

Smart Places Seminar III

Meeting the Digital Skills Challenge

Haileybury - 9th February 2018

Executive Report

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COLLEGE**

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Welcome from our hosts at Haileybury



Delegates were warmly welcomed to Haileybury by Deputy Head (Academic) Stephen Campbell.

Stephen kick-started the discussions amongst delegates by reflecting on the challenge of balancing the introduction of digital technology into the educational space with the need to retain a focus on what it is that is being taught. Highlighting the inherent dangers of confusing information with knowledge and understanding, and assuming that access to lots of information would mean it was also understood, Stephen went on to highlight some of the exciting digital developments that Haileybury were looking at:

- Augmented Reality, allowing students to immerse themselves in alternative worlds such as historical events and locations;
- Textbooks that use Artificial Intelligence and machine learning to understand an individual pupil's misconceptions or areas of weakness, re-teaching these areas in different ways and responding to need; and,
- Machine power that supports the tracking and monitoring of pupil progress, enabling the school to predict a pupil's dip in academic performance and have a series of potential interventions in place before the dip.

Stephen closed by looking ahead to a hugely exciting time for education and for technology where we start to see how computers, machines and technology can assist and augment the teaching and learning experience.

www.haileybury.com

Introduction - Cllr Gagan Mohindra

Cllr Mohindra, Vice-Chairman of the West Essex & Eastern Herts Digital Innovation Zone (DIZ) Board, opened the event thanking the delegates for taking time out of their busy schedules to attend and thanking the school for kindly hosting the event. He commented on how good it was to see such a cross section of organisations present, from business, health, education, the voluntary sector and local authorities.

Cllr Mohindra saw the digital revolution as a key factor that will help shape both our economy and service delivery in the short, medium and longer term. It will increasingly transform the way we work, the way we access services, the way we travel, and every aspect of how we live our lives.

The national commitment to be at the forefront of the digital revolution is set out in the Government's recently published industrial strategy. Cllr Mohindra saw the challenge for the DIZ being to localise this commitment to jointly develop digital strategies that will help our businesses, our communities and our citizens go further, faster.

He reflected that without the right skills we will not be able to exploit the opportunities that will arise here in the heart of the London Stansted Cambridge Corridor, whether at Public Health England in Harlow, the expanded Stansted Airport or through the massive investment we are making in superfast infrastructure in all the district areas. While all our organisations have been looking at how we accentuate the positives and ameliorate the negatives of the digital revolution individually, the DIZ board have been looking at the opportunities that exist to work collectively. To make the whole greater than the sum of its parts.

Cllr Mohindra hoped the event would bring clarity around what we need to do next to upskill for success and looked forward to hearing delegates' perspectives on how we should move forward.





Russell Beck - Impellam Group

'Future Workforce in a Digital Age'

Russell, from the Impellam Group, began his presentation with a look at some of the workplace predictions that are currently being considered. These included the views often stated that 'we can't afford to retire until our 70's or 80's' and that 'robots are taking our jobs away,' and Russell drew out the contradiction in these two views.

He argued that research shows people absolutely believe automation will destroy jobs, but most people believe it will be other jobs and not their own that will be automated and that this is due to the fact that change is so much faster than most people appreciate.

A major future threat to business will be the lack of availability of the talent it needs in the volumes in which it needs it. As a result talent development will become front and central to business planning and employers will need to be aware of how attractive they are making themselves to the limited talent pool in order to both recruit new staff and retain existing staff.



As the digital world evolves and develops, Russell argued that work will become increasingly transitory, with permanent employment and long term contracts in decline and a trend towards freelance and

contracted services. We will see the young people of today undertaking multiple jobs simultaneously as new technologies allow what were previously full-time jobs to be broken up into smaller chunks or 'gigs' and specialist jobs outsourced.



Russell's presentation picked up on some key trends emerging in the workplace



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So what skills will become important in this new age of employment? Russell highlighted the top ten skills that employers are likely to be looking for in recruits by 2020. They were:



- Complex Problem Solving
- Creativity
- Co-ordinating with others
- Judgement and Decision-making
- Negotiation
- Critical Thinking
- People Management
- Emotional Intelligence
- Service Orientation
- Cognitive Flexibility

Essentially these can be summarised as design or creative skills and people skills. As diversity of skills and backgrounds will be critical, by extension the ability to engage with people and operate in whatever environment workers find themselves will be a prerequisite.

As daunting as some of these trends are Russell's message was that these trends were here and going to continue.

Employees, employers and educators need to be ready for the changes and adapt to make the most of the opportunities they will bring.

Russell has produced a white paper on Digital Futures and he invited delegates interested in exploring this further to contact him for a copy of the paper.

Russell can be contacted at Russell.Beck@Impellam.com





Karen Spencer - Principal, Harlow College

'Not just courses, careers!'

Karen, reflecting on the college's belief that it is important to help their students work towards careers and not just the completion of courses, spoke of how the college has prioritised the development of new technologies to ensure students are best prepared for their future, a future they cannot predict.

However, for Harlow College this is not just a case of technology for the sake of technology or of just wanting to be seen to have the latest equipment without a sense of how it can impact on their students.

