

# From staff member, to student, to part-time researcher?

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## Abstract

Often, our initial impression of a researcher is someone who dedicates their entire career to the pursuit of knowledge. For many, becoming a researcher follows a linear path. The path starts with an Undergraduate degree, then a Masters and finally a PhD, which leads to a career as a researcher at a post secondary institution. This paper explores what it means to be a researcher and how others can follow a non-linear path and become a non-traditional researcher.

## Introduction

I consider myself an avid life longer learner. Ironically, while I completed my undergraduate studies, I could not wait to get out. However, once out, I found myself missing the learning process. From then on I started doing courses. Not because I had too, but because I wanted to. Looking back this would become a fundamental switch that led to a 15-year journey and writing this paper. Linear was something that this 15-year journey was not. The path I took spanned two careers, dozens of university courses and four provinces. Many choices were made on the way; there were no wrong ones. I found each choice a learning experience that helped shape the person I am today. This paper will explore the milestones in my educational and professional career that led to me becoming a non-traditional, part time researcher.

## Undergraduate: Consuming information

I look back fondly at my time as an undergraduate student, probably for all of the wrong reasons. My first two years at university were a bit of a blur, between working, studying and other extracurricular activities, I was lucky to get by. In the third year I began to straighten myself out and worked towards a bachelor of science. The majority of my undergraduate studies were about learning new information as a means to an ends. My main goal was to finish so I could get a good paying job. I can only recall one instance where I considered myself doing actual research. At the end of my undergraduate program, I was required to complete a research project. I was neither prepared for nor enthusiastic about this undertaking, and the result was mixed at best. If someone had told me that I would eventually choose to conduct research of my own free will I would have laughed out loud. Many of my classmates were in the same situation, we heard about research but that was something you did as a professor or a graduate student. When the time came for us to actually perform some research we were at a loss. There was no session on how to look up academic material or even how to reference the material we were citing. With little support, it was no wonder that there was no research spark ignited in me. I vividly recall the joy I felt once I had finished my capstone project. Not because I had enjoyed the process, but because I would never have to do something like that again.

## Private sector: Dealing with data

After graduating from university, I bounced around a little and finally settled in the high tech sector. As a software developer, I faced many challenges and was confronted with massive amounts of data. For example, we tackled everything from the features clicked on by users to the number of errors an application was making. This was the beginning of the data collection

era, where mined data yielded valuable insight into a product. Software packages, such as Crystal Reports, allowed the user to sift through data, provided it was formatted correctly. The phrase "management by metric" was uttered by management on a daily basis. This was a very new concept for me and really struck a cord. For the first time I saw how data was being used to answer questions and make decision in a concrete way. Data was at the centre of how the organization made improvements. Moreover, once a change was implemented, the data provided us with a way to measure success. This was not only limited to automatic collection of quantitative data, the use of qualitative data was also used to improve the overall productivity of the organization (Markovits, 2010). Qualitative data from the support desks was also analyzed to identify where customers were having trouble. It was not uncommon to see an entire application interface reworked based on usability concerns pointed out by customers.

### **University as a career: Asking questions**

In 2004, I moved from the private sector to Memorial University, where I have worked for the past nine years. There were many reasons why I chose to work in a post secondary institutional environment. Work life balance, flexibility and the chance to work with students were top on the list. With the birth of our first child, it made sense to work in a environment that was more stable and did not require the same time commitment. Taking the position at Memorial was also a homecoming for me, before that I has spent almost a decade living and working in New Brunswick, Ontario and beautiful British Columbia. The time I spent away from Newfoundland gave me the opportunity to work with many great individuals and experience the diverse culture that Canada has to offer. Looking back, I feel these experiences allowed me to look at my environment from a wider point of view.

At this point in my career, I did not remotely consider myself a researcher, even though I shared my ideas with others in meeting and informal discussions. While attending conferences in the private sector, the research discussed felt like it was force fed onto the attendees. The conferences I attended at university, however, had the expectation that attendees present their work. Not long after my first conference, I found myself thinking about what I could contribute. Slowly but surely, this led me to look at ideas from a more critical view as opposed to an operational viewpoint. I started asking myself why students behave in a certain way, and before long I was conducting small surveys. The information gleaned from these surveys helped influence and often justify operational choices. The next logical step was to present at one of these conferences. The first conference at which I presented was the Canadian Learning Commons Conference at the University of New Brunswick. This allowed me to share some of my ideas to a larger audience. Initially my sessions were focused on sharing my operational knowledge. Over time my presentations began to explore other ideas such as the effectiveness of student training as it relates to customer service.

