Educational Therapy in the Secondary Classroom, Emphasizing Executive Functioning Skills

Carolyn Patterson, MA, BCET

Abstract

Students with executive function deficits often perform worse than their typical peers even if they have equivalent potential. This is often due to lack of adequate time spent on completing assignments. High school students identified with ADHD, inattentive type, or mild/moderate learning disabilities were enrolled in an elective class at an independent religious school. This class, which was limited to four students per class period, provided direct instruction on executive function skills and integrated support for ongoing classroom assignments. The class was taught by an educational therapist with a special education credential who collaborated with the students' teachers and parents. The students in the elective class met or exceeded the minimum standards of achievement at this high school. This suggests that the educational therapy model of teaching students may bring better outcomes than existing special education services.

High school students with learning disabilities may not receive the most helpful interventions for the work demanded of them starting in ninth grade. In contrast to classroom expectations through eighth grade, the transition to the high school curriculum demands executive functioning skills and the ability to apply those skills to research, writing, and problem-solving. There may be supports in the form of classroom and test accommodations, but these do not address the work that is assigned for independent study, particularly homework, but also in-class group projects. Providing direct instruction on the types of metacognitive skills used in executive functioning and providing breaks within the school day to accomplish some tasks under supervision can help students with learning differences achieve better academic results in high school.

Literature Review

Students with ADHD (inattentive, hyperactive, or combined types), learning disabilities like dyslexia and dysgraphia, and executive functioning deficits, such as problems with time management, goal setting, or planning and prioritizing, attend classes in general education settings, but their learning differences can contribute to poor performance in spite of having average or above average intellectual potential (Garcia, 2017; Greene, 2014; Pritchard, 2016). Estimates of how many students are affected by executive functioning problems are somewhere between 7–13% of the school-aged population in the United States (Centers for Disease Control, 2018). Poor academic performance in high school can have a detrimental effect upon future prospects of entering college and on future earning (College Board, n.d.). While these students often are given accommodations specified under a 504 plan, an IEP report, or a psycho-educational assessment, these accommodations do not address study habits that must occur after school (U. S. Department of Education, 2018). Furthermore, most IEP or 504 plan goals do not address other skills that help a student succeed, such as self-advocacy, self-awareness, goal-setting, persistence, coping mechanisms, or emotional support (Goldberg, Higgins, Raskind, & Herman, 2003; Hanford, 2017). Autonomy and other "dimensions of character…strengths of heart, will, and mind" must also be addressed (Duckworth, as cited in Ficksman, 2018). Applying principles of educational therapy, which look at aspects of a student's learning environment within and outside of school, can fill in the gaps.

The transition from middle school to high school, at ninth grade, is a particularly vulnerable one. Research from the Consortium on Chicago Research shows that two factors in ninth grade determine high school graduation: "The number of credits earned and the number of semester F's in core subjects" indicate that a student who receives no more than one F that first year is more likely to graduate (Allensworth & Easton, 2005). They report that "being on- or off-track at the end of freshman year is a much better predictor of high school graduation than eighth-grade test scores." Unfortunately, this vulnerable time for 14- and 15-year-olds is also a period of underdeveloped executive functioning skills, and the risk of failing courses is high for this age group.

The prevalent model in public high schools and some private high schools is to educate students with mild-to-moderate learning disabilities inclusively within the general education classroom and to allow for pull-outs or push-ins with a special educator, with instruction that presumably addresses their individual learning disabilities in a tiered Response-to-Intervention model (Gersten et al., 2005). However, individual accommodations frequently are not implemented consistently and are difficult to track across all curricula and by multiple teachers in secondary schools (Hughes & Cohen, 2015; Wexler et al., 2018).

