

Report on the Consultation with Young People on the Digital Strategy for Schools





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# **Overview**

# **Background to this Report**

The Department of Education and Skills is developing a new Digital Strategy for Schools to be completed during 2015. The Digital Strategy for Schools will set out how Department of Education and Skills' priorities can be delivered and facilitated by the use of technology in education. The development of the Strategy is of critical importance to Ireland if it is to realise the potential of ICT in schools and prepare our young people to live, learn and work in the 21st century.

The Department of Education and Skills has partnered with the Department of Children and Youth Affairs (DCYA) to seek the views of young people through a structured consultation process informed by DCYA expertise in consulting with young people.

# **Contents of the Report**

This report outlines the methodology of the focus group consultations, describes the outcomes and outlines the key messages and findings.

In some cases direct quotations of the young people are used. While the quotations used may be from one participant, or a particular table or a particular group, they are used to reflect the general views of all young people who took part in the consultation sessions.



Figure 1. Participants provide their feedback during one of the activities

The participants demonstrated enormous clarity and insightfulness on the use of information and communication technology both in schools and in their daily lives. Their main recommendations of relevance to the Digital Strategy for Schools can be summarised as follows:

- 1. Technology needs to become more relevant to learning in school. Currently, technology is something that is more relevant to their social lives and is of limited relevance in school.
- 2. Provide access to learning resources on the internet as these are often more up-to-date than those provided in textbooks or easier to understand than what has been presented by the teacher.
- 3. Use ICT to open up new forms of learning and collaboration and provide greater flexibility for students with different styles of learning.
- 4. Provide Cloud-based services such as email, online resource banks, organisation of teaching and learning resources, and the administration of homework.
- 5. Use ICT to record students' work on an ongoing basis, accessing it at any time, and using ICT as their student journal.
- 6. Use ICT for administration including roll call in each class and the assignment of homework and homework feedback.
- 7. Provide ongoing training for teachers to help them use these services effectively.
- 8. Use ICT to help students with specific learning needs such as dyslexia or dyspraxia.
- 9. Raise awareness of technology downsides such as plagiarism, distraction, cyber bullying and access to inappropriate material and enable students to deal with these.
- 10. Help filter out unreliable or inappropriate sources and content.



Figure 2. "Warming up"

# **Young People Consultation Sessions**

Two facilitated consultation sessions were held in the National Digital Research Centre (NDRC). The sessions were hosted in a large open plan space which allowed for:

- work at circular tables,
- active movement,
- space for brainstorming.

A planning committee comprising of the Department of Education and Skills and Department of Children and Youth Affairs was set up in advance to plan the sessions:

- to ensure there was a broad representation of young people in attendance;
- that a structured methodology to the questions being asked was in place;
- that questions were directly relevant to the topics under consideration in the development of the strategy;
- that a variety of interesting tasks were undertaken by the young people involved;
- to ensure that the young people actively participated in an enjoyable process.

The post-primary consultation was held on Friday, June  $6^{th}$  2014. In all, 43 participants between the ages of 14 and 18 took part of which 19 were male (44%) and 24 were female (56%).

The primary consultation held on Monday, June 9<sup>th</sup> 2014. In all, 32 participants between the ages of 8 and 13 took part of which 16 were male (48%) and 17 were female (52%).

# **Selection of the Participants**

For the post-primary level consultation, young people from Comhairle na nÓg were selected.

Comhairle na nÓg are child and youth councils located in the 34 Local Authorities of the country which give children and young people the opportunity to be involved in the development of local services and policies. Through Comhairle na nÓg, children and young people are provided with a forum to discuss local and national issues of relevance to them. Delegates from Comhairle na nÓg are elected to represent their local area at the annual Dáil na nÓg.

Comhairle na nÓg and Dáil na nÓg are recognised as the official structures for participation by children and young people in the development of policies and services and is funded through the Department of Children and Youth Affairs (DCYA) Comhairle na nÓg Development Fund.

For the primary level consultation, nine schools were invited to send pupils from  $3^{rd}$  to  $6^{th}$  class of which eight schools participated on the day. Teachers accompanied their pupils to the venue but did not participate in the consultation session.

# **Consultation Methodology**

The methodology and process chosen for both the primary and post-primary sessions were similar. With the post-primary cohort of young people some sub-activities were added into to the process to elicit additional information. This was done because of their age and cognitive maturity.

All the activities and processes in the methodology were mutually self-reinforcing and built successively on top of each other (see Table 1).

Table 1. Information-gathering methodology

_	Table 1. Information-gathering methodology
ACTIVITY	DESCRIPTION
1 OPEN SPACE	For the opening activity the cohort of young people were divided into five (5) tables or groupings and allocated a wall space with the following demarcated question "Why should we use technology in our classrooms?" for both primary and post-primary students. For post-primary an additional question 'what technology devices do you use in school?' was posed.
ACTIVITY	This break-up into five (5) groupings allowed for the distribution of young people through-out different tables, started the socialisation process with other peers from different schools and commenced the session with an kinaesthetic activity in which they are doing something physical while at the same time activating their cognition.
	The purpose of this individual and group activity was to 'brainstorm'. Every participant received a pack of sticky notes on which they could write their ideas and reasons which they then placed on the wall space.
	The output from this activity was reflected back to the students so they could see the diversity and commonality of ideas and reasons across all the groups. This reflection was also used as a lead-in for the subsequent activity where the young people were asked to consider technology and its use in their everyday lives.
2	This follow-on activity had a template for each participant where they were asked to think about their use of technology through the timeline of a single day and to divide that use into three coloured categorisations as follows:
LIFELINES	<ol> <li>For PERSONAL USE coloured in (BLUE);</li> </ol>
ACTIVITY	2. For use IN SCHOOL coloured in (RED);
	3. For use <b>FOR SCHOOL</b> coloured in <b>(GREEN)</b> .
	Primary students were given a lifeline chart that contained nine (9) slots, while for post-primary students it was felt that a lifeline chart with fifteen (15) slots would be more applicable.
	The participants used the lifeline chart to map out their 'average day' using technology from the time they woke up to the time they went to bed and divided these uses into their relevant coloured-coded categories.
	The purpose of this activity was to get the students to think about the diversity and the richness of technology that they use on a daily basis and to reflect on these patterns and usage. It also informed the researchers about the differences or similarities in student use of technology throughout the course of their day.

# **ACTIVITY** DESCRIPTION This next activity was a 'moving debate'. This was introduced to get the young people moving and interacting again after the previous sit-down activity. The question used in the debate was 3 as follows "Do you want to use more communication and information technology in school". This question was deliberately chosen as a follow-on question from the previous activities for the **MOVING DEBATE** following reasons: **ACTIVITY** 1. Open Space Activity had asked them to think of broad reasons and ideas of why (in the widest sense) technology should be used in the classroom while, 2. Lifelines Activity had asked them to consider the use of technology in their daily life and specifically asked them to categorise this usage. This started their internal thinking process of comparisons between their current use of technology both outside and inside school. The response options available to the students were: 1. Yes 2. Not Sure 3. No The students were asked to move about the learning space to the Yes, Not Sure and No place markers to indicate where they stood in the debate. On completion of the first round of movement, further questions were asked from samples of young people in each response category to gather the reasons for their selection. This afforded the participants in the Moving Debate Activity to reflect back and think about comments made. A second and final round of movement was conducted where they had the opportunity to change their response based on the statements they had heard and to change positions. This follow-on activity was developed with circular placemats with five (5) hubs for categorisation and classification of a main question into relevant sub-sections. The hubs or 4 sections of the wheel are the mechanism that is used to refine and bound the primary question being asked. **PLACEMATS & PRIORITISATION** The question chosen was: "How should ICT be used?" This question was a direct lead-in from **ACTIVITIES** all the previous activities and was used to route the young people towards an examination of the use of technology in a specific setting, that of the school. The question posed however, was as deliberately as broad as possible and doesn't actually mention 'school' in the question. The placemat wheel was divided into five hubs with the following pre-selected question subcategories for exploration shown in different colours: For us to learn coloured in (RED); In all subject areas coloured in (GREEN); 2. 3. To show what we have learned coloured in (BLUE); 4. For teaching coloured in (ORANGE); To search for and choose information coloured in (YELLOW). An additional step in the activity following the results of the moving debate, was added for postprimary they were asked to further sub-divide each of their hubs into a Benefits (given a +) and Drawbacks (given a -) part. When the placemat was completed, every participant at each of the tables was given a bundle of sticky dots. Primary were given two (2) dots for each question section and post-primary were given three (3) dots for each question section. Each participant using their dots prioritised the statements they felt were the most important to them. At the end of this process, a tally of the dots against each statement section was made with the top scoring statements taken in each of the coloured hubs. Each table then presented to the session organiser their top statement in each coloured hub. For post -rimary they presented their top two (2) prioritised statements in each hub. All the statements were collated and presented on-screen for the participants to review. The output of this activity was then used as a lead into another **Voting Activity** for post -primary

students only.

