THE VIEWS OF YOUNG PEOPLE ON DIGITAL LEARNING AND TEACHING
EXECUTIVE SUMMARY

This report contains the views, insights and experiences gathered from young people by Young Scot to influence the development of the Scottish Government’s Digital Learning and Teaching Strategy. The key findings from the ‘My Digital Future’ rewards task showed that young people find that digital technology is an important learning aid in the classroom, a tool for revision, provides an interactive learning experience and gives them a quick way to access information. However, they feel that in general resources within their schools are low, can be unreliable and can be misused, and they felt that, in many cases teachers lack knowledge on how to use the digital technology they have. Their visions for the future of digital technology in learning and teaching are positive. They imagine that every pupil will have access to digital technology that can be used to support their learning and it will be integrated into all aspects of the curriculum. The national survey provides a broad insight into how young people view digital learning and teaching in their education. It highlights how young people feel that access to digital technology in their school could be improved and that they see digital technology playing a role in many aspects within the school community, ranging from teaching and homework to connecting with other schools.
INTRODUCTION

On the 24th September 2015, the Scottish Government announced a public consultation on the development of a Digital Learning and Teaching Strategy for Scotland. The aim of the strategy is to create the conditions that will allow all of Scotland’s educators, learners and parents to take full advantage of the opportunities offered by digital technology in order to raise attainment, ambition and opportunities for all.

The Scottish Government approached Young Scot to engage with young people from across Scotland in order to ensure their views, insights and experiences are listened to, gathered and used to influence the development of the strategy.

The co-design project:

- Delivered a national survey of young people from across Scotland to gather quantitative data on young people’s views and experiences around digital learning and teaching in schools. The survey was active from mid-November 2015 until mid-December 2015 and received 276 responses during this time.

- Established an online task, ‘My Digital Future,’ via the Young Scot Rewards platform in order to gain a more in-depth insight into young people’s vision for the future of digital learning and teaching. The task received 82 responses.

1 https://consult.scotland.gov.uk/learning-directorate/digital-learning
METHODOLOGY

Young Scot plays a key role in supporting partners to engage and consult young people across Scotland, helping them to influence the design and delivery of policy and services. Our co-design service involves young people systematically co-creating, co-producing, co-designing and co-delivering solutions. Young people are involved much earlier in decision making process through a highly participative approach, developing informed insights, ideas, recommendations and solutions for policy and practice.

The Young Scot co-design process enables young people and organisations to explore insights and experiences and develop ideas together:

- **Explore**
  Define by uncovering the issues through gathering insights and genuine experiences from/by young people.

- **Create**
  Generate ideas and co-produce solutions with/by young people.

- **Reflect**
  Consider the future impact and sustainability of the ideas produced.

- **Recommend**
  Produce influential ideas/solutions with young people.

- **Implement**
  Implementation of ideas/solutions with young people.

Through the co-design process, young people have ownership of what they have to say; relating their views and opinions on a particular subject or policy area to deliver ideas and solutions in a spirit of co-design and collaboration.

In the **Explore** phase of the co-design process we opted to conduct a national young people’s survey and an online task via the Young Scot Rewards Platform.
MY DIGITAL FUTURE – REWARDS TASK

In order to gain a more in-depth insight into young people’s vision for the future of digital learning and teaching, we established an online task for young people to take part in via the Young Scot Rewards platform - https://rewards.youngscot.org/. The task took the form of ‘My Digital Future,’ were young people were invited to share their experiences and future vision of digital learning and teaching by answering two questions;

1. Tell us what your experience of using digital technology in school looks like just now. What are your own positive and negative experiences of using digital technology in learning?

2. Tell us about your vision for digital technology in learning and teaching. What do you imagine digital learning to look like in the future?

The young people submitted their content online and received 250 Young Scot reward points for taking part. We received a total of 82 responses, with participation particularly high in Edinburgh, Glasgow, Midlothian and South Lanarkshire.

