& Luh, 2019), while neglecting the complementary problem of how to end the use of bad practices. [illegible] is the relevant solution to the latter problem.

In the present article, we discuss the de-implementation of inappropriate accommodations practices in educational settings. We begin by describing educational accommodations and discussing their advantages and disadvantages. We then cover a general model for school-based consultation that is well-suited to de-implementation efforts. Finally, we use the logic of functional behavioral assessment to help understand why inappropriate accommodations practices persist, and we describe implications for de-implementing those practices.

Educational Accommodations: Use and Misuse

Educational accommodations involve changes to the manner in which instruction or assessment takes place, while maintaining the same content (Lovett & Lewandowski, 2015).[1] Accommodations include changes to presentation format (e.g., reading test items aloud to a student), response format (e.g., allowing a student to use a laptop to type rather than handwrite class notes), setting (e.g., preferential seating near the teacher), and timing (e.g., lengthening time allotments for exams). Effective accommodations allow students to better access (i.e., participate in) educational programming; this is often appropriate and, in fact, necessary. A student with a visual impairment may have little chance of understanding instruction presented in the typical manner, and a student with a reading disability may have similarly little chance of demonstrating their knowledge on a science test without having the items read to them. Despite these helpful features, accommodations do not directly increase students' skill levels. In contrast, effective [illegible] do increase skills. Therefore, as a general rule, interventions are to be preferred to accommodations, when both are potential responses to a student's disability-related deficits.

Accommodations have two additional limitations as well. First, they sometimes inadvertently reduce standards for students, taking away a natural incentive for skill development. For instance, if a student in fifth grade is provided a laptop due to having slow handwriting, the student has no incentive (or even much opportunity) for improving handwriting fluency. Similarly, if a student in ninth grade is provided class notes, that student never needs to learn how to take notes, and has little incentive to pay attention in class more generally (see e.g., Harrison et al., 2020). A second limitation of accommodations is that they can provide an unfair advantage—that is, a performance boost that is not tied to a disability-related need. A clear case of this is the use of memory aids, where students are actually permitted access to additional information ("cheat sheets") to use during an exam, to help cue memory. Most students, with or without disabilities, would benefit from such aids. Because accommodations can impede skill development and provide unfair advantages, they should only be used when (a) a student has clear disability-related deficits, (b) effective interventions are unavailable or insufficient, and (c) the accommodation does not compromise the integrity of the instruction or assessment.

For many high-incidence disabilities, where effective interventions have been developed (see e.g., Burns et al., 2017), the need for accommodations might seem to be low. However, accommodations are in fact very popular. For instance, Murray et al. (2014) found that of 170 high school students with ADHD who had a formal support plan, 87.9% received extended time on tests and a substantial minority received more intensive accommodations such as modified grading standards and slower-paced instruction. Far fewer students received interventions. Similarly, Hott et al. (2020) reviewed 89 IEPs of high school students with learning disabilities in mathematics, finding that the vast majority received accommodations (an average of five per student!) but most IEPs did not list any specialized instructional services or interventions.

Students with high-incidence disabilities such as learning disabilities and ADHD often receive instruction and complete tests under altered conditions that are mandated by formal plans. This very high rate of accommodation is unlikely to reflect genuine student needs and/or an unavailability of effective interventions. A wide variety of research suggests that accommodations are provided excessively and indiscriminately. First, as mentioned earlier, effective interventions are available for many of the functional impairments associated with common disability conditions. This does not mean that interventions will completely eliminate the impairments associated with the disability, but evidence-based interventions are often not even attempted or delivered

scores, and teachers face an ever-growing list of demands on their time. Teachers are

source of pressure that leads to inappropriate accommodations, then administrators and other school staff may need training in how to best deal with families in a positive and professional manner while still advocating for appropriate accommodation decisions.

Functional Behavioral Assessment: A Preface to De-Implementation

In functional behavioral assessment (FBA), behavior is thought to be responsive to environmental contingencies. Antecedent variables can cue behavior, and consequences reinforce it. This is true of any behavior, whether adaptive or problematic. To conduct an FBA, a wide variety of information is solicited from informants who have witnessed the behavior, and the behavior and its context are also directly observed (Steege et al., 2019). FBAs are typically conducted in educational settings to address student misbehavior, but they have also been used occasionally to better understand and modify behavior of employees (e.g., Fienup et al., 2013). To understand an institutional practice such as inappropriate provision of accommodations, it is important to understand what variables are causing and maintaining the practice.

FBA-related data on the behavior of making educational accommodation decisions is often easily obtained; in our own consulting work, we collect it deliberately and also obtain it informally. However, such data is rarely published. Two studies have examined the behavioral dynamics of the accommodation process comprehensively, both of them at the middle school level and focused on [illegible] accommodations (Crawford & Ketterlin-Geller, 2013; Rickey, 2005). The two studies' results converge with each other, and also with our own observations, having participated in and consulted on instructional and testing accommodation decisions for over a decade across various levels of education. In addition, there is other research specifically on psychologists and their opinions about their role vis-à-vis accommodations -

- If the student has a disability, then they will need accommodations.
- Students should not feel any discomfort, stress, or anxiety when taking tests.

