EduCHI 2020: 2nd Annual Symposium on HCI Education

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CHI 2020 Extended Abstracts, April 25–30, 2020, Honolulu, HI, USA.

ACM ISBN 978-1-4503-6819-3/20/04.
DOI: https://doi.org/10.1145/3334480.3375066

Abstract
The past few years has seen steady growth for the HCI Education Community of Practice (CoP), driven primarily by the "HCI Living Curriculum" workshop at CHI 2018 and the inaugural EduCHI symposium at CHI 2019. In discussions among HCI educators over the past two years, two themes have stood out: creating channels for discussions related to HCI education and providing a platform for sharing HCI curricula and teaching experiences. To that end, we are organizing EduCHI 2020: The 2nd Annual Symposium on HCI Education. Similar to last year's symposium, EduCHI 2020 will again feature paper presentations about HCI education trends, curricula, pedagogies, teaching practices, and diverse and inclusive HCI education. In addition, we will also be adding more opportunities for discussions among and between members of the HCI education community, particularly around solving current and future challenges facing HCI educators.

Author Keywords
HCI education; HCI curriculum; Community of Practice; EduCHI.

CSS Concepts
• **Social and professional topics** → Professional topics, Computing education, Model curricula

Background

Two thousand and twenty marked 28 years since the publication of the Association for Computing Machinery (ACM) Special Interest Group on Computer-Human Interaction (SIGCHI) Curricula for Human-Computer Interaction [1]. Developed by the SIGCHI Curriculum Development Group (CDG), the publication outlined examples of courses that covered both foundational HCI concepts as well as innovative methods, tools, and approaches from contemporary HCI research. This publication was the outcome of many years of dedicated efforts by dozens of HCI scholars and educators, with Ronald Baecker chief among them. In his 1989 ACM SIGCHI Bulletin outlining his vision of HCI education [2], Baecker offered "a proposal for a new curriculum in human-computer interaction and user-centered system and interface design." A few years later, in 1992, his vision, and the ones of his HCI colleagues, materialized in the first version of the SIGCHI Curriculum and for many years this document (known as the green book) shaped the design of many HCI programs. In fact, it is difficult to overstate just how vital this curriculum was to the establishment and growth of HCI education programs.

In the ensuing decades, the HCI discipline experienced many changes, from the proliferation of mobile phones and social media to the development of ubiquitous computing devices, the internet of things, virtual/augmented reality, voice user interfaces, brain-computer interfaces, and many other innovative technologies that profoundly change the way humans interact with technology. In light of these changes, an international community of HCI educators has started coming together around the common goal of updating the curriculum to reflect modern contexts and challenges.

Current efforts in this area were driven by the ACM SIGCHI Executive Committee, who sponsored a project to investigate the present and future of HCI education from 2011 to 2014 [3]. A recurring theme from this project was the desire for a collection of online resources for HCI scholars and educators - known as the HCI living curriculum [4] - to share and collaborate on developing course outlines, curricula, and teaching materials. Following on this effort, a workshop was held at the CHI 2014 conference in Toronto, Canada [5] which yielded different visions of what this new curriculum could be. A second workshop was held two years later, at the AfriCHI 2016 conference in Nairobi, Kenya, which brought an international perspective on HCI education and how a global community could participate in its development and growth [6]. The following year, semi-structured interviews with HCI educators were conducted at the CHI 2017 conference in Denver, Colorado [7, 8] to gather feedback on a preliminary framework for the HCI living curriculum. Two years ago, at the CHI 2018 conference in Montréal, Canada, a second workshop was held and emphasized the need to develop a Community of Practice (CoP) to support global HCI education and build excitement and interest in the living curriculum [9]. The results from the workshop, as well as findings from the research conducted at CHI 2017, were published in ACM *interactions* [10].

Of the many themes that emerged from the CHI 2018 workshop activities and discussions, two stood out as an immediate need: creating discussion channels for HCI educators and providing a platform for sharing HCI

curricula and teaching experiences. To that end, for the CHI 2019 conference in Glasgow, Scotland, we organized a symposium dedicated exclusively to HCI education [11]. The one-day symposium – titled EduCHI 2019: Global Perspectives on HCI Education – brought together HCI educators across disciplinary and geographical borders to discuss, dissect, and debate HCI teaching and learning. Featuring two keynote addresses, twelve paper presentations, and a panel discussion by expert HCI educators representing different global perspectives, the symposium was successful in shining a light on current and future HCI education trends, curricula, pedagogies, teaching practices, and diverse and inclusive HCI education.

Feedback from EduCHI 2019 attendees was largely positive, with respondents to a post-symposium survey providing an average rating of 4 (out of 5) in terms of overall quality. Respondents were especially satisfied with the paper presentations (average rating of 4.5/5). Overall, respondents cited meeting other HCI educators and learning about effective teaching practices as two main benefits, but there were also requests for more opportunities for discussions and more engagement between attendees. Therefore, we hope to build off the success of last year's symposium with EduCHI 2020: The 2nd Annual Symposium on HCI Education.

While this symposium is targeting HCI educators, its scope is much broader. Indeed, we will make an effort to recruit participants with research interests in the area of human-centered education.

The goals of the symposium are to:

- Support the continued growth and development of the HCI education CoP;
- Provide a platform for discussing current and emerging trends in HCI education;
- Share innovative pedagogies and teaching methods from HCI educators; and
- Promote a global, diverse, and inclusive vision for HCI education.

Organizers

The team below includes faculty and students who are active HCI educators and researchers and play key roles in promoting the development of the HCI living curriculum. The first two authors and the last author were the lead organizers of the CHI 2018 workshop on Developing a Community of Practice to Support Global HCI Education (W25) [9] and the CHI 2019 EduCHI Symposium on Global Perspectives on HCI Education [11]. Additionally, the organizers are also authors on previous HCI education research articles referenced in the Background section [3, 4, 10] and more broadly within the area of HCI education [12, 13, 14, 15, 16].

Olivier St-Cyr is an Assistant Professor, Teaching Stream in the Faculty of Information at the University of Toronto, in Toronto, Canada. He is the liaison for the User Experience Design (UXD) concentration. His research interests lie in the areas of HCI education and HCI curriculum development. Prior to joining the University of Toronto, he spent eight years working in industry on HCI related projects.

Craig M. MacDonald is an Associate Professor in the School of Information at Pratt Institute where he

developed and coordinates the Master of Science in Information Experience Design program and serves as the founding director of the Center for Digital Experiences. He holds a Ph.D. in Information Studies and Human-Computer Interaction from Drexel University and his research focuses on building organizational UX capacity in practical settings and strengthening HCI and UX education.

Colin M. Gray is an Assistant Professor at Purdue University, where he is program lead for an undergraduate major and graduate concentration in UX Design. His research focuses on the ways in which the pedagogy and practice of designers informs the development of design ability, particularly in relation to ethics, design knowledge, and professional identity formation. His work crosses multiple disciplines, including human-computer interaction, instructional design and technology, design theory and education, and engineering and technology education.

Leigh Ellen Potter is a senior lecturer and Director of the IDEA Lab at Griffith University, Australia. Through both her research and her industry work, Dr Potter has specialised in participatory design, user experience, usability analysis, and technology evaluation. Her current work explores the application of emerging technology in teaching situations, and the active involvement of students as design partners in the development process. She was awarded the Griffith Award for Excellence in Teaching (Innovation in Learning Design) and is a Fellow of the Griffith Learning and Teaching Academy.

Anna Vasilchenko is a postgraduate researcher based in Open Lab at Newcastle University, UK. Anna's research interests are centered around innovative methods of teaching and learning for STEM subjects in higher education, while specific focus of her PhD project is on HCI and Ubicomp education. Anna is studying how student-generated content and blended learning, which are built around ideas of 'learning through making' and 'peer learning', could help to address some of the challenges in teaching such a multifaceted field as HCI.

Jaisie Sin is a graduate student at the Technologies for Aging Gracefully Lab and the Faculty of Information at the University of Toronto, in Toronto, Canada. There, she is a teaching assistant and course instructor for various courses in human-computer interaction, software development, and software design. She also holds a Master of Information in User Experience Design from the University of Toronto. Her research focuses on older adults' use of technology, in particular of speech-based interfaces, and inclusive design from the perspective of preventing digital marginalization.

Elizabeth F. Churchill is a Director of User Experience at Google focused on designer and developer tools for the connected ecosystems of the Social Web and Internet of Things. Elizabeth has been a research leader at well-known corporate R&D organizations including Fuji Xerox's research lab in Silicon Valley (FXPAL), the Palo Alto Research Center (PARC), eBay Research Labs in San Jose, and Yahoo! in Santa Clara, California. A Distinguished Scientist and Speaker of the Association for Computing Machinery (ACM) and a member of the CHI Academy, Elizabeth most recently served as ACM Secretary/Treasurer and is the current ACM Vice President.

Website

The symposium website is available at https://educhi2020.hcilivingcurriculum.org/. The website contains background information about HCI education and our motivations for holding the symposium, details about the symposium organizers, and the call for participation. It will also contain the symposium agenda and downloadable copies of all accepted papers. After the symposium, we will update the website with a summary of symposium activities.

Pre-Symposium Plans

We will distribute a call for participation to all attendees from our CHI 2018 workshop [9] and CHI 2019 symposium [11]. Moreover, we will distribute the call on relevant academic mailing lists and through social media, specifically through the HCI Education Facebook group (223 members, as of 16 December), the @HCI_Education Twitter account (170 followers, as of 16 December), and the SIGCHI-Announcements mailing list. We will also actively solicit submissions from individuals who have expressed an interest in HCI education issues, either through their involvement in previous HCI education activities or through published research about education-related topics. Our goal is to solicit submissions from a broad and diverse range of HCI and human-centered educators, recruited from all regions of the world (e.g., Africa, Asia, Europe, North America, etc.), from different disciplinary perspectives (e.g., design, computer science, CSCW, information science, psychology, etc.), institutional perspectives (public/private, graduate/undergraduate), and with a variety of cultural viewpoints. We aim to receive 20 to 25 submissions, of which we plan to accept approximately 10-12 to be presented and/or discussed at the symposium. We will promote the completed program through the same venues as above, and through that we hope to recruit an additional 20 to 30 attendees.