NATIONAL SURVEY

In order to gain a broad insight into the views and experiences of young people from across Scotland on digital learning and teaching, we worked in partnership with the team in the Scottish Government to devise a national survey, which was made available on Young Scot’s digital platform – www.young.scot, using Survey Gizmo to collect responses. We also produced paper versions of the survey which Young Scot used when engaging face-to-face with young people. These were then entered into the online platform for analysis. We offered 50 Young Scot Rewards points as an incentive for submitting their views and experiences. The opportunity was promoted via our extensive social media presence on Facebook and Twitter, and through our partnership networks. The questions were made available for young people to respond to from the second half of November to the middle of December 2015. The survey encouraged participation from young people aged between 11 and 25.
KEY FINDINGS

MY DIGITAL FUTURE

The My Digital Future activity revealed a wide range of views and experiences of young people from across Scotland, with a total of 82 responses. The first question asked was:

Q1. Tell us what your experience of using digital technology in school looks like just now. What are your own positive and negative experiences of using digital technology in learning?

Responses from this question revealed a mixture of positive and negative experiences of digital technology in learning and teaching. The most common positive and negative experiences are discussed in turn below.

POSITIVE EXPERIENCES

Interactive learning

Many young people commented that their learning experience was enhanced by the use of interactive technology, such as tablet computers and interactive whiteboards. They found this made them focus and interact more with the topic being taught and preferred it over using textbooks and simply listening to a presentation from a teacher. They found it useful across a wide range of different subjects.

“Digital learning in school mostly takes the form of smart boards to assist teachers during lessons. This is a very useful tool as it makes demonstrating points and accessing information much easier for the teacher and also makes the lessons much more interactive.”

“We have at least one computer and one interactive whiteboard in every classroom, which really helps make the lessons much more interesting. We are able to watch videos clips on YouTube and Twig on Glow ² to enhance the subject, and people in my classes really enjoy not always having to stare at boring textbooks!”

Revision

Another positive experience highlighted was the importance of digital technology as a learning aid for revision. When preparing for exams and revising, many young

² Twig on Glow is a video-based resource for use by teachers and children that presents the key learning points for 8-14 year olds within engaging real-life contexts.
people commented that they used revision apps, revision websites and interactive games.

“I like to do quizzes to help me learn certain topics within subjects and use the questions as extra study material. This includes the website BBC Bite size and the revision and test sections is what I use to help me study for tests and learn the things I struggle with.”

“Digital technology in school is used all through the day. We use laptops and computers for research for projects and assignments. We also use the class computer and our own mobiles to do online interactive quizzes such as Kahoot, to do revision for tests, exams etc.”

Accessing information

Many young people commented that having access to digital technology (laptops, tablet computers, mobile phones etc.) made it easier for them to access information in class and therefore complete tasks more quickly and effectively.

“In school we can use a range of digital technology in a variety of subjects. In Maths we use the computer to access past papers on the topics we are studying to gain a deeper understanding of the subject. I find digital technology easier as it is simple to access information.”

“At school we use digital technology to make presentations, write the occasional essay on word and do research. I think it's great for getting information quickly.”

Learning aid

Some young people mentioned that digital technology was useful for people who may have difficulties learning in a traditional way. For example, those who have dyslexia, technology provides them with an important learning aid.

“I am dyslexic so at my school I'm entitled to use digital papers. Digital Papers are basically when the exam paper is put in the computer so I can use adobe reader to help me read and spellcheck to make sure everything is spelt right.”

“Digital technology in school is good as it allows everyone to take part in everything no matter what ability level of the pupil this means that everyone can try their best and do their best in school and nobody feels left out.”
NEGATIVE EXPERIENCES

Unreliable technology

Many young people commented that the digital technology they use at their school is unreliable. This means that when technology fails, lessons do not go to plan.

“I find digital technology easy to use as it is simple to access information but if the computer isn't working it can stop a whole lesson.”

“And although using technology can help you do work it isn't always very reliable.”

Teacher’s knowledge

Another consistent response was that teachers do not always know how to use the digital technology they have access to. This can result in teachers lacking confidence in the technology they are using and then asking pupils for help.

“Also some of the teachers don't know how to use the technology and that also slowed classes down because pupils are having to show teachers what to do.”

“We have smart boards that don't get me wrong are a great piece of technology but only when they work and the teachers know how to use them so most the time we can’t get the most use out of them.”

Misuse

There were a number of responses that spoke about other pupils misusing and being distracted by the technology they are allowed to use, such as laptops and tablet computers, and this meant it impacted on the rest of the class. In most cases the rest of the class was distracted by misuse, and in some cases the use of digital resources was reduced for all learners in consequence of the misuse.

“…However I do believe that more needs to be done to ensure that students are working on appropriate tasks at all times.”

“In school we are given iPads which are very helpful in class but you get the odd few who misuse them.”

Resources

Another emerging theme was that young people would like to use digital technology more often but a lack of resources in their school prevented this from happening.

“We only have a few computers and we are not meant to go on them unless we are working on something in class that needs research.”

“I think that we are not using digital technology enough at school. We only use it at technological studies, information technology and sometimes in the library.”
Q2. Tell us about your vision for digital technology in learning and teaching. What do you imagine digital learning to look like in the future?

This was the second question that was part of the rewards task. There were a variety of responses detailing a wide range of visions for the future of digital technology in learning and teaching. The key findings from this question are related to access, integration, communication and apps:

**Access**

The most recurring response to this question was that their vision was that all pupils would have access to a tablet, supplied by the school, which they could use in all of their classes. This would provide easy and quick access to information and provide a more efficient and convenient way to learn, keeping all of their work in one place. It would also mean that learning apps would be readily available for the whole class.

“In the future I personally think all schools will make sure each pupil will have access to laptops and iPads for learning. For example, the iPads could be used to access learning apps such as duo lingo in a language class to help students work more interactively.”

“I think in the future schools are going to give pupils iPads, not jotters. I think it would be filled with educational apps and it would benefit learning quite a lot.”

**Integration**

There were a number of responses that spoke about their vision that digital technology would be integrated into all subjects within the curriculum. They felt that all subjects could be supported by digital technology, however currently it is only some classes that are integrating it into what they teach. This could be done through using online learning platforms and apps more regularly in a variety of subjects to increase the learning experience.

“In the few years to come, I hope that school based technology will become cleaner and more efficient. At the moment only some subjects have found a place for technology, such as sciences and technologies, but I hope that all subjects will find space to use the internet and technology.”

“For example, in music lessons, we would have iPads and tablets to create and listen back to songs and tunes that we compose ourselves. In Maths, we would be able to see how the formulas and equations we learn about are relevant to the real world, and see them interactively. This would help to engage us as a class, if we could see what we learn interactively.”
Communication

A lot of responses spoke about their vision that teachers would be able to communicate more efficiently with their pupils by using digital technology. They felt this would be done through a school app or platform that would allow pupils to ask their teachers questions, and teachers could also use this as a place to put homework, online tutorials and lessons. They felt this increased support would aid their learning, whilst it would also be beneficial for a student if they were off ill.

“Integrated on-line classroom environments for students who are often unable to attend due to illness, specifically long term or reoccurring illnesses (this may also ensure children who suffer from mental illness or are victims of bullying are able to access material outside of class, in a safe environment.)”

“Digital technology can also be helpful for sites such as Edmodo where teachers can help students out of school, put up homework assignments and study packs.”

Apps

Many responses from young people talked about how their vision for digital learning and teaching would include more educational apps. At the moment they feel there are some useful apps but there could be more development of what is currently there to enhance their learning experience both inside and outside the classroom.

“I would like it if more apps were developed to help students study for exams in a way that they are familiar with (on their phone, laptop or tablet) as I feel many students would prefer to learn via an app than via textbooks or paper. For example, the SQA has some apps that are really helpful but there are almost no course notes or resources in app form.”

“I hope to see the learners of the future able to watch a full class lesson on-the-go while using apps and features on their mobile phones to actually take measurements, do science experiments, or communicate with other learners.”
NATIONAL SURVEY

The national survey was made available on Young Scot’s digital platform – [www.young.scot](http://www.young.scot), using Survey Gizmo to collect responses. The survey was promoted through our social media platforms. The number of useable survey responses totalled 276.

We should not assume that those engaged are wholly representative of the broader demographic of young people across Scotland, however this piece of work has provided a ‘snapshot’ into young people’s views and experiences on digital learning and teaching in schools.

