Portsmouth as a Digital City

Developing a digital strategy for schools and colleges

Discussion paper for the PEP Conference

Friday 2nd July 2021

A Welcome from the Councillor for Children and Young People

Suzy Horton - Deputy Group Leader; Cabinet Member for Children, Families & Education

Less than 2 years ago I was sitting in a meeting talking about how a digital strategy for the city could support our own aspiration to raise children's aspirations; how it could be used to improve outcomes, enhance skills and improve inclusion. Who could have known that within a few months all teachers would be thrown headfirst into their own digital learning journey, being pushed out of their comfort zone in order to give a learning lifeline to the children in the city?

As we emerge from the pandemic, we are realising that we are not in the same place as we were before and that there are enormous opportunities in front of us. There has been an accelerated digital skills advancement by teachers and children, huge investment in devices and infrastructure in schools and from partner organisations, and in many cases parental engagement and support has been strengthened. Schools have worked together, sharing expertise and ideas and there is a sense of renewed educational community, not least because of the key worker status that did the profession proud.

But the conversation I was having 2 years ago still stands. We cannot ignore the need that we have in the city to improve standards and progress, to give our children the skills that are being demanded by employers, for them to enjoy the feeling of being successful and to love learning, achieving and go on to have fulfilling careers and lives. We still need to be challenging the 'Portsmouth Paradox' where OFSTED recognises the excellence in schools, yet we know the results many children achieve need to be better.

The digital city-wide commitment that will be explored over the coming year could ultimately drive improved outcomes in terms of attainment and progress by becoming the new way of learning, the new vehicle for good pedagogy and the new way of parental engagement. We need a digital learning strategy, but we need one that has relationships and people at the heart of it. Teachers will always be the catalyst for learning, the support and the champions for high attainment for each individual learner; and we need the leadership to make the strategy a success.

What part can you play in making this happen?

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Introduction

Mike Stoneman - Deputy Director, Education

PEP Strategy 2020-2023

Covid-19 has brought the potential of digital technology to effectively deliver remote learning to the fore, but exploiting its use is not new and discussions involving school leaders and key partner agencies were underway in January of last year before the pandemic hit.

These discussions focussed on how a city-wide approach could be developed which supported learning both in school and at home and which could ultimately drive improved outcomes in terms of attainment and progress as well as help cut teacher workload, support inclusion and drive efficiencies. This ambition was given a high priority within the Portsmouth Education Strategy 2020 - 2023 and forms Priority 2 of the strategy: *implement a digital learning strategy for the city that supports learning both at school and at home (Annex A).*

As a result of the developments in digital learning over the last 18 months, including the accelerated digital skills advancement we have seen in teachers and children, the huge investment in devices and infrastructure in schools and strengthened parental engagement and support; we are now in a strong position to move the digital learning agenda to the next stage and to realise those ambitions that we had back in early 2020 of a new way of learning and an effective vehicle for good pedagogy that can drive improved outcomes for our children and young people.

The city and our schools will also benefit from the government backed Local Full Fibre Network investment to provide ultrafast connectivity in the city and giving teachers and pupils access to cutting edge technology. All schools will have the opportunity to be connected by July 2022.

We hope this discussion paper contributes to moving our strategy forward.

The Portsmouth Economic Development and Regeneration Strategy 2019 - 2035 is based upon a clear vision for the continued growth and development of the city. The potential for technology to radically enhance the educational environment, to boost skills and increase educational outcomes, is a critical part of building a skilled and capable workforce who can drive innovation and sustain the scientific and technological economy going forward.

Imagine Portsmouth
www.imagineportsmouth.co.uk

Aim of the Discussion Paper

Natalie Sheppard – Director of Education TSAT

My interest in digital learning was first sparked early in 2019 when I became Director of our Portsmouth hub and started to think about the future of all our children; from those in the early years through to those in KS4. Living in Southsea, I had become fascinated at how the high street was changing, with department stores closing to make room for 'flexible workspaces' and started to research what has been called the '4th industrial revolution'.

Worldwide management consulting firms have predicted that by 2030 technology will be pervasive, jobs more fluid and the global labour market highly competitive. The workforce will look very different, with people engaging with their jobs 'on the move'; working flexibly and shouldering the responsibility for their own development. It is predicted that Robotics, smart algorithms and AI could automate 30% of the hours worked globally by 2030; placing low skilled workers particularly at threat. In a Shaping Portsmouth survey of 300 companies – 54% said that young people coming to them do not have the skills they need to be successful. The top skill missing was Engineering followed by Leadership and management.

I believe that the purpose of school is to prepare children to 'meet the world.' To offer deep learning experiences so that knowledge sticks with young people for the rest of their lives and allows them to contribute to the world, to shape it, and to solve the problems of the future. This belief led me to explore how we might enhance education through technology.

Developing a digital strategy for my Trust has been like finding all the puzzle pieces and then putting them together to make the picture on the front of the box. It is my hope that we can collaborate to share our puzzle pieces and that in doing so, we will all have a picture. Collectively, we can help make Portsmouth the best city in the UK to live, learn and work in.