Potential presenters will be asked to submit a full paper (4-8-page) or a short paper (2-4-page) in CHI Extended Abstracts format. All aspects and topics related to HCI education will be welcomed, including, but not limited to: research related to HCI education, effective HCI pedagogies and teaching practices (e.g., assignments/assessments, labs, studios, active learning activities, resources, readings, case study, lecture materials, etc.), presentations of HCI curricula and their deployment, thought-provoking or inspirational perspectives on HCI education, lessons learned by seasoned HCI educators, and descriptions of unsolved HCI education challenges. Papers and participants will be selected based on their experience, perspective, and potential contribution to achieving the symposium goals.

Following a successful acceptance, selected participants will be asked to prepare the final camera-ready version of their submission as well as a presentation to be delivered at the symposium. All accepted papers will be posted on the symposium website.

Symposium Structure

Our symposium will be a one-day event in which participants will be an integral part in presenting their vision and perspectives on HCI education. To maximize engagement and encourage both formal and informal knowledge sharing, the symposium will be split into two parts. The morning portion of the symposium will consist of two sessions of long and short presentations and will include both traditional research talks and

thought-provoking or inspirational talks. Long presentations will be 20 minutes and short presentations will be 10 minutes (including time for questions). To build this portion of the technical program, we will be soliciting two types of paper submissions:

- **Research Papers**: describe novel research on or about HCI education, following a traditional research paper format.
- **Provocations**: present a new, controversial, inspiring, or otherwise thought-provoking perspective on or about HCI education.

The afternoon portion will include two sessions for interactive discussions about HCI teaching practices and brainstorming around significant challenges or issues critical to HCI educators. To build this portion of the program, we will be soliciting two more types of submissions:

- **Teachable Moments**: describe and/or demonstrate an interesting or innovative teaching method, curricular approach, or other pedagogical tools for HCI educators.
- **Unsolved Challenges**: outline an unsolved problem, issue, or challenge faced by HCI educators and solicit a request for solutions that may address it.

At the beginning of the day, participants will be presented along with the background and goals of the symposium. The unsolved challenges will be introduced in the morning portion (mini-presentations of five minutes each) and attendees will have until lunch to sign-up to participate, brainstorm, and help solve at least two challenges during the afternoon sessions. The symposium will conclude with a 30-minute discussion from the organizers about the future of the HCI Education Community of Practice.

Below is the proposed symposium schedule:

09:00 – 09:15 Welcome, agenda, background and goals, and introductions
09:15 – 09:30 Unsolved challenges presentations I
09:30 – 10:45 Paper Session I
10:45 – 11:00 Unsolved challenges presentations II
11:00 – 11:30 Coffee break
11:30 – 12:30 Paper Session II
12:30 – 14:00 Lunch
14:00 – 15:00 Demo / Discussion Session I
15:00 – 15:30 Coffee break
15:30 – 16:30 Demo / Discussion Session II
16:30 – 17:00 Closing: the future of HCI education CoP
EVENING: informal dinner for networking

Post-Symposium Plans

All papers and presentations will be archived on the symposium website. Moreover, we will post a summary of the discussions that took place during the symposium, which will include pictures and notes taken throughout the event. We will also aim to summarize the main ideas discussed at the symposium in an article we plan to publish in the HCI Education Forum of the ACM *interactions* magazine. Finally, we will also keep the HCI education community aware of developments through our Facebook HCI Education group and our twitter account (@HCI_Education).

Call for Participation

The HCI Education Community of Practice has been working for the past two years to create channels for discussion about HCI education and provide a platform for sharing HCI curricula and teaching experiences. To that end, we are organizing the second annual symposium on HCI education. Held as part of the CHI 2020 conference in Hawaii, EduCHI 2020 seeks to bring together an international community of scholars, practitioners, and researchers to shape the future of HCI education. Further information on the symposium can be found at: https://educhi2020.hcilivingcurriculum.org. We are seeking several distinct types of submissions:

1. Papers: A 4-8-page (full) or a 2-4-page (short) paper, in CHI Extended Abstracts format, in one of the following categories:

Research: Describe novel research on or about HCI education, following a traditional research paper format.
Provocations: Present a new, controversial, inspiring, or otherwise thought-provoking perspective on or about HCI education.

2. Demos / Discussions: A 2-4-page paper, in CHI Extended Abstracts format, in one of the following categories:

Teachable Moments: Describe and/or demonstrate an interesting or innovative teaching method, curricular approach, or other pedagogical tool(s) for HCI educators.
Unsolved Challenges: Explain an unsolved HCI education problem or other concern for HCI educators. A selection of these challenges will be introduced in the morning session and attendees will sign-up to discuss and brainstorm solutions in the afternoon session.

To apply, submit your paper at https://educhi2020.hotcrp.com by 4 February 2020.

Applicants will be selected based on their experience, perspective, and potential contribution to achieving the symposium goals. All accepted papers and presentations will be posted on the symposium website. At least one author of each accepted paper must register for the symposium.

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