The majority of respondents (84%) were aged between 12-17 and currently attending school. 63% identified as female, 33% as male, 1% selected ‘other’ and 3% prefer not to say. Participation was particularly high in Edinburgh, Glasgow, Highlands, South Lanarkshire and West Lothian.
SURVEY QUESTIONS

The national survey contained 26 questions of which some were multiple choice and others were open for comment. The questions were as follows:

1. Do you use the internet?
2. Tell us how many hours of the day you spend on the internet?
3. Which of the following devices do you use to access the internet?
4. Do you use digital technology in any classes at school?
5. Tell us which classes and what you do?
6. Do you use technology for learning at home?
7. What for?
8. What digital technology is used in your school at the moment?
   Laptops/Desktop PCs/Interactive Whiteboards/Tablet Computers etc.
9. Can you use your own device for learning whilst in school? E.g. bringing your own device.
10. Do you use Glow in your school?
11. If yes, what do you use it for?
12. What digital skills do you learn at school? E.g. how to use laptops, tablets, PCs and other hardware, how to use the internet and email, internet safety, how to complete work using digital software etc.
13. Do you think that the digital skills you learn at school will be useful when you leave school?
14. If yes, in what ways does it help you?
15. Would you like to use digital technology more often in school?
16. The teachers in my school encourage the use of digital technology in classes.
17. The teachers in my school are confident in using digital technology in the classroom.
18. What could teachers in your school do to increase the use of digital technology in your school?
19. The digital technology used in my school is of a high quality and standard.
20. The pupils' access to digital technology in my school could be improved.
21. How do you think access could be improved?
22. Is digital technology ever used for tests and exams at your school?
23. If yes, how is it used?
24. Do you prefer using digital technology for tests and exams rather than a pen and paper?
25. Why do you prefer it?
26. What do you think digital technology should be used for in the school community? E.g. teaching, homework, promoting school achievements on Twitter, connecting with other schools etc.
SURVEY RESULTS

1. Do you use the internet?

Most of the respondents said that they are always connected to the internet (59%), 33% commenting that they were online at least once every day, 4% are online every week and 3% sometimes use the internet.
2. Tell us how many hours of the day you spend on the internet?

This question was open for comment and received 275 responses. The most common response was around 3-4 hours each day. There were several responses that mentioned that they are always connected to the internet, checking social media accounts nearly every hour of the day. There were also a number of people who responded that they spent more than 10+ hours a day on the internet.

3. Which of the following devices do you use to access the internet?

These results show that a number of devices are used by young people to access the internet. 49% of respondents use their smartphone to access the internet, 21% use a laptop, 11% use a PC, followed by 9% using a tablet and 4% using an x-box. The 5% who said ‘other’ commented that they used all of the options or several of the options provided, not just one.
4. Do you use digital technology in any classes at school?

This question was open for comment and received 206 comments. The most replicated responses were that digital technology was used mostly in computing and ICT classes, but with many commenting that it was used in all their classes, whether it was for research, writing tasks or presentations. Many said that most of their classes have interactive whiteboards.

“Spanish - the Scholar website to do the activities and build up vocabulary. Business - to research an organisation’s history and website."

“Almost all classes we use the smart board. In business studies and computing we each use a computer.”

5. Tell us which classes and what you do?

No 11%
Not sure 8%
Yes 81%
6. Do you use technology for learning at home?

- Yes: 85%
- No: 9%
- Not sure: 6%

7. What for?

This question was open to comment and received 180 responses. Many said that when using technology for learning at home it helped with completing homework tasks and research because it is a quick way to access information. In addition, many used technology to aid revision by using online revision websites and games.

- "Homework, research, and general studying (usually BBC bite size for studying.)"
- "Researching information, online dictionary, learning videos/tutorials, educational games, past papers on SQA website."

8. What digital technology is used in your school at the moment? Laptops/Desktop PCs/Interactive Whiteboards/Tablet Computers etc.

This question was open for comment and received 242 responses. Most said that their schools have desktop PCs, laptops and interactive whiteboards. Fewer commented that their school use tablet computers and notebooks.
9. Can you use your own device for learning whilst in school? E.g. bringing your own device

This question was open for comment and received 112 responses. This received a mixed response, with some saying that they were allowed either in certain classes or if they are carrying out certain tasks. On the other hand, there were a lot of responses that commented that you were not allowed to or only very rarely.

“Yes, we have a bring your own device scheme.”

“Not often, depends on the teacher's view on mobile phones in the classroom.”