The question 'So What?' is their key challenge to the technology they look to introduce and Karen shared some research findings (see slide below) that supported their commitment to ensure every one of their pupils is equipped to study in the digital age. Whilst the college would not say that it is the iPads on their own that contribute to the impacts seen, the findings support the

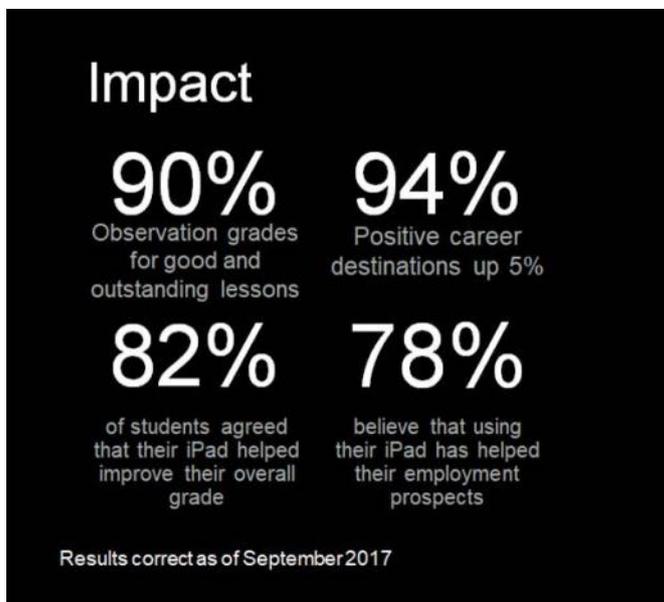
idea of preparing the students to become digitally competent citizens in an ever competitive world.

6 The college prepares students for the spaces they will work in, as well as the technology they will work with, and whilst some jobs will be taken by robots in future, there will still be jobs requiring human interaction. There is also a balance to be struck between teaching priority STEM/engineering/construction

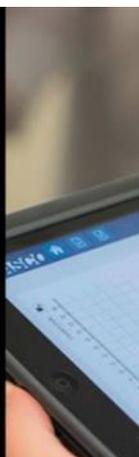
skills alongside the creative thinking and innovation skills that experts believe will become so crucial.

Teaching in innovative and engaging ways is essential to ensure that students are successful and fully equipped for their next steps, whether that be Apprenticeships, Higher Education or the world of work.

www.harlow-college.ac.uk



Some of the key Impact findings for Harlow College



HARLOW COLLEGE



The Q & A Panel Discussion

After our two keynote speakers had delivered their presentations, they were joined by Clare Morris of ReThink partners on a Q&A panel chaired by John Houston of One Epping Forest.

The first question asked whether there were opportunities for older workers, many of whom may have needed to change roles, become unemployed or retired but wish to return to the work place. Many of these people have some of the key skills we are looking to develop in our future workforce whether those are creative thinking skills, design approaches or experience of delivering and using new technology.

The panel's view was that there is a need engage with this generation and upskill them to return to work. Clare felt we often underestimate the skills/talents of retired people but was not sure how to get them back into education. Karen mentioned that those beyond funded education age did face the barrier of funding in order to return to education, whilst Russell felt there was space for reciprocal roles to be developed with older workers mentoring younger ones with people and life skills and the younger mentoring the older with digital skills.

The second question revolved around apprenticeships. Russell felt that apprenticeships needed to be for all, not just 18 to 22 year olds, with a range of new 'adult' or 'retiree' apprenticeships. Karen had a more general concern that businesses didn't fully understand the apprenticeship offer or found the rules, process and expectations of the employer far too complex and therefore didn't offer apprenticeships.

A question was posed about tapping into the potential of those with disabilities. Clare believed society has always been poor at including those with disabilities in the workforce and that, sadly, technology would not automatically overcome that; however Karen also felt that by, perhaps using AI, transferable skills could be identified and acceptable workplace adjustments suggested.

Finally a question was raised on barriers to teaching creativity and enterprise. Karen explained that Harlow College placed these skills as one of the core attributes within student learning. However, it is a mistake for businesses to think that the role of schools and colleges is to solely train people to work in their current businesses and so one answer would be to involve the local business community and bring their skills and knowledge directly into the process.





Clare Morris - ReThink Partners

'Digital Skills For All - How can we work together to improve digital skills?'

After a vibrant networking session over coffee, Clare gave an introduction to the workshop session to follow and reflected that for many people the term 'digital' can be a barrier right from the start. Clare spoke about the need to tackle digital skills in terms of generational groupings.

There are the 'Digital Natives', the children of today who are quick learners, but to whom we also have a responsibility to equip with the ethical, sense-making side of digital so that they can make informed, appropriate decisions. If they see something on social media can they determine if what they are reading is true?

Then you have 'Generation X', the users of technology who have some understanding of its uses and capabilities but are not able to use it to its full potential. And you have Silver Surfers, who many are too quick to underestimate in terms of digital take-up and skills, but where you may also have issues of confidence and technical skill that need to be addressed.