ACTIVITY	DESCRIPTION
	The final activity in the methodology was one of evaluation. Both primary and post-primary
6	young people were asked to evaluate the consultation session that they took part in.
	For primary students the evaluation was done visually using an evaluation dart board where
EVALUATION &	each student was able to place a dot in a dartboard segment for each of the questions.
FEEDBACK	
ACTIVITY	The dartboard segments were as follows:
	1. The experience overall
	2. The venue
	3. The games
	The open space activity     The lifeline activity
	6. The moving debate activity
	7. The placemat activity
	7. The placemat activity
	The response segments inside the dartboard were as follows:
	1. Very Good coloured (BLUE)
	2. Good coloured (GREEN)
	3. Okay coloured (ORANGE)
	4. Not Good coloured (RED)
	For post-primary students, an alternative method of a survey questionnaire with a Likert scale
	response on a scale of 1 to 5 was chosen.
	The current questions included.
	The survey questions included:  1. The day overall
	<ol> <li>The day overall</li> <li>The overall organisation of the digital strategy consultation</li> </ol>
	3. The open space activity
	4. The lifeline activity
	5. The moving debate activity
	6. The placemat activity
	7. The voting activity
	8. The food
	The rating scale available was as follows:
	1. Poor
	2. Fair
	3. Good
	4. Very Good
	5. Excellent
	There were three (3) additional unscaled open questions as follows:
	<ol> <li>What was the best thing about the day?</li> <li>What (if anything) would you change about the consultation?</li> </ol>
	3. Any further comments?
	5. This further confinence.
7	The final stage in the process was the summarisation of the day for the young people. This
	afforded the organisers the opportunity to explain the value and relevance of the work done by
SHORT SUMMARY	the young people on the day and to thank them for it.
AND WRAP-UP	The acceion concluded by giving them a high level idea of hearth significant districts the signi
ACTIVITY	The session concluded by giving them a high level idea of how their work would fit into the wider consultation process and development of the Digital Strategy for Schools.
	consultation process and development of the Digital strategy for schools.

# **Open Space**

# What is information and communications technology?

# **Methodology for Open Space Activity**

For the Open Space activity, the young people were asked "What is information and communications technology?" A number of verbal answers were provided by the participants and these formed the broad parameters for the session discussion.

The participants were then asked to consider the sub-question: Why should we use technology in our classrooms?

The young people used coloured post-it notes to write their responses to this (one response per note). Generally, participants used two or more notes. They were then invited to post their responses on the wall in no particular order.

Five participants were then asked to volunteer to work on organising the post-it notes into categories or themes. One of the session facilitators worked with this group to help them decide on the categories and provide advice on where some of the more obscure responses fitted.



Figure 3. Open Space response wall - primary

# **Primary Open Space Activity**

A selection of responses made by the participants are captured in Table 2 for primary students.

Table 2. Primary category headings with sample indicative statements

#### Less books

"It's better than breaking your back with heavy bags"

"You don't need a lot of books, you can just keep it all on your computer"

#### To do projects

"Learn about different stuff like PowerPoint, Excel, OneNote, Word, Visio and Access"

"We should use computers in our classroom so we can type up reports"

#### To help us learn

"For advanced learning - it's a quicker way to learn"

"Because Google has exact information and you could learn from that"

#### To research and look up information

- "We can compare information and find out what's true and what's false which will improve certain skills"
- "Good in class if the teacher knows what they're doing, because if he/she doesn't it might be dangerous"
- "You can research things better than books if you want to find out more facts"
- "We can get things done quicker with keyboards and copy and paste"
- "We should use technology in our classroom because having something saved on an iPad or phone means you can look back at it"

#### Reasons to learn how to use it

- "We should learn because our future is technology"
- "We should use technology to get smarter"
- "Because the internet is smarter than people"
- "We should use information technology because it can open up cheaper and wider forms of education"

#### New skills

- "Computers are good to improve typing skills"
- "It trains our skills on a computer"

#### To play games

- "We use it to play some technology games"
- "Learn through activities and games"

#### Fun

- "Technology makes learning fun"
- "Because children like using it"
- "Children can feel free to be creative using it"

#### Easier

- "Everything is close together on a computer and you don't have to be looking for your books"
- "If you have an app on the computer that has Math questions or English questions it will be easy for them because it will be fun and the children remember easier"
- "It's easier to write something down rather than remember everything"

The responses themes were inputted into Wordle and reported back to the participants as shown in Figures 4 for primary students. Wordle is a tool for generating a "word cloud" from a source text. The word cloud gives greater prominence to words that appear more frequently in the source text, the more times a word or phrase appears in the source text, the larger that word appears in the word cloud. As Figure 4 indicates, most of the uses were categorised as "looking up info" by the primary students.



Figure 4. Why should we use technology in our classrooms? - Primary Wordle



Figure 5. Giving some considered thought to the process – primary student

# **Key Messages Arising from Primary Open Space Activity**

The primary students are aware of the importance of use of technology. They articulate the benefits of technology that impact them directly - such as reduced weight of school bags by substituting physical books for eBooks, the injection of fun and games into learning and the availability of information for projects.

They see the importance of technology in their future lives for and the future of society. While they see technology as the norm, they are concerned that schools are not moving with the times.

They tend to focus on the use of ICT to access information rather than for creativity. They talk about opening up "cheaper and wider forms of education". However, they do see the potential for "more learning and assessment methods to suit different styles of learning".

# **Post-Primary Open Space Activity**

A selection of responses made by the participants are captured in Table 3 for post-primary students.

Table 3. Post-primary category headings with sample indicative statements

# Phones (mostly statement of 'phone' or type of phone)

"Use phones secretly but we aren't meant to", "phones not really allowed"

"To google answers when the teachers don't know answers"

#### Laptops, desktops, iPads, Kindle

"Computers way too old", "Computers in first year. That's it!!"

"Computers in computer class once per week", "XP, so a bit malfunctioning"

"Sometimes for class we go to the computer room (not that often though)"

#### Interactive whiteboards

"Some teachers use the interactive whiteboard, but not the students"

#### Inclusion

"To help people that could be deaf / blind"

"So adults and children can connect and bond"

"People who don't have IT gadgets at home can benefit from the gadgets in school"

"To help people with disability"

"It makes education more accessible to the current generation"

"People / schools need to move on with technology or Ireland will be left behind"

#### Information communication

- "Without it, young people are not getting the most comprehensive education available"
- "Why not? There are no disadvantages only more efficiency"
- "Keep up with technology (we don't want to fall behind)"
- "Students relate more to interactive computer methods"
- "We're in the 21st century. Technology is everywhere. Schools need to move with the times!!"
- "We are in a modern era embrace it"
- "Making the learning process faster and easier"
- "It would save having to buy books. Buy one laptop to use forever"
- "Infinite amount of information in the palm of your hand"
- "It gives youth an experience with new technology and new ways of thinking"

#### Keeping up with the times, modern world

- "We'll use it in university and work, so why not start now?"
- "The books may be outdated"
- "The world is changing, the classroom needs to follow suit"
- "90% of work is done on computers"
- "Technology is the norm!"
- "ICT is the future. Give kids a taste of what they will be working on"
- "It's easier to remember stuff through technologies and games"
- "To keep up with foreign education systems"

#### Ease of access

- "Less books, less physical strain"
- "More practical, lighter weight, lighter than books"

#### **Learning tool**

- "Different ways of learning", "Education can seem more interesting"
- "Makes learning more interesting, more organised"
- "Young people are kept interested in schoolwork as it is a change from books"
- "To connect / engage young people in the learning process"
- "It would improve IT skills for young people which in turn could lead to career options"
- "Life skills"
- "Easy to condense heavy material into slideshows"
- "More learning and assessment methods to suit different styles of learning"
- "Internet avoids bias in books"
- "Promote reading because kids prefer reading off screens"
- "To further your knowledge about different cultures and countries"

#### Improvements - technical

- "Makes studying easier", "Could improve productivity"
- "Makes students feel what they are learning is more relevant"
- "Students are more immersed in the information / lesson"
- "Parents and teachers can contact easier, i.e. Dropbox"
- "More expansive and comprehensive education"

#### **Environment**

- "Good for our backs and uses less stress"
- "To save paper, to save the environment"

#### **Fun and interest**

- "We're no longer in the 80s"
- "To have variation"
- "Still learn when teacher isn't bothered to teach us"



Figure 6. Categorising by themes – post-primary

The responses themes were inputted into Wordle and reported back to the participants as shown in Figure 7 for post-primary. Wordle is a tool for generating a "word cloud" from a source text. The word cloud gives greater prominence to words that appear more frequently in the source text, the more times a word or phrase appears in the source text, the larger that word appears in the word cloud.

