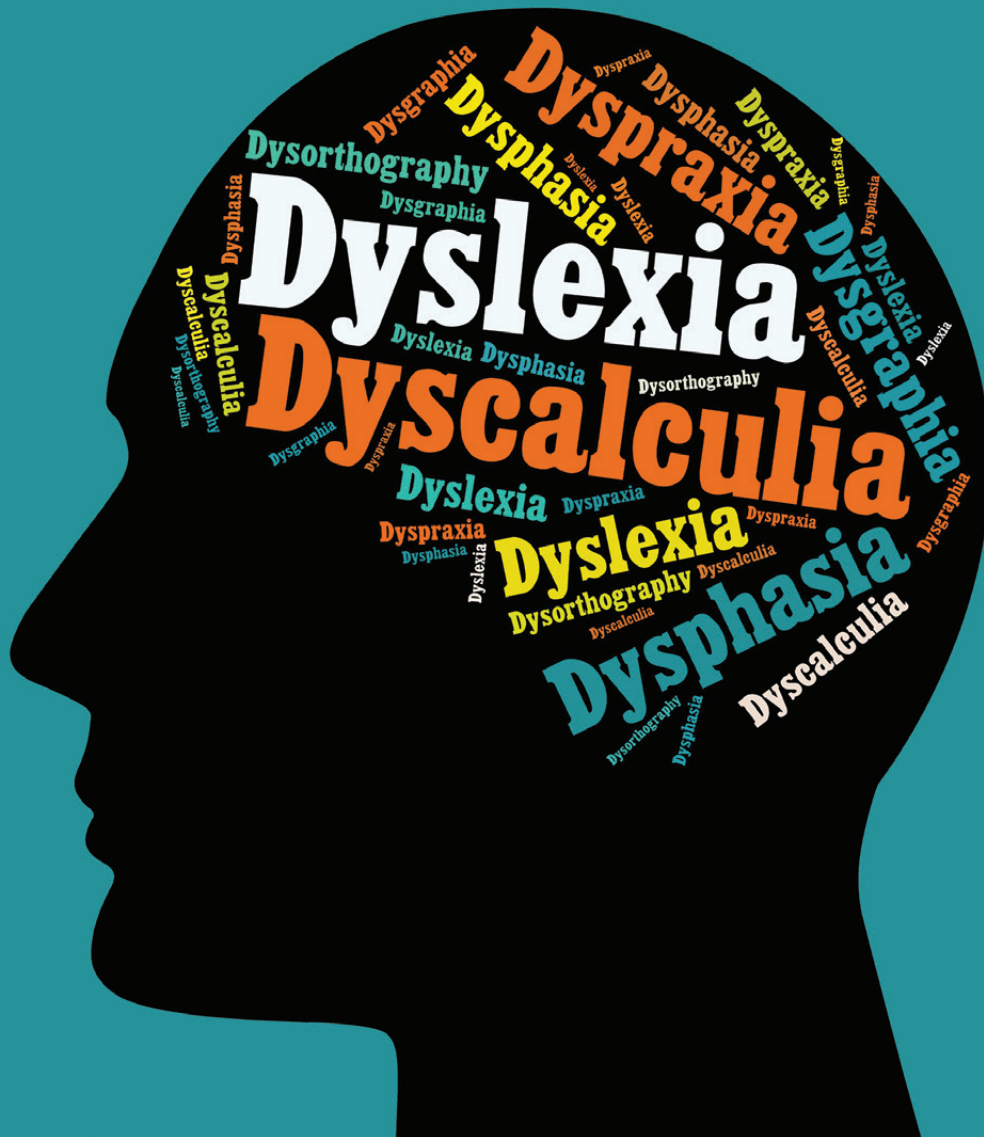


TOOLKIT:

Current Best Practices and Supportive Interventions for Learners and Clients with Learning Disabilities.

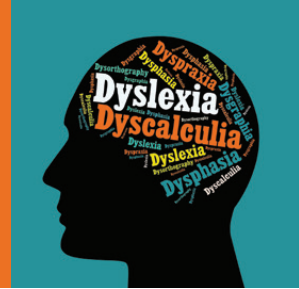


Metro Toronto
Movement
for **Literacy**

**EMPLOYMENT
ONTARIO**

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INTRODUCTION

Welcome, and thank you for opening this toolkit on *Current Best Practices and Supportive Interventions for EO Clients with Learning Disabilities*.

Here you'll find the best of the best discoveries that came out of a research project conducted in 2014-2105 by the Metro Toronto Movement for Literacy entitled "*Creating Pathways of Learning Support for EO Clients with Learning Disabilities*". Its goal is to strengthen the capacity of Employment Ontario's service providers to meet the needs of Employment Services (ES) and Literacy & Basic Skills (LBS) learners and clients with learning disabilities (LD). The project included a literature review, environmental scan, stakeholder focus groups and consultation with experts to gather their wisdom. These pages offer concrete ideas and strategies to put into action – not extra work, simply practices and supportive resources that we hope make some of your work easier.

Please note that there is a glossary of terms on the inside back cover for your reference.

Setting the stage


Employment Ontario (EO) service providers work with some resilient and capable people. The learners or clients who approach your program seeking employment, education, or training may also have learning disabilities.

These learning challenges may be formally diagnosed or not; the learner/client may disclose this information to you or not; they may self-identify with the term "learning disability" or not; and you and your colleagues may be aware of the presence of learning disabilities in these individuals or not. But people who struggle to learn make up an estimated 10% of our population, and it's safe to say they are overrepresented in EO programs – the box below explains a bit more.

What's more, the numbers are increasing. An intake officer at an LBS program in a community college estimates that in the last five years, their LD caseload has approximately doubled. Another professional with 30 years' experience in LBS believes that most LBS learners they encounter have LD – even if these learners have not been formally diagnosed.

It is estimated that adult Canadians with learning disabilities comprise:

- 30%-70% of those incarcerated in correctional institutions
- 25%-40% of those on income support
- 15%-30% of job training participants

 More than a quarter of Canadians with learning disabilities aged 22-29 did not complete high school, twice the number of drop-outs in the general population

 In 2006, the average annual income of Canadians with a learning disability was \$20,215, compared to an average of \$26,640 for all disability types

Whatever your role in an EO program, in this toolkit you'll find ways to support this growing number of people. And you'll find it useful wherever you're starting from. Your organization may already follow processes to identify, support and accommodate individuals with LD; you may have specialized training and accommodations/interventions already in place. On the other hand, you may never have thought about this topic at all. Maybe you bring only curiosity, or even frustration and confusion. That's okay – read on.

What do we mean by “learning disabilities”?

There are a number of proposed definitions of the term, and in North America there is only general agreement on which definitions are accepted, but we all agree what learning disabilities are not: **they have nothing to do with intelligence**. As for what they are, this project adheres to the definition of learning disabilities as stated in 2001 by the Learning Disabilities Association of Ontario (LDAO), which can be found at the link below:

<http://www.ldao.ca/introduction-to-ldsadhd/introduction-to-ldsadhd/what-are-lds/official-definition-of-lds/>

LDAO's definition clearly distinguishes LD from intellectual disabilities, emphasizing the specific (not global) nature of this “variety of disorders that affect the acquisition, retention, understanding, organization or use of verbal and/or non-verbal information... result[ing] from impairments in one or more psychological processes related to learning”

Official Definition of Learning Disabilities

“Learning Disabilities” refers to a variety of disorders that affect the acquisition, retention, understanding, organisation or use of verbal and/or non-verbal information. These disorders result from impairments in one or more psychological processes related to learning (a), in combination with otherwise average abilities essential for thinking and reasoning. Learning disabilities are specific not global impairments and as such are distinct from intellectual disabilities.

Learning disabilities range in severity and invariably interfere with the acquisition and use of one or more of the following important skills:

- oral language (e.g., listening, speaking, understanding)
- reading (e.g., decoding, comprehension)
- written language (e.g., spelling, written expression)
- mathematics (e.g., computation, problem solving)

Learning disabilities may also cause difficulties with organisational skills, social perception and social interaction.

(LDAO, 2001, p.7). This is an important distinction to note; in other Commonwealth countries, the term “learning disability” makes reference to what North Americans call intellectual/developmental disabilities, such as Down Syndrome.

Confusion and discord around terminology is not limited to that distinction, though: in various moments, references to LD either may or may not include ADD/ADHD, Autism Spectrum Disorder/s, Asperger’s Syndrome, Acquired Brain Injury, and Aphasia. This is not even to mention concurrent diagnoses having to do with physical and mental health, with addictions and the variety of responses to neglect, poverty, trauma and violence.

To acknowledge this complexity, the work in this project always focuses on the individual – someone’s learning strengths and challenges come from and play out in their unique situation. A learning disability is only one facet of a person’s life, and no person’s life is any less complex than another’s. Each time this toolkit mentions a learner or a client, hypothetical or real, remember we are referring to a whole person (body, spirit, heart and mind) with many strengths, who lives in multiple contexts, and whose identity and experience are fluid co-constructions within interdependent communities.

