Adaptation And Input: Defining A Living Curriculum

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Abstract

This position paper discusses ways of defining a living curriculum, and experiences of teaching HCI at postgraduate level. The moral and political implications of a global community resource are also explored. Current ways of delivering an HCI curriculum in a university context are subject to changes through technology, access, and funding. The development of a living curriculum for HCI education should include ways of accounting for diversity, accountability and distribution. The characteristics of such a system include its ability to respond to transformation in content, method, and requirements.

Author Keywords

Education; curriculum; HCI; Design,

ACM Classification Keywords

K.3. Computers and Education

Introduction

Teaching HCI in a postgraduate design school in London means preparing students for the wider world of design. Imparting an understanding of how people are affected by computer systems, the implications of algorithmic culture for creative practice, and how methods can be adapted and hybridized is an essential element of curriculum objectives. There are some specific aspects to communicating HCI in the ambience of a design school that include; the need to adapt HCI concepts to creatively driven outputs, a focus on practical outcomes, and the transference of ideas from one domain to another.

Experience

The individual tutorial is the base unit of design teaching practice and remains the gold standard for postgraduate design education. Tutorials can be delivered via VoIP and email, although these are often experienced as a lower resolution encounter. Technological mediation of the tutorial can take the form of collaborative computer use with teacher and student referring to online examples throughout the session. Increasingly, students also make voice recordings of the teaching encounter. This may reflect the diverse language skills in the student body or a desire for digital-native capture and archiving. Students use smartphones and laptops during teaching encounters such as seminars or lectures and often tweet the event live. Group feedback sessions often include absent colleagues, both teachers and students via Skype. Scraping data from Flickr or Twitter to use in a creative design brief is a way of thinking about data materiality, processes, and their subsequent transformation into meaningful experiences. Concepts are certainly explored via YouTube and it is common to show web video in a teaching context, usually projected at large scale in a teaching room. Social media is also treated as a subject and design work might focus on how people behave online or on the design characteristics of avatars.

Definition

Curriculum adaptability means being able to adjust the importance of various curriculum strands for application across different domains. This implies levels of material expression. For example, theoretical work applicable in multiple knowledge fields is top-level curriculum content. As the subject becomes more specific (either over time or across domains) so curriculum content can also become more directly applicable. A system able to give the right content at the right level of fidelity would have the flexibility of a living system.

Responsiveness to change is an important quality for curriculum delivery [1]. As student and teacher demands change so the curriculum should have ways of eliciting new relevant material. We have seen rapid changes in where HCI researchers choose to focus attention [2]. The living curriculum should be able to account for these by gathering new forms of curriculum content and means of delivery. This could include videos streamed online, or webinars. Ways of inputting to the living curriculum should be democratic with access granted to teachers, students, commercial partners, research councils, and children. Methods of inputting should be similarly scaled to include; document upload, audio-visual content, performance, code etc. The diversity of interest across HCI is seen as a strength and an opportunity, but also a challenge in

the need for complex management structures. The living curriculum must also be distributable in forms that are easy to understand. This includes the considerable challenge of interoperable data standards, ownership, and a delivery mechanism. A living HCI curriculum should also be free to access and available to all, much like a national library.

Contribution

I would contribute to an HCI living curriculum in three main ways. As a teacher of HCI in postgraduate design I am engaged in an ongoing process of developing curriculum materials. These include theoretical frameworks for practical design work intended to inform student output, the preparation of seminar and lecture materials including written and audio visual material, and the development of creative briefs for student groups to respond to. Methods of assessment for these course materials are done in two ways; collegiate feedback, both inside the home institution and at others, and formal and informal student

response mechanisms are regularly expressed and captured. The methodological investigation into how curriculum materials are delivered and generated is another axis of involvement. My contribution to the living curriculum would also include content moderation. Assessing curriculum materials including; presentations, texts, course outlines, and learning objectives is an ongoing collaborative process which I have been part of for the past five years. I have been involved in the design and delivery of complex content delivery systems across healthcare, energy, and informatics and can contribute research skills, practical design knowledge and practical design process knowledge.

Conclusion

Reflecting on how technology is used in the curriculum; it is at once a material, a medium, and a subject. The living HCI curriculum should be able to reflect these levels of activity whilst also being a model of open and transparent knowledge exchange.

References

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