In 2011, I attended an EDUCAUSE conference in Philadelphia. One of the keynote speakers was Michael McRobbie the President of Indiana University. He delivered a speech titled "IT from Both Sides of the Executive Table" (McRobbie, 2011). He pointed out universities are one of the oldest forms of human organization; historically these institutions have conducted research, taught others to do research and collected and stored information. He went on to discuss how today's junk data could be tomorrow's treasures and may lead to breakthroughs. He discussed a wide range of topics such as the mission of universities, supporting the Open Source Software movement, and the role of Central IT within a university. The latter really had an impact on me and it caused me to reflect on my own role within the university. Up to this point I had been collecting and researching a substantial amount of data specifically related to student

computing. The main goal of the research was to gain a better understanding of student behaviour. For example, the trend toward mobile communication has enabled different types of communication among students, such as social media. This has created a fundamental shift on how students use computing resources and how they learn at postsecondary institutions. Up until now I have been reviewing the literature related to this topic, and doing my own research by conducting interviews and surveys with students. Often I would present my findings to my peers in other parts of the organization and to higher level management within my department. It is at this point then I decided to pursue a Masters in Education. As in most of my courses I intended to kill two birds with one stone. In other words I would try to incorporate my own work in class projects, and apply what I have learned in my program to work.

I consider myself lucky to have a position that directly involves student interaction. More importantly, I find myself in a position to influence the way they interact with technology. One stark difference I found during my time in the private sector was the lack of ability to step back and look at the bigger picture. For example, problems were often addressed on the assembly line when they really needed to be addressed in the design stage, long before they became an actual product. More and more I started to question how we interact with students. I felt that undertaking a graduate program would provide me the necessary motivation to seek some of the answers to these bigger picture issues.

### **Digression # 1: To think or not to think?**

In order to be considered a researcher you must first look at the world critically. What makes someone a critical thinker? If you are lucky, at some point in your academic career you begin to shift from a consumer of information to a creator of information. This critical shift is set off when you start to transition from learning to thinking. This may happen in high school, during an undergraduate degree, or it may never happen (Lipman, 1988). Looking back I cannot recall when I became a critical thinker. Like most things in my life, it probably happened very slowly. For me it was a combination of my work environment and my drive to consume information. I have been fortunate to be in a position to make changes in my job. In order to make a change, you must first understand the root cause of the problem. My approach has often been to first measure the problem then let the data tell the story. When I left the private sector I brought this approach to the post secondary environment. Over time, I began collecting data to help solve a variety of issues. In the private sector, the goal was solving the problem. This too was the main objective on campus, however the environment also allowed me to dig deeper and explore more meaningful questions. For example, I began collecting data on the type of devices that students wanted to use on Memorial's wireless network. The goal was to discover which devices were the most popular. Over time we could see a trend towards mobile devices, such as smart phones, over more traditional technology, like laptops. During this time I was also doing a course that allowed me take this data and ask more strategic questions, such as exploring the impact of mobile technology not only from a technology perspective but also from a learning perspective.

### **Graduate studies: Seeking answers to questions**

As I stated before, I find it ironic that I spent the first five years of university trying to get out. Now, I find university woven into the fabric of my own identity. From my own experiences with research, the more you do it the more you want to explore. For example, once I discovered that students often own more than one mobile device, the next logical question is why? So, questions often lead to additional questions, becoming a circular entanglement that is not easily broken. Just the very nature of working at a post secondary institution gives you access to resources that cannot be found anywhere else. Being on campus allows you to gain access to the library's

holdings by simply searching on your computer. In addition, you can go to the university library and gain access to librarians and other knowledgeable library staff. Graduate studies offered a chance to learn more about how to conduct research and articulate it to readers. Unlike my undergraduate experience, a lot of emphasis is placed on how to conduct rigorous research, and how to write papers. Many Graduate programs required their students do a research course early on in their programs which is important as I felt I did not learn this correctly in the undergraduate level.

I was now mentally ready to undertake this type of program and to build the skills necessary to be an effective researcher. I also felt that I had data and experience to contribute to field of education technology. This program forced me to gain a depth of knowledge in areas that interested me professionally and academically. Writing papers in Assistive Technology, IT Training, Mobile Computing, and Student Computing helped me gain insight in these areas would not have happened otherwise.

### **Digression # 2: The problem with a subjective opinion**

An opinion is a point of view or a belief that has been created by someone (Merriam Webster, 2013). A fact is something that has been proven and can be observed (Dictionary.com, 2013). It has been my experience that far too many decisions have been made based on opinions supported by anecdotal evidence. These types of decisions are reactive and deal with addressing symptoms of a larger issue. These band-aid solutions may seem to produce results, but often result in the band-aid losing its ability to stick, causing the problem to reemerge. Then, if the band-aid needs to be removed, it can be very painful. At work, I had the opportunity to see the results of good and poor decision making. I have witnessed groups spending considerable amounts of resources working towards these band-aid decisions. Conversely, I have seen people highlight the problem, then seek more empirical means of measuring the issue. They may be looking at data that has already been collected, or it may result in data needing to be collected. Once the information is acquired, a careful examination is conducted on the data. Sometimes a clear solution emerges from this process, in this case a solution can be implemented with confidence. However, more often than not, there is no clear choice and a "lesser evil" approach has to be made. I am not saying that this type of approach will always lead to the best solution. I am saying that intuition is more likely to result in a trail of inconsistencies that could lead to more problems down the road.