The post-primary group came up with a broader range of technology themes for use in the classroom. The main categories arising were the use of technology as a "learning tool" and for "interactive information communication".



Figure 7. Why should we use technology in our classrooms? - Post-primary wordle

#### What technology devices do you use in school?

Participants at the post-primary workshop were asked to list the technology devices that they use in school. Again, these were grouped into general categories and a Wordle analysis for the devices used in school is shown in Figure 8.

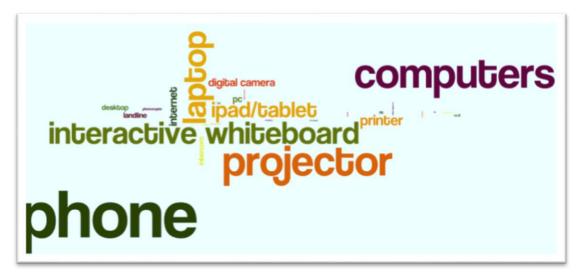


Figure 8. What technology devices do you use in school? – Post-primary wordle

## **Key Messages Arising from Post-Primary Open Space Activity**

The post-primary participants are certainly more vocal with regard to the reasons why there must be more technology in schools. It is interesting and of merit to see the comments about the use of technology for the inclusion of other students with disability.

The participants are aware of the changes that are happening and that technology is being used in all aspects of society. They feel that they need to be prepared for this and that technology is now a "life skill". They are concerned that we "will be left behind" if schools do not embrace technology, that "schools need to move with the times". Participants also indicated that the technology in schools is outdated, can be slow and "old".

They see that technology and internet access can provide an alternative to textbooks. They recognize the potential for technology to make learning "more interesting", "accessible" and promote "new ways of thinking". They also see that technology can provide alternative "learning and assessment methods to suit different styles of learning".

Finally, it is clear that the teenage group see their phones as being the main technology device that they use. What was surprising is that so many participants indicated that they use their phones in school. When this was followed through in the Lifeline activity (below), many students indicated that they use their phones on the way into and out of school and during break time to check messages and social media.

# **Lifelines**

When and where young people use ICT

# **Methodology for Lifelines Activity**

A day in my life – the participants were asked to indicate at what times and where they use information and communications technology, from the time they get up to the time they go to sleep? Participants classified their responses in different colours for the following categories:

- 1. For **PERSONAL USE** (for me)
- 2. For use IN SCHOOL
- 3. For use **FOR SCHOOL**

Lifeline samples for both primary and post-primary can be seen in Figures 9 and 10. Primary students were provided with nine time-blocks while post-primary were given an additional six time-blocks (6) bringing their total to fifteen time-blocks (15). This represents the longer school day in post-primary and likelihood of more frequent use of technology by older participants throughout the day.

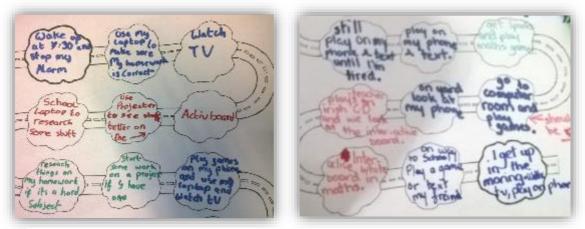


Figure 9. A day in my life - primary samples

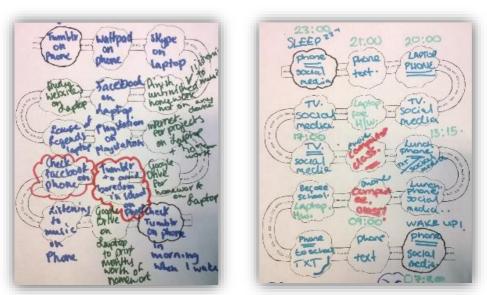


Figure 10. A day in my life – post-primary samples

# **Primary Lifelines Activity**

A selection of responses made by primary students are captured in Table 4 - 6. It is based on a lifeline chart with nine (9) time blocks during an average day. There were also a significant number of incomplete time blocks (or non-responses) from students.

#### *Table 4. Personal use of technology - primary (Blue)*

#### Small number of technologies indicated:

TV, laptop, phone, tablet

#### Multiple technology purposes indicated:

Check homework is correct, play games, watch movies, listening to music, texting, browsing, looking up stuff, social networking, check time, reading, chat to friends, social media, alerting / reminders, emails

#### Multiple technology products indicated:

YouTube, Xbox, PlayStation, Nintendo DS, Facebook, Instagram, Twitter, Google, Viber, Skype, Minecraft, Kindle, iPad, iPod

#### Interesting comment sample:

"I text until I fall asleep"

#### Table 5. In school use of technology - primary (Red)

#### **Current core school technologies indicated:**

Laptop, projector, interactive whiteboard (e.g. Smartboard, Activboard), computer, calculator, book scanner in library, CD player,

#### Reduced number of technology purposes indicated:

Information research, information display, literacy, projects, maths (numeracy), typing, coding / programming (two responses), maths games, for art, for history, look at news, roll call (two responses), listen to Irish, blogging, robotics, recording of homework on the whiteboard, showing of examples

#### Fewer technology products indicated:

Netflix (there was an entry for this but not sure if correct), Reading Eggspress, Scratch, Microsoft PowerPoint, YouTube, Microsoft Photo Story, Sumdog, Mathletics, Kindle (two responses)

#### Interesting comment sample:

"My teacher uses the computer while we work", "We watch a movie on Netflix on a rainy day"

## Table 6. Out of school use of technology - primary (Green)

# Smaller number of technologies indicated:

Computer, music device, tablet, phone

#### Reduced number of technology purposes indicated:

Information research, project work, maths work, homework, information gathering, calculator, English poems and essays, learn about animals, spell checking, games

#### **Fewer technology products indicated:**

Microsoft Word, Google, Scratch, iPod, iPad

## **Key Messages Arising from Primary Lifelines Activity**

In school, participants use technology for information gathering and dissemination. Many refer to the use of the interactive whiteboard by the teacher. There are some references to coding and robotics, which are perhaps tied to a particular school.

There also appears to be a difference in the scale and use of technology between primary and post-primary. Primary level participants use less variety of technologies and not as much compared to post-primary level users. Post-primary students appear to have more freedom and access to different technologies.

One student chose not to respond and marked on their sheet "not concerned for rules" and some students attempted to put more than one classification into each time block. There were also a significant number of incomplete time blocks (or non-responses) from participants.

# **Post-Primary Lifelines Activity**

A selection of responses made by post-primary students are captured in Tables 7 - 9.

#### Table 7. Personal use of technology - post-primary (Blue)

## Multiple number of technologies indicated:

Phone, computer, laptop, TV, game console, tablet, music device.

#### Multiple technology purposes indicated:

Alarm-setting, texting, browsing web pages, listening to music, social networking and social media, blogging, phone call (low incidence though to friends, more to ask about being collected from school), email, streaming TV series and movies, radio, reading the news, playing games (gaming), classified advertisements, visual discovery, one response of app development, eBook reading, uploading videos, editing videos, podcasts, digital publishing, one response of online shopping and one response of Massive Open Online Course (MOOC).

## Multiple technology products indicated:

Tumblr, Wattpad (writing community), Skype, Facebook, PlayStation, Twitter, Instagram, Netflix, Snapchat, YouTube, Gmail, Sky TV, Viber, DoneDeal, Blackberry Messenger, iMessage, Pinterest, Spotify, Coursera, Reddit, Xbox, Issu, Kindle, iPad, iPod.

#### Interesting comment sample:

"White noise to help me sleep!"

#### Table 8. In school use of technology - post-primary (Red)

#### **Current core school technologies indicated:**

Teacher computer or laptop, projector, iPad, boards (called whiteboard, magic whiteboards, interactive whiteboard and smartboard), CD Player, tape, printer.

### Reduced number of technology purposes indicated:

Mainly information delivery with some interaction (e.g. iPad for maths), computer classes, listening to comprehensions, watching slideshows, type up of projects, there was a low indication of information research, language classes, 1 response about replacement of school books), ECDL in Transition Year. Use in specific subjects such as videos for history, the projector for languages and iPad for maths. There were three responses about the electronic taking of attendance.

# Few technology products indicated:

Other than the naming of the types of interactive whiteboard, the only other entries were for Microsoft PowerPoint, Edmodo (classified as a social learning platform).

#### Interesting comment sample:

Check Facebook on phone, use Tumblr (microblogging) to avoid boredom in school.

Use of phone to take pictures of notes and text, maths equations and solutions.

Use of phone to check time in school.

Check phone during tutorial.

Use computers for personal use if unsupervised.

Table 9. Out of school use of technology - post-primary (Green)

#### **Smaller number of technologies Indicated:**

Computer, laptop, tablet, phone

#### Reduced number of technology purposes indicated:

Information retrieval, do homework, study, projects, print homework, spell checking, dictionary, oral language work, typing up work, watching documentaries, information researching, update to-do lists, look up exam papers / questions online

#### Few technology products indicated:

Google Drive, Wikipedia, Google Translate and Microsoft Office productivity applications such as Word and PowerPoint, iPad

## **Key Messages arising from Post-Primary Lifelines Activity**

Post-primary students are using technology more out of school than in school. There is a richer use of technology across multiple devices for personal use. Their use is concentrated on social media, playing games and browsing the web. The prominence of the smart phone is very evident here and the various ways it is being used such as an alarm clock, listening to the radio, checking social media updates and SMS messages.

This contrasts sharply with in-school usage where there is not the same richness of technology usage and tends to be passive in nature (teacher presentations, "computer" class). However, there are references to the use of texting, email and the use of Snapchat, Twitter and Facebook in the school settings during school time.

#### **Primary and Post-Primary Patterns**

Figures 11 to 13 illustrate the variance in usage patterns between primary and post-primary students in relation to their use 'in school', 'for school use' and their 'personal use'.

Figure 11 shows that students are predominantly using technology for 'personal use' (287 data counts) and this is over twice the level it is at primary (119 data counts).

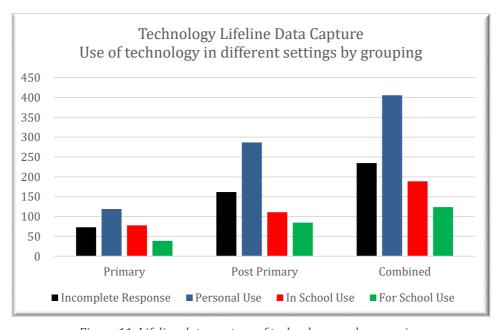


Figure 11. Lifeline data capture of technology use by grouping

Figure 11 also shows that post-primary students did not account for a significant number of time blocks (162) and thus Figure 12 has excluded these responses and just presents their responses in relation to 'Personal Use', the 'In School Use' and 'For School Use'.

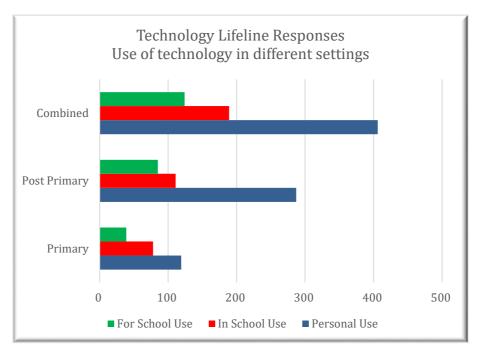
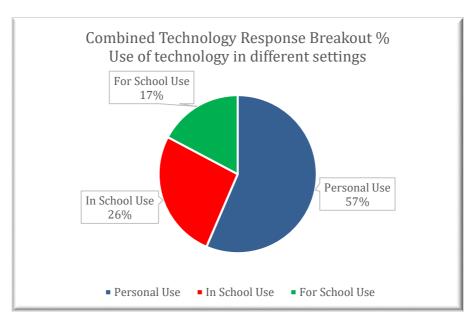


Figure 12. Technology use by location (purpose)

Figure 13 shows that when 'In School' and 'For School' responses are accumulated (312 counts) and contrasted with 'Personal Use' (406 counts) it shows that students use technology 43% of the time for school related activities and 57% of the time for Personal Use.



*Figure 13. Percentage breakout of technology usage by location (purpose)* 

Both groups struggled to come up with examples of technology in the Lifeline Activity and this was reflected in their responses to the workshop evaluation. Specifically they struggled to identify how they used technology during their school day.

# **Moving Debate**

The case for and against more use of ICT in School

# **Methodology for the Moving Debate Activity**

The young people were asked to stand in the middle of the room. The primary group did a dry run of the moving debate by being asked "Do you agree that One Direction are the best band in the world?" If they agreed, they were asked to move to the left of the room, if they disagreed, they were asked to move to the right. If undecided, they could stay in the centre.

They were then given the opportunity to persuade those standing at the opposite side to change positions by explaining to the group their ideas/opinions on the topic.

If someone changed their views, they were free to move during the debate.

The facilitator asked the following question:

"Do you want to use more communications and information technology for school?"

# **Primary Moving Debate Activity**

A list of the persuasions for each of the positions given by primary students is shown in Figure 14. Agreement with the statement is shown in green, undecided is shown in orange and disagreement is shown in red. Direct quotations from video footage are included in Appendix 3 to allow for comparison with the reviewer's paraphrasing.

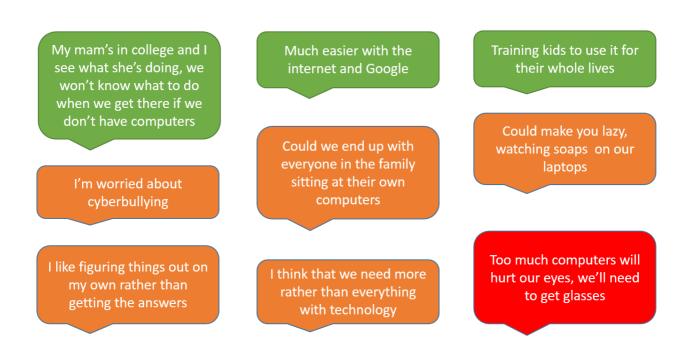


Figure 14. Primary comments made in the moving debate activity

#### **Key Messages Arising from the Primary Moving Debate Activity**

In general, participants want more ICT in school. They see that ICT provides more up-to-date content than books, that it supports creativity and innovation and in general helps make learning "easier". They also mention the need to be able to use ICT for future work.

They did voice concern that too much dependency on ICT might have negative impacts such as distraction "watching soaps", isolation "sitting at their own computers", or social issues "cyberbullying".

# **Post-Primary Moving Debate Activity**

A list of the persuasions for each of the positions given by post-primary students is shown in Figure 15. Agreement with the statement is shown in green, undecided is shown in orange and disagreement is shown in red. Direct quotations from video footage are included in Appendix 3 to allow for comparison with the reviewer's paraphrasing.

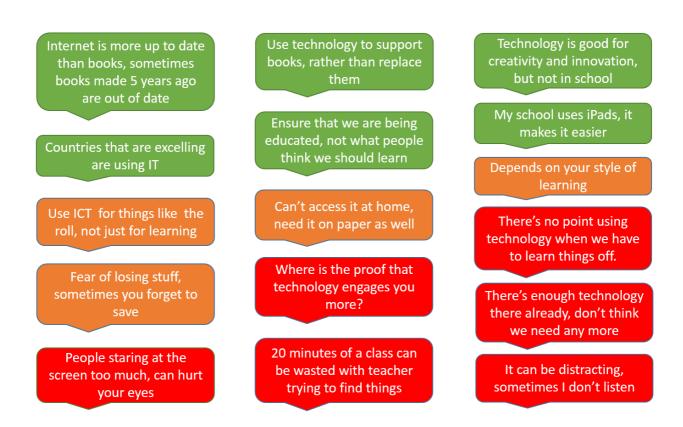


Figure 15. Post-primary comments made in moving debate activity

#### **Key Messages Arising from the Post-Primary Moving Debate Activity**

In general, participants want more ICT in school. They see that ICT provides more up-to-date content than books, that it supports creativity and innovation and in general helps make learning "easier". They also mention the need to be able to use ICT for future work. They are also conscious of the shortcomings of ICT and understand that ICT is not the panacea for learning, they see it as a tool, alongside books and complementary to other forms of teaching and learning.