Labels

Labels are surely inadequate to capture the truth of a whole person, and they can also be damaging. At the same time, they play an important role in conversations about learning disabilities. When their use is left in the hands of the individual in question, labels can be very useful. Labels can work for people by ensuring them access to supports, services, group memberships, medications, and of course, accommodations.



Here's what the Learning Disabilities Association of Ontario says about labels:

Right off the top, many people wonder whether "learning disabilities" is the best label to use. Some say "disability" is not an accurate label, since people with LDs are not unable to learn – they learn just fine, when they're taught appropriately. Many people prefer the phrase "learning differences" instead.

We [LDAO] acknowledge that the term "learning disabilities" is not perfect. We use it as an organization because using one label makes it easier to communicate with other people when we're talking about LDs, and because the term is recognized in the Canadian Human Rights Act. However you choose to label your LDs, we suggest you get at least a little comfortable with the term "learning disabilities", because it's the term used in medical, employment and educational settings.

Underneath the umbrella of LDs, there are many more labels – and arguments about them. Some specific types of learning disabilities are given very specific names, and those names are not always agreed upon: dyslexia, dyscalculia, dysgraphia and central auditory processing disorder each refer to specific types of LDs. Each of the specific names introduces more controversy for some people and clarity for others.

For example, it might really help a young girl to know that her issues with learning math are called dyscalculia. But for another person, the questions about which types of mathematical learning issues are included in the label might be problematic, limiting or distracting.

At LDAO, we tend to use broad descriptions – like "language-based LD", or "LD that affects reading" – when talking about categories of LD. When we talk about specifics, it's often useful to simply describe the way a particular person learns.

From *About Labels and Labelling* (LDAO, 2011)



Learning disabilities expert, Dr. Sheldon Horowitz, has an excellent video on Youtube produced by The National Centre for Learning Disabilities in the United States, explaining different types of LD. (See the resources section on pages 42-43 for the video link.)

Like a great deal of material on LD, the language in the Dr. Horowitz video mentioned above focuses on children. The term "Learning Disability" was formally introduced in 1963, and in the two decades that followed, research in the field focused almost exclusively on children in academic contexts. We then started to realize that people do not "outgrow" LD in adulthood. The late 1980s and early 1990s saw a developing awareness that LD impacts the entire social world (outside the classroom) and the entire lifespan (outside childhood) (Johnston, 1995). This toolkit draws only on child-oriented material regarding points that are relevant to adults, like this video's description of cognitive operations.

How it might look: characteristics of learning disabilities with examples

Whether or not one subscribes to the more formal LD terms and labels, with some people it is still really clear that they are experiencing challenges. Thankfully, there are characteristic patterns to watch for if you think an individual's learning struggles might be categorized as a "disability":



- Surprising discrepancies in actual performance: someone may speak very well, but can't write down what they have said.
- Performance can vary from day to day, and at certain times of the day. For example, someone has learned how to use an app well, but *sometimes* forgets how to run it.



- Inability to concentrate for long periods: someone may be easily distracted by noise, and unable to reconnect to the task they had been doing.
- Problems with estimating time or distance: a person may not be able to plan a multi-stepped project because they have no sense of how long each step will take.



- Uneven memory: a person may not remember an instruction from earlier in the class, but can recite verbatim lines from a film they saw years ago.
- Difficulty with abstract ideas and relationships: someone may seem to behave "inappropriately" if they have difficulty picking up on social cues or interpreting the intent of a message.



- Difficulty remembering order: an individual may leave out important details in an assigned task because they received too many instructions at once.
- Difficulty understanding cause and effect: someone may not realize that they are likely to be penalized for being late all the time.

(Adapted from *Job Fit*, LDAO, p.15)

Screening, assessment and formal diagnosis

Many individuals with LD are seen by EO services, and few come in with a formal diagnosis and documentation of LD in hand, due to lack of access to services that will diagnose LD. Barriers are often financial, but also include lack of facilities and long wait times, compounded by the stigma still associated with LD.

In consequence, recognizing learning disabilities may be challenging, given the differing levels of training among providers, differing beliefs about and definitions of LD, and the confounding presence of a host of other issues which the person may be dealing with. Confusion is natural. However, despite the challenges, getting to the label of LD might be very important, and can help individuals start to move beyond a personal history where they have internalized a lifetime of negative messages, as other people in their lives have interpreted the markers of LD as signs of being unmotivated, disorganized, unlucky or worse.

Accessible, accurate and robust assessment for LD is often a turning point in an adult's life; for some it is the first introduction to the notion that they are not "stupid" or "bad" or "wrong". In these cases the boost to self-esteem cannot be overstated. Nor can the benefits of the accommodations that result from receiving formal documentation. Helping people arrange assessments for LD can really be seen as a **work of advocacy**.

Psychoeducational assessment is the main way to formally diagnose LD, and it must be done by a psychologist (LDAO, 2001). Other related testing might be done by a pediatrician, a psychiatrist or a neurologist. A high quality psychoeducational assessment is very involved. The first test gathers data on things like short-term memory, reasoning, inference, etc., which are then analyzed in order to identify underlying cognitive strengths and weaknesses. The next test assesses literacy skills, such as reading comprehension. A comparative analysis of the two is then mounted to discover how the former helps explain the findings of the latter – and to be done right, the tests and their implications have to be very clearly explained to the person who has been assessed.

If you think you could more effectively teach, serve or accommodate someone by better understanding the nature of their learning challenges, you may want to open a respectful conversation with them about assessment. Maybe your organization already has a screening mechanism as part of its intake process – find information about these on p. 24. Maybe someone has come to you with the idea that being diagnosed would be beneficial to them. It probably will be: a formal LD diagnosis is key to being granted deserved accommodations, making issues of access particularly important – but again, it's very expensive! You will learn about possible sources of funding for assessment on p. 25.

The duty to accommodate = the starting point

Addressing LD is already part of the job for EO service providers. We all have a duty to accommodate that is enshrined in statute and case law. Accommodation is a cornerstone of the right to equal treatment and opportunities. It may involve changing the terms or conditions of the environment, the functions of a job or the requirements of educational assessments, in order to level the playing field so that all people can participate fully.

Under the Ontario Human Rights Code, which explicitly names learning disabilities, the principles that guide accommodation include:

- inclusive design
- full integration
- individualization
- respect for the dignity of the individual

The imperative to express respect for people's dignity shapes how needs must be accommodated, and what needs are accommodated is a complex matter of policy interfacing with daily realities. The Code states, "There is no set formula for accommodation – each person has unique needs and it is important to consult with the person involved" (OHRC, 2000, p.10). Read the entire *Policy and Guidelines on Disability and the Duty to Accommodate* at <http://www.ohrc.on.ca/en/policy-and-guidelines-disability-and-duty-accommodate>.

The Accessibility for Ontarians with Disabilities Act (AODA) is a piece of legislation that obligates organizations, private and public (including education, training and employment services), to ensure that their practices are accessible. AODA standards are a set of enforceable rules that organizations must adhere to in preventing and removing barriers. This includes barriers to access (such as providing potential applicants with accommodations for interviews to ensure non-discrimination in consideration for a program).





Community colleges in Ontario are working to go beyond mere compliance with the AODA, going to great lengths to innovate, train on, advocate for, and embed accessibility principles and practices in the life of institutions. These initiatives are guided by the several principles, notably those of Universal Design for Learning (UDL), which emphasize integration and attention to things like the creation of accessible documents both online and in print. UDL practices result in a normalized, non-stigmatizing, and very helpful climate for all clients and learners, including those with LD. (See more on p. 36)

Nevertheless, despite the long-standing existence and enforceability of AODA policies, awareness and comprehension of them – and resources to implement them – may be limited across ES and LBS services. The rest of this toolkit aims to make accommodation easier to integrate into practices that serve all learners and clients – and to go beyond accommodation, to come to a place where we embrace and fully respect how differently all people learn.

SUMMARY OF RESEARCH FINDINGS: THE LITERATURE

The research for this project included a literature review, interviews with key stakeholders, and many focus groups. Every step was guided by two main questions:

- What practices are best serving adults with LD throughout Ontario, and in all LBS program streams (Anglophone, Deaf, Francophone, and Native Learners)? What approaches, environments and interventions are most supportive? What opportunities are there to share resources or coordinate efforts? *and*
- Where are the gaps? What is the nature of the challenges really facing adults with LD seeking education, training and employment, and what needs to be in place to address them?

A survey of the relevant literature saw the following themes organically emerge: **public and private culture and belief, concurrent concerns, the best interventions and supports, and the increasing part played by technology.**

Culture and belief

The dominant public beliefs about LD are expressed in the accessibility **policies and standards** set by the Ontario Human Rights Code and the AODA. Ontario service providers also have a history of affirming the principle of equity; we share a general desire to acknowledge and address systemic barriers. We innovate and collaborate to find ways of mediating or eliminating these barriers. This overall approach is aimed at leveling the playing field and creating an culture of equity. It is our basic responsibility to respect the human rights of those with whom we have the privilege of working.