Picking up Karen's earlier comment about the 'So What?' Clare highlighted that digital skills are a social good and that we all gain more, if we all gain. People need to be involved from the outset to avoid a situation where you have a great digital infrastructure or great products being developed to utilise that infrastructure, but a population that does not know how to get the most from them. How can we collaborate as a society to get there faster?

Clare asked the workshop teams to consider five key questions:

- What is our ambition for digital skills in our area?
- What would great look like in five years?
- How can we galvanise a collective approach?

- What do you need - as an employer, as an educator, as a community organisation?

- What can you offer others?

And finally Clare asked each group to consider whether we, as a collective, are on the right track?





Delegate Workshop Discussions - 'Digital Skills For All'

After Clare's challenges to the workshops session, it was over to the delegates to work through the issues, opportunities and questions she raised.

Splitting out into mixed groupings of delegates from across multiple sectors and across administrative boundaries, each table was asked to consider the key questions and feed back their thoughts to the room at the end of the session.



The plenary session drew out a number of key points on each of the challenges set:

- *What is our ambition for digital skills in our area?*

The right levels of connectivity and access in the broadest terms - not just infrastructure but local community access to digital resources such as the colleges.

Bridging the gap between those that 'Can or Will' and those that 'Can't or Won't'.

Ensuring technology does not stifle creativity.



- *What would great look like in five years?*

Delivering services across digital networks through fibre to the home.

Sign-posting of services to enable informed decisions e.g. visiting the pharmacy before the GP or A&E.

- *How can we galvanise a collective approach?*

Branding. Connecting people and keeping them informed.

Maintain public / private sector mix. Demonstrating results.

Sharing a single vision but also ensuring all stakeholders have a voice and all partners feel the benefits.



- *What do you need - as an employer, as an educator, as a community organisation?*

Building a basic skill set matrix, including emotional and social skills. Help to bridge the generational gap. Build a clear supply chain of digital skills.

Support for people to use technology. Attraction of public / private investment into the area and help with the cost of innovation.



- *What can you offer others?*

Opportunity to exploit local heritage assets. Support of cross-border groups eg. Culture Without Borders. Business mentors for schools.

- *Are we on the right track?*

Yet to be determined, but there is a clear need to overcome risk-aversion amongst the public sector partners and 'do things differently'.



Cllr Mark Mills-Bishop, Leader Broxbourne Council - Closing Remarks

Bringing the event to a close, Cllr Mark Mills-Bishop reiterated how events like the Digital Skills Seminar are critically important for all the five district council areas that comprise the Digital Innovation Zone. The seminars help to ensure we are collectively ready to embrace digital opportunities and challenges.



Cllr Mills-Bishop was hugely heartened with the range of people and sectors at the event, demonstrating that we all see real opportunities in working together to fully unlock the potential of new technology for the communities we serve, young or old. The challenge for us will be to make sure that our joint work matches our joint ambition and that we deliver real impact, making the whole greater than the sums of its parts.



Thanking Haileybury College for providing such a wonderful venue and the DIZ Board for organising this event, Cllr Mills-Bishop also warmly thanked the speakers who framed the key questions perfectly, shone a light and helped illuminate the way forward. Finally, he thanked the delegates who had found time in busy schedules to contribute to the discussion.

Cllr Mills-Bishop pointed out that we all share the ambition to make eastern Hertfordshire and west Essex one of the best-connected places to live, work, study, enjoy and do business. For small businesses, 'think big', opportunities are there. The harder the task the more glorious the success.

In closing, Mark felt confident that the joint working approach the DIZ has adopted will be essential to getting us to where we need to be and with the help of the gathered delegates, urged them to go out and make it happen!



About the West Essex & Eastern Hertfordshire Digital Innovation Zone

The West Essex and Eastern Hertfordshire Digital Innovation Zone Board was established by 10 partner organisations from top and second tier local government, social care as well as local acute and strategic health providers, and the private sector. It covers a geography that contains over 29,000 businesses and over 454,000 residents in over 212,000 households. Having expanded its membership to ensure a wider perspective it now welcomes voluntary sector and further and higher education sector representatives onto its board.

Together, the partners have co-funded and co-commissioned the development of a Digital Innovation Strategy for the Zone which is being produced by Arup Consulting. This document, due for completion by June 2018, will help to shape the workstreams of the DIZ Board and seek to establish the DIZ as a 'go-to' organisation for the exploration of digital approaches, technology and solutions in a supportive yet challenging cross-border, cross-sector, urban / rural environment.

The DIZ has a number of key strategic aims, including:

- Identifying and delivering short-term practical digital investment and enhancement projects
- Building more productive and effective relationships with international infrastructure organisations
- Developing a strategic long-term plan for the enhancement of digital investment and applications across all partner organisations
- Establishing effective governance arrangements across all relevant partner organisations
- Developing effective communication and branding to maintain an understanding of, and support for, the digital programme among key stakeholders and external partners
- Identifying and targeting key sources of external investment and support for coordinating local partner programmes

For more information on the DIZ or to speak to us about our work, please contact Mike Warr at Epping Forest District Council at mwarr@eppingforestdc.gov.uk

Delegates from the following organisations attended or supported the seminar:

