	8.0 % (2)	92.0 % (23)

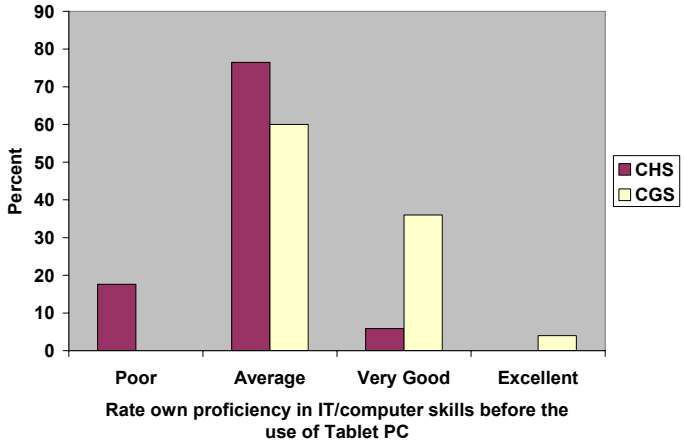
Age Group



Number of Years of Teaching Experience



Rate your Proficiency in IT/computer Skills Before the use of the Tablet PC



3. Tablet PC and Other Technology Use

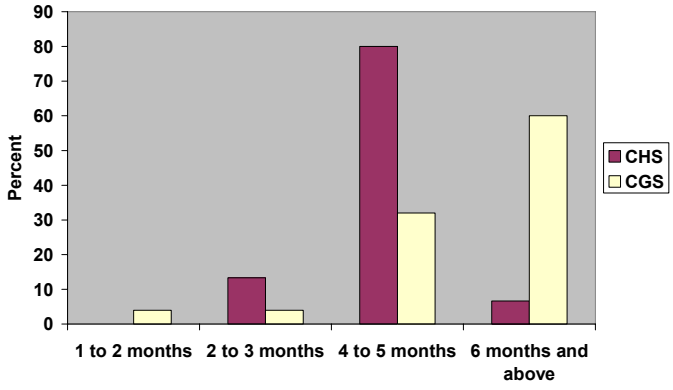
3.1 Subjects Taught using the Tablet PC

Which subjects do you currently teach, which do you teach using the Tablet PC and which subjects do you wish to teach using the Tablet PC in the future? (tick accordingly)

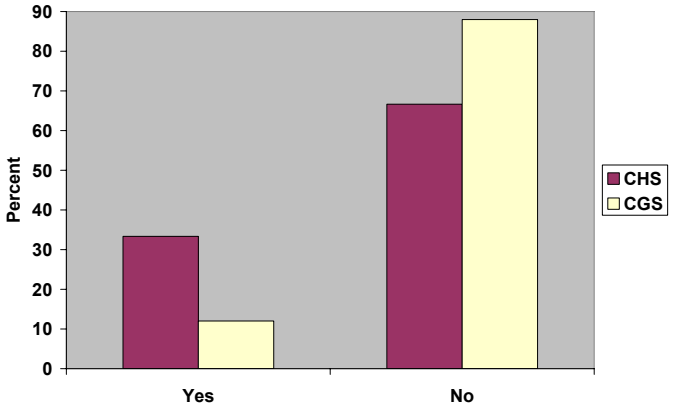
Subject	School	Subjects I teach	Subjects I teach using Tablet PC	Subjects in which I intend to teach in the future using Tablet PC
English Language	CHS	13.3% (2)	20.0% (3)	0% (0)
	CGS	4.0% (1)	20.0% (5)	12.0% (3)
Malay Language	CHS	0% (0)	0% (0)	0% (0)
	CGS	0% (0)	4.0% (1)	0% (0)
Chinese Language	CHS	0% (0)	0% (0)	0% (0)
	CGS	4.0% (1)	16.0% (4)	0% (0)
Literature	CHS	13.3% (2)	6.7% (1)	0% (0)
	CGS	0% (0)	8.0% (2)	8.0% (2)
Geography	CHS	0% (0)	0% (0)	0% (0)
	CGS	0% (0)	12.0% (3)	0% (0)
History	CHS	0% (0)	13.3% (2)	0% (0)
	CGS	0% (0)	0% (0)	4.0% (1)
Mathematics	CHS	0% (0)	20.0% (3)	0% (0)
	CGS	0% (0)	16.0% (4)	0% (0)
Science	CHS	0% (0)	26.7% (4)	0% (0)
	CGS	0% (0)	16.0% (4)	4.0% (1)
Home Economics	CHS	0% (0)	6.7% (1)	0% (0)
	CGS	0% (0)	8.0% (2)	0% (0)
Art and Crafts	CHS	0% (0)	0% (0)	0% (0)
	CGS	0% (0)	4.0% (1)	4.0% (1)
Design & Technology	CHS	6.7% (1)	0% (0)	0% (0)
	CGS	0% (0)	0% (0)	0% (0)
Civics & Moral Education/National Education	CHS	0% (0)	0% (0)	6.7% (1)
	CGS	12.0% (3)	8.0% (2)	4.0% (1)
Aesthetics / PE & CCA	CHS	13.3% (2)	6.7% (1)	0% (0)
	CGS	8.0% (2)	4.0% (1)	0% (0)

3.2 Tablet PC Use

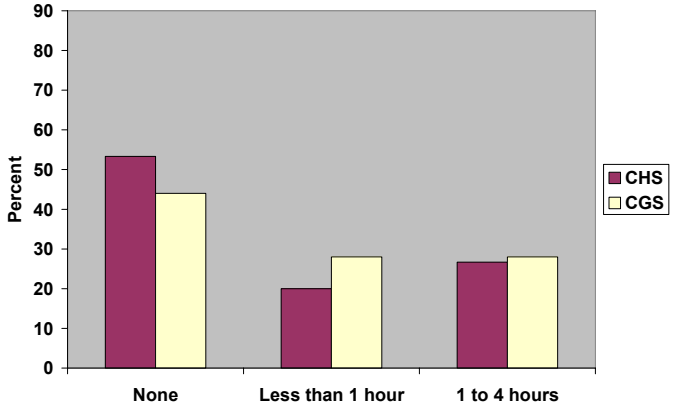
How long have you been using the Tablet PC in teaching?



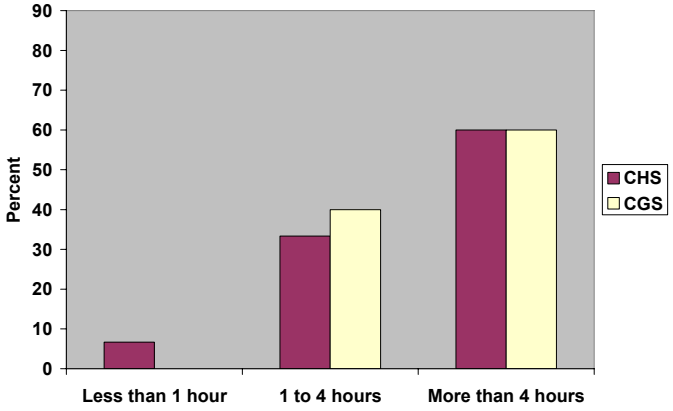
Do you have your own Tablet PC, i.e., the Tablet PC belongs to you?



How many hours do you use your Tablet PC at home per day?



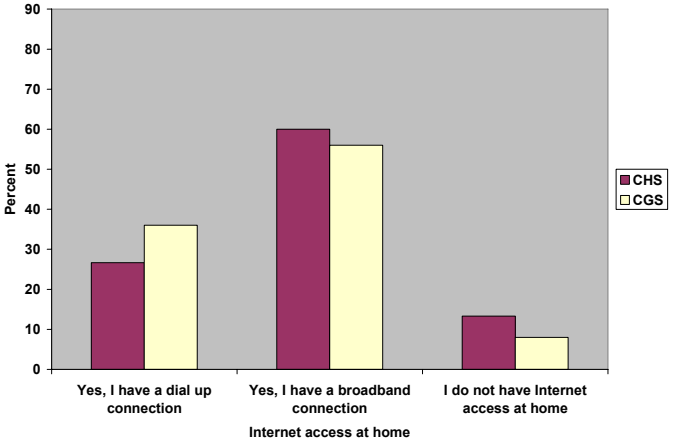
How many hours do you use your Tablet PC in school per day?



Do you have other technologies that you use at home (other than the Tablet PC)?

Type of Technology	CHS	CGS
Mobile Phone	100.0% (15)	100 % (24)
Desktop Computer	78.6% (11)	85.7 % (18)
Laptop Computer	60.0% (3)	64.7 % (11)
Videogames	50.0% (3)	41.7 % (5)
MP3 Player	40.0% (2)	60.0 % (9)

Type of Internet Access at Home



How frequently do you engage in the following activities using your Tablet PC per day? (tick accordingly)

Activity	School	None	More than 1 hour	1 to 4 hours	More than 4 hours	Total Responses
Searching for information	CHS	13.3% (2)	66.7% (10)	13.3% (2)	6.7% (1)	15
	CGS	4.0% (1)	16.0% (4)	72.0% (18)	8.0% (2)	25
Conducting research for lesson plans or curriculum designs	CHS	14.3% (2)	57.1% (8)	21.4% (3)	7.1% (1)	14
	CGS	4.0% (1)	28.0% (7)	56.0% (14)	12.0% (3)	25
E-mailing	CHS	7.7% (1)	69.2% (9)	23.1% (3)	0% (0)	13
	CGS	4.0% (1)	48.0% (12)	44.0% (11)	4.0% (1)	25
Developing instructional materials	CHS	7.1% (1)	64.3% (9)	21.4% (3)	7.1% (1)	14
	CGS	0% (0)	37.5% (9)	41.7% (10)	20.8% (5)	24
Developing student assessments	CHS	23.1% (3)	46.2% (6)	23.1% (3)	7.7% (1)	13
	CGS	0% (0)	44.0% (11)	48.0% (12)	8.0% (2)	25
Producing homework assignments	CHS	14.3% (2)	50.0% (7)	28.6% (4)	7.1% (1)	14
	CGS	0% (0)	41.7% (10)	54.2% (13)	4.2% (1)	24
Organizing information	CHS	28.6% (4)	50.0% (7)	14.3% (2)	7.1% (1)	14
	CGS	4.2% (1)	25.0% (6)	66.7% (16)	4.2% (1)	24
Creating presentations	CHS	20.0% (3)	46.7% (7)	26.7% (4)	6.7% (1)	15
	CGS	0% (0)	37.5% (9)	54.2% (13)	8.3% (2)	24
Watching movies	CHS	100.0% (11)	0% (0)	0% (0)	0% (0)	11
	CGS	83.3% (20)	8.3% (2)	8.3% (2)	0% (0)	24
Chatting online/Instant messaging	CHS	75.0% (9)	25.0% (3)	0% (0)	0% (0)	12
	CGS	66.7% (16)	29.2% (7)	4.2% (1)	0% (0)	24
Playing games	CHS	90.9% (10)	9.1% (1)	0% (0)	0% (0)	11
	CGS	95.8% (23)	4.2% (1)	0% (0)	0% (0)	24
Listening to music	CHS	66.7% (8)	33.3% (4)	0% (0)	0% (0)	12
	CGS	50.0% (12)	25.0% (6)	20.8% (5)	4.2% (1)	24
Collaborating with colleagues	CHS	54.5% (6)	45.5% (5)	0% (0)	0% (0)	11
	CGS	25.0% (6)	45.8% (11)	20.8% (5)	8.3% (2)	24
Grading student work	CHS	38.5% (5)	38.5% (5)	15.4% (2)	7.7% (1)	13
	CGS	25.0% (6)	50.0% (12)	25.0% (6)	0% (0)	24
Giving students feedback on their work	CHS	50.0% (6)	25.0% (3)	16.7% (2)	8.3% (1)	12
	CGS	41.7% (10)	45.8% (11)	12.5% (3)	0% (0)	24
Organizing classroom activities in accordance with a lesson plan	CHS	30.8% (4)	53.8% (7)	7.7% (1)	7.7% (1)	13
	CGS	16.0% (4)	40.0% (10)	44.0% (11)	0% (0)	25

4. Tablet PC Applications

Below is a list of applications that are found in the Tablet PC. For each application, please tick in which subjects you have used the application and your experience using it. Tick all that apply.

4.1 Mind Book

The Mind Book: A digital scrapbook where you can record down your train of thoughts and ideas and insert images and annotations.

	CGS	
	No	Yes
English Language	90.5% (19)	9.5% (2)
Literature	95.2% (20)	4.8% (1)
Civics and Moral Education	95.2% (20)	4.8% (1)

Your experience in using the Mind Book (tick all that apply)

	CGS	
	No	Yes
never used, or no opinion	4.5% (1)	95.5% (21)
is easy to use	95.5% (21)	4.5% (1)

4.2 Fun with Construction

Fun with Construction: A digital web-board where you can make use of geometrical tools like compass, protractor, etc.

	CHS		**CGS**	
	No	Yes	No	Yes
Design and Technology	91.7% (11)	8.3 % (1)	100% (21)	0% (0)
Mathematics	75.0% (9)	25.0% (3)	76.2% (16)	23.8% (5)
Geography	100% (12)	0% (0)	85.7% (18)	14.3% (3)
Home Economics	100% (12)	0% (0)	90.5% (19)	9.5% (2)
Science	100% (12)	0% (0)	95.2% (20)	4.8% (1)
Civics and Moral Education	100% (12)	0% (0)	95.2% (20)	4.8% (1)

Your experience in using Fun with Construction (tick all that apply)

	CHS		**CGS**	
	No	Yes	No	Yes
never used, or no opinion	100 % (12)	0% (0)	54.5% (12)	45.5% (10)
had problems	100 % (12)	0% (0)	90.9% (20)	9.1% (2)
is easy to use	75.0% (9)	25.0% (3)	59.1% (13)	40.9% (9)
helps me to teach better	91.7% (11)	8.3% (1)	72.7% (16)	27.3% (6)
makes teaching fun	91.7% (11)	8.3% (1)	72.7% (16)	27.3% (6)

4.3 Virtual Classroom

Note: No teachers reported that they used Virtual Classroom in the Malay class.

Virtual Classroom: A wireless system whereby teachers can test/quiz students on understanding on a subject and have graphical representation.

	CHS		CGS	
	No	Yes	No	Yes
Science	66.7% (8)	33.3% (4)	95.0% (19)	5.0% (1)
English Language	83.3% (10)	16.7% (2)	80.0% (16)	20.0% (4)
History	83.3% (10)	16.7% (2)	100% (20)	0% (0)
Mathematics	91.7% (11)	8.3% (1)	85.0% (17)	15.0% (3)
Home Economics	91.7% (11)	8.3% (1)	100% (20)	0% (0)
Chinese Language	100% (12)	0% (0)	80.0% (16)	20.0% (4)
Literature	100% (12)	0% (0)	85.0% (17)	15.0% (3)
Geography	100% (12)	0% (0)	90.0% (18)	10.0% (2)
Aesthetics/PE	100% (12)	0% (0)	95.0% (19)	5.0% (1)
Civics and Moral Education	100% (12)	0% (0)	95.0% (19)	5.0% (1)
Other	100% (12)	0% (0)	95.0% (19)	5.0% (1)

Your experience in using Virtual Classroom (tick all that apply)

	CHS		CGS	
	No	Yes	No	Yes
never used, or no opinion	64.3% (9)	35.7% (5)	58.3% (14)	41.7% (10)
had problems	50.0% (6)	50.0% (6)	75.0% (18)	25.0% (6)
is easy to use	83.3% (10)	16.7%(2)	87.5% (21)	12.5% (3)
helps me to teach better	83.3% (10)	11.8% (2)	70.8% (17)	29.2% (7)
makes teaching fun	58.8% (10)	11.8% (2)	66.7% (16)	33.3% (8)

4.4 EduLearn (Microsoft Learning Gateway)

EduLearn: In modules such as Forum and Homework, users can call out an editor to input with Digital Ink and the content will be updated into the system. Note: CGS teachers were told to interpret this question as if "EduLearn" read "Microsoft Learning Gateway (MLG)".

	CGS	
	No	Yes
English Language	75.0% (15)	25.0% (5)
Chinese Language	80.0% (16)	20.0% (4)
Literature	85.0% (17)	15.0% (3)
Geography	90.0% (18)	10.0% (2)
Aesthetics/PE	90.0% (18)	10.0% (2)
Mathematics	80.0% (16)	20.0% (4)
Science	90.0% (18)	10.0% (2)
Civics and Moral Education	95.0% (19)	5.0% (1)

Your experience in using EduLearn (tick all that apply)

	CGS	
	No	Yes
never used, or no opinion	75.0% (18)	25.0% (6)
had problems	95.8% (23)	4.2% (1)
is easy to use	50.0% (12)	50.0% (12)
helps me to teach better	50.0% (12)	50.0% (12)
makes teaching fun	66.7% (16)	33.3% (8)

4.5 Sketchpad

SketchPad: A digital ink friendly note-taking, sketching and diagrammatic tool allowing teachers to separate work from notes or questions from answers. Real-time collaborations allowing students to interact on the same documents real-time with peers and teachers.

	CGS	
	No	Yes
Chinese Language	87.5% (14)	12.5% (2)
English Language	93.8% (16)	6.3% (1)
Literature	93.8% (15)	6.3% (1)
Science	93.8% (15)	6.3% (1)

Your experience in using SketchPad (tick all that apply)

	CGS	
	No	Yes
never used, or no opinion	15.0% (3)	85.0% (17)
had problems	100% (20)	0% (0)
is easy to use	95.0% (19)	5.0% (1)
makes teaching fun	90.0% (18)	10.0% (2)

4.6 Chinese Character Writing

Your experience in using Training in Chinese Character Writing (Tick all that apply)

	CGS	
	No	Yes
is easy to use	85.0% (17)	15.0% (3)
makes teaching fun	85.0% (19)	15.0% (1)

4.7 Assessment of Chinese

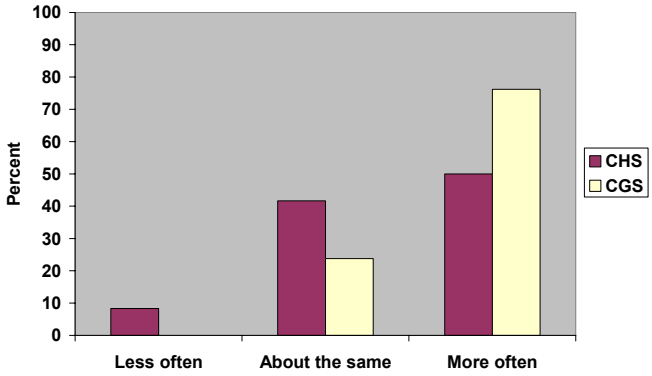
Your experience in using Assessment of Chinese vocabulary using Digital Ink, a tool for Chinese teachers to record phrases to assess students in their vocabulary and writing. (tick all that apply)

	CGS	
	No	Yes
never used, or no opinion	16.0% (4)	64.0% (16)
is easy to use	85.0% (17)	15.0% (3)
helps me to teach better	85.0% (17)	15.0% (3)
makes teaching fun	95.0% (19)	5.0% (1)

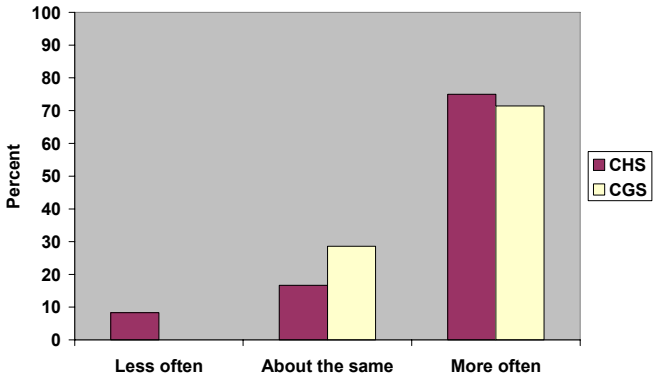
5. Positive Classroom Practices when using Tablet PCs

Would you say that the following practices occur in your classes less often, about the same, or more often NOW than before Tablet PCs are used in class? (Tick accordingly)

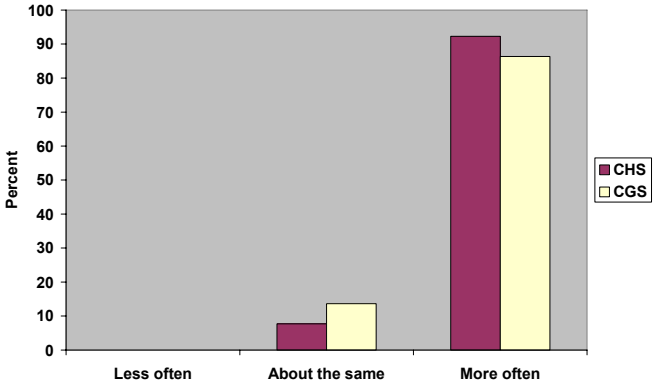
Students select their own research areas



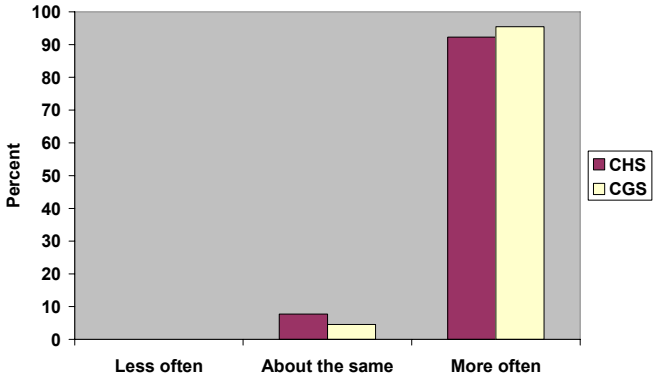
Students explore a subject topic on their own.



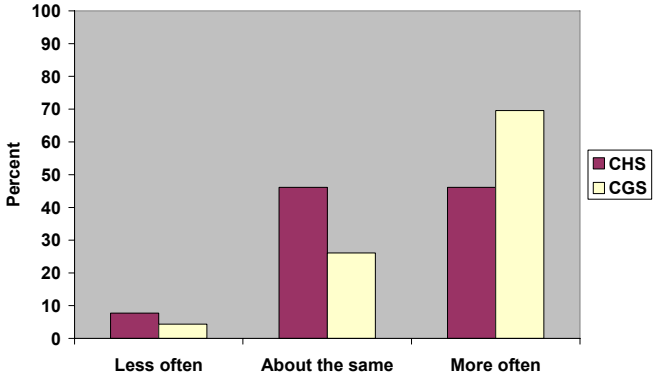
Students research beyond their textbooks



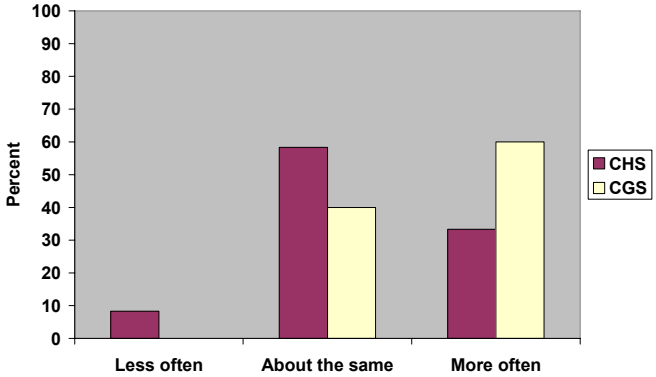
Students use online materials for learning



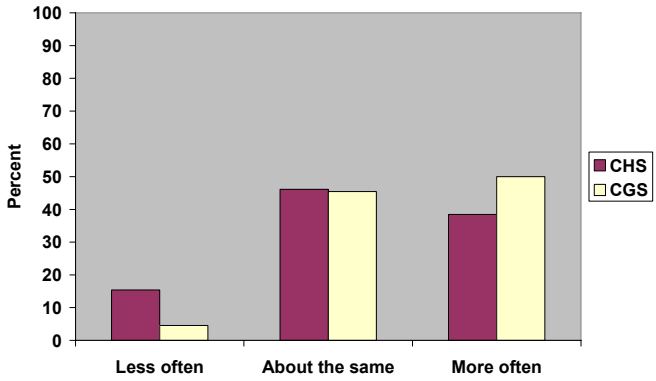
Students work in groups



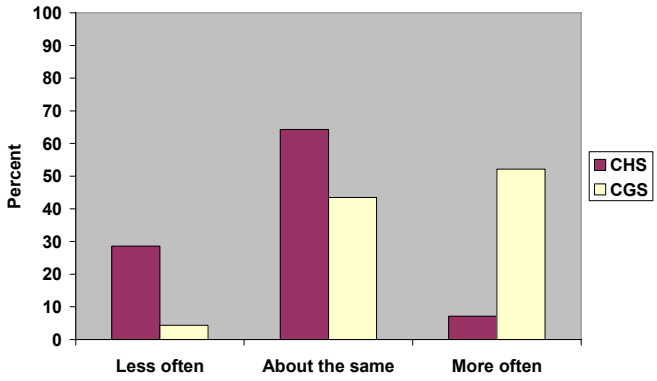
Students write more about a topic area



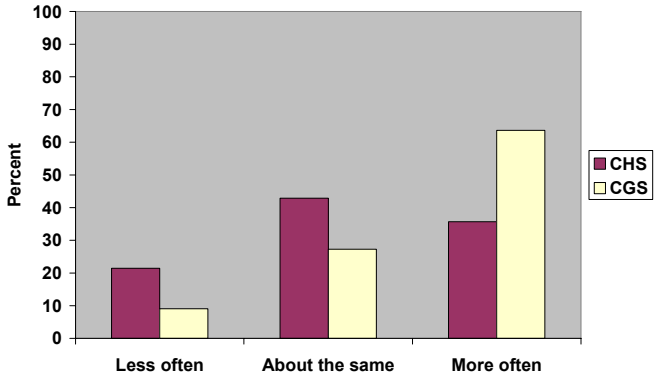
Students take quizzes and tests



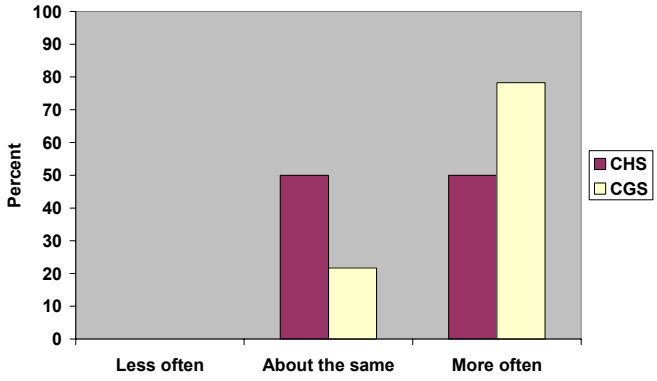
Students interact with teachers



Students present work in class



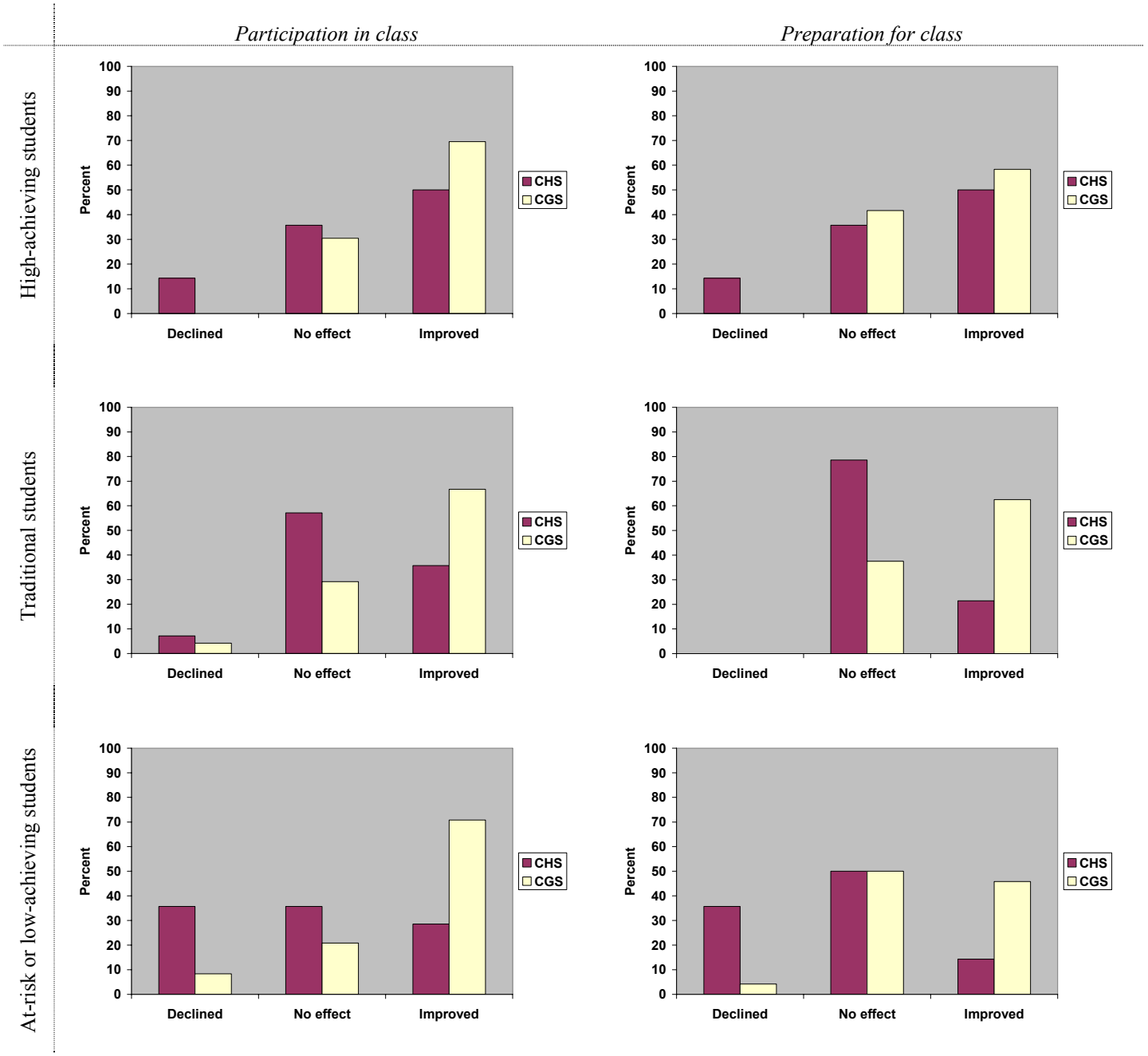
Students compose reports on the computer



5.1 Tablet PC Effect on High-Achieving, Traditional, and Low-Achieving Students

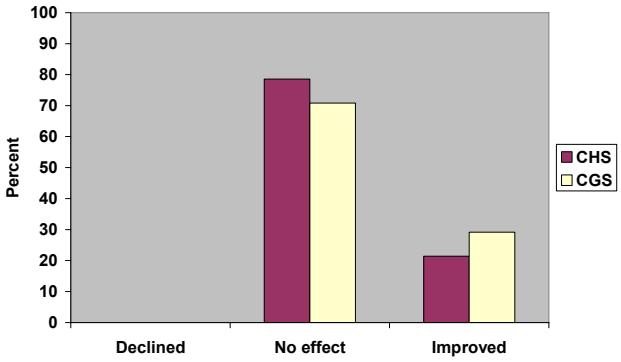
Although both CGS and CHS have students who tested very high on their Primary School Leaving Exams, the teachers still consider students to be in varying achievement levels. This section reports on teacher assessments of the effect of the Tablet PC on these different groups of students.

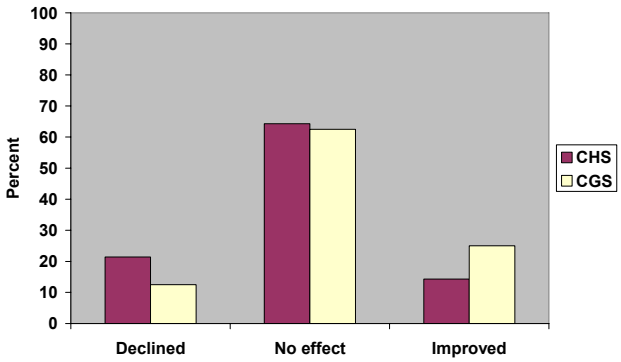
Please indicate the effect you think Tablet PCs have had on high-achieving/traditional/at-risk or low-achieving students in the following areas:



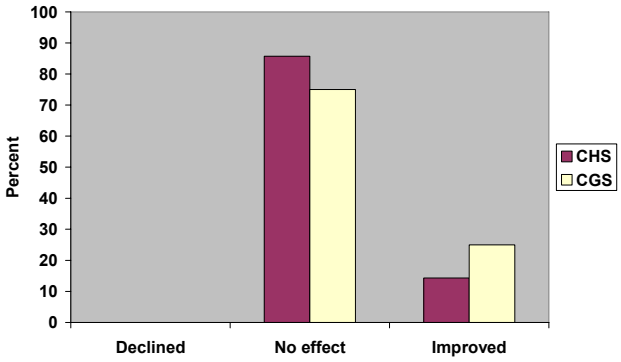
Attendance *Behavior*

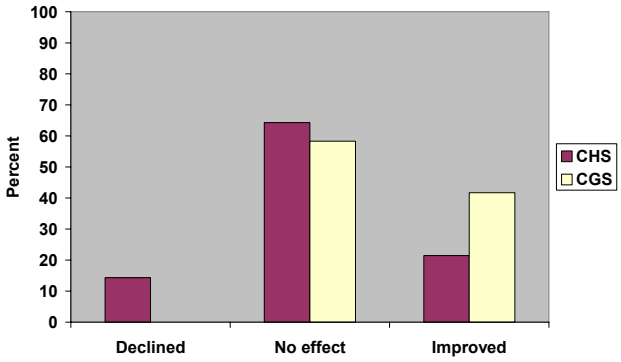
High-achieving students



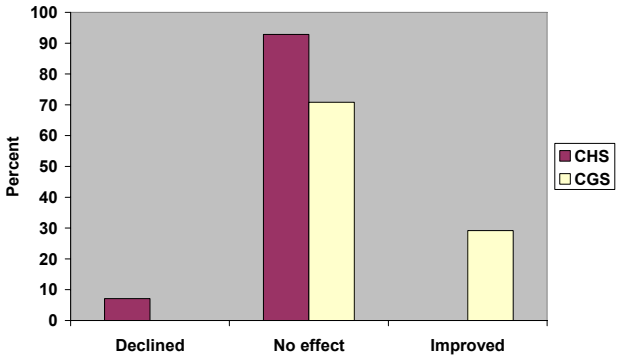


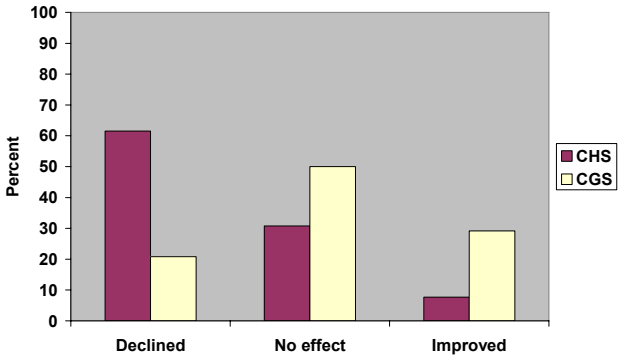
Traditional students





At-risk or low-achieving students

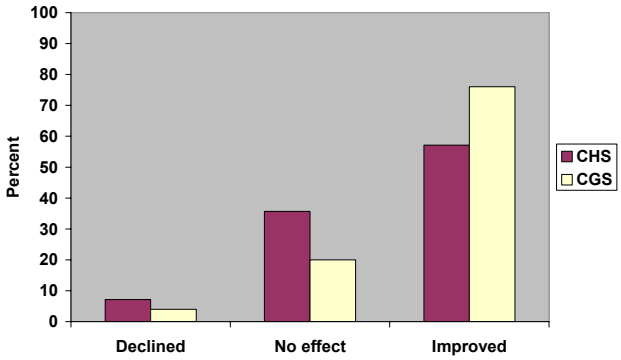


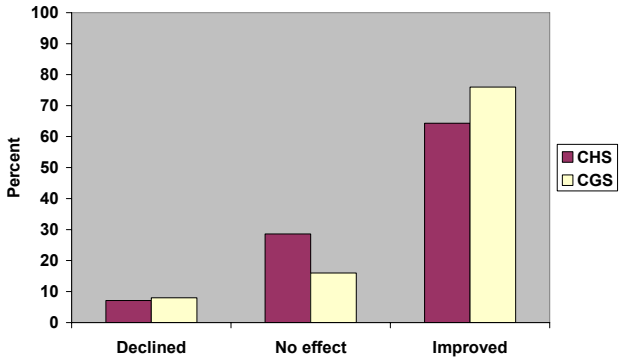


Motivation

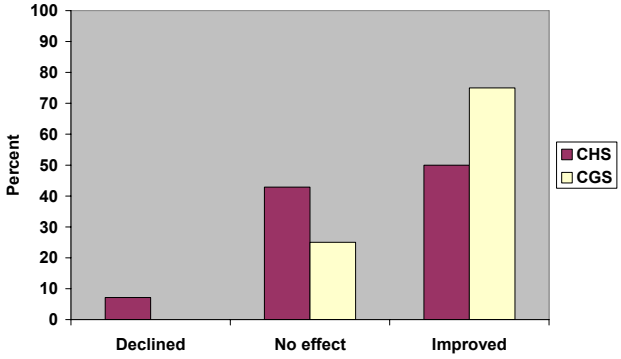
Engagement/interest level in class

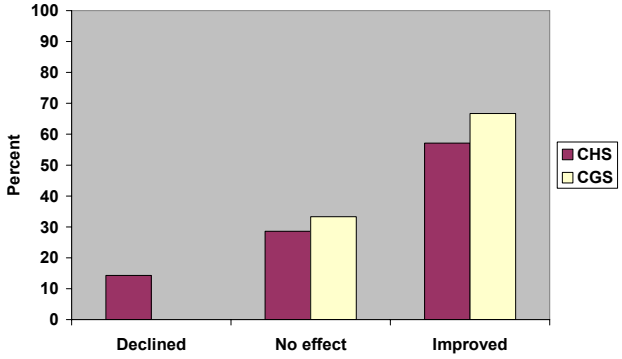
High-achieving students



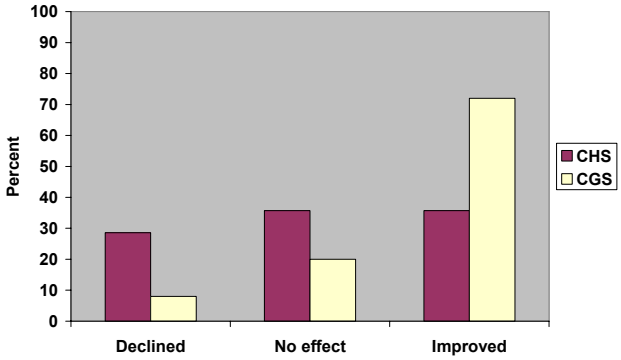


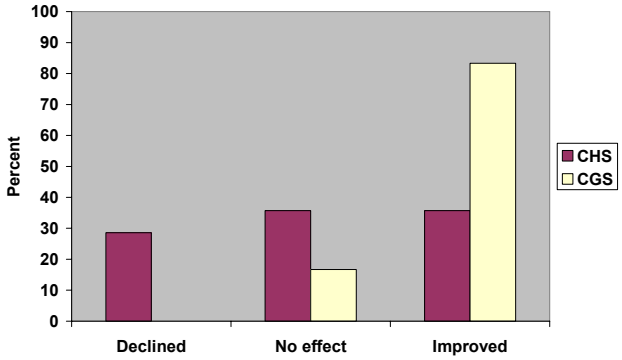
Traditional students





At-risk or low-achieving students

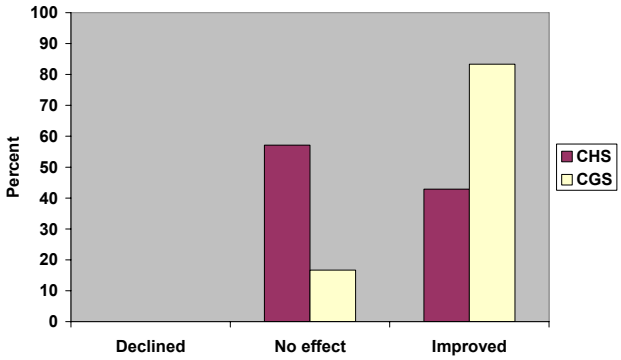


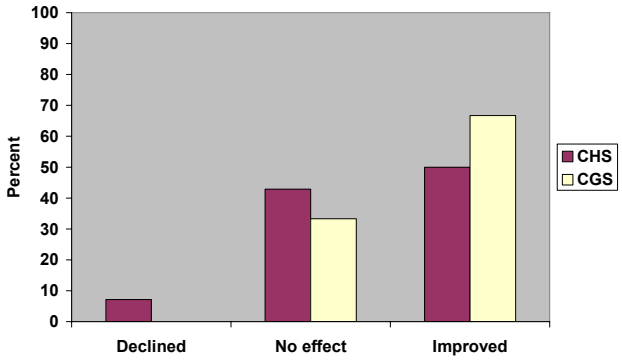


Ability to retain content material

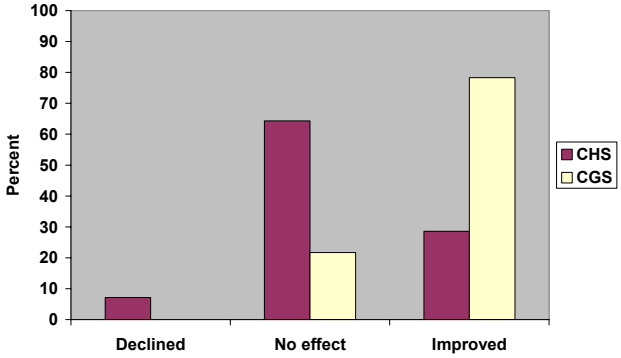
Amount of higher order thinking

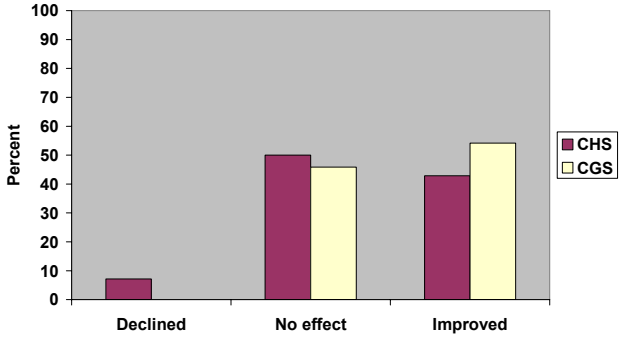
High-achieving students



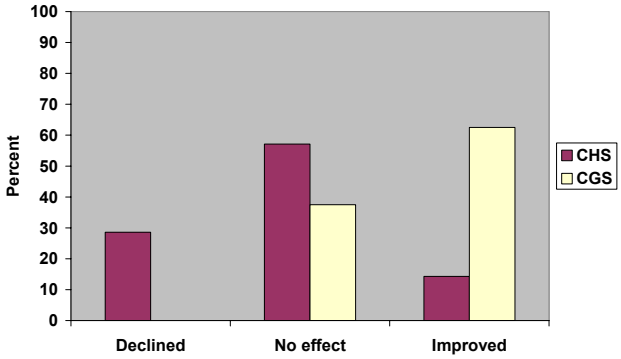


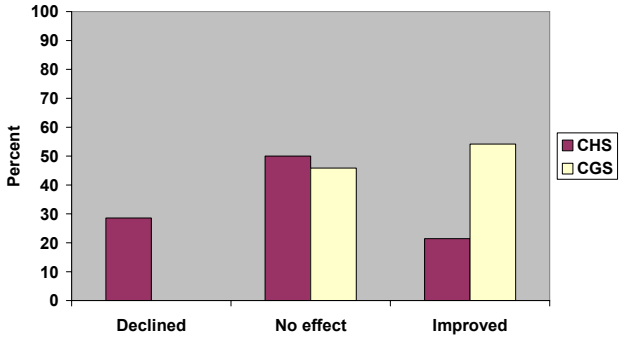
Traditional students





At-risk or low-achieving students

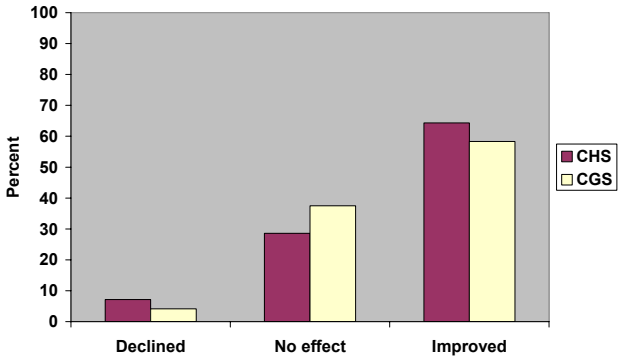


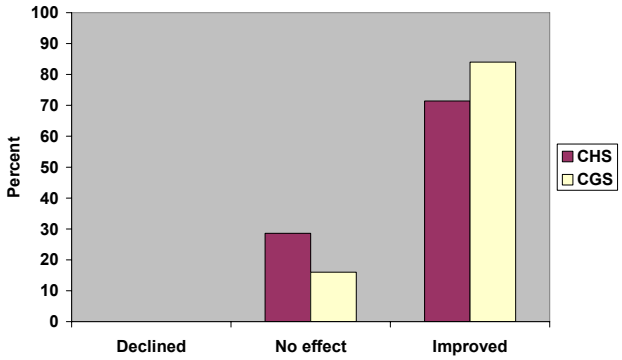


Quality of work

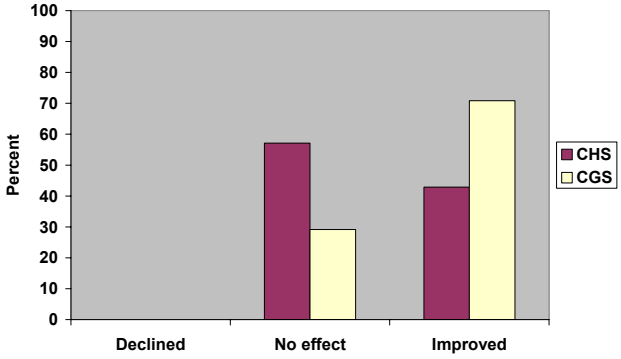
Ability to work independently

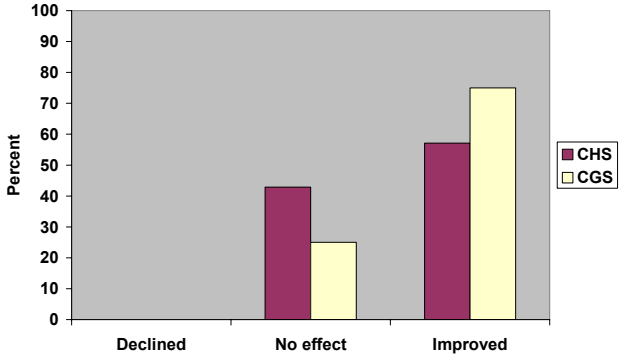
High-achieving students



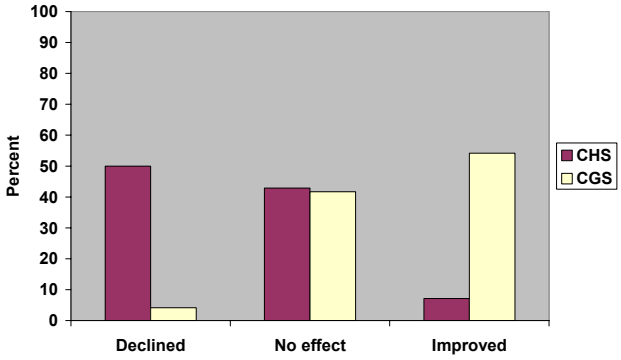


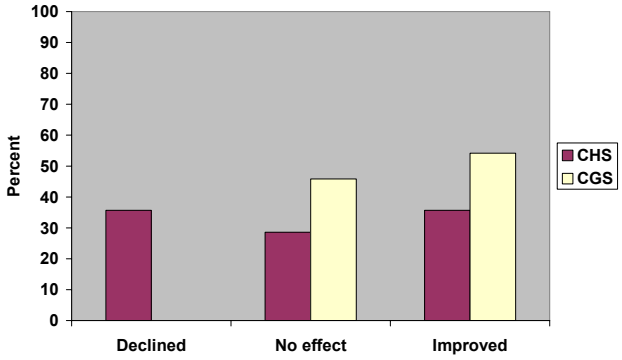
Traditional students





At-risk or low-achieving students

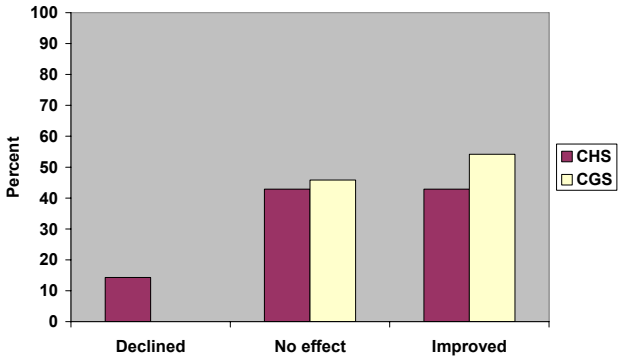


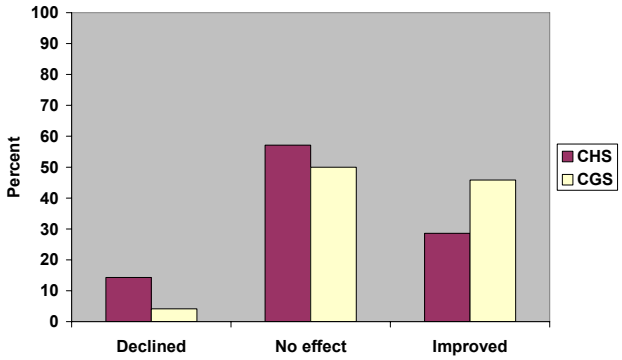


Ability to work in groups

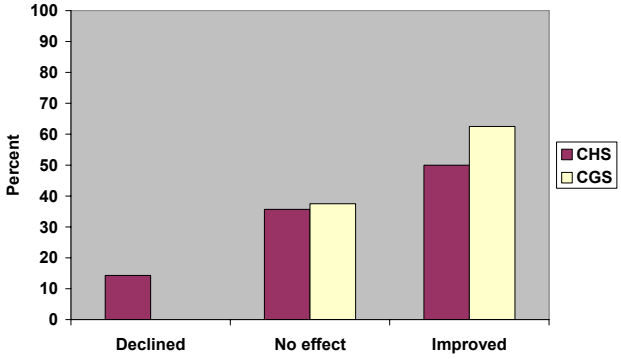
Interaction with teachers

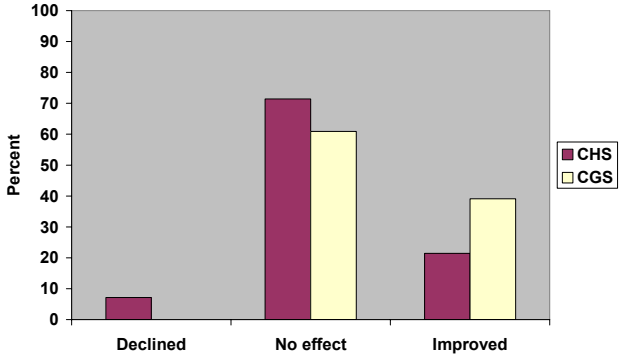
High-achieving students



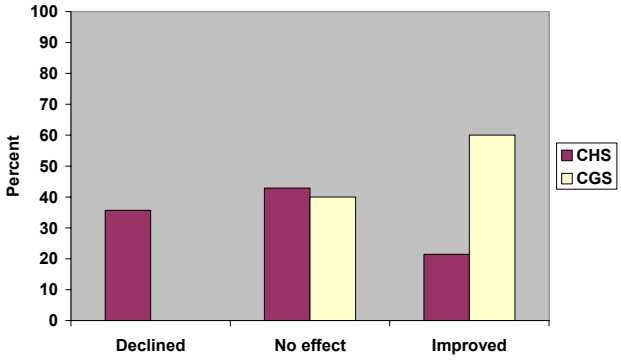


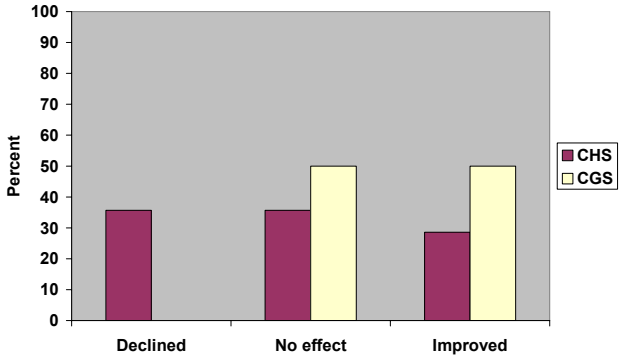
Traditional students

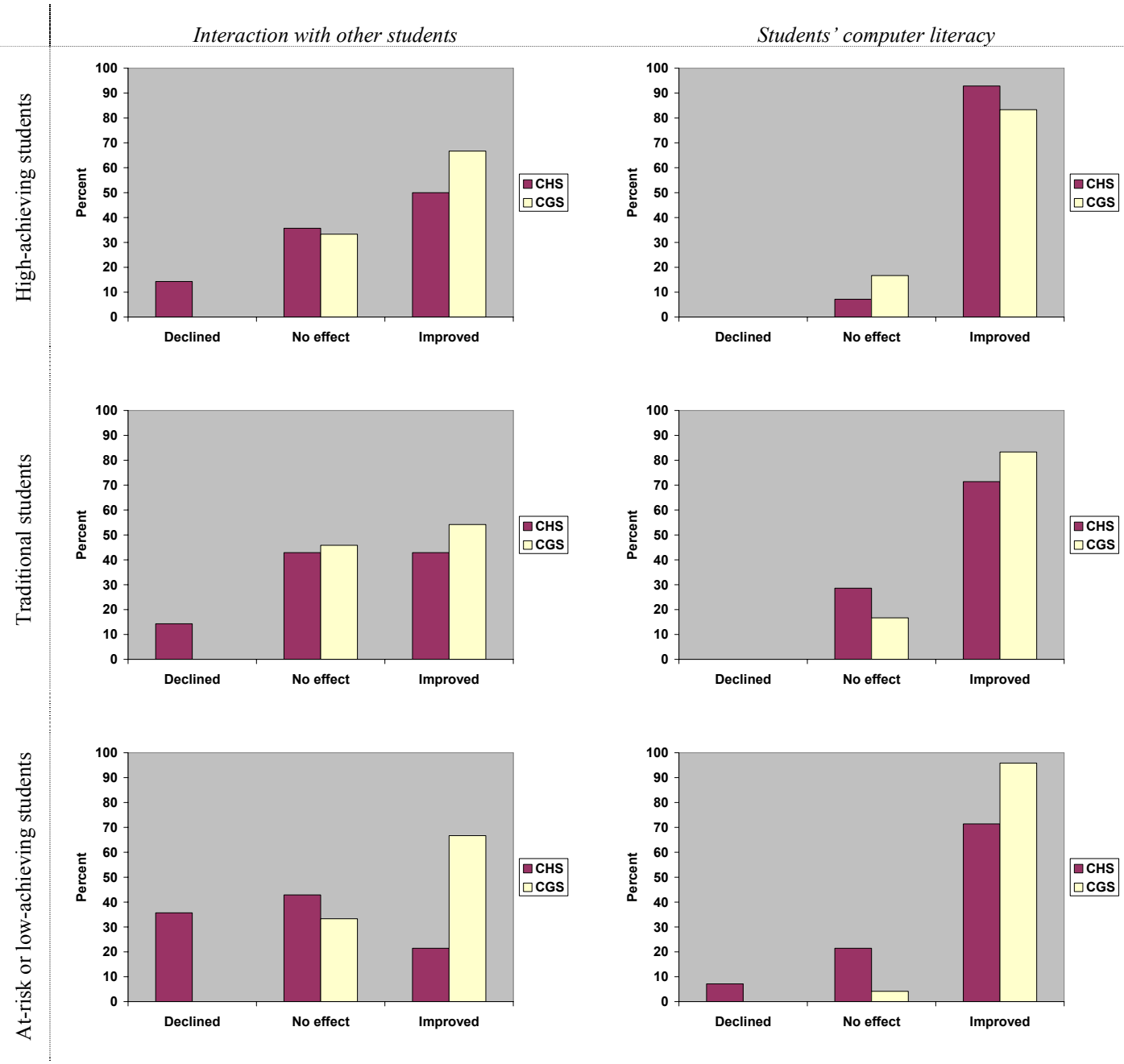


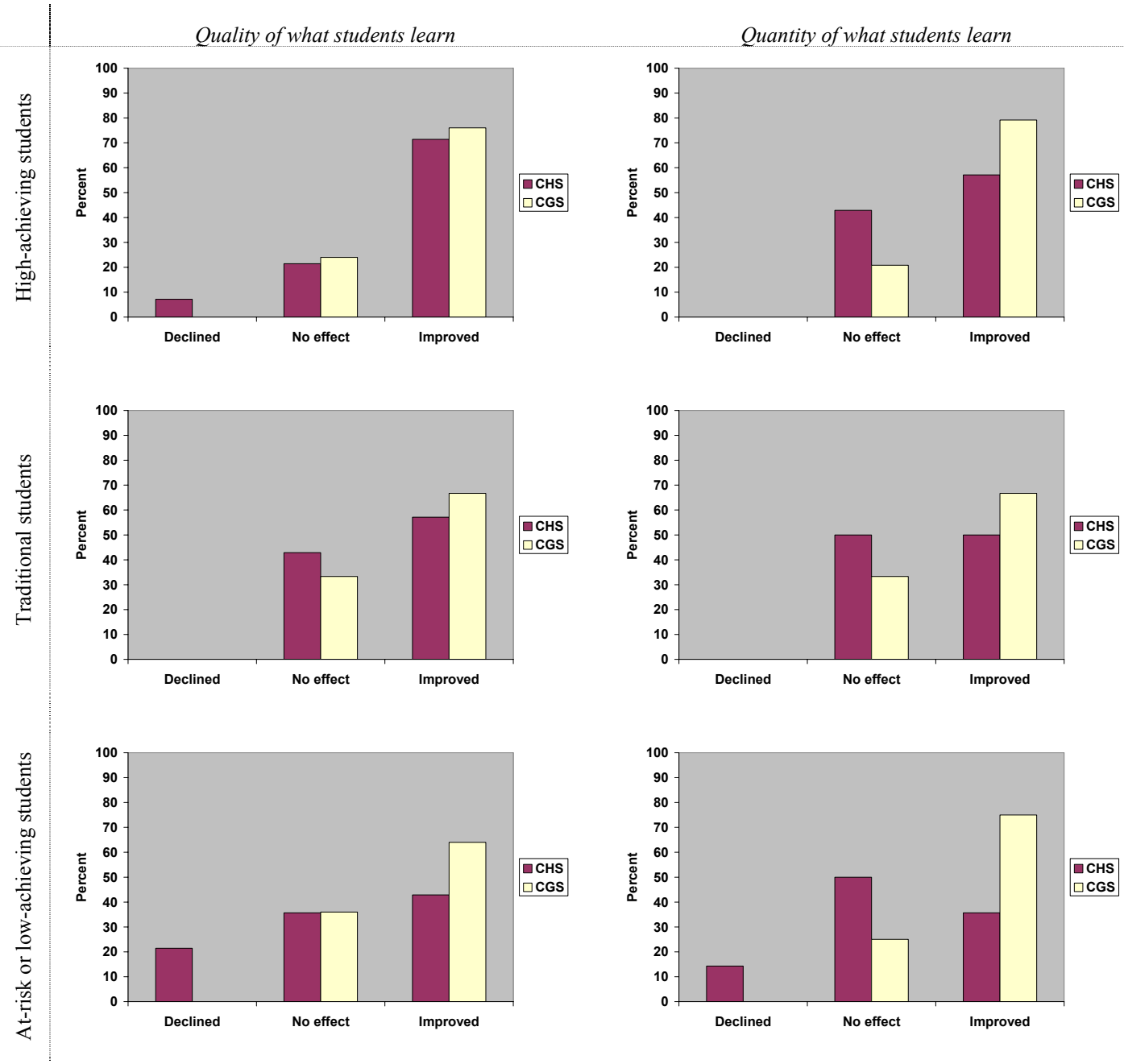


At-risk or low-achieving students





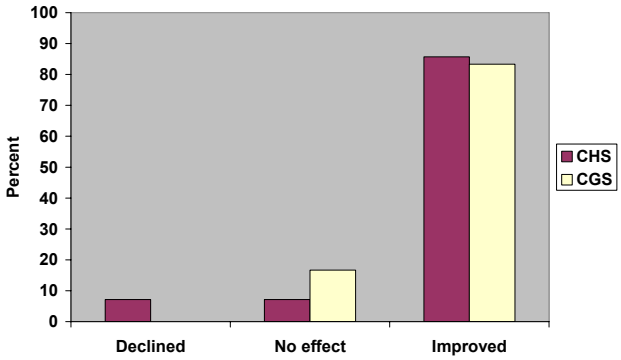

Interaction with other students
Students' computer literacy
High-achieving students
Traditional students
At-risk or low-achieving students
Percent
100
90
80
70
60
50
40
30
20
10
0
Declined
No effect
Improved
CHS
CGS

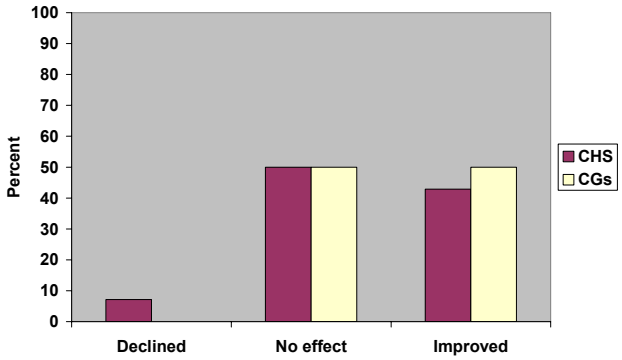

Quality of what students learn
Quantity of what students learn
High-achieving students
Traditional students
At-risk or low-achieving students
Percent
100
90
80
70
60
50
40
30
20
10
0
Declined
No effect
Improved
CHS
CGS

Personalized learning opportunities

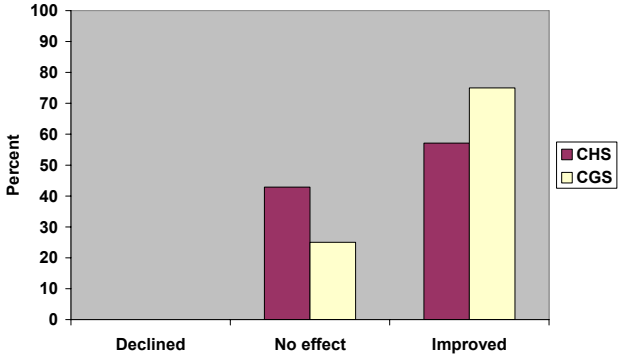
Rigor of the curriculum

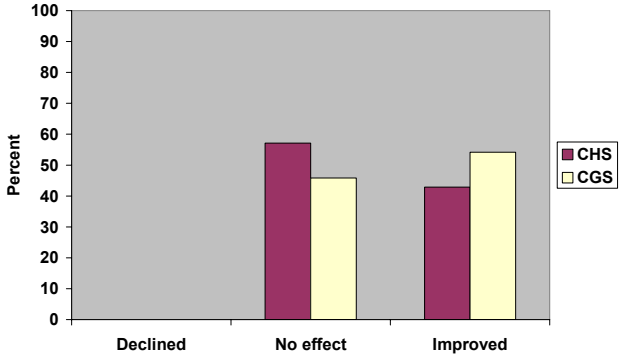
High-achieving students



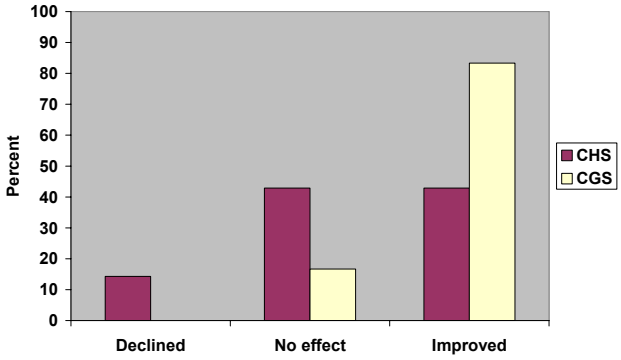


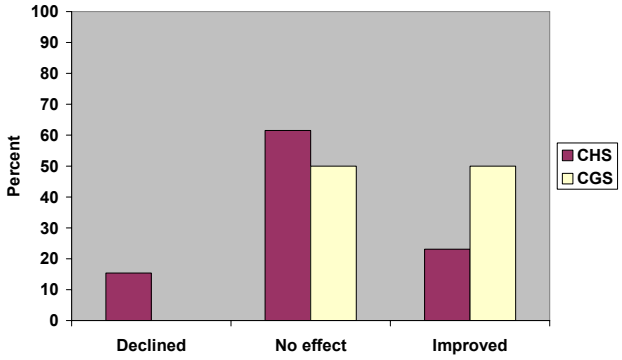
Traditional students





At-risk or low-achieving students





6. Professional Development

Who provided the training? (Tick all that apply)

	CHS	CGS
School/Principal provided training	60.0% (9)	4.0% (1)
Microsoft provided training	6.7% (1)	12.0% (3)
Educational consultant provided training	20.0% (3)	4.0% (1)
Other provided training	13.3% (2)	80.0% (20)

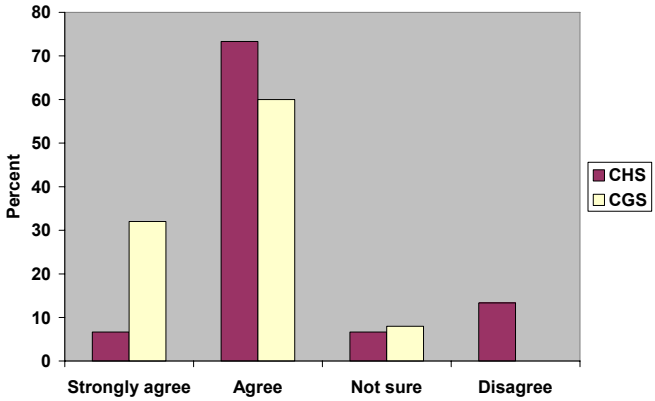
What kinds of professional training activities have you received? (Tick all that apply)

	CHS	CGS
Participated in any professional training activities that helped integrate technology into the curriculum	66.7% (10)	88.0% (22)
Professional training activities received:		
▪ On-site training	13.3% (2)	12.0% (3)
▪ Off-site training	6.7% (1)	0.0% (0)
▪ Summer institutes	0.0% (0)	20.0% (5)
▪ On-going training throughout the school year	73.3% (11)	20.0% (5)
▪ On-site embedded training (e.g., peer training, coaching, team training)	6.7% (1)	4.0% (1)
▪ Other	0.0% (0)	36.0% (9)

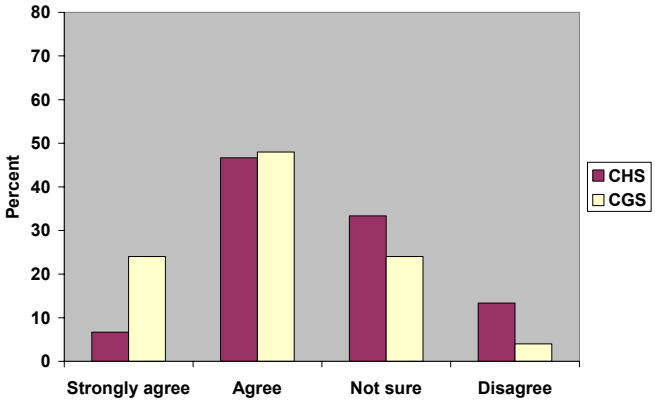
7. Attitudes toward Tablet PCs

The following section is about your perception of Tablet PCs. There is no right or wrong answer. Please answer the statements honestly. Please tick the boxes that reflect the extent you agree or disagree with each of the statements given.

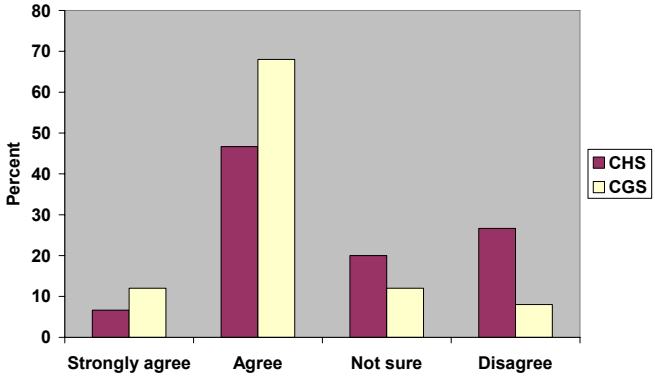
I feel comfortable using a Tablet PC in the classroom



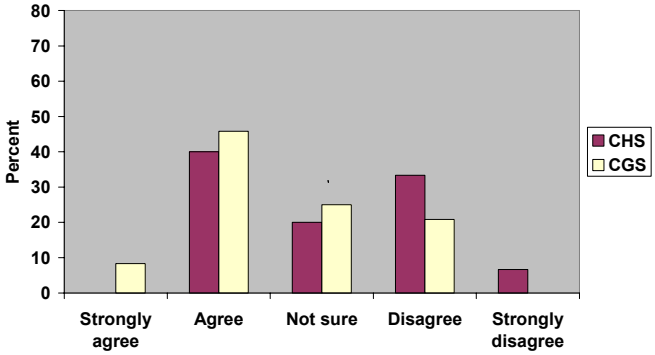
I like my students to learn on a Tablet PC



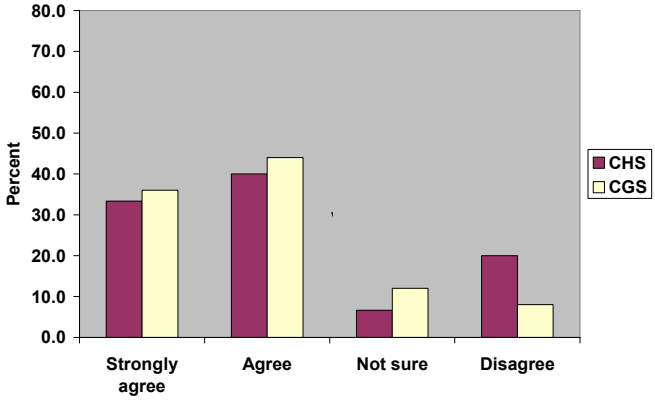
I like my students to work on assignments using the Tablet PC



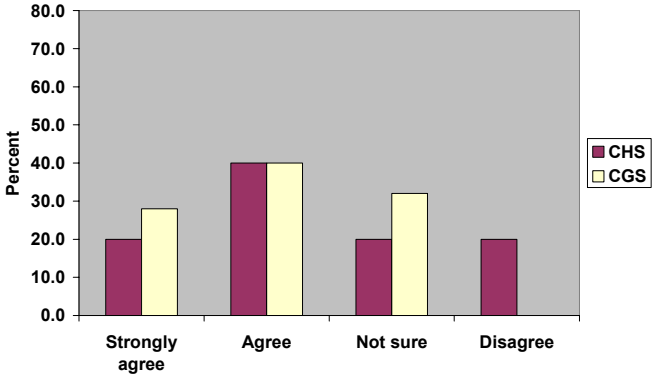
Even though an assignment might be submitted electronically, I still print out my student's work to grade it



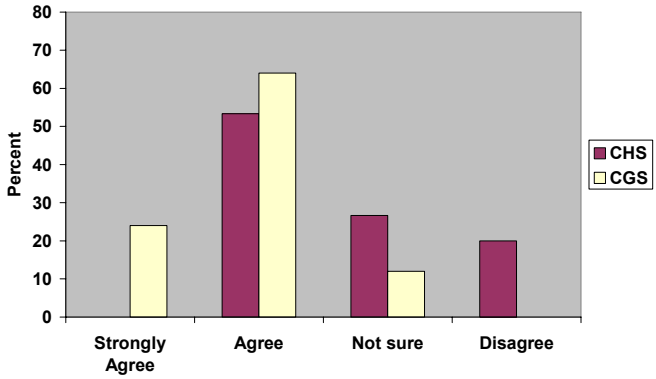
I have more access to educational resources



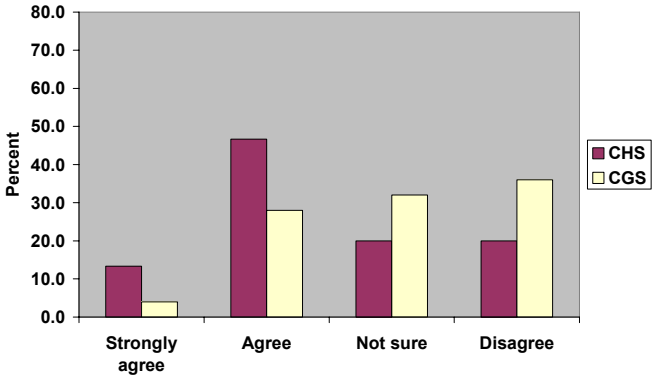
My students find the Tablet PCs useful in visualizing concepts



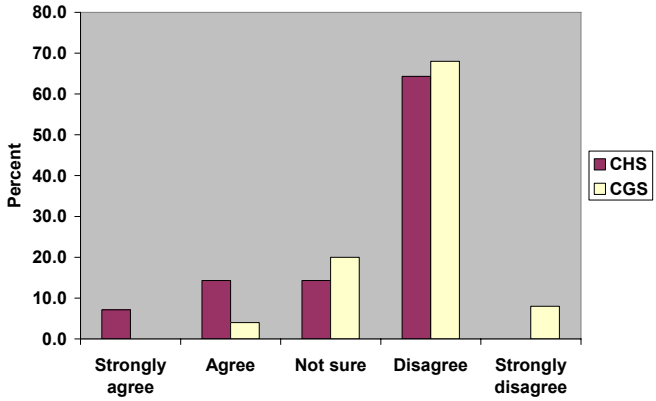
Tablet PCs encourage a different form of communication between me and my students



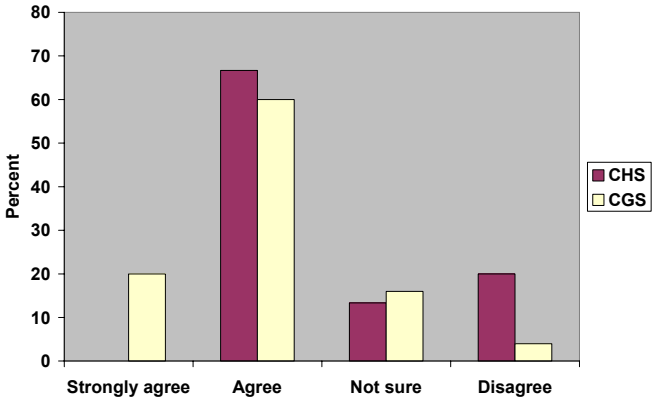
I think that it takes a long time to finish my lesson preparation when I use a Tablet PC



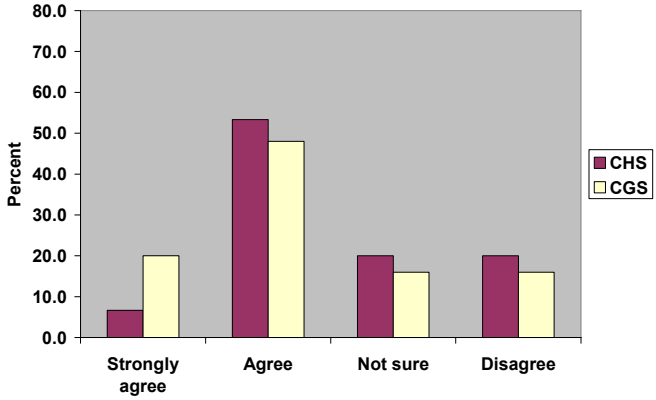
Working with a Tablet PC makes me very nervous



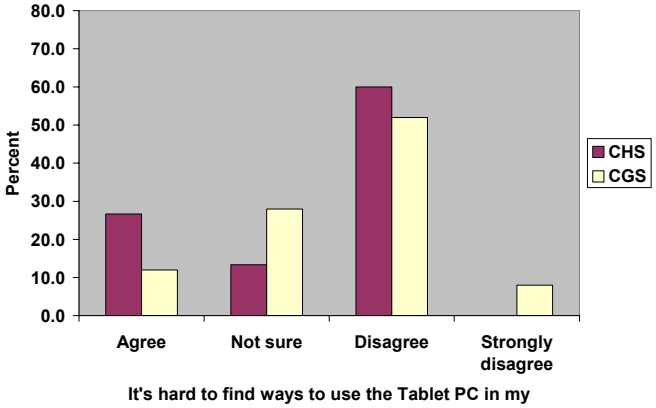
I think that Tablet PCs are easy to use



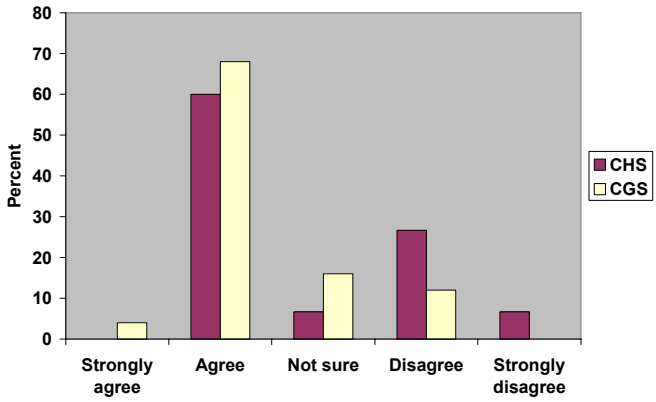
I was given enough training in using Tablet PC



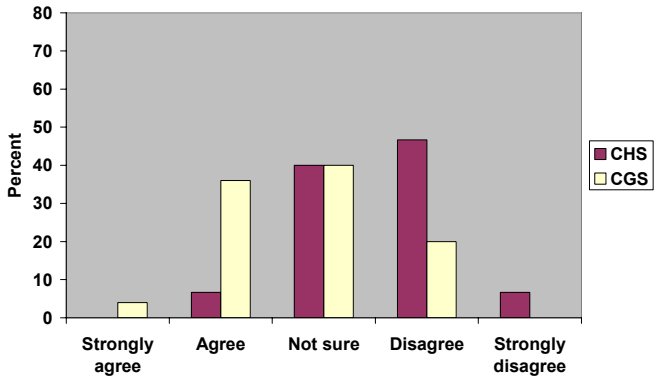
It's hard to find ways to use the Tablet PC in my classroom



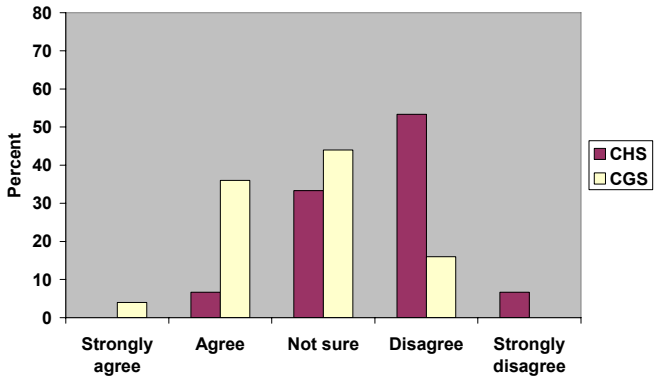
My role in the classroom has changed



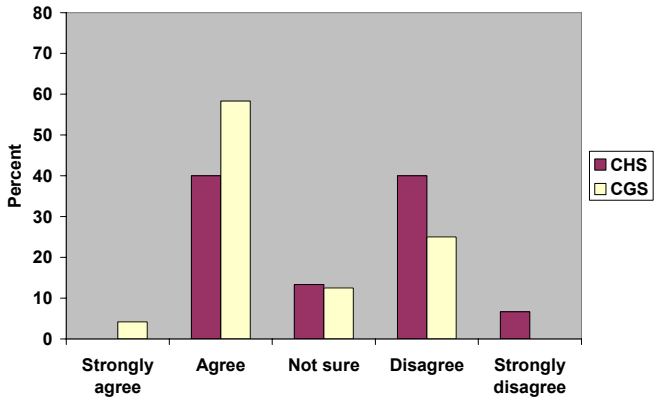
I can more reliably assess student progress, work, and effort



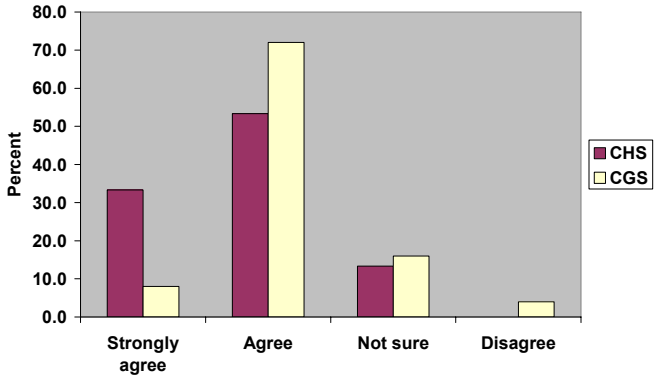
I like to discuss schoolwork with my students using Tablet PC



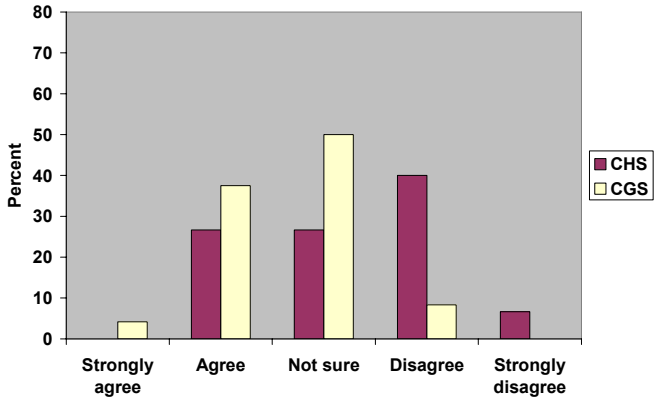
My beliefs about teaching and learning have changed



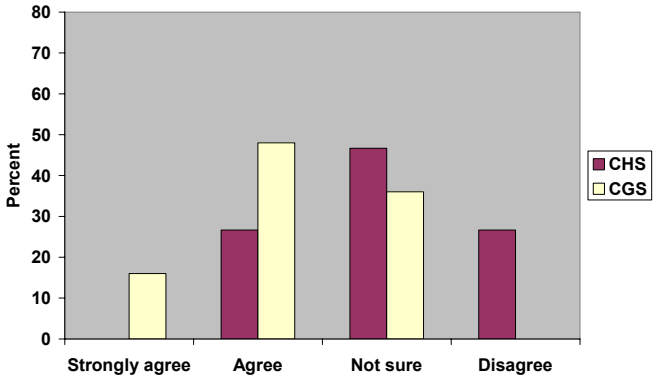
I do not think that students should be allowed to use the Tablet PC whenever they want during class



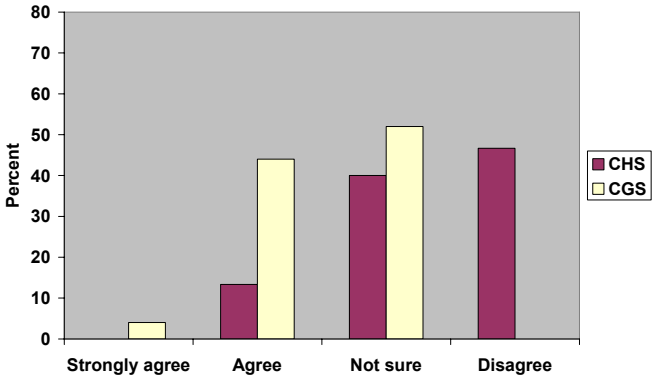
Tablet PCs help me save time



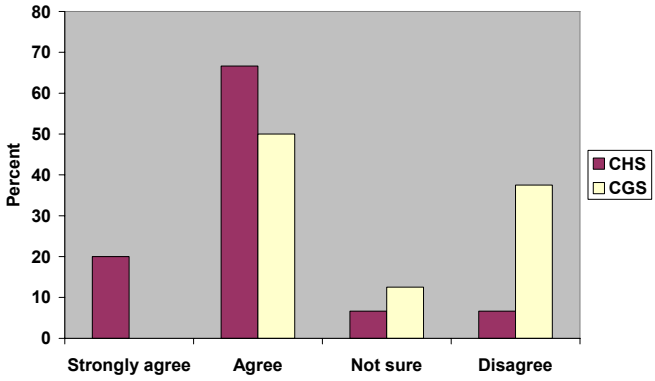
Tablet PCs help the students' development of higher order thinking skills



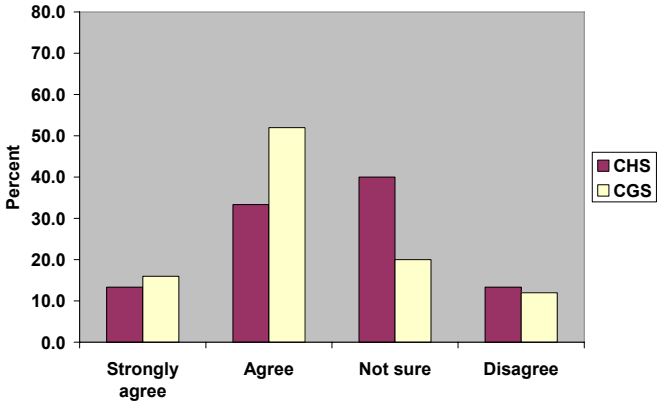
Tablet PCs improved the students' achievement in my class



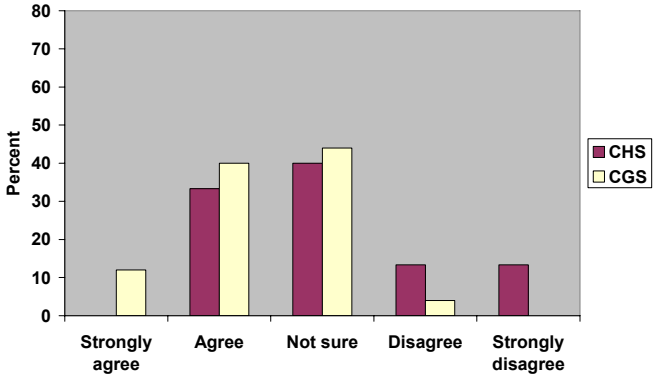
It's harder to manage my classroom when all students are using their Tablet PCs



I will be motivated to use a Tablet PC if I owned one



Every student should own a Tablet PC so that we can continue work outside classroom hours



Appendix D: Student Survey Questions and Summary Statistics

1. Introduction

This appendix provides student survey results in summary form for both schools. The online student survey asked questions regarding students' background, technology use, perceptions of Tablet PC use in their learning and Tablet PC applications. The survey consisted of 49 questions which are listed, along with possible responses, in the survey codebooks in Appendix G (for Catholic) and Appendix H (for Crescent).

At Catholic High School, there were 288 who completed the online survey, and at Crescent Girls School there were 344. Some students skipped a few survey questions so that for each survey item, the total number of students can vary. To determine how many students answered a particular survey question, see Appendix F of this report. Selected items that were judged irrelevant during survey administration are not reported in this document.

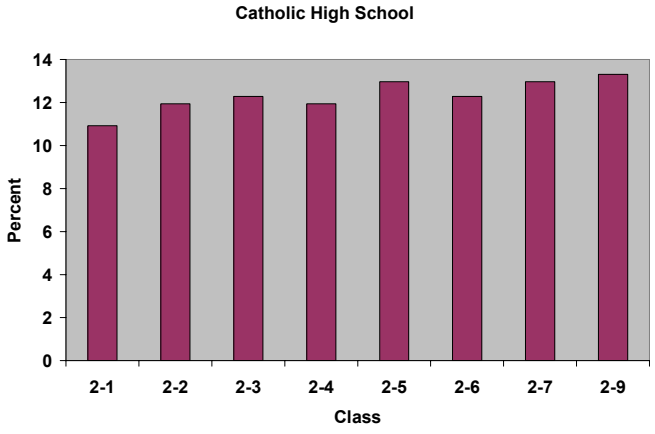
In this appendix we represent the data for each survey question using a graph or table. The data are presented in the same order presented in the survey. Section 2 contains demographic questions about student characteristics and reports on students' prior use of technology. In Section 3, students' use of the Tablet PC in various subject areas are reported. This section also includes data about frequency of Tablet PC use. Section 4 contains data about students' use of various Tablet PC applications. Section 5 reports on questions about students' perceptions of Tablet PCs and their attitudes toward the use of Tablet PCs for teaching and learning. Section 6 reports on students' perceptions of how often particular classroom practices were used after the Tablet PCs were introduced.

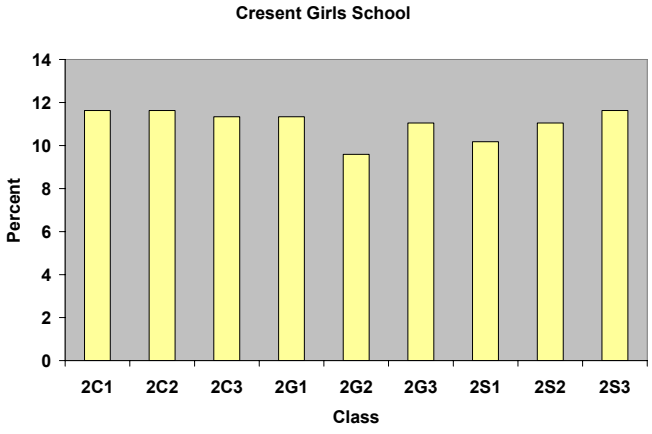
In the survey, students also completed open-ended questions about the different ways they used the Tablet PC and what they liked and disliked about it. Students' responses on the open-ended items are incorporated into the qualitative results reported in Volume 1.

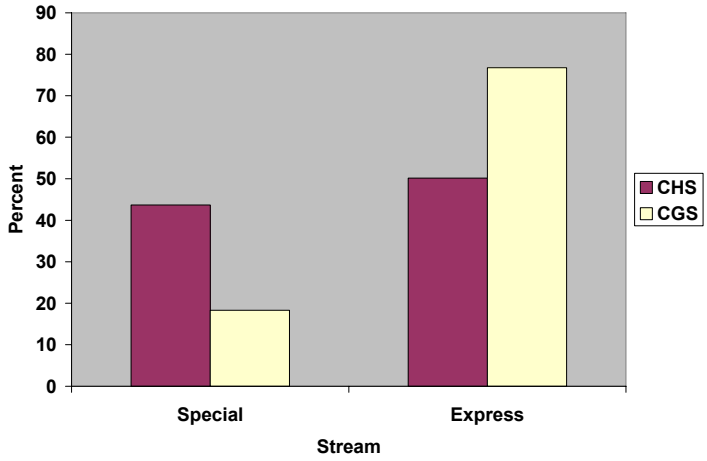
A note on formatting and data presentation: where percentages are listed, the number of responses is also given in parentheses after the percentage.

2. Background Information

Class to which the student is assigned







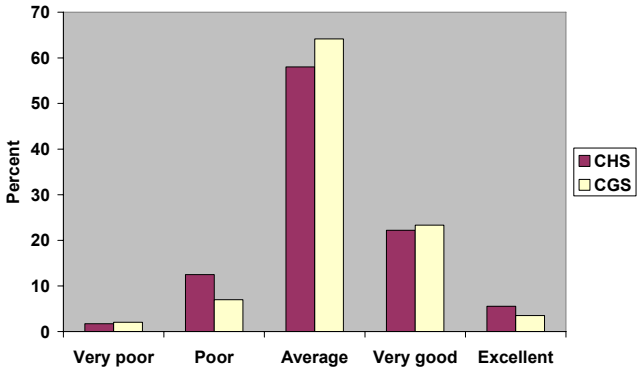
CHS

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
PSLE aggregate	274	225	299	247.4	8.4
Age of student	287	13	16	13.7	0.5
How long attended school	286	0.5	8	2.8	2.2

CGS

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
PSLE aggregate	340	225	268	245	5.8
Age of student	296	12	16	13.6	0.57
How long attended school	239	.5	2	1.7	0.29

Rate your Proficiency in IT/computer Skills Before the use of the Tablet PC



3. Tablet PC and Other Technology Use

3.1 Tablet PC Use in Different Subjects

Which subjects do you study that require the use of Tablet PC? (Tick all that apply)

Subject	CHS	CGS
Science	99.3% (283)	98.8% (330)
English language	95.4% (272)	91.6(307)
Chinese language	94.0% (268)	30.7% (103)
History	93.0% (265)	25.7% (86)
Literature	85.3% (243)	89.0% (298)
Mathematics	81.8% (233)	90.7% (304)
Music/ PE & CCA	75.8% (216)	7.2% (24)
Home Economics	67.4% (192)	75.4% (252)
Arts & Crafts	67.4% (192)	69.2% (231)
Design & Technology	43.0% (122)	5.1% (17)
Geography	28.1% (81)	96.7% (324)
Civics & Moral Education/ National Education	17.1% (49)	25.9% (86)
Malay language	1.1% (3)	0.0% (0)

In which subjects is using the Tablet PC helpful to your learning? (Tick all that apply)

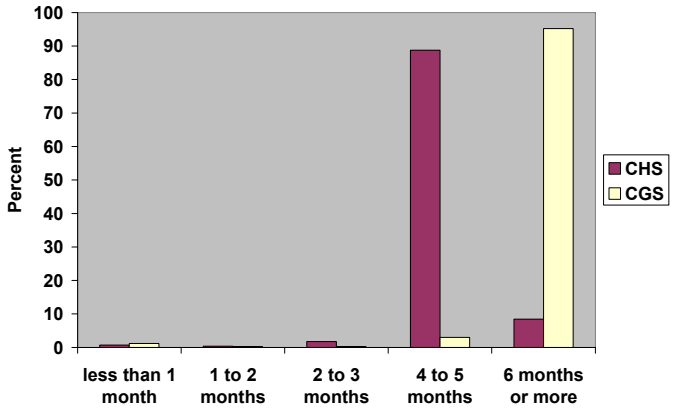
Subject	CHS	CGS
Science	95.7% (269)	90.4% (293)
English language	84.0% (236)	72.5% (235)
History	82.5% (231)	21.3% (68)
Literature	69.0% (194)	72.5% (235)
Chinese language	64.9% (181)	17.0% (55)
Mathematics	60.7% (170)	69.3% (224)
Arts & Crafts	42.7% (120)	41.7% (135)
Home Economics	36.7% (103)	38.4% (124)
Design & Technology	20.3% (57)	0.0% (0)
Music/ PE & CCA	20.1% (56)	5.2% (17)
Geography	18.5% (52)	85.1% (275)
Civics & Moral Education/ National Education	9.3% (26)	11.1% (36)
Malay language	1.1% (3)	0.0% (0)

3.2 Tablet PC Frequency of Use and Other Technology Use

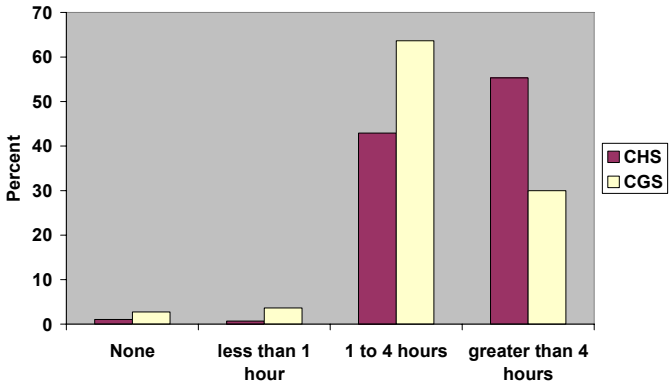
Do you have your own Tablet PC, i.e., the Tablet PC belongs to you?

CHS	CGS
90.0% (253)	93.4% (311)

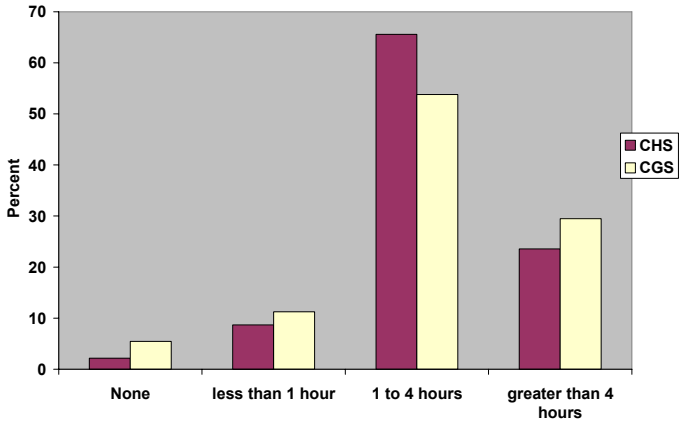
How long have you been using the Tablet PC?



How many hours do you use your Tablet PC at home per day?



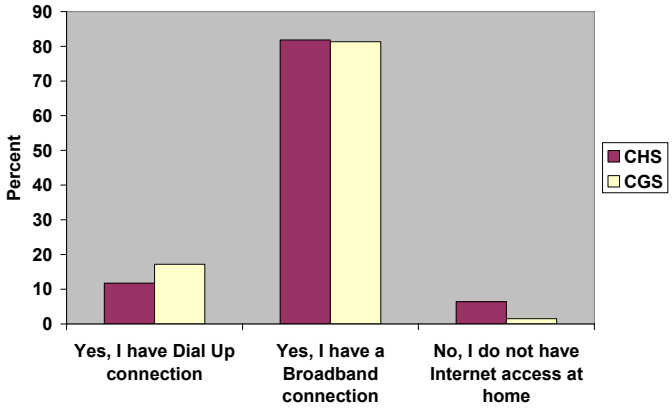
How many hours do you use your Tablet PC in school per day?



Do you have other technologies that you use at home (other than the Tablet PC)?

Type of Technology	CHS	CGS
Desktop computer	87.5% (244)	78.3% (263)
Mobile phone	83.6% (235)	87.8% (295)
Video games	53.4% (149)	0.0% (0)
MP3 music player	49.5% (138)	53.7% (180)
Laptop computer	21.9% (61)	28.6% (96)

Type of Internet Access at Home



How frequently do you engage in the following activities using your Tablet PC per day? (tick accordingly)

Activity		I never have used the Tablet PC for this	I have used the Tablet PC for this but not on a daily basis	Less than 1 hour	1 to 4 hours	More than 4 hours	Total Responses
Searching for information	CHS	0.4% (1)	30.2% (86)	18.9% (54)	42.5% (121)	8.1% (23)	285
	CGS	1.2% (4)	32% (108)	21.3% (72)	37.9% (128)	7.7% (26)	338
E-mailing	CHS	3.9% (11)	45.9% (130)	40.6% (115)	7.8% (22)	1.8% (5)	283
	CGS	4.4% (15)	32.5% (110)	41.4% (140)	17.5% (59)	4.1% (14)	338
Typing/writing and editing reports	CHS	1.4% (4)	27.8% (79)	22.2% (63)	41.2% (117)	7.4% (21)	284
	CGS	3.3% (11)	24.0% (81)	20.5% (69)	44.5% (150)	7.7% (26)	337
Taking notes in class	CHS	2.1% (6)	20.8% (59)	26.1% (74)	44.4% (126)	6.7% (19)	284
	CGS	2.7% (9)	14.5% (49)	11.0% (37)	55.8% (188)	16.0% (54)	337
Organizing information	CHS	3.2% (9)	29.2% (83)	34.2% (97)	28.5% (81)	4.9% (14)	284
	CGS	3.3% (11)	24.6% (83)	28.8% (97)	36.8% (124)	6.5% (22)	337
Working together on group assignments	CHS	1.1% (3)	29.2% (83)	19.7% (56)	38.0% (108)	12.0% (34)	284
	CGS	1.2% (4)	33.5% (113)	16.9% (57)	38.3% (129)	10.1% (34)	337
Creating presentations	CHS	1.8% (5)	31.6% (89)	15.6% (44)	37.2% (105)	13.8% (39)	282
	CGS	1.8% (6)	35.4% (119)	16.4% (55)	35.1% (118)	11.3% (38)	336
Watching movies	CHS	37.5% (105)	35.0% (98)	7.9% (22)	16.4% (46)	3.2% (9)	280
	CGS	23.7% (80)	34.0% (115)	11.5% (39)	19.5% (66)	11.2% (38)	338
Chatting online/instant messaging	CHS	12.4% (35)	13.8% (39)	19.8% (56)	35.7% (101)	18.4% (52)	283
	CGS	3.6% (12)	16.6% (56)	15.4% (52)	36.1% (122)	28.4% (96)	338
Playing games	CHS	9.5% (27)	25.4% (72)	20.8% (59)	33.9% (96)	10.2% (29)	283
	CGS	7.1% (24)	27.0% (91)	22.3% (75)	31.2% (105)	12.5% (42)	337
Listening to music	CHS	8.8% (25)	19.4% (55)	26.4% (75)	28.2% (80)	17.3% (49)	284
	CGS	1.5% (5)	15.7% (53)	17.5% (59)	36.5% (123)	28.8% (97)	337
Learning online	CHS	3.6% (10)	27.8% (78)	29.5% (83)	32.0% (90)	7.1% (20)	281
	CGS	3.3% (11)	27.2% (92)	24.0% (81)	39.3% (133)	6.2% (21)	338
Making graphics, art or drawings	CHS	8.2% (23)	46.8% (132)	26.2% (74)	14.9% (42)	3.9% (11)	282
	CGS	7.7% (26)	38.0% (128)	22.3% (75)	20.5% (69)	11.6% (39)	337
Creating spreadsheets and graphic charts of data	CHS	26.4% (73)	43.0% (119)	23.1% (64)	5.4% (15)	2.2% (6)	277
	CGS	21.4% (72)	48.1% (162)	15.7% (53)	11.9% (40)	3.0% (10)	337
Accessing information posted by my teacher	CHS	1.4% (4)	13.1% (37)	36.2% (102)	37.9% (107)	11.3% (32)	282
	CGS	0.9% (3)	19.9% (67)	35.6% (120)	34.1% (115)	9.5% (32)	337
Reading material for school	CHS	6.0% (17)	26.4% (75)	35.9% (102)	25.4% (72)	6.3% (18)	284
	CGS	3.3% (11)	25.8% (87)	27.6% (93)	36.2% (122)	7.1% (24)	337
Highlighting or marking the text while reading for school	CHS	9.3% (26)	36.4% (102)	37.1% (104)	14.3% (40)	2.9% (8)	280
	CGS	5.6% (19)	30.0% (101)	24.0% (81)	31.5% (106)	8.9% (30)	337

4. Tablet PC Applications

This section includes two types of responses to two kinds of questions: (1) whether students use an application for a given subject area, and (2) the nature of their experience using this application. This section reports data from answers to only those survey questions about three of the Tablet PC applications because, during survey administration, students were instructed to ignore the survey questions about other applications that they did not use. (This is reported as N/A in the tables below.)

Below is a list of applications that are found in the Tablet PC. For each application, please tick in which subjects you have used the application and your experience using it. Tick all that apply.

4.1 Mind Book

The Mind Book: A digital scrapbook where you can record down your train of thoughts and ideas and insert images and annotations.

	CHS	CGS
Not applicable	N/A	55.4% (170)
Science	N/A	38.8% (119)
Geography	N/A	37.5% (115)
English Language	N/A	36.2% (111)
Mathematics	N/A	29.8% (91)
Literature	N/A	27.7% (85)
Home Economics	N/A	16.6% (51)
History	N/A	10.7% (33)
Arts and Crafts	N/A	10.4% (32)
Chinese Language	N/A	5.6% (17)
Civics and Moral Education	N/A	3.6% (11)

Your experience in using the Mind Book (tick all that apply)

	CHS	CGS
never used, or no opinion	N/A	70.8% (211)
is easy to use	N/A	26.3% (79)
helps me learn more	N/A	11.0% (33)

4.2 Fun with Construction

Fun with Construction: A digital web-board where you can make use of geometrical tools like compass, protractor, etc.

Subject	CHS	CGS
Mathematics	82.0% (219)	97.8% (312)
Not applicable	16.1% (43)	0%
Science	12.7% (34)	9.8% (31)
Design and Technology	9.4% (25)	3.4% (11)
Arts and Crafts	4.1% (11)	0%
Geography	3.4% (9)	32.0% (102)
Aesthetics/PE	1.1% (3)	0%
Malay Language	0.7% (2)	0%
English Language	0.4% (1)	0%
Literature	0.4% (1)	0%
Home Economics	0.4% (1)	0%

Your experience in using Fun With Construction (tick all that apply)

Response	CHS	CGS
is easy to use	32.0% (87)	51.2% (132)
helps me learn more	23.2% (63)	18.9% (49)
had problems	21.7% (59)	34.4% (89)
makes learning fun	20.6% (56)	37.1% (96)
never used, or no opinion	19.0% (52)	0%
often frustrated when using	17.3% (47)	0%
makes learning more difficult	3.7% (10)	0%

4.3 Virtual Classroom

Virtual Classroom: A wireless system whereby teachers can test/quiz students on understanding on a subject and have graphical representation.

	CHS	CGS
Science	56.3% (142)	19.9% (66)
History	28.6% (72)	0%
Not applicable	28.0% (71)	15.0% (49)
English Language	21.0% (53)	54.4% (179)
Mathematics	15.9% (40)	54.7% (181)
Literature	13.5% (34)	17.0% (56)
Chinese Language	12.7% (32)	0%
Home Economics	6.3% (16)	7.6% (25)
Geography	5.6% (14)	33.9% (112)
Arts and Crafts	5.6% (14)	6.3% (21)
Design and Technology	3.2% (8)	0%
Aesthetics/PE	1.6% (4)	0%
Civics and Moral Education	1.6% (4)	6.0% (20)
Malay Language	0.4% (1)	0%

Your experience in using Virtual Classroom (tick all that apply)

	CHS	CGS
is easy to use	46.5% (125)	80.3% (216)
never used, or no opinion	28.6% (77)	0%
makes learning fun	10.0% (27)	32.3% (87)
helps me learn more	8.2% (22)	18.6% (50)
had problems	7.8% (21)	9.7% (26)
often frustrated when using	7.4% (20)	0%
application making learning more difficult	6.0% (16)	0%

4.4 EduLearn (Microsoft Learning Gateway)

EduLearn: In modules such as Forum and Homework, users can call out an editor to input with Digital Ink and the content will be updated into the system. Note: CGS students were told to interpret this question as if "EduLearn" read "Microsoft Learning Gateway (MLG)".

	CHS	CGS
Science	N/A	98.0% (300)
English Language	N/A	96.1% (294)
Geography	N/A	96.1% (293)
Mathematics	N/A	95.4% (292)
Literature	N/A	92.5% (283)
Chinese Language	N/A	54.9% (168)
History	N/A	23.2% (71)
Arts and Crafts	N/A	19.9% (61)
Home Economics	N/A	19.6% (60)
Civics and Moral Education	N/A	8.2% (25)

Your experience in using EduLearn (tick all that apply)

	CHS	CGS
is easy to use	N/A	76.3% (232)
makes learning fun	N/A	39.0% (119)
helps me learn more	N/A	34.4% (105)
had problems	N/A	3.3% (10)
often frustrated when using	N/A	3.3% (10)
makes learning more difficult	N/A	2.3% (7)

4.5 SketchPad

SketchPad: A digital ink friendly note-taking, sketching and diagrammatic tool allowing teachers to separate work from notes or questions from answers. Real-time collaborations allowing students to interact on the same documents real-time with peers and teachers.

	CHS	CGS
Not applicable	N/A	61.9% (197)
English Language	N/A	23.4% (74)
Mathematics	N/A	22.4% (71)
Geography	N/A	22.1% (70)
Science	N/A	21.8% (69)
Literature	N/A	20.3% (64)
Arts and Crafts	N/A	11.9% (38)
Home Economics	N/A	8.5% (27)
Chinese Language	N/A	7.3% (23)

Your experience in using SketchPad (tick all that apply)

	CHS	CGS
never used, or no opinion	N/A	67.8% (211)
is easy to use	N/A	28.7% (89)
often frustrated when using	N/A	2.9% (9)
helps me learn more	N/A	6.5% (20)

4.6 Learning of Mathematics

In 'Learning of Mathematics (transformation and functions) with Tablet' you may be prompted with an object and description of a transformation to be applied on the object. You will sketch the transformed object and the system will mark your answer and provide the correct answer. What is your experience with this application?

	CHS	CGS
never used, or no opinion	N/A	78.1% (246)
is easy to use	N/A	15.6% (49)
makes learning fun	N/A	10.1% (32)
helps me learn more	N/A	6.3% (20)

4.7 Science Practical Assessment

In Science Practical Assessment (SPA) you can plan experiments and draw experiment procedures and equipment. The plan can be submitted to teachers for assessment. What is your experience with this application?

	CHS	CGS
never used, or no opinion	N/A	78.3% (252)
is easy to use	N/A	10.9% (35)
makes learning fun	N/A	10.6% (34)
helps me learn more	N/A	6.5% (21)

4.8 Chinese Character Writing

Training in Chinese Character Writing teaches students writing of Chinese characters. What is your experience with this application?

	CHS	CGS
is easy to use	50.0% (138)	19.7% (63)
never used, or no opinion	26.3% (72)	72.0% (229)
helps me learn more	18.8% (52)	6.3% (20)
makes learning fun	15.9% (44)	9.1% (29)
often frustrated when using	8.0% (22)	2.8% (9)
had problems	6.5% (18)	0%
Application making learning more difficult	2.9% (8)	0%

4.9 Chemist Pad

ChemistPad helps students learn chemistry in a fun way. Students can draw the molecular structure on the Tablet PC and it helps identify the molecular notation and beautify it. What is your experience with this application?

	CHS	CGS
never used, or no opinion	N/A	95.0% (306)
makes learning fun	N/A	3.7% (12)
is easy to use	N/A	3.4% (11)
helps me learn more	N/A	1.5% (5)

5. Perceptions of and Attitudes toward the Tablet PC

This section reports on a Yes/No question. The responses shown are the Yes ones and are shown in order of response percentages.

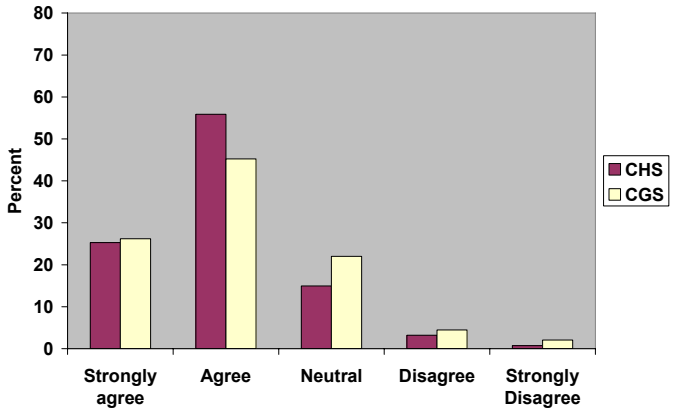
Perceptions toward the Tablet PC and Other Technologies

	CHS	CGS
	Percent	Percent
Does the teacher tell you when you can use the Tablet PC in class?	91.4% (256)	84.1% (281)
Has the way you take notes changed since you got the Tablet PC?	83.2% (233)	76.7% (257)
Is the Tablet PC convenient to use anywhere?	81.4% (228)	77.9% (261)
Does the short battery time get in the way of using the Tablet PC?	81.4% (228)	91.0% (305)
Do you enjoy reading off the Tablet PC?	73.8% (206)	54.9% (184)
Can you use the Tablet PC anywhere you want in the school?	71.6% (199)	78.2% (262)
Are you allowed to load any non-copywrited or non-pirated programs or media onto the Tablet PC that you want?	33.3% (93)	60.0% (201)

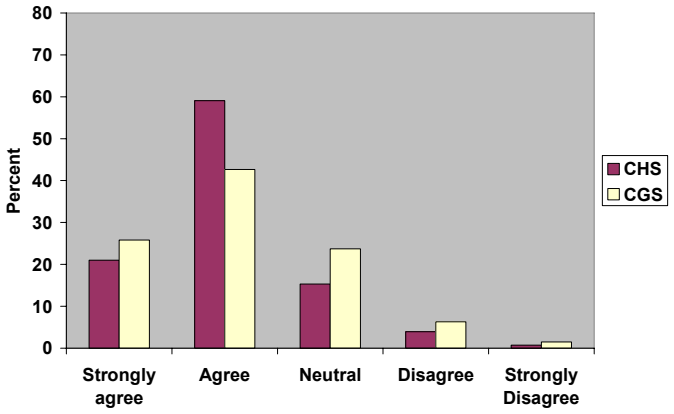
5.1 Attitudes toward Tablet PCs

For the questions below, please tick the appropriate box that reflects how much you agree or disagree with each of the statements. If you do not agree or disagree, tick Neutral.

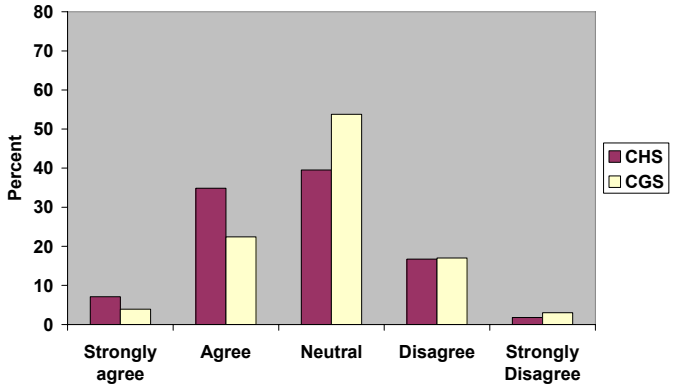
I like learning on a Tablet PC



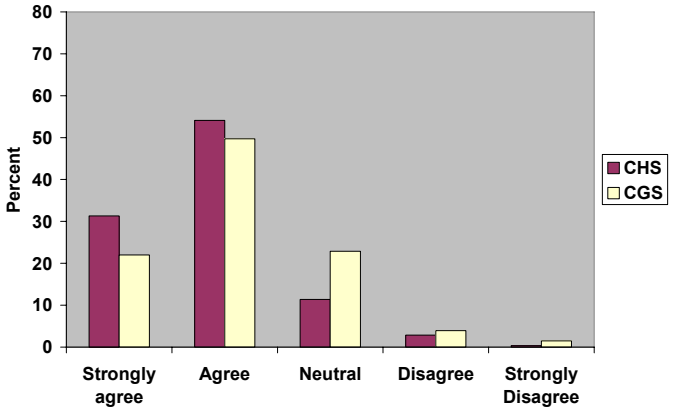
I like working on assignments using Tablet PC



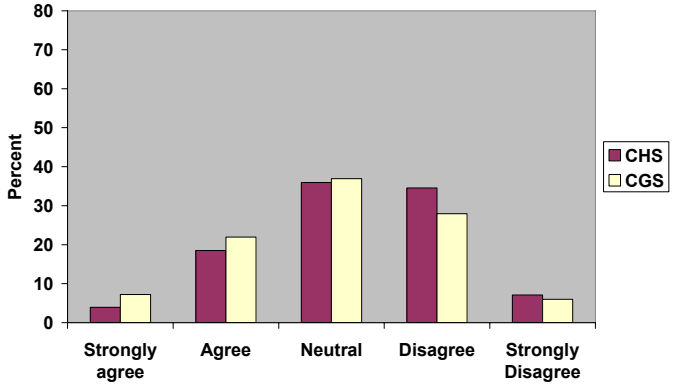
The challenge of solving problems with a Tablet PC does not appeal to me.



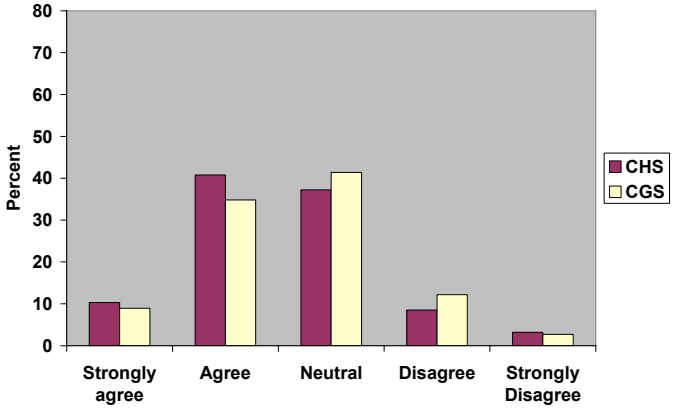
I like the way Tablet PC helps me in group work.



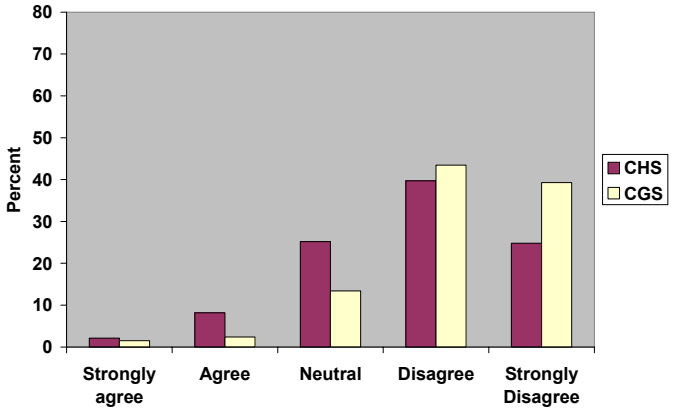
I think that it takes a long time to finish my schoolwork when I use a Tablet PC.



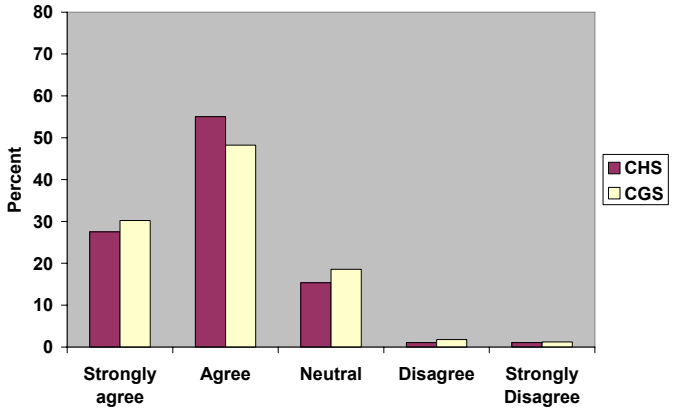
Tablet PCs improve the quality of my schoolwork.



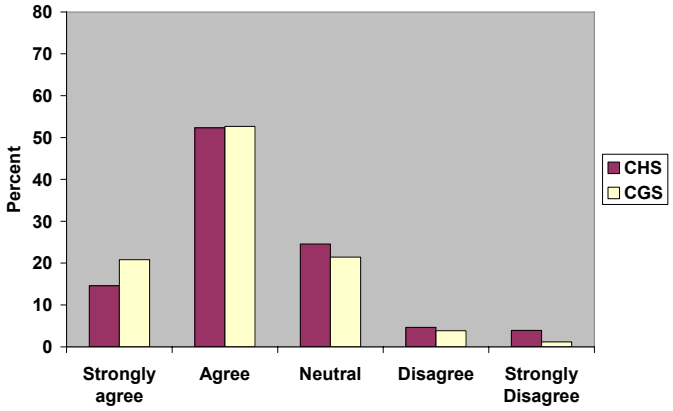
Working with a Tablet PC makes me very nervous



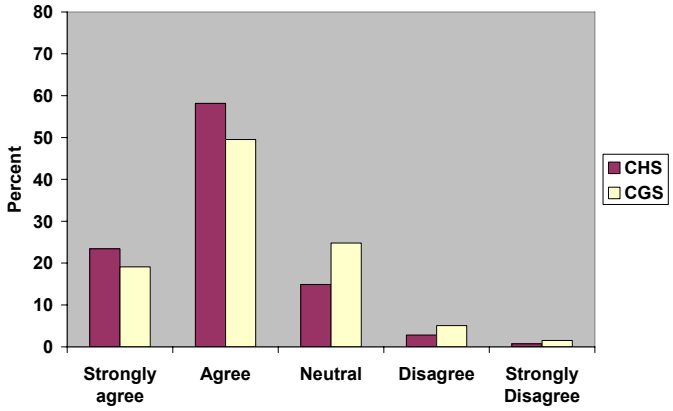
I think that Tablet PCs are easy to use



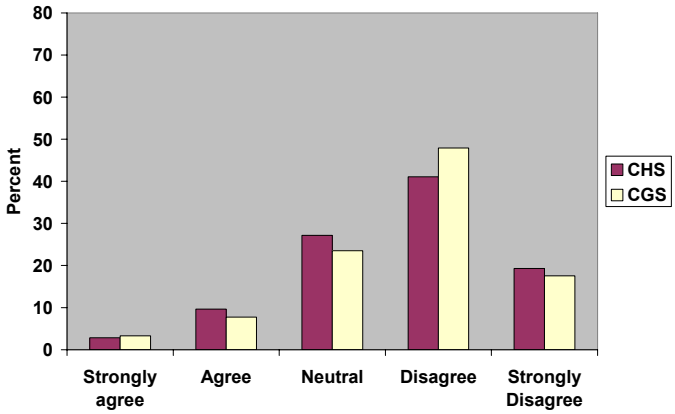
I am given enough training in using Tablet PC



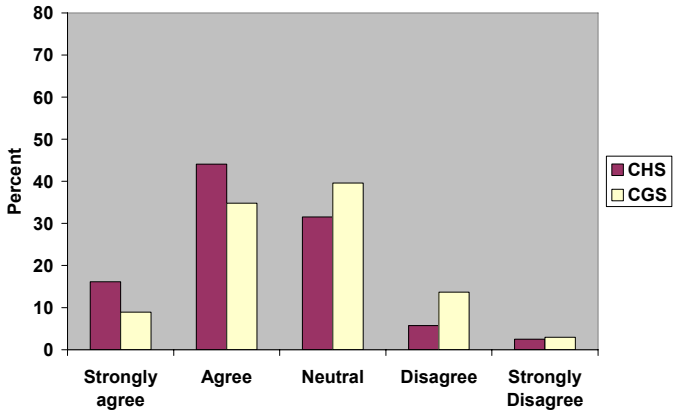
I can learn a lot using Tablet PCs



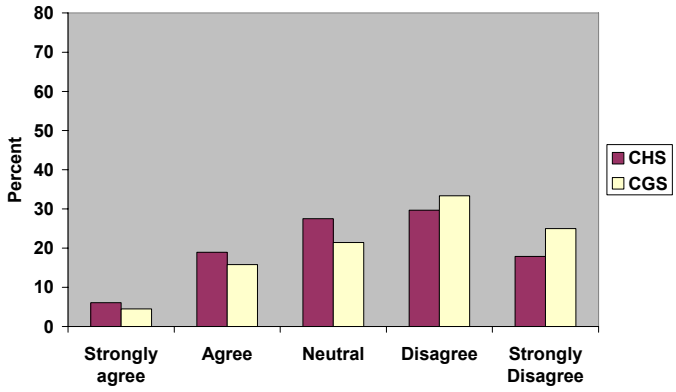
Using the Tablet PCs do not interest me very much



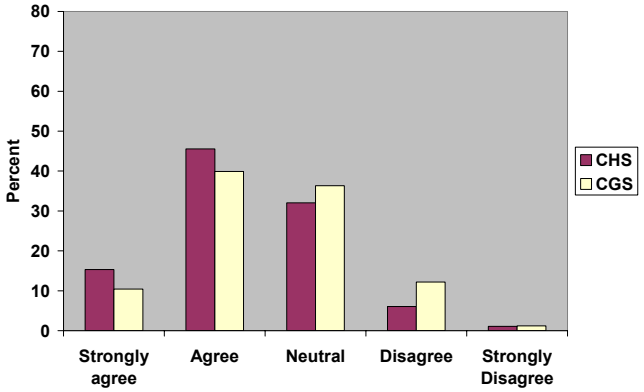
Tablet PCs make schoolwork easier to do.



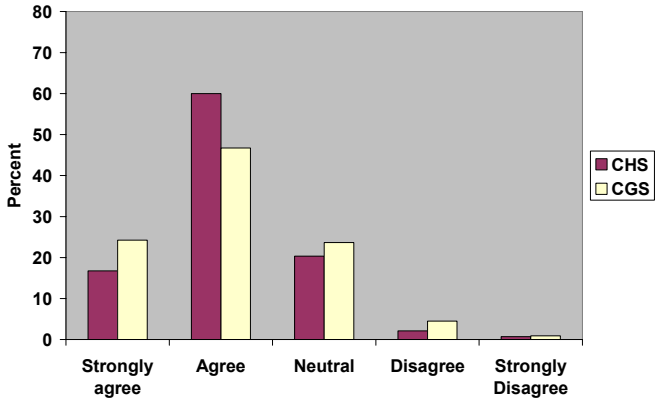
My typing skills get in the way of finishing my assignments on the Tablet PC



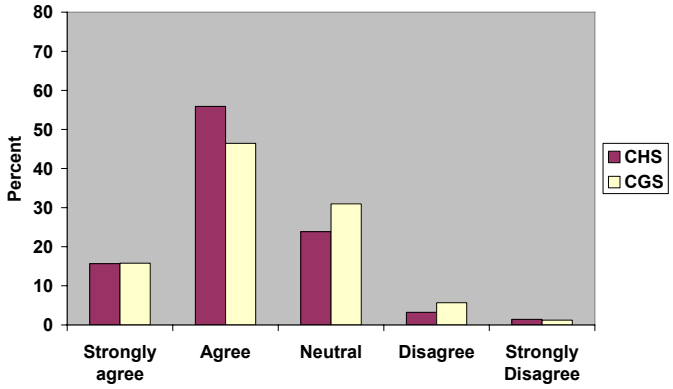
I like to discuss schoolwork using Tablet PC



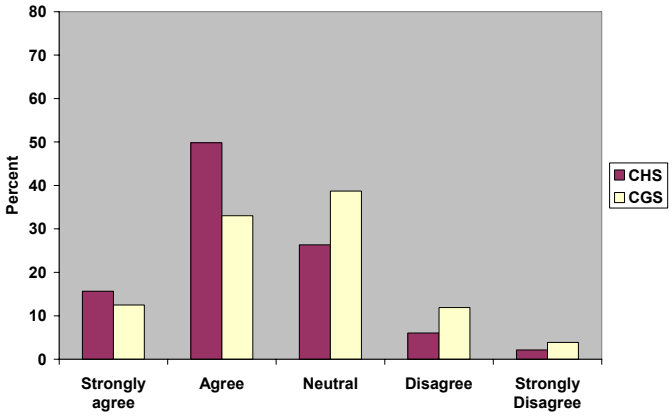
I enjoy how Tablet PCs are used in our daily lives



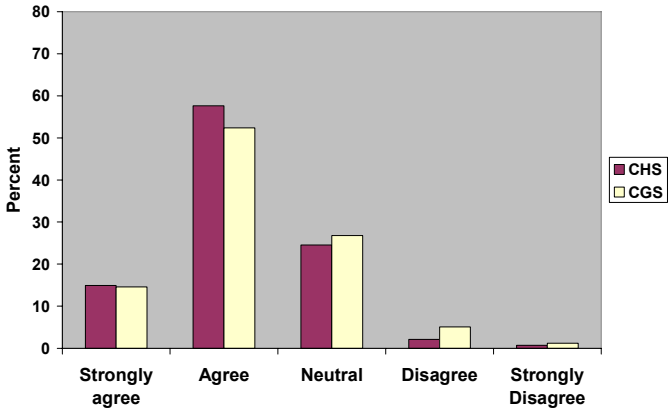
Learning with a Tablet PC is helping me to prepare for the future



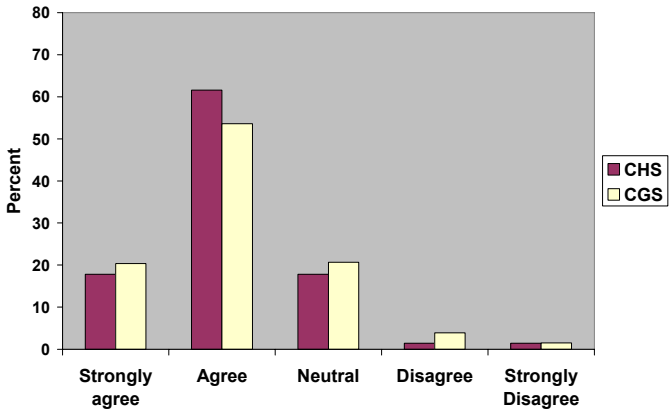
Tablet PCs help me save time



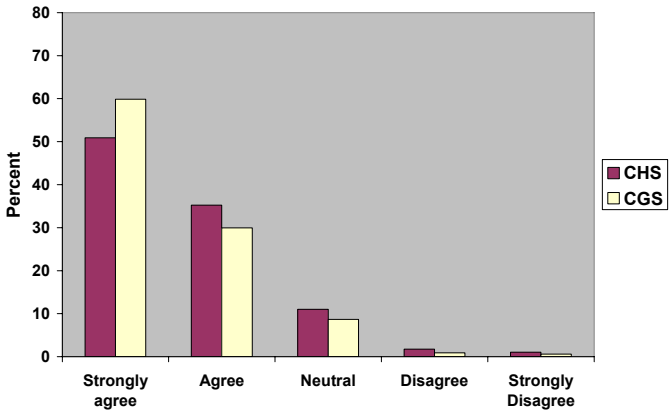
Tablet PCs allow me to learn independently



Tablets PCs help me to organize my work



I like owning a Tablet PC



5.2 Laptop vs. Tablet Mode

What way do you prefer to use the Tablet PC for the following tasks? If you prefer to hold it as a tablet, tick 'In tablet mode.' If you use it like a laptop computer, tick 'Tablet PC.' If you do not do this task on the Tablet PC, tick 'Not applicable.'