## **Primary and Post-Primary Patterns**

The final positions from the moving debate with the question "**Do you want to use more communications and information technology in school?**" is shown in Figure 16.

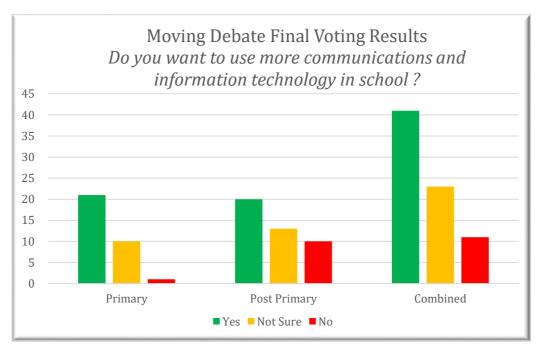


Figure 16. Moving Debate results

The number of no responses is interesting, particularly at post-primary. Students are concerned that the introduction of new technologies could be a distraction from the business at hand, i.e. exam performance to secure a favourable Leaving Certificate to ensure entry to third-level education. Young people perceive that the current post-primary system is focused on having "to learn things off" and that "there's enough technology there already". The system needs to be reformed before ICT can benefit teaching and learning.



Figure 17. The Moving Debate

# **Placemats and Prioritisation**

#### How ICT should be used

# **Methodology for Placemats and Prioritisation Activity**

'How ICT should be used' is written in the middle circle of the placemat which is divided into five coloured segments:

for us to learn coloured (RED)
 in all subject areas coloured (GREEN)
 to show what we have learned coloured (BLUE)
 for teaching coloured (ORANGE)
 to search for and choose information coloured (YELLOW)

Based on the outcome from the moving debate, post-primary participants divided each of the sections into "Benefits" and "Drawbacks". Participants recorded their comments under each of the sections.

# **Prioritisation (Primary)**

Participants then prioritised points in each segment with sticky coloured dots.

Each person had two dots per segment.

Each table writes out the top recommendation under each segment and the top five recommendations for each section from all tables is displayed on screens.



Figure 18. Group getting started on their placemat

#### **Prioritisation (Post-Primary)**

Participants prioritised points in each segment with sticky dots.

Each person given three dots per segment.

The top two recommendations under each segment are recorded.

The top 10 recommendations for each section from all tables is displayed on screens.

See figure 20 for process diagram.



Figure 19. Prioritising main points



# 1. Prioritising

Participants prioritised points in each segment with sticky dots. Each person given three dots per segment.



# 2. Recording

Top two recommendations under each segment were recorded.



# 3. Reporting

Top 10 recommendations for each section from all tables were displayed on screen.

Figure 20. The placemats prioritisation process for post-primary



How ICT should be used

Figure 21. Sample primary placemat

Figure 22. Sample post-primary placemat

# **Primary Placemats and Prioritisation Activity**

An analysis of each of the five (5) sections is presented for primary students in Tables 10 to 14. The coloured sections are:

- 1. For us to learn (RED)
- 2. In all subject areas (GREEN)
- 3. To show what we have learned (BLUE)
- 4. For teaching (ORANGE)
- 5. To search for and choose information (YELLOW)

#### Table 10. For us to learn – primary (Red)

#### For us to learn (overall positive opinions)

- information and fact searching
- online source material
- online translation and mapping
- typing skills

The participants view technology as mainly for consumption, information searching and research.

# Table 11. In all subject areas – primary (Green)

#### In all subject areas (overall positive)

- access curriculum material (books) from anywhere
- digital classes and online spelling bee
- google images for art
- websites to understand areas of subjects
- help to do more projects

Websites were mentioned for information, images for art and applications to test spelling and numeracy. There were a lot of responses about using ICT for more project work. Given that primary students already complete a lot of project work, this may just be a further extension of what they already do.

#### *Table 12. To show what we have learned – primary (Blue)*

#### To show what we have learned (overall positive)

- store what we produce and access it later to see what we did a day later or a year later
- use of screen sharing so teacher and students can show work to each other
- upload photos into a movie maker and do a voice over to explain
- type up an account of what you learnt
- online tests

The participants would like to see technology helping them to archive their work on an ongoing basis and to be able to access it and share it through the course of their school journey.

# Table 13. For teaching – primary (Orange)

#### For teaching (overall positive)

- use interactive whiteboard to show whole class rather than sit with each pupil
- if the class does a project use PowerPoint to explain
- you could email your homework
- ICT will be needed for everyone in the future so teachers need to teach using it
- teacher can use a projector so we can see better

Young people view technology as a means to help them organise their learning, submit homework and get timely feedback. They would like to be able to email homework.

## Table 14. To search for and choose information – primary (Yellow)

## To search for and choose information (overall mixed)

- for projects you are writing about you can look up an expert
- google translate for languages
- you can use ask.com to about questions in history
- the internet can be used to search for information
- not all information on the internet is true so teacher resources are a good way to find correct information and nearly always being you to a safe website

There appears to be a common and high level understanding as to the value of the internet for information searching and some strategies for sourcing it. However, there is a concern that not all information on the internet is reliable.

## **Primary Top Five Scoring Statements by Section**

The final outcome from the scoring process is shown in Table 15.

#### *Table 15. Top 5 scoring statements - primary*

#### For us to learn

- 1. Learning how to type with all your fingers to help people use computers
- 2. Websites that have 101 facts for info
- 3. Google translate and google maps
- 4. We can learn from online dictionaries and thesauruses
- 5. You can look for information on the internet

#### In all subject areas

- 1. ICT will help to do more projects
- 2. Websites are a great way to help you understand certain areas of subjects
- 3. You could use google images for art
- 4. Digital classes and online spelling bees
- 5. If you forget your books you get in trouble. If you use a computer you can access the programmes from anywhere

#### To demonstrate what we have learned

- 1. Online tests
- 2. Type up a recount of what you learned
- 3. We can write it on a hard drive and then we can see what we did over the day or year
- 4. Windows movie maker IMovie photos of all your projects and voice track to explain them
- 5. Screen sharing technology can be implemented so teachers and students can show work to other people's personal screens

#### For teaching

- 1. ICT will be needed for everyone in the future teachers need to teach using it
- 2. Interactive whiteboards are easier to show the whole class rather than going to each pupil individually
- 3. Email you could email your homework
- 4. If the class does a project you could make a PowerPoint to explain
- 5. The teacher can use a projector so we can see better

#### To search for and choose information

- 1. The internet can be used to search up information
- 2. You can use ask.com to ask about questions in history
- 3. Google translate for languages
- 4. Not everything on the internet is true so a good way to find correct information is to search teacher resources with whatever you wish to search. This nearly always brings you to a safe website
- 5. For projects, if you were writing about animals and you were not an expert you could look it up

# **Post-Primary Placemats and Prioritisation Activity**

An analysis of each of the five (5) sections is presented post--rimary students in Table 16 to 20. The coloured sections are:

- 1. For us to learn (RED)
- 2. In all subject areas (GREEN)
- 3. To show what we have learned (BLUE)
- 4. For teaching (ORANGE)
- 5. To search for and choose information (YELLOW)

#### Table 16. For us to learn – post-primary (Red)

#### For us to learn (overall mixed opinions)

- Not for everyone
- Might not suit student way of learning
- More information and less biased
- Information stored and accessed for when time to revise
- Improves ICT skills if used daily
- Can make you lazy (spelling / grammar) [-], dyslexia / dyspraxia aid spelling / reading [+]
- Can be distracting (e.g. social media)
- Some information is wrong on ICT

They did not address how they would see the school and classroom of the future looking like. They recognise the benefits that technology allows for students with learning needs, however, they feel that technology is "not for everyone".

#### Table 17. In all subject areas – post-primary (Green)

#### In all subject areas (overall neutral to negative)

- Reduce carry-load of books,
- Stuck if no internet
- Restriction of camera and block websites on devices during school hours on school network to increase attention in class
- Creativity and expression can be lost in English auto-correct functionality
- Wastes a lot of time teachers are not familiar with it
- Not all teachers good with technology and not all schools the same should be brought into classrooms where the teacher is comfortable with it
- Teachers will require training, teachers will resist change e.g. JCSA strike threats

No post-primary student indicated how specifically technology could be used in subjects or the curriculum. The use of technology across all subjects was not mentioned either.

