Mixed Messages:

There are no rules. There is no sense of time. You can be anything and everything you ever wanted to be. While the Internet has opened up a whole new world of powerful possibilities for a generation of tech-savvy kids, public debate currently oscillates between seeing the Internet as an unregulated arena that leaves children vulnerable to exploitation or an essential portal that gives them access to the necessary tools to learn and survive in contemporary times. Through a longitudinal study at UBC Vancouver's Developmental Change and Technology Lab (DCTech), Dr. Jennifer Shapka is hoping to unravel some of the perceptions and misperceptions of this 21st century phenomenon, and its influence on adolescents' social, physical and cognitive development.

AS THE DANGERS OF TEENS AND THE INTERNET MAKE MEDIA HEADLINES, JENNIFER SHAPKA SIFTS THROUGH THE FACT AND FICTION OF ADOLESCENT INTERNET USE

frontier: *Why did you establish the Development Change and Technology Lab (DCTech)?*

Jennifer Shapka: I created the DCTech Lab to look at the contextual factors that are influencing adolescent development, in particular, the influence of growing up in an information age. Of any demographic, adolescents are spending the most time on the Internet, and it is influencing how they socialize and how they learn. But we have no idea, from a developmental perspective, whether this is a good thing or a bad thing.

f: *Why do we know so little about what adolescents are doing online?*

JS: To date, most of the reports we have about what kids are doing online are self-reports in the form of questionnaires or time-diaries that ask questions like: "On a weekly basis, how many minutes are you on the Internet?" Not only do these types of questionnaires get dated very quickly but we also know that people's ability to remember how much time they spent doing something is biased, particularly for kids who are not as cognitively developed. In addition, kids are likely to report less if they are embarrassed or worried that they are spending too much time on the Internet. What my research is trying to do is monitor in real time what

adolescents are doing on the Internet by actually recording all of the different activities they engage in online.

f: *How do you plan to do this?*

JS: I have infrastructure funding from the Canada Foundation for Innovation (CFI) for a four-year study to set up an Internet service provider like Telus or Shaw, but on a much smaller scale. When families sign up to be involved in the study, we provide them with high-speed Internet service. We then identify when the adolescent is online and stream all uploaded and downloaded traffic into a separate database. There is no private or personal information being collected,

"The Internet can be a powerful tool in many positive ways but we have to make sure it's used in appropriate ways."

only the websites they are visiting and when and if they're instant messaging, including the number of messages they send and receive, the size of those messages and how many people they are chatting with. I actually show the adolescents a sample of the data, which hopefully ensures that they use the Internet as they normally would.

f: *How influential is the Internet on adolescents?*
JS: Again, we don't have any real answers to this question, but it certainly has the potential to influence all aspects of a child's development. Socially, we know that email, chatrooms, and Instant Messaging have changed the way friends are made and kept up with. I have questions about the differences in these friendships, including the quality, the longevity, the diversity, etc. I also have concerns for those who aren't involved in online socializing and what it means for their friendship networks if they are missing out on this aspect of the social world. As well, physically, we now know that television watching is directly related to obesity in children because it encourages a sedentary lifestyle. We also know that computer time isn't replacing television time; it's actually in addition to it so the potential is that it may lead to increased risks of obesity for children.

f: *What trends are you noticing so far?*
JS: Because the project is in its early stages, I have only pilot data on Internet use.

Based on usage patterns though, it appears that most adolescents are using the Internet in appropriate, non-excessive ways. However, there are certain youth in our sample who are spending upwards of seven hours per day online. We want to identify what might be going on for these adolescents. We also notice that younger teens between the ages of 11 to 13 spend less time on the Internet, but that by 14 years old, online activities jump dramatically to an average of 2.5 hours per day, including sending or receiving more than 40 instant messages per day. One of the interesting things we have noticed is that 25 per cent of our sample does not use Instant Messaging. This raises questions about a lack of friendships for these adolescents. We also notice that these adolescents tend to spend more time on social networking sites, like friendster or myspace, or in chatrooms, where they are likely to be socializing with people they don't know in real life. Theoretically, this may mean that these are the adolescents who are vulnerable to online predators.

f: *How do you think growing up with the Internet will impact today's teens in the long run?*
JS: I think ultimately they'll have a much more global sense of the world. Their sense of community will be different because it might not be geographically based. I think the question of what knowledge is will also

be different because they are moving away from the memorization of facts and focusing on knowing how to access knowledge instead.

f: *What do you hope to achieve?*
JS: I see this particular project as laying the foundation for understanding how adolescents are using the Internet, how it changes over time and how it links to other developmental outcomes. Then we can start to think about intervention, prevention, and education for problems that we identify.

f: *What do you find most rewarding about your work?*
JS: The potential to affect change. I love that I am working on a contemporary problem and that the results of my work may directly influence the day-to-day lives of kids.