### **Life after graduate studies: What now?**

For the last two years I have been working towards a Masters in Education and will be graduating in April. So what is next on this journey? Up until now, each term presented me with a new challenge and at least one research paper would force me to find ways to incorporate my own information research to my work. Once this chapter of my life ends, will I continue to have opportunities to do research? Up until now, I have not published in any type of peer-reviewed journal. From my perspective I have two conventional choices to continue with research. The first is to aim my sights on writing articles in professional journals. This would seem like the logical choice, there are several publications, for example, *EDUCAUSE Quarterly*, that could potentially publish my work. The other option would be a professional degree such as an EdD. These programs are for practising professionals that can continue their day jobs while working. This will require a lot of additional effort and a long term commitment. If I step back a little I can see a third unconventional option, the internet, specifically blogging. Blogging, while not peer reviewed, would allow me to continue to share ideas. The very nature of blogging

allows for back and forth dialog via comments. This allows users to challenge and/or expand on ideas posted in your article.

For more than two and half years I have been writing papers, many of which have helped me gain more insight into my profession. There comes a time, however, when you want to reach a wider audience. At this point, I consider myself someone who looks at the world through a critically tinted lens, but am I really a researcher, and can a blog be considered a medium to share research? Albert Szent-Gyorgy (as cited in Ferrarese, 2005) was famously quoted as saying "Research is to see what everybody else has seen, and to think what nobody else has thought" (p. 527). Based on this definition maybe I am a researcher, but not in the traditional sense.

At this point in my Masters, I am writing at least two papers per semester. These papers take a considerable amount of time and emotional effort. For the most part, my audience has consisted of my professor, and a few people who worked with me at university. I felt that my papers were not publishable, but I still wanted to reach a larger audience. One day chatting with a colleague over a cup of tea, we came up with the idea of creating an educational blog. The focus of the blog was to be something we were both interested in: educational technology. This could be a perfect solution to my quandary, it would allow me to publish material to a larger audience, plus I could avoid my own perceived publishing phobia. Before long we decide on a name, Binary Chalk and then started to brainstorm potential themes for posts (Pendergast & Goulding, 2013). Blogs serve many purposes. Depending on the writing styles, posts could be used for magazine articles, published as scholarly journal articles and even presented as academic posters (Nardi, 2004). In order to have a successful blog, it should be updated on a regular basis. I think it is fair to say that neither of us are prolific writers. We both had jobs and lot of other commitments. To solve this problem, we decided to add a core group of bloggers from the post secondary landscape. We recruited professors, staff and even students to participate. At present, we have bloggers representing universities and colleges from the Atlantic region. Our goal was to publish every Monday. The topics vary widely, but have one thing in common: educational technology. Over time we have been building our readership and now have a weekly audience of 300. These 300 readers chose to visit the blog of their own free will. I often criticize myself on the low number of readers, but if I revisit why I co-founded this blog in the first place, I consider it a success. I have gone from having a readership of only a handful to people to a much wider audience. While a blog is far less formal, and not nearly as rigid as a peer-reviewed journal, it does allow a person to present an argument. The amount of rigour depends on each individual. One thing I do like about blogging is the flexibility it provides. For example, I have posted blogs in videos, demos, and written format. While I discovered blogging near the end of my Masters, I think it could be a great tool for graduate students. It would take very little work to convert an academic paper into a blog. For traditional researchers, publishing to a peer reviewed academic journal pushes them to write high quality work. Writing for a larger audience may have a similar effect on the quality of material that is being produced in a blog. After all, once something is published in a blog, it is there for everyone to see.

## **Conclusion**

I purposely posed the title of this paper as a question rather than as statement as my goal was not to answer the question but to explore the events that have brought me to this point in my career. Reading over this paper it is clear to me that the professional and academic choices I have made have led me to this point. My commitment to lifelong learning and my decision to work at a post secondary institution have influenced me in profound ways. Do I consider myself a part-time

researcher? In the traditional sense, probably not. In a non-traditional sense, using a non-traditional medium, maybe.

## References

- Dictionary.com. (2013). Define: Fact. Retrieved 03/15, 2013, from <http://dictionary.reference.com/browse/fact>
- Ferrarese, L., & Ford, H. (2005). Supermassive black holes in galactic nuclei: Past, present and future research. *Space Science Reviews, 116*(3), 523-624. doi: 10.1007/s11214-005-3947-6
- Lipman, M. (1988). Critical thinking--what can it be? *Educational Leadership, 46*(1), 38. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url,uid&db=aph&AN=8524864&site=ehost-live&scope=site>
- Markovits, Y. (2010). The link between job satisfaction and organizational commitment: Differences between public and private sector employees. *International Public Management Journal, 13*(2), 177.
- McRobbi, M. (2011). EDUCAUSE IT from both sides of the executive table. *The Best Thinking in Higher Ed IT*, Philadelphia.
- Merriam Webster. (2013). Define: *Opinion*. Retrieved 03/15, 2013, from <http://www.merriam-webster.com/dictionary/opinion>
- Nardi, B. B. A. (2004). Why we blog. *Communications of the ACM, 47*(12), 41.
- Pendergast, S., & Goulding, A. (2013). *Binary chalk*. Retrieved 04/01, 2013, from <http://binarychalk.com/>