#### Table 18. To show what we have learned – post-primary (Blue)

#### To show what we have learned (overall mixed)

- Teachers take a long time to correct work because they can't use technology
- Programs save time spell- checking and collect data to find averages
- Because you are searching the topics you are more aware and understand the information better
- You can develop computer skills, e.g. PowerPoint
- Can be easier to type than write
- It promotes laziness, easier to cheat on an iPad
- You can copy and paste instead of learning it
- Can be used for cheating by looking up answers on gGoogle
- Plagiarism

The participants would like to see technology as part of the assessment and to help streamline the amount of time a teacher needs to spend on correcting work and to make it more efficient. Some see that using technology it is much easier to type using the computer than to write, but they are also conscious that it is easier to copy and paste other people's work, and that some students may be tempted to "cheat".

#### *Table 19. For teaching – post-primary (Orange)*

## For teaching (overall mixed)

- Less personal and judgemental
- More organised information is not lost or on miscellaneous sheets
- Large bank of resources available
- Information is sometimes hard to find again
- Constantly moving forward prepare for future and college
- Cloud computing in classrooms
- Homework app to remind students of homework such as Edmodo
- Some teachers have little / no knowledge of technology
- Time consuming
- Teachers need to be educated on how to use technology

Some participants see the benefits of using technology for assessment, as it is "less personal and judgemental". Students are concerned of "being stuck" if there is no internet. Given the on-going and future importance of technology and reliance on it in the school-setting, there will be a need to make sure that internet connectivity is reliable and secure.

## Table 20. To search for and choose information – post-primary (Yellow)

#### To search for and choose information (overall mixed)

- Distraction filters should be tailored to school and pupil needs, slow internet in school and teachers not trained enough and don't prepare
- Websites might provide easier explanations than your teacher
- More capability to understand new information
- More up-to-date than books already published
- Keeps information up-to-date
- School books have all the facts needed on exams useless information on the internet
- Students may not actually understand what they are putting down
- Wrong information on Wikipedia anyone can edit the material so it's not always accurate
- There are unreliable sources e.g. Wikipedia and google translate

There is a concern that not all information on the internet is reliable and there is a need to help students filter out unreliable or inappropriate sources and content. There is also some acknowledgement that they need more rigorous ways to cite and file resources found during the school year. Some young people perceive the text book as providing "all facts needed for an exam" and may not have used the internet to locate alternative learning resources.

# **Key Messages Primary and Post-Primary Placemats and Prioritisation Activity**

A broad synthesis across primary and post-p-rimary submissions for each of the five (5) sections from the statements made by the students is summarised into a table. The table has taken these responses and mapped them onto applicable topical areas that will be of relevance in forthcoming Digital Strategy documentation (see Table 21).

A [+] or a [-] has been placed beside a statement to indicate whether the statement made by the students was positive or negative about the current and future use of technology in a school-setting.

Table 21. Topical areas relatable to the statements made by the primary and post-primary students

Section / Area	"Quotes Synthesis" and Individual Quotes with + and - aspect
Curriculum &	[+] access books from anywhere, reduce book carrying load
Course Material	
Information Management	[+] information and fact-searching, online source material, online translation and mapping, more information and less bias, Google images for Art, websites to understand areas of subjects, searching the topics you are more aware and understand the information better, for projects you
"Online research skills, relevance, proper usage and citation"	are writing about you can look up an expert, Google Translate for languages, you can use Ask.com to ask about questions in history, the internet can be used to search for information, websites might provide easier explanations than your teacher, more capability to understand new information, more up-to-date than books already published, keeps information up-to-date
	[-] not having the proper sources, information wrong, you can copy and paste instead of learning it, can be used for cheating by looking up answers on Google, plagiarism, promotes laziness and easier to cheat, information is sometimes hard to find again, time consuming, not all information on the internet is true so teacher resources are a good way to find correct information and nearly always being you to a safe website, school books have all the facts needed on exams – useless information on the internet, students may not actually understand what they are putting down, wrong information on Wikipedia – anyone can edit the material so it's not always accurate, there are unreliable sources e.g. Wikipedia and Google Translate
Office / Productivity Suite "Productivity	[+] proper typing skills, improve ICT skills if used daily, programs save time – spell-checking and collecting data such as averages, you can develop computer skills e.g. PowerPoint, if a class does a project use PowerPoint to explain
tool skills used in industry"	[-] can make you lazy (spelling/grammar), creativity and expression can be lost in English (auto-correction functionality
Student Product / Project Repository	[+] information stored and access for when time to revise, help to do more projects, store what we produce and access it later to see what we did, type up an account of what you learnt.
	[-] teachers take a long time to correct work because they can't use technology

Management of Information Delivery /	[+] restriction of camera and block websites on devices during school hours on the school network for better attention in class
Connectivity	[-] can be distracting (social media), distraction – filters should be tailored to school and pupil needs.
Individual Learning Styles	[-] might not suit the student way of learning, not for everyone.
Mediate Learning Disabilities	[+] aid in spelling/reading for students with dyslexia and dyspraxia, can be easier to type than write.
Assessment, Testing and Feedback	[+] digital classes and online spelling bee, online tests, less personal and judgemental
Teacher Training and Development	[-] waste a lot of time with it - teachers are not familiar with it, not all teachers are good with technology and not all schools the same, teachers will require training and will resist change, ICT will be needed by everyone in the future – so teachers need to start teaching it, some teachers have little or no knowledge of technology, teachers need to be educated on how to use technology, technology constantly moving forward – prepared for future and college, teachers not trained enough and don't prepare
In-Class Presentation Technology	[+] use of screen sharing so teachers and students can show work to each other, use interactive whiteboard to show whole class rather than sit with each student, teacher can use a projector so we can see better
Technology Robustness and	[+] cloud computing in classrooms
Infrastructure	[-] not receiving emails, stuck if no internet, slow internet in school
Student Learning and Management System	[+] you could email your homework, more organised – information is not lost or on miscellaneous sheets, large bank of resource available, homework app to remind students of homework
Devices	[+] Students should be able to use their personal phone with the option of connecting to a restricted network blocking social media

# **Post-Primary Voting**

## **Methodology for Voting Activity**

The most popular recommendations numbered 1-10 from the placemats were displayed on screen. Participants were then asked to complete five rounds of voting, with each round corresponding to a category. Each participant had one vote for each of the categories:

for us to learn coloured Red (RED)
in all subject areas coloured Green (GREEN)
to demonstrate what we have learned coloured Blue (BLUE)
for teaching coloured Orange (ORANGE)

to search for and choose information coloured Yellow (YELLOW)

Participants voted one round (category) at a time in ballot boxes. For each round (category), they marked their top choice from the list of 1 to 10 displayed on the screen. They then placed their vote in the ballot box.



Figure 23. At the ballot box

## **Outcomes of Post-Primary Voting Activity**

The final outcome of voting process is shown in Table 22 below.

Table 22. Top 10 statements - post-primary (top 3 shown in bold)

#### For us to learn

- 1. Technology might not suit a student's way of learning
- 2. Can make you lazy spelling/grammar (auto-correct)
- 3. Information is all stored and can easily be accessed come the time to revise
- 4. Improves peoples' ICT skills if they are using it on a daily basis
- 5. Some information is wrong on ICT
- 6. Not for everyone
- 7. More information and less biased information
- 8. Using ICT can be distracting e.g. social media
- 9. People who have dyslexia/dyspraxia can use word/spell check as they find spelling/reading difficult
- 10. People not receiving emails, not having the proper resources etc.