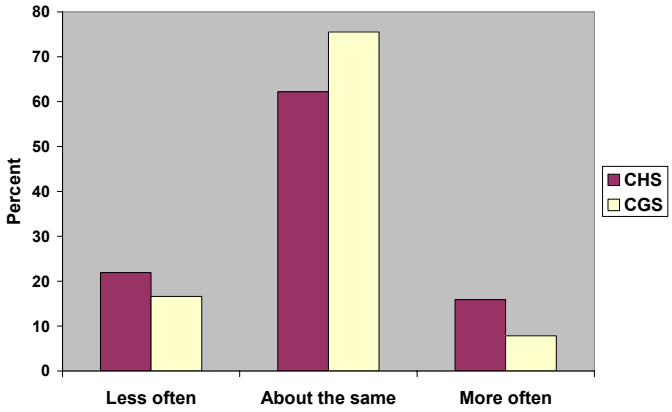
These responses are for tablet mode, and are shown in order of response percentages

	CHS	CGS
drawing	84.5% (235)	81.8% (275)
drawing diagrams while taking notes during lessons	80.4% (225)	77.9%(261)
taking notes	70.5% (198)	37.0% (124)
making a map	65.1% (183)	70.5% (237)
taking notes during lessons	61.3% (171)	31.8% (107)
doing complex problems and problem solving	47.5% (133)	56.8% (191)
doing simple calculations	22.4% (63)	32.6% (109)
inserting graphics in a report	18.6% (52)	21.1% (72)
reading off the screen	16.4% (46)	14.3% (48)
studying for a test	13.2% (37)	15.8% (53)
searching the Internet	2.5% (7)	5.7% (19)

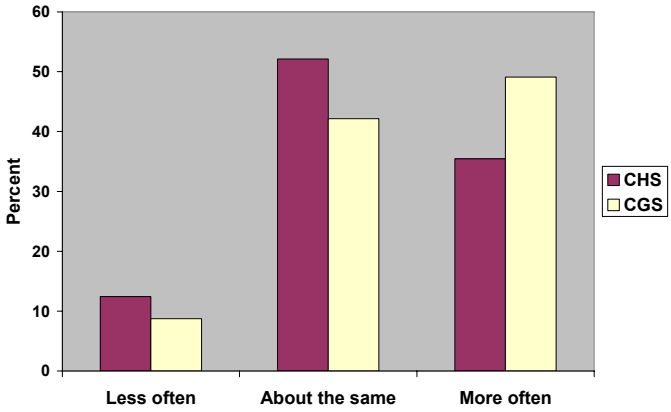
6. Positive Classroom Practices when using Tablet PCs

Would you say that the following practices occur in your classes now than before because Tablet PCs are used in class?

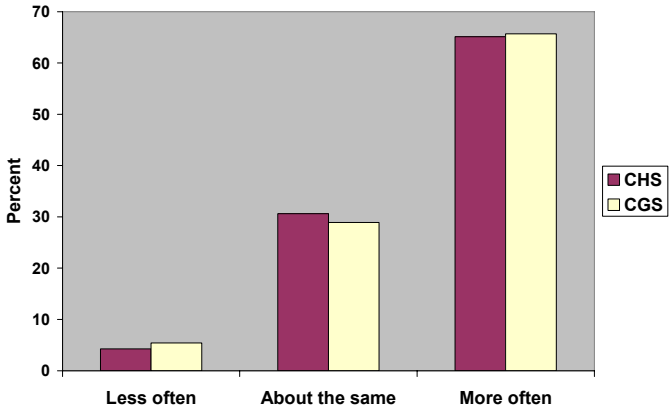
Students select their own topics for assignments



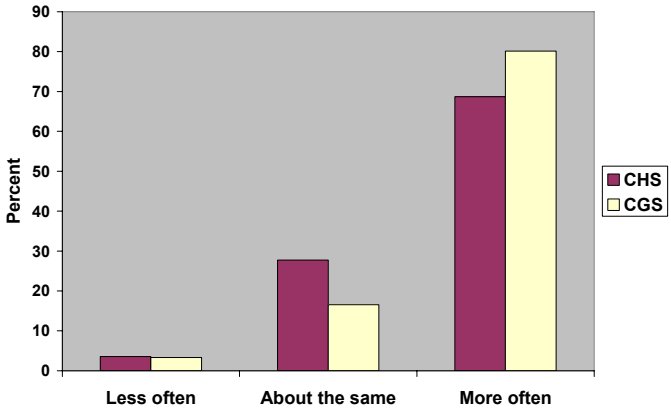
Students explore a subject area on their own



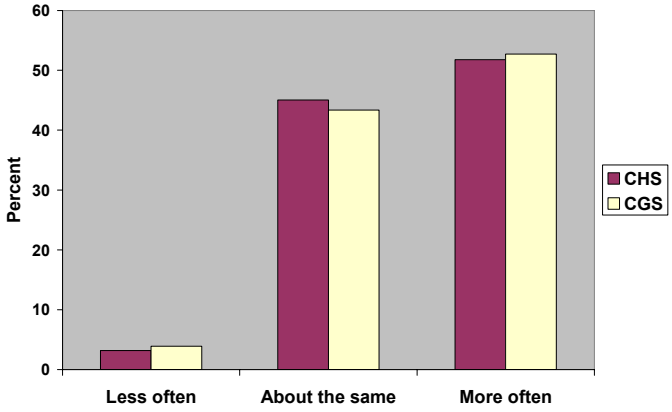
Students research beyond their textbooks



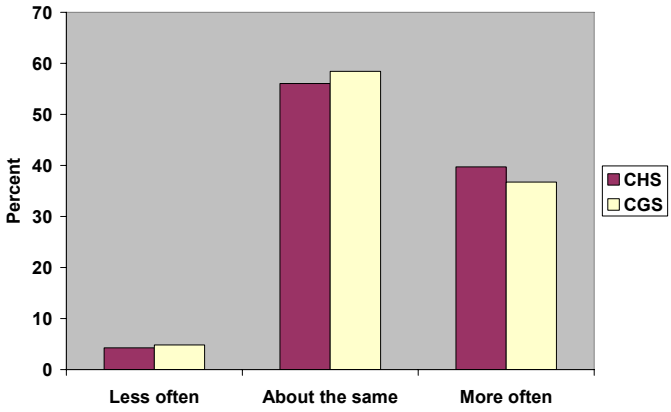
Students use online materials for learning



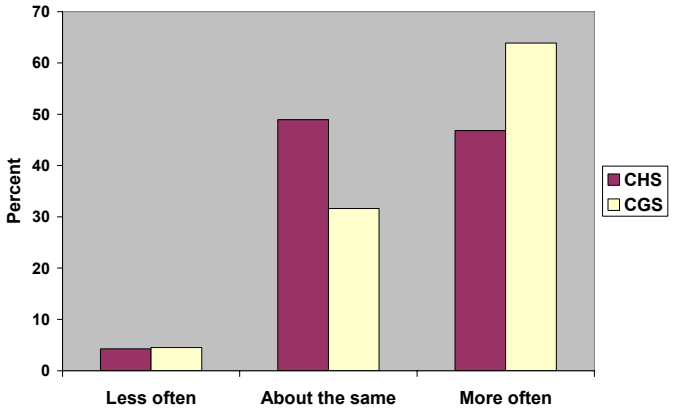
Students work in groups



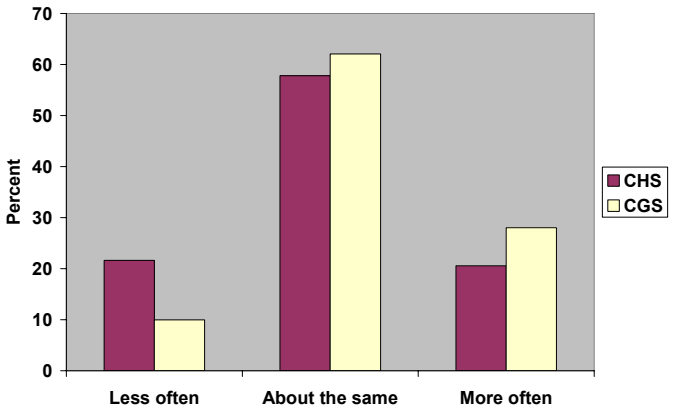
Students write more about a topic area



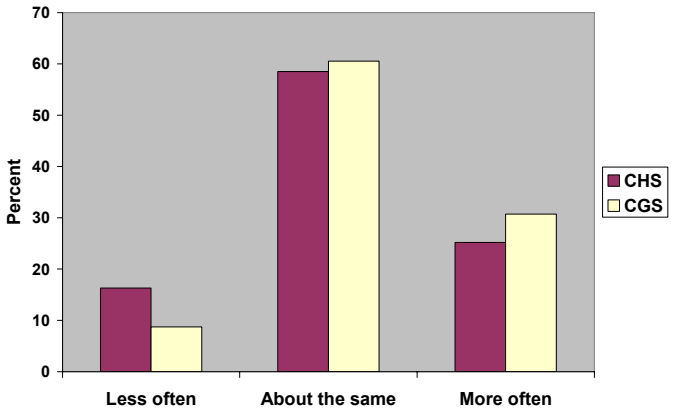
Students take quizzes and tests



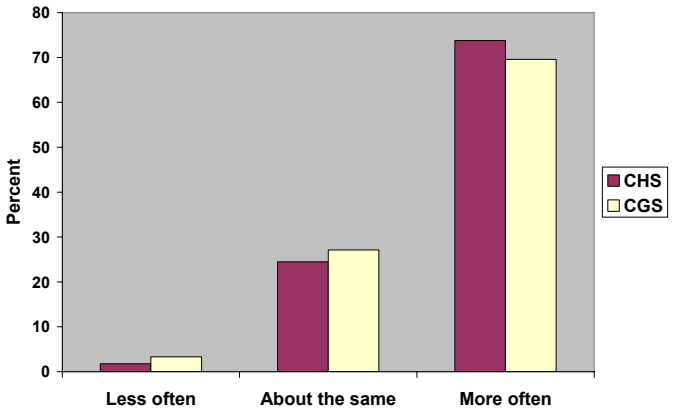
Students interact with teachers



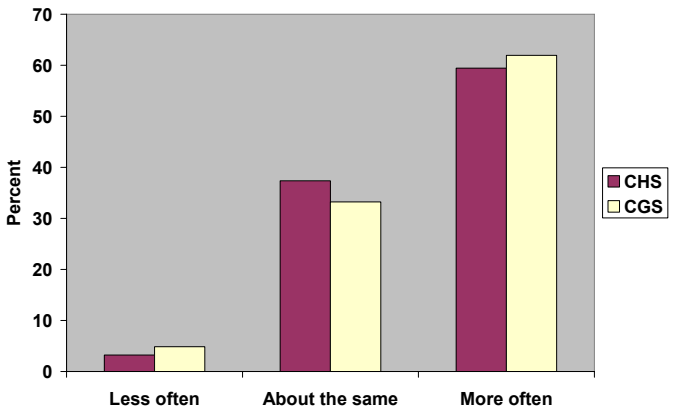
Students teach other students



Students present work in class



Students compose reports on the computer



Appendix E: Teacher Descriptive Statistics and Valid Cases per Survey Item

Catholic High School: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
gender	17	1	2	1.59	0.51
age group	17	1	8	3.53	1.55
number of years of teaching experience	16	2	4	3.31	0.87
rate own proficiency in IT/computer skills before the use of Tablet PC	17	2	4	2.88	0.49
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: English Language	15	0	2	0.53	0.83
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future Literature	15	0	2	0.27	0.59
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: History	15	0	2	0.27	0.70
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Aesthetics/ PE	15	0	2	0.27	0.59
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Mathematics	15	0	2	0.40	0.83
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Science	15	0	2	0.53	0.92
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Home Economics	15	0	2	0.13	0.52
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Design and Technology	15	0	1	0.07	0.26
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Civics and Moral Education	15	0	3	0.20	0.77
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: None	15	0	3	0.20	0.77
how long have you been using the Tablet PC in teaching	15	3	5	3.93	0.46
own Tablet PC, i.e. the Tablet PC belongs to you	15	1	2	1.67	0.49
number of hours per day you use your Tablet PC at home	15	1	3	1.73	0.88
number of hours per day you use your Tablet PC in school	15	2	4	3.53	0.64
use other technologies at home: Desktop Computer	14	1	2	1.21	0.43
use other technologies at home: Laptop Computer	5	1	2	1.40	0.55
use other technologies at home: Mobile Phone	15	1	1	1.00	0.00
use other technologies at home: Videogames	6	1	2	1.50	0.55
use other technologies at home: MP3 Player	5	1	2	1.60	0.55
Internet access at home	15	1	3	1.87	0.64
frequency of use of your Tablet PC per day: Searching for information	15	1	4	2.13	0.74

	N	Minimum	Maximum	Mean	Std. Deviation
frequency of use of your Tablet PC per day: Conducting research for lesson plans or curriculum design	14	1	4	2.21	0.80
frequency of use of your Tablet PC per day: E-mailing	13	1	3	2.15	0.55
frequency of use of your Tablet PC per day: Developing instructional materials	14	1	4	2.29	0.73
frequency of use of your Tablet PC per day: Developing student assessments	13	1	4	2.15	0.90
frequency of use of your Tablet PC per day: Producing homework assignments	14	1	4	2.29	0.83
frequency of use of your Tablet PC per day: Organising information	14	1	4	2.00	0.88
frequency of use of your Tablet PC per day: Creating presentations	15	1	4	2.20	0.86
frequency of use of your Tablet PC per day: Watching movies	11	1	1	1.00	0.00
frequency of use of your Tablet PC per day: Chatting online / Instant messaging	12	1	2	1.25	0.45
frequency of use of your Tablet PC per day: Playing games	11	1	2	1.09	0.30
frequency of use of your Tablet PC per day: Listening to music	12	1	2	1.33	0.49
frequency of use of your Tablet PC per day: Collaborating with colleagues	11	1	2	1.45	0.52
frequency of use of your Tablet PC per day: Grading student work	13	1	4	1.92	0.95
frequency of use of your Tablet PC per day: Giving students feedback on their work	12	1	4	1.83	1.03
frequency of use of your Tablet PC per day: Organising classroom activities in accordance with a lesson plan	13	1	4	1.92	0.86
Applications in Tablet PC - Fun with Construction: Mathematics	12	0	1	0.25	0.45
Applications in Tablet PC - Fun with Construction: Design and Technology	12	0	1	0.08	0.29
experience using Fun with Construction: is easy to use	12	0	1	0.25	0.45
experience using Fun with Construction: often frustrated when using	12	0	0	0.00	0.00
experience using Fun with Construction: helps me to teach better	12	0	1	0.08	0.29
experience using Fun with Construction: makes teaching fun	12	0	1	0.08	0.29
Applications in Tablet PC - Virtual Classroom: English Language	12	0	1	0.17	0.39
Applications in Tablet PC - Virtual Classroom: History	12	0	1	0.17	0.39
Applications in Tablet PC - Virtual Classroom: Mathematics	12	0	1	0.08	0.29
Applications in Tablet PC - Virtual Classroom: Science	12	0	1	0.33	0.49

	N	Minimum	Maximum	Mean	Std. Deviation
Applications in Tablet PC - Virtual Classroom: Home Economics	12	0	1	0.08	0.29
experience using Virtual Classroom: had problems	12	0	1	0.50	0.52
experience using Virtual Classroom: is easy to use	12	0	1	0.17	0.39
experience using Virtual Classroom: helps me to teach better	12	0	1	0.17	0.39
experience using Virtual Classroom: makes teaching fun	12	0	1	0.17	0.39
occurrence of classroom practices before Tablet PCs: Students select their own research areas	12	1	3	2.42	0.67
occurrence of classroom practices before Tablet PCs: Students explore a subject topic on their own	12	1	3	2.67	0.65
occurrence of classroom practices before Tablet PCs: Students research beyond their own textbooks	13	2	3	2.92	0.28
occurrence of classroom practices before Tablet PCs: Students use online materials for learning	13	2	3	2.92	0.28
occurrence of classroom practices before Tablet PCs: Students work in groups	13	1	3	2.38	0.65
occurrence of classroom practices before Tablet PCs: Students write more about a subject topic	12	1	3	2.25	0.62
occurrence of classroom practices before Tablet PCs: Students take quizzes and tests	13	1	3	2.23	0.73
occurrence of classroom practices before Tablet PCs: Students interact with teachers	14	1	3	1.79	0.58
occurrence of classroom practices before Tablet PCs: Students teach other students	14	1	3	2.14	0.77
occurrence of classroom practices before Tablet PCs: Students present work in class	14	2	3	2.50	0.52
effect Tablet PC has on high-achieving students: Participation in class	14	1	3	2.36	0.74
effect Tablet PC has on high-achieving students: Preparation for class	14	1	3	2.36	0.74
effect Tablet PC has on high-achieving students: Attendance	14	2	3	2.21	0.43
effect Tablet PC has on high-achieving students: Behaviour	14	1	3	1.93	0.62
effect Tablet PC has on high-achieving students: Motivation	14	1	3	2.50	0.65
effect Tablet PC has on high-achieving students: Engagement/interest level in class	14	1	3	2.57	0.65
effect Tablet PC has on high-achieving students: Ability to retain content material	14	2	3	2.43	0.51
effect Tablet PC has on high-achieving students: Amount of higher order thinking	14	1	3	2.43	0.65
effect Tablet PC has on high-achieving students: Quality of work	14	1	3	2.57	0.65
effect Tablet PC has on high-achieving students: Ability to work independently	14	2	3	2.71	0.47

	N	Minimum	Maximum	Mean	Std. Deviation
effect Tablet PC has on high-achieving students: Ability to work in groups	14	1	3	2.29	0.73
effect Tablet PC has on high-achieving students: Interaction with teachers	14	1	3	2.14	0.66
effect Tablet PC has on high-achieving students: Interaction with other students	14	1	3	2.36	0.74
effect Tablet PC has on high-achieving students: Students' computer literacy	14	2	3	2.93	0.27
effect Tablet PC has on high-achieving students: Quality of what students learn	14	1	3	2.64	0.63
effect Tablet PC has on high-achieving students: Quantity of what students learn	14	2	3.00	2.57	0.51
effect Tablet PC has on high-achieving students: Personalized learning opportunities	14	1	3.00	2.79	0.58
effect Tablet PC has on high-achieving students: Rigor of the curriculum	14	1	3.00	2.36	0.63
effect Tablet PC has on at-risk or low achieving students: Participation in class	14	1	3.00	1.93	0.83
effect Tablet PC has on at-risk or low achieving students: Preparation for class	14	1	3.00	1.79	0.70
effect Tablet PC has on at-risk or low achieving students: Attendance	14	1	2.00	1.93	0.27
effect Tablet PC has on at-risk or low achieving students: Behaviour	13	1	3.00	1.46	0.66
effect Tablet PC has on at-risk or low achieving students: Motivation	14	1	3.00	2.07	0.83
effect Tablet PC has on at-risk or low achieving students: Engagement/interest level in class	14	1	3.00	2.07	0.83
effect Tablet PC has on at-risk or low achieving students: Ability to retain content material	14	1	3.00	1.86	0.66
effect Tablet PC has on at-risk or low achieving students: Amount of higher-order thinking	14	1	3.00	1.93	0.73
effect Tablet PC has on at-risk or low achieving students: Quality of work	14	1	3.00	1.57	0.65
effect Tablet PC has on at-risk or low achieving students: Ability to work independently	14	1	3.00	2.00	0.88
effect Tablet PC has on at-risk or low achieving students: Ability to work in groups	14	1	3.00	1.86	0.77
effect Tablet PC has on at-risk or low achieving students: Interaction with teachers	14	1	3.00	1.93	0.83
effect Tablet PC has on at-risk or low achieving students: Interaction with other students	14	1	3.00	1.86	0.77
effect Tablet PC has on at-risk or low achieving students: Students' computer literacy	14	1	3.00	2.64	0.63
effect Tablet PC has on at-risk or low achieving students: Quality of what students learn	14	1	3.00	2.21	0.80

	N	Minimum	Maximum	Mean	Std. Deviation
effect Tablet PC has on at-risk or low achieving students: Quantity of what students learn	14	1	3.00	2.21	0.70
effect Tablet PC has on at-risk or low achieving students: Personalized learning opportunities	14	1	3.00	2.29	0.73
effect Tablet PC has on at-risk or low achieving students: Rigor of the curriculum	13	1	3.00	2.08	0.64
effect Tablet PC has on traditional students: Participation in class	14	1	3.00	2.29	0.61
effect Tablet PC has on traditional students: Preparation for class	14	2	3.00	2.21	0.43
effect Tablet PC has on traditional students: Attendance	14	2	3.00	2.14	0.36
effect Tablet PC has on traditional students: Behaviour	14	1	3.00	2.07	0.62
effect Tablet PC has on traditional students: Motivation	14	1	3.00	2.43	0.65
effect Tablet PC has on traditional students: Engagement/interest level in class	14	1	3.00	2.43	0.76
effect Tablet PC has on traditional students: Ability to retain content material	14	1	3.00	2.21	0.58
effect Tablet PC has on traditional students: Amount of traditional students higher-order thinking	14	1	3.00	2.36	0.63
effect Tablet PC has on traditional students: Quality of work	14	2	3.00	2.43	0.51
effect Tablet PC has on traditional students: Ability to work independently	14	2	3.00	2.57	0.51
effect Tablet PC has on traditional students: Ability to work in groups	14	1	3.00	2.36	0.74
effect Tablet PC has on traditional students: Interaction with teachers	14	1	3.00	2.14	0.53
effect Tablet PC has on traditional students: Interaction with other students	14	1	3.00	2.29	0.73
effect Tablet PC has on traditional students: Students' computer literacy	14	2	3.00	2.71	0.47
effect Tablet PC has on traditional students: Quality of what students learn	14	2	3.00	2.57	0.51
effect Tablet PC has on traditional students: Quantity of what students learn	14	2	3.00	2.50	0.52
effect Tablet PC has on traditional students: Personalized learning opportunities	14	2	3.00	2.57	0.51
effect Tablet PC has on traditional students: Rigor of the curriculum	14	2	3.00	2.43	0.51
School/Principal provided training	15	0	1.00	0.60	0.51
Microsoft provided training	15	0	1.00	0.07	0.26
Educational consultant provided training	15	0	1.00	0.20	0.41
Other provided training	15	0	1.00	0.13	0.35
professional training activities received: On-site training	15	0	1.00	0.13	0.35
professional training activities received: Off-site training	15	0	1.00	0.07	0.26

	N	Minimum	Maximum	Mean	Std. Deviation
professional training activities received: Summer institutes	15	0	0.00	0.00	0.00
professional training activities received: On-going training throughout the school year	15	0	1.00	0.73	0.46
professional training activities received: On-site embedded training (e.g., peer training, coaching, team training)	15	0	1.00	0.07	0.26
participated in any professional training activities that helped integrate technology into the curriculum	15	1	2.00	1.33	0.49
I feel comfortable using a Tablet PC in the classroom.	15	1	4.00	2.27	0.80
I like my students to learn on a Tablet PC.	15	1	4.00	2.53	0.83
I like my students working on assignments using Tablet PCs.	15	1	4.00	2.67	0.98
Even though an assignment might be submitted electronically, I still print out my student's work to grade it.	15	2	5.00	3.07	1.03
I have more access to educational resources.	15	1	4.00	2.13	1.13
My students find Tablet PCs useful in visualizing concepts	15	1	4.00	2.40	1.06
Tablet PCs encourage a different form of communication between me and my students.	15	2	4.00	2.67	0.82
I think that it takes a long time to finish my lesson preparation when I use a Tablet PC	15	1	4.00	2.47	0.99
Working with a Tablet PC makes me very nervous	14	1	4.00	3.36	1.01
I think that Tablet PCs are easy to use	15	2	4.00	2.53	0.83
I was given enough training in using Tablet PC	15	1	4.00	2.53	0.92
It's hard to find ways to use the Tablet PC in my classroom	15	2	4.00	3.33	0.90
My role in the classroom has changed	15	2	5.00	2.80	1.08
I can more reliably assess student progress, work, and effort	15	2	5.00	3.53	0.74
I like to discuss schoolwork with my students using Tablet PC	15	2	5.00	3.60	0.74
My beliefs about teaching and learning have changed	15	2	5.00	3.13	1.06
I do not think that student should be allowed to use the Tablet PC whenever they want during class.	15	1	3.00	1.80	0.68
Tablet PCs help me save time	15	2	5.00	3.27	0.96
Tablet PCs help the students' development of higher order thinking skills	15	2	4.00	3.00	0.76
Tablet PCs improved the students' achievement in my class	15	2	4.00	3.33	0.72
It's harder to manage my classroom when all students are using their Tablet PCs	15	1	4.00	2.00	0.76
I will be motivated to use Tablet PC if I own one	15	1	4.00	2.53	0.92
Every student should own one Tablet PC so that we can continue schoolwork outside classroom hours	15	2	5.00	3.07	1.03

Crescent Girls School: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
gender	25	1	2	1.92	0.28
age group	25	1	8	3.16	2.41
number of years of teaching experience	25	1	4	2.80	1.26
rate own proficiency in IT/computer skills before the use of Tablet PC	25	3	5	3.44	0.58
subjects currently teach, use the Tablet PC and wish to teach using the Tablet PC in the future: English Language	25	0	3	0.80	1.15
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Malay Language	25	0	2	0.08	0.40
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Chinese Language	25	0	2	0.36	0.76
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Literature	25	0	3	0.40	0.96
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Geography	25	0	2	0.24	0.66
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: History	25	0	3	0.12	0.60
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Aesthetics/ PE	25	0	2	0.16	0.47
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Mathematics	25	0	2	0.32	0.75
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Science	25	0	3	0.44	0.92
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Home Economics	25	0	2	0.16	0.55
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Arts and Crafts	25	0	3	0.20	0.71
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Design and Technology	25	0	0	0.00	0.00
subjects currently taught using the Tablet PC and wish to teach using the Tablet PC in the future: Civics and Moral Education	25	0	3	0.40	0.82
how long have you been using the Tablet PC in teaching	25	2	5	4.48	0.77
own Tablet PC, i.e. the Tablet PC belongs to you	25	1	2	1.88	0.33
number of hours per day you use your Tablet PC at home	25	1	3	1.84	0.85
number of hours per day you use your Tablet PC in school	25	3	4	3.60	0.50
use other technologies at home: Desktop Computer	21	1	2	1.14	0.36
use other technologies at home: Laptop Computer	17	1	2	1.35	0.49
use other technologies at home: Mobile Phone	24	1	1	1.00	0.00
use other technologies at home: Videogames	12	1	2	1.58	0.51
use other technologies at home: MP3 Player	15	1	2	1.40	0.51
Internet access at home	25	1	3	1.72	0.61

	N	Minimum	Maximum	Mean	Std. Deviation
frequency of use of your Tablet PC per day: Searching for information	25	1	4	2.84	0.62
frequency of use of your Tablet PC per day: Conducting research for lesson plans or curriculum design	25	1	4	2.76	0.72
frequency of use of your Tablet PC per day: E-mailing	25	1	4	2.48	0.65
frequency of use of your Tablet PC per day: Developing instructional materials	24	2	4	2.83	0.76
frequency of use of your Tablet PC per day: Developing student assessments	25	2	4	2.64	0.64
frequency of use of your Tablet PC per day: Producing homework assignments	24	2	4	2.63	0.58
frequency of use of your Tablet PC per day: Organizing information	24	1	4	2.71	0.62
frequency of use of your Tablet PC per day: Creating presentations	24	2	4	2.71	0.62
frequency of use of your Tablet PC per day: Watching movies	24	1	3	1.25	0.61
frequency of use of your Tablet PC per day: Chatting online / Instant messaging	24	1	3	1.38	0.58
frequency of use of your Tablet PC per day: Playing games	24	1	2	1.04	0.20
frequency of use of your Tablet PC per day: Listening to music	24	1	4	1.79	0.93
frequency of use of your Tablet PC per day: Collaborating with colleagues	24	1	4	2.13	0.90
frequency of use of your Tablet PC per day: Grading student work	24	1	3	2.00	0.72
frequency of use of your Tablet PC per day: Giving students feedback on their work	24	1	3	1.71	0.69
frequency of use of your Tablet PC per day: Organizing classroom activities in accordance with a lesson plan	25	1	3	2.28	0.74
Applications in Tablet PC - Mind Book: English Language	21	0	1	0.10	0.30
Applications in Tablet PC - Mind Book: Literature	21	0	1	0.05	0.22
Applications in Tablet PC - Mind Book: Civics and Moral Education	21	0	1	0.05	0.22
experience using Mind Book: is easy to use	22	0	1	0.05	0.21
Applications in Tablet PC - Fun with Construction: Geography	21	0	1	0.14	0.36
Applications in Tablet PC - Fun with Construction: Mathematics	21	0	1	0.24	0.44
Applications in Tablet PC - Fun with Construction: Science	21	0	1	0.05	0.22
Applications in Tablet PC - Fun with Construction: Home Economics	21	0	1	0.10	0.30
Applications in Tablet PC - Fun with Construction: Civics and Moral Education	21	0	1	0.05	0.22
experience using Fun with Construction: had problems	22	0	1	0.09	0.29

	N	Minimum	Maximum	Mean	Std. Deviation
experience using Fun with Construction: is easy to use	22	0	1	0.41	0.50
experience using Fun with Construction: helps me to teach better	22	0	1	0.27	0.46
experience using Fun with Construction: makes teaching fun	22	0	1	0.27	0.46
Applications in Tablet PC - Virtual Classroom: English Language	20	0	1	0.20	0.41
Applications in Tablet PC - Virtual Classroom: Chinese Language	20	0	1	0.20	0.41
Applications in Tablet PC - Virtual Classroom: Literature	20	0	1	0.15	0.37
Applications in Tablet PC - Virtual Classroom: Geography	20	0	1	0.10	0.31
Applications in Tablet PC - Virtual Classroom: Aesthetics/PE	20	0	1	0.05	0.22
Applications in Tablet PC - Virtual Classroom: Mathematics	20	0	1	0.15	0.37
Applications in Tablet PC - Virtual Classroom: Science	20	0	1	0.05	0.22
Applications in Tablet PC - Virtual Classroom: Civics and Moral Education	20	0	1	0.05	0.22
experience using Virtual Classroom: had problems	24	0	1	0.25	0.44
experience using Virtual Classroom: is easy to use	24	0	1	0.13	0.34
experience using Virtual Classroom: helps me to teach better	24	0	1	0.29	0.46
experience using Virtual Classroom: makes teaching fun	24	0	1	0.33	0.48
Applications in Tablet PC – Microsoft Learning Gateway: English Language	20	0	1	0.25	0.44
Applications in Tablet PC - Microsoft Learning Gateway: Chinese Language	20	0	1	0.20	0.41
Applications in Tablet PC - Microsoft Learning Gateway: Literature	20	0	1	0.15	0.37
Applications in Tablet PC - Microsoft Learning Gateway: Geography	20	0	1	0.10	0.31
Applications in Tablet PC - Microsoft Learning Gateway: History	20	0	0	0.00	0.00
Applications in Tablet PC - Microsoft Learning Gateway: Aesthetics/PE	20	0	1	0.10	0.31
Applications in Tablet PC - Microsoft Learning Gateway: Mathematics	20	0	1	0.20	0.41
Applications in Tablet PC - Microsoft Learning Gateway: Science	20	0	1	0.10	0.31
Applications in Tablet PC - Microsoft Learning Gateway: Civics and Moral Education	20	0	1	0.05	0.22
experience using Microsoft Learning Gateway: had problems	24	0	1	0.04	0.20
experience using Microsoft Learning Gateway: is easy to use	24	0	1	0.50	0.51

	N	Minimum	Maximum	Mean	Std. Deviation
experience using Microsoft Learning Gateway: helps me to teach better	24	0	1	0.50	0.51
experience using Microsoft Learning Gateway: makes teaching fun	24	0	1	0.33	0.48
Applications in Tablet PC - SketchPad: English Language	16	0	1	0.06	0.25
Applications in Tablet PC - SketchPad: Chinese Language	16	0	1	0.13	0.34
Applications in Tablet PC - SketchPad: Literature	16	0	1	0.06	0.25
Applications in Tablet PC - SketchPad: Science	16	0	1	0.06	0.25
experience using SketchPad: is easy to use	20	0	1	0.05	0.22
experience using SketchPad: makes teaching fun	20	0	1	0.10	0.31
Applications in Tablet PC - EduLearn: Science	12	0	1	0.08	0.29
experience using Chinese Character Writing: is easy to use	20	0	1	0.15	0.37
experience using Chinese Character Writing: makes learning fun	20	0	1	0.05	0.22
experience using Assessment of Chinese: is easy to use	20	0	1	0.15	0.37
experience using Assessment of Chinese: helps me to teach better	20	0	1	0.15	0.37
experience using Assessment of Chinese: makes teaching fun	20	0	1	0.05	0.22
occurrence of practices before Tablet PCs: Students select their own research areas	21	2	3	2.76	0.44
occurrence of practices before Tablet PCs: Students explore a subject topic on their own	21	2	3	2.71	0.46
occurrence of practices before Tablet PCs: Students research beyond their own textbooks	22	2	3	2.86	0.35
occurrence of practices before Tablet PCs: Students use online materials for learning	22	2	3	2.95	0.21
occurrence of practices before Tablet PCs: Students work in groups	23	1	3	2.65	0.57
occurrence of practices before Tablet PCs: Students write more about a subject topic	20	2	3	2.60	0.50
occurrence of practices before Tablet PCs: Students take quizzes and tests	22	1	3	2.45	0.60
occurrence of practices before Tablet PCs: Students interact with teachers	23	1	3	2.48	0.59
occurrence of practices before Tablet PCs: Students teach other students	22	1	3	2.55	0.67
occurrence of practices before Tablet PCs: Students present work in class	23	2	3	2.78	0.42
effect Tablet PC has on high-achieving students: Participation in class	23	2	3	2.70	0.47
effect Tablet PC has on high-achieving students: Preparation for class	24	2	3	2.58	0.50
effect Tablet PC has on high-achieving students: Attendance	24	2	3	2.29	0.46
effect Tablet PC has on high-achieving students: Behavior	24	1	3	2.13	0.61

