"My Dyslexia is Like a Bubble": How Insiders with Learning Disabilities Describe Their Differences, Strengths, and Challenges

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Educational research undervalues the experiences of people with disabilities, including those with learning disabilities and/or dyslexia, whom we call *insiders*. In this study, we examined narratives pertaining to schooling from published memoirs and/or interviews with 30 insiders with learning disabilities or dyslexia. First, we describe how these insiders define learning disabilities. We found multiple definitions of learning disabilities (LD), from sharp divisions between "LDness" and "normal," to conceptions of universal learner variability such as "everyone learns differently." We also describe how insiders defined their gifts as learners, and the challenges they faced in schools. Insiders identified strengths around creative problem-solving, multimodal thinking, and persistence. Challenges in school involved learning how to read, difficulty memorizing disconnected facts and needing more time. Recommendations include designing instruction that builds on the cognitive gifts of those with learning disabilities and dyslexia while minimizing instruction that focuses on their challenges.

Keywords: *Dyslexia, learning disabilities, neurodiversity, qualitative research*

Introduction

I don't think regular students can understand what it means to have a learning disability, because they haven't gone through it. They don't know how it feels to struggle. When you're in the class and you're just having a real hard time. . . To me, you have to go through it to know how it is (Jarrel quoted in Connor, 2008, p. 115).

Educational research is dominated by the perspectives of nondisabled individuals doing research on those with disabilities. Activists in the Disability Rights movement and academics in Disability Studies reject this arrangement as inherently ableist, assuming that the perspectives of people with disabilities are less valid (Charlton, 1998). Our study is situated within Disability Studies, and thus disability is framed from a wider perspective than traditional models. We understand disability as *both* biological and socially constructed, as well as embodied (Linton, 1998). In the case of learning disabilities and/or dyslexia, we seek to understand more about the experiences of students with learning disabilities, as well as how those experiences are shaped by schooling contexts (McDermott, Goldman, & Varenne, 2006).

This study is part of a larger project that explores how *insiders*, or people with disabilities, describe their experiences with schooling. This paper explores how learning disabilities are conceptualized by using the narratives of individuals with learning disabilities and/or dyslexia, or insiders. As the opening quote demonstrates, the perspectives of individuals with learning disabilities can provide a critical perspective on learning disabilities unavailable from any other source. We contend that collective analysis of narratives of insiders such as Jarrel, whose quote opens this paper, can offer much needed experiential data on a contested academic realm: the definition of learning disabilities.

Conceptual Framework and Literature Review

Contested Definitions of Learning Disabilities

Formalized as a category of special education in 1977, learning disabilities are the largest category of special education services in the U.S. (U.S. Department of Education, 2016). According to the U.S. Department of Education, Office of Special Education Program (2017), 2.35 million students (aged 6-21) were identified as having a specific learning disability under IDEA, which was 38.8% of the total student population aged 6-21 who were served under IDEA in 2015. The concept of learning disabilities historically began with *dyslexia*—a term that has existed since the 1930s to describe individuals who had significant difficulty learning to read—and *minimal brain injury*, a medical term for brain injuries of unknown origin that affected learning (Danforth, 2009). Scanlon (2013) describes as the core conceptualization in learning disabilities as "an academic-based disorder originating in the central nervous system" (p. 27). In the law that initially codified it (PL 94-142), a learning disability was described as a "disorder in one or more basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, read, spell or do mathematical calculations." Learning disabilities are defined within a particular subject area: reading, writing, and/or mathematics. In most U.S. contexts, dyslexia is synonymous with a reading learning disability (Cortiella & Horowitz, 2014). The IDEA 2004 and the DSM-5 include dyslexia as part of the learning disabilities definition. The DSM-5 defines dyslexia as an "alternative term used to refer to a pattern of learning difficulties characterized by problems with accurate or fluent word recognition, poor decoding, and poor spelling abilities" (DSM-5, 2013). All the insiders that we studied reported either having a learning disability and/or dyslexia. Since the insiders used both terms, we do as well.

This conceptualization that learning disabilities is an academic-based disorder originating in the central nervous system indirectly "favors a processing disorder, but does not limit the definition to that nor require directly documenting such a disorder" (Scanlon, 2013, p. 27). In other words, processing is a critical part of the definition of learning disabilities, but currently cannot be measured in a way that is feasible for a learning disabilities diagnosis. Originally, learning disabilities were diagnosed using the discrepancy model, which determined the presence of a learning disability by identifying a discrepancy between achievement and IQ (Fletcher, Coulter, Reschly, & Vaughn, 2004). However, this model has been long debated and has ultimately been discredited as an adequate model for diagnosing learning disabilities. The 2006 regulations of IDEA 2004 allow states to redesign criteria for learning disabilities identification. This has resulted in a variety of methods to identify learning disabilities with many states also recognizing Response to Intervention (RtI), "a data-based process of decision making conducted in a Multi-Tier System of Supports (MTSS) that ensures early identification and support for students with learning and behavioral difficulties and disabilities" (Cortiella & Horowitz, 2014, p. 14). However, RtI does not proscribe a single way of identifying students for specific learning disabilities identification (Cottrell & Barrett, 2016), causing inconsistent diagnosis.

In part, the history of learning disabilities is the history of what it excludes. Historical accounts of learning disabilities describe how researchers became interested in those who had an unexpected failure to learn, but did not have sensory disabilities, and were differentiated from those with intellectual disabilities (Danforth, 2009). Learning disabilities became a term that described only students with "unexpected failure to learn," unexpected because the individual was not intellectually disabled, and had received at least an "adequate" education. Deep within the concept of learning disabilities is this idea of unexpected failure—a student who is struggling with learning without an obvious cause (Fletcher et al., 2004). Learning disabilities have been described as a sociopolitical construction designed to separate white, middle-class children from other categories of special education by creating a new category with less stigma than intellectual disabilities (Sleeter, 1986). In the first decade of the existence of the category, almost all students with learning disabilities were white (Sleeter, 1986). Currently, students of color are disproportionately represented in the category of learning disabilities, a complex situation that emerges through teachers' racial biases as well as systemic issues such as underfunding and less qualified teachers at schools that serve low-income families (Harry & Klingner, 2014).

Multiple Theoretical Models of Learning Disabilities

As the preceding section demonstrates, the most common way to understand learning disabilities is through a medical model, conceptualizing the difference solely within the individual and seeking to find individual deficits and remediate them. In the social model of disability, disability is framed as the inability of society to accommodate a wide range of individuals, rather than a specific impairment of an individual (Shakespeare, 2006; Linton, 1998). In the social model, biological or physical difference is *impairment*, but *disability* is a function of the interaction between the individual and the environment. Scholars in Disability Studies in Education have demonstrated how perceptions of disability are influenced by the contexts of schools

and classrooms (Collins, 2014). Learning disabilities are produced through interaction; children must be seen in a particular context, doing particular actions, to be seen as learning disabled by teachers (McDermott et al., 2006). While these scholars do not necessarily reject the biological basis of learning disabilities, they focus analysis on how schools and classrooms either allow for individual differences, or mark individual differences as stigmatized.

