

When All Means Every: Two Approaches to UDL Curriculum Design for Students with Severe Disabilities

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Abstract

*Universal Design for Learning has been established as a scientifically valid framework useful for guiding educational practice to improve outcomes for a broad range of students (<http://udl-irn.org/critical-elements/>, P.L. 110-315). There is some debate within UDL groups as to whether **all** means **every** or if it means **a broader range** (i.e., 99%). In 2009, Edyburn & Gardner suggested a paradigm shift occurs when educators begin to think of their curriculum as disabled rather than of students as disabled. The purpose of this paper is to (a) extend the ‘disabled curriculum’ conversation to incorporate curricula that do not adequately consider and incorporate methods, materials, and responses for individuals with the most significant learning needs; and to (b) offer practical strategies for developing curricula that do. Utilizing two approaches, suggestions will be provided to ensure the needs of learners with severe disabilities are included during the curriculum design and development process. This paper is specifically useful for those educators who design and develop their own unit plans whether individually or as a group.*

Keywords

UDL, severe disabilities, curriculum.

INTRODUCTION

Universal Design for Learning (UDL) has been established as a scientifically valid framework useful for guiding educational practice to improve outcomes for a broad range of students (<http://udl-irn.org/critical-elements/>). According to CAST, UDL is “a set of principles for curriculum development that give all students equal opportunity to learn,” (<http://www.cast.org/udl/index.html>). The definition of UDL used in the Reauthorization of the Higher Education Act of 2008 presents UDL as a framework that “reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities...” [HEOA, P.L. 110-315, §103(a)(24)]. So, to whom does UDL apply? Additional questions must be asked.

Is UDL useful to improve outcomes for a broad range of students, or is UDL useful to reduce barriers and maintain high achievement expectations for *all* students, thereby giving *all* an equal opportunity to learn? To some, this question may seem insignificant (all vs. broad). To those of us who work, support, and live with individuals with severe

and multiple disabilities, this is *the* quintessential question of the day. Does all mean all in the same way that the No Child Left Behind Act (2002) means all (all but excluding 1% of students with the most severe disabilities) or does all mean every in the same way that IDEA (2004) supports zero reject? What if the application of a UDL framework to curriculum design really does include the needs of those students with the most severe disabilities—the 1%? What would this look like in practice?

The purpose of this paper is to extend and affirm the discussion of a UDL framework to include every student. I will discuss how to consider the needs of students with severe disabilities when using the UDL framework to design general curricula.

THE PROMISE OF UDL FOR STUDENTS WITH SEVERE DISABILITIES

The promise of UDL for students with severe disabilities has been discussed for quite some time (Basham & Gardner, 2010; Edyburn, 2005; Edyburn, 2010; Edyburn & Gardner, 2009; McGuire, 2006; Rose & Gravel, 2009; Rose & Meyer, 2002.) Few studies actually measure the achievement of students with severe disabilities in a UDL designed curriculum (Browder, Mims, Spooner, Ahlgrim-Delzell, & Lee, 2008; Coyne, Pisha, Dalton, Zeph, & Smith, 2012; Katz, 2013). None could be located that measure the steps taken to design the curriculum to ensure the instructional needs of students with severe disabilities are met (although several discuss the promise of UDL for students with severe disabilities; see Downing, 2006; Jiménez, Graf, & Rose, 2007; Wehmeyer, 2006). Given the limited implementation available for this population, how does one universally design general education curricula to consider the needs of these students?

UDL at its very core is meant to eliminate barriers BEFORE students encounter them. Presently, standards (e.g., the Common Core State Standards) are the foundation on which instruction is built. Students with severe disabilities must have access, participate, and demonstrate progress in this general curriculum (IDEA, 2004). Thus, when students with severe disabilities have individualized goals that intersect with general education curricula, standards based curricula is appropriate for their instructional experiences. Therefore, when designing standards based curricula, it is also critical that the needs of students with severe disabilities be considered. Educators should assume that there will

be students with severe disabilities partaking in educational content of all kinds.

How can you design curriculum that is meant for everyone, to be inclusive of students with such significant and individualized learning needs? There are two ways to do this. First, while it's true that students with severe disabilities have unique and individual learning needs, they share many learning characteristics. By incorporating content and supports to address the generalized characteristics of this group of learners, it is possible to create a curriculum that will better meet their needs. This process can be characterized as a general case approach. Secondly, if a specific need is identified and must be accommodated after an educational experience has been designed, the use of a fluid and flexible curriculum design can incorporate this accommodation as a pre-existing option for others in the future, thereby constantly growing a better curriculum. This process can be characterized as an infinity approach. More detail on these two approaches is provided below.

A General Case Approach to the UDL Framework

A UDL framework can be applied when designing curriculum to address the generalized needs of students with severe disabilities by looking at a variety of shared characteristics. Universally, teacher preparation programs instruct teacher candidates on the general characteristics of this population in the same way that general characteristics of students with learning disabilities, cognitive disabilities and others are addressed. Every student must have unique learning needs in order to be found eligible under IDEA for special education services (IDEA, 2004). The needs of students with severe disabilities are not more or less unique than those of students with other high incidence disabilities, their numbers simply occur in classrooms at a much lower incidence. Furthermore, we as educators are less prepared to meet the needs of learners with severe disabilities. Teacher training continues to prepare teachers to meet the needs of the many (high incidence) rather than the few (low incidence). As Edyburn & Gardner (2009) suggested, a paradigm shift occurs when we begin to look at the curriculum as disabled rather than as the students as disabled. If we do that, we can see that curricula that do not include methods, materials, and strategies to include students with severe disabilities are indeed, incomplete. Teacher training (general and special) that does not specifically address the needs of these students is also incomplete.

To address this, we can borrow from an approach first introduced to teach generalