Reflections on the Doctoral Consortium

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This paper provides a reflective commentary on the British HCI Doctoral Consortium from the perspective of the Organising Committee. We discuss the approach to holding a Human Computer Interaction Doctoral Consortium in July 2020 and the outcomes. We reflect on our lived experience pre, during and post event, flagging issues and perspectives that emerged from the day, and possible implications for doctoral consortiums and training for HCI.

Keywords: lived experience, doctoral consortium, HCI, doctoral training

1. INTRODUCTION

By March 2020, the decision had been made, there would not be a BCS-HCI (British Computer Society – Human Computer Interaction) conference at the University of Keele this year. As lockdown began, Alan proposed that even if the main conference did not go ahead that we hold the Doctoral Consortium on-line and Sandra gained support from Keele. We were go!

Bit scary, doing it online, something we hadn't done before (and as of April 2020, hadn't much experienced) but we all eagerly agreed by email and the Doctoral Consortium committee was formed.

The committee represented all UK nations with academics from the universities of Swansea, Belfast, Edinburgh, Preston, Sunderland and Keele. Gender split was 2 female, 4 male. It involved mid-career and senior academics with a range of research experience from just out of early career stage to those who'd been involved in HCI research before direct manipulation interfaces and WYSIWYG (What You See Is What You Get). Committee members had

excellent complementarity as can be seen from indicative publications: Raymond Bond (Torney et al., 2016, Bond et al., 2019), Alan Dix (1992, 2007), Tom Flint (2016, 2018), Lynne Hall (2016, 2020), Gavin Sim (2003, 2015), Sandra Woolley (2019, 2020).

This paper provides a reflective commentary from the lived experience of organising and holding a Doctoral Consortium for HCI students. Reflexivity thrives when colleagues in a supportive environment engage in a willing and open dialogue (Cuncliffe and Easterby-Smith, 2017), with the Organising Committee providing that environment for us.

In developing this commentary, we took a qualitative approach to understanding the learning to be gained from the unexpected challenges in our environment. In the first instance we wanted to explore our lived experiences of the event. This enabled the representation in our reflections of the perceptions and options that influenced choices made in how things were done (Boylorn, 2008). Our personal first-hand knowledge of earlier iterations of the event, and organising the

virtual event itself, allowed us to frame the debate of how we could learn and enhance our understanding of the 'shared typical' to allow further innovation for future activities (McIntosh and Wright, 2018).

This approach and intentions are presented in this paper as a reflective commentary embodying our situated actions and reactions as they unfolded. Just like many HCI experiments and evaluations, these occurred pre-, during and post- a digitally enabled experience, In section 2 we outline how we prepared for the consortium event. Section 3 discusses the experience on the day Section 4 outlines our post-consortium approach. Section 5 discusses possible implications for doctoral training for HCI.

2. PLANNING THE CONSORTIUM

Our first meeting was on the 17th of April to discuss what we were going to do for the online Doctoral Consortium. Meeting like this was not so strange – it has long been typical to meet online for the BCS-HCI Interactions group, with all committee meetings done remotely. By 2019, meeting online was also standard for most conference organisers and many collaborative projects with participants typically geographically distributed. But somehow, with COVID it all seemed really, really challenging. Even though we've all been using Skype for years with no bother at all!

We gave much more time to planning this consortium than we typically would, meeting every few weeks from April onwards. But that was in the strange time of full lockdown COVID where human contact was so limited. We found we didn't just need the social life of the family zoom on a Sunday afternoon, we also needed the academic social life – the getting together for collegiate meetings. And knowing that we, as well-networked experienced researchers needed that reinforced our view that the PhD students who were in a more isolated position than us would also really benefit from being able to get together.

Being online and leading into something that was to be online was a worrying idea back then. Looking back now during the final edit of this paper in November 2020, this seems a very strange perspective because now it seems entirely normal.

When we met to discuss this idea of wholly online DC in April, it was with some trepidation. Could we actually do a doctoral consortium online? Would it work? Would anyone come? But even if it might not be great, we were in complete agreement that we needed to try. First things first, date and times and so on to be the same as envisaged in the University of Keele's outline conference programme. One firm decision in the uncertain COVID landscape.

Having agreed that we should do something we then began to overthink and come up with over-expectations of what we could do. Some of these were really excellent but utterly unfeasible, but they showed our determination that the experience would be great for those that attended. And along with all our wild ideas, in the background and from meeting to meeting all the necessary stuff happened, like the call for papers, the website, the sponsorship, the submission site, communications with the publishers, inviting other academics to participate and so on.

We considered in depth each time we met about what the PhD students would get out of the day. We identified that value from participation in the DC had 2 main elements for doctoral students:

- Immediate value - being part of a research community event with peers and experienced researchers, learning and thinking about HCI
- Lasting Value - tangible experience and evidence of reviewed research activity aka a publication.

2.1 Structure and Schedule

We aimed to give immediate value through a good online experience that HCI doctoral students would enjoy. Following the typical HCI approach we planned a lot and packed plenty in. Aiming to give value and to avoid any chance of 'nothing to do.'

Our main concern prior to the event was that it would be boring. We didn't want to be memorable for the wrong reasons! By May, all of us had experienced terribly dull things in Zoom, Teams and the like. We had all sat through hours of talks and the silence of unstructured events. We had all listened to panels and audiences agree or report authors present all the key findings in the first minutes of a 3-hour event leaving hours of not much to say. Our focus was thus how could we give enough and the right sort of content to entertain, engage and make a useful experience. We thought about structure and schedule, how to make this bearable, what it might involve, what platforms we might use. And how to make it useful and valuable for the students.

In the end, after much discussion we went for a schedule that would be a really excellent value doctoral consortium if it had been physically co-located. We had plenary speakers to entertain and engage. Chris Speed would open the consortium

to present compelling, provocative research ideas on a summer morning, setting the tone for an interesting day. Raymond Bond's 12 maxim's and guides would bring everyone back into the zone after lunch, with some excellent tips, quotes and ideas for success in doctoral studies. We would have breakouts for students to present and share their work as well as to discuss the challenges of COVID-19. And many academics to join those breakout groups beyond the committee, others who wanted to help and support doctoral students.

2.2 The Submissions

We spent some time considering how we could get a different type of submission. In hindsight, it isn't really clear what the rationale was to do something different about submissions. The actual holding of the event would require a disruptive change from physical to online. However, beyond this the event would follow a similar structure and experience as if it was a geographically collocated event.

In some ways, in our initial discussions about the submission process we almost threw the baby out with the bathwater wanting to innovate in all ways for the Doctoral Consortium. So, we came up with a submission that included not only the paper but also the idea of visual or audio assets, questions that might be asked and so on. Items that don't typically go in a paper submission. And in the end these elements wouldn't go in ours either.

As time went on and submission date loomed, we did rein ourselves back as pragmatics hit. So, although we had asked for this extended submission, the end point of our doctoral consortium, the lasting value for the student, would remain the same – a paper in the eWics (electronic workshops in computing) format in a digital library.

3. THE EVENT

We had worried that the day would be challenging, awkward or just plain dull. Another stark scenario had been perhaps that no one would come. Or that if the students did come that they might not engage. But such worries were unfounded. Students and academics did come and after those initial communication

heavy months of lockdown, we had all learnt to communicate more effectively online.

3.1 Participants

More people attended than were typically seen at the BCS- HCI Doctoral Consortium, with 22 students attending along with 8 academics.

An obvious advantage of holding the event online was losing the requirement of geographical co-location. For many students there is a lack of access to funding for travel. For others, family or work commitments may make it impossible to participate if that means going somewhere. Similarly, not needing to be physically present attracted more academics who were able to dip in and attend a couple of sessions. Having more academics made the day more interesting, informative and useful.

All doctoral students are at the beginning of their research, but not everyone is at the beginning of adult life. The goal is no longer necessarily the PhD as a route to an academic career. Instead students are undertaking their doctorate at diverse times and for a range of reasons. And with this diversity comes a challenge, "*reacting to my grey hair*" rather than the date someone obtained their PhD. The invisibility of qualification conflicts with the social heuristic that with age comes experience and knowledge. As in the doctoral consortium population there are more PhD students who do not fit the 'traditional' route than those who do leave school, and sequentially complete their first degree, masters, and PhD. Instead, there are now many students having second careers or just a burning desire to find something out, with many diverse, part-time, self-funded doctoral students

There is diversity in the doctoral population in HCI, however, there is much greater homogeneity in the topics being considered. Most focus is on the 'human' with relatively little consideration of technical HCI and almost an avoidance of programming.

3.2 The Programme

The broad spectrum of participants with different types of people and expertise resulted in plentiful engagement and interaction Throughout the day people responded and communicated actively.

A big concern for us was to give students an opportunity to discuss work and to share what they have done with one another. We had intended to thematically allocate breakout groups, but this wasn't possible as there was not sufficient similarity. However, randomising

the breakout rooms worked well, with positive discussions of work, with interesting questions and ideas.

The breakout groups were deliberately changed so that students had the chance to meet different academics and peers during the day. This change of groups was effective and it made the day more interesting and natural, the chance to meet more and a wider variety of people.

In the breakout rooms there were typically 2 academics along with 5 students. This was an appropriate approach and discussions went well. The group was small enough to enable presentations and debate and enough time was given to let people have meaningful discussions. There was more input from the academics then from the students, with typically academics commenting rather than peers, however, some broader discussions were also held.

However, encouraging people to speak was easier than anticipated, however, getting them to stop was much more challenging than expected. In the real world, the Chair holds up sheets of paper saying '1 minute left' then 'STOP' and if that doesn't work the Chair stands and in response to this very clear signal people tend to stop. We don't have that yet in an online space. And somehow, just muting the speaker seems too blunt an instrument, but this is something that still needs to be resolved to make online events work well.

3.3 Impact of COVID-19

In the discussions and conversations in the breakout groups in all sessions, a key theme was reassurance, with intense and appropriate concern about COVID. The Doctoral Consortium was held in the unprecedented and strange time of COVID-19. Unsurprisingly, this provided much of the context of the discussion during the day with coronavirus and responses to it such as lockdown, having a significant impact on many HCI doctoral students and their work.

There was already an existing sense of need for support within the doctoral community - of the challenges of concentration, of finding time and space to think within lockdown. However, more than this in our discipline, there has been the growing realisation that COVID-19 is going to significantly impact on the focus and methods for many carrying out doctoral research. As experienced researchers it is now often much more difficult to work out how to get the data collected. This is even more challenging for students with less experience and awareness of alternatives.

When this was discussed at the doctoral consortium there was a clear sense of relief from doctoral students. The realisation of not being alone, that the challenges being faced are across the board made everyone realise that these are problems for many within the HCI research community. In particular, the sense that others are also having to really reconsider their research questions, approaches and methods, particularly data collection was good to hear for many in the same position.

3.4 Social Events

The Doctoral Consortium included a social event with Alan hosting a Virtual Pizza. Although this was well attended and a reasonable experience, it was not like the real thing. Not only was the pizza missing, but rather than a convivial chat in a cheerful restaurant, it became a Q&A. This was inevitable as there were many people. Once there are more than 6 people the experience immediately begins to feel a little like a classroom, with all listening to one or few. This highlights that currently the way we engage in online experiences doesn't really support the idea of large audiences able to do more than passively listen.

It proved useful to mix up the social event with the History of HCI workshop. This offered greater potential for students to mix with more academics than would be typical with a co-located Doctoral Consortium.

3.4 Tech Challenges

There was considerable sympathy about tech problems with much gratitude for assistance rather than expectation of seamless technological support. Online we're all a bit lost together and there was no sense of expected service level delivery or that anyone should be providing this apart from the platforms and providers. We know it is not each other's fault if Zoom is misbehaving or our connection dips. This would again perhaps be different in real space, where delegates attending a physical event might expect better signage or whatever.

On the day, Alan had the unenviable job of being in charge of the tech. It was to some degree inevitable that the Chair would end up doing the most menial of tasks. In the real world this would have been putting up signs to rooms and making sure the coffee was set out. For the Chair, unlike the real world where everything is finished once the consortium starts there was a

need to check everything was going on ok all the time. This would not be the likely case in a co-located Doctoral Consortium where breakout rooms are next door and once people leave you are certain they are going to get where they are going.

In the online space the need was to support people unused to the platform and experience and moving us all about into breakout rooms. And unlike in the real world, where you can drop in and out of a session and have a meaningful experience, in the virtual world this doesn't really work. As Alan moved from room to room and checked all was well, he had too much going on. And from the experience we learn that we need a Master of Ceremonies of sorts, or perhaps a team just as we would have helpers who staff the Registration Desk and help delegates.

4. AFTER THE CONSORTIUM

Informal feedback provided after the consortium from students highlighted that the Doctoral Consortium was a really useful experience and students got a lot from it. This was so for students at all stages of their doctoral studies, with participants including recent starters to those completing their final corrections.

Students afterwards have kept in touch with one another after meeting at the Doctoral Consortium. However, interestingly, students kept in touch using their tech not ours. We, the Organising Committee and other academics who are conference chairs and journal editors are still web and paper-based in our minds, whilst students are more likely to be users of twitter and Instagram.

For many doctoral students, a publication in a Doctoral Consortium would be their first publication and provide lasting value from their participation. For BCS-HCI conferences we use eWics for publishing. This has been used for many years, so it could be expected that the templates would work and be easy to follow. But this was not to be so.

Of the 22 papers submitted only a handful were correct. Something was clearly not working in the guidance / template as provided in (BCS, 2020). Instead, to get all of the papers into the appropriate format required significant effort and iteration was needed. A human editor was essential to check that things were correct and to help to correct.

We also wrote to eWics to identify our challenges – or rather to identify that their template and guidance are not fit for purpose. That it is not a good template and that better guidance is needed. But unfortunately, by the time we get to the next BCS-HCI no one will have remembered to follow that action up.

5. HCI OBSERVATIONS ON ONLINE CONFERENCES

From the experience of the Doctoral Consortium it is possible to make a number of HCI observations about the online conference format adopted.

A supposed benefit with virtual conferences is that they are 'easier' to record. Clicking on a button gets you the highest quality video and audio from screen sharing WHEN the WiFi is optimal. However, we will now have lots more YouTube videos from virtual conferences that would not ordinarily be recorded. We can already see that from the BCS-HCI Doctoral Consortium. However, in being recorded perhaps people may be even more sensitive and cognisant regarding what their slides present. Although there are some positives to this in ensuring that the content is appropriate and inclusive, it may also impede the ability to discuss risky or sensitive research.

Although we will have lots of recordings, some presentations will only be partially recorded or not at all because pressing a button is more challenging than might be thought. And just like charging the phone or remembering to switch off the hall lamp) – chairs of sessions often forget to do it! This forgetting to record scenario reminds us all of HCI experiments and usability tests where we really did forget to turn the mic on or press the record button to capture the user's interactions and think-aloud data. We have all been there. Maybe HCI could help with this problem automating that button click as you say 'and I would like to pass this talk over to our speaker, Joe Bloggs' … Perhaps as voice interaction becomes more common we will see embedded intents or verbal commands

Virtual conferences allow participants to contribute and ask questions without. In particular functions such as the chat feature provide reluctant speakers with a way to compose and send their thoughts to everyone. The chat feature also allows participants to ask questions as the thought arises during the presentation allowing more consideration of the entire speech. This may bring the need for new roles to support virtual conferences such as a 'question or chat manager' who supports the presenter.

Finally, there is a significant benefit of being able to dip in and out of sessions, in that more people can attend part if not all of an event. In particular part-time students or busy academics can join and unjoin when needed because they are not physically in the room. When present physically, it is more difficult to disengage and it often feels 'rude' to leave. Online it is possible to come and go more easily or even to stay in the room by simply muting the conference audio stream if you need to leave for a short while

6. DISCUSSION

Immediate value was achieved during the day with students learning, engaging, networking, progressing and enjoying HCI and the HCI community. The immediate value was more strongly felt than would normally be expected from attendance at a Doctoral Consortium. Attendance was of more value for students and academics. Yet when we had set out, the dominant perspective had not been of increased value. Instead, there was a definite vision that an online Doctoral Consortium would not be as good as being together in an unknown university somewhere. By early July, we'd settled into the new normal and all of us were hyper-aware of what we were missing out on. Online no longer needed to mean 2nd best, but instead just a different experience with its own benefits and limitations.

The planning and development meetings were of high value to all of us on the Committee. From the first meeting onwards discussion was of a whole range of topics, a good proportion of which were only vaguely relevant to the Doctoral Consortium. We told a lot of stories, shared experiences, challenges and solutions, talked technology and got to know each other. We were all anxious, living in a pandemic where everything was different, but each day we were meant to be doing our jobs working from home. As well as we could, which often wasn't that well. With jobs that now were not like they had ever been before. Being able to professionally share with others who were beyond our own institutions was valuable. But having a group with a purpose meant the discussions didn't just gravitate to the endless sameness of lockdown. Instead the focus was on something to look forward to, an affective position that was unusual within the holding pattern of "*Stay Home, Save the NHS, Save Lives.*"

At the event, the diversity of HCI doctoral students, was apparent across age, race, gender and experience. Doctoral students are learning their craft from subject experts, their supervisor. This is so, but the related assumption that doctoral students are young in year needs abandoning. Many students now bring a rich background to their work with the diversity of the attendees reinforcing the need to offer doctoral training that reflects the make-up of the user population.

Lasting value from participating was achieved through the publication of this volume - the proceedings of the Doctoral Consortium. In addition, the session was recorded [https://hcibook.net/dc-bcshci2020/]. This seemed important at the time so that it was a tangible memory of that day. Now, this seems less important and we recognise that it is the lasting value achieved through publication that is required. Similarly, we complicated the submissions process requiring digital assets. However, it is unlikely that these will have large or indeed any audience. However, what we can remain certain of is that other researchers are most likely to look at the papers. These will be provided in the standard format in a standard digital library with no innovation at all.

In reflection, we planned and designed the Doctoral Consortium well providing a valuable experience to everyone that participated. However, one of the odd things we did, and one which perhaps more than any other highlighted the impact of living in a pandemic on our normal professional behaviour, was not to involve any users (doctoral students) in the development of it. This is almost surreal, because we are all user-centred people and talked endlessly about how the experience would be. Our committee includes Participatory Design researchers and yet we did not turn to the participants to co-create the experience.

7. CONCLUSIONS AND LESSONS LEARNT

From our reflective approach to remembering and the lived experience the key lessons learnt were:

- Doctoral Consortiums work well on-line attracting more students and academics than typically at a co-located event. However, in the evolving normal, we need to remember to retain what worked before as well as to innovate.

- Additional roles are needed to support and control online doctoral consortiums such as enabling participants to move around sessions, stay timely, manage the chat pane and resolve connectivity challenges.

- Social aspects of doctoral consortiums remain challenging and it is not clear how to effectively recreate the social space to chat and network provided at conferences. Even so, online we still achieved a sense of belonging, community and togetherness at 2020's HCI Doctoral Consortium

- Lasting value for the foreseeable future will still come from written paper-style publications. Providing doctoral students with support in following formatting and template guidelines as part of a Doctoral Consortium provides a useful learning experience.

- Student diversity offers great opportunities and new directions for research, however, there is currently a lack of technical HCI doctorates, with most doctoral students focusing on the Human rather than technology development.

- Changes are needed in approaches to methods and data collection in response to COVID-19. Students need to be encouraged to embrace such disruption resulting from COVID-19 and look to ways to extend existing methods and develop novel ways to engage with users remotely.

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