Developing in the last 20 years through the activism of autistic self-advocates, the neurodiversity movement has initiated a cultural conversation on a strengths-based model of disability (Kapp, Gillespie-Lynch, Sherman, & Hutman, 2013). As summarized by Silberman (2015), neurodiversity is the belief that autism is just one way of being in the world, part of natural cognitive diversity, and has both benefits and challenges. Neurodiversity has become an important movement for people with learning disabilities, bringing increased attention to the cognitive gifts of those with dyslexia (Eide & Eide, 2012).

Insider Narratives in Research

Following Brenda Brueggeman (2001), we approach "disability as insight" (p. 795). Using memoir allows for better understanding of the experience of the insider, told from their perspective. Insider narrative, particularly when told with some level of control over the narrative such as in an interview or memoir, can be particularly important for those who are spoken for more than they are listened to (Biklen, 2005). We consider insider perspectives as important opportunities for theory building; the perspectives of those who understand the disability can help educational research develop and refine theories.

Our theoretical approach follows the work of Beth Ferri (2008, 2011) in using disability life writing as a source for counter narratives to dominant ableist narratives. While much of the research using memoir to understand the perspectives of those with disabilities has focused on in-depth analysis of individual memoirs, we want to amplify individual narratives through collective analysis of multiple cases. This study was inspired by the work of Paula Kluth and Kelly Chandler-Olcott (2008), which used multiple memoirs of people with autism to inform both scholarly work (Chandler-Olcott & Kluth, 2008) and writing for teachers (Kluth, 2004). Analysis of insider perspectives, whether from interviews or life writing, can provide another perspective on understanding and improving the educational experiences of individuals with disabilities.For this particular paper, cognizant that definitions of learning disabilities are currently in flux, we focus on insider definitions of learning disabilities and dyslexia. Thus, our team asked the following questions:

1. How did insiders who identified with learning disabilities and/or dyslexia describe learning disabilities and/or dyslexia?
2. How did dyslexia and/or learning disabilities matter in insiders' school experience?

Methods

This research project used qualitative methods, particularly document and narrative analysis, to analyze both memoirs by and interviews of insiders with learning disabilities and/or dyslexia. For this study, we used an analytic approach associated with grounded theory, understanding grounded theory as a process rather than a rigid set of procedures (Charmaz, 2007). After collecting data sources using purposeful sampling, the research team collectively analyzed the data through multiple cycles of data analysis using peer review to resolve discrepancies. Using narrative analysis (Riessmann, 2007), we analyzed narratives for both thematic and structural elements. Our study used multiple cases in a cross-case comparison (Miles, Huberman, & Saldaña, 2013) looking for themes that cut across different individuals.

We understand qualitative research as a person-centered process (Luttrell, 2010), and thus we created a research team that included multiple perspectives. Our team was comprised of faculty and students at the doctoral, master's and undergraduate levels. All members of the team identified as female. Members of the research team identified as White, Asian, and Latina. In addition, the team included researchers who identified as both disabled and nondisabled, including multiple members with learning disabilities.

Data Collection

In order to answer our research questions, this study used qualitative document analysis (Bogdan & Biklen, 2003; Schwandt, 2015). Through a purposeful sampling procedure (Patton, 2015), we chose memoirs and interviews that were related to our study. Our data sources for this study were 13 published memoirs written by individuals with learning disabilities, nine essay-length memoirs (Rodis, Garrod, & Boscardin, 2001), and eight full-text interviews conducted with individuals with learning disabilities (Connor, 2008). The data sources were identified through two rounds of search queries. The list of selected cases is included in Table 1. All the insiders are referred to by their first names for consistency.

In our first round of data collection, we searched using the following keywords: *memoir* AND *learning disabilit** OR *dyslexi** and then *autobiography* AND

Table 1
Data Sources

Author	Insider	Data Source	Title of Book	Year Published
Samantha Abeel	Samantha Abeel	Memoir	*My Thirteenth Winter: A Memoir*	2005
Barbara Arrowsmith-Young	Barbara Arrowsmith-Young	Memoir	*The Woman Who Changed Her Brain: How I Left My Learning Disability Behind and Other Stories of Cognitive Transformation*	2013
David Connor	Chanell	Interview	*Urban Narratives: Life at the Intersections of Learning Disability, Race, and Social Class*	2008
David Connor	Michael	Interview	*Urban Narratives: Life at the Intersections of Learning Disability, Race, and Social Class*	2008
David Connor	Precious	Interview	*Urban Narratives: Life at the Intersections of Learning Disability, Race, and Social Class*	2008
David Connor	Jarrel	Interview	*Urban Narratives: Life at the Intersections of Learning Disability, Race, and Social Class*	2008
David Connor	Michelle	Interview	*Urban Narratives: Life at the Intersections of Learning Disability, Race, and Social Class*	2008
David Connor	Santiago	Interview	*Urban Narratives: Life at the Intersections of Learning Disability, Race, and Social Class*	2008
David Connor	Vanessa	Interview	*Urban Narratives: Life at the Intersections of Learning Disability, Race, and Social Class*	2008
David Connor	W.G.	Interview	*Urban Narratives: Life at the Intersections of Learning Disability, Race, and Social Class*	2008
Eileen Gold Kushner & Kathy Young	Eileen Gold Kushner	Memoir	*Smart on the Inside*	2012
Christopher Lee & Rosemarie Jackson	Christopher Lee	Memoir	*Faking It: A Look into the Mind of a Creative Learner*	1992
Jonathon Mooney	Jonathon Mooney	Memoir	*The Short Bus*	2008
Rosemary Peel	Rosemary Peel	Memoir	*My Dyslexic Journey*	n.d.
Tennessee Reed	Tennessee Reed	Memoir	*Spell Albuquerque*	2009

Table 1 (cont.)

Pano Rodis, Andrew Garrod, & Mary Lynn Boscardin	Kevin Marshall, Jr.	Memoir (essay-length)	*Learning Disabilities and Life Stories*	2001
Pano Rodis, Andrew Garrod, & Mary Lynn Boscardin	Garett Day	Memoir (essay-length)	*Learning Disabilities and Life Stories*	2001
Pano Rodis, Andrew Garrod, & Mary Lynn Boscardin	Kelly Miskell	Memoir (essay-length)	*Learning Disabilities and Life Stories*	2001
Pano Rodis, Andrew Garrod, & Mary Lynn Boscardin	Aaron Pizialli	Memoir (essay-length)	*Learning Disabilities and Life Stories*	2001
Pano Rodis, Andrew Garrod, & Mary Lynn Boscardin	Velvet Cunningham	Memoir (essay-length)	*Learning Disabilities and Life Stories*	2001
Pano Rodis, Andrew Garrod, & Mary Lynn Boscardin	Alison May	Memoir (essay-length)	*Learning Disabilities and Life Stories*	2001
Pano Rodis, Andrew Garrod, & Mary Lynn Boscardin	Nelson Vee	Memoir (essay-length)	*Learning Disabilities and Life Stories*	2001
Pano Rodis, Andrew Garrod, & Mary Lynn Boscardin	Lynn Pelkey	Memoir (essay-length)	*Learning Disabilities and Life Stories*	2001
Pano Rodis, Andrew Garrod, & Mary Lynn Boscardin	Oliver Queen	Memoir (essay-length)	*Learning Disabilities and Life Stories*	2001

Table 1 (cont.)

