

CASE STUDY

Driving digital skills enhancement: Student content creators***Lucy Bamwo^a, Michal Kochanowicz^b, Priya Mahey^a, and Joanna Szpunar^c**^a Learning and Teaching Innovation Centre, University of Hertfordshire, United Kingdom^b School of Physics, Engineering and Computer Science, University of Hertfordshire, United Kingdom^c Hertfordshire Business School, University of Hertfordshire, United KingdomContact: l.p.bamwo@herts.ac.uk

ABSTRACT

The student technology mentor (STMs) team at the University of Hertfordshire have worked together to create an engaging online digital skills course for students. They have designed, developed, and authored content for their peers with the eventual aim of staff learning from these resources. This project will continue to be enhanced and added to over time by fellow students. The STMs have worked closely in partnership with the digital capabilities team to lead digital skills development for employment development. The content is currently aimed at our Level 6 and 7 students and is integrated as part of the Go Herts award so that students gain recognition and reward for engagement in extra curricular activity. This case study outlines how students can drive change, lead strategy, and design and author content whilst working in partnership with staff.

KEYWORDS

digital skills, student authors, digital capabilities, change agents, student developers

As part of the University of Hertfordshire's digital strategy, the role of student technology mentors (STMs) has been instrumental in supporting both staff and students with their digital capabilities over the past few years. As outlined by Bamwo et al. (2020), the STM role was initially placed to support the rollout of a new online environment; however, the role evolved to working closely with academic staff and students to support digital capabilities, technology-enhanced learning tools training, and reviewing module design, with a focus on inclusivity and accessibility whilst working in partnership. The STM role has become ever more essential as the reliance on technology and digital skills has increased.

As consumers of educational digital content, especially throughout the pandemic, students are experts in what online content works for them. They bring current digital skills

and knowledge along with considerable creativity, enthusiasm, and initiatives. Dollinger & Mercer-Mapstone (2019) explained that recognition of students possessing valuable resources, such as perspectives, opinions, ideas and experiences, can energise higher education. This led to the decision to engage student technology mentors as knowledge producers at our institution. This year, the STM team have worked together to create an online digital skills course for students that will continue to be enhanced and added to over time. This course has been embedded into the Go Herts Award scheme. This award allows students to gain points by participating in extracurricular activity such as digital skills training and development, which directly relates to graduate attributes. Students can gain gold, silver or bronze depending on the points gathered. The award is acknowledged on the student's transcript to show recognition of their activities and demonstrate to employers the skills and knowledge they have developed beyond their degree.

To continue our partnership culture, this project has evolved to provide the students the opportunity to lead, author, and develop online digital skills content for their fellow students with the idea originating from the students themselves. It is envisioned that the content will also be used to support academic staff with their digital capabilities next academic year. This partnership has opened a new innovative pathway of enhancing digital capabilities across our student body with the benefit of challenging negative staff perceptions of students as content creators. Staff have often seen students as consumers of their content and not as subject specialists. This case study will explain the processes and lessons learnt throughout this project from both the student and staff perspectives and the approaches we have taken to ensure a healthy and successful partnership.

The role of staff has been to facilitate and offer advice and guidance in the form of "cooperative enterprise" (McCulloch, 2009) with a partnership of co-production where all partners are focussed on production, dissemination, and application of knowledge and on the development of learners. Building partner confidence and relationships has been key to the project. Bovill et al. (2011) argue that there has been a lack of enthusiasm when it comes to students authoring content; however, this project has shown that with support and encouragement, students can successfully deliver high quality content whilst gaining valuable experience.

INSTITUTION AND HISTORICAL CONTEXT

The university has eight academic schools and a community of over 26,000 students who are based on campus and at partner institutions in the United Kingdom (UK) and overseas. Delivery of courses ranges from blended (on-campus) to purely online.

It is worth noting from Lorber et al. (2019) that common challenges to the staff-student partnership involve students being sceptical regarding the extent to which they can share their involvement and contribution, which can lead to barriers for effective collaboration in developing the learning and teaching environment. Bovill et al. (2011) and Marquis et al. (2016) both suggest that this is closely linked with the aspect of challenging traditional roles and models that might result in hesitancy and staff feeling uncomfortable with this necessary change in power relation. Lorber et al. (2019) rationalised that this will often result in uneasiness with providing students with greater input and the time resources required for the success of a partnership work.

