

Is dyslexia really a learning disability? People with dyslexia have trouble reading, but they often have other very well developed skills that set them apart from non-dyslexic people. As of now, Emory University provides accommodations for students with Dyslexia by offering extended time on exams so students have time to read and process test questions as well as provides these students with electronic versions of their textbooks if they desire them (Smiley, 2013). Perhaps if we change the way we view the disability that students with dyslexia have, we can realize that dyslexic people have many strengths to contribute to the world (Gladwell, 2013). At Emory if we provide students with a class that is aimed at the specific strengths students with dyslexia often have, we can encourage students with and without dyslexia to work together to create a more inclusive and positive environment.

To understand Dyslexia it is imperative to know what it is. The Americans with Disabilities Act defines a learning disability as “a neurologic disorder that causes difficulties in learning that cannot be attributed to poor intelligence, poor motivation, or inadequate teaching” (What is a Learning Disability, 1998). Among all learning disabilities, dyslexia is the most common. Of the United States population, 5-10% of people have learning disabilities. Eighty percent of all people with learning disabilities have dyslexia (What is a Learning Disability, 1998). People with dyslexia have unexpected difficulty in reading even though they have the intelligence, motivation, and education necessary for literacy (What is a Learning Disability, 1998). Dyslexia is a specific learning disability that comes from a neurological dysfunction. It is marked by difficulties with accurate and/ or fluent

word recognition and is often accompanied by poor spelling and decoding abilities. As a consequence of these struggles, people with dyslexia may have problems with reading comprehension and may have reduced reading experience that prevents the growth of vocabulary and the understanding of background knowledge (Definition of Dyslexia, 2002).

In the past and still in some cases now, dyslexia is purely a learning disability rather than a processing style, characterizing people with difficulties that impeded their ability to perform “normally” (Eide, B. & Eide, F., 2012). A trend among those with dyslexia, psychologists, neurologists, and family members of those with dyslexia is developing that focuses on the talents and abilities that people with dyslexics have due to their learning approach (Eide, B. & Eide, F., 2012).

As students that have dyslexia develop in society they are forced to compensate for the abilities that didn't come as easily to them. Students have to make up for their reading capacity and spelling errors in any way that is available to them. In many cases, this compensation has encouraged students to excel in many alternative ways (Gladwell, 2013). In their book The Dyslexic Advantage, Dr. Brock L. Eide and Dr. Fernette F. Eide identify 4 key strengths that dyslexic people often have: material reasoning, interconnected reasoning, narrative reasoning, and dynamic reasoning (Eide, B. & Eide, F., 2012). Recognizing these strengths will help shape the curriculum of the class offered at Emory.

What precisely are these strengths? Material reasoning is the power to reason about the physical and material world. According to the research Dr. B Eide and F. Eide gathered, dyslexic people understand shape, size, motion, position, or

orientation in space of physical objects and the interactions better than others. As such, children with dyslexia may struggle in the classroom but may also be astonishingly creative outside the classroom. These students have a lot of potential because they have a unique style of reasoning about real world, global or big picture spatial features (Eide, B. & Eide, F., 2012).

As part of the material reasoning skills, dyslexic students understand a 3 – dimensional space better than a 2 – dimensional one. A study was done by British psychologist Elizabeth Aree and her colleagues to investigate this hypothesis. The study compared dyslexic and non-dyslexic adolescents on three different visual and spatial tasks. One task showed 2-D patterns and asked participants to reproduce the patterns with colored blocks, which assessed two-dimensional spatial reasoning. Another task showed abstract line drawings for 5 seconds and then asked participants to redraw the line from memory as another way of assessing two-dimensional spatial reasoning. A third task, had subjects seated before a computer screen and asked them to search through a virtual 3-D house to find a hidden object in one of the rooms. After they searched 4 rooms the computer turned off and subjects were asked to reconstruct the house’s floor plan from memory using cardboard shapes. The results showed that participants with dyslexia performed worse than non-dyslexics on the 2-D tasks and did much better on the 3-D task (Eide, B. & Eide, F., 2012).

Interconnected reasoning is the ability to see how things relate to each other either by similarity, association, correlation or cause and effect. Students with dyslexia can see things from multiple perspectives using different approaches and

techniques from a variety of disciplines. Interconnected reasoning also includes the ability to summarize information and find its most important aspects in specific contexts. While this is an important strength it can also causes problems where speed, accuracy, reliability and precision are valued more than creativity, novelty and insight (Eide, B. & Eide, F., 2012).

Narrative Reasoning is the ability to construct a connected series of scenes from fragments of past personal experiences. These scenes can be used to think about the past, describe the present, and predict potential future or imaginary scenarios. This ability is related to the episodic or personal memory. People with dyslexia have a powerful episodic memory and a weaker semantic memory, which in contrast, centers on abstract and impersonal facts. Many individuals with dyslexia learn better when they turn abstract information into narrative or case-based information through the use of the episodic memory (Eide, B. & Eide, F., 2012).

The last characteristic described is dynamic reasoning, is the ability to accurately predict past or future states using the episodic memory. This skill is especially valuable when making predictions and hypotheses in settings where precise answers are unavailable. Dynamic reasoning is the power to find patterns in the real world that allows for the reconstruction of past events and predicting future events or simulate and preview different possible outcomes for various courses of action (Eide, B. & Eide, F., 2012).

These skills are often developed and refined in people with dyslexia because they engage in “capitalization learning”, which is the idea that we get more skilled by building on strengths that they are naturally given (Gladwell, 2013). Dyslexic

students often can't do what school requires them to do, but that doesn't mean they should be depressed and focus on their weaknesses (Gladwell, 2013).