10. Do you use Glow in your school?

The results show a mixed response as to whether their school uses Glow, with 37% saying their school does and 38% saying that they do not. A quarter of responses show that many are unaware if their school does.
11. If yes, what do you use it for?

This question was open for comment and received 92 responses. Most responses are that Glow is used for emails, accessing their homework and resources to help with homework. Other comments included that it was useful for sending in work to your teachers and a way to communicate with them if you have any questions.

“This service is one which is strongly used and pushed in our school. The main aspects that are used are the Microsoft Office products which are provided. This includes the Outlook, OneNote (strong emphasis) and word. The OneDrive and SharePoint are also utilized.”

“Accessing PowerPoints, class notes, information from teachers, emailing teachers for help or advice and seeing weekly information sheets.”

12. What digital skills do you learn at school? E.g. how to use laptops, tablets, PCs and other hardware, how to use the internet and email, internet safety, how to complete work using digital software etc.

This question was open for comment and received 234 responses. A majority of respondents said that they learn how to use laptops and computers at school, learn how to use the internet and how to be safe online. There were also a high number of comments that they learnt how to use digital software such as Microsoft Word, PowerPoint and Excel. There were also some responses that show that certain digital technology is used in different subjects, such as 3D modelling software being used in Graphic Communication.

“We only learn how to use different things on the computer in IT, and we learn about internet safety in Personal and Social Education (PSE)”

“A wide range, how to safely and securely use a computer and internet. The benefits of the communication it allows. How to use the digital environment to complete work and collaborate with class mates. Online research and analysis skills. Some office skills, i.e. word processing, power pointing and e-mailing.”
13. Do you think that the digital skills you learn at school will be useful when you leave school?

Of those that answered yes, they felt that the digital skills they learnt at school will be useful when finding a job in their future, as they feel having an understanding of digital technology is important in the workplace. There are also responses that say that an understanding of using emails, the internet, Microsoft Word and PowerPoint will be useful, whether this be at work or personal use. Another important point mentioned in many answers is the importance of being taught how to be safe online, with them recognising that it is an essential skill when using the internet.

“Every aspect previously mentioned will benefit me and be useful after I leave school. The society we live in demands that we know and can use technology to its best ability and aspects such as communication and internet surfing will stay with me.”

“The world now is so technology driven and is used even more in almost all jobs.”

14. If yes, in what ways does it help you?

“No 10%
Not sure 19%
Yes 71%
15. Would you like to use digital technology more often in school?

This response shows that 68% would like to see digital technology used more often in school, with 17% saying that they would not.
16. The teachers in my school encourage the use of digital technology in classes.

This statement required a response of whether they agree with it, strongly agree, disagree or strongly disagree with it. 58% agree with the statement, with only 10% strongly agreeing with it. 25% disagree and 7% strongly disagree that the teachers in their school encourage the use of digital technology in classes.
17. The teachers in my school are confident in using digital technology in the classroom.

This statement required a response of whether they agree, strongly agree, disagree or strongly disagree. The response shows that 56% think that the teachers in their school are confident in using digital technology in the classroom, and 13% strongly agree. 24% disagree with this statement, showing that they feel that their teachers lack this confidence, with 7% strongly disagreeing.
18. What could teachers in your school do to increase the use of digital technology in your school?

This question was open for comment and received 238 responses. A vast majority of the responses said that teachers should allow pupils to use their own devices in classes more often in order to aid their learning. Another common response is that the teachers should incorporate digital technology into the curriculum more so that there are more opportunities for pupils to use it. Another response was that they feel teachers need to have further training in using digital technology so that it can be used more effectively.

“They could let us use our devices to search and help during classes.”

“The school could run courses that some of the teachers who aren’t as confident could go to.”

“Feel more confident in using it before we use it ourselves.”

“Incorporate them into lesson plans more.”

19. The digital technology used in my school is of a high quality and standard
This statement required a response of whether they agree, strongly agree, disagree or strongly disagree with it. 47% agreed with this statement and 24% strongly agreed. 22% disagreed that the digital technology used in their school is of a high quality and 7% strongly disagreed.

20. The pupils' access to digital technology in my school could be improved

This statement required a response of whether they strongly agree, agree, disagree or strongly disagree with it. 24% strongly agree and 39% agree with this statement, showing that almost two thirds of respondents think that digital technology could be improved in their school. 32% disagree that pupils’ access to digital technology could be improved and 5% strongly disagree.
21. How do you think access could be improved?

This question was open for comment and received 121 responses. The overall response was that there should be more resources for pupils to use in school, as at present there are not enough devices (computers, laptops etc.) for everyone. Many said that Wi-Fi in school was either very slow or they did not have access to it on their own devices. There were also many comments on library access and how this could be improved as to allow pupils to use the computing facilities more often.

“Library (with computers inside) available to pupils more often - frequently closed when it is supposed to be open to pupils before school and at lunch every day. IT teachers allow pupils into classrooms to work or practice in their own time before school, at break and lunch.”

“Wi-Fi isn't always available therefore use of laptops/ phones for help can't be used.”

“There are not enough devices available, and as the present ones are fairly expensive, staff are sometimes reluctant to allow the necessary access.”

22. Is digital technology ever used for tests and exams at your school?

![Pie chart showing responses to the question about the use of digital technology for tests and exams.]

- Yes: 32%
- No: 42%
- Not sure: 26%
42% responded that digital technology is not used for tests and exams at their school, with 32% saying it is. However, 26% say that they are not sure if digital technology is used.

23. If yes, how is it used?

This question was open for comments and received 91 responses. The majority of responses were that it is used mostly for people who have difficulty writing and therefore using digital technology, such as a computer or laptop, would be more suitable. Many young people also commented that informal online tests are used in many subjects.

“If you struggle to write or read you get allocated to a computer for exams by learning support.”

“We used the computers in business for our tests.”

24. Do you prefer using digital technology for tests and exams rather than a pen and paper?

56% prefer using digital technology for tests and exams rather than pen and paper and 44% do not.

25. Why do you prefer it?

This question was open for comment and received 41 responses. The overall response was that using digital technology for exams and tests is easier and faster. Another response was that their handwriting is not legible and therefore using a computer or laptop helps combat this problem. Several people also commented that as they are dyslexic, using a computer or laptop is much easier for them.

“It is faster and it's easier to change mistakes that you notice later on/at the end.”

“Because I am dyslexic and one of my weaknesses is writing.”

26. What do you think digital technology should be used for in the school community? E.g. teaching, homework, promoting school achievements on Twitter, connecting with other schools etc.

This question was open for comment and received 200 responses. The most repeated response was that digital technology should be used for teaching and homework in the school community, followed by connecting with other schools. There were a number of young people who said digital technology should be used for all of the above options.
“Digital technology can and should be used for every aspect in the school community. Everything from totally digital lessons and homework (all of which could be available on line) to twitter updates on school events, updates.”

“I think that digital technology should be used in the school environment for homework, doing online courses in class, studying etc.”

“It would be useful if there was a website for all schools in a certain area to upload their resources for other schools to use. This way pupils can get information, documents or worksheets that other schools have used.”

“For help connecting with the school and teachers, and also to help student find out information, i.e. their timetable and classes.”

“Teaching using the projector, typing work and helping inform pupils of special events (my school uses Glow for a Daily Sheet which tells pupils about assemblies, competitions, clubs and other school related issues).”

“There could be a website were schools sign into it and you could see what other schools in Scotland are doing.”

**CONCLUSION**

The exploration has revealed a broad range of insights from the participating young people about their experiences, opinions and ideas around digital learning and teaching. As previously stated, we cannot necessarily assume that those engaged are wholly representative of the broader demographic; but this piece of work has provided a ‘snapshot’ of insight into young people’s attitudes and opinions from across Scotland.

It is clear from the ‘My Digital Future’ task and the national survey that digital technology currently plays an important role in learning and teaching in schools. The young people that participated provided a range of positive and negative experiences. They see digital technology as an important learning aid, a tool for revision and to provide an interactive learning experience in the classroom. Currently they generally think there are not enough resources in their schools, what they do have can be unreliable and subject to misuse, and in some cases, teachers are not trained in the technology they use.

They have positive visions for how they see digital technology being used in learning and teaching in schools in the future. They imagine it to become built into all aspects of learning and teaching within the school curriculum, with increased access to resources for all pupils. Young people feel that digital technology should play a role in many aspects of the school community, from homework and teaching to connecting with other schools.