John Rodrigues	John Rodrigues	Memoir	*High School Dropout to Harvard: A Dyslexia Success Story*	2013
Abraham Schmitt	Abraham Schmitt	Memoir	*Brilliant Idiot: An Autobiography of a Dyslexic*	1994
Linda Tessler	Linda Tessler	Memoir	*One Word at a Time: A Road Map*	2008
Joseph J. Thomas Jr.	Joseph J. Thomas Jr.	Memoir	*Shhhhhh, I Have Something to Say: The Joe Thomas Story*	2010
Victor Villaseñor	Victor Villaseñor	Memoir	*Burro Genius*	2005
Shamus Young	Shamus Young	Memoir	*How I Learned*	2011

learning disabilit* OR *dyslexi.** Our first searches were on a university academic database, followed by Google Scholar, Google Books and an online bookseller, Amazon. com. In the university database search, we found many books about learning disabilities, but few memoirs. We were more successful finding memoirs when searching through less academic sites, such as Google Books and Amazon. Amazon also included self-published memoirs. We searched through the titles and descriptions of the texts to determine relevance.

We used the following inclusion criteria:

(a) published in English
(b) authors (or interviewees) identify as individuals with learning disabilities or dyslexia, but not intellectual disabilities, autism, or other disabilities (reflecting the U.S. definition of learning disabilities)
(c) discussed educational experiences in K-12
(d) published memoir written by insiders, not *about* insiders' experiences from perspectives from parents or family members, OR academic text *with* full texts of interview with individually identified insiders

After we identified the race and gender of the memoirs that we had reviewed in our first round of data collection (eight memoirs and one book of essay-length memoirs, with a total of 17 insiders), we found that of 17 insiders, 10 were male, and only two identified as people of color. Because commercially available memoirs disproportionately represent white male perspectives, bringing multiple voices to analysis of disability life writing requires a broader definition of textual sources (Ferri, 2011). In order to address this disproportionality, we searched for additional sources of disability life writing from people of color and women. We did a second round in all four databases, searching for our previous search terms (*memoir* AND *learning disabilit** OR *dyslexi** and then *autobiography* AND *learning disabilit** OR *dyslexi.**) in combination with keywords that might indicate gender or racial diversity (e.g., Black, African-American, Latino/a/x, Hispanic, Asian-American, Asian). From this second-round search, we added five additional book-length memoirs and eight research interview narratives to address a significant diversity problem with our initial data set. The interview narratives all came from a single source: *Urban Narratives: Life at the Intersections of Learning Disability, Race, and Social Class* (2008). We included the full text of interviews from Connor (2008) because they were extensive (between 20 and 30 pages). Including these additional narratives, our data set had an equal representation of males and females, with 15 insiders in each category. Seven insiders identified as African-American and six identified as Latinx (using a variety of terms), meaning that 13 out of 30 insiders identified as people of color. Very few of the insiders explicitly identified as White, so we cannot report this data for each data source. We note that this difference in explicit discussion of race and ethnicity has significance, particularly in the U.S. context in which whiteness is considered a norm, rather than a notable aspect of identity. We push back against an inequitable assumption of whiteness that has been identified in disability studies (Bell, 2006), using purposeful sampling (Patton, 2015) to create a more representative sample of narratives. Unfortunately, we were not able to find insiders with dyslexia or learning disabilities who identified as Asian or Indigenous.

We do understand that the difference in these sources makes certain aspects of analysis, such as comparison, impossible. For example, we had difficulty comparing

the experiences of individuals of color with that of white individuals, since the data sources were so dissimilar (the majority of people of color were represented by interview data rather than published memoirs). However, finding a wide variety of perspectives was critical to our research team. We also believe that the data is much richer for this multiplicity, both in perspective and genre.

Data Analysis

After collecting 30 insider cases of individuals who identified as having learning disabilities, through a process of document analysis, all narratives relating to educational experiences were identified for coding. Each book/interview was read by one member of the research team, who extracted narratives that were relevant to schooling experiences.

From 30 insider cases, we extracted 817 narratives about educational experience, defining narratives as excerpts of text, no longer than a paragraph, focused on the insider's experiences with school and/or learning (Reissman, 2007). These narratives were put into a spreadsheet, wherein the data was coded by multiple members of the research team.

Coding themes were determined by the research team. Throughout this process, all coding categories emerged from research team discussions, and then two members of the research team would code, resolving all discrepancies. We used a form of peer debriefing, similar to the concept of interrater reliability in quantitative research studies (Creswell, 2013) to strengthen the rigor and trustworthiness of this qualitative study.

We began with attribute coding to help us organize the narratives in categories, such as setting and academic content (Miles et al., 2013) (see Table 2). For each narrative segment, we identified the location (School or Out of School), and the level of school (Preschool, Elementary, Middle, Secondary, Post-Secondary). We identified the academic content involved (Math, Literacy, Science, Social Studies, Other).

The next round of coding focused on structural elements of the narrative (Reissman, 2007). In the entire data set of narratives (1,010 narratives), we identified three genres of narrative: 1) *trial narratives*, in which insiders would describe negative experiences in schools (518 narratives), 2) *salvation narratives*, in which insiders would describe positive experiences in schools (283 narratives), and 3) *definitional narratives*, which were abstract statements about what learning disability/dyslexia was, and how it mattered in schools (242 narratives). All narratives were coded for these categories. One narrative could be coded into multiple categories.

Definitional narratives often communicated insiders' perceptions of their disability and are often written not as traditional narratives, with a beginning, middle, and end (Labov & Waletsky, 1997), but as timeless statements focused on how learning disabilities were different or similar to the experiences of others. For example, Santiago, an insider quoted in Connor's text (2008), said, "I have a learning disability. I get special treatment that a regular student won't get. That doesn't mean I'm stupid. I just don't learn as quick as others, so that's why I get this treatment"(p. 203). This is not a narrative in a traditional sense, telling of a specific event located in a particular space and time. This definitional story explains, from his point of view, what makes a learner with learning disabilities different from others, in this case the speed at which a person learns, as well as the different "treatments" at school. These definitional narratives formed the core of the analysis of this paper.