Beneficiaries of the Strategy

As this is an educational strategy, the ultimate beneficiaries will be Portsmouth's learners aged 3-18. Teachers and early learning practitioners will also benefit since they will receive training that will allow them to become skilled in the effective use of digital technology. Parents and carers will be able to stay up to date with and support their child's learning.

Approach to Strategy Development

The next 12 months is about generating our collective thinking and decision-making so that we can create a long-term strategy to support schools and colleges with their individual plans for digital learning*.

- PEP series of actions for 2020-21 (Annex A) including strategy groups to develop this discussion paper

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- Surveys of schools' digital offerings and barriers in November 2020 and April 2021
- Discussion paper put out for consultation via the July 2021 PEP conference
- Delivery of actions identified in the discussion paper leading to the creation of city-wide educational strategy to address digital disadvantage (target date for launch July 2022 at the PEP summer conference)

*FOR THE PURPOSE OF THIS DOCUMENT, DIGITAL LEARNING IS DEFINED AS ANY PROCESS IN WHICH THE TEACHER OR LEARNER USES DIGITAL EQUIPMENT, SUCH AS A COMPUTER, TO ACCESS DIGITAL TOOLS SUCH AS LEARNING PLATFORMS AND VIRTUAL LEARNING ENVIRONMENTS, AND/OR DIGITAL LEARNING RESOURCES (SUCH AS LESSONS, TESTS, LEARNING AIDS AND GAMES), TO IMPROVE THEIR KNOWLEDGE AND SKILLS.

Key Beliefs about the Value of Educational Technology

Mini Literature Review

In 2014, the Scottish government commissioned a literature review on how the use of digital technology for teaching and learning can improve outcomes. In terms of raising attainment, they found that the short-term benefits of technology included students having a greater feeling of control over learning and more confidence to practise a skill, through to medium term impacts such as faster acquisition of knowledge and skills, and improved impacts such as achieving higher exam or test results, where digital technology had been used.

The conclusions were that:

- There is conclusive evidence that digital equipment, tools and resources can, where effectively used, raise the speed and depth of learning in science and maths for primary and secondary age learners.
- There is indicative evidence that the same can be said for some aspects of literacy, especially writing and comprehension.
- There is promising evidence that the use of digital equipment and resources can help learners with additional support needs to improve their skills and competencies in literacy and numeracy.

Within our own city, we have case studies on the impact of technology to improve learning and outcomes. Portsmouth College has had an Apple 1:1 iPad strategy in place for a number of years which has changed students learning habits and transformed attainment.

Click the images to link to Portsmouth College Case Study Video and Document

Click the images for links to UTC Chromebook Scheme Case Study Document

The Scottish literature review, our own case studies and wider publications such as the Net Support Guide to Developing a Digital Strategy all share one common theme: *what matters most is meeting teachers' needs in terms of their understanding of the benefits and applications of digital technologies.*

"More effective use of digital teaching to raise attainment happens when teachers can identify how digital tools and resources can be used to achieve improved learning outcomes, as well as having knowledge and understanding of technology. This applies in all schools." (p.2 Scottish strategy)

It is not whether technology is used (or not) which makes the difference, but how well the technology is applied to support teaching and learning by teachers. And the conditions that are put in place to bring about the effective use and integration of digital technologies.

100% of schools, special schools and colleges responded to the Spring 2021 Digital Future survey. Please find the outcomes below, with comparators to some of the November data.

Student Learning Platform

Platform	Nov-20	Mar-21
Google	17	22
Microsoft	12	24
Seesaw Only	14	5
Tapestry Only	3	3
Purple Mash Only	2	2
No Platform	1	0