To overcome some of these barriers, there was a huge investment in training and supporting the STMs. The staff involved with this partnership are not connected to an

academic school and have non academic roles. This collaboration between staff and students proved extremely positive, with benefits for staff, gaining the insight and expertise mentors brought and for students gaining an understanding from the staff of what happens behind the scenes at the university.

STUDENT TECHNOLOGY MENTOR PERSPECTIVE

STMs have been actively involved in the partnership project, aiming to create engaging and accessible learning content for students to improve their digital skills. They worked in teams of two to design courses on the Go Herts Award site that is held in our online learning environment, Canvas, on various topics ranging from programming languages and information communications technology (ICT) proficiency to digital creation and communication. Working in pairs allows students to support each other and give and receive feedback. This significantly benefited the content due to the opportunity to share a critical view, exchange ideas, and support each other with challenging tasks. Content creation was followed by the staff and student peer-review process that provided another layer of critical evaluation and support. Furthermore, the STMs have been granted the opportunity to share their practice at external conferences. This was a significantly rewarding experience that subsequently allowed them to apply new ideas and inspirations to the project.

Joanna's experience

My contribution to the partnership project has opened several pathways for personal development. Predominantly, the idea of creating content for students and being assigned decision-making power on the design rules and possible content has provided an ideal background for the utilisation of my imagination and creativity. This led to my greater engagement in proposing ideas and providing critical views with the aim of creating a compelling and accessible knowledge base for others. Furthermore, the freedom of choosing the topics provided me with greater encouragement to follow my area of expertise and share passion alongside the common knowledge on digital matters selected through the extensive research process.

The process of paired content creation allowed the development of teamwork skills, especially through collaboration based on the exchange of ideas and mutual support that aimed to explore new approaches and foster a more productive team environment. Furthermore, I improved my time management by developing strong organisational skills to set manageable goals and prioritize and delegate tasks to meet deadlines. This has also positively affected my oral and written communication skills by allowing the development of mutual understanding, awareness of communication barriers, and acceptance of constructive feedback followed by discussion and application of possible solutions to the project.

It is also important to mention that co-authoring and designing digital skills content for students gave me an opportunity to develop greater respect for others, which was crucial due to the expected diverse audience. This enabled me to see multiple sides of an issue and extended my understanding of accessibility and inclusivity, which assisted me with learning how to adapt the content to various needs and expectations. This will certainly become an important skill in my future professional career. Furthermore, the opportunity to view and learn from a staff perspective allowed me to broaden my horizons and

consequently contributed to the creation of better relationships within the university community.

Michal's experience

Participation in the partnership project allowed me to expand my communication skills by providing me with the opportunity to share my practice at conferences as well as in research papers. Moreover, I significantly improved my teamwork skills due to the paired content creation that involved the assignment of tasks and responsibilities followed by continuous support and exchange of ideas. Close cooperation with other STMs and academic staff members enabled me to notice the importance of effective communication in a team to achieve success and overcome certain issues. Since the atmosphere in the team was supportive and friendly, it significantly facilitated the development of the project as we could reach out to others for help when facing issues and challenges.

For each page, we needed to identify, find, evaluate, apply, and acknowledge various sources of information. Therefore, I have significantly extended my research skills, which are important to proceed with a further academic career. All content needed to be accessible and inclusive to meet the needs of individuals with various disabilities and/or coming from diverse backgrounds. Since those groups require different approaches to teaching and learning, I have become more aware of others, which allowed me to look from a broader context and gain a better understanding of how to develop appropriate learning content.

After designing the course content, we participated in short catch-up sessions where we had the opportunity to present our work and ask staff partners for critical evaluation. This experience allowed me to understand the importance of constructive feedback, as I was able to notice issues that I had not been previously aware of. Applying it in practice and making the necessary improvements has led to the development of high-quality and inclusive learning content that everyone can benefit from. I understood that the ability to accept feedback is an important skill as it allows a broader perspective; hence, it will be a valuable skill in my future career.

