

NSF National Workshop on Future Technology to Preserve College Student Health and

Foster Wellbeing: Vision Statement – Justin Longo

One of the central questions that I think this workshop should address is the agency and maturity of the target – the college student. While I am of course stereotyping by assuming that every college student arrives at their undergraduate experience as a late teen straight from high school and their parent's home, that stereotype is at least useful as a guide. With that frame in mind, this enormously important transition period in a young person's life is one great jumble of ambiguities: are they a fully-fledged adult with capacity to make (and responsibility for making) their own choices? Or are they a child with newfound autonomy that will face opportunities and choices for which they are not prepared. Do universities have an institutional and social responsibility to nurture young people from adolescence through to adulthood¹, or does the responsibility rest with parents, secondary school educators and the students themselves to arrive at university ready to learn.²

This question seems unresolved in the minds of many university instructors I speak to, and for many students (and – speaking as one - their parents). Take, for example, the simmering debate about the role of laptop computers and other device in the lecture hall or seminar room. Many thoughtful positions that have been articulated in favour of creating device free zones start with the apology that such a prohibition smacks of paternalism and does not acknowledge that college students are adults.³ Nonetheless, appeals to collective respect and professional behaviour appear to have lost out over strict prohibition. From the "consumer" perspective, consider the anecdote of parents requesting meetings with their child's university instructor to act as the agent for their child⁴, which certainly upend any notions of student agency and their responsibilities as an adult learner.

While this emerges as a debate between two polar opposites, a useful middle ground is to consider how student achievement requires effort on the part of both the student (with an appropriate support network) and the institution. Within such a framework, a goal for student development from adolescent to adult should be for the student to develop agency, autonomy and maturity to accompany their developing intellectual skills. Rather than attempt to impose structure with the hopes that it coalesces into an

¹ Tinto, Vince. (Ed.) *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.

² Coates, Ken. "Career ready: Towards a national strategy for the mobilization of Canadian potential." Canadian Council of Chief Executives. <http://www.ceocouncil.ca/wp-content/uploads/2015/03/Career-Ready-Ken-Coates-final-March-251.pdf>

³ e.g., <https://medium.com/@cshirky/why-i-just-asked-my-students-to-put-their-laptops-away-7f5f7c50f368> and <http://www.washingtonpost.com/posteverything/wp/2014/12/30/this-year-im-resolving-to-ban-laptops-from-my-classroom/>

⁴ Pizzolato, Jane Elizabeth and Sherrell Hicklen. "Parent involvement: Investigating the parent-child relationship in millennial college students." *Journal of College Student Development* 52, no. 6 (2011): 671-686.

architecture that will guide the student's future development, the development of agency can provide the tools for navigating the world without structure.

What does this have to do with HCI?

This vision for a university environment that seeks to build, in cooperation with a student and their support network, the agency, autonomy and maturity of the student, relates to the design of Human Computer Interaction (HCI) that reflects the dual nature of the student experience – as simultaneously and alternatively child and adult. Such interactions should balance the appeal to the user that reflects their interests and motivations, but does not focus solely on immediate-term change (perhaps through some incentive or behavioural response) but rather targets the longer-term development of agency leading towards lasting change and the ability to respond with agility to new situations in future.

With an understanding that adult learning differs from childhood learning, adults are seen as increasingly independent and responsible for their own actions, motivated to learn by a desire to solve immediate problems in their lives, prefer self-direction, and use experience to build upon learning. The transference of this perspective to HCI would imply an interface theme that relies more heavily on text as a supplement to the visual and auditory information than on the primarily graphical interface that dominates much of current interface design thinking. There are others ways in which an adult-learner approach might influence the design of the user experience, but the central feature should be a transparent interaction where all aspects of the interface are open to question, and concerns are understandable to non-specialist participants. If the black box underlying a visual interface is not transparent, it will either alienate the user, fail to develop a capacity for critical thinking, or both.

Brief Bio

Justin Longo is Assistant Professor and Cisco Research Chair in Big Data and Open Government in the Johnson-Shoyama Graduate School of Public Policy at the University of Regina. He completed a 2-year post-doctoral fellowship in open governance in the Center for Policy Informatics at Arizona State University (2013-2015) following the completion of a PhD in public administration at the University of Victoria (2013) where he researched the use of enterprise social collaboration platforms inside government policy analysis settings. His research focuses on opening governance, as processes of social decision making, to more diverse sources of knowledge, more avenues of interaction and enhanced social understanding; and opening government, as formal public institutions, as knowledge organizations, promoting the conditions where knowledge is shared and used, collaboration encouraged and capacity throughout the policy cycle enhanced. During and prior to his doctoral work, Justin was the founder and principal of Whitehall Policy Inc. where he led in the conceptual and UX/UI design of Digital Fishers, a science-oriented crowdsourcing project that sees virtual citizen scientists tag raw video collected from the NEPTUNE Canada cabled seafloor observatory. Justin also led the conceptual design and modelling for Climate Changers, an award-winning iOS app that links behavioural choices with understanding about climate change for middle school students. His academic blog and contact info is at <http://jlphd.wordpress.com> and he spends too much time on Twitter @whitehallpolicy.