Digital Learning Offer

Level	Nov-20	Apr-21
Poor	1	3
Basic	25	16
Competent	29	31
Advanced	2	6
Expert	1	3
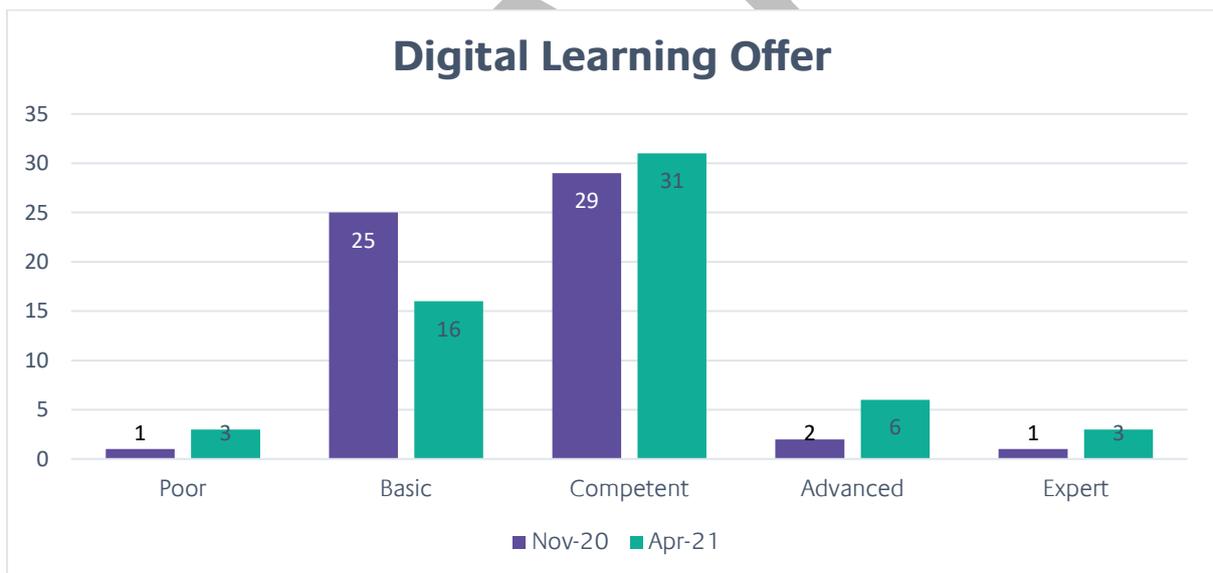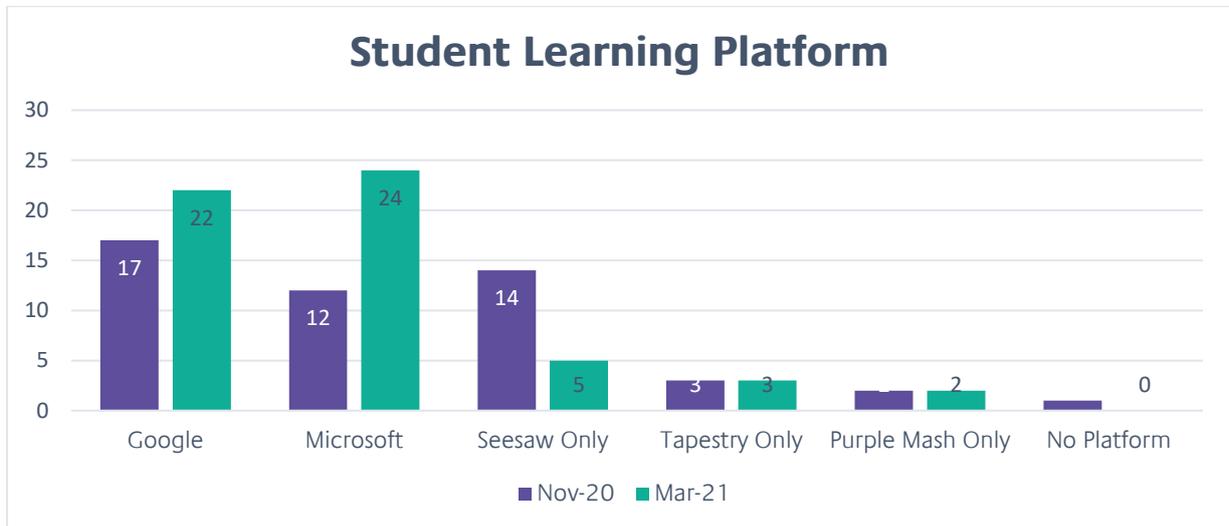
Schools were asked to evaluate their digital learning offer along the following lines. We recognise that this is context and phase specific but it was a way of gaining insight.

- Digital means are not used to support learning (poor)
- A learning platform exists but its potential is yet to be fully realised (basic)
- A learning platform is in place and teachers and students use it for the teaching, learning and assessment of the curriculum (competent)
- A 1:1 strategy is in place which is enhancing students' access to, and progress within, the curriculum (advanced)
- Several years into a 1:1 strategy and able to support other schools with this journey (expert)