After extracting these narratives, we analyzed them separately, looking for themes. We found 242 narratives that we coded as dealing with definitions. We read through all these narratives to create subcategories that repeatedly emerged in the data: 1) defining learning disabilities, 2) gifts of learning disabilities, and 3) challenges of learning disabilities. We then coded all 242 narratives for these codes. This second round of coding was done by the first author and two additional researchers. We did additional rounds of defining codes, again reading through all the narratives in each subsection (such as gifts of learning disabilities) and determining codes from the data. In total, this paper represents four rounds of coding, all done by multiple members of the research team, with peer review of all coding. Table 2 includes all levels of codes used in the research.

While we do not assume that our findings are generalizable in the sense used by quantitative research, we assert that our findings are trustworthy (Mishler, 1990). Research that is trustworthy has followed a series of methodological steps that are clearly outlined so that the research could be replicated. We purposefully ensured that our data set was diverse in terms of race and gender, adding multiple perspectives to our data set. Another aspect of our study that boosters trustworthiness is the multiple positionalities represented on the research team. In our data analysis process, we focused on group analysis and decision making by consensus, or peer analysis, as we saw the process of meaning-making through these narratives as a dialogic process. We looked for and paid attention to variability, not simply what was similar, looking for negative evidence for each of our claims.

Findings

In this research project, we analyzed narratives of insiders with learning disabilities, describing

Table 2
Coding Schemes

Codes	Description
Location of Narrative	
In School	Narrative set in school setting
Out of School	Narrative set in out of school setting
Level of Schooling (if an In-School narrative)	
Preschool (ages 3-5)	Narrative occurs when insider is in preschool
Elementary School (ages 5 – 11)	Narrative occurs when insider is in elementary school
Middle School (ages 11 – 13)	Narrative occurs when insider is in middle school
High School (ages 13 – 18)	Narrative occurs when insider is in preschool
Post-secondary (ages 18+)	Narrative occurs when insider is in preschool
Academic Content (if any)	
Mathematics	Narrative involves learning in the area of mathematics
Science	Narrative involves learning in the area of science
Literacy	Narrative involves learning in the area of literacy
Social Studies	Narrative involves learning in the area of social studies
Other	Narrative involves learning in another school subject, such as physical education or art
Narrative Structure	
Trial Narrative	Narrative in which insiders describe negative experiences in schools
Salvation Narrative	Narrative in which insiders describe positive experiences in schools
Definitional Narrative	Statements about what learning disability/dyslexia was, and how it mattered in schools
Defining Learning Disabilities	Narratives that explained how the insider conceptualized learning disabilities/dyslexia
Gifts of Learning Disabilities	Narratives that explored strengths that the insider connected to learning disabilities
Challenges of Learning Disabilities	Narratives of challenges that the insider connected to learning disabilities

commonalities in school experiences. In this paper, cognizant of issues regarding the definition of learning disabilities, we focus on how insiders with learning disabilities described their cognitive differences. We begin by describing how the insiders conceptualized the label of learning disabilities. We then describe both the gifts and the challenges that insiders described as connected to their learning disabilities. Findings emerge from 242 narratives of 30 insiders with learning disabilities from published memoir and transcripts of interviews.

Defining Learning Disabilities

Echoing the multiple definitions present in the field of educational psychology, there was not a single definition of learning disabilities in this data set. To the contrary, we found a wide variety of ways to conceptualize a learning disability. One dominant metaphor was that people with learning disabilities "learn differently." At times, those differences were described as in neurological terms, describing "wiring" or "processing." Some narratives described a contrast between "normal" learners, and those with learning disabilities. Some insiders resisted this difference, insisting that everyone "learns differently," not just individuals with learning disabilities. At other times, insiders such as Santiago described learning disabilities as related to speed of learning. Another theme that emerged was differing opinions about whether learning disabilities were a disability or a difference, and whether or not they existed only in school or across all settings. We begin with the theme of secrecy and diagnosis that we found in multiple narratives about defining learning disabilities.

Secrecy and diagnosis. Taken from an essay written by insider Lynn Pelkey in *Learning Disabilities and Life Stories* (Rodis et al., 2001), the quote below was echoed in multiple narratives, in which insiders reported secrecy around their learning disabilities diagnosis that appeared to impact their own self-understanding about learning disabilities.

> I do not know when I was labeled as learning disabled. It was not until junior high and maybe into high school that the term LD started to surface with frequency. For years, my fellow LDers and I wondered what LD meant. No one ever told us. We did know that it set us apart from others and that we were different. Being LD was not something that we received awards for. It was secretive and suspicious. It was something talked about in hushed tones. It was discussed at secret parent/teacher meetings. It was the reason that I had to go to summer school. Is it any surprise then, before I knew what LD meant, I felt ashamed about being LD? (p.19)

Multiple insiders told similar stories (seven insiders in eight narratives), describing how they learned about learning disabilities much later than when they entered special education classes, or much later in life. For these insiders, their understanding of learning disabilities developed through how they were treated by adults and children, or through their sense of relative lower status, yet lacking specific information about why.

For several insiders, the experience of first learning about learning disabilities was pivotal. Some described the moment in which they were first formally diagnosed as critical, in which they were able to make sense of their difficulties and give them a name. Victor Villaseñor, telling the story of his diagnosis at the age of 45 in his autobiography Burro Genius, wrote,

> When the woman practitioner returned with my results, I could see that she was on the verge of crying. She told me that I was completely off her charts. That it was a miracle I'd ever learned to read, write, or even listen because I had both visual and audio dyslexia. I began to cry, too. Someone finally understood all the "hell" that I'd been through since a child when I'd first tried to understand language (2005, p. 313).

In the narratives of diagnosis, the common thread is the discovery of new language and concepts to understand oneself. Insiders noted that this understanding allowed them to stop thinking of themselves as incapable of learning. With the combination of secrecy and shame about learning disabilities experienced by insiders throughout the narratives, we are not surprised by the wide variety in how insiders defined learning disabilities. We now sketch the various theories of learning disabilities that emerged from the data set.

Learn differently versus "normal learners." One theory presented by insiders was that people with learning disabilities "learn differently." This theory was presented by five insiders (eight narratives). Lynn Pelkey, the insider quoted above, reports the importance of a conversation with a tutor who explained her learning disability to her, the first time an adult had openly discussed it with her,

> She explained it like this, "Lynn, you are part of a minority, a small portion of the population that has a learning disability. You and others like you learn a certain way. The rest of the people learn a different way. Kind of like putting a round peg in a square hole. It can be done, but not as fast as putting the matching shape in the matching hole" (Rodis et al., 2001, p. 22).

The tutor's explanation suggests a "learn differently" theory of learning disabilities, as the tutor created a contrast between Lynn, the student with learning disabilities, and others: "You and others like you learn a certain way. The rest of the people learn a different way" (Rodis, 2001, p. 22). Like the narrative above, these were often constructed on a normal/abnormal binary. Insiders described a difference between people without learning disabilities, who were "normal," and people with learning disabilities, who learned "differently."