#### In all subject areas

- 1. You don't have to carry loads of books
- 2. Teachers will require training and will likely resist change (e.g. JCSA strike threats)
- 3. Technology should be used in the classroom for means other than teaching such as: improve how the roll is taken in each class, improve how homework is noted ICT as a replacement for the journal
- 4. Camera and certain websites restricted on devices during school hours on school network so students pay attention in class
- 5. English creativity and human expression can be lost (using an auto correct system)
- 6. You are stuck if you have no internet
- 7. Not all teachers are good with technology so it should be brought into classrooms where teachers are comfortable with it. (not all schools are the same)
- 8. There are no written records of classwork and notes
- 9. In English the notes/summary may be of a higher quality from the internet as opposed to teacher given works
- 10. ICT wastes a lot of time as teachers are not familiar with it

#### To demonstrate what we have learned

- 1. Because you are searching the topics yourself you are more aware and you understand the information better
- 2. You can develop computer skills e.g. PowerPoint
- 3. Plagiarism
- 4. Because teachers are not able to use technology a lot, they sometimes take a long time to correct work
- 5. Programmes save time as they have spell-checks, collect data find averages etc.
- 6. It promotes laziness
- 7. Easier to cheat on an iPad
- 8. You can copy and paste instead of learning it
- 9. Technology can be used for cheating e.g. looking up an answer on google
- 10. Can be easier to type than write

#### For teaching

- 1. Constantly moving forward, prepare for future and college
- 2. More organised, info not lost or on miscellaneous sheets
- 3. Teachers need to be educated on how to use technology
- 4. Information is sometimes hard to find again
- 5. Large bank of resources available
- 6. Some teachers have little/no knowledge of technology
- 7. Less personal and judgemental
- 8. Time consuming
- 9. Cloud computing in classrooms
- 10. Homework app to remind students of homework (Edmodo)

## To search for and choose information

- 1. Wrong info e.g. Wikipedia anyone can edit the material so it's not always accurate
- 2. School books have all facts needed for exams. Useless information on the internet
- 3. Students may not actually understand what they are putting down
- 4. More up-to-date than books already published
- 5. Keeps information up-to-date
- 6. There is unreliable sources e.g. Wikipedia and Google Translate
- 7. Websites might provide you with easier explanation than your teacher
- 8. Slow internet in school and teachers not trained enough and don't prepare
- 9. Distraction filters should be tailored to schools and pupils needs
- 10. More capability to understand new info



Figure 24. The "Count"

# **Overall Conclusions**

#### **Student Voice**

Technology will be needed by everyone in the future; our teachers need to teach while using it. Teachers need to be educated on how best to use technology. All teachers in a school should use technology, not just those teachers that are interested in it. We need to be constantly moving ahead to prepare for the future and for college.

Learning how to type properly with all your fingers can help us use computers better and is easier than writing for some people. Technology needs to be suitable for how a student learns; we don't all learn the same way and it should be used to help those people who have difficulties with spelling and reading.

We need to use technology to help us do more projects and to be more organised and not to have information that is on miscellaneous sheets or can easily be lost. We can learn from online information and look for it on the internet. Using the internet can be a great way to understand certain parts of difficult subjects. We need material that is up-to-date, accurate, reliable and easy to access; that is as good as our books to ensure that we have all the facts that we will need in our exams. Technology means that everything we do is stored and can be easily be accessed when it comes time for us to revise.

It can also be used for cheating and could make you lazy and there is also the danger that not everything on the internet is true so a good way to find correct information would be to search and look for information made by teachers for other teachers and students.

Technology can also be useful in other areas and not just for teaching. It can be used to help improve how things are done in class and how our homework is noted down and done rather than use journals. It also means that we don't have to carry loads of books into school. It could be used for online testing and to type up a recount of what we've learned and how we learnt it and to be able to show our work to other students and teachers.

# **Adult Interpretation of Student Voice**

The 75 participants demonstrated enormous clarity and insightfulness on their use of information and communication technology both in school and in their personal lives. Technology, particularly the smart phone, has become a central part of their social lives. These young people have a mature perspective on how digital technology can benefit how they live, learn and work now and in the future.

They perceive technology as something that is more relevant to their social lives and is of limited relevance in school. While there is some evidence that young people are using technology outside of school as an aid to learning, they are still reliant on textbooks and printed materials when preparing for exams (this is particularly the case at post-primary level).

They are using the internet for their own research but are conscious that some sources may not be reliable. They feel that information on the internet is often more up-to-date than what is published in their textbooks, or easier to understand than what has been presented by the teacher.

They would like to see greater use of ICT in school, but this needs to happen alongside curriculum reform. They understand that technology can open up new forms of learning, allow for collaboration and it can provide greater flexibility for students with different styles of learning. However, they are

concerned that such uses of technology are currently at variance with our exam-focussed system where such skills and new forms of learning are not encouraged.

Young people want to see greater use of technology in their school lives. They want to use a range of technology services that include: Cloud-based services such as email and collaboration; online resource banks; access to digital teaching and learning resources; and the administration of homework.

They believe teachers will require training to help them use such services effectively. They are also of the view that if teachers don't have the skills or if the technology is unreliable, ICT can be more of a distraction than a help in a time-constrained classroom. They also believe that some teachers may resist rather than embrace such changes because of lack of knowledge or unreliable equipment.

They see the potential for recording their work on an ongoing basis, accessing it at any time, and for having a digital student journal. They would like to see a greater focus on project-based work and less emphasis on learning information and facts. Technology could also enable them to display the work they have completed during the course of a school year.

ICT could also enhance school administration, particularly in the classroom to facilitate roll call while also facilitating the administration of homework and homework feedback.

They understand that ICT has the potential to help students with specific learning needs such as dyslexia or dyspraxia.

While these young people are very conscious that ICT provides many potential benefits, they are aware of the inappropriate uses of technology such as: plagiarism; becoming distracted; challenges posed by cyber-bullying; and or access to inappropriate material.

They are concerned that not all of the information on the internet is reliable and there is a need to help students filter out unreliable or inappropriate sources and content.

Overall, the young people involved in this consultation have demonstrated a very mature perspective on the potential role of ICT in schools. They see the potential, but understand that the provision of ICT devices and services in and of themselves may do more harm than good. They are not necessarily looking for more laptops, iPads or educational games, but a system which encourages alternative forms of learning aided by technology.

They are conscious that they need more access to technology in school and for learning and are worried that if we don't do so, they, and the country as a whole, will be left behind.

# **Recommendations for the Digital Strategy**

The main recommendations of relevance to the Digital Strategy for Schools from this research conducted with primary and post-primary students can be summarised as follows:

- 1. Technology needs to become more relevant to learning in school. Currently, technology is something that is more relevant to students' social lives and is of limited relevance in school.
- 2. The need to provide access to learning resources on the internet as these are often more upto-date than what they are provided in the textbook or easier to understand than what has been presented by the teacher.

- 3. The use of ICT to open up new forms of learning and collaboration and to provide greater flexibility for students with different styles of learning.
- 4. To provide Cloud-based services such as email, online resource banks, organisation of teaching and learning resources, and the administration of homework and school functions.
- 5. The use of ICT to record their work on an ongoing basis, accessing it at any time, and using ICT as their student journal.
- 6. The use of ICT for administration including roll call in each class and the assignment of homework and homework feedback.
- 7. To provide ongoing training for teachers to help them use these services effectively.
- 8. The use of ICT to help students with specific learning needs such as dyslexia or dyspraxia.
- 9. To raise awareness of technology downsides such as plagiarism, distraction, cyber-bullying and access to inappropriate material and to enable students to deal with these.
- 10. To help filter out unreliable or inappropriate sources and content.



Figure 25. Post-primary group busy at work

# **Acknowledgements**

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- Talbot NS, Bawnogue, Clondalkin, Dublin 22
- Laytown Senior School, Laytown Co Meath
- St Audoen's National School, Cook St, Dublin 8
- Gaelscoil na Rithe, Dún Seachlainn, Co na Mí
- Our Lady Of Mercy SNS, Military Rd, Waterford

## **H2** Learning

This report is written by John Hurley, partner with H2 Learning. Dwayne Keogh provided analytic assistance. H2 Learning worked with the Department of Education and Skills to develop the Digital Strategy for Schools.



For more information on H2 Learning, please visit www.h2.ie.



Figure 26. The post-primary group get ready to hear their instructions from Child and Youth Participation Officer, Martin Donohue

# **Appendix 1 – Primary Group Programme**

Consultation on Digital Strategy – Primary Monday, 9 June 2014

#### 11:00 Welcome and brief introduction

Why we are doing this consultation and what will happen to your views

#### 11:10 Open space – full group (OPEN SPACE ACTIVITY)

What is information and communications technology? Explain to children. Allow for four or five responses.

#### Why should we use technology in our classrooms?

Post-it notes on one wall

All participants review entire wall

## 11:30 Four or five participants work on grouping post-it notes from each wall

List of final grouping shown on two screens as Wordles

Remaining participants play a game

ALL - play game/icebreaker

#### 11:50 Break into groups of six or seven at tables (LIFELINES ACTIVITY)

Complete individual lifelines

A day in my life – at what times and where I use information and communications technology, from the time I get up to the time I go to sleep?