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1:1 Intention
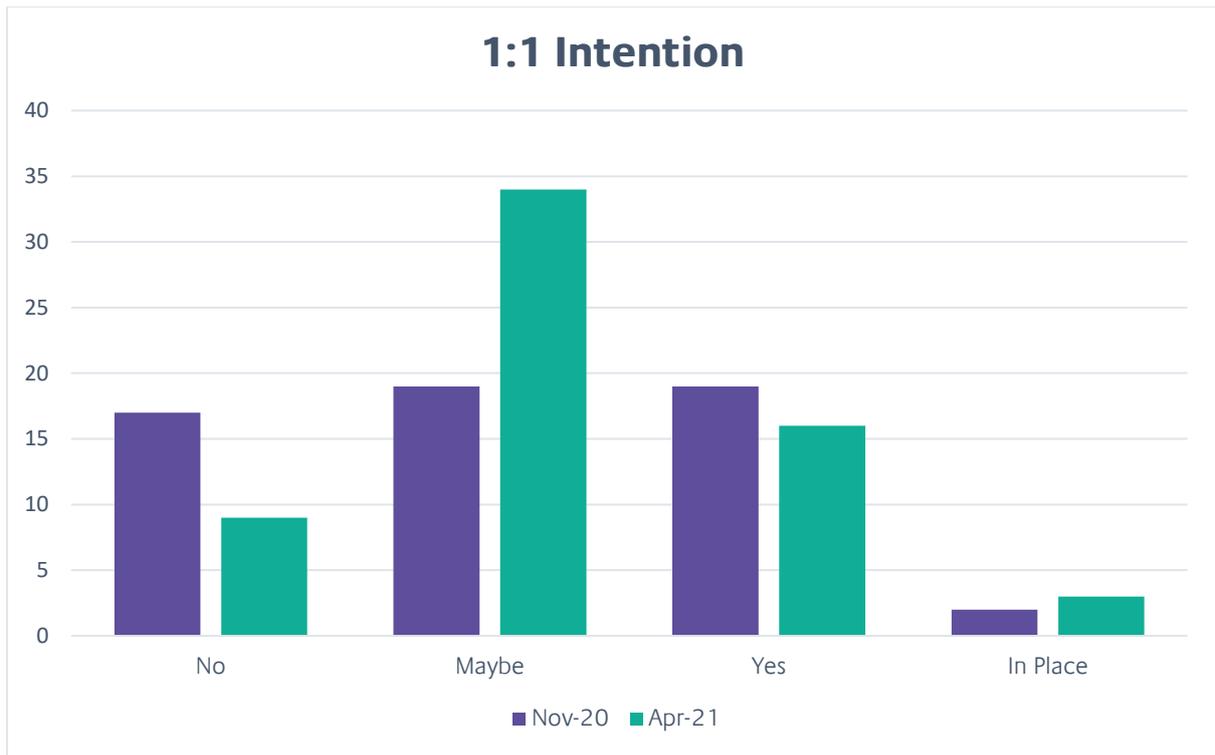
- Portsmouth College: Launched 1:1 iPAD scheme 2016
- UTC: Launched 1:1 Chromebook scheme 2018
- ALNS and Trafalgar: Launched 1:1 Chromebook scheme September 2020
- Arundel Court Primary: Distributed 1:1 netbooks Y5+6 Early Spring 2021
- Charter: Distributed Chromebooks Easter 2021
- Priory: Launching 1:1 Apple iPad scheme September 2021
- TPA: Launching 1:1 HPx360 scheme September 2021

Barriers to Digital Development

- Financial 55%
- Other 10%
- Technical 11%
- Cultural 13%
- None 11%
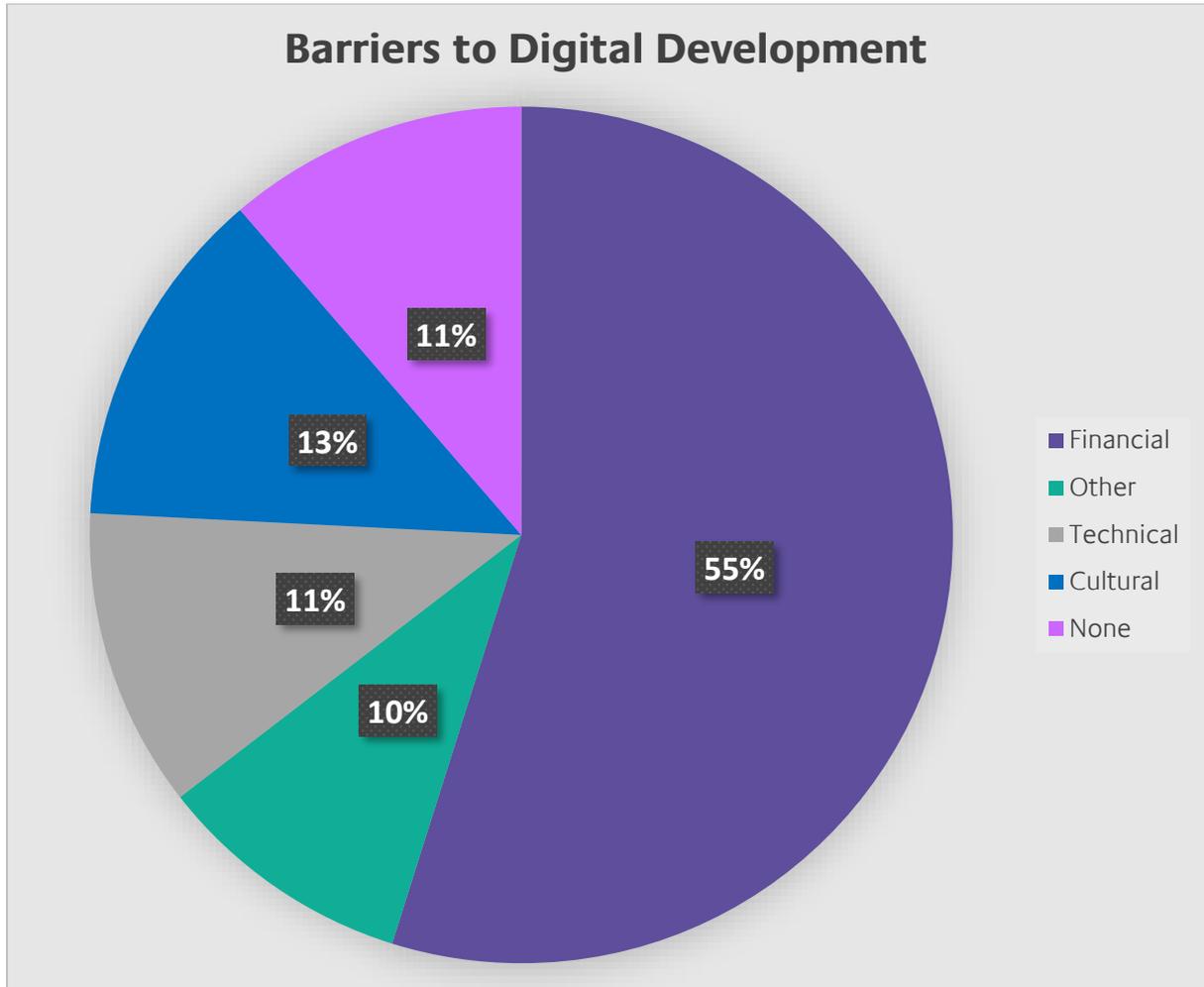
"Capability of child and parent to use the platforms effectively. This coupled with financial and technical issues in keeping devices working properly is a barrier. We could be investing hugely in time and money for little quality gain." Headteacher (anonymous)