	N	Minimum	Maximum	Mean	Std. Deviation
effect Tablet PC has on high-achieving students: Motivation	25	1	3	2.72	0.54
effect Tablet PC has on high-achieving students: Engagement/interest level in class	25	1	3	2.68	0.63
effect Tablet PC has on high-achieving students: Ability to retain content material	24	2	3	2.83	0.38
effect Tablet PC has on high-achieving students: Amount of higher order thinking	24	2	3	2.67	0.48
effect Tablet PC has on high-achieving students: Quality of work	24	1	3	2.54	0.59
effect Tablet PC has on high-achieving students: Ability to work independently	25	2	3	2.84	0.37
effect Tablet PC has on high-achieving students: Ability to work in groups	24	2	3	2.54	0.51
effect Tablet PC has on high-achieving students: Interaction with teachers	24	1	3	2.42	0.58
effect Tablet PC has on high-achieving students: Interaction with other students	24	2	3	2.67	0.48
effect Tablet PC has on high-achieving students: Students' computer literacy	24	2	3	2.83	0.38
effect Tablet PC has on high-achieving students: Quality of what students learn	25	2	3	2.76	0.44
effect Tablet PC has on high-achieving students: Quantity of what students learn	24	2	3	2.79	0.41
effect Tablet PC has on high-achieving students: Personalized learning opportunities	24	2	3	2.83	0.38
effect Tablet PC has on high-achieving students: Rigor of the curriculum	24	2	3	2.50	0.51
effect Tablet PC has on at-risk or low achieving students: Participation in class	24	1	3	2.63	0.65
effect Tablet PC has on at-risk or low achieving students: Preparation for class	24	1	3	2.42	0.58
effect Tablet PC has on at-risk or low achieving students: Attendance	24	2	3	2.29	0.46
effect Tablet PC has on at-risk or low achieving students: Behavior	24	1	3	2.08	0.72
effect Tablet PC has on at-risk or low achieving students: Motivation	25	1	3	2.64	0.64
effect Tablet PC has on at-risk or low achieving students: Engagement/interest level in class	24	2	3	2.83	0.38
effect Tablet PC has on at-risk or low achieving students: Ability to retain content material	24	2	3	2.63	0.49
effect Tablet PC has on at-risk or low achieving students: Amount of at-risk or low achieving order thinking	24	2	3	2.54	0.51
effect Tablet PC has on at-risk or low achieving students: Quality of work	24	1	3	2.50	0.59

	N	Minimum	Maximum	Mean	Std. Deviation
effect Tablet PC has on at-risk or low achieving students: Ability to work independently	24	2	3	2.54	0.51
effect Tablet PC has on at-risk or low achieving students: Ability to work in groups	25	2	3	2.60	0.50
effect Tablet PC has on at-risk or low achieving students: Interaction with teachers	24	2	3	2.50	0.51
effect Tablet PC has on at-risk or low achieving students: Interaction with other students	24	2	3	2.67	0.48
effect Tablet PC has on at-risk or low achieving students: Students' computer literacy	24	2	3	2.96	0.20
effect Tablet PC has on at-risk or low achieving students: Quality of what students learn	25	2	3	2.64	0.49
effect Tablet PC has on at-risk or low achieving students: Quantity of what students learn	24	2	3	2.75	0.44
effect Tablet PC has on at-risk or low achieving students: Personalized learning opportunities	24	2	3	2.83	0.38
effect Tablet PC has on at-risk or low achieving students: Rigor of the curriculum	24	2	3	2.50	0.51
effect Tablet PC has on traditional students: Participation in class	24	1	3	2.63	0.58
effect Tablet PC has on traditional students: Preparation for class	24	2	3	2.63	0.49
effect Tablet PC has on traditional students: Attendance	24	2	3	2.25	0.44
effect Tablet PC has on traditional students: Behavior	24	2	3	2.42	0.50
effect Tablet PC has on traditional students: Motivation	24	2	3	2.75	0.44
effect Tablet PC has on traditional students: Engagement/interest level in class	24	2	3	2.67	0.48
effect Tablet PC has on traditional students: Ability to retain content material	23	2	3	2.78	0.42
effect Tablet PC has on traditional students: Amount of traditional students higher order thinking	24	2	3	2.54	0.51
effect Tablet PC has on traditional students: Quality of work	24	2	3	2.71	0.46
effect Tablet PC has on traditional students: Ability to work independently	24	2	3	2.75	0.44
effect Tablet PC has on traditional students: Ability to work in groups	24	2	3	2.63	0.49
effect Tablet PC has on traditional students: Interaction with teachers	23	2	3	2.39	0.50
effect Tablet PC has on traditional students: Interaction with other students	24	2	3	2.54	0.51
effect Tablet PC has on traditional students: Students' computer literacy	24	2	3	2.83	0.38
effect Tablet PC has on traditional students: Quality of what students learn	24	2	3	2.67	0.48
effect Tablet PC has on traditional students: Quantity of what students learn	24	2	3	2.67	0.48

	N	Minimum	Maximum	Mean	Std. Deviation
effect Tablet PC has on traditional students: Personalized learning opportunities	24	2	3	2.75	0.44
effect Tablet PC has on traditional students: Rigor of the curriculum	24	2	3	2.54	0.51
School/Principal provided training	25	0	1	0.04	0.20
Microsoft provided training	25	0	1	0.12	0.33
Educational consultant provided training	25	0	1	0.04	0.20
Other provided training	25	0	1	0.80	0.41
professional training activities received: On-site training	25	0	1	0.12	0.33
professional training activities received: Summer institutes	25	0	1	0.20	0.41
professional training activities received: On-going training throughout the school year	25	0	1	0.20	0.41
professional training activities received: On-site embedded training (e.g., peer training, coaching, team training)	25	0	1	0.04	0.20
professional training activities received: Other	25	0	1	0.36	0.49
participated in any professional training activities that helped integrate technology into the curriculum	25	1	2	1.12	0.33
I feel comfortable using a Tablet PC in the classroom.	25	1	3	1.76	0.60
I like my students to learn on a Tablet PC.	25	1	4	2.08	0.81
I like my students working on assignments using Tablet PCs.	25	1	4	2.16	0.75
Even though an assignment might be submitted electronically, I still print out my student's work to grade it.	24	1	4	2.58	0.93
I have more access to educational resources.	25	1	4	1.92	0.91
My students find Tablet PCs useful in visualizing concepts	25	1	3	2.04	0.79
Tablet PCs encourage a different form of communication between me and my students.	25	1	3	1.88	0.60
I think that it takes a long time to finish my lesson preparation when I use a Tablet PC	25	1	4	3.00	0.91
Working with a Tablet PC makes me very nervous	25	2	5	3.80	0.65
I think that Tablet PCs are easy to use	25	1	4	2.04	0.73
I was given enough training in using Tablet PC	25	1	4	2.28	0.98
It's hard to find ways to use the Tablet PC in my classroom	25	2	5	3.56	0.82
My role in the classroom has changed	25	1	4	2.36	0.76
I can more reliably assess student progress, work, and effort	25	1	4	2.76	0.83
I like to discuss schoolwork with my students using Tablet PC	25	1	4	2.72	0.79
My beliefs about teaching and learning have changed	24	1	4	2.58	0.93
I do not think that student should be allowed to use the Tablet PC whenever they want during class.	25	1	4	2.16	0.62
Tablet PCs help me save time	24	1	4	2.63	0.71
Tablet PCs help the students' development of higher order thinking skills	25	1	3	2.20	0.71

	N	Minimum	Maximum	Mean	Std. Deviation
Tablet PCs improved the students' achievement in my class	25	1	3	2.48	0.59
It's harder to manage my classroom when all students are using their Tablet PCs	24	2	4	2.88	0.95
I will be motivated to use Tablet PC if I own one	25	1	4	2.28	0.89
Every student should own one Tablet PC so that we can continue schoolwork outside classroom hours	25	1	4	2.40	0.76

Appendix F: Student Descriptive Statistics and Valid Cases per Survey Item

Catholic High School: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Class	289	1	8	4.62	2.28
Stream	275	1	2	1.53	0.50
PSLE Aggregate	274	225	299	247.42	8.42
Age of student	287	13	16	13.66	0.54
how long student has attended school	286	0.5	8	2.75	2.21
rate proficiency in IT/computer skills before use of Tablet PC	288	1	5	3.17	0.78
subjects required to use Tablet PC: English language	285	0	1	0.95	0.21
subjects required to use Tablet PC: Malay language	285	0	1	0.01	0.10
subjects required to use Tablet PC: Chinese language	285	0	1	0.94	0.24
subjects required to use Tablet PC: Literature	285	0	1	0.85	0.36
subjects required to use Tablet PC: Geography	285	0	1	0.28	0.45
subjects required to use Tablet PC: History	285	0	1	0.93	0.26
subjects required to use Tablet PC: Music/ PE & CCA	285	0	1	0.76	0.43
subjects required to use Tablet PC: Mathematics	285	0	1	0.82	0.39
subjects required to use Tablet PC: Science	285	0	1	0.99	0.08
subjects required to use Tablet PC: Home Economics	285	0	1	0.67	0.47
subjects required to use Tablet PC: Arts & Crafts	285	0	1	0.67	0.47
subjects required to use Tablet PC: Design & Technology	284	0	1	0.43	0.50
subjects required to use Tablet PC: Civics & Moral Education/ National Education	286	0	1	0.17	0.38
subjects Tablet PC is helpful in learning: English language	281	0	1	0.84	0.37
subjects Tablet PC is helpful in learning: Malay language	281	0	1	0.01	0.10
subjects Tablet PC is helpful in learning: Chinese language	279	0	1	0.65	0.48
subjects Tablet PC is helpful in learning: Literature	281	0	1	0.69	0.46
subjects Tablet PC is helpful in learning: Geography	281	0	1	0.19	0.39
subjects Tablet PC is helpful in learning: History	280	0	1	0.83	0.38
subjects Tablet PC is helpful in learning: Music/ PE & CCA	279	0	1	0.20	0.40
subjects Tablet PC is helpful in learning: Mathematics	280	0	1	0.61	0.49
subjects Tablet PC is helpful in learning: Science	281	0	1	0.96	0.20
subjects Tablet PC is helpful in learning: Home Economics	281	0	1	0.37	0.48
subjects Tablet PC is helpful in learning: Arts & Crafts	281	0	1	0.43	0.50
subjects Tablet PC is helpful in learning: Design & Technology	281	0	1	0.20	0.40
subjects Tablet PC is helpful in learning: Civics & Moral Education/ National Education	281	0	1	0.09	0.29

	N	Minimum	Maximum	Mean	Std. Deviation
how long been using Tablet PC	285	1	5	4.04	0.42
have own Tablet PC	281	1	2	1.10	0.30
number of hours use Tablet PC at home on a daily basis	276	1	4	3.11	0.63
number of hours use Tablet PC in school on a daily basis	282	1	4	3.52	0.57
other technologies use at home other than Tablet PC: desktop computer	279	0	1	0.87	0.33
other technologies use at home other than Tablet PC: laptop computer	279	0	1	0.22	0.41
other technologies use at home other than Tablet PC: mobile phone	281	0	1	0.84	0.37
other technologies use at home other than Tablet PC: video games	279	0	1	0.53	0.50
other technologies use at home other than Tablet PC: mp3 music player	279	0	1	0.49	0.50
Internet access at home	281	1	3	1.95	0.42
frequency of use of Tablet PC on a daily basis: searching for information	285	1	5	3.28	0.99
frequency of use of Tablet PC on a daily basis: E-mailing	283	1	5	2.58	0.77
frequency of use of Tablet PC on a daily basis: typing/writing and editing reports	284	1	5	3.25	0.99
frequency of use of Tablet PC on a daily basis: organizing information	284	1	5	3.03	0.95
frequency of use of Tablet PC on a daily basis: working together on group assignments	284	1	5	3.31	1.05
frequency of use of Tablet PC on a daily basis: creating presentations	282	1	5	3.30	1.11
frequency of use of Tablet PC on a daily basis: watching movies	280	1	5	2.13	1.18
frequency of use of Tablet PC on a daily basis: chatting online/Instant messaging	283	1	5	3.34	1.27
frequency of use of Tablet PC on a daily basis: playing games	283	1	5	3.10	1.17
frequency of use of Tablet PC on a daily basis: listening to music	284	1	5	3.26	1.21
frequency of use of Tablet PC on a daily basis: learning Online	281	1	5	3.11	1.01
frequency of use of Tablet PC on a daily basis: making graphics, art or drawings	282	1	5	2.60	0.97
frequency of use of Tablet PC on a daily basis: creating spreadsheets and graphic charts of data	277	1	5	2.14	0.94
frequency of use of Tablet PC on a daily basis: accessing information posted by my teacher	282	1	5	3.45	0.91
frequency of use of Tablet PC on a daily basis: reading material for school	284	1	5	3.00	1.01
frequency of use of Tablet PC on a daily basis: highlighting or marking the text while reading for school	280	1	5	2.65	0.93

	N	Minimum	Maximum	Mean	Std. Deviation
Applications in Tablet PC - Fun with Construction: English Language	267	0	1	0.00	0.06
Applications in Tablet PC - Fun with Construction: Malay Language	267	0	1	0.01	0.09
Applications in Tablet PC - Fun with Construction: Chinese Language	267	0	0	0.00	0.00
Applications in Tablet PC - Fun with Construction: Literature	267	0	1	0.00	0.06
Applications in Tablet PC - Fun with Construction: Geography	267	0	1	0.03	0.18
Applications in Tablet PC - Fun with Construction: History	267	0	0	0.00	0.00
Applications in Tablet PC - Fun with Construction: Aesthetics/PE	267	0	1	0.01	0.11
Applications in Tablet PC - Fun with Construction: Mathematics	267	0	1	0.82	0.38
Applications in Tablet PC - Fun with Construction: Science	267	0	1	0.13	0.33
Applications in Tablet PC - Fun with Construction: Home Economics	267	0	1	0.00	0.06
Applications in Tablet PC - Fun with Construction: Arts and Crafts	267	0	1	0.04	0.20
Applications in Tablet PC - Fun with Construction: Design and Technology	267	0	1	0.09	0.29
Applications in Tablet PC - Fun with Construction: Civics and Moral Education	267	0	0	0.00	0.00
Applications in Tablet PC - Fun with Construction: Not applicable	267	0	1	0.16	0.37
experience using Fun with Construction: never used, or no opinion	273	0	1	0.19	0.39
experience using Fun with Construction: had problems	272	0	1	0.22	0.41
experience using Fun with Construction: is easy to use	272	0	1	0.32	0.47
experience using Fun with Construction: often frustrated when using	272	0	1	0.17	0.38
experience using Fun with Construction: helps me learn more	272	0	1	0.23	0.42
experience using Fun with Construction: makes learning fun	272	0	1	0.21	0.41
experience using Fun with Construction: makes learning more difficult	273	0	1	0.04	0.19
Applications in Tablet PC - Virtual Classroom: English Language	252	0	1	0.21	0.41
Applications in Tablet PC - Virtual Classroom: Malay Language	252	0	1	0.00	0.06
Applications in Tablet PC - Virtual Classroom: Chinese Language	252	0	1	0.13	0.33
Applications in Tablet PC - Virtual Classroom: Literature	252	0	1	0.13	0.34

	N	Minimum	Maximum	Mean	Std. Deviation
Applications in Tablet PC - Virtual Classroom: Geography	251	0	1	0.06	0.23
Applications in Tablet PC - Virtual Classroom: History	252	0	1	0.29	0.45
Applications in Tablet PC - Virtual Classroom: Aesthetics/PE	252	0	1	0.02	0.13
Applications in Tablet PC - Virtual Classroom: Mathematics	252	0	1	0.16	0.37
Applications in Tablet PC - Virtual Classroom: Science	252	0	1	0.56	0.50
Applications in Tablet PC - Virtual Classroom: Home Economics	252	0	1	0.06	0.24
Applications in Tablet PC - Virtual Classroom: Arts and Crafts	252	0	1	0.06	0.23
Applications in Tablet PC - Virtual Classroom: Design and Technology	252	0	1	0.03	0.18
Applications in Tablet PC - Virtual Classroom: Not applicable	254	0	1	0.28	0.45
experience using Virtual Classroom: never used, or no opinion	269	0	1	0.29	0.45
experience using Virtual Classroom: had problems	269	0	1	0.08	0.27
experience using Virtual Classroom: is easy to use	269	0	1	0.46	0.50
experience using Virtual Classroom: often frustrated when using	269	0	1	0.07	0.26
experience using Virtual Classroom: helps me learn more	269	0	1	0.08	0.27
experience using Virtual Classroom: makes learning fun	269	0	1	0.10	0.30
experience using Virtual Classroom: application making learning more difficult	268	0	1	0.06	0.24
experience using Chinese Character Writing: never used, or no opinion	274	0	1	0.26	0.44
experience using Chinese Character Writing: had problems	275	0	1	0.07	0.25
experience using Chinese Character Writing: is easy to use	276	0	1	0.50	0.50
experience using Chinese Character Writing: often frustrated when using	276	0	1	0.08	0.27
experience using Chinese Character Writing: helps me learn more	276	0	1	0.19	0.39
experience using Chinese Character Writing: makes learning fun	276	0	1	0.16	0.37
experience using Chinese Character Writing: application making learning more difficult	276	0	1	0.03	0.17
use Tablet PC anywhere you want in school	278	1	2	1.28	0.45
teacher tells you when you can use Tablet PC in class	280	1	2	1.09	0.28
allowed to load any non-copywrited or non-pirated programs or media to Tablet PC that you want	279	1	2	1.67	0.47
Tablet PC convenient to use anywhere	280	1	2	1.19	0.39
enjoy reading off the Tablet PC	279	1	2	1.26	0.44
Tablet PC changed notetaking ways	280	1	2	1.17	0.37

	N	Minimum	Maximum	Mean	Std. Deviation
short battery time get in the way of using Tablet PC	280	1	2	1.19	0.39
feel comfortable using Tablet PC in classroom	281	1	5	1.85	0.70
like learning on a Tablet PC	281	1	5	1.98	0.77
like working on assignments using Tablet PCs	281	1	5	2.04	0.76
challenge of solving problems with Tablet PC does not appeal to me	281	1	5	2.71	0.89
like the way Tablet PC helps me in group work	281	1	5	1.87	0.75
takes a long time to finish my schoolwork when I use a Tablet PC	281	1	5	3.22	0.96
Tablet PCs improve the quality of my schoolwork	282	1	5	2.54	0.90
working with a Tablet PC makes me very nervous	282	1	5	3.77	0.98
Tablet PCs are easy to use	280	1	5	1.93	0.75
given enough training in using Tablet PC	281	1	5	2.31	0.91
can learn a lot using Tablet PCs	282	1	5	1.99	0.75
using Tablet PCs do not interest me very much	280	1	5	3.64	0.99
Tablet PCs make schoolwork easier to do	279	1	5	2.34	0.90
typing skills get in the way of my assignments on the Tablet PC	280	1	5	3.34	1.15
like to discuss schoolwork using Tablet PC	281	1	5	2.32	0.84
enjoy how Tablet PCs are used in daily lives	280	1	5	2.10	0.72
learning with Tablet PC helps me to prepare for the future	281	1	5	2.19	0.79
Tablet PCs help me save time	281	1	5	2.29	0.88
Tablet PC allows me to learn independently	281	1	5	2.16	0.72
Tablet PC helps me to organize my work	281	1	5	2.07	0.73
like owning a Tablet PC	281	1	5	1.67	0.82
Prefer tablet mode: doing complex problems and problem solving	280	1	3	1.66	0.70
prefer tablet mode: doing simple calculations	281	1	3	1.90	0.58
prefer tablet mode: taking notes during lessons	279	1	3	1.41	0.54
prefer tablet mode: drawing diagrams while taking notes during lessons	280	1	3	1.25	0.54
prefer tablet mode: making a map	281	1	3	1.52	0.77
prefer tablet mode: inserting graphics in a report	280	1	3	1.92	0.54
prefer tablet mode: reading off the screen	281	1	3	1.86	0.41
prefer tablet mode: studying for a test	280	1	3	1.91	0.41
prefer tablet mode: searching the Internet	280	1	3	1.99	0.20
prefer tablet mode: drawing	278	1	3	1.22	0.56
students select their own topics for assignments	283	1	3	1.94	0.61
students explore a subject area on their own	282	1	3	2.23	0.65
students research beyond their textbooks	281	1	3	2.61	0.57

	N	Minimum	Maximum	Mean	Std. Deviation
students use online materials for learning	281	1	3	2.65	0.55
students work in groups	282	1	3	2.49	0.56
students write more about a topic area	282	1	3	2.35	0.56
students takes quizzes and tests	282	1	3	2.43	0.58
students interact with teachers	282	1	3	1.99	0.65
students teach other students	282	1	3	2.09	0.64
student present work in class	282	1	3	2.72	0.49
student compose reports on the computer	281	1	3	2.56	0.56

Crescent Girls School: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Class	342	9	17	12.96	2.63
Stream	327	1	2	1.81	0.39
PSLE Aggregate	340	225	268	245	5.8
Age of student	296	12	16	13.6	0.57
how long student attended school	239	1	2	1.76	0.29
rate proficiency in IT/computer skills before use of Tablet PC	343	1	5	3.19	0.70
subjects required to use Tablet PC: English language	335	0	1	0.92	0.28
subjects required to use Tablet PC: Malay language	335	0	0	0.00	0.00
subjects required to use Tablet PC: Chinese language	335	0	1	0.31	0.46
subjects required to use Tablet PC: Literature	335	0	1	0.89	0.31
subjects required to use Tablet PC: Geography	335	0	1	0.97	0.18
subjects required to use Tablet PC: History	334	0	1	0.26	0.44
subjects required to use Tablet PC: Music/ PE & CCA	335	0	1	0.07	0.26
subjects required to use Tablet PC: Mathematics	335	0	1	0.91	0.29
subjects required to use Tablet PC: Science	334	0	1	0.99	0.11
subjects required to use Tablet PC: Home Economics	334	0	1	0.75	0.43
subjects required to use Tablet PC: Arts & Crafts	334	0	1	0.69	0.46
subjects required to use Tablet PC: Design & Technology	335	0	1	0.05	0.22
subjects required to use Tablet PC: Civics & Moral Education/ National Education	332	0	1	0.26	0.44
subjects Tablet PC is helpful in learning: English language	324	0	1	0.73	0.45
subjects Tablet PC is helpful in learning: Malay language	324	0	0	0.00	0.00
subjects Tablet PC is helpful in learning: Chinese language	323	0	1	0.17	0.38
subjects Tablet PC is helpful in learning: Literature	324	0	1	0.73	0.45
subjects Tablet PC is helpful in learning: Geography	323	0	1	0.85	0.36
subjects Tablet PC is helpful in learning: History	320	0	1	0.21	0.41
subjects Tablet PC is helpful in learning: Music/ PE & CCA	324	0	1	0.05	0.22
subjects Tablet PC is helpful in learning: Mathematics	323	0	1	0.69	0.46
subjects Tablet PC is helpful in learning: Science	324	0	1	0.90	0.29
subjects Tablet PC is helpful in learning: Home Economics	323	0	1	0.38	0.49
subjects Tablet PC is helpful in learning: Arts & Crafts	324	0	1	0.42	0.49
subjects Tablet PC is helpful in learning: Design & Technology	324	0	0	0.00	0.00
subjects Tablet PC is helpful in learning: Civics & Moral Education/ National Education	324	0	1	0.11	0.31
how long been using Tablet PC	335	1	5	4.91	0.50
have own Tablet PC	333	1	2	1.07	0.25

	N	Minimum	Maximum	Mean	Std. Deviation
number of hours use Tablet PC at home on a daily basis	329	1	4	3.07	0.79
number of hours use Tablet PC in school on a daily basis	330	1	4	3.21	0.63
other technologies use at home other than Tablet PC: desktop computer	336	0	1	0.78	0.41
other technologies use at home other than Tablet PC: laptop computer	336	0	1	0.29	0.45
other technologies use at home other than Tablet PC: mobile phone	336	0	1	0.88	0.33
other technologies use at home other than Tablet PC: video games	336	0	0	0.00	0.00
other technologies use at home other than Tablet PC: mp3 music player	335	0	1	0.54	0.50
Internet access at home	337	1	3	1.84	0.40
frequency of use of Tablet PC on a daily basis: searching for information	338	1	5	3.19	1.01
frequency of use of Tablet PC on a daily basis: E-mailing	338	1	5	2.84	0.91
frequency of use of Tablet PC on a daily basis: typing/writing and editing reports	337	1	5	3.29	1.02
frequency of use of Tablet PC on a daily basis: taking notes in class	337	1	5	3.68	1.00
frequency of use of Tablet PC on a daily basis: organizing information	337	1	5	3.19	0.99
frequency of use of Tablet PC on a daily basis: working together on group assignments	337	1	5	3.23	1.06
frequency of use of Tablet PC on a daily basis: creating presentations	336	1	5	3.19	1.09
frequency of use of Tablet PC on a daily basis: watching movies	338	1	5	2.61	1.34
frequency of use of Tablet PC on a daily basis: chatting online/Instant messaging	338	1	5	3.69	1.15
frequency of use of Tablet PC on a daily basis: playing games	337	1	5	3.15	1.16
frequency of use of Tablet PC on a daily basis: listening to music	337	1	5	3.75	1.08
frequency of use of Tablet PC on a daily basis: learning online	338	1	5	3.18	1.01
frequency of use of Tablet PC on a daily basis: making graphics, art or drawings	337	1	5	2.90	1.16
frequency of use of Tablet PC on a daily basis: creating spreadsheets and graphic charts of data	337	1	5	2.27	1.02
frequency of use of Tablet PC on a daily basis: accessing information posted by my teacher	337	1	5	3.31	0.93
frequency of use of Tablet PC on a daily basis: reading material for school	337	1	5	3.18	1.00
frequency of use of Tablet PC on a daily basis: highlighting or marking the text while reading for school	337	1	5	3.08	1.09

	N	Minimum	Maximum	Mean	Std. Deviation
Applications in Tablet PC - Mind Book: English Language	307	0	1	0.36	0.48
Applications in Tablet PC - Mind Book: Chinese Language	305	0	1	0.06	0.23
Applications in Tablet PC - Mind Book: Literature	307	0	1	0.28	0.45
Applications in Tablet PC - Mind Book: Geography	307	0	1	0.37	0.48
Applications in Tablet PC - Mind Book: History	307	0	1	0.11	0.31
Applications in Tablet PC - Mind Book: Aesthetics/PE	306	0	0	0.00	0.00
Applications in Tablet PC - Mind Book: Mathematics	305	0	1	0.30	0.46
Applications in Tablet PC - Mind Book: Science	307	0	1	0.39	0.49
Applications in Tablet PC - Mind Book: Home Economics	307	0	1	0.17	0.37
Applications in Tablet PC - Mind Book: Arts and Crafts	307	0	1	0.10	0.31
Applications in Tablet PC - Mind Book: Civics and Moral Education	307	0	1	0.04	0.19
Applications in Tablet PC - Mind Book: Not applicable	307	0	1	0.55	0.50
experience using Mind Book with Construction: never used, or no opinion	298	0	1	0.71	0.46
experience using Mind Book with Construction: is easy to use	300	0	1	0.26	0.44
experience using Mind Book Construction: helps me learn more	300	0	1	0.11	0.31
Applications in Tablet PC - Fun with Construction: Geography	319	0	1	0.32	0.47
Applications in Tablet PC - Fun with Construction: Mathematics	319	0	1	0.98	0.15
Applications in Tablet PC - Fun with Construction: Science	316	0	1	0.10	0.30
Applications in Tablet PC - Fun with Construction: Design and Technology	319	0	1	0.03	0.18
experience using Fun with Construction: had problems	259	0	1	0.34	0.48
experience using Fun with Construction: is easy to use	258	0	1	0.51	0.50
experience using Fun with Construction: helps me learn more	259	0	1	0.19	0.39
experience using Fun with Construction: makes learning fun	259	0	1	0.37	0.48
Applications in Tablet PC - Virtual Classroom: English Language	329	0	1	0.54	0.50
Applications in Tablet PC - Virtual Classroom: Chinese Language	330	0	1	0.06	0.24
Applications in Tablet PC - Virtual Classroom: Literature	330	0	1	0.17	0.38
Applications in Tablet PC - Virtual Classroom: Geography	330	0	1	0.34	0.47
Applications in Tablet PC - Virtual Classroom: Mathematics	331	0	1	0.55	0.50
Applications in Tablet PC - Virtual Classroom: Science	331	0	1	0.20	0.40

	N	Minimum	Maximum	Mean	Std. Deviation
Applications in Tablet PC - Virtual Classroom: Home Economics	331	0	1	0.08	0.26
Applications in Tablet PC - Virtual Classroom: Arts and Crafts	331	0	1	0.06	0.24
Applications in Tablet PC - Virtual Classroom: Civics and Moral Education	331	0	1	0.06	0.24
experience using Virtual Classroom: had problems	269	0	1	0.10	0.30
experience using Virtual Classroom: is easy to use	269	0	1	0.80	0.40
experience using Virtual Classroom: helps me learn more	269	0	1	0.19	0.39
experience using Virtual Classroom: makes learning fun	269	0	1	0.32	0.47
Applications in Tablet PC – Microsoft Learning Gateway: English Language	306	0	1	0.96	0.19
Applications in Tablet PC - Microsoft Learning Gateway: Chinese Language	306	0	1	0.55	0.50
Applications in Tablet PC - Microsoft Learning Gateway: Literature	306	0	1	0.92	0.26
Applications in Tablet PC - Microsoft Learning Gateway: Geography	305	0	1	0.96	0.19
Applications in Tablet PC - Microsoft Learning Gateway: History	306	0	1	0.23	0.42
Applications in Tablet PC - Microsoft Learning Gateway: Mathematics	306	0	1	0.95	0.21
Applications in Tablet PC - Microsoft Learning Gateway: Science	306	0	1	0.98	0.14
Applications in Tablet PC - Microsoft Learning Gateway: Home Economics	306	0	1	0.20	0.40
Applications in Tablet PC - Microsoft Learning Gateway: Arts and Crafts	306	0	1	0.20	0.40
Applications in Tablet PC - Microsoft Learning Gateway: Civics and Moral Education	306	0	1	0.08	0.27
experience using Microsoft Learning Gateway: had problems	305	0	1	0.03	0.18
experience using Microsoft Learning Gateway: is easy to use	304	0	1	0.76	0.43
experience using Microsoft Learning Gateway: often frustrated when using	305	0	1	0.03	0.18
experience using Microsoft Learning Gateway: helps me learn more	305	0	1	0.34	0.48
experience using Microsoft Learning Gateway: makes learning fun	305	0	1	0.39	0.49
experience using Microsoft Learning Gateway: application making learning more difficult	305	0	1	0.02	0.15
Applications in Tablet PC - SketchPad: English Language	316	0	1	0.23	0.42
Applications in Tablet PC - SketchPad: Literature	316	0	1	0.20	0.40
Applications in Tablet PC - SketchPad: Geography	317	0	1	0.22	0.42

	N	Minimum	Maximum	Mean	Std. Deviation
Applications in Tablet PC - SketchPad: Mathematics	317	0	1	0.22	0.42
Applications in Tablet PC - SketchPad: Science	316	0	1	0.22	0.41
Applications in Tablet PC - SketchPad: Home Economics	318	0	1	0.08	0.28
Applications in Tablet PC - SketchPad: Arts and Crafts	318	0	1	0.12	0.32
Applications in Tablet PC - SketchPad: Not applicable	318	0	1	0.62	0.49
experience using SketchPad: never used, or no opinion	311	0	1	0.68	0.47
experience using SketchPad: is easy to use	310	0	1	0.29	0.45
experience using SketchPad: often frustrated when using	310	0	1	0.03	0.17
experience using SketchPad: helps me learn more	310	0	1	0.06	0.25
experience using Learning of Mathematics: never used, or no opinion	315	0	1	0.78	0.41
experience using Learning of Mathematics: is easy to use	315	0	1	0.16	0.36
experience using Learning of Mathematics: helps me learn more	315	0	1	0.06	0.24
experience using Learning of Mathematics: makes learning fun	316	0	1	0.10	0.30
experience using Science Practical Assessment: never used, or no opinion	322	0	1	0.78	0.41
experience using Science Practical Assessment: is easy to use	322	0	1	0.11	0.31
experience using Science Practical Assessment: helps me learn more	322	0	1	0.07	0.25
experience using Science Practical Assessment: makes learning fun	322	0	1	0.11	0.31
experience using Chinese Character Writing: never used, or no opinion	318	0	1	0.72	0.45
experience using Chinese Character Writing: is easy to use	319	0	1	0.20	0.40
experience using Chinese Character Writing: often frustrated when using	318	0	1	0.03	0.17
experience using Chinese Character Writing: helps me learn more	319	0	1	0.06	0.24
experience using Chinese Character Writing: makes learning fun	319	0	1	0.09	0.29
experience using Chemist Pad: never used, or no opinion	322	0	1	0.95	0.22
experience using Chemist Pad: is easy to use	323	0	1	0.03	0.18
experience using Chemist Pad: helps me learn more	323	0	1	0.02	0.12
experience using Chemist Pad: makes learning fun	323	0	1	0.04	0.19
use Tablet PC anywhere you want in school	335	1	2	1.22	0.41
teacher tells you when you can use Tablet PC in class	334	1	2	1.16	0.37
allowed to load any non-copywrited or non-pirated programs or media to Tablet PC that you want	335	1	2	1.40	0.49
Tablet PC convenient to use anywhere	335	1	2	1.22	0.42
enjoy reading off the Tablet PC	335	1	2	1.45	0.50

	N	Minimum	Maximum	Mean	Std. Deviation
Tablet PC changed note taking ways	335	1	2	1.23	0.42
short battery time get in the way of using Tablet PC	335	1	2	1.09	0.29
feel comfortable using Tablet PC in classroom	336	1	5	1.88	0.76
like learning on a Tablet PC	336	1	5	2.11	0.92
like working on assignments using Tablet PCs	333	1	5	2.15	0.93
challenge of solving problems with Tablet PC does not appeal to me	335	1	5	2.93	0.82
like the way Tablet PC helps me in group work	332	1	5	2.13	0.85
it takes a long time to finish my schoolwork when I use a Tablet PC	333	1	5	3.04	1.01
Tablet PCs improve the quality of my schoolwork	336	1	5	2.65	0.90
working with a Tablet PC makes me very nervous	336	1	5	4.17	0.85
Tablet PCs are easy to use	334	1	5	1.96	0.82
given enough training in using Tablet PC	336	1	5	2.12	0.82
can learn a lot using Tablet PCs	335	1	5	2.20	0.86
using Tablet PCs do not interest me very much	336	1	5	3.69	0.96
Tablet PCs make schoolwork easier to do	336	1	5	2.67	0.92
typing skills get in the way of my assignments on the Tablet PC	336	1	5	3.59	1.15
like to discuss schoolwork using Tablet PC	336	1	5	2.54	0.88
enjoy how Tablet PCs are used in daily lives	334	1	5	2.11	0.85
learning with Tablet PC helps me to prepare for the future	336	1	5	2.30	0.84
Tablet PCs help me save time	336	1	5	2.62	0.98
Tablet PC allows me to learn independently	336	1	5	2.26	0.81
Tablet PC helps me to organize my work	334	1	5	2.13	0.83
like owning a Tablet PC	334	1	5	1.52	0.74
prefer tablet mode: doing complex problems and problem solving	336	1	3	1.58	0.74
prefer tablet mode: doing simple calculations	334	1	3	1.81	0.66
prefer tablet mode: taking notes during lessons	336	1	3	1.71	0.51
prefer tablet mode: drawing diagrams while taking notes during lessons	335	1	3	1.28	0.57
prefer tablet mode: making a map	336	1	3	1.47	0.77
prefer tablet mode: inserting graphics in a report	336	1	3	1.88	0.54
prefer tablet mode: reading off the screen	335	1	3	1.90	0.43
prefer tablet mode: studying for a test	336	1	3	2.00	0.56
prefer tablet mode: taking notes	335	1	3	1.66	0.54
prefer tablet mode: searching the Internet	335	1	3	1.95	0.25
prefer tablet mode: drawing	336	1	3	1.27	0.62
students select their own topics for assignments	331	1	3	1.91	0.49

	N	Minimum	Maximum	Mean	Std. Deviation
students explore a subject area on their own	332	1	3	2.40	0.65
students research beyond their textbooks	332	1	3	2.60	0.59
students use online materials for learning	332	1	3	2.77	0.50
students work in groups	332	1	3	2.49	0.57
students write more about a topic area	332	1	3	2.32	0.56
students takes quizzes and tests	332	1	3	2.59	0.58
students interact with teachers	332	1	3	2.18	0.59
students teach other students	332	1	3	2.22	0.59
student present work in class	332	1	3	2.66	0.54
student compose reports on the computer	331	1	3	2.57	0.59

Appendix G: Codebook for Catholic High School Student and Teacher Survey

This document contains the codebook information for the student and teacher survey items. The student and teacher surveys were administered online. This codebook provides information on the variable name, response categories, and type of variable for the student and teacher surveys. The purpose of the codebook is to document all survey items for communication and analysis purposes.

