Abstract

This paper is a call to action for academic and information technology industry leaders to develop a generalizable online instructional model tailored to the learning needs of those suffering from dyslexia. It is estimated that 35% of entrepreneurs are dyslexic (Logan, 2009). According to the Sloan Consortium, online instruction is the fastest growing segment of the higher education industry (Allen & Seaman, 2010). Online entrepreneurship students may provide researchers with an opportunity to identify dyslexics clustered in higher proportions than other academic disciplines. There is no evidence to show entrepreneurship students are more likely to be dyslexic than other students, but the higher density of dyslexics in entrepreneurial careers suggests that dyslexic students may gravitate toward entrepreneurship programs. A model to tailor instruction to the needs of dyslexic entrepreneurship students in an online higher education setting may have a profoundly positive impact, when generalized across academic programs, on the instruction of current and future dyslexic online students.
Introduction

Colleges are entrusted to foster human development (Terenzio, 2002). However, this mission is not being completely fulfilled as course designers of online program have been slow to create innovative solutions tailored to the needs of dyslexic students. Online education is the fastest growing segment of academia (Allen & Seamen, 2010) and is expected to grow and gain wider acceptance throughout society. A recent meta-analysis conducted by the Department of Education (2009) has shown online instruction to be superior to traditional classroom settings insofar as helping students reach learning outcomes. However, there is a gap in the literature and in practice as to how to best instruct learning disabled, including dyslexic, online students.

The Sloan Consortium publishes a much anticipated data on online education annually, yet it makes no mention of initiatives in place to assist dyslexic students studying online. We know dyslexics learn differently and should be instructed differently to accommodate for their disabilities (Cass Business School, 2004). However, dyslexics are taught in the same manner as non-dyslexics in online classrooms.

Dyslexic entrepreneurship students in online degree programs offer researchers an opportunity to identify strategies to enhance learning outcomes of dyslexic students in virtual classroom environments. According to Logan (2009) 35% of entrepreneurs are dyslexic compared to 1% of corporate managers, and 10% of the general population (Bowers, 2007). Of course, preliminary data should be collected from entrepreneurship and other online classes to determine if similar ratios apply to higher education. The principal investigator hypothesizes that there is a significant difference in dyslexia rates among entrepreneurship students and students in non-business courses, but this hypothesis needs to be tested.

Problems and Opportunities

Entrepreneurs are more likely to possess a learning disability (Stanley, 2000) and develop coping skills (Logan, 2009) that enhance professional success. Examples of highly successful dyslexic entrepreneurs, including Charles Schwab and Richard Branson (Morris, 2002), appear in many practitioner-oriented publications such as Entrepreneur, Business Week, and Forbes.
However, a literature review of 19 leading scholarly entrepreneurship journals by the principal investigator identified no scholarly inquiry into the issue of tailoring instructional methodologies or best practices towards educating learning disabled entrepreneurship students online. While there is a large body of evidence on the topic of dyslexia in education journals targeting primary and secondary teachers, there remains a need to investigate best practice toward instructing dyslexic college students online.

Kenney College, which focuses in the area of entrepreneurship instruction in an online setting, is developing a model that innovatively uses instructional methods and information technology to manufacture content tailored to the needs of dyslexic students. However, there is ample opportunity for other academic leaders, researchers, and information technology providers to combine their talents and resources to help dyslexic students in virtual classrooms.

Researching entrepreneurs requires insight into their behaviors and motives. Entrepreneurs tend to be motivated by achievement (McClelland, 1961); value flexibility and are self-motivated. These same traits are hallmarks of the successful online student. Entrepreneurs are also more comfortable with untraditional learning environments (Lechuga, 2006) and non-traditional learning environments have been identified as useful in engaging dyslexics (Cass Business School, 2004). Smilor (2006) noted that entrepreneurs tend to be exceptional learners, but learn differently than most people:

Learning must be action oriented and practical. Analysis is fine, but takeaways from the learning process must be translated into immediate solutions to problems or means to take advantage of upcoming opportunities. Learning must involve and engage entrepreneurs. That is, it must in some way be customized to address their issues, challenges and needs. It is in this sense highly experiential. Entrepreneurs thus learn from everyday interactions with customers, suppliers, and competitors or they learn in more formal programs through experiential exercises, case studies or hands-on spreadsheets (p. 1).
Today’s online modules are not tailored to meet the needs of varied learning styles (Whiteley 2007) much less dyslexic online students. However, there seems to be synergy between methods recommended in the scholarly literature to teach both entrepreneurs and dyslexics.

**Growth of Online Business Programs**

In recent years there has been a significant increase in the number of individuals pursuing business degrees online. This is occurring as the demand for online programs increase across the academy. According to Allen and Seaman (2010):

- 66% of colleges are reporting demand for new online classes and programs.
- In 2009, 4.6 million college students were taking at least one online class. This more than 25% of total college student population and a 1.4 million student increase since 2005.
- Demand for online courses is greater than demand for traditional courses.
- 74% of public university leaders view online education as central to their long-term strategy.

As many as 10% of students may be learning disabled (Bowers, 2007) yet existing online courses do not accommodate these students effectively, leading to missed opportunities and possibly increased attrition. The survey instrument used to generate the statistic that 35% of entrepreneurs are dyslexic (Logan, 2009) was the *Revised Adult Dyslexia Checklist* (Vinegrad, 1994). While a good starting point, a review of the literature identifies numerous survey instruments to measure dyslexic characteristic, and efforts should be made by researchers to assure that 35% of entrepreneurs are truly dyslexic, and entrepreneurship students should be surveyed to determine dyslexia rates among current entrepreneurship students.

**A Call to Leaders**

In 2010, there were over a million new online students enrolled in colleges within the United States. There are 5.6 million online students in the USA alone (Sloan Consortium, 2011). Dyslexia, as with all learning disabilities occurs with varying degrees of severity. Quantifying
dyslexics within society is challenging, and there is limited secondary research to glean the likely percentage of college students who are dyslexic. However, if we use the 2.2% as a benchmark (Casale, 2010), based on estimates of dyslexic college students with the United Kingdom, there are over 123,000 dyslexic online students in America. While there are numerous researchers focused on the relationship between instruction and dyslexia, and at least one college (i.e. Kenney College Graduate School of Global Entrepreneurship) with faculty engaged in ethnographic research in this area, there is a need for more collaboration and connectivity between the scholarly community and information technology leaders.

Not only is there an entrepreneurial opportunity, but there is a social entrepreneurship component as well. Essentially, entrepreneurs need to work together to develop solutions that assist the next generation of entrepreneurs who are pursuing an online academic path. This paper is a call to action to all those committed to harnessing the power of technology and education to solve societal problems.

References