"Financial - need individual laptops and iPads for children in school. Cultural - parents don't access online platforms in everyday life and use mobile devices for Facebook/Instagram so need digital literacy development. Staff development - professional development for IT specialist aspects of curriculum and how to develop a curriculum that incorporates IT in all aspects every day." Headteacher (anonymous)

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Priority 1 this Year

Legend:
- Creating a framework to teach digital literacy
- Defining a school vision statement that includes new technologies
- Developing parental engagement through digital means
- Developing the skills and confidence of educators
- Having a strategy around digital wellbeing for staff and students
- Identifying tools to leverage data/insights
- Increasing students access to devices to use in class
- Working digital into curriculum and assessment delivery

Pie chart values: 7%, 20%, 5%, 30%, 13%, 0%, 8%, 17%

Top 3 Priorities:

1. Developing the skills and confidence of educators
2. Increasing students' access to devices
3. Creating a school vision statement that includes new technologies

How important do you think it is that we develop a digital learning and teaching strategy for Portsmouth with a common vision statement and underlying principles?

Pie chart values: 2%, 3%, 14%, 37%, 44%

Legend: 1, 2, 3, 4, 5
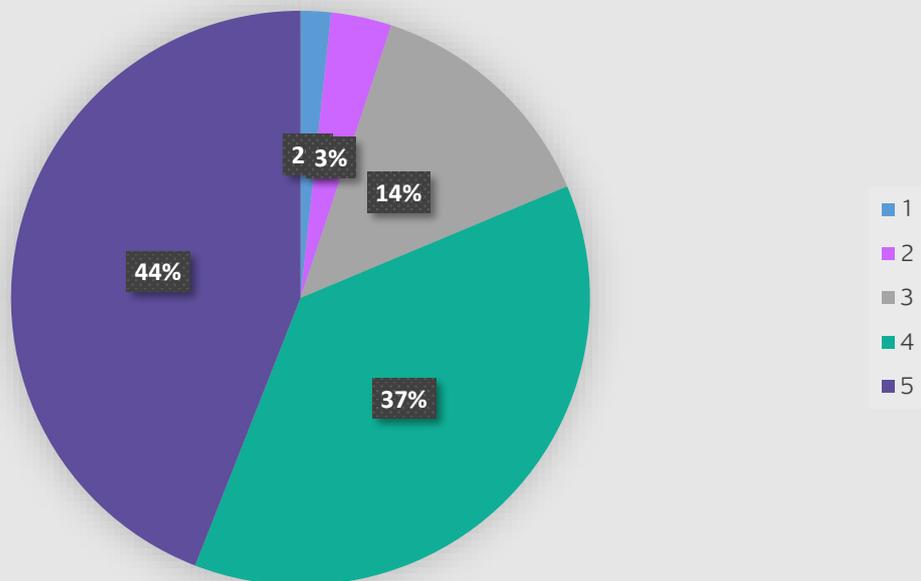
Respondents were asked to give a level on importance 1-5 Likert scale.
1 = Strongly disagree, 2 = Disagree, 3 = Neither agree or disagree, 4 = Agree, 5= Strongly agree

83% rated between 4 and 5 (Agree and Strongly Agree)

The Key Challenges

In order to make Portsmouth a Digital City, we must work at a local level to develop an action plan around three essential and connected objectives:

- Addressing Digital Poverty
- Building Capacity
- Evidencing Impact

Addressing Digital Poverty

Earlier this year Portsmouth City Council teamed up with Shaping Portsmouth, the not-for-profit company that brings together business, community and education partners together to establish the Bridging the Digital Divide project, to ensure that all children have access to the tech they need to support their learning at home.