Survey data collected in May 2005 includes the following *N*s for Catholic High School:

- Students: 293
- Teachers: 17

Variable naming conventions

Each variable in the datasets are numbered, and start with the letters S or T.

- S: Survey items for the student survey
- T: Survey items for the teacher survey

There are two datasets for each school. One dataset is from the student survey and the second dataset is for the teacher survey.

Missing data coding information

Missing data is coded as such in the statistical packages we used to analyze the data. There are many reasons for missing data. Every effort in quality control is made to insure that missing data did not include responses that included "not applicable," "zero," or "none." Some reasons for missing data include non-response and unreliable respondent.

Student Survey

Variable Name	Survey Question	Response Categories	Type	Comments
S_id	Respondent ID		Open-Ended	SRI created variable to protect confidentiality of the student
school	School	1 = Catholic	Numeric	Value specifically for Catholic High School only
S8	Class	1 = 2-1 2 = 2-2 3 = 2-3 4 = 2-4 5 = 2-5 6 = 2-6 7 = 2-7 8 = 2-8	Numeric	Value specifically for Catholic High School only
S9	Stream	1 = Stream 2 = Express	Numeric	
S10	PSLE Aggregate		Open-Ended	
S11	How old are you? (number of years)		Open-Ended	
S12	How long have you been a student at this school? (number of years)		Open-Ended	
S13	How would you rate your proficiency in IT/computer skills before the use of Tablet PC?	1 = Very Poor 2 = Poor 3 = Average 4 = Very Good 5 = Excellent	Numeric	
Which subjects do you study that require the use of Tablet PC? (Tick all that apply):				
S14_A	English Language	0 = Not selected 1 = Selected	Numeric	
S14_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S14_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S14_D	Literature	0 = Not selected 1 = Selected	Numeric	
S14_E	Geography	0 = Not selected 1 = Selected	Numeric	
S14_F	History	0 = Not selected 1 = Selected	Numeric	
S14_G	Music / PE & CCA	0 = Not selected 1 = Selected	Numeric	
S14_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S14_I	Science	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S14_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S14_K	Art & Crafts	0 = Not selected 1 = Selected	Numeric	
S14_L	Design & Technology	0 = Not selected 1 = Selected	Numeric	
S14_M	Civics & Moral Education/National Education	0 = Not selected 1 = Selected	Numeric	
S15	Are there other subjects you study that require the use of Tablet PC? Please specify.		Open-Ended	
In which subjects is using the Tablet PC helpful to your learning? (Tick all that apply)				
S16_A	English Language	0 = Not selected 1 = Selected	Numeric	
S16_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S16_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S16_D	Literature	0 = Not selected 1 = Selected	Numeric	
S16_E	Geography	0 = Not selected 1 = Selected	Numeric	
S16_F	History	0 = Not selected 1 = Selected	Numeric	
S16_G	Aesthetics / PE & CCA	0 = Not selected 1 = Selected	Numeric	
S16_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S16_I	Science	0 = Not selected 1 = Selected	Numeric	
S16_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S16_K	Art & Crafts	0 = Not selected 1 = Selected	Numeric	
S16_L	Design & Technology	0 = Not selected 1 = Selected	Numeric	
S16_M	Civics & Moral Education/National Education	0 = Not selected 1 = Selected	Numeric	
S17	Are there other subjects in which using the Tablet PC is helpful to your learning? Please specify		Open-Ended	
S18	How long have you been using the Tablet PC?	1 = less than 1 month 2 = 1 to 2 months 3 = 2 to 3 months 4 = 4 to 5 months 5 = 6 months or more	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S19	Do you have your own Tablet PC, i.e., the Tablet PC belongs to you?	1 = Yes 2 = No	Numeric	
S20	How many hours do you use your Tablet PC at home on a daily basis?	1 = None 2 = less than 1 hour 3 = 1 to 4 hours 4 = greater than 4 hours	Numeric	
S21	How many hours do you use your Tablet PC in school on a daily basis?	1 = None 2 = less than 1 hour 3 = 1 to 4 hours 4 = greater than 4 hours	Numeric	
What other technologies do you use at home other than the Tablet PC? (Tick all that apply.)				
S22_A	Desktop computer	0 = Not selected 1 = Selected	Numeric	
S22_B	Laptop computer	0 = Not selected 1 = Selected	Numeric	
S22_C	Mobile phone	0 = Not selected 1 = Selected	Numeric	
S22_D	Videogames (e.g., X-box, Gameboy)	0 = Not selected 1 = Selected	Numeric	
S22_E	MP3 music player	0 = Not selected 1 = Selected	Numeric	
S23	Are there other technologies that you use at home? Please specify.		Open-Ended	
S24	Do you have Internet access at home?	1 = Yes, I have Dial Up connection 2 = Yes, I have a Broadband connection 3 = No, I do not have Internet access at home	Numeric	
How frequently do you engage in the following activities using your Tablet PC on a daily basis? (Tick one).				
S25_A	Searching for information	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_B	E-mailing	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S25_C	Typing/Writing and editing reports	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_D	Taking notes in class	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_E	Organizing information	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_F	Working together on group assignments	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_G	Creating presentations	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_H	Watching movies	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S25_I	Chatting online / Instant messaging	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_J	Playing games	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_K	Listening to music	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_L	Learning online	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_M	Making graphics, art, or drawings	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_N	Creating spreadsheets and graphic charts of data	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S25_O	Accessing information posted by my teacher such as homework, school schedule, quizzes, etc.	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_P	Reading material for school	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_Q	Highlighting or marking the text while reading for school	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
The Mind Book: A digital scrapbook where you can record down your train of thoughts and ideas and insert images and annotations. (Tick all that apply.)				
S26_A	English Language	0 = Not selected 1 = Selected	Numeric	Students at CHS were told to tick Not Applicable for questions involving Mind Book
S26_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S26_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S26_D	Literature	0 = Not selected 1 = Selected	Numeric	
S26_E	Geography	0 = Not selected 1 = Selected	Numeric	
S26_F	History	0 = Not selected 1 = Selected	Numeric	
S26_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
S26_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S26_I	Science	0 = Not selected 1 = Selected	Numeric	
S26_J	Home Economics	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S26_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
S26_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S26_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S26_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
S26_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using the Mind Book Digital Scrapbook. (Tick all that apply.)				
S27_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	Students at CHS were told to tick Not Applicable for questions involving Mind Book
S27_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S27_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S27_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S27_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S27_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S27_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
Fun with Construction: A digital web-board where you can make use of geometrical tools like compass, protractor, etc. (Tick all that apply.)				
S28_A	English Language	0 = Not selected 1 = Selected	Numeric	
S28_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S28_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S28_D	Literature	0 = Not selected 1 = Selected	Numeric	
S28_E	Geography	0 = Not selected 1 = Selected	Numeric	
S28_F	History	0 = Not selected 1 = Selected	Numeric	
S28_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
S28_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S28_I	Science	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S28_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S28_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
S28_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S28_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S28_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
S28_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using Fun with Construction. (Tick all that apply.)				
S29_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S29_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S29_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S29_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S29_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S29_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S29_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
Virtual Classroom: A wireless system whereby teachers can test/quiz students on understanding on a subject and have graphical representation. (Tick all that apply.)				
S30_A	English Language	0 = Not selected 1 = Selected	Numeric	
S30_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S30_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S30_D	Literature	0 = Not selected 1 = Selected	Numeric	
S30_E	Geography	0 = Not selected 1 = Selected	Numeric	
S30_F	History	0 = Not selected 1 = Selected	Numeric	
S30_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
S30_H	Mathematics	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S30_I	Science	0 = Not selected 1 = Selected	Numeric	
S30_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S30_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
S30_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S30_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S30_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
S30_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using the Virtual Classroom. (Tick all that apply.)				
S31_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S31_B	I have had problems using this application	0 = Not selected 1 = Selected	Numeric	
S31_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S31_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S31_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S31_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S31_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
EduLearn: In modules such as Forum and Homework, users can call out an editor to input with Digital Ink and the content will be updated into the system. (Tick all that apply.)				
S32_A	English Language	0 = Not selected 1 = Selected	Numeric	Students at CHS were told to tick Not Applicable for questions involving EduLearn
S32_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S32_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S32_D	Literature	0 = Not selected 1 = Selected	Numeric	
S32_E	Geography	0 = Not selected 1 = Selected	Numeric	
S32_F	History	0 = Not selected 1 = Selected	Numeric	
S32_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S32_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S32_I	Science	0 = Not selected 1 = Selected	Numeric	
S32_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S32_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
S32_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S32_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S32_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
S32_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using EduLearn. (Tick all that apply.)				
S33_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	Students at CHS were told to tick Not Applicable for questions involving EduLearn
S33_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S33_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S33_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S33_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S33_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S33_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
SketchPad: A digital ink friendly note-taking, sketching and diagrammatic tool allowing teachers to separate work from notes or questions from answers. Real-time collaborations allowing students to interact on the same documents real-time with peers and teachers. (Tick all that apply.)				
S34_A	English Language	0 = Not selected 1 = Selected	Numeric	Students at CHS were told to tick Not Applicable for questions involving SketchPad
S34_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S34_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S34_D	Literature	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S34_E	Geography	0 = Not selected 1 = Selected	Numeric	
S34_F	History	0 = Not selected 1 = Selected	Numeric	
S34_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
S34_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S34_I	Science	0 = Not selected 1 = Selected	Numeric	
S34_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S34_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
S34_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S34_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S34_N	None	0 = Not selected 1 = Selected	Numeric	
S34_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using SketchPad (Tick all that apply.)				
S35_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	Students at CHS were told to tick Not Applicable for questions involving SketchPad
S35_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S35_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S35_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S35_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S35_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S35_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
In 'Learning of Mathematics (transformation and functions) with Tablet' you may be prompted with an object and description of a transformation to be applied on the object. You will sketch the transformed object and the system will mark your answer and provide the correct answer. What is your experience with this application?				
S36_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	Students at CHS were told to tick Not Applicable for questions involving Learning of Mathematics

Variable Name	Survey Question	Response Categories	Type	Comments
S36_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S36_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S36_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S36_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S36_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S36_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
In Science Practical Assessment (SPA) you can plan experiments and draw experiment procedures and equipment. The plan can be submitted to teachers for assessment. What is your experience with this application?				
S37_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	Students at CHS were told to tick Not Applicable for questions involving SPA
S37_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S37_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S37_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S37_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S37_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S37_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
Training in Chinese Character Writing teaches students writing of Chinese characters. What is your experience with this application?				
S38_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S38_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S38_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S38_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S38_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S38_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S38_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
ChemistPad helps students learn chemistry in a fun way. Students can draw the molecular structure on the Tablet PC and it helps identify the molecular notation and beautify it. What is your experience with this application?				
S39_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	Students at CHS were told to tick Not Applicable for questions involving ChemistPad
S39_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S39_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S39_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S39_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S39_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S39_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
S40	List any applications that you used on the Tablet PC but were not listed above.	0 = Not selected 1 = Selected	Open-Ended	
S41_A	Can you use the Tablet PC anywhere you want in the school?	1 = Yes 2 = No	Numeric	
S41_B	Does the teacher tell you when you can use the Tablet PC in class?	1 = Yes 2 = No	Numeric	
S41_C	Are you allowed to load any non-copywrited or non-pirated programs or media onto the Tablet PC that you want?	1 = Yes 2 = No	Numeric	
S41_D	Is the Tablet PC convenient to use anywhere?	1 = Yes 2 = No	Numeric	
S41_E	Do you enjoy reading off the Tablet PC?	1 = Yes 2 = No	Numeric	
S41_F	Has the way you take notes changed since you got the Tablet PC?	1 = Yes 2 = No	Numeric	
S41_G	Does the short battery time get in the way of using the Tablet PC?	1 = Yes 2 = No	Numeric	
For the questions below, please tick the appropriate box that reflects how much you agree or disagree with each of the statements. If you do not agree or disagree, tick Neutral.				
S42_A	I feel comfortable using a Tablet PC in the classroom.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S42_B	I like learning on a Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_C	I like working on assignments using Tablet PCs.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_D	The challenge of solving problems with a Tablet PC does not appeal to me.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_E	I like the way Tablet PC helps me in group work.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_F	I think that it takes a long time to finish my schoolwork when I use a Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_G	Tablet PCs improve the quality of my schoolwork.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_H	Working with a Tablet PC makes me very nervous.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_I	I think that Tablet PCs are easy to use.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_J	I am given enough training in using Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_K	I can learn a lot using Tablet PCs.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S42_L	Using the Tablet PCs do not interest me very much.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_M	Tablet PCs make schoolwork easier to do.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_N	My typing skills get in the way of finishing my assignments on the Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_O	I like to discuss schoolwork using Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_P	I enjoy how Tablet PCs are used in our daily lives.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_Q	Learning with a Tablet PC is helping me to prepare for the future.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_R	Tablet PCs help me save time.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_S	Tablet PCs allow me to learn independently.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_T	Tablets PCs help me to organize my work.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_U	I like owning a Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
What way do you prefer to use the Tablet PC for the following tasks? If you prefer to hold it as a tablet, tick 'In tablet mode.' If you use it like a laptop computer, tick 'Tablet PC.' If you do not do this task on the Tablet PC, tick 'Not applicable.'				
S43_A	Doing complex problems and problem solving	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_B	Doing simple calculations	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_C	Taking notes during lessons	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_D	Drawing diagrams while taking notes during lessons	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_E	Making a map	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_F	Inserting graphics in a report	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_G	Reading off the screen	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_H	Studying for a test	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_I	Taking notes	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_J	Searching the Internet	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_K	Drawing	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
Would you say that the following practices occur in your classes now than before because Tablet PCs are used in class?				
S44_A	Students select their own topics for assignments.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_B	Students explore a subject area on their own.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_C	Students research beyond their textbooks.	1 = Less often 2 = About the same 3 = More often	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S44_D	Students use online materials for learning.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_E	Students work in groups.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_F	Students write more about a topic area.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_G	Students takes quizzes and tests.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_H	Students interact with teachers.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_I	Students teach other students.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_J	Students present work in class.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_K	Students compose reports on the computer.	1 = Less often 2 = About the same 3 = More often	Numeric	
S45	Briefly describe 5 different ways in which you plan to use the Tablet PC in the future, e.g., design a Web site for project work.		Open-Ended	
S46	Briefly describe 2 things that you like and 2 things that you dislike about using the Tablet PC.		Open-Ended	
S47	Do you have any suggestions for new ways Tablet PCs could be used to improve the learning experience at school?		Open-Ended	
S48	Would you be interested in participating in a short group discussion on the use of tablet PC? This friendly group discussion will be held during the month of June or September.	1 = Yes 2 = No	Numeric	
S49	Your name and contact number so that we can contact you for the discussion:		Open-Ended	

Teacher Survey

Variable Name	Survey Question	Response Categories	Type	Comments
T_id	Respondent ID		Open-Ended	SRI created variable to protect confidentiality of the student
T1	School	1 = Catholic	Numeric	Value specifically for Catholic High School only
T4	Gender	1 = Male 2 = Female	Numeric	
T5	Which age group are you in?	1 = 21-25 years 2 = 26-30 years 3 = 31-35 years 4 = 36-40 years 5 = 41-45 years 6 = 46-50 years 7 = 51-55 years 8 = older than 55 years	Numeric	
T6	How many years of teaching experience do you have?	1 = Less than 1 year 2 = 1 to 3 years 3 = 3 to 5 years 4 = 5 years or more	Numeric	
T7	How do you rate your proficiency in IT/computer skills before the use of Tablet PC?	1 = Very poor 2 = Poor 3 = Average 4 = Very good 5 = Excellent	Numeric	
Which subjects do you currently teach, which do you teach using the Tablet PC and which subjects do you wish to teach using the Tablet PC in the future? (tick accordingly)				
T8_A	English Language	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_B	Malay Language	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_C	Chinese Language	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T8_D	Literature	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_E	Geography	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_F	History	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_G	Aesthetics/ PE	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_H	Mathematics	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_I	Science	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_J	Home Economics	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T8_K	Arts and Crafts	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_L	Design and Technology	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_M	Civics and Moral Education	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_N	None	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T9	How long have you been using the Tablet PC in teaching?	1 = Less than 1 month 2 = 1 to 2 months 3 = 2 to 3 months 4 = 4 to 5 months 5 = 6 months and above	Numeric	
T10	Do you have your own Tablet PC, i.e. the Tablet PC belongs to you?	1 = Yes 2 = No	Numeric	
T11	How many hours do you use your Tablet PC at home per day?	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T12	How many hours do you use your Tablet PC in school per day?	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
Do you have other technologies that you use at home (other than the Tablet PC)?				
T13_A	Desktop Computer	1 = Yes 2 = No	Numeric	
T13_B	Laptop Computer	1 = Yes 2 = No	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T13_C	Mobile Phone	1 = Yes 2 = No	Numeric	
T13_D	Videogames	1 = Yes 2 = No	Numeric	
T13_E	MP3 Player	1 = Yes 2 = No	Numeric	
T14	Are there other technologies you use? (please specify)		Open-ended	
T15	Do you have Internet access at home?	1 = Yes, I have a dial up connection 2 = Yes, I have a broadband connection 3 = I do not have Internet access at home	Numeric	
How frequently do you engage in the following activities using your Tablet PC per day? (tick accordingly)				
T16_A	Searching for information	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_B	Conducting research for lesson plans or curriculum design	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_C	E-mailing	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_D	Developing instructional materials	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_E	Developing student assessments	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_F	Producing homework assignments	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_G	Organizing information	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_H	Creating presentations	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T16_I	Watching movies	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_J	Chatting online / Instant messaging	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_K	Playing games	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_L	Listening to music	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_M	Collaborating with colleagues	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_N	Grading student work	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_O	Giving students feedback on their work	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_P	Organizing classroom activities in accordance with a lesson plan	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T17	Are there other activities you engage in using the Tablet PC each day? Please specify.		Open-Ended	
The Mind Book: A digital scrapbook where you can record down your train of thoughts and ideas and insert images and annotations.				
T18_A	English Language	0 = Not selected 1 = Selected	Numeric	
T18_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T18_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T18_D	Literature	0 = Not selected 1 = Selected	Numeric	
T18_E	Geography	0 = Not selected 1 = Selected	Numeric	
T18_F	History	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T18_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T18_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T18_I	Science	0 = Not selected 1 = Selected	Numeric	
T18_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T18_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T18_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T18_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T18_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T18_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using the Mind Book (tick all that apply)				
T19_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T19_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T19_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T19_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T19_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T19_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T19_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Fun with Construction: A digital web-board where you can make use of geometrical tools like compass, protractor, etc.				
T20_A	English Language	0 = Not selected 1 = Selected	Numeric	
T20_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T20_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T20_D	Literature	0 = Not selected 1 = Selected	Numeric	
T20_E	Geography	0 = Not selected 1 = Selected	Numeric	
T20_F	History	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T20_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T20_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T20_I	Science	0 = Not selected 1 = Selected	Numeric	
T20_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T20_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T20_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T20_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T20_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T20_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using Fun With Construction (tick all that apply)				
T21_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T21_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T21_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T21_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T21_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T21_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T21_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Virtual Classroom: A wireless system whereby teachers can test/quiz students on understanding on a subject and have graphical representation.				
T22_A	English Language	0 = Not selected 1 = Selected	Numeric	
T22_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T22_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T22_D	Literature	0 = Not selected 1 = Selected	Numeric	
T22_E	Geography	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T22_F	History	0 = Not selected 1 = Selected	Numeric	
T22_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T22_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T22_I	Science	0 = Not selected 1 = Selected	Numeric	
T22_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T22_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T22_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T22_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T22_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T22_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using Virtual Classroom (tick all that apply)				
T23_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T23_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T23_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T23_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T23_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T23_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T23_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
EduLearn: In modules such as Forum and Homework, users can call out an editor to input with Digital Ink and the content will be updated into the system.				
T24_A	English Language	0 = Not selected 1 = Selected	Numeric	
T24_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T24_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T24_D	Literature	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T24_E	Geography	0 = Not selected 1 = Selected	Numeric	
T24_F	History	0 = Not selected 1 = Selected	Numeric	
T24_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T24_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T24_I	Science	0 = Not selected 1 = Selected	Numeric	
T24_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T24_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T24_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T24_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T24_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T24_O	Other (please specify)	0 = Not selected 1 = Selected		
Your experience in using EduLearn (tick all that apply)				
T25_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T25_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T25_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T25_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T25_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T25_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T25_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
SketchPad: A digital ink friendly note-taking, sketching and diagrammatic tool allowing teachers to separate work from notes or questions from answers. Real-time collaborations allowing students to interact on the same documents real-time with peers and teachers.				
T26_A	English Language	0 = Not selected 1 = Selected	Numeric	
T26_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T26_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T26_D	Literature	0 = Not selected 1 = Selected	Numeric	
T26_E	Geography	0 = Not selected 1 = Selected	Numeric	
T26_F	History	0 = Not selected 1 = Selected	Numeric	
T26_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T26_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T26_I	Science	0 = Not selected 1 = Selected	Numeric	
T26_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T26_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T26_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T26_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T26_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T26_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using SketchPad (tick all that apply)				
T27_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T27_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T27_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T27_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T27_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T27_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T27_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
EduWARE: Provide support for Digital Ink input in EduWARE (an offline content aggregation tool), so that teachers can create content such as diagrams, graphs and illustrations and save these as learning objects in the course.				
T28_A	English Language	0 = Not selected 1 = Selected	Numeric	No teachers answered this question.
T28_B	Malay Language	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T28_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T28_D	Literature	0 = Not selected 1 = Selected	Numeric	
T28_E	Geography	0 = Not selected 1 = Selected	Numeric	
T28_F	History	0 = Not selected 1 = Selected	Numeric	
T28_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T28_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T28_I	Science	0 = Not selected 1 = Selected	Numeric	
T28_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T28_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T28_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T28_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T28_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T28_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using EduWARE (tick all that apply)				
T29_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	No teachers answered this question.
T29_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T29_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T29_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T29_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T29_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T29_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Learning of Mathematics with Tablet, (transformation and functions): You may be prompted with an object and description of a transformation to be applied on the object. You will sketch the transformed object and the system will mark your answer and provide correct answer. (Tick all that apply)				
T30_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	No teachers answered this question.

Variable Name	Survey Question	Response Categories	Type	Comments
T30_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T30_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T30_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T30_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T30_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T30_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Science Practical Assessment, which allows you to plan experiments and draw experiment procedures and equipment. The plan can be submitted to teachers for assessment. (Tick all that apply)				
T31_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T31_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T31_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T31_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T31_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T31_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T31_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Training in Chinese Character Writing (Tick all that apply)				
T32_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T32_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T32_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T32_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T32_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T32_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T32_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using ChemistPad, which helps students to learn chemistry in a fun way. Students can draw the molecular structure on the Tablet PC and it helps to identify the molecular notation and beatify it. (Tick all that apply)				

Variable Name	Survey Question	Response Categories	Type	Comments
T33_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	No teachers answered this question.
T33_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T33_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T33_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T33_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T33_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T33_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Input of Mathematics formulas using Digital Ink for use with the EduLearn Learning Management System and with the Math Explorer system: An editor that recognizes Mathematical symbols and equations created using Digital Ink, which will then be interpreted and sent to the EduLearn or the Math Explorer system for further interpretation and use. The editor will provide feedback to students if equations are not formed properly. (Tick all that apply)				
T34_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	No teachers answered this question.
T34_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T34_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T34_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T34_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T34_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T34_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Assessment of Chinese vocabulary using Digital Ink, a tool for Chinese teachers to record phrases to assess students in their vocabulary and writing. (tick all that apply)				
T35_A	I have never used this application or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T35_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T35_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T35_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T35_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T35_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T35_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
T36	Do you use other applications on the Tablet PC? Please specify.		Open-Ended	
Would you say that the following practices occur in your classes less often, about the same, or more often NOW than before Tablet PCs are used in class? (Tick accordingly)				
T37_A	Students select their own research areas	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_B	Students explore a subject topic on their own	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_C	Students research beyond their textbooks	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_D	Students use online materials for learning	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_E	Students work in groups	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_F	Students write more about a subject topic	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_G	Students take quizzes and tests	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_H	Students interact with teachers	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_I	Students teach other students	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_J	Students present work in class	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
Please indicate the effect you think Tablet PCs have had on high-achieving students in the following areas				

Variable Name	Survey Question	Response Categories	Type	Comments
T38_A	Participation in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_B	Preparation for class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_C	Attendance	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_D	Behavior	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_E	Motivation	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_F	Engagement / interest level in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_G	Ability to retain content material	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_H	Amount of higher order thinking	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_I	Quality of work	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_J	Ability to work independently	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_K	Ability to work in groups	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_L	Interaction with teachers	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_M	Interaction with other students	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_N	Students' computer literacy	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_O	Quality of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_P	Quantity of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T38_Q	Personalized learning opportunities	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_R	Rigor of the curriculum	1 = Declined 2 = No effect 3 = Improved	Numeric	
Please indicate the effect you think Tablet PCs have had on at-risk or low-achieving students in the following areas				
T39_A	Participation in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_B	Preparation for class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_C	Attendance	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_D	Behavior	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_E	Motivation	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_F	Engagement / interest level in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_G	Ability to retain content material	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_H	Amount of higher order thinking	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_I	Quality of work	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_J	Ability to work independently	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_K	Ability to work in groups	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_L	Interaction with teachers	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_M	Interaction with other students	1 = Declined 2 = No effect 3 = Improved	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T39_N	Students' computer literacy	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_O	Quality of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_P	Quantity of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_Q	Personalized learning opportunities	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_R	Rigor of the curriculum	1 = Declined 2 = No effect 3 = Improved	Numeric	
Please indicate the effect you think Tablet PCs have had on traditional students in the following areas				
T40_A	Participation in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_B	Preparation for class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_C	Attendance	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_D	Behavior	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_E	Motivation	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_F	Engagement / interest level in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_G	Ability to retain content material	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_H	Amount of higher order thinking	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_I	Quality of work	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_J	Ability to work independently	1 = Declined 2 = No effect 3 = Improved	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T40_K	Ability to work in groups	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_L	Interaction with teachers	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_M	Interaction with other students	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_N	Students' computer literacy	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_O	Quality of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_P	Quantity of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_Q	Personalized learning opportunities	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_R	Rigor of the curriculum	1 = Declined 2 = No effect 3 = Improved	Numeric	
T41	If you think the EdVantage program has any negative impacts, please describe them.		Open-Ended	
T42	Have you participated in any professional training activities that helped you use the Tablet PC or its applications?	1 = Yes 2 = No	Numeric	
T43	How many hours/days have you spent on this type of professional development since the start of the Tablet PC program? Specify hours or days.		Open-Ended	
Who provided the training? (Tick all that apply)				
T44_A	School/Principal	0 = Not selected 1 = Selected	Numeric	
T44_B	Microsoft	0 = Not selected 1 = Selected	Numeric	
T44_C	Educational consultant	0 = Not selected 1 = Selected	Numeric	
T44_D	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
What kinds of professional training activities have you received? (Tick all that apply)				
T45_A	On-site training	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T45_B	Off-site training	0 = Not selected 1 = Selected	Numeric	
T45_C	On-going training throughout the school year	0 = Not selected 1 = Selected	Numeric	
T45_D	On-site embedded training (e.g., peer training, coaching, team training)	0 = Not selected 1 = Selected	Numeric	
T45_D	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
T46	Have you participated in any professional training activities that helped you integrate technology into the curriculum?	1 = Yes 2 = No	Numeric	
T47	Please describe how the Tablet PC changed the curriculum and state for which subject.		Open-Ended	
T48	Briefly describe the MOST USEFUL training you have participated in and how it was delivered.		Open-Ended	
T49	What training or assistance do you need to further integrate technology into the curriculum?		Open-Ended	
The following section is about your perception of Tablet PCs. There is no right or wrong answer. Please answer the statements honestly. Please tick the boxes that reflect the extent you agree or disagree with each of the statements given.				
T50_A	I feel comfortable using a Tablet PC in the classroom.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_B	I like my students to learn on a Tablet PC.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_C	I like my students to work on assignments using Tablet PCs.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_D	Even though an assignment might be submitted electronically, I still print out my student's work to grade it.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T50_E	I have more access to educational resources.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_F	My students find Tablet PCs useful in visualizing concepts	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_G	Tablet PCs encourage a different form of communication between me and my students.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_H	I think that it takes a long time to finish my lesson preparation when I use a Tablet PC	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_I	Working with a Tablet PC makes me very nervous	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_J	I think that Tablet PCs are easy to use	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_K	I was given enough training in using Tablet PC	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_L	It's hard to find ways to use the Tablet PC in my classroom	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_M	My role in the classroom has changed	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_N	I can more reliably assess student progress, work, and effort	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T50_O	I like to discuss schoolwork with my students using Tablet PC	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_P	My beliefs about teaching and learning have changed	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_Q	I do not think that student should be allowed to use the Tablet PC whenever they want during class.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_R	Tablet PCs help me save time	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_S	Tablet PCs help the students' development of higher order thinking skills	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_T	Tablet PCs improved the students' achievement in my class	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_U	It's harder to manage my classroom when all students are using their Tablet PCs	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_V	I will be motivated to use Tablet PC if I own one	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_W	Every student should own one Tablet PC so that we can continue schoolwork outside classroom hours	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T51	Briefly describe 5 different ways in which you will use the Tablet PC in your teaching. Please be as specific as possible.		Open-Ended	

Variable Name	Survey Question	Response Categories	Type	Comments
T52	Briefly describe 2 things that you like about using the Tablet PC.		Open-Ended	
T53	Briefly describe 2 things that you dislike about using the Tablet PC.		Open-Ended	
T54	Do you have any suggestions for new ways Tablet PCs could be used to improve the teaching and learning experience at school?		Open-Ended	

Appendix H: Codebook for Crescent Girls' School Student and Teacher Survey

This document contains the codebook information for the student and teacher survey items. The student and teacher surveys were administered online. This codebook provides information on the variable name, response categories, and type of variable for the student and teacher surveys. The purpose of the codebook is to document all survey items for communication and analysis purposes.