Public beliefs also have to do with the **words we use**; language builds our everyday reality, and words are always charged. As we've seen, even whether to use the term "learning disability" at all remains at issue. People using a strengths-based approach to learning may celebrate different learning abilities, capacities and styles, while others debate the medicalization implied by the term "learning disability", especially within a culture that has a growing tendency to pathologize as clinical disorder what may be regarded as normal human phenomena and traits.

The problem with not using labels, though, medical or otherwise, is that it allows voices on the far less compassionate end of the spectrum to dismiss people's legitimate differences and needs, and even risks victim-blaming. For example, someone might say something like "So-called 'dyslexia' is just an excuse for bad teaching/poor performance on standardized tests", etc. In dispensing with this hundred-year-old term, we would regress to the days when learning to read was understood as only and always a simple matter of work and good discipline. Not only that, the sense of identity and community some people have built around their labels would also be jeopardized. This

would be very problematic given that meaningful self-conception and social supports are the keys to resilience. The upshot is that labels are useful insofar as they get people the services and accommodations they need, and the compassion and respect they deserve.

Why would an adult self-identify or disclose their status as having an LD in the face of reductive and negative stereotypes that speak to deficiency, to weakness and confusion?

For a guide to disclosure see p. 40

Social stigma: Adults with LD do still experience stigma. Causes may have to do with the disability being invisible (so it could be perceived as being faked); and historical, yet inaccurate, associations with stupidity and slowness, with laziness and just not trying hard enough. This is not even to mention communities/cultures that bring even more severe judgment to issues of intellectual or academic ability.

Self-esteem: It's not just what others say and think about people with LD – it matters what someone believes about themselves. A fairly robust self-esteem is required for a sense of **self-efficacy**, for believing that it matters what you do, and for believing that you have the ability to complete tasks and to reach goals. Self-esteem is required to engage in practices of continuous learning, and it is more important to adult development than basic skills in literacy and numeracy.

Self-efficacy is related to “re-framing” the LD, or accepting and valuing oneself with LD, and “such acceptance brings with it the ability and willingness to discuss one’s learning disabilities with others when and as appropriate, without shame or guilt”

(Smith, 2011, p.3).

Frank, strengths-based discussion opens the possibility of reaching out for support, or advocating for rights. But healthy self-esteem is a tall order for many of us, especially in a competitive culture with limited resources to meet the needs of vulnerable individuals. For students in academic settings, where people with LD report high levels of isolation, anxiety and self-judgment, the task can seem almost hopeless.

Outside the classroom, the non-academic or social outcomes for people with LD can be seen through a strengths-based lens that focuses on resilience and the brilliant innovations that these adults come up with to cope every day. A particularly sad irony is that so few feel brilliant or think of themselves as such – quite the opposite. The internalized sense that one is stupid or incapable contributes a damaged sense of personal agency, a feeling of lack of control over one’s own life, and a diminished ability to connect with others. Close on the heels of isolation and despair are often found risk-taking and self-destructive strategies, such as self-medication with drug use.



But what’s the REAL problem?

In true chicken and egg style, what if a young student was living in poverty and neglected nutritionally, and so had troubles concentrating at school, resulting in being labelled as lazy and stupid? And what if the trouble at school was met with vicious abuse at home, and the avoidance of both environments by the student marked the beginning of substance use? What then would ever prompt someone meeting that person as an adult to wonder if they had a learning disability?

Concurrent concerns

Living with mental health issues: How mental health issues dovetail with LD is profoundly complicated, and it may be almost impossible to tell them apart, or to definitively separate causes from effects. Struggles with processing information – especially social cues – may result in anxiety and depression. Can a depressed or anxious mind be present while learning new things, or facing a job interview? One report on LD found that the incidence of mental health issues increased and worsened throughout a lifespan – that older adults [living with suspected or diagnosed LD] were more likely to report suicidal thoughts, depression, and distress. One arresting statistic indicates that “*For persons who committed suicide and left notes, 89% produced spelling patterns and handwriting errors similar to a school sample of adolescents with LD*” (Wilson et al, 2009, p.25).

Being racialized and/or poor: EO providers serve a population of deep ethno-cultural diversity. Some cultural norms attach severe shame and stigma to difficulties with ability, competence and academic performance. Indeed these may inhibit disclosure of LD, or stop people from availing themselves of accommodations... Yet we are in a context where “despite higher workforce participation, people of colour (racialized people) are more likely to be un- or under-employed or living in poverty. While a larger share of racialized workers is looking for work, fewer of them have found jobs compared to the rest of Ontarians... [and] a 2011 report found that racialized Canadian workers earned 81.4 cents for every dollar paid to their Caucasian counterparts” (Ontario Common Front, 2012, p.20).

The compromised sense of personal agency of people who have undiagnosed/unsupported LD often leads to poor mental health, which in turn can compromise sleep and nutrition patterns, and exacerbate the risk of poverty. A structural analysis of the issue suggests that solutions are every bit as interlocked and complex as the problems.

People who have experienced violence and trauma

Violence impacts learning in profound and complex ways. This is because people who have experienced violence, trauma and neglect in their lives often develop brilliant strategies – internal and outward behaviours – in order to survive the unbearable.

Students who act out or act helpless, who struggle with being physically or mentally present in classrooms, may be enacting, or unintentionally repeating, these survival/ coping strategies. The problem is that these tactics are no longer serving the individual; they are getting in the way of learning. Consider, for example, the strategy of dissociating when one feels anxious (perhaps a common response to classrooms and employment offices). It is hard to remember what you learned when you were “spaced out” for periods of time. It is also hard for anyone to keep their thoughts straight or draw connections between ideas when they are adrenalized.

As students in public schools of all levels, survivors of violence often experience further violation when these strategies, rather than being appreciated (or even understood for what they are), are judged as evidence of laziness or apathy, bad attitude, poor study habits, antisocial aggression, or simply low intellectual ability.

Not much imagination is required to see that people enrolled in school who have survived violence and had traumatic experiences are often the same people who have LD, nor is it surprising that the hallmarks of trauma exposure are indistinguishable from other processing difficulties. Best practices, then, would know to compassionately watch for how some of what we see as LD may have its roots in the amygdala (the “fight, flight or freeze” primal part of the brain) rather than the frontal lobe (planning and execution) (Horsman, 2000).

People who are Deaf

The current study celebrates Deaf culture and looks only to people who are Deaf and Hard-of-Hearing to define that culture for the hearing, and to show us our role within it. The inclusion of Deaf issues here is not an indication that these issues are a liability or a pathology. It is a culture. But it is one in which issues of LD are complex and understudied.



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Learning Disabilities, such as linguistic and memory problems, can be overlooked as factors contributing to a person's learning difficulties because they may be misattributed to communication challenges common to Deaf people. For example, if a Deaf baby was born to hearing parents who did not sign, then that individual received *no Deaf-specific language input/instruction at all* until they became involved with Deaf culture, often at a residential school. So certainly there is a language development delay for that person. But how would one know if that was attributable to LD or identify the concurrent LD that is also at work? Providers qualified to do the necessary sophisticated assessments are rare. The most recent recommendations publically available are found in *A Guide to the Diagnosis of Learning Disabilities in Deaf and Hard-of-Hearing Children and Adults*, published in 1994 in the journal, *American Annals of the Deaf*.

Interventions and supports

Instructional methods

Different learning disabilities can, in a sense, be seen as occupying points on a continuum of learning styles – from slow to quick, from single focus to multi, from momentary to long-term retention. Just as no one is in perfect physical or mental health, all people have cognitive operations at which they excel and cognitive patterns that come naturally to them and act as their default settings. And so as with all people, adults with LD resonate with different instructional methods, and have a variety of strategies that work for them. There is no one-size-fits-all approach, even for people who share types of learning struggles. Still, there are recommended instructional methods and approaches to creating learning environments that remain consistent across the literature.

Mainly, these all recognize the differences between adults and children, and call for strengths-based, holistic assessment and curriculum. The literature also reveals general harmony on principles that should guide instruction in classroom and training spaces. Broadly stated, there is consensus in the LD field on the following:

- that learning that lasts is self-directed or intrinsically motivated; the individual must be involved in a collaborative way
- that skills training should be contextualized in real life and have functional application
- that remedial academic instructional methods should be explicit, direct, intensive, structured and systematic (for example, building and marking very clear transitions between activities)
- that instruction should be varied in modality and multisensory, with many options and changes in learning conditions, and willingness to adapt the environment or pace of delivery
- that compensatory strategies should be explored and affirmed

- that feedback should be frequent and explicit
- that respectful relationships that evoke mentorship and andragogy, more than top-down instructional transmission, are helpful



Relationships: change takes time and trust

Some LDs involve differences in style – or deficits in social skills. Romantic relationships and social interactions with employers, colleagues, and strangers all require intensive and appropriately-paced information processing. To succeed in such a networking-oriented job market, people must expertly read crucial nonverbal messages, and know how to respond to them.

The implications are easy to see when considering how “weird” or inappropriate an individual may seem due to their weakness in processing social cues, or inability to interpret the content or intent of a message, to understand cause and effect, to convey their own intended tone, or to use the right level of formality. But difficulties in these areas are not character flaws or moral failings – or even “traits” at all. These difficulties are both facets of some LDs and their effects; if an individual was segregated in school on the one hand, or had to work *so hard* to stay afloat in school, on the other – they may have missed many opportunities to develop socially. And *social skills are skills like any other*: they can be taught, learned, and practiced in adulthood.