Under the scheme, businesses and individuals can donate new and used devices or make a financial donation. The donations are refurbished where necessary at the Landport Centre and then used to benefit people in Portsmouth, with a focus on supporting school aged children.

Manor Infant School was the first school to benefit from the new scheme.

"In April we were able to make use of the digital strategy led by PCC and TSAT. We took delivery of 10 devices; however some were not fit for purpose so we ended up using 5. These devices were a range of laptops and tablets. We were able to give them to 5 disadvantaged families who have used them to support online learning at home as we have not had to isolate any bubbles since February half term.

Since lockdown has ended, we have continued to promote e-books and set some learning that involves using digital devices through Purple Mash."

Helen Castle – Headteacher of Manor infant school

However, Stef Nienaltowski, CEO of Shaping Portsmouth, has reported that donations have been quite slow and the equipment is not always fit for use.

In the Headteacher survey, 33 school leaders said that they would like information about resourcing devices. And the chance to think through the aspects of the various ways of doing this; sustainability; total cost of ownership and potential savings that can offset the cost of investment.

This suggests that we ought to move forward with the development of a city-wide device procurement and maintenance strategy.

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Building Capacity

School leaders have told us that developing the skills and confidence of educators is a priority. We know that we need 'doers' who can implement the vision that leaders have. Who have the technical know how to support devices but also those 'champions' who can bridge the divide between the technology and teaching. We have therefore partnered with Primary Goal to introduce a training programme that can build capacity within your school for digital change. A School Leaver can become your Digital Advocate, or a teacher can lead as your Digital Champion.

Louise Campton started Primary Goal several years ago due to her own experiences as a parent and is incredibly passionate about helping to build the capacity for digital change. She has created two strong programmes and has a full range of technology partners on board.

Offer 1: Level 3 Digital Advocate (infrastructure technician)
- An 18-month opportunity for a school leaver, costing your school less than £3,000 in the first year.
- Enable school leavers to evolve their career post pandemic.
- Help support secondary school NEET figures and grow your own Digital and Teaching Talent of the future.

Offer 2: Digital Champion
- An 18-month opportunity for current staff member/teacher (Including 3 months EPA) starting
- Monthly half-day workshops including partner enrichment opportunities.
- Work-based coach visits.
- 20% off the job training.
- Challenges designed to transform your institution.
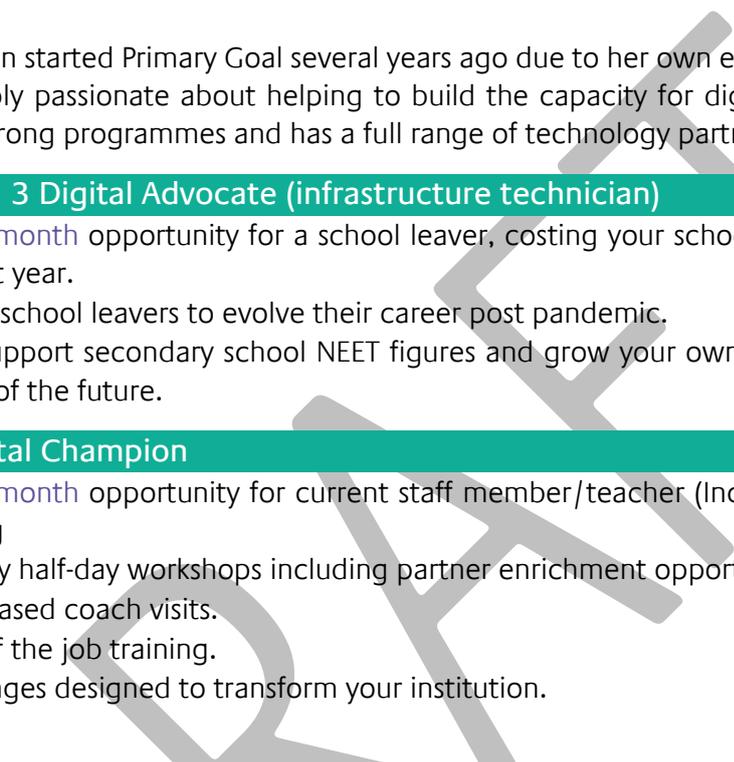
Audit of current school technology position
Troubleshooting skills
Effective action planning
Front of class technology
Data – usage and security (GDPR)
Parental engagement
Collaboration through cloud technologies
Data security and backup, Disaster recovery plan
Online safety
Enhancing the curriculum through technology
IT/Cyber security
Leadership skills
Device management
Improving communication
Evaluation of work and next steps

No financial investment is required, you can use your Apprenticeship Levy to cover 100% of the training costs

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- If you feel that you have the capacity to take on a 16-year-old or 18-year-old school leaver as a Digital Advocate; or have a member of support staff, or teacher, who has a real interest in digital learning and can be developed to lead whole-school, then please contact Primary Goal ready for a September 21 start.

Contact Primary Goal: 03300 583 328 or enquiries@primarygoal.ac.uk

Why?