STAFF PERSPECTIVE

Priya's experience

Working in partnership with students has helped inform our practice and has progressed this project forward into positive directions that we could not have predicted. It has been an instructive way to see what students are lacking when discussing digital skills and how the university can offer to close that gap. The STMs have been able to bring forward their own knowledge, ideas, and skills and have been given the personal agency to lead and be creative. At the start, a more structured approach was arranged, where we suggested content areas for STMs to build and develop. We regularly met up with the STMs on a one-to-one basis to check on progress, answer questions, and provide guidance.

Having this partnership with the students is not only beneficial to the students but the staff too. Students can see the latest trends in technology and how it is being used by peers and incorporate this knowledge into their content. It has informed us about digital areas that we were unaware of. The content they created included elements which we may have missed, such as different platforms they use to communicate or digital skills they wish the university offered. These are continuously changing or developing; therefore, having this

guidance from the students for staff is an informative and dynamic way for staff to learn. It builds on the mutual respect and learning between staff and students.

The process for this project has been a learning curve in which we could not predict whether students would value the content the STMs produced, as the outcome has always been for the STMs to have free creative control over the content. We placed our trust into the STMs and their specialist knowledge in what is current and needed by their peers. Staff by nature have natural authority over their subject specialisms; however, this is not automatically granted to students, even by their own peers. The STMs are digital subject specialists and acknowledging their authorship on the pages has demonstrated this to the STMs, staff, and the students. Initial feedback for this content has been overwhelmingly positive. This is highlighted in the award submissions, where students have evidenced and commented on the content they have been through.

Lucy's experience

Evidence from the national Jisc digital experience insight (DEI) survey showed that we were not providing students with enough opportunities to develop their digital skills. Employers have also fed back that graduates are not coming to the workplace with the expected digital skill set. It was during an STM team-wide catch-up meeting discussing strategies on how we can support students and their digital skills that the idea for creating a digital skills course arose. The STMs expressed that they were keen on creating the content themselves. Through enquiry, we established what the students felt they needed for this project to be successful. It was important to ascertain directly from them the direction of their professional development, giving autonomy and empowerment rather than making assumptions.

Initially, suggested areas for the STMs to develop digital skills content were based on evidence gathered from the DEI survey and internal consultations. After the first set of resources were created, the STMs were encouraged to think of their own ideas of what content they thought could be created with the freedom to explore and create. It was exciting to see the enthusiasm from the students as they took control of the direction of the project and had the independence to design and develop topics that were important and interesting to them. Regular meetings occurred to check on progress and provide guidance. As time progressed, there was a transformation in the nature of the meetings. The STMs became much more impassioned and confident in their development, as their ownership and leadership of this project evolved.

There has been a high investment of time and effort into our partnership; however, this is counterbalanced through the excellent outcomes, sense of reward, and learning experiences for all partners. It has enlightened our practice and approach where we are actively promoting engaging students as partners with all university projects.

Moving forward, the new intakes of STMs mixing with established STMs will enable the latter to be able to give support, advice, and mentorship to new students early on to support the transition to partnership. Transitioning into partnership has taken much effort from both parties. However, it is hoped that through sharing our practice internally and externally, a cultural shift towards seeing students as subject specialists and developers in their respective fields will start to happen.

LESSONS LEARNT AND PREPARING FOR THE FUTURE

Setting the tone of the partnership was of particular importance. The STMs had free creative control on their pages and formed a consensus together on design rules so content could be consistent. It was understood that this was a project alongside their degree/master's programme. Therefore, through strong communication, the message was to always prioritise their studies. If any of the STMs felt the workload overwhelming, deadlines were adjusted or it was suggested that the STM consider taking time off for their well-being. We wanted communication with the STMs to be open and clear; therefore, having regular meetings allowed us to note the progress of their content. It was always made clear that even if no progress had been made, they should come and talk to us for a well-being check.

One key factor for success is that there must be a passion for partnership for it to work. It takes personal investment and time from both staff and students to make it successful. Constantly talk to your partners about what is working and what is not working and what ideas they have. Consider everything they can bring (not just the student voice) and what you can bring to them. Effort and reward are driven both ways.