Bridges Academy changes the requirements of school to accommodate students with special abilities. Bridges Academy, an elementary and high school in Los Angeles, participates in the movement of changing perceptions about students who have learning disabilities, learning differences, special needs and special education. Bridges Academy is a school for the twice exceptional or 2e. Students that are twice exceptional have high abilities, are gifted, and talented and also deal with dyslexia, attention deficit hyperactivity disorder, autism, Aspergers syndrome, dysgraphia and problems in processing audiovisual information. Bridges Academy is completely devoted to the social, emotional, intellectual, academic and creative growth of 2e students. Teachers are looking to unlock the potential that each student contains (Elliot, 2013).

I found this model for a school especially interesting and I think Emory University can add a class to its psychology department that is aimed at the skill advantages of dyslexic students. Students with dyslexia that have been accepted to Emory have worked hard throughout primary school and have achieved high excellence necessary for admission, which is similar to the idea of 2e (Elliot, 2013). This course would allow all students to improve their material reasoning, interconnected reasoning, narrative reasoning and dynamic reasoning skills. Having this kind of course would benefit those with dyslexia, those without dyslexia and the school overall. The cooperation of the faculty and the students with and without dyslexia will lead to a more understanding and more thriving academic

environment for Emory. Emory may even decide to make this course mandatory for all freshmen. If this were the case, students with dyslexia will become more confident and thrive better in the courses they take in the future and all students will be more open minded as they continue their journey through the University in.

For students that have dyslexia this course would give them an opportunity to play to their strengths. They wouldn't be in a traditional classroom that required reading and taking notes. Instead they would be participating in hands on 3-D activities that would be aimed towards their unique abilities. And because they were using their strengths they would be happier, more confident, have higher self-esteem, have higher levels of energy, and experience less stress. Dyslexic students would be more likely to achieve their goals, be more engaged, and perform better in other classes and at work and in different activities. A course like this would help students with dyslexia be more effective in the development of themselves and as growing students (Why Strengths? The Evidence, 2010). Dyslexic students may even learn more about how they can use their strengths to apply them to other courses that may not focus on their strengths.

However, even students that don't have dyslexia would benefit from such a course as well. Students without dyslexia would get to engage with students with dyslexia and learn from their strengths. Many people with dyslexia have been successful entrepreneurs and business people because of their dyslexic advantages (Eide, B. & Eide, F., 2012). This course would allow those without dyslexia to master these skills as well and possibly become successful in similar fields as those with dyslexia. Students without dyslexia would become more empathetic to those with

dyslexia because they are likely to struggle with what those with dyslexia do not struggle with.

In fact, Emory University would gain from this type of class because they would be encouraging students with dyslexia and students without to come together to help each other work through strengths and weaknesses. More students with dyslexia would be more inclined to apply to Emory if they knew Emory offered specific classes that were aimed at their strengths but also challenged them in other academic areas. Students that are already enrolled in Emory would be happier and more resilient, which would contribute to a more positive environment throughout campus (Why Strengths? The Evidence, 2010).

This type of class would help Emory adhere to its mission: “Emory University’s mission is to create, preserve, teach and apply knowledge in the service of humanity” (Mission Statements, n.d.). The class would create new knowledge regarding the perceptions of those with dyslexia. During the semester the course would work on preserving the idea that advantages come with every disadvantage, which students who engage the course will understand from first hand experience. These students will go on to teach and apply their knowledge of new skills and new perspectives in future courses and jobs.

This course could take shape in many different ways. The course would be taught by a professor who has dyslexia and has been able to be successful in his/her work at Emory or during a career. Students within the class could be split into groups depending on their interests and would be able to explore different

concentrations. Concentrations could include building a robot, which would primarily use the material reasoning skill (Eide, B. & Eide, F., 2012). Students could participate in different natural observation research studies, which would require interconnected reasoning skills (Eide, B. & Eide, F., 2012). Students wouldn't be limited and could choose their own concentration as long as the professor approved it. Assignments for this class wouldn't be written. Proposals would be submitted as pictures or orally, which would play to the narrative and dynamic reasoning advantages (Eide, B. & Eide, F., 2012). At the end of the semester, the professor would evaluate how productive the students were, and how successful their projects were.

A course like this would be very worthwhile. It engages all kinds of people with all kinds of skills and encourages cooperation. Adding this course to the course catalogue would set Emory apart from other universities and would attract all kinds of people with exceptional talents and ideas.

References

- Definition of Dyslexia. (2002, November 12). *The International Dyslexia Association*. Retrieved December 13, 2013, from <http://www.interdys.org/ewebeditpro5/upload/Definition.pdf>
- Eide, B., & Eide, F. (2012). *The dyslexic advantage: Unlocking the hidden potential of the dyslexic brain*. London: Penguin.
- Elliot, S. (2013, December 9). Ads Use Famous Figures to Put a Face on a Problem. *New York Times*. Retrieved December 13, 2013.
- Gladwell, M. (2013). *David and Goliath Underdogs, Misfits, and The Art of Battling Giants*. Retrieved December 10, 2013.
- Mission Statements. (n.d.). *Catalog Emory College of Arts and Sciences*. Retrieved December 13, 2013, from <http://catalog.college.emory.edu/about/mission.html>
- Smiley, J. (2013, December 5). Disability Services [Interview by H. Girsky].
- What is a Learning Disability? (1998, May 27). *Learning Disability Fact Sheet*. Retrieved December 13, 2013, from <http://www.ada.gov/learnfac.htm>
- Why Strengths? The Evidence. (2010). *Capp*. Retrieved December 10, 2013, from www.capeu.com