A great article on social skills and LD is *Social Skills and Adults with Learning Disabilities*, found at <http://www.ldonline.org/article/6010/>

Such skills are best practiced over time, with trusted people whom the individual knows as allies. It takes a long time to get to know someone, and this has to happen in order to understand what really is stopping someone from reaching their highest potential. If an individual has experienced tough times, it may take longer to feel sufficiently safe to disclose enough to access meaningful support. Overall, the central principle is that adults with LD must be respected as adults, and interacted with as whole people. In the atmosphere of dignity created by authentic and boundaried connection, people can grow secure enough to learn and to challenge themselves.

Technology's growing role

Careful needs-based selection of assistive technology is paramount, but more importantly, selection has to be collaborative with learners, chosen according to their preference and goals. The phenomenon of "buy in" is central.

Adaptive and assistive technologies are becoming more and more widely available, affordable, and understood. E-readers, text magnifiers, screen readers and voice-to-text programs are words that need less and less explanation, especially in education and training environments.

Implementation and use of these technologies will involve resources including, but not limited to, the financial. Practitioner training and enthusiastic compliance with accessibility policies must also be in place when technology enters the picture. For example, in the delivery of training or academic curriculum, in order to use documents that would use a screen reader, the layout of documents would need to observe UDL principles of clear document design (see p. 36).

What follows is a *brief overview from LDAO* of the types of technology with which clients and learners are increasingly familiar:

Screen Reading Software

Screen reading software will read the text that appears on a computer screen to the user. Screen reading software is particularly useful for individuals with dyslexia, but is also useful for people who are auditory learners.

Speech/Voice Recognition Software

Speech/Voice recognition software, sometimes referred to as speech-to-text software, will convert the spoken word into text on a page, or into computer commands (e.g. opening files or navigating software applications) via a microphone. Speech recognition software is particularly useful for individuals who have written expressive difficulties and difficulty using keyboards to navigate software applications.

Word Prediction Software

Word prediction software will present possible words that a user is looking for while typing text, which the user can select with a mouse click. The software will also predict the next possible word based on frequency of usage and context. This technology is particularly useful for individuals with difficulty spelling, and for people who have difficulty typing.

Optical Character Recognition (OCR)

Optical Character Recognition (OCR) software will convert paper based text into electronic text for use with screen readers. A scanner is needed to scan materials from book or other paper-based text. The OCR will then recognize the letter shapes through imaging analysis and convert them to electronic text. This technology is particularly useful for individuals who cannot access printed materials due to low vision or processing deficits.

Visual Organizers

Visual Organizers are used to present ideas, concepts, information, and related concepts in the form of charts, tables, graphs, flowcharts, and diagrams. This technology is particularly useful for individuals who have difficulty processing, analyzing, and comprehending text-based information, but is also used for people who are visual learners.

Electronic Organizers

Electronic or digital organizers are hardware devices or software used for time management and resource organization. This technology is particularly useful for individuals who have difficulty with time management and organization, and is also used by people who are tactile learners and prefer opportunities where they can actually do something physically with the information they are to learn.

(Adapted from Assistive Technology: A snapshot, LDAO, 2001)



For an integrated approach to the use of technology in training programs, please see the *Fanshawe College Model of Support for Apprentices with Learning Challenges* (see resources section for link).

ONTARIO VOICES

What a wealth of wisdom and experience in this sector! And the pressures and potentials in it mirror those of the wider world: populations growing in diversity and size, bringing the need to deploy resources in increasingly efficient ways. This project heard from many Ontarians involved at all levels with EO service providers, and found compelling patterns and interesting harmonies. What follows is not an exhaustive analysis of that data by any means. It is a sketch intended to leave you with a few impressions – that we care about the same things and that there are rich possibilities for cross-sector organization and resource sharing.

What EO providers are saying about their experiences with clients and learners

Interviews with key informants revealed a framework in which to consider EO structures and practices, both in terms of best practices and gaps/unmet needs. Four themes emerged organically in the conversations: service coordination and development, assessment and documentation, supportive technology and design, and relationships.



In these conversations, real appreciation for integration and a team-based approach took shape. The importance of robust and accessible assessment mechanisms became clear, as did the fundamental need for authentic relationships with clients and learners. There was a strong commitment across the sector to interact with unique individuals rather than to implement practices aimed at categories or groups, and a growing excitement, or at least openness, around the new technologies.

Frustrations, too, were voiced – many felt a lack of expertise and specialized training in the field of LD was causing confusion in terms of intake, referrals, and advocacy. Disconnection among EO providers, pressure to move clients and learners along within certain timelines, and a lack of centralized coordination were named as things that inhibit wraparound service. The prohibitive expense of formal assessments and assistive technologies was also often named.

These themes continued to echo in the project focus groups, where there was talk of coordinating referrals, bringing LBS and ES providers together to conference, and, with clients and learners, addressing learning needs and developing individual relationships over and above paying attention to labels. Yet the importance of documentation is not lost on providers, and there was a desire to talk about identifying the challenges of clients and learners at the intake level. Providers notice fear and reluctance around disclosure of LDs, and want to strategize to increase the likelihood of disclosure.

“Our learners are adults who have had transactions with the education system. If they have not been diagnosed then, then we have to consider mental health issues as well. If they come in with paperwork, it is easier to serve them, but there are a lot of barriers nonetheless. And then if they don’t have paperwork, they are not very good at self-advocating...and it is very difficult to have someone tested. I have tried that several times, but I have not been successful due to red tape and cost.”

There is simply no substitute for “one trusted person... the human touch...the deep needs assessment and the listening component [that is] the empathy of a social service support.” These are the words of a Manager at LDATD, who was speaking of the efficacy of truly knowing a client when finding the right training or employment fit. “There is an understanding of their abilities on the side of the provider... [U]pon talking with a provider who understands labour market trends [as well], the individual is equipped and empowered to continue their own search.”

What learners and clients are saying about their experiences with EO providers

What this toolkit names as “concurrent issues” was perhaps the theme that resonated most often among people who contributed their voices. Complex relationships with anxiety, depression, and self-medication had their roots deep in people’s biographies. Stigma, shame, embarrassment, harsh self-judgment and the agony of being singled out were named again and again. Both receiving a formal diagnosis in childhood (being put in the “stupid” class, being bullied and labelled) and not receiving a formal diagnosis (being assumed to be unintelligent, “just not getting it”) were often recalled with pain.

The impression that no one cared/knew/listened at school was often coupled with memories of instability or worse at home. These issues set the stage for what is desired and needed in the present from EO providers serving these clients and learners. The importance of checking in on a personal level and having individual connections with service providers (everything “depends on your worker”), including opportunities for one-to-one support, were repeatedly noted. But the wraparound service benefits of a team-based approach are noticed too: when the organization in question has a team culture, the community is better able to retain individuals. The value of the sense that they matter, that people care, and that this work is taking place in a community was a recurring theme.

On the question of what works, the new assistive technologies played a dominant role, along with being encouraged to develop their own strategies and workarounds. Repetition, “showing” rather than “telling”, delivery targeted to various learning styles, and the chance to engage in comforting practices (taking breaks, moving, music, etc.) were also named as helpful.

“To me it is about a lack of consistency between programs. Everyone is doing their own thing. I like a team approach where I can access all sorts of programs and not just EO. Allowing incentives like food, coffee and bus fare are helpful. We are all individuals and we need to be listened to. If you walk in and say you want an education and they tell you ‘you don’t fit my mandate’ – well come on! And to get services, you have to tell them you have a disability. [It takes] a lot of courage. I shouldn’t have to do that.”

“There’s a lot of stigma when you tell people you have a learning disability. I’ve experienced here that they talk to you like a little girl. You don’t need to talk down to me; we’re not stupid. In fact, we may be more intelligent because we’ve had to learn to deal with problems...”

Deaf clients and learners

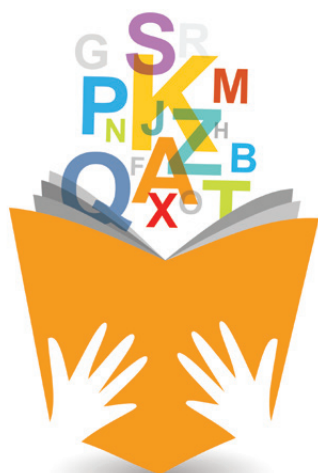
Deaf individuals who may have LD navigate a world and learning context that can often be viewed as inhospitable: it may be near-impossible to get an assessment, and in the absence of the appropriate expertise in interpretation, the results can be nearly meaningless. Consider the following case:

“More people are getting involved, but there are still so few qualified people to assess a Deaf person with an LD, so few resources. The Canadian Hearing Society has Connect Services, a mental health/ counselling department for the Deaf community. They have ONE Deaf counsellor [with whom they can use ASL] – others have to use an interpreter.

One student is working with that Deaf counsellor; he wishes to pursue post-[secondary]. They realized there were barriers. He’d had an assessment done in high school but it’s outdated – they asked us if we had funding for a new one.