A different model, based on educational therapy, can provide more successful outcomes to those students with learning differences within a general education setting. Educational therapy is a multi-dimensional treatment alliance where the client, generally a student with a learning difference, interacts with an educational therapist and others in his or her family and/or other allied professionals to improve aspects of his educational performance and self-concept (Ficksman & Adelizzi, 2018). While many educational therapists have a background as classroom teachers, the methods of the educational therapist are different than a subject-expert teacher or tutor. The educational therapist integrates information about the client, about the client's learning disability, and about the client's family situation to come up with specific goals to improve outcomes both academically and personally for the client.

Most educational therapy is provided in a one-on-one session.[1] Other models of educational therapy are offered within a small group setting. In a review of many methods of providing adequate interventions in reading, Barbara Foorman and Joseph Torgesen report that "one-on-one interventions in reading have not been shown to be more effective than small group interventions," where "small group" size is described as "three and four children at a time" (Foorman & Torgesen, 2001).

Most schools find it too expensive and time-consuming to offer intensive remediation to address the individual needs of students with learning disabilities. They also cannot promise to have the same teacher, or teachers with the same training, from year to year. Granted, this model of having one credentialed teacher/educational therapist for a total of 16 students is a rarity amongst schools with scarce funds.

Most educators recognize that they have different kinds of learners in each classroom, that there are some basic ways to accommodate them that are not intrusive, and that accommodations do not change the difficulty level of the required work. However, the teacher is not able to manage those students' problems outside of the classroom, such as initiating and sustaining attention on homework assignments or knowing how to check their writing for accuracy and syntactical fluency. Yet these learning issues lead to missed assignments, lack of understanding of the material, and poor performance on tests and writing assignments.

Other factors may influence a student's success, such as the level of parental support; emotional coping skills; medical treatment; outside tutoring; knowing how to apply strategies; having grit, perseverance, and motivation to do well; and other intrinsic and extrinsic skills. One group has identified six capacities, known as the "Success Attributes," which predict future success as adults: self-awareness, proactivity, perseverance, goal setting, support systems, and emotional coping skills (Goldberg, Higgins, Raskind and Herman, 2003; "Internal Survey," 2018). One aspect of educational therapy is that it strengthens character development in the form of character skills, such as motivation, self-talk, compassion, and curiosity (Ficksman, 2018). When a student does not feel successful, he or she loses a sense of belonging to the school group and is more prone to dropping out (Schall, Wallace, & Chhuon, 2016). Happily, the opposite is also true: When students are given tasks that they can succeed with, they develop and increase their motivation to produce in the classroom.

Many independent schools are offering accommodations similar to the 504 plans devised in a public school. In this study, an independent, religious, all-boys' school in Southern California started a new approach, providing a class where small groups of students were explicitly taught about executive function skills and given academic support and accommodations based on their particular learning disabilities. These students received instruction in a class called "Directed Study," which was taught by a credentialed special education teacher who is also an educational therapist.

Methods

Student groups. Four groups of students were compared, with 10 students in each group. Data was taken from scores on the High School Placement Test (HSPT) entrance exam (Scholastic Testing Services, 2014), first semester grades, and first year grade point averages (GPA).

1. DS = Directed Study students, received direct intervention for classroom assignments and test accommodations. Students in the Directed Study class were self-identified as having a learning disability or difference and were enrolled in the class at the request of their parents.

2. ID = Identified with learning differences at the onset of the school year. They received classroom and test accommodations but no direct intervention.

3. UNID = Unidentified as students with learning differences who were brought to the learning specialist's attention during the school year by all members of the freshman teachers. No accommodations were given.

4. CTRL = Control group, typically achieving freshmen students enrolled in the same courses as the DS, ID and UNID students; no accommodations.

The demographics of the sample shown in Table 1 are representative of this school's population, which is predominantly Caucasian. These 40 subjects were enrolled in a class of 185 students, so each subgroup represents about 5% of the freshman class. (See Table 1.)