"ALL people learn things different." In a subtheme of "learn differently," a small group of insiders (three insiders in three narratives) insisted that ALL people learn differently, extending cognitive diversity to all learners. Jarrel described all learners as variable,

> Everyone has their own way of learning, and that's how people are, especially people with learning disabilities. We see things different, we learn things different. And there is more than one way to learn. There's not really just one way and you have to go that way, and if you can't, you get left behind. I don't see it that way. There's always different ways (Connor, 2008, p. 107).

While most insiders created a binary between "normal" learners, and those who "learn differently," a few insiders like Jarrel include all learners in the "learn differently" category. This way of understanding learning disabilities was focused on commonality.

While at times this discussion of learning differently was generic, at other times insiders were specific about the differences between those with learning disabilities, and those without learning disabilities. We found three specific kinds of differences identified by insiders: needing more time, needing more help, and being wired differently. Insiders also discussed whether learning disability was a lifelong disability or existed only within schools. We also found more specific differences identified by the insiders in the sections on gifts and challenges. These two categories were more general ways in which the insiders described their differences from non-learning disabled students.

Needing "more time." Six insiders (in 19 narratives) understood those differences through the lens of speed, describing people with learning disabilities as needing "more time" to learn, having trouble "keeping up with the class," and "not catch[ing] on as quick." Students who did not have learning disabilities were described as faster: "other children are more faster than us," and "general ed kids, they are faster." Jarrel reported, "Like I said before, we learn differently from other people. It doesn't make you not normal. It's just you learn in a different way, a different speed" (Connor, 2008, p. 109). Michael, another participant in Connor's study, described the fundamental difference between individuals with learning disabilities and others as how much time it takes them to learn. These narratives described the fundamental difference as one of time. These narratives sometimes came with critique of classrooms that rushed through materials, and at other times seemed related to concepts of processing speed, as one insider stated, "Because of my LD, I was not a fast thinker."

Needing "more help." Three insiders (with six narratives) described learning disabilities as describing students who "need more help." The help included smaller classes, because students with learning disabilities "don't work well with a big class." Other help included tutoring, and clear explanations of content: "For learning disability people, they just need a little bit more, like extra tutoring, or just need things to be explained to them in a very simple way" (Connor, p. 118). This construction of learning disabilities was related to the services provided.

Being wired differently. Five insiders (in eight narratives) used neurological language to describe learning disabilities, with references to the brain. Insider Garrett Day used the term "processing deficits" to explain his difference: "I might be limited in the ways that I can learn because of processing deficits but when the classes get my strengths I can flourish" (Rodis et al., 2001, p. 104).

Learning disability as a lifelong disability or only within schools. Four insiders stressed learning disabilities as a disability, and emphasized coming to terms with its effects on their lives, long past school. Three of the insiders (in seven narratives) explicitly questioned how schooling and pedagogy constructed their difficulties, making learning disabilities primarily visible in school. Another insider, Aaron Pizialli, explained,

> Learning disabilities exist, but they may be nothing more than an accumulation of various culturally determined blocks and flows—flows being the states in which educational production is in tune/touch with the individual and blocks being the crisis points in which the individual is unable to produce what the educational world requires (Rodis et al., 2001, p. 31).

For Aaron, learning disability is not defined in isolation, but based on how learning differences are perceived and valued in the classroom. Some educational settings may be "in tune" with the individual, or may create "crisis" through a "block." These are the points at which the individual "is unable to produce what the educational world requires."

Other insiders also brought attention to the mismatch between their schooling and their individual ways of learning. In his memoir, *The Short Bus*, Jonathan Mooney writes, "LD is not a thing or material fact in the world like bacteria. LD is an idea and an interpretation of cognitive difference"(p. 47). While Jonathan M. never denies that he has a different way of thinking than others, and in fact discusses this at length, he considers learning disabilities as a particular, historized conception of those differences. Those differences exist, but the way that they are understood is a cultural and historical production.

Difference or a disorder? Nineteen insider narratives included the word "normal." Sometimes normal was contrasted with learning disabilities. Lynn stated, "My dyslexia is like a bubble. I am enclosed in an invisible sheath that allows me to come excitingly close to being 'normal' but never completely there"(Rodis et al., 2001, p. 18). Other insiders claimed "normal," such as when Jarrel explained that, "I do consider myself regular, just in terms of learning I have a disability"(Connor, 2008, p. 109). The concept of normal was included in many narratives, and seemed to be pivotal to how students made sense of their difference, whether they claimed normalcy, or rejected it, or, like Lynn, believe that their dyslexia made them inherently separate from "normacy." One insider described learning disabilities as "half-normal."

Jonathon M. described his struggles with the concept of normal, and his emotional journal as an adult to not only accept his differences, but to critically question the entire system of schooling and culture which serves to create disability. He wrote,

> In our culture, people with disabilities stand more for what they are not than what they are— not normal, not whole—a negation that calls into being its opposite: the normal. The normal looms over all of our lives, an impossible goal that we are told is possible if: if we sit still, if we buy certain consumer goods, if we exercise, if we fix our teeth, if we … The short bus polices that terrain; it patrols a fabricated social boundary demarcating what is healthy and sick, acceptable and broken, enforcing normalcy in all of us. What had I lost in trying to belong to the other side?(Mooney, p. 28).

Jonathan M. draws on critical theorists such as Michel Foucault to critique not only how society creates this division between normal and abnormal, but how such enforcement is internalized within the learning disabilities subject.

Gifts

Echoing the recent interest in neurodiversity for individuals with learning disabilities/dyslexia (Eide & Eide, 2012), we found that 12 insiders with learning disabilities did identify cognitive strengths, which some referred to as "gifts." Jarrel noted that, "Having LD probably makes you think differently about things . . . I kind of sense that it gives people different ideas, different ways of thinking . . . a different way of seeing"(p. 110). As Samantha A. wrote in her memoir, "I have also come to view my learning disability as a rather strange and unusual gift. I believe it has allowed me to develop strengths that I might not have otherwise developed." We identified two themes across discussion of gifts: creativity/conceptual thinking (12 narratives from eight insiders) and multi-modal thinking (11 narratives from six insiders). These two categories were connected for some insiders. Other identified strengths included memorization (two insiders) and persistence (three insiders).

Creativity/conceptual thinking. Using different terms, insiders described their abilities to be creative and solve complex problems (eight insiders with 12 narratives). Multiple insiders created a division between the rote skills expected in schools and the complex, conceptual thinking in which they excelled. While rote thinking and memorization were extremely difficult, higher-level cognitive skills such as conceptual thinking were a strength. Linda Tessler (2008), in her memoir titled *One Word at a Time: A Road Map*, describes how she, even as an adult, cannot recall math facts but was able to excel in statistics: "[s]tatistics requires conceptual thinking, and that's something I can do" (p. 96).