Lifelines are completed using colour coding, with three coloured markers for each person:

Personal: coloured Blue
 In School: coloured Red
 For School: coloured Green

## **12:10 Moving Debate** (MOVING DEBATE ACTIVITY)

Do you want to use more communications and information technology in school?

# 12:30 Group work in 'Benefits' and 'Challenges' tables - Part 1 (PLACEMAT ACTIVITY)

'How ICT should be used' is written in the middle circle of the placemat which is divided into five coloured segments:

for us to learn coloured Red
 in all subject areas coloured Green
 to show what we have learned coloured Blue
 for teaching coloured Orange
 to search for and choose information coloured Yellow

#### 12:50 Lunch

## 1:20 Group work in 'Benefits' and 'Challenges' tables – Part 2 (PLACEMAT ACTIVITY)

'How should ICT be used?' is written in the middle circle of the placemat which is divided into five coloured segments:

for us to learn coloured Red
 in all subject areas coloured Green
 to show what we have learned coloured Blue
 for teaching coloured Orange
 to search for and choose information coloured Yellow

# 1:45 Prioritising with sticky dots – each person given two dots per segment (PRIORITISATION ACTIVITY)

- Each table writes out the top recommendation under each coloured segment
- Top recommendations from all table displayed on screens
- Game

**2.00 – 2.10** Evaluation and close (EVALUATION AND FEEDBACK ACTIVITY) and (SHORT SUMMARY AND WRAPUP ACTIVITY)

# **Appendix 2 – Post-Primary Group Programme**

Consultation on Digital Strategy – Post-Primary Friday, 6 June 2014

#### 11:15 Welcome and brief introduction:

Why we are doing this consultation and what will happen to your views

#### 11:25 Open space – full group (OPEN SPACE ACTIVITY)

What is information and communications technology? Allow for four or five responses.

## Why should we use technology in our classrooms?

- Post-it notes on one wall
- All participants review entire wall

#### What technology devices do you use in school?

- Post-it notes on opposite wall
- All participants review entire wall

#### 11:45 Four or five participants work on grouping post-it notes from each wall

List of final grouping shown on two screens as Wordles Remaining participants play a game

ALL - play game/icebreaker

#### 12:00 Break into groups of eight at tables (LIFELINES ACTIVITY)

#### **Complete individual lifelines**

A day in my life – at what times and where I use information and communications technology, from the time I get up to the time I go to sleep?

Lifelines are completed using colour coding, with three coloured markers for each person:

Personal: coloured Blue
 In School: coloured Red
 For School: coloured Green

# 12:20 Moving Debate: Do you want to use more information and communications technology in school? (MOVING DEBATE ACTIVITY)

## 12:40 Group work in 'Benefits' and 'Challenges' tables - Part 1 (PLACEMAT ACTIVITY)

'How ICT should be used' is written in the middle circle of the placemat which is divided into five coloured segments:

for us to learn
 in all subject areas
 to show what we have learned
 for teaching
 to search for and choose information

coloured Red

 coloured Green
 coloured Blue
 coloured Orange
 coloured Yellow

#### 1:00 Lunch

## 1:40 Group work in 'Benefits' and 'Challenges' tables - Part 2

(PLACEMAT ACTIVITY)

'How ICT should be used' is written in the middle circle of the placemat which is divided into five coloured segments:

for us to learn coloured Red
 in all subject areas coloured Green
 to show what we have learned coloured Blue
 for teaching coloured Orange
 to search for and choose information coloured Yellow

# 2:15 Prioritising with sticky dots – each person given 3 dots per segment

(PRIORITISATION ACTIVITY) and (VOTING ACTIVITY)

- Top two recommendations under each segment are transferred onto the tablets and screens
- Five rounds of voting with recommendations numbered 1-10 displayed on screens under the following colour-coded themes

for us to learn
 in all subject areas
 to demonstrate what we have learned
 for teaching
 to search for and choose information

coloured Red

 coloured Green
 coloured Blue
 coloured Orange
 coloured Yellow

Participants vote (one round at a time) in ballot boxes marking their top choice (from 1-10) using designated coloured paper

Outcome of voting displayed on screens

- **3:00 Evaluation** (EVALUATION AND FEEDBACK ACTIVITY)
- **3:15** Close (SHORT SUMMARY AND WRAPUP ACTIVITY)

# **Appendix 3 – Direct Quotes from Moving Debates**

Consultation on Digital Strategy – Primary and Post-Primary Friday, 6 June 2014 and Monday, 9 June 2014

# **Primary**

Source File: IMG\_1439.MOV

TIME FROM	TIME TO	DIRECT QUOTES
00:41	01:10	"my Mam is in college right now, a lot of the stuff that she's doing in college she gets her
		notes on the internet and she does a lot of projects on internet"
		"if we don't know how to use it, it's not going to be easy as soon as we get further on"
01:14	01:38	"cause books are boring"
		"I don't like reading"
		"you can type up and copy and paste stuff and the edit yourself"
		"much easier"
01:54	02:15	"I think it's kind of making classes impersonal and we use too much technology and I also
		think we're training kids to use it for their whole lives but some kids won't have those
		opportunities later in life"
02:18	02:53	"if you use enough communication you might get cyberbullied"
		"if we teach children to just use computers don't read books they'll hurt their eyes,
		everybody will need glasses and everybody will have bad eyesight"
		"how would you like it if you came home and everybody in your family is sitting on a
		computer [mimics hunch over a keyboard typing] like this"
02:58	03:15	"it's easier to use computers but you still have to learn stuff by yourself"
		"you can't always use computers for everything"
03:18	04:20	"if you use computers and everything all the time say if you're watching your soaps or
		everything like Coronation Street and Emmerdale if you keep watching them you'll start
		getting lazy"
04:29	04:50	"we live in a world where technology is everything that people do"
		"I want more because it's fun, we can learn from it and we can still do other things by
		ourselves"
05:17	05:26	"because computers are sometimes boring because you play some games and every time
		the same"
05:39	05:49	"I don't really like just getting the answer, I like being able to [indistinct]"
		The reviewer presumes from the context that the student is indicating "work it out for myself"

# **Post-Primary**

Source File: IMG\_1437.MOV

TIME FROM	TIME TO	DIRECT QUOTES
01:12	01:30	"access to more information as well"
01:17	01:28	"a book might have been made five years ago and if you're reading about the population of the world it would be different now, but on the internet it would be more up- to-date"
01:38	01:40	"technology is linked with efficiency, why don't we want a more efficient education system?"
01:45	01:54	"my school uses the iPad and it's a lot easier than carrying around more books because you've got all your books on the iPad and if you're stuck on anything you can look it up on the internet"
02:01	02:12	"they're handy for the environment and they're also handy for the books and stuff so that's not hurting your back"  "they can be hacked to watch like bad things as well"
02:19	02:56	"I do think it's a good thing to have more technology, but, for example for my generation it might be tough as we're more used to paper from primary school"  "using technology promotes creativity and innovation but let's be honest the education system isn't about that"  "the Leaving Cert is about learning off and passing the exam you just need to get the points to get into college, so the technology might distract you too much"  "the education system needs to reform in order for technology to suit it"  "I know if I was to use it right now it just wouldn't work for me, I need to learn off"
03:06	03:18	"people are becoming obsessed, I think sticking to books is much better"  "obviously [loud noise] the majority of it should be books and a bit of technology won't do any harm"
03:24	04:05	"computers for Excel, Power Point and Word, that's really good cause you need that for project work and stuff"  "where is the proof that it actually engages you more and makes you more efficient in school, I'd rather see that they did a study"  "oh let's put more money into something that we don't really know works and might distract people even more"  "I know when I have my phone in school I'm on Instagram, Twitter, Snapchat and I won't be listening"
04:11	04:17	"I wouldn't be sure, it might take me three years to figure it out and then by the time that's done I just wouldn't be working"
04:22	05:09	"our school uses a lot of technology with projectors, internet and laptops in every single classroom, so if we want to access information we can do that, but then when my teacher starts doing it we waste twenty minutes of class for her to set it up, for her to find the right things, so by the time she gets it right we either really really bored or the class is over" "I find once we're shown something on the internet we go home and then we can't access it again because the teachers knows that it's on certain websites and we can't see them again" "I'm a person who learns by seeing things a number of times, I need it on paper as well as seeing it somewhere else" "what we need more is teachers' that are able to talk to us and explain things rather than show us something that has been prepared already"

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