Description of "Directed Study." This high school class, available to freshmen students, is offered as an elective in which study skills and executive functions are practiced and explored. In a small group setting, with no more than four students per class, students with a documented learning disability are supervised by a professional educational therapist. The class meets every other day for 90 minutes and is part of the school's block schedule. This educational therapist becomes acquainted with the learning differences of each individual student and communicates those differences to his general education teachers, along with recommendations for classroom accommodations. During the Directed Study classes, the educational therapist teaches explicit lessons on executive function skills. In addition, the students work together to record all upcoming assignments,

[1] For example, noted educational therapist Maxine Ficksman relates how a 6th grade student she worked with, Miriam, who was reading at a second-grade level and who was "sullen and withdrawn," blossomed after six months of working together in a one-on-one educational therapy setting. Miriam learned to trust the therapist, to take risks, and to accept the belief the educational therapist had in her abilities to learn and thrive (Ficksman, 2018).

and they are given time to work on homework for other classes. They can receive guidance from the educational therapist who is familiar with the assignments.

At the beginning of the school year, all Directed Study students are given the Mindprint Learning assessment (also known as the Penn Computerized Neurocognitive Battery) to ensure there is common understanding of their executive functioning skills (Moore, Reise, Gur, Hakonarson, & Gur, 2015; Weinstein, n.d.). Other curricula include *Learning How to Learn* (Oakley & Sejnowski, 2017), *SMARTS* (Strategies, Motivation, Awareness, Resilience, Talents, Success) (Meltzer, n.d.) and Seeing *My Time* (Sklar, n.d.).

Time spent on planning/prioritizing in the classroom. The scope and sequence of the Directed Study curriculum focuses on direct instruction of the definitions of executive function skills at the beginning of the school year. As the school year progresses, approximately 20 minutes of each class is devoted to recording and strategizing how to manage on-going assignments from six different teachers. Students are reminded of the procedures for completing specific assignments for specific subjects. For example, the algebra teacher is using a stand-alone online math curriculum, and assignments have to be completed through that application as well as written out by hand, photographed, and submitted through Google Classroom. The English teacher prefers vocabulary to be hand written on index cards and brought to class in person.

As the school year progresses, the teacher works one-on-one with each student on specific issues that he struggles with. These include writing, organizing materials, and coaching on self-awareness and self-advocacy. By the halfway point of the school year, most of the class time is spent on the latter activities, and the direct instruction on executive skills is phased out. However, specific skills, such as goal-directed persistence, flexibility, initiating attention, sustaining attention, metacognition, and other executive function skills, are noted explicitly by the educational therapist to the students.

Student-to-teacher ratio, 4:1. Why four students? Much research has been done on effective direct instruction (Bloom, 1984; Foorman & Torgesen, 2001; Vaughn, Hughes, Moody, & Elbaum, 2001). While one-on-one is considered the most effective and is the model for most educational therapy, small groups of three or four students have also been shown to be highly effective. Practical matters also dictated limiting the class size to a maximum of four students, based on available classroom space and the estimated number of students who would benefit from this class out of the entire freshman class. The school follows a block schedule with classes meeting every other day for 90 minutes. While taking this class prevents these students from taking a foreign language class their first year, it eliminates the homework from that class, reducing their overall homework load.

Results

The average CSQ score of the entire cohort of freshman students was 114. The students in DS group had an average CSQ score of 98, 16 points (one standard deviation) lower than the mean. The UNID students had an average CSQ score of 111, three points lower than the cohort's mean. The average CSQ of the students selected for the ID group as well as the CTRL group was 108, six points lower than the mean.

As shown in Table 2, the DS group performed much better during semester 1 than their CSQ scores would have predicted. The average semester 1 GPA for the DS group is 78.86% (a high C); for the ID group, 81.00% (a low B); for the UNID group, 71.98% (a low C); and for the CTRL group, 82.26% (a B). As a group, the DS students all achieved at least a 70% or a C average; seven of the ten students achieved at least an 80% or a B average. (See Table 2.)

As shown by Table 3, the end-of-year GPAs for the two groups of students with learning differences indicated that the students enrolled in the DS class achieved an average GPA of 79.14 compared to UNID students, whose average GPA was 73.84, the lowest of the four groups. (See Table 3.)

Figure 1 illustrates the expected performance of each of the four groups based on their average CSQs and their actual performance based on average GPAs for semester 1. The students in the control group performed as expected. Among the students with learning differences, the group of that performed at the highest level were the students who arrived at the school already identified (ID) as having a learning difference. This group had an average CSQ 10 points higher than the DS group. Other factors, such as taking medication to increase focus or prior training in strategies, could have also influenced this group's stronger performance though this information was not readily available. Although the CSQ scores for the DS group ranged from 81–118, below average to above average, this group's GPA was better than predicted. The UNID group's CSQ scores ranged from 99–124, all within the average to above average range, yet their GPAs were well below expectancy.

Table 1. *Demographic Information of Subjects*

	Caucasian	Latino	Asian	African American	Biracial
DS	7	2	1		
ID	7		1	2	
UNID	7				3
CTRL	4	3	2	1	
Totals	**25**	**5**	**4**	**3**	**3**

Table 2. *Comparison of Placement Test Score ("CSQ" in SS) and Semester 1 GPA (in %)*

	DS Group		ID Group		UNID Group		CTRL Group	
	CSQ	GPA, Semester 1	CSQ	GPA, Semester 1	CSQ	GPA, Semester 1	CSQ	GPA, Semester 1
	81	70.89	97	71.48	99	72.07	96	69.8
	84	83.19	102	76.97	100	73.25	96	73.57
	88	83.15	104	84.12	100	65.75	100	87.09
	96	80.36	107	87.20	103	79.12	101	77.37
	96	82.50	108	69.43	108	69.48	106	79.28
	96	72.17	111	81.77	110	58.43	109	87.07
	101	80.56	111	73.65	116	74.67	112	81.93
	104	74.45	112	94.69	122	76.04	114	89.36
	113	81.32	115	82.73	123	69.97	117	88.86
	118	80.05	117	89.16	124	81.03	129	88.24
Average	**98**	**78.86**	**108**	**81**	**111**	**71.98**	**108**	**82.26**

Note: CSQ (Cognitive Skills Quotient) describes "the scores the student earned on the Verbal and Quantitative subtests as well as his or her total score for these two subtests combined. The computed cognitive skills quotient (CSQ)…replaces the traditional IQ" (HSPT Manual, 2014, p. 4). SS = Standard Score: 100 is the mean

GPA = Grade point average in percentages: 90–100 is considered an A, 80–89 a B, 70–79 a C, 60–69 a D, and <60 an F.

Discussion

When compared against a group of students (UNID) with no school-based supports, the Directed Study (DS) group of students outperformed their peers by about 5% on their grade point averages. This is remarkable when comparing their incoming scores and expected performance. A student scoring a standard score of 81 on an intelligence measure would not typically be expected to earn higher than a C average (approximately 70–75%), yet the boys in this group scored between approximately 73–83%, earning B or C averages.

The UNID group, based on their average to above-average IQ scores, presented no reason to suspect that these students would struggle with the school's curriculum, especially compared to the CTRL group's CSQ scores. The UNID students' families did not reveal that their sons had ever experienced any school difficulties and were not flagged during the admission process as possibly needing support. The difference of offering students with learning differences meaningful support, compared to receiving no support, is shown in Figure 1: Students with ostensibly low IQ/CSQ scores performed much higher than their scores would have predicted. Conversely, the students in the UNID group were expected to earn average to above-average grades based on their CSQ scores, yet they performed much worse than predicted.