Several insiders described their strengths in discussion, particularly when interested in challenging concepts. Abraham felt that the opportunity to share his thoughts gave him a sense of empowerment,

> The opportunity to speak to a class called forth the best of my creativity, insight and thinking. It . . . fed my growing sense that my brain worked, even at a superior level in certain specific, selected ways (Schmitt, 1994, p. 71).

Several insiders described how they seemed to "click" with challenging work when their curiosity was engaged. Insider Santiago wrote about the importance of interest,

> It's really weird how I'm labeled with a learning disability, but when . . . I click onto things that interest me coz I know, I know already, I know what's going on, I know what happened. It just clicks and I'm like one of the main students raising their hands and discussing it with the teachers. (Connor, 2008, p. 205).

Multi-modal thinking. A second theme that emerged in 11 narratives (six insiders) was strengths in multimodal engagement and thinking, both visual thinking and a kind of deep, multi-sensory engagement. In his memoir, *High School Dropout to Harvard: A Dyslexic Success Story,* John Rodrigues described thinking visually: "In fact, my cognitive panorama is wholly different from most people in one big way: I think in pictures" (2012, p. 1). Insiders described seeing connections between ideas visually, using visualization as a comprehension strategy both in reading and math.

Others described their close attention to visual details, from colors to plants. In her memoir, *The Woman Who Changed Her Brain: How I Left My Learning Disability Behind and Other Stories of Cognitive Transformation,* Barbara Arrowsmith-Young (2013) connected this heightened engagement to multiple senses, to a kind of heightened whole-self engagement with content,

> When I needed to learn something and thought about diving into material, I physically felt myself diving into what I was learning—as if I were plunging my body into a pool of ideas.

> When I wrote poetry . . . I became the thing I was writing about. If it was the drop of dew on the petal, I felt its viscosity and wetness, the surface tension, the cohesiveness of the water molecules, the surface energy determining whether the drop would stay contained or flow out over the flower (p. 35).

As another insider, Victor stated, dyslexia was the "gift" that allowed him to deeply engage in the world, "What does this catchall phrase dyslexia really mean? Was this what allowed me to sometimes see the whole world come alive in light and color? Could dyslexia be a gift?" (Villasenor, 2005, p. 313). Engagement here goes well beyond typical use of the phrase, into a whole self, embodied connection to material.

Persistence/motivation. While the first two gifts were understood by insiders as innate cognitive gifts that seemed to differentiate them from others, the last gift came not from their inherently different biology, but from their experience in schools. Three insiders (in three narratives) reported that their experience with learning disabilities had shaped their motivation, training them to work harder than other students. Insiders described their abilities to solve problems as a strength, as well as their motivation to work hard. Insiders attributed this strength to the problem-solving skills they had developed over the years, working twice as hard as others, and being motivated to prove the doubters (often identified as teachers) wrong.

Challenges

In analyzing our data, we looked for narratives about what made learners with learning disabilities different, from their perspective. Some of the differences were gifts, described above, while others made life in schools more challenging. In this section we report on the three most common challenges reported by the insiders: 1) literacy challenges, including learning how to read and comprehend (23 insiders with 42 narratives), 2) difficulty with memorization (11 insiders with 14 narratives), and 3) needing more time to learn (12 insiders with 23 narratives). We then discuss how the insiders described these differences mattering in their school experiences, particularly when schooling focused on memorization, speed, and public performance of knowledge.

Literacy challenges. Insiders told multiple narratives about the complicated relationship between forms of language that they experienced; as Jonathan M wrote, "my dyslexia was a long struggle to use language to make sense of the world" (Mooney, 2008, p. 95). Within the category, the most frequent challenge reported was learning to decode text (16 narratives from 11 insiders). Other difficulties

varied between insiders, typically difficulties moving between one form of language to another. Some insiders described having difficulty expressing their thoughts verbally. John R. wrote, "I think faster than I can process spoken language. I'm usually thinking of another word or thing before I've finished the last word, so the words come out garbled" (Rodrigues, 2013, p. 17-18). Others described having difficulty understanding the speech of others, from directions, to listening and understanding stories read aloud. In her memoir, *Spell Albuquerque: Memoir of a "Difficult" Student*, Tennessee Reed (2009) shared her experiences being challenged by multiple step directions, including when she attended college.

For others, thinking and writing were difficult to integrate. Eileen Gold Kushner wrote in her memoir *Smart on the Inside* (2012): "I wanted to enjoy writing stories like the other kids, but I had such a hard time getting my ideas from my brain onto paper" (p. 2). John R. shared that his "thinking and written expression are disconnected. What feels like a clear idea in [his] head does not always exit [his] pen in the same way" (2012, p. 27).

The most frequent kind of narrative involved difficulties learning how to read, with 16 narratives from 11 insiders. One common thread was the emotional anxiety of this challenge. Stories focused on the experience of being a young child in school having difficulty learning what seemed natural for other students. Jonathan M. wrote about his struggles with language due to his dyslexia, "when you sit in first grade and stare at a page that shakes like a heat line in a mirage; when the nausea of confusion and the fear of explosion overwhelmed your five-year-old frame" (Mooney, 2008, p. 95). Eileen K. also had similar difficulties,

> The truth is, I was usually in a fog or blackout when it came to words. Words never were—or never would be (as I'd someday learn)—easy for me. No matter how hard I tried or how carefully I did my homework, I kept being placed further and further back in the reading groups. I couldn't figure out how the other classmates were getting it while I wasn't (Kushner & Young, 2008 p. 95).

These challenges around language became profoundly painful for insiders when they were forced to perform publicly. These difficulties made reading out loud particularly difficult for insiders, to put it mildly. Insiders told many stories about being forced to read aloud, ranging from elementary to high school. These moments were intensely stressful for students. Narratives include instances of crying, stomach pain, biting teachers, hiding in the bathroom, and paying other students to read for

them. Most of these stories include description of peers—and sometimes even teachers—mocking the insiders. Insider Rosemary Peel shared her experience,

> Taking a deep breath I began to read, and for the first paragraph all went well. Then as the words became less familiar the letters began to move and change. I was sunk! The class broke into fits of giggles, the teacher looked bemused and I wished the floor would open up and swallow me. (Peel, 2015, p. 11-12)

Insiders did not report ways in which they were able to cope with these situations of forced performance; nor did any insider report any benefit to these moments. The strategies that they reported using were either of resistance or avoidance, such as hiding in the bathroom or paying other students. While some of these narratives took place in elementary school, many also happened later in education, indicating that the practice of reading aloud continued to be a source of considerable stress for insiders beyond elementary school.