Survey data collected in May 2005 includes the following *N*s for Crescent Girl School:

- Students: 344
- Teachers: 25

Variable naming conventions

Each variable in the datasets are numbered, and start with the letters S or T.

- S: Survey items for the student survey
- T: Survey items for the teacher survey

There are two datasets for each school. One dataset is from the student survey and the second dataset is for the teacher survey.

Missing data coding information

Missing data is coded as such in the statistical packages we used to analyze the data. There are many reasons for missing data. Every effort in quality control is made to insure that missing data did not include responses that included "not applicable," "zero," or "none." Some reasons for missing data include non-response and unreliable respondent

Student Survey

Variable Name	Survey Question	Response Categories	Type	Comments
S_id	Respondent ID		Open-Ended	SRI created variable to protect confidentiality of the student
school	School	2 = Crescent	Numeric	Value specifically for Crescent Girl School only
S8	Class	9 = 2C1 10 = 2C2 11 = 2C1 12 = 2G1 13 = 2G2 14 = 2G3 15 = 2S1 16 = 2S2 17 = 2S3	Numeric	Value specifically for Crescent Girl School only
S9	Stream	1 = Stream 2 = Express	Numeric	
S10	PSLE Aggregate		Open-Ended	
S11	How old are you? (number of years)		Open-Ended	
S12	How long have you been a student at this school? (number of years)		Open-Ended	
S13	How would you rate your proficiency in IT/computer skills before the use of Tablet PC?	1 = Very Poor 2 = Poor 3 = Average 4 = Very Good 5 = Excellent	Numeric	
Which subjects do you study that require the use of Tablet PC? (Tick all that apply):				
S14_A	English Language	0 = Not selected 1 = Selected	Numeric	
S14_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S14_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S14_D	Literature	0 = Not selected 1 = Selected	Numeric	
S14_E	Geography	0 = Not selected 1 = Selected	Numeric	
S14_F	History	0 = Not selected 1 = Selected	Numeric	
S14_G	Music / PE & CCA	0 = Not selected 1 = Selected	Numeric	
S14_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S14_I	Science	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S14_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S14_K	Art & Crafts	0 = Not selected 1 = Selected	Numeric	
S14_L	Design & Technology	0 = Not selected 1 = Selected	Numeric	
S14_M	Civics & Moral Education/National Education	0 = Not selected 1 = Selected	Numeric	
S15	Are there other subjects you study that require the use of Tablet PC? Please specify.		Open-Ended	
In which subjects is using the Tablet PC helpful to your learning? (Tick all that apply)				
S16_A	English Language	0 = Not selected 1 = Selected	Numeric	
S16_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S16_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S16_D	Literature	0 = Not selected 1 = Selected	Numeric	
S16_E	Geography	0 = Not selected 1 = Selected	Numeric	
S16_F	History	0 = Not selected 1 = Selected	Numeric	
S16_G	Aesthetics / PE & CCA	0 = Not selected 1 = Selected	Numeric	
S16_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S16_I	Science	0 = Not selected 1 = Selected	Numeric	
S16_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S16_K	Art & Crafts	0 = Not selected 1 = Selected	Numeric	
S16_L	Design & Technology	0 = Not selected 1 = Selected	Numeric	
S16_M	Civics & Moral Education/National Education	0 = Not selected 1 = Selected	Numeric	
S17	Are there other subjects in which using the Tablet PC is helpful to your learning? Please specify		Open-Ended	
S18	How long have you been using the Tablet PC?	1 = less than 1 month 2 = 1 to 2 months 3 = 2 to 3 months 4 = 4 to 5 months 5 = 6 months or more	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S19	Do you have your own Tablet PC, i.e., the Tablet PC belongs to you?	1 = Yes 2 = No	Numeric	
S20	How many hours do you use your Tablet PC at home on a daily basis?	1 = None 2 = less than 1 hour 3 = 1 to 4 hours 4 = greater than 4 hours	Numeric	
S21	How many hours do you use your Tablet PC in school on a daily basis?	1 = None 2 = less than 1 hour 3 = 1 to 4 hours 4 = greater than 4 hours	Numeric	
What other technologies do you use at home other than the Tablet PC? (Tick all that apply.)				
S22_A	Desktop computer	0 = Not selected 1 = Selected	Numeric	
S22_B	Laptop computer	0 = Not selected 1 = Selected	Numeric	
S22_C	Mobile phone	0 = Not selected 1 = Selected	Numeric	
S22_D	Videogames (e.g., X-box, Gameboy)	0 = Not selected 1 = Selected	Numeric	
S22_E	MP3 music player	0 = Not selected 1 = Selected	Numeric	
S23	Are there other technologies that you use at home? Please specify.		Open-Ended	
S24	Do you have Internet access at home?	1 = Yes, I have Dial Up connection 2 = Yes, I have a Broadband connection 3 = No, I do not have Internet access at home	Numeric	
How frequently do you engage in the following activities using your Tablet PC on a daily basis? (Tick one).				
S25_A	Searching for information	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_B	E-mailing	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S25_C	Typing/Writing and editing reports	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_D	Taking notes in class	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_E	Organizing information	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_F	Working together on group assignments	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_G	Creating presentations	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_H	Watching movies	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S25_I	Chatting online / Instant messaging	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_J	Playing games	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_K	Listening to music	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_L	Learning online	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_M	Making graphics, art, or drawings	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_N	Creating spreadsheets and graphic charts of data	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S25_O	Accessing information posted by my teacher such as homework, school schedule, quizzes, etc.	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_P	Reading material for school	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
S25_Q	Highlighting or marking the text while reading for school	1 = I never have used the Tablet PC for this 2 = I have used the Tablet PC for this but not on a daily basis 3 = Less than 1 hour 4 = 1 to 4 hours 5 = More than 4 hours	Numeric	
The Mind Book: A digital scrapbook where you can record down your train of thought and ideas and insert images and annotations. (Tick all that apply.)				
S26_A	English Language	0 = Not selected 1 = Selected	Numeric	
S26_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S26_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S26_D	Literature	0 = Not selected 1 = Selected	Numeric	
S26_E	Geography	0 = Not selected 1 = Selected	Numeric	
S26_F	History	0 = Not selected 1 = Selected	Numeric	
S26_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
S26_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S26_I	Science	0 = Not selected 1 = Selected	Numeric	
S26_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S26_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S26_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S26_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S26_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
S26_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using the Mind Book Digital Scrapbook. (Tick all that apply.)				
S27_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S27_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S27_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S27_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S27_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S27_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S27_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
Fun with Construction: A digital web-board where you can make use of geometrical tools like compass, protractor, etc. (Tick all that apply.)				
S28_A	English Language	0 = Not selected 1 = Selected	Numeric	
S28_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S28_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S28_D	Literature	0 = Not selected 1 = Selected	Numeric	
S28_E	Geography	0 = Not selected 1 = Selected	Numeric	
S28_F	History	0 = Not selected 1 = Selected	Numeric	
S28_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
S28_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S28_I	Science	0 = Not selected 1 = Selected	Numeric	
S28_J	Home Economics	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S28_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
S28_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S28_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S28_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
S28_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using Fun with Construction. (Tick all that apply.)				
S29_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S29_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S29_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S29_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S29_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S29_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S29_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
Virtual Classroom: A wireless system whereby teachers can test/quiz students on understanding on a subject and have graphical representation. (Tick all that apply.)				
S30_A	English Language	0 = Not selected 1 = Selected	Numeric	
S30_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S30_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S30_D	Literature	0 = Not selected 1 = Selected	Numeric	
S30_E	Geography	0 = Not selected 1 = Selected	Numeric	
S30_F	History	0 = Not selected 1 = Selected	Numeric	
S30_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
S30_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S30_I	Science	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S30_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S30_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
S30_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S30_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S30_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
S30_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using the Virtual Classroom. (Tick all that apply.)				
S31_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S31_B	I have had problems using this application	0 = Not selected 1 = Selected	Numeric	
S31_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S31_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S31_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S31_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S31_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
EduLearn: In modules such as Forum and Homework, users can call out an editor to input with Digital Ink and the content will be updated into the system. (Tick all that apply.)				
S32_A	English Language	0 = Not selected 1 = Selected	Numeric	Students at CGS were told to treat this questions as if it said "Microsoft Learning Gateway (MLG) instead of EduLearn.
S32_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S32_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S32_D	Literature	0 = Not selected 1 = Selected	Numeric	
S32_E	Geography	0 = Not selected 1 = Selected	Numeric	
S32_F	History	0 = Not selected 1 = Selected	Numeric	
S32_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S32_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S32_I	Science	0 = Not selected 1 = Selected	Numeric	
S32_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S32_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
S32_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S32_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S32_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
S32_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using EduLearn. (Tick all that apply.)				
S33_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	Students at CGS were told to treat this questions as if it said "Microsoft Learning Gateway (MLG) instead of EduLearn.
S33_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S33_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S33_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S33_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S33_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S33_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
SketchPad: A digital ink friendly note-taking, sketching and diagrammatic tool allowing teachers to separate work from notes or questions from answers. Real-time collaborations allowing students to interact on the same documents real-time with peers and teachers. (Tick all that apply.)				
S34_A	English Language	0 = Not selected 1 = Selected	Numeric	
S34_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
S34_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
S34_D	Literature	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S34_E	Geography	0 = Not selected 1 = Selected	Numeric	
S34_F	History	0 = Not selected 1 = Selected	Numeric	
S34_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
S34_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
S34_I	Science	0 = Not selected 1 = Selected	Numeric	
S34_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
S34_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
S34_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
S34_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
S34_N	None	0 = Not selected 1 = Selected	Numeric	
S34_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience using SketchPad (Tick all that apply.)				
S35_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S35_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S35_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S35_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S35_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S35_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S35_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
In 'Learning of Mathematics (transformation and functions) with Tablet' you may be prompted with an object and description of a transformation to be applied on the object. You will sketch the transformed object and the system will mark your answer and provide the correct answer. What is your experience with this application?				
S36_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S36_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S36_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S36_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S36_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S36_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S36_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
In Science Practical Assessment (SPA) you can plan experiments and draw experiment procedures and equipment. The plan can be submitted to teachers for assessment. What is your experience with this application?				
S37_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S37_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S37_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S37_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S37_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S37_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S37_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
Training in Chinese Character Writing teaches students writing of Chinese characters. What is your experience with this application?				
S38_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S38_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
S38_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S38_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S38_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S38_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S38_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
ChemistPad helps students learn chemistry in a fun way. Students can draw the molecular structure on the Tablet PC and it helps identify the molecular notation and beautify it. What is your experience with this application?				
S39_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
S39_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S39_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
S39_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
S39_E	This application helps me to learn more.	0 = Not selected 1 = Selected	Numeric	
S39_F	This application makes learning more fun.	0 = Not selected 1 = Selected	Numeric	
S39_G	This application makes learning more difficult.	0 = Not selected 1 = Selected	Numeric	
S40	List any applications that you used on the Tablet PC but were not listed above.	0 = Not selected 1 = Selected	Open-Ended	
S41_A	Can you use the Tablet PC anywhere you want in the school?	1 = Yes 2 = No	Numeric	
S41_B	Does the teacher tell you when you can use the Tablet PC in class?	1 = Yes 2 = No	Numeric	
S41_C	Are you allowed to load any non-copywrited or non-pirated programs or media onto the Tablet PC that you want?	1 = Yes 2 = No	Numeric	
S41_D	Is the Tablet PC convenient to use anywhere?	1 = Yes 2 = No	Numeric	
S41_E	Do you enjoy reading off the Tablet PC?	1 = Yes 2 = No	Numeric	
S41_F	Has the way you take notes changed since you got the Tablet PC?	1 = Yes 2 = No	Numeric	
S41_G	Does the short battery time get in the way of using the Tablet PC?	1 = Yes 2 = No	Numeric	
For the questions below, please tick the appropriate box that reflects how much you agree or disagree with each of the statements. If you do not agree or disagree, tick Neutral.				
S42_A	I feel comfortable using a Tablet PC in the classroom.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_B	I like learning on a Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S42_C	I like working on assignments using Tablet PCs.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_D	The challenge of solving problems with a Tablet PC does not appeal to me.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_E	I like the way Tablet PC helps me in group work.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_F	I think that it takes a long time to finish my schoolwork when I use a Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_G	Tablet PCs improve the quality of my schoolwork.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_H	Working with a Tablet PC makes me very nervous.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_I	I think that Tablet PCs are easy to use.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_J	I am given enough training in using Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_K	I can learn a lot using Tablet PCs.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_L	Using the Tablet PCs do not interest me very much.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S42_M	Tablet PCs make schoolwork easier to do.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_N	My typing skills get in the way of finishing my assignments on the Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_O	I like to discuss schoolwork using Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_P	I enjoy how Tablet PCs are used in our daily lives.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_Q	Learning with a Tablet PC is helping me to prepare for the future.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_R	Tablet PCs help me save time.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_S	Tablet PCs allow me to learn independently.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_T	Tablets PCs help me to organize my work.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
S42_U	I like owning a Tablet PC.	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree	Numeric	
What way do you prefer to use the Tablet PC for the following tasks? If you prefer to hold it as a tablet, tick 'In tablet mode.' If you use it like a laptop computer, tick 'Tablet PC.' If you do not do this task on the Tablet PC, tick 'Not applicable.'				

Variable Name	Survey Question	Response Categories	Type	Comments
S43_A	Doing complex problems and problem solving	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_B	Doing simple calculations	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_C	Taking notes during lessons	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_D	Drawing diagrams while taking notes during lessons	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_E	Making a map	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_F	Inserting graphics in a report	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_G	Reading off the screen	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_H	Studying for a test	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_I	Taking notes	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_J	Searching the Internet	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
S43_K	Drawing	1 = In tablet mode 2 = Tablet PC 3 = Not Applicable	Numeric	
Would you say that the following practices occur in your classes now than before because Tablet PCs are used in class?				
S44_A	Students select their own topics for assignments.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_B	Students explore a subject area on their own.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_C	Students research beyond their textbooks.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_D	Students use online materials for learning.	1 = Less often 2 = About the same 3 = More often	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
S44_E	Students work in groups.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_F	Students write more about a topic area.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_G	Students takes quizzes and tests.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_H	Students interact with teachers.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_I	Students teach other students.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_J	Students present work in class.	1 = Less often 2 = About the same 3 = More often	Numeric	
S44_K	Students compose reports on the computer.	1 = Less often 2 = About the same 3 = More often	Numeric	
S45	Briefly describe 5 different ways in which you plan to use the Tablet PC in the future, e.g., design a Web site for project work.		Open-Ended	
S46	Briefly describe 2 things that you like and 2 things that you dislike about using the Tablet PC.		Open-Ended	
S47	Do you have any suggestions for new ways Tablet PCs could be used to improve the learning experience at school?		Open-Ended	
S48	Would you be interested in participating in a short group discussion on the use of tablet PC? This friendly group discussion will be held during the month of June or September.	1 = Yes 2 = No	Numeric	
S49	Your name and contact number so that we can contact you for the discussion:		Open-Ended	

Teacher Survey

Variable Name	Survey Question	Response Categories	Type	Comments
T_id	Respondent ID		Open-Ended	SRI created variable to protect confidentiality of the student
T1	School	2 = Crescent	Numeric	Value specifically for Crescent Girl School only
T4	Gender	1 = Male 2 = Female	Numeric	
T5	Which age group are you in?	1 = 21-25 years 2 = 26-30 years 3 = 31-35 years 4 = 36-40 years 5 = 41-45 years 6 = 46-50 years 7 = 51-55 years 8 = older than 55 years	Numeric	
T6	How many years of teaching experience do you have?	1 = Less than 1 year 2 = 1 to 3 years 3 = 3 to 5 years 4 = 5 years or more	Numeric	
T7	How do you rate your proficiency in IT/computer skills before the use of Tablet PC?	1 = Very poor 2 = Poor 3 = Average 4 = Very good 5 = Excellent	Numeric	
Which subjects do you currently teach, which do you teach using the Tablet PC and which subjects do you wish to teach using the Tablet PC in the future? (tick accordingly)				
T8_A	English Language	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_B	Malay Language	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_C	Chinese Language	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T8_D	Literature	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_E	Geography	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_F	History	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_G	Aesthetics/ PE	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_H	Mathematics	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_I	Science	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_J	Home Economics	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T8_K	Arts and Crafts	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_L	Design and Technology	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_M	Civics and Moral Education	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T8_N	None	0 = Not selected 1 = Subjects I teach 2 = Subjects I teach using Tablet PC 3 = Subjects in which I intend to use Tablet PC in the future	Numeric	
T9	How long have you been using the Tablet PC in teaching?	1 = Less than 1 month 2 = 1 to 2 months 3 = 2 to 3 months 4 = 4 to 5 months 5 = 6 months and above	Numeric	
T10	Do you have your own Tablet PC, i.e. the Tablet PC belongs to you?	1 = Yes 2 = No	Numeric	
T11	How many hours do you use your Tablet PC at home per day?	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T12	How many hours do you use your Tablet PC in school per day?	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
Do you have other technologies that you use at home (other than the Tablet PC)?				
T13_A	Desktop Computer	1 = Yes 2 = No	Numeric	
T13_B	Laptop Computer	1 = Yes 2 = No	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T13_C	Mobile Phone	1 = Yes 2 = No	Numeric	
T13_D	Videogames	1 = Yes 2 = No	Numeric	
T13_E	MP3 Player	1 = Yes 2 = No	Numeric	
T14	Are there other technologies you use? (please specify)		Open-ended	
T15	Do you have Internet access at home?	1 = Yes, I have a dial up connection 2 = Yes, I have a broadband connection 3 = I do not have Internet access at home	Numeric	
How frequently do you engage in the following activities using your Tablet PC per day? (tick accordingly)				
T16_A	Searching for information	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_B	Conducting research for lesson plans or curriculum design	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_C	E-mailing	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_D	Developing instructional materials	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_E	Developing student assessments	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_F	Producing homework assignments	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_G	Organizing information	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_H	Creating presentations	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T16_I	Watching movies	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_J	Chatting online / Instant messaging	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_K	Playing games	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_L	Listening to music	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_M	Collaborating with colleagues	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_N	Grading student work	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_O	Giving students feedback on their work	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T16_P	Organizing classroom activities in accordance with a lesson plan	1 = None 2 = Less than 1 hour 3 = 1 to 4 hours 4 = More than 4 hours	Numeric	
T17	Are there other activities you engage in using the Tablet PC each day? Please specify.		Open-Ended	
The Mind Book: A digital scrapbook where you can record down your train of thoughts and ideas and insert images and annotations.				
T18_A	English Language	0 = Not selected 1 = Selected	Numeric	
T18_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T18_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T18_D	Literature	0 = Not selected 1 = Selected	Numeric	
T18_E	Geography	0 = Not selected 1 = Selected	Numeric	
T18_F	History	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T18_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T18_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T18_I	Science	0 = Not selected 1 = Selected	Numeric	
T18_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T18_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T18_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T18_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T18_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T18_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using the Mind Book (tick all that apply)				
T19_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T19_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T19_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T19_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T19_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T19_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T19_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Fun with Construction: A digital web-board where you can make use of geometrical tools like compass, protractor, etc.				
T20_A	English Language	0 = Not selected 1 = Selected	Numeric	
T20_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T20_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T20_D	Literature	0 = Not selected 1 = Selected	Numeric	
T20_E	Geography	0 = Not selected 1 = Selected	Numeric	
T20_F	History	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T20_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T20_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T20_I	Science	0 = Not selected 1 = Selected	Numeric	
T20_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T20_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T20_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T20_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T20_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T20_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using Fun With Construction (tick all that apply)				
T21_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T21_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T21_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T21_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T21_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T21_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T21_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Virtual Classroom: A wireless system whereby teachers can test/quiz students on understanding on a subject and have graphical representation.				
T22_A	English Language	0 = Not selected 1 = Selected	Numeric	
T22_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T22_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T22_D	Literature	0 = Not selected 1 = Selected	Numeric	
T22_E	Geography	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T22_F	History	0 = Not selected 1 = Selected	Numeric	
T22_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T22_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T22_I	Science	0 = Not selected 1 = Selected	Numeric	
T22_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T22_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T22_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T22_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T22_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T22_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using Virtual Classroom (tick all that apply)				
T23_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T23_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T23_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T23_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T23_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T23_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T23_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
EduLearn: In modules such as Forum and Homework, users can call out an editor to input with Digital Ink and the content will be updated into the system.				
T24_A	English Language	0 = Not selected 1 = Selected	Numeric	
T24_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T24_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T24_D	Literature	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T24_E	Geography	0 = Not selected 1 = Selected	Numeric	
T24_F	History	0 = Not selected 1 = Selected	Numeric	
T24_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T24_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T24_I	Science	0 = Not selected 1 = Selected	Numeric	
T24_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T24_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T24_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T24_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T24_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T24_O	Other (please specify)	0 = Not selected 1 = Selected		
Your experience in using EduLearn (tick all that apply)				
T25_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T25_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T25_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T25_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T25_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T25_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T25_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
SketchPad: A digital ink friendly note-taking, sketching and diagrammatic tool allowing teachers to separate work from notes or questions from answers. Real-time collaborations allowing students to interact on the same documents real-time with peers and teachers.				
T26_A	English Language	0 = Not selected 1 = Selected	Numeric	
T26_B	Malay Language	0 = Not selected 1 = Selected	Numeric	
T26_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T26_D	Literature	0 = Not selected 1 = Selected	Numeric	
T26_E	Geography	0 = Not selected 1 = Selected	Numeric	
T26_F	History	0 = Not selected 1 = Selected	Numeric	
T26_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T26_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T26_I	Science	0 = Not selected 1 = Selected	Numeric	
T26_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T26_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T26_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T26_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T26_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T26_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using SketchPad (tick all that apply)				
T27_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T27_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T27_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T27_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T27_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T27_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T27_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
EduWARE: Provide support for Digital Ink input in EduWARE (an offline content aggregation tool), so that teachers can create content such as diagrams, graphs and illustrations and save these as learning objects in the course.				
T28_A	English Language	0 = Not selected 1 = Selected	Numeric	
T28_B	Malay Language	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T28_C	Chinese Language	0 = Not selected 1 = Selected	Numeric	
T28_D	Literature	0 = Not selected 1 = Selected	Numeric	
T28_E	Geography	0 = Not selected 1 = Selected	Numeric	
T28_F	History	0 = Not selected 1 = Selected	Numeric	
T28_G	Aesthetics/ PE	0 = Not selected 1 = Selected	Numeric	
T28_H	Mathematics	0 = Not selected 1 = Selected	Numeric	
T28_I	Science	0 = Not selected 1 = Selected	Numeric	
T28_J	Home Economics	0 = Not selected 1 = Selected	Numeric	
T28_K	Arts and Crafts	0 = Not selected 1 = Selected	Numeric	
T28_L	Design and Technology	0 = Not selected 1 = Selected	Numeric	
T28_M	Civics and Moral Education	0 = Not selected 1 = Selected	Numeric	
T28_N	Not Applicable	0 = Not selected 1 = Selected	Numeric	
T28_O	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
Your experience in using EduWARE (tick all that apply)				
T29_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T29_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T29_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T29_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T29_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T29_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T29_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Learning of Mathematics with Tablet, (transformation and functions): You may be prompted with an object and description of a transformation to be applied on the object. You will sketch the transformed object and the system will mark your answer and provide correct answer. (Tick all that apply)				
T30_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	No teachers answered this question.

Variable Name	Survey Question	Response Categories	Type	Comments
T30_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T30_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T30_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T30_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T30_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T30_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Science Practical Assessment, which allows you to plan experiments and draw experiment procedures and equipment. The plan can be submitted to teachers for assessment. (Tick all that apply)				
T31_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T31_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T31_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T31_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T31_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T31_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T31_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Training in Chinese Character Writing (Tick all that apply)				
T32_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T32_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T32_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T32_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T32_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T32_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T32_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using ChemistPad, which helps students to learn chemistry in a fun way. Students can draw the molecular structure on the Tablet PC and it helps to identify the molecular notation and beautify it. (Tick all that apply)				

Variable Name	Survey Question	Response Categories	Type	Comments
T33_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	
T33_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T33_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T33_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T33_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T33_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T33_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Input of Mathematics formulae using Digital Ink for use with the EduLearn Learning Management System and with the Math Explorer system: An editor that recognizes Mathematical symbols and equations created using Digital Ink, which will then be interpreted and sent to the EduLearn or the Math Explorer system for further interpretation and use. The editor will provide feedback to students if equations are not formed properly. (Tick all that apply)				
T34_A	I have never used this application, or have no opinion.	0 = Not selected 1 = Selected	Numeric	No teachers answered this question.
T34_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T34_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T34_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T34_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T34_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	
T34_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
Your experience in using Assessment of Chinese vocabulary using Digital Ink, a tool for Chinese teachers to record phrases to assess students in their vocabulary and writing. (tick all that apply)				
T35_A	I have never used this application or have no opinion.	0 = Not selected 1 = Selected	Numeric	No teachers answered this question.
T35_B	I have had problems using this application.	0 = Not selected 1 = Selected	Numeric	
T35_C	This application is easy to use.	0 = Not selected 1 = Selected	Numeric	
T35_D	I am often frustrated using this application.	0 = Not selected 1 = Selected	Numeric	
T35_E	This application helps me to teach better.	0 = Not selected 1 = Selected	Numeric	
T35_F	This application makes teaching more fun.	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T35_G	This application makes teaching more difficult.	0 = Not selected 1 = Selected	Numeric	
T36	Do you use other applications on the Tablet PC? Please specify.		Open-Ended	
Would you say that the following practices occur in your classes less often, about the same, or more often NOW than before Tablet PCs are used in class? (Tick accordingly)				
T37_A	Students select their own research areas	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_B	Students explore a subject topic on their own	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_C	Students research beyond their textbooks	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_D	Students use online materials for learning	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_E	Students work in groups	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_F	Students write more about a subject topic	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_G	Students take quizzes and tests	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_H	Students interact with teachers	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_I	Students teach other students	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
T37_J	Students present work in class	1 = Less often 2 = About the same 3 = More often 4 = Not applicable	Numeric	
Please indicate the effect you think Tablet PCs have had on high-achieving students in the following areas				

Variable Name	Survey Question	Response Categories	Type	Comments
T38_A	Participation in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_B	Preparation for class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_C	Attendance	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_D	Behavior	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_E	Motivation	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_F	Engagement / interest level in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_G	Ability to retain content material	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_H	Amount of higher order thinking	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_I	Quality of work	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_J	Ability to work independently	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_K	Ability to work in groups	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_L	Interaction with teachers	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_M	Interaction with other students	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_N	Students' computer literacy	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_O	Quality of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_P	Quantity of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T38_Q	Personalized learning opportunities	1 = Declined 2 = No effect 3 = Improved	Numeric	
T38_R	Rigor of the curriculum	1 = Declined 2 = No effect 3 = Improved	Numeric	
Please indicate the effect you think Tablet PCs have had on at-risk or low-achieving students in the following areas				
T39_A	Participation in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_B	Preparation for class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_C	Attendance	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_D	Behavior	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_E	Motivation	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_F	Engagement / interest level in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_G	Ability to retain content material	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_H	Amount of higher order thinking	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_I	Quality of work	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_J	Ability to work independently	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_K	Ability to work in groups	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_L	Interaction with teachers	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_M	Interaction with other students	1 = Declined 2 = No effect 3 = Improved	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T39_N	Students' computer literacy	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_O	Quality of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_P	Quantity of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_Q	Personalized learning opportunities	1 = Declined 2 = No effect 3 = Improved	Numeric	
T39_R	Rigor of the curriculum	1 = Declined 2 = No effect 3 = Improved	Numeric	
Please indicate the effect you think Tablet PCs have had on traditional students in the following areas				
T40_A	Participation in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_B	Preparation for class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_C	Attendance	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_D	Behavior	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_E	Motivation	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_F	Engagement / interest level in class	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_G	Ability to retain content material	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_H	Amount of higher order thinking	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_I	Quality of work	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_J	Ability to work independently	1 = Declined 2 = No effect 3 = Improved	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T40_K	Ability to work in groups	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_L	Interaction with teachers	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_M	Interaction with other students	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_N	Students' computer literacy	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_O	Quality of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_P	Quantity of what students learn	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_Q	Personalized learning opportunities	1 = Declined 2 = No effect 3 = Improved	Numeric	
T40_R	Rigor of the curriculum	1 = Declined 2 = No effect 3 = Improved	Numeric	
T41	If you think the EdVantage program has any negative impacts, please describe them.		Open-Ended	
T42	Have you participated in any professional training activities that helped you use the Tablet PC or its applications?	1 = Yes 2 = No	Numeric	
T43	How many hours/days have you spent on this type of professional development since the start of the Tablet PC program? Specify hours or days.		Open-Ended	
Who provided the training? (Tick all that apply)				
T44_A	School/Principal	0 = Not selected 1 = Selected	Numeric	
T44_B	Microsoft	0 = Not selected 1 = Selected	Numeric	
T44_C	Educational consultant	0 = Not selected 1 = Selected	Numeric	
T44_D	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
What kinds of professional training activities have you received? (Tick all that apply)				
T45_A	On-site training	0 = Not selected 1 = Selected	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T45_B	Off-site training	0 = Not selected 1 = Selected	Numeric	
T45_C	On-going training throughout the school year	0 = Not selected 1 = Selected	Numeric	
T45_D	On-site embedded training (e.g., peer training, coaching, team training)	0 = Not selected 1 = Selected	Numeric	
T45_D	Other (please specify)	0 = Not selected 1 = Selected	Open-Ended	
T46	Have you participated in any professional training activities that helped you integrate technology into the curriculum?	1 = Yes 2 = No	Numeric	
T47	Please describe how the Tablet PC changed the curriculum and state for which subject.		Open-Ended	
T48	Briefly describe the MOST USEFUL training you have participated in and how it was delivered.		Open-Ended	
T49	What training or assistance do you need to further integrate technology into the curriculum?		Open-Ended	
The following section is about your perception of Tablet PCs. There is no right or wrong answer. Please answer the statements honestly. Please tick the boxes that reflect the extent you agree or disagree with each of the statements given.				
T50_A	I feel comfortable using a Tablet PC in the classroom.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_B	I like my students to learn on a Tablet PC.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_C	I like my students to work on assignments using Tablet PCs.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_D	Even though an assignment might be submitted electronically, I still print out my student's work to grade it.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T50_E	I have more access to educational resources.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_F	My students find Tablet PCs useful in visualizing concepts	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_G	Tablet PCs encourage a different form of communication between me and my students.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_H	I think that it takes a long time to finish my lesson preparation when I use a Tablet PC	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_I	Working with a Tablet PC makes me very nervous	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_J	I think that Tablet PCs are easy to use	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_K	I was given enough training in using Tablet PC	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_L	It's hard to find ways to use the Tablet PC in my classroom	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_M	My role in the classroom has changed	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_N	I can more reliably assess student progress, work, and effort	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	

Variable Name	Survey Question	Response Categories	Type	Comments
T50_O	I like to discuss schoolwork with my students using Tablet PC	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_P	My beliefs about teaching and learning have changed	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_Q	I do not think that student should be allowed to use the Tablet PC whenever they want during class.	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_R	Tablet PCs help me save time	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_S	Tablet PCs help the students' development of higher order thinking skills	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_T	Tablet PCs improved the students' achievement in my class	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_U	It's harder to manage my classroom when all students are using their Tablet PCs	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_V	I will be motivated to use Tablet PC if I own one	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T50_W	Every student should own one Tablet PC so that we can continue schoolwork outside classroom hours	1 = Strongly agree 2 = Agree 3 = Not sure 4 = Disagree 5 = Strongly disagree	Numeric	
T51	Briefly describe 5 different ways in which you will use the Tablet PC in your teaching. Please be as specific as possible.		Open-Ended	

Variable Name	Survey Question	Response Categories	Type	Comments
T52	Briefly describe 2 things that you like about using the Tablet PC.		Open-Ended	
T53	Briefly describe 2 things that you dislike about using the Tablet PC.		Open-Ended	
T54	Do you have any suggestions for new ways Tablet PCs could be used to improve the teaching and learning experience at school?		Open-Ended	