It is estimated that **77%** of future jobs will require a technical skill compared to **50%** of the current roles.

The UK has a shortfall of around **173,000** skilled STEM workers costing this STEM sector **£1.5 billion.**

New **STEM** roles are expected to **double** in the next **10 years.**

https://primarygoal.ac.uk/

Launch of training offer from Primary Goal - use your Apprenticeship Levy

65% of students today will do jobs that currently don't exist.

Evidencing Impact

It is through the spirit of the PEP encapsulated in the motto 'pulling together, achieving more' that we will be able to evidence the impact of teaching with technology.

In the Spring survey, Headteachers told us which 'Going Digital' topics they were interested in and the desire to hear from leaders of different phases who have successfully integrated technology was clear.

Impact Review: Measuring Success/Stakeholder voice/	25
Early years: Leadership Perspectives	20
Infant: Leadership Perspectives	14
Primary: Leadership Perspectives	26
Secondary: Leadership Perspectives	9
Post-16 leadership perspectives	1

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Proposition Number 1: Initiate Roundtables

In the digital survey, we asked school leaders what their preferred means of engaging in a range of 'Going Digital' topics would be.

Means of engagement	
Workshops (for Senior Leaders and Governors) with a limited number of people to allow for richer discussion	30
Recorded webinars that can be watched any time	51
A consultancy basis - discussing them in relation to my school context only	17
Documents on the PEP website	21

In order to meet the desire for workshops/webinars, the proposal is to initiate 5 roundtables which will recorded.

The purpose of a roundtable is to bring in speakers with different perspectives to debate questions they have seen in advance. And invite an audience to observe or participate by asking questions. These will be held 3 times during the year with an open invite to schools to participate. And the recordings hosted on the PEP website afterwards.

We have identified the following questions to underpin the purpose of the roundtable discussions:

What can we do to develop children's digital literacy skills from the infant phase onwards? *(Compere – Oli Bradley HT Goldsmiths)*

What do we think about the relationship between digital tools and pedagogy? *(Compere – Kev Burns T&L Hub lead TSAT)*

What are we learning about how technology can reduce teachers' workload? *(Compere – Nys Hardingham CEO Salterns Trust)*

What are we finding works in terms of getting safe, affordable devices into young people's hands? *(Compere – TBC)*

What can we do to develop a strong strategy around digital safety and digital wellbeing? *(Compere – TBC)*

Launch MS Form at the conference – give people two weeks to reflect and sign up to what fits their school improvement journey.

Proposition Number 2- Open our Doors

School leaders have a great many questions about digital technology. These range from the technical 'what is out there' to the operational issues around having large numbers of devices on site. And what to do with the DfE devices! Matters of digital safety and well-being and the more philosophical side of ethical considerations.

Seeing devices in use in the classroom and talking to children, teachers and key school staff who lead and manage a digital strategy could be a really helpful way of building the 'picture on the front of the puzzle box.'

It is clear from the survey that we have a large number of people throughout our schools that are interested in moving forward with digital learning, both leaders and 'doers' of change. If more advanced schools put themselves forward to host a 'Digital Immersion Day' and enable key staff from other schools to observe in classrooms, have focus group discussions, and meet the staff who grease the wheels of the operation, then we could do a lot to build our collective vision and understanding of the place of technology and address individual school barriers.

Launch MS form so people could put themselves forward and perhaps provide initial overview of how they might structure such an opportunity.

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Reflections on contents of discussion paper

At the PEP conference on 2nd July, there will be a chance to feedback your evaluation of the content and ideas expressed in this discussion paper. Feel free to use the tool below to capture your thoughts in advance. On the day, facilitators will capture these. However, you can also email the table directly to n.sheppard@tsatrust.org.uk if you prefer.