Even when insiders learned how to decode text, they reported that reading still took them far longer than it took for their peers. An emphasis on competition and speed presented significant challenges to the insiders. Insider Kevin M. shared, "My problem was not with comprehension, but speed . . . My problem was that everyone in the class could read faster than me, even the children I considered myself to be much smarter than" (Rodis et al., p. 116). Insider Vanessa felt shame as a result of needing time to learn: "Sometimes you have to read four or five times in order for me to get it and it's right there in front of my face. That's one thing I feel ashamed of, like wow, my brain's probably processing slow" (Connor, 2008, p. 236).

Some insiders, like Tennessee R., reported that reading comprehension continued to be a pronounced difficulty, even as others felt able to understand complex content at the college level. Textbooks and long reading assignments were significant obstacles,

> The professor got angry with me because I had trouble understanding the reading material the first time. Even though my reading comprehension has improved a lot throughout the years, it will never be perfect because my disability is permanent. The professor said, "If I could read this chapter while I'm feeding my kid his bottle than you can read this, too (Reed, 2009, p. 138).

It also took far longer than teachers assumed for the insiders to complete writing assignments. In his memoir, *Faking It: A Look Into the Mind of a Creative Learner,* Christopher Lee wrote,

> My teacher had us keep a weekly journal. Each week I could write about anything I wanted, and I was only supposed to take ten minutes. I was not supposed to worry about punctuation or spelling. At first this assignment scared me. I knew I would have to put more than ten minutes into it to simply get a "pass." In fact, I typically put three hours into each journal entry (1992, p. 36).

Chris L.'s narrative emphasized, like many others, the invisible labor of dyslexic students. Particularly at the high school and college level, insiders reported taking much longer than their peers to complete assignments, yet keeping that labor hidden. For some insiders, this was the primary marker of learning disabilities: the extra time that they took to complete assignments.

This section on literacy was associated with more narratives in our study than any other category under challenges. Understanding and participating in discussion were more often a strength for insiders, although it was a decided challenge for a few. Having significant difficulty learning to read, and narratives of being forced to read aloud, were dominant across the insiders' narratives. Also pronounced across the data set was the issue of reading and writing taking inordinate amounts of time for insiders, labor that was often invisible to teachers, a theme we return to later in this section.

Memory. Difficulties with memorization were a common theme in the narratives. Eleven insiders reported difficulties with memory, with 14 total narratives. Some were general discussions of memory. Santiago shares,

> It's really hard for me to put everything in my memory. I can probably remember it one second, one minute, but when I'm going through the subject later on… I have to go back and learn it again, it needs storing in my head. It's just like that. It takes me about two or three more times going over it. It's the process of going back to it (Connor, 2008, p. 209).

Insiders described having difficulty in remembering three kinds of information: 1) sounds and words while decoding, 2) spelling of words, and 3) math facts and procedures. These difficulties were linked to rote and procedural learning, and often these narratives make

explicit that the teaching de-emphasized meaning-making in favor of memorization. Such instruction appeared to be particularly challenging for students with learning disabilities.

For spelling, some insiders reported that typical instructional methods for improving spelling, such as memorizing words in spelling lists and then being tested, were not effective for them. In Abraham's autobiography, he shared,

> I could spend just as much time as my classmates studying the lesson, but when I was expected to remember the words, I could not. As a result, I spent my recess periods writing the words hundreds of times. Then I was tested again, but the result was little better than before. So I stayed after school to write the same words over and over again . . . I always was the last one done; sitting among the empty desks, I could hear laughter from children at play on the other side of the room (Schmitt, 1994, p. 15).

Just as the isolated spelling words presented challenges, isolated memorization of math facts was challenging for insiders, as Chris L. wrote, "[w]hen I stopped trying to memorize the tables by saying them over and over in my mind as I had been taught to do, I began to make sense of them and therefore, to learn them (Jackson & Lee, 1992, p. 91). Barbara A. shared her experiences with math,

> In fifth grade, math . . .[was] still difficult for me, and the teacher suggested in her remarks that drills and repetition—adding numbers, memorizing the multiplication tables—would set everything right. She was wrong about that, and the pattern continued through elementary school (2013, p. 21).

Multiple insiders described learning their math facts through memorization as a particular challenge.

Needing more time to learn. Twelve insiders in 23 narratives, reported that learning takes more time for students with learning disabilities. Insiders emphasized again and again that they could do the work that was assigned, but that it took them longer than it did for their peers. Sometimes, that was embarrassing, as attention was drawn to their difficulties. At other times, they invested considerably more labor into their learning than peers did, but attempted to hide that extra labor. Michael shared the time it takes for him to learn,

So if it takes you an hour, it might take me an hour and half, two hours. That's all it is. But when outsiders, when I was out there, I didn't know how it was, so I was just like them: "Oh man, look at this guy. He's in special ed." The kids in there, they're just as smart, but he really doesn't know it just takes them a little while longer than everyone else. The only thing I can do is work harder than everyone else. If my sister studies three times a day, I probably have to study five times a day (Connor, 2008, p.137).

Kevin M. too recognized the hours that need to be put in for him to stay afloat,

> As an LD student in college, I have had to work very hard to accept that I am different. I am not the average student, and definitely not an exceptional one. I study very hard for exams, and often don't get anything higher than Cs. I look at other people in my classes who ace all the exams and make it seem so easy. This can be really upsetting, because people look at me like I didn't prepare myself, or I don't try hard enough (Rodis et al., 2001, p. 123).

While the insiders asserted that these three differences (language, memory, and time) stemmed from their cognitive diversity, they also frequently critiqued the educational settings in which they learned. Again and again, their differences, such as their difficulty with rote memory, was a poor fit for the educational settings they experienced, which seemed to emphasize speed, memorization and lecture, all of which were *exactly* what challenged the insiders. Three insiders specifically critiqued the typical lecture format for learning, describing teachers that quickly moved through material, and expected all students to remember.

From Blocks to Flows

We end with narratives from two insiders, Lynn and Victor, that explore positive shifts in the content of their instruction, from rote memorization to meaning-making. Lynn described her special education classrooms as focused on memorization of basic skills. One day, the general education math teacher invited Lynn to come into his class,

> As I sat in that class, something magical happened to me. I could understand what he

was teaching. I was learning. I even started participating in the class, raising my hand and answering questions. I was LD. But then again I wasn't. I still couldn't multiply or divide very well, and I had to use elaborate ways to come up with the answer. But I wasn't memorizing, I was thinking, and I was figuring out the answer. I was learning. This was one of the experiences that shot a pinhole in the bubble that trapped me in my LDness (Rodis et al., 2001, p. 21).

In Lynn's quote, she called attention to how she could not multiply and divide easily. Again, she described a dichotomy between challenges with basic skills and strengths in conceptual thinking. In addition, she described that when she was placed in an environment in which her curiosity was awakened and in which she could engage conceptually in a high-level discussion, the feeling was "magical."