There is one person who is qualified in town, but it’s \$3K. Our DSO can’t pay for it because he’s a non-fee-paying student, so they referred us back to CHS. So CHS got some funding and he got it done. And all it said was yeah he needs extra time, a learning strategist, an interpreter and all the things we already do in Upgrading! So now I have to contact the counsellor and have everyone meet again... I still don’t know what to do. He’s missing a lot of classes. It’s still an English issue. He’s still struggling. We’re just still using current practices.”

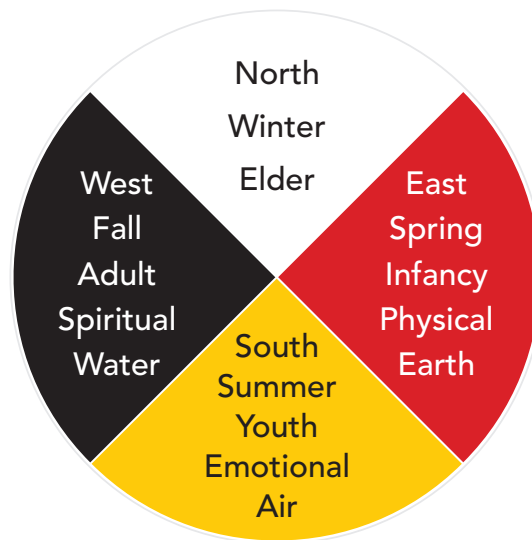
The focus group for Deaf learners found a similar sense that usual definitions and approaches are not quite relevant. There was a general lack of familiarity with formal assessment processes, and uncertainty about what to attribute memory and literacy struggles to. But what works to support learning – great emphasis on the visual and the iconic, hope for emerging technologies, and attention to context – all emerged as important. This context is both vocabulary/information in authentic context, and an acknowledgement of Deaf cultural context and perspectives.



“When I’m reading, I’ll look at a dictionary but I won’t understand what’s in the dictionary unless there’s a picture attached to it. Attaching a visual to a written word helps, but I don’t always understand the written word. I use a visual dictionary.”

Aboriginal clients and learners

The implications of some concurrent concerns that people deal with can't be considered extra/on top of LD. Rather, they shift both the nature of the issues and their solutions. This is as true of Aboriginal learners living on and off reservation as it is of Deaf learners. Literacy and skills training programs for Aboriginal learners are developed and offered within a specific socio-political and historical context, and these programs can be perceived as part of broader efforts to redress systemic inequities, and even seen as a support to restorative justice.



The statistics on the economic and social wellbeing of Aboriginal peoples in Canada are sobering. Rates of suicide, correctional and psychiatric incarceration, and self-medication with substances are all many times the national average. Colonization, violence, racism and discrimination, and of course, the legacy of the residential school system are all factors contributing to a complex and challenging context for EO providers and learners/clients in this stream.

"I didn't notice until I was older and the teachers didn't notice and my family didn't notice. I dissociated because I came from an abusive home. I would fantasize and deliberately take myself out of the bad situation and put myself in the good situation. I missed a lot of school because of my abusive home. Teachers thought I was stupid and I thought I was stupid because I missed a lot of school and didn't know the material. I was called into the principal's office and was threatened with the strap because they thought I was intentionally not coming to school. I quit school at age 15..."

There are many cultural stereotypes about Aboriginal people not learning in a “linear” way and about time and other abstract constructs being shaped differently in traditional cultures. Some of these things are true, but at the same time, Aboriginal people are diverse and so are the educational and training supports that work for them. This is not even to mention the impacts on service provision of the rural/urban divide.

The current research does corroborate the popular idea that a more holistic approach is better, hearing ideas about incorporating music into lessons, for example, and about how helpful it is to work in a supportive and understanding community, where people are “allowed to be who [they] are”.

But school itself remains a site of trauma for many. Deeply internalized feelings of shame and distrust of educational spaces are the reverberations of inter-generational trauma firmly planted by the residential school system. To understand the long-term impacts of residential schools in Canada, please read *History of Residential Schools in Canada*, and check out Christianna Jones’ brave and beautiful video on the same topic at www.learningandviolence.net. (See the resources section on pages 42-43 for links to these two resources.)



SO WHAT DO WE DO?

Assessments: access

“In the thirteen years I’ve been working there, I have never had a single person say to me ‘I’m dyslexic’. They’ll say ‘I can’t read’.”

- Community-based LBS practitioner

The conversation can start respectfully and descriptively, with open-ended questions about what someone wants to work on, and what tends to get in the way of their learning. What specifically do they notice when reading? What have other people said about their learning? *They may answer in a very deficits-based way because they want to belong in your program.* It is possible to re-frame what they say to focus on their ingenuity and resilience.

The next step is often a kind of screening, such as an interview or questionnaire. Upon getting the results, if there is sufficient reason to perceive a given barrier as falling under the current definition of a learning disability, and if the individual is willing and interested, then formal assessment can be arranged.

To assess who is sent for LD screening, ATN in London, Ontario, uses the Delta Screener to arrive at a learning profile. (See the resources section on pages 42-43 for a link to the Delta Screener tool.) This questionnaire covers the following topics: Language and Developmental History, Previous Academic History (Elementary, Secondary, Post-Secondary), Family History, Health and Medical History, Employment History, Current Academic Status, Current Learning Challenges, Current Strengths and Coping Strategies. During screening, the “person talks to a lot, historical background... it’s a whole framework of skills development – right from birth. [The data is] collected and digested; are there indicators?” If there is enough evidence of LD, the individual is sent for diagnostic assessment.



Please take a look at *Difficult or Disability? It's Worth a Closer Look* from The Literacy Network of Durham Region – it has loads of information on screening tests on pages 26-28, and on page 35 it explores possible funding sources for formal psychoeducational assessments.

Further information on screening and assessment, as well as information on funding for an assessment (for post-secondary students in particular) can be found on pp. 37-39 of the Literacy Coalition of New Brunswick's excellent resource manual, *Adult Literacy and Learning Disabilities: Best Practices for Success*.

(See the resources section on pages 42-43 for links to these resources.)

Accommodation: what it might look like

Every initiative to accommodate has to be unique to the strengths, needs and desires of each individual, and arrived at in consultation with them. Yet sometimes people can't figure out what might help, either because no one has ever asked them before, or because they've only recently articulated the nature of their challenges.

What follows is adapted from LDonline's excellent online resource, *Accommodations and Compliance Series: Employees with Learning Disabilities*. Although this **list of accommodation ideas** uses language that targets mainly workers and workplace situations, there are plenty of ideas to try whenever people gather for training, education, or employment activities.

Reading

People with learning disabilities may have limitations that make it difficult to read text. Because it can be difficult to visually discern letters and numbers, these characters may appear jumbled or reversed. Entire words or strings of letters may be unrecognizable.

Reading from a paper copy:

- Convert text to audio
- Provide larger print
- Double space the text on print material
- Use color overlays to help make the text easier to read
- Provide materials that are type-written, in a font that is not italicized
- Have someone read the document aloud to the individual
- Scan the documents and use Optical Character Recognition (OCR), which will read the information aloud
- Use a reading pen, a portable device that scans a word and provides auditory feedback

Reading from a computer screen:

- Use screen reading software, which highlights and reads aloud the information on the computer screen
- Use form-generating software that computerizes order forms, claim forms, applications, equations, and formula fields
- Use a manual or electric line guide to help individuals “keep their place” on the computer monitor
- Alter color schemes and fonts to suit the individual’s visual preferences

Spelling

People with learning disabilities might have difficulty spelling, which can manifest itself in letter reversals, letter transposition, omission of letters or words, or illegible handwriting.

- Allow use of paper and electronic reference materials such as a dictionary or a thesaurus
- Use word prediction software that displays a list of words that typically follow the word that was entered in a document
- Use word completion software that displays sample words after someone starts typing part of a word
- Allow a buddy, coworker, or supervisor to proofread written material



Writing

People with learning disabilities might have difficulty with the cognitive or the physical process of writing.

Cognitive process of writing: People with learning disabilities might have difficulty organizing a written project, identifying themes or ideas, structuring sentences or paragraphs, or identifying and/or correcting grammar errors.

- Use a computerized graphic organizer
- Use software programs assisting with spelling, reading, and grammar
- Provide electronic/talking dictionaries and spellcheckers
- Create written forms to prompt the writer for information needed
- Allow the individual to provide a verbal response instead of a written response
- Permit use of reference books such as a thesaurus or dictionary

Physical process of writing: People with learning disabilities may have difficulty with the physical process of writing. It may be difficult to fill in blanks, to bubble in dots, or to line up numbers or words in a column, on a line, or within a margin. Handwriting may be illegible.

- Provide writing aids
- Use line guides and column guides
- Supply bold line paper
- Allow use of all digital devices and personal computers
- Use speech recognition software that recognizes the user's voice and changes it to text

Mathematics

A person with a learning disability could have difficulty recognizing or identifying numbers, remembering sequencing of numbers, understanding the mathematical sign or function (whether symbol or word) or performing mathematical calculations accurately and efficiently.

- Use scratch paper to work out math problems
- Permit use of fractional, decimal, statistical, or scientific calculators
- Provide talking calculator
- Use calculators or adding machines with large display screens
- Provide talking tape measures, clocks and scales
- Use pre-measurement guides or jigs
- Post mathematical tables/charts at desk or in work area

Speaking/Communicating

People with learning disabilities may have difficulty communicating with co-workers or supervisors. For people with learning disabilities, poor communication may be the result of underdeveloped social skills, lack of experience/exposure in the workforce, sometimes compounded by shyness, intimidation, behaviour disorders, or low self-esteem.

- To help facilitate communication, provide advance notice of topics to be discussed in a meeting
- To reduce or eliminate anxiety, provide advance notice of the date of the meeting when employee is required to speak
- Allow the employee to provide a written response in lieu of a verbal response
- To reduce or eliminate the feeling of intimidation, allow employee to have a friend or coworker attend meeting

Organizational Skills

A person with a learning disability may have difficulty getting organized or staying organized.

- Help the employee reduce clutter in their work area
- Hire a professional organizer
- Use a colour-code system to label or identify materials
- Use calendars (paper, electronic, or both) to remind of deadlines, meetings, etc.
- Build organization skills by attending time management workshops
- Build organization skills through self-education at sites like mindtools.com
- Build "catch up" time into the work week or work day

Memory

A person with a learning disability could have memory deficits that affect the ability to recall something that is seen or heard. This may result in an inability to recall facts, names, passwords, and telephone numbers, even if such information is used regularly.

- Provide checklists to help remember job tasks
- Use flowchart to describe steps to a complicated task (such as powering up a system, closing down the facility, logging into a computer)
- Safely and securely maintain paper lists of crucial information such as passwords
- Prompt employee with verbal or written cues
- Allow the employee to use a voice activated recorder to record verbal instructions
- Provide additional training time on new information or tasks
- Provide refresher training as needed

Time Management

A person with a learning disability may have difficulty managing time. This can affect the person's ability to organize or prioritize tasks, adhere to deadlines, maintain productivity standards, or work efficiently.

- Make to-do lists and check items off as they are completed
- Use calendars to mark important meetings or deadlines
- Divide large assignments into smaller tasks and goals
- Remind employee verbally of important tasks or deadlines



Social Skills

People with learning disabilities may have difficulty exhibiting appropriate social skills on the job. This may be the result of underdeveloped social skills, lack of experience/exposure in the workforce, or other issues such as shyness, intimidation, behaviour disorders, or low self-esteem. This can affect the person's ability to adhere to conduct standards, work effectively with supervisors, or interact with coworkers or customers.

- Thoroughly review conduct policy with the employee
- Provide concrete examples to explain inappropriate behavior
- Provide concrete examples to explain consequences in a disciplinary action
- Explicitly recognize and reward appropriate behavior
- Provide detailed day-to-day guidance and feedback
- Offer positive reinforcement
- Provide clear expectations and the consequences of not meeting expectations

- Give assignments verbally, in writing, or both, depending on what would be most beneficial to the employee
- Establish long-term and short-term goals for employee
- Provide sensitivity training to promote disability awareness
- If feasible, allow the employee to work from home
- Help the employee “learn the ropes” by matching them with a mentor
- Make the employee attendance at social functions optional
- Allow the employee to transfer to another workgroup, shift, or department



Access LDonline’s complete *Accommodations and Compliance* series and much more at www.ldonline.org.

To allow personal control over how you target your accommodation-oriented questions, the US-based Job Accommodation Network (JAN) features a system called **SOAR, the Searchable Online Accommodation Resource** – <http://askjan.org/soar/> . It’s designed to let users explore various accommodation options for people with disabilities in work and educational settings – it not only includes more thoughts on accommodations for learning disabilities, it also has material on working with people who are Deaf or Hard-of-Hearing.

Instruction: best approaches

Creating safe learning environments – for mind and heart

Following the principles on p.14, the best instructional methods are explicit, intensive, individualized, and varied (especially adding visual and kinesthetic elements, and presenting material in different ways). There is a lot of space for one-to-one work, help breaking things down into smaller steps or chunks, and plenty of concrete examples, applicable to what the individual is really doing or training/studying to do.

In general, instruction must be: structured, connected, informative, explicit, scaffolded, intensive, process-sensitive, accommodated, evaluated, generalizable and enduring. Each of these is described and illuminated with examples in the Literacy and Learning Disabilities Special Collection's '*LD Appropriate Instruction*' – *Characteristics* (see resources section for link).

Clients and learners are adults who happen to have learning challenges, rather than learning challenged children who have grown up.

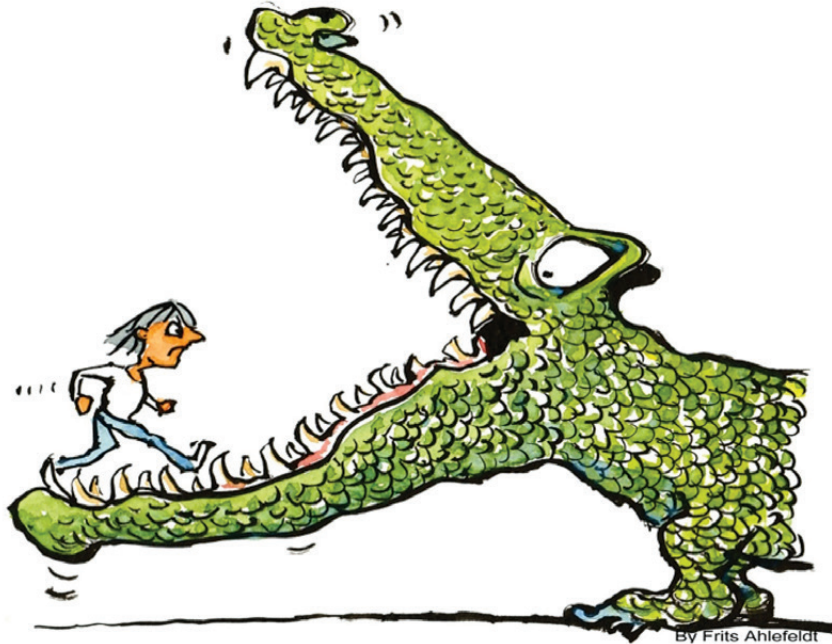
Along with these practical considerations, the usual basic principles of adult learning remain applicable when working with adults who have LD. This means honouring people's experiences, knowledge and wisdom; it also has everything to do with working from a respectful place – one that doesn't make any assumptions about the capacities or inner lives of other people. Clients and learners are adults who happen to have learning challenges, rather than learning challenged children who have grown up. It's a subtle distinction, but also a good reminder of where our starting place needs to be! Elena Aguilar's list of the five things that are true of all adult learners in *The Science Behind Adult Learning* echo this reminder.

Five things to remember about how adults learn best

1. The learning experience has to feel good.
2. Adults want to be the origin of our own learning.
3. Adults will commit to learning when we believe that the objectives are realistic and important for our personal and professional needs.
4. Adults need direct, concrete experiences for applying what we have learned to our work.
5. Adult learners come to the learning process with a self-direction

From The Science Behind Adult Learning by Elena Aguilar, 2011

While you're reading Elena Aguilar's *The Science Behind Adult Learning* article, be sure to explore all of the www.edutopia.org website. Although largely dealing with primary levels of education, its progressive and innovative material can be readily generalized and provide fresh insights.



Even with all that solid methodology in place, walking into a training or educational environment can feel **like this** for many people. And in very concrete ways, learning depends on relationships and environments that feel like they're not going to eat you alive – because of how our brains work and how our physiologies hold on to remnants of difficult experiences.

Dr. Jenny Horsman in Toronto researches the impacts of violence on learning, in particular illuminating the neuroscience connections that explain why past trauma inhibits our capacities:

Messages of danger bypass the neocortex, where thinking, planning and reasoning take place, and go directly to mechanisms which trigger the instincts of flight, fight or freeze. To prepare, the brain releases chemicals and closes down parts of the brain not necessary for survival. It also dampens activity in the Broca's area, which is responsible for language. Repeated trauma can lead the brain to see all novelty, excitement or anxiety as a threat. (Horsman, 2010)

The trick, however, is that **learning new things is always an experience of novelty**; when response patterns of panic or disconnection are triggered by change itself, the chance to learn is radically compromised.

The next time you find yourself thinking, *"But I just said that, I just gave that instruction"*, consider the neuroscience in plainer terms: the brain will shut down everything it deems non-essential in an emergency, like low frequency sounds such as the normal human speaking voice.

For even more insight into how the brain's stress-reactions are affected by long-ago experiences, please see *Childhood Trauma Alters Neural Responses to Stress* by Janet Fang (see resources section for link).

There is hope, though, for people who are easily triggered into anxiety. New research in neuroplasticity, a notion quickly growing in popularity, suggests that through training and practice, we can literally develop new synaptic pathways that are fortified by use. The principle of neuroplasticity turns on the **brain's capacity to physically/structurally change in response to stimulus and activity** – something that until recently researchers believed to end with childhood. We now know that **these processes can and do continue throughout adulthood** (Cherry, 2015). Similarly to how a path through a meadow walked on repeatedly over time will become bare, packed earth, we can develop new neural interconnections and thereby develop and adapt new functions believed to be the physical mechanism of learning.