Among evaluators (school psychologists as well as clinical psychologists who perform evaluations), additional inaccurate beliefs are often present:

> When a student or family is seeking accommodations, my job is to assist them in obtaining accommodations.
> If a student has a past history of receiving accommodations (or reports of such a history), then the student must need the accommodations, and the present evaluation is simply to update the details.
> There is no need to worry that a student or family may exaggerate a student's degree of impairment to try to show a need for accommodations.

All of these beliefs are false, contradicted by empirical research (see Lovett & Lewandowski, 2015, for a comprehensive review). Unfortunately, all of these beliefs create a context where the dominant response is to provide an accommodation.

Immediate Antecedents

Providing accommodations is typically a response to at least one of a small set of antecedent stimuli. One is inadequate academic performance, relative to expectations. The key phrases here are "inadequate" and "relative to expectations." What counts as "inadequate" depends on the expectations, and in some settings, a "C" grade is viewed as satisfactory and untroubling, whereas in other settings, an A-minus grade is cause for great concern. Often, the expectations are based on a student's background, and so students from disadvantaged backgrounds are less likely to receive accommodations (Lovett, 2020), since expectations are lower, and relatively low performance is viewed as reasonable.

A second, related antecedent stimulus is [illegible] inadequate performance in the future. This often occurs when a student switches schools, graduates from one setting to another, or prepares for a major exam (such as an AP/IB exam or a college admissions exam). Although the student has a history of high performance, they (or their parents) are concerned that a new educational environment has higher standards or fewer natural supports, or that an upcoming major exam has requirements against which the student's hitherto-adequate skills cannot succeed. Psychologists and other school staff may be skeptical of the requested accommodation, given the history of unaccommodated high performance, but neither they nor the family can point to any definitive data predicting what will happen in the future, and accommodations allay the concerns over what might happen in the future.

A final antecedent stimulus is the student's discomfort relating to some aspect of the educational program. That discomfort can present as anxiety, sadness, low self-esteem, or even anger and oppositionality, and it may or may not be accompanied by actual evidence of poor academic performance. To take an extreme case, if an elementary school student exclaims "I hate math!" and pouts as a math calculation subtest

begins, even though his score is in the average range, the school psychologist administering the measure may begin to wonder if the student might feel better taking his teacher's math tests with a calculator and some additional time in a separate room where the test proctor is a kindly teaching/resource assistant who the children like to talk to, and who gives hints when the student needs more "memory cues." When children are uncomfortable, parents and school staff understandably empathize and feel uncomfortable as well, leading to powerful escape motivation.

Consequences

What happens after accommodations are provided? Often, student performance improves. The most common accommodation, extended time on tests, tends to yield performance gains for both students with and without disabilities (Cahan et al., 2016). Similarly, if a student was concerned because her foreign language class was bringing down her GPA, and she no longer needs to take the class (a common curricular accommodation in the United States), her GPA will improve. Higher academic performance is desired by virtually all parties: students, parents, teachers, school administrators, and even psychologists. Some private practice psychologists even publicize client testimonials attesting to this, to attract new clients; see, for example, Cognitive Assessment Group (2020). This not only serves as positive reinforcement for providing accommodations, but negative reinforcement as well—parents stop calling the school and requesting evaluations and meetings, and teachers and school administrators stop bothering the school psychologist to do something.

In addition, students with and without disabilities both accommodations as beneficial, and so regardless of whether the accommodations are needed or appropriate, the accommodations tend to reduce their discomfort (Lovett & Leja, 2013). The student is therefore provided powerful and direct negative reinforcement for using accommoda-

strategies for pursuing those reinforcers must be provided. These alternative strategies are typically interventions for academic skills and for anxiety. School psychology and special education research has yielded many effective interventions for academic skills (see, e.g., Burns et al., 2017), including many skills that are needed for access to instruction and assessment in their standard formats. For instance, training in reading fluency, reading comprehension, and writing skills can reduce a need for extended time, read-aloud, and note-taking accommodations, respectively. Anxiety is also one of the more treatable conditions, even when it is at the level of a clinical disorder, and research has found effective interventions for children (Higa-McMillan et al., 2016). Since test anxiety is often related to a perceived need for accommodations, school staff should be aware that there are specific interventions for test anxiety that have been found effective (Soares & Woods, 2020).

Note

1. Some scholars distinguish between [illegible] and [illegible]. We do not, since there is no agreement on whether particular alterations (e.g., extended testing time) are one or the other. We use the term [illegible] broadly to encompass any official alterations to the manner of instruction or assessment.

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