Victor V., after many descriptions of struggling in a school setting in which he could not read and was repeatedly shamed for it, described a substitute teacher who upended the status quo that existed in the classroom—between those who were expected to succeed, and those who were expected to fail. The substitute teacher, Mr. Swift, gave a writing assignment in which spelling and punctuation did not matter. Victor suddenly embraced writing: "My God, without the shackles of spelling and punctuation, I was flying! All these things were coming out" (Villasenor, 2005, p. 28). He attributed this shift to moving past the struggles of spelling and punctuation into the play of ideas, and that writing was communication,

And now I understood for the first time in my life why reading and writing had always seemed so boring and stupid. I'd never known that they were vital to our lives outside the classroom. You see, Mr. Swift explained to us that the whole world communicated through reading and writing. (2005, p. 34).

When his teacher returned, Victor was shamed for his misspellings, and the A that Mr. Swift had put on his paper was replaced with an F. But the experience changed Victor, who decided to become a writer. These narratives suggest the power of shifting pedagogical focus from the challenges, to the gifts of learning disabilities.

Discussion

Our study has illuminated how insiders with learning disabilities understood their cognitive differences, based on 30 insider accounts from memoirs and interviews. According to the findings of this study, insiders with learning disabilities had multiple perspectives on the meaning of the label of learning disabilities. While some insiders claimed an identity as "normal," others rejected the binary between normal and abnormal, proposing that all people "learn differently."

We wondered at how few insiders used the language of processing, or neurological terms, to explain learning disabilities. We suspect that this is connected to the many narratives about secrecy and learning disabilities. For an insider to develop an understanding of their learning disabilities as connected to "wiring" and/or "processing," they would need to have explicit conversations about their disability. The description of learning disabilities as a difference of time, in contrast, highlights their own experience, and is often directly related to the narratives of feeling left behind in their classes. When classrooms are focused on speed, students use speed to determine their own status in the classroom (Bibby, 2009). In a previous study, Lambert (2017) found that students with learning disabilities often used terms related to speed to understand themselves as mathematics learners, equating speed with competence.

Some saw learning disabilities as a lifelong disability, and others saw it as constructed by schools. For those who saw learning disabilities as constructed only within schools, we noted a strong connection between the social model and the perspectives of people with learning disabilities. Insiders with learning disabilities described classrooms as places that did not fit their way of learning. Some noted how their disability did not extend outside the classroom, but was only visible in school.

The findings of this study revealed the insiders' perspectives on their strengths. The strengths, also referred to as gifts, were identified in creativity/conceptual thinking, multi-modal thinking, and persistence/motivation. We connect this finding to the emergence of neurodiversity as a way of understanding cognitive diversity in dyslexia (Eide & Eide, 2011). Neurological evidence exists for individuals with learning disabilities having strengths in visual-spatial processing (Attree, Turner, & Cowell, 2009).

In a particularly vivid theoretical assertion, one of the insiders, Aaron P., asserted that learning disability exists, but is best understood as flows, "the states in which educational production is in tune/touch with the individual" and blocks, "the crisis points in which the individual is unable to produce what the educational world requires" (Rodis et al., 2001, p. 31). This conception is quite similar to the conceptions of neurodiversity, in which cognitive differences are both strengths and associated challenges. Advocates of neurodiversity in education advocate creating educational spaces that allow students to match instruction with their strengths (Armstrong, 2012).

Limitations. We recognize several limitations to this research. First, we were missing important perspectives in our data set, particularly those who identified as Indigenous and Asian-American youth. Second, we could have extended the search farther, looking for additional research sources. We wonder what else we might find if we included data sources such as blogs. In addition, the differences between our data sources (memoirs and interviews) made comparison difficult, particularly across categories of race.

Implications

Creating a link between scholarship and praxis, our research team is committed to using these narratives to create conversations with classroom teachers, students, and family members about improving the experience of schooling for people with learning disabilities. In this section, we describe implications for our findings for educational research and practioners.

One of the major themes presented in the narratives is that "everyone learns differently." Since "everyone learns differently" applies to everyone, not just those who have a learning disability, general and special educators should be aware of neurodiversity in order to reach a wider range of learners. Insiders reported having difficulty with rote memorization, but found they "absorbed" content when the material was linked to its relevance in the real world. This finding directly contradicts traditional special education research, which tends to focus educational research and recommendations on direct, explicit instruction of pre-determined procedures (Lambert & Tan, 2017). In fact, memorization of disconnected facts and procedures was identified by insiders as an ineffective educational practice. Based on the narratives we studied, we call on educational research on students with learning disabilities to fully explore how students with disabilities can best immerse themselves in relevant, rigorous content, building from strengths rather than focusing instruction on challenges. As John R. wrote in his memoir,

> On the spectrum of formal education, the beginning and upper levels are very similar in principle. In both places you're able to explore, think creatively, and carve out a path in whatever direction it takes you. Visual thinkers like myself thrive in this environment. I found the school system leading up to college so regimented that it allowed little room for curiosity. That system also judges everyone based on a narrow linear system, which doesn't take into account different types of intelligence (Rodrigues, 2013, p. 7).

We found that the insiders responded to authentic, meaningful instruction that allowed them to explore problems, and resisted rote instruction based on memorization, whether that memorization was in mathematics or spelling. We ask that schools consider how to make K-12 education more like preschool and college, places where students with dyslexia are able to "explore, think creatively, and carve out a path in whatever direction it takes you."

We suggest that schools consider what students with learning disabilities actually know about their cognitive differences. Our findings suggest that for many students with learning disabilities, their cognitive difference is rarely, if ever, discussed with a trusted adult. Behind secrecy and labels comes a lack of knowledge. We call for increased professional development for educators both on how to work with students with learning disabilities and to help students in understanding what learning disability means. We wonder how the perspectives shared here, concepts such as blocks and flows, developed by insiders, could assist students just learning about learning disabilities.

Educational researchers interested in how to define learning disabilities should consider the perspectives of insiders presented here, such as the unique theoretical contribution of blocks and flows. Although rarely considered in research on learning disabilities, how individuals with disabilities understand learning disabilities, and how to communicate learning disabilities best to individuals, should be a goal for educational research. How can teachers and parents build student understandings of their own strengths and weaknesses? How does the variation that we found in individual challenges matter? What kinds of messages help students become agentic learners, and assist them in developing metacognition? We see parallels between the way that many of the students with learning disabilities conceptualized learning disabilities and neurodiversity.

Throughout the narratives, insiders reported the tremendous emotional toll of their difficulties in schooling. Insiders repeatedly discussed the feeling of not being as good as other students and the anxieties that accompanied that feeling. If students are constantly thinking about trying to be as good as everyone else, then they are not thinking about the content being taught. Schools have a huge responsibility to make all of their students feel welcomed, safe, and at home. We call for additional research on the insider perspective of learning disabilities, and making connections between gifts, and the classrooms in which they learn. We call for classrooms that minimize blocks and maximize flows for students with learning disabilities.

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