From the parents' perspective, the Directed Study class was beneficial for their sons. Comments on an internal survey included: "The transition to high school has been far smoother than I anticipated, and I believe that is because of the support of the directed studies program," "Without that program, I think this first year would have been much more difficult and discouraging having to deal with his learning differences on his own while transitioning to high school," and "He has tremendous confidence in his classes and his executive functioning has improved so [much]. He always knew what was due. The biggest stride was he felt more comfortable approaching his teachers" ("Internal Survey," 2018). Parents noted that they felt that the Directed Study teacher was an advocate for their sons. The relationship that develops with an educational therapist is qualitatively different than that of a general education teacher, who in secondary school is an authority whose grade goes on a student's permanent record. The recognition by the educational therapist that these students have differences in how they learn, which can be compensated for, is different than most teachers' expectation that they are not as bright as other students. As another parent commented, "[The educational therapist] is also the first adult in his life that made him feel that he COULD learn. We are grateful for the impact she had on his life."

Various aspects of the Directed Study class affected individual students differently. Some needed a break during the school day from the intensity of the coursework at this college preparatory high school. Others needed the repeated instruction in content areas, which was provided sometimes one-on-one or to all members of a particular class. Others benefited from the "science of learning" aspect of the class, surprised to learn that their learning differences could also contain some strengths they had not recognized previously, such as strengths in processing speed, working memory, or abstract reasoning. Some appreciated the way that study skills were directly related to the coursework, such as taking Cornell notes on a science lecture or embedding vocabulary in a card game like "Apples to Apples" to get in the necessary repetitions they needed. Using accommodations

Table 3. *Comparison of Placement Test Score ("CSQ" in SS) to end-of-year Grade Point Average (GPA), Directed Study and Unidentified students.*

	DS CSQ SS	DS GPA %		UNID CSQ SS	UNID GPA %
DS student 1	81	73.78	UNID student 1	99	70.93
DS student 2	84	81.62	UNID student 2	100	75.4
DS student 3	88	82.87	UNID student 3	100	67.68
DS student 4	96	80.01	UNID student 4	103	77.9
DS student 5	96	82.97	UNID student 5	108	70.62
DS student 6	96	76.03	UNID student 6	110	72.76
DS student 7	101	80.23	UNID student 7	116	74.22
DS student 8	104	76.25	UNID student 8	122	77.86
DS student 9	113	80.39	UNID student 9	123	72.02
DS student 10	118	78.52	UNID student 10	124	79.45
average	**96**	**79.14**	**average**	**111**	**73.85**

such as extra time or using a keyboard were normalized within the school setting, and these Directed Study students noticed that many other boys used those accommodations. Efforts to demystify their learning disabilities and to quantify how common they were, allowed the students to participate fully in their academic classes.

The educational therapist in this setting had a unique standing as both a teacher and a learning specialist with clinical training in graduate-degree level educational therapy. As a teacher, she worked with some of the same students as the other freshmen teachers and could corroborate information about these students. She attended faculty meetings and professional development days, as well as fulfilling other duties on campus, and became someone they could turn to with a difficult situation. As a learning specialist and trained clinician, who had experience with public schools, IEPs, psycho-educational reports, and students with a variety of learning differences, she could offer explanations, not excuses, for a certain student's performance.

The intangible benefits included building these students' self-awareness and self-confidence. The students surprised themselves with how well they did in some subjects, and they were better equipped to accept low grades when they knew they had not studied adequately. Quantitatively, the students in this cohort performed better than students with learning differences had in previous years, based on their GPAs at the end of the school year.

It is a gray area to say if an "average" student at this high school (or at any school) "should" be earning C's or B's. However, the control group had the closest matches between the initial CSQ scores and average semester 1 GPAs, with 2 exceptions (see Table 2). The other three groups had large differences between the initial CSQ scores and the semester 1 GPA, consistent with describing these students as "exceptional." For the DS students, their entrance exam scores skewed low, even below average, yet their GPA performance was in the average range. For the

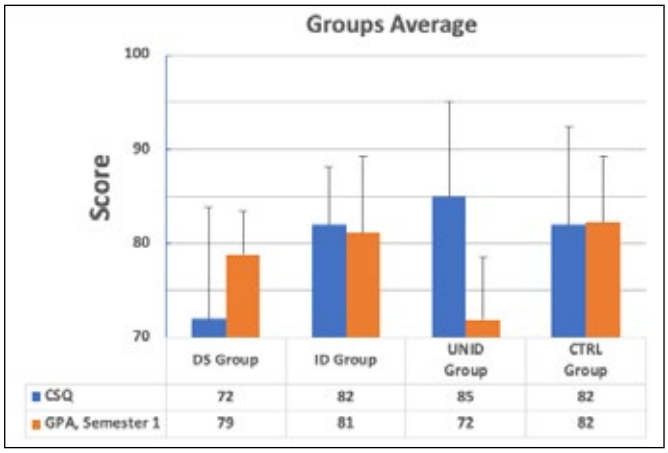

Figure 1. Comparison of expected to actual performance of the four student groups, semester 1, 2017-2018. Scale for standard scores converted to percentages

UNID students, their CSQ scores skewed higher, but their GPA performance was much worse, even worse than the DS students (see Figure 1).

Conclusions

Given the difference in GPA scores between the DS group and the UNID group, it is likely that the Directed Study class gave those students adequate academic supports in the form of teaching executive skills, reviewing their writing, and giving frequent reminders about upcoming assignments to help them achieve.

The results of this study of 40 students is intended to show that the support offered in an educational therapy model in a 1:4 teacher to student ratio produced a positive effect for the students who received the intervention. It suggests that this model may be a more effective approach in improving academic outcomes for students with mild-to-moderate learning disabilities.

Having academic and emotional support from an educational therapist and time to complete work while in school and/or to rest from the rigors of a challenging academic school day gave the boys in DS the ability to perform at an average or above average level. Additionally, the teacher contacted the students' parents frequently, and the parents in turn supported and reminded the boys of assignments outside of the school day. The work of educational therapy can produce better outcomes for students within a school environment when collaboration and communication with parents and teachers are welcomed and encouraged.

References

Allensworth, E. M., & Easton, J. Q. (2005). The on-track indicator as a predictor of high school graduation. *Consortium on Chicago School Research*. Retrieved from https://consortium.uchicago.edu/sites/default/files/publications/p78.pdf

Bloom, B. (1984). The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. *Educational Researcher, 13*,4-16.

Centers for Disease Control and Prevention. (2018, April 24). State-based prevalence data of parent reported ADHD diagnosis by a health care provider. Retrieved from https://www.cdc.gov/ncbddd/adhd/prevalence.html

College Board. (n.d.) Trends in higher education: Lifetime earnings by education level. Retrieved from https://trends.collegeboard.org/education-pays/figures-tables/lifetime-earnings-education-level

Ficksman, M., & Adelizzi, J. U. (2018). The dynamic of educational therapy: Theoretical framework and model. In J. U. Adelizzi & M. Ficksman (Eds.), *The Clinical Practice of Educational Therapy* (2nd ed.) (pp. 3-27). New York, NY: Routledge.

Ficksman, M. (2018). Cultivating character development: Educational therapy's impact on individuals, families, schools, educational policy, and society. In J. U. Adelizzi & M. Ficksman (Eds.), *The Clinical Practice of Educational Therapy* (2nd ed.) (pp. 205-220). New York, NY: Routledge.

Foorman, B. R., & Torgesen, J. (2001). Critical elements of classroom and small-group instruction promote reading success in all children. *Learning Disabilities Research & Practice, 16*(4), 203-212. Retrieved from http://fcrr.org/publications/publicationspdffiles/critical_elements.pdf

Garcia, N. (2017, October 6). In Boulder, students with special needs are outperforming their state peers but are far behind their own classmates. Retrieved from https://www.chalkbeat.org/posts/co/2017/10/06/in-boulder-students-with-special-needs-are-outperforming-their-state-peers-but-are-far-behind-their-own-classmates/

Gersten, R., Fuchs, L. S., Compton, D., Coyne, M. D., Greenwood, C., & Innocenti, M. S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children, 71*, 149-164. Doi:10.1177/001440290507100202.