The STMs have worked directly alongside academic staff and have on-the-ground insight into what digital skills are wanted and needed by staff and students. As we move to look at supporting staff digital skills, it has been hugely beneficial having their perspective. Partnership work with the STMs will continue onwards to create content directed at our academic staff.

RECOMMENDATIONS

Over the last few years, a set of recommendations have been created for those who are thinking of embarking on a similar partnership project:

- **Communication:** Open the routes of communication so that your partners feel comfortable to speak openly and confidently to you. Listen carefully and give opportunities for partners to communicate with you. Use communication routes that are comfortable for both sides. You may find this may evolve over time, from team text chats to calls and face-to-face meetings.
- **Guidance, not instruction:** You may feel you need to give instruction, as this has been the status quo; however, this is the opposite of how to progress the partnership. Partners guide each other through. As soon as you instruct, the partnership becomes imbalanced. Guidance is a necessary part of partnership. You need enough to empower with a strong sense of direction without taking the lead.
- **Equity:** You need to acknowledge the power imbalance and address it. This is done over time by empowering students and breaking down barriers. Ask for their opinions and ideas and encourage them to bring ideas to you. Support their ideas and show that you value what they bring to the partnership.
- **Invest in people:** Create a programme of training and support for everyone involved and pay students to develop themselves. Build time to develop the partnerships. Ensure that students are integrated and understand the workings of the organisation as a whole, for example, being part of university-wide project working groups and giving them staff benefits such as continuing professional development.

- Respect students' time and studies: Ensure that students are paid for their time and work. Be considerate of peak times in their studies and adjust the workload accordingly.
- Prioritize leadership and ambition: Real drive and enthusiasm from both students and staff are needed. Both need to be invested in making the project a success. Both need to see the rewards. Make sure the rewards are known at the very start to both staff and students, as it's not always clear.

CONCLUSION

This partnership project continues to drive the digital capabilities strategy from the ground up. It has been key in developing student digital skills and has highlighted areas that may have been missed in the curriculum, preparing students for the digital world of work. Importantly, the project has influenced a shift in staff mindsets around what partnership is and what can be achieved when you recognise the challenges together and share leadership with influence. Creating a collaborative environment from the outset has been key for students to feel prepared and empowered. This collaborative environment needs to be continually nurtured and supported.

The benefits for the students have become clear over time with them gaining transferable skills for employment and new opportunities to build networks and producing tangible outputs that they can add to their portfolios. Demystifying academic staff and the university structures through exposure to those unseen areas also helped the students feel more comfortable in their positions. For staff, this project is an example where they can clearly see the student contribution of working in partnership and the mutual benefits this can bring. The enduring nature of this project means that we will continue to build and evolve our partnership relationships. Moving forward, the new intakes of STMs mixing with established STMs will enable them to be able to give support, advice, and mentorship to new students early on to support the transition to partnership. Transitioning into partnership has taken much effort from both parties. However, it is hoped that through sharing our practice internally and externally, a cultural shift towards seeing students as subject specialists and developers in their respective fields will start to happen.

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NOTE ON CONTRIBUTORS

Lucy Bamwo is a Digital Capabilities Manager working at the Learning and Teaching Innovation Centre at the University of Hertfordshire. She has over 20 years working in further and higher education with a strong background in educational technology. She is a committee member of the digital capabilities group at UCISA and has presented on partnership and co-creation widely alongside student partners.

Michal Kochanowicz is an undergraduate student at the University of Hertfordshire and specializes in computer science. He is an associate fellow for the higher education academy. Michal has worked as a technology mentor for over a year and is currently on a study abroad programme at the Nanyang Technological University in Singapore.

Priya Mahey is a Digital Capabilities Developer working at the Learning and Teaching Innovation Centre at the University of Hertfordshire. She has a background in law and educational technology, working with academic staff and students to develop their digital skills for the last 5 years.

Joanna Szpunar is an undergraduate student at the University of Hertfordshire and specializes in international business and computer science. She is an associate fellow for the higher education academy and has worked as a technology mentor over a year. Joanna has been designing and planning learning activities for academic staff and students, supporting their digital and academic skills development. She is currently developing her technological skills on a study abroad programme at the Nanyang Technological University in Singapore.

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