

interview

Sandy Eix

Working in a physics playground

BY RICKY CHU

Sandy Eix is the "Science Learning Lead" with Science World. Science World is a self-supporting non-profit organization devoted to providing hands-on science learning experiences, with exhibits at the Telus World of Science building in Vancouver and outreach activities throughout British Columbia.

Ricky: What kind of education do you have?

Eix: A BSc in Physics, joint honours in Math, from the University of Waterloo, a BEd from Queen's University, and an MSc and a PhD from Simon Fraser University (SFU) with research on modelling solitons in optical fibres.

Ricky: Fun fact: Brian May of the rock band Queen kept an avid interest in astronomy even after he stopped (and later finished!) his PhD work. Do you still keep an eye on new developments in your graduate research at SFU?

Eix: I don't, really (my PhD work hasn't led anywhere exciting), but I do read *New Scientist* to try to keep up with the world of science research at large.

Ricky: What did you think you were going to do with your education while you were still in school?

Eix: I oscillated between wanting an academic research career and wanting to teach. I always dreamed of working at a science centre, but never figured I'd have the chance.

Ricky: Is there anything you wish you had done more of during your time in school?

Eix: It might have been nice to get more sleep. I packed my days with a combination of coursework, debating club, college life activities, and lots of friends.

Ricky: As a woman in physics, are there any special job or education issues you have to consider?

Eix: I have met the occasional dinosaur who feels that women don't belong in the field, and I was the only girl in my second year lab. Mostly, though, I've found that being a woman in a field with lots of guys means that I am really motivated to be good friends with the other gals! And it never hurts to have a good mentor or role model.

Ricky: What are some of your physics classmates doing now?

Eix: From my undergrad days, two of my classmates are professors! One of my master's classmates created herself a career in technical communication. Another one is a manager in a high tech software company. One started his own



Dr. Sandy Eix

business creating exhibits and three-dimensional visualizations. I know a few folks who went into commercial labs, and some who are teaching at colleges.

Ricky: What is your current job? How did you find out about it?

Eix: I am currently "Science Learning Lead" for Science World. Until very recently I was a program and exhibit developer. A friend found the job posting on a bulletin board (the physical kind, not the electronic kind) at SFU and told me about it.

Ricky: How did you market yourself to your employer?

Eix: Omigosh, I never would have called it "marketing myself!" My strengths coming into this job were a willingness to take on any subject matter, and an ability to talk about science stuff with almost anyone. You can't get through a PhD in physics if you're easily intimidated by tough ideas!

Ricky: What is a typical work day like for you? What do you do? What traits about you make you successful in your work?

Eix: There is no typical day! On any given day, I might be running a science workshop for preschoolers, meeting with the media to promote a new exhibit, troubleshooting with the workshop about something in a gallery that isn't working, training staff to do Centre Stage shows, sourcing equipment for activities for schoolkids, running a karaoke contest, building little robots, or doing a year's worth of financial planning.

Ricky: How difficult was your transi-

tion from your degree program to the "real world?"

Eix: It was absolutely ferocious. I started my job before I finished my PhD, so for a year I was doing a 9 to 5 job plus working 4 to 5 hours per day writing my thesis. I don't recommend that. But learning to function in the real world wasn't too tough.

Ricky: What are the major differences between working in a non-profit or business environment compared to academia?

Eix: My academic experience was as a grad student, where I had not much money, but where my time management was pretty straightforward - work on a single giant project until my committee decided it was done. Now I make more money (but not as much as my friends in the for-profit world). 99% of the time, I work an 8:30 to 5:00 schedule and don't feel guilty about not working outside working hours. But I am perpetually juggling an overflowing list of priorities that depends on the organization's goals, my own goals, customers, stakeholders...

Ricky: How has physics helped or hindered you in your career?

Eix: The most obvious example is the Eureka gallery at Science World. I created the content for that space - 10000 square metre of physics playground.

Ricky: Have your extracurricular activities helped you in your work?

Eix: Yes. I think I can safely say that I have used every odd skill I have ever picked up in doing my job, from playing piano and violin to debating, teaching, sewing, origami, dancing...

Ricky: What do you think is the most underrated skill or experience people get from doing a physics degree?

Eix: Most people seem to think that they'll use the content of their degree for their career. Unless you're continuing in research, or teaching, that's not true. The skills and experience that come in most handy are subtler things, like being able to communicate clearly (essential for preparing and defending a thesis), being able to solve problems systematically, being able to differentiate between useful and useless information and between interesting and dull questions, being able to avoid bias, and, most importantly, not being afraid to take on a challenge.

Ricky Chu is a former Production Editor for CUPJ and is now currently a graduate student at SFU.