Goldberg, R. J., Higgins, E. L., Raskind, M. H., &. Herman, K. L. (2003). Predictors of success in individuals with learning disabilities: A qualitative analysis of a 20-year longitudinal study. *Learning Disabilities Research & Practice, 18*(4), 222–236. Retrieved from http://www.sanjeshserv.ir/hamgam/Files/file/Qualitative%20Analysis%20of%20a%2020-Year%20Longitudinal%20Study.pdf

Greene, R. W. (2014). *Lost at school: Why our kids with behavioral challenges are falling through the cracks and how we can help them*. New York, NY: Scribner.

Hanford, E. (2017, October 24). States' laws to protect dyslexic children mostly lack funding, accountability, training mandates. *American Public Media Reports*. Retrieved from https://www.apmreports.org/story/2017/10/24/dyslexia-laws-by-state

Hughes, R., & Cohen, M. (2015, April). Do 504 plans help students with ADHD? Retrieved from http://www.chadd.org/AttentionPDFs/ATTN_04_15_504Plans.pdf

Internal Survey: Directed Study parent questionnaire for St. Francis High School parents. (2018, May 25). Retrieved from *SurveyMonkey.com*.

Meltzer, L. (n.d.). SMARTS full executive function curriculum. *Research Institute for Learning and Development (RESEARCHILD)*. Retrieved from https://smarts-ef.org/executivefunctionpackages/full-executive-function-curriculum/

Moore, T.M., Reise, S.P., Gur, R. E., Hakonarson, H., &. Gur, R. C. (2015). Psychometric properties of Penn Computerized Neurocognitive Battery. *Neuropsychology, 29*(2), 235-246. Retrieved from http://dx.doi.org/10.1037/neu0000093

Oakley, B., & Sejnowski, T. (2017). Learning how to learn: Powerful mental tools to help you master tough subjects. *Coursera*. Retrieved from https://www.coursera.org/learn/learning-how-to-learn

Pritchard, A. (2016). Testing accommodations for ADHD: Evidence that the status quo is inefficient. Retrieved from https://ldaamerica.org/testing-accommodations-for-adhd-evidence-that-the-status-quo-is-ineffective/

Schall, J., Wallace, T. L. B., & Chhuon, V. (2016). 'Fitting in' in high school: How adolescent belonging is influenced by locus of control beliefs. *International Journal of Adolescence and Youth*, 21:4, 462-475. DOI: 10.1080/02673843.2013.866148.

Scholastic Testing Service, Inc. (2014). *HSPT high school placement test interpretive manual*. Bensonville, IL: Author.

Sklar, M. D. (n.d.). What is Seeing My Time? *Executive Functioning Success*. Retrieved from https://executivefunctioningsuccess.com/seeing-my-time/

U.S. Department of Education Office for Civil Rights. (2018, April 24). Protecting students with disabilities. Retrieved from https://www2.ed.gov/about/offices/list/ocr/504faq.html?exp

Vaughn, S., Hughes, M. T., Moody, S. W., & Elbaum, B. (2001). Instructional grouping for reading for students with LD: Implications for practice. *LD Online*. Retrieved from http://www.ldonline.org/article/6308/

Weinstein, N. (n.d.). Mindprint in schools. *Mindprint Learning*. Retrieved from https://mindprintlearning.com/schools/

Wexler, J., Kearns, D. M., Lemons, C. J., Mitchell, M., Clancy, E., Davidson, K. A.,…& Wei, Y. (2018). Reading comprehension and co-teaching practices in middle school English language arts classrooms. *Exceptional Children, 84*(4) 384-402. DOI: 10.1177/001440291877/1543.

Carolyn Patterson, MA, BCET, has a master's degree in special education and is a Board Certified Member of the Association of Educational Therapists. She is credentialed as a mild/moderate education specialist in California and has taught in public schools as a special education teacher. Currently, she maintains a private educational therapy practice and is the learning specialist at an independent, religious boys' high school.