Dr. Dan Siegel's varied and accessible treatments of the healing and hopeful possibilities introduced by these developments in neuroplasticity emphasize how our experiences – especially those in interpersonal relationships – shape these new neural connections (Siegel, 2012). Visit Dr. Siegel's website at www.drdansiegel.com for resources.

The Dyslexia-Stress-Anxiety Connection published by The International Dyslexia Association suggests we strategize with learners to reduce the sense of threat and risk associated with learning. "Years of self-doubt and self-recrimination may erode a person's self-esteem, making them less able to tolerate the challenges of school, work, or social interactions, and [make them] more stressed and anxious." (IDA, 2013)

First, clients and learners need to relax enough to be present both physically and mentally in order to take in information. When people have spent so much of their lives being compared to other people, judging themselves harshly, hiding their truth, experiencing dissociative moments when they miss things, leading to frustration and agony, it is first a **sense of safety** that will introduce the possibility of learning.

Physical: Begin by setting up a safe learning environment. Creatively adjust the physical space to aim for welcoming lighting, colour, texture, acoustics, arrangement of furniture, orderliness, and variety – beauty and a flash of something from nature won't hurt. Some of these ideas may be tough to implement in our institutions with their tight budgets and fluorescent lights, but little things are always possible – arrange tables so people don't feel trapped, give the choice of sitting at close quarters or at a distance, ask if learners/clients prefer the blinds open or closed, put a vase on a table, bring a communal cardigan for those who get cold.



Emotional: We can never eliminate all potential triggers, as we can't know what might remind an individual of trauma. But we can reduce the chances of something insensitive being said or done in all kinds of public spaces. For example, if working in a group, the joint creation and maintenance of group guidelines ensure a safe learning space by naming differences and contrasting needs in groups made up of people with social, cultural, and cognitive variance. This creates conditions that go beyond "tolerating" differences, instead celebrating how they create a rich learning environment. Negotiation and empathy are skills that can be developed.

In all group settings, straightforwardly naming that violence is common in our world and comes in many forms helps normalize it – not to say that violence is inevitable or natural, but rather to reduce the sense of shame and stigma for people who feel like they have a "shameful secret". Addressing groups as if anyone/everyone in the group may have experienced violence does two things: it alleviates the pressure for individuals to disclose, and introduces the balm of "not crazy/not alone". It is also an expression of Universal Design for Learning (see more on p. 36). To explore several ways to bring these understandings into learning spaces, visit the interactive "Helping Others Learn" page at the Learning and Violence website. The link is: <http://www.learningandviolence.net/helpothr/hlpothers.htm>

The strategies for instruction at [learningandviolence.net](http://www.learningandviolence.net) are very concrete: its Student Kit (http://www.learningandviolence.net/StudentKit/reception_desk.html) is a curriculum resource for all adult learners, particularly suited to LBS programs, that addresses the impacts of past and present violence one by one. For example, some people have an inability to embrace complexity and get caught in "all or nothing" thinking; there is a multimedia module to work through that strategizes for successful learning on the "middle ground".

Chances are you already do many things to create healthy learning spaces. Maybe you express faith in your clients or learners; they sense you see them as individuals; you offer attention, genuine encouragement, sincere constructive feedback, and comfort during setbacks. This is excellent – respectful and authentic relationships have everything to do with the tone we bring, and our own internalized beliefs about other people’s capacities. Far from arousing feelings of pity or the impulse to rescue, engaging with people’s stories of how they have negotiated their difficulties is often humbling and very instructive.

A strengths-based approach commends the workarounds and creative compensations that resourceful adults have had to use as strategies all their lives. They make links in brilliant and unique ways, but these have often been undervalued. These gifts are often explored through the lens of neurodiversity. Another video by Dr. Sheldon Horowitz titled, *Strengths of Students with Learning Disabilities and Other Disorders*, celebrates neurodiversity and is not disorder-focused. This video is focused on children with LD but is well worth viewing (see resources section for link). Finally, the emotional texture of an attitude that honours resilience and workarounds is beautifully expressed in Lucy Clark’s article, *My daughter, my beautiful failure*, featured in The Guardian in 2014.



“In an education system that long ago became a race... my girl opted out of the competition early. Consequently now she is one of the ones coming last by a mile, hobbled by an unseen, misunderstood disability and yet still so determined to cross the line... But for the compassion, patience, and implicit understanding of one magnificent teacher, and a clutch of friends coaching from the sideline, she might not have made it.”

From *My daughter, my beautiful failure* by Lucy Clark, The Guardian, Nov 4, 2014

Relationships of training, coaching and education revolve around information sharing, energy exchange, and communication – like all inter-adult relationships. In all cases, relationships develop between human beings in all their uniqueness – not between categories or groups, such as “hard to serve clients”. Of all the ways to support adults with LD, perhaps counterintuitively, it is a universal approach to design that may respond most effectively to individual needs.

Universal design for learning

Universal Design for Learning (UDL) acknowledges that there is no one way of learning any material or skill. Among other things, this kind of design is driven by how learners respond to varied and multiple ways of representing information (instruction), and need the chance to use varied and multiple ways of expressing it (assessment). It emphasizes clarity, flexibility and it preemptively eliminates barriers by using a greater variety of modalities, engaging more of the senses, and offering more choice so learners can learn what really engages them.

Documents that are as clear as possible, teaching methods that are as engaged, as relevant and as explicit as possible, using a wide variety of strategies in instruction, bringing inclusive materials (like curriculum that reflects diversity) into any learning environment – these are simply good practices to support everyone’s learning. Consider the wheelchair accessible ramp to a building, and how grateful the delivery person with a dolly is to see that ramp, or the single parent with a double stroller.

The seven fundamental principles of Universal Design for Learning:

- Be accessible and fair.
- Provide flexibility in use, participation and presentation.
- Be straightforward and consistent.
- Ensure information is explicitly presented and readily perceived.
- Provide a supportive learning environment.
- Minimize unnecessary physical effort or requirements.
- Ensure the learning space fits students’ needs and instructional materials.

From George Brown College’s Accessibility Awareness Training for Educators

There is a tremendous amount of supportive material online to help practitioners of all kinds design their learning materials and experiences in this way. The popular internet entity known as Grammar Girl shares guidelines for writing for dyslexic readers, such as avoiding abbreviations (see resources section on pages 42-43 for link to article). But much of UDL is common sense: word things as clearly as possible, make text big enough, and consider how your document would sound if read aloud by a text-to-speech screen reader. Clear language and design keeps the focus on the content you're trying to transmit rather than its form.

Finally, please see the *National Center on Universal Design for Learning*, for its comprehensive collection of resources and examples; and *CAST: Transforming Education through Universal Design for Learning*, for its explicit focus on education. (See resources section on pages 42-43 for links.)

Assistive Technology

All of the following supportive technologies are currently the strongest examples of their type, so do check them out – but this field changes quickly, so always look for the latest iterations (hint: prices tend to come down over time) (full urls all included for print version):

- Telepresence robots provide access to learning or training environments when travel is impossible; Double also observes ergonomic principles: <http://www.doublerobotics.com/>
- Text-to-speech software voices any written text; Voice Dream does so in 27 languages: <http://www.voicedream.com/>
- Speech-to-text software lets you dictate to your device; Dragon Naturally Speaking allows for voice-commanded web navigation: <http://www.nuance.com/dragon/index.htm>
- The Kurzweil system is literacy technology that offers supportive reading and writing assistance, reinforces for retention, and assesses skills, in observance of the principles of UDL: <http://www.kurzweilededu.com/default.html>
- Screen readers for people with low or no vision to hear whatever is on a screen, including its formatting; JAWS (Job Access With Speech) supports navigation and has output in Braille and speech: <http://www.freedomscientific.com/Products/Blindness/Jaws>

Many of the options for assistive technology unfortunately can be quite costly and this is a significant challenge for most individuals involved with EO service providers. The spectrum of assistive technology options runs from very costly robots to accessibility apps that come free with all iPads, which in and of themselves are quite expensive.

Faculty training is hugely important, as is allowing physical freedom and movement in the classrooms. All these things benefit students, and support everyone's ability to pay attention and engage with their learning.

One helpful free-of-cost assistive technology tool is downloadable, text-to-speech software. You can find this tool at the homepage of www.naturalreaders.com.

Another valuable tool is the Livescribe Smartpen, available for about \$130, which syncs handwriting to digital devices. You can find the Livescribe Smartpen at www.livescribe.com.

"The pen has been absolutely incredible; to take notes with the pen and the pad has dramatically increased my ability to study afterwards because it records the professor's voice at the exact same time as I'm taking notes, and then at home I can re-write my notes – you press the pen on a given word and it plays exactly what the professor was saying at that moment. The information shows up in my handwriting on the computer just as I would write it in the book."

Recent LBS learner, for whom Disability Services at his college provided a bursary for the pen.

Other online resources

While some Ontario-based publications may sometimes be too focused on the Toronto context, there is a wealth of helpful and relevant resources online that feature many perspectives from different places. These resources are useful to anyone anywhere for the following purposes:

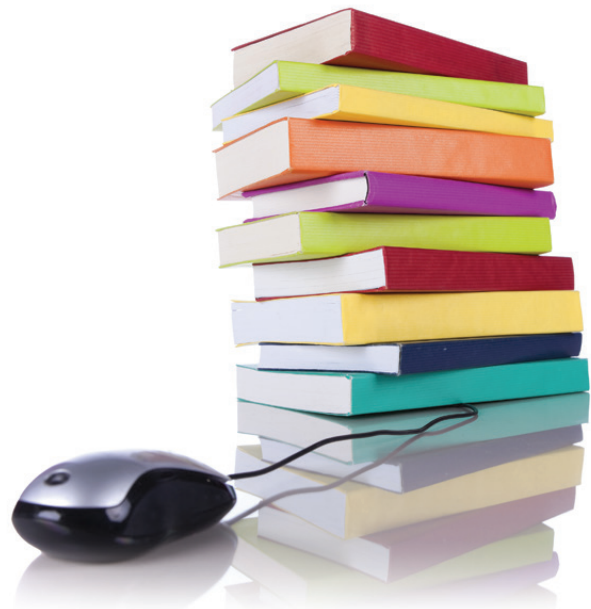
Finding community

Many online resources find their value in galvanizing communities of people who have shared struggles, offering them connection as well as new ideas and tools. The *Learning Disabilities Association of Ontario* has a wealth of resources and its “Websites and Online Resources” page functions as an excellent aggregator of good theory and practice, as well as relevant policies. <http://www.ldao.ca/ldadhd-resources/websites-and-online-resources/>

LDonline, based in Arlington, Virginia, is a website with background information, strategies, advice, resources, recommendations and links for people with LD. <http://www.ldonline.org/indepth/adults>

Additionally, the *LearningHUB* is an Ontario-based, partially EO-funded online space that offers free full courses on a variety of topics such as lifelong learning and goal setting. Among these is a course called “learning strategies for students with learning disabilities and ADHD”. http://www.learninghub.ca/course_listing/courses.aspx

Additionally, be sure to check out the excellent resources at Deaf Learn Now and Good Learning Anywhere. Deaf Learn Now (www.deaflearnnow.ca) is an online LBS program for Deaf and Hard of Hearing Adults in Ontario, run by George Brown College. Good Learning Anywhere (www.goodlearninganywhere.com), run by the Sioux Hudson Literacy Council, provides online distance learning programs for adults in Ontario, with a focus on Aboriginal learners and clients.



Finding local services

Although the Learning Disabilities Association of Halton (LDAH) does not endorse or recommend any of the service providers listed on their website, the LDAH does have an excellent list of Ontario professionals who are specialists in law, learning strategies, counselling, and providers of psychoeducational assessments.

<http://ldahalton.ca/finding-help/professionals/>

Finding Support and Advice

Knowing how to support clients and learners when you come from outside their communities can feel like delicate business. Leaving the expertise in the hands of the individuals in question is half the equation; informing yourself deeply is the other half. *Resources for practitioners on violence against Aboriginal people* offers background readings to expand understanding of the context in which we do this training and education. http://www.learningandviolence.net/helpothr/Resources_for_Practitioners-Violence_Against_Aboriginal_People.pdf

The Khan Academy is a website that walks users through lessons on many topics (though it's famous for its Math instruction) in explicit and visual modalities useful to so many learning styles, including those with auditory and textual processing difficulties. www.khanacademy.org

Good2Talk is a free, confidential and anonymous helpline providing professional counselling and information and referrals for mental health, addictions and well-being to post-secondary students in Ontario, 24/7/365. <http://www.good2talk.ca/>

York University's *Learning Disability Services' Should I Disclose my Learning Disability to an Employer?* is an accessible strengths-based guide to disclosing LD. It resists the tendency to be too sunny and acknowledges that not every recipient of the disclosure is going to jump to accommodate – disclosure may even disadvantage the individual, so they should weigh the decision carefully. At the same time, this resource provides a map of how to do so in the best way possible, even providing case studies and scripts for individuals to consider and compare. <http://lds.info.yorku.ca/career-services/disclosure/>

FINAL THOUGHTS

Jamie was initially referred to us from Grand River Hospital and was assessed in January 2009. He was diagnosed with dyslexia as a child and completed high school and an apprenticeship as a welder. However, he developed seizure epilepsy on the job and was required to have brain surgery. Following the surgery, Jamie worked with a speech therapist as well as an occupational therapist in order to regain some basic skills that were lost. As a result, he also lost his license as a welder and was not able to independently carry out things like take care of his own banking. With the help of several tutors over the last few years, Jamie has been able to regain his welding license, has drastically improved his reading ability and is now working on improving his writing skills. He is now able to do most of his daily tasks and activities independently.

- Community-based LBS practitioner

As with many individuals who fall significantly behind the curve in learning and training environments, the contributing factors are both complex and out of Jamie's control. What supported his success took time: time in a program, time with people who cared. Time to heal. But Jamie alone remains the story's hero.

Decision-making goes best when the people most affected by them have the greatest say in those decisions. When you are at a loss with certain clients or learners, always start by finding out from these resourceful and resilient people what they think might help. Show them this toolkit and MTML's complementary Learners Toolkit and ask what the most compelling ideas are for them. Collaborate to find your course of action.

Trust in learners and clients to know what is best for them; trust in their ability to develop skills, break old patterns, and transform their own lives. Trust yourself too – very likely, you know what to do – you may just need time, resources, and institutional/bureaucratic support to do it. Reach out for that support. Become involved as a citizen to create conditions for organizational development – including communication with elected officials to build awareness and encourage government policies and funding that nurture this work and recognize the time it takes.

And don't forget to nurture yourself – supporting people who may be going through hard times is complex work, and it's an ever-evolving process to set our own boundaries, and help people in ways that aren't too costly for us. On this topic, check out the Teachers Room, including resources like *But I'm Not a Therapist* and more at <http://learningandviolence.net/StudentKit/TeachersRoom/TeachersRoom.html>.

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Helpful Resources

- Deaf Learn Now – www.deaflearnnow.ca
- Delta Screener (ATN) – http://www.cacuss.ca/_Library/Resources/ENGLISH_DeltaScreener2011_Fillable_.pdf
- Dr. Dan Siegel – www.drdansiegel.com
- Edutopia – www.edutopia.org
- Good Learning Anywhere – www.goodlearninganywhere.com
- Grammar Girl's Writing for Dyslexic Readers – www.quickanddirtytips.com/education/grammar/writing-for-dyslexic-readers
- Job Accommodation Network (JAN) – SOAR system – Searchable Online Accommodation Resource. <http://askjan.org/soar/>
- LDonline – the educators' guide to learning disabilities and ADHD – www.ldonline.org
- Learning and Violence – www.learningandviolence.net
- Christianna Jones video on the history of Canadian residential schools: <http://www.learningandviolence.net/change/EllevenResearchers/ChristiannaJonesSingle.html>
- Helping Others Learn: <http://www.learningandviolence.net/helpothr/hlpothers.htm>
- History of Residential Schools in Canada*. <http://www.learningandviolence.net/lrnteach/outlines/tutortrain/HistoryofResidentialSchoolsinCanada.pdf>
- Learning and Violence student kit: http://www.learningandviolence.net/StudentKit/reception_desk.html
- Resources for Practitioners: on violence against Aboriginal People*. http://www.learningandviolence.net/helpothr/Resources_for_Practitioners-Violence_Against_Aboriginal_People.pdf
- Literacy and Learning Disabilities Special Collection: 'LD Appropriate Instruction' – Characteristics. http://ldlink.coe.utk.edu/characteristics_of_ld.htm
- Literacy Coalition of New Brunswick. *Adult Literacy and Learning Disabilities: Best Practices for Success*. <http://www.nald.ca/library/learning/alld/alld.pdf>

Videos:

- The National Centre for Learning Disabilities: Ask the Expert videos: *Learning Disabilities, What Are the Different Types?* https://www.youtube.com/watch?v=yG_xSBsFMPO
- Strengths of Students with Learning Disabilities and Other Disorders*. <https://www.youtube.com/watch?v=CYHzJGTA6KM>

GLOSSARY OF KEY TERMS

AODA	Accessibility for Ontarians with Disabilities Act
ATN	ATN Access Inc. (ATN Access For Persons With Disabilities Inc.; originally founded as the Audio Tactile Network)
DSO	Developmental Services Ontario
EO	Employment Ontario
ES	Employment Services
JAN	Job Accommodation Network
LBS	Literacy & Basic Skills
LD	Learning Disability
LDAH	Learning Disabilities Association of Halton
LDAO	Learning Disabilities Association of Ontario
LDATD	Learning Disabilities Association of Toronto District
MTCU	Ministry of Training, Colleges and Universities (Ontario)
OHRC	Ontario Human Rights Code
SOAR	Searchable Online Accommodation Resource
UDL	Universal Design for Learning

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