PLUS	MINUS	INTERESTING
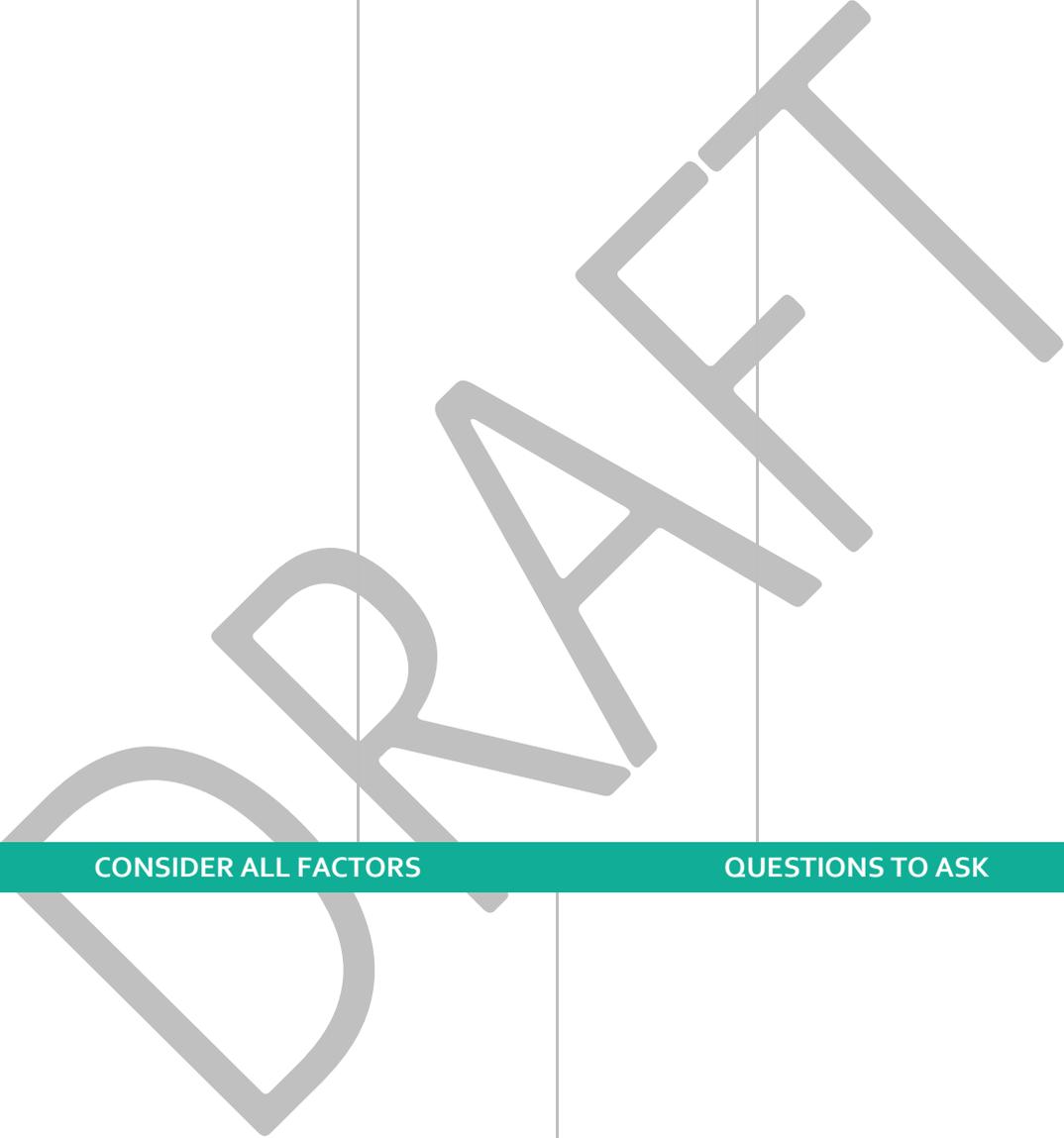
CONSIDER ALL FACTORS	QUESTIONS TO ASK

Further Support- Puzzle Pieces

- Net Support's Guide to a Teaching and Learning Strategy
- Ed Foundation Digital
- Ed Tech Schools

Or you can:

- Contact Richard Denham r.denham@tsatrust.org.uk for consultancy support for your individual school needs

Discussion paper produced by the Digital Drive Team

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Debbie Anderson – Head of School Improvement
Alison Critchley – Head of Sufficiency

City representatives:
Stef Nienaltowski– Director of Shaping Portsmouth

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PEP 2020-2023 Education Strategy

Priority Number 2: Digital Learning

Strategy - Portsmouth Education Partnership

Series of initial actions 2020-21:

1. **Established a strategy group of school leaders / pioneers** to agree and drive forward a digital learning strategy for the city under the 'Imagine Portsmouth' banner.

2. **Developed, in consultation with schools, MATs, and other partners a three-year digital learning strategy for Portsmouth** with clear expectations about the way in which secondary, primary, infant, junior and special schools will increase their use of technology to enhance learning over the three years.

3. **Supported schools to effectively exploit the potential of digital learning both in school and at home.** This included a high quality CPD offer (incorporating safeguarding and a focus on assessment and feedback), technical support and a series of events and workshops to promote digital learning and showcase local good practice, and membership of the Ed Tech Programme.

4. **Ensured all schools had in place by the end of September 2020 contingency arrangements for remote education** which met the expectations set out in the DFE guidance in the event of a local outbreak in a school or a local lockdown in a community.

5. **Significantly reduced the number of children with no access to either appropriate devices or to the internet.** In the short to medium term this will include the distribution of devices through a number of avenues including nationally funded government schemes and local schemes through Shaping Portsmouth, LA Emergency Grant and the HIVE.

6. **Upskilled parents and pupils** in order to support home learning and a blended offer of digital and non-digital and supported schools to build and develop better relationships with parents about their child's learning.

7. Ensured schools had the information they needed to make informed decisions about the most **suitable apps to support home learning** and the **leasing and purchase options to provide additional devices to pupils**, including 1:1 subscription model.

8. Developed and established **support networks** across the city to encourage and support the implementation of digital learning e.g. IT managers in schools.

9. Explored the **digital apprenticeship programme** that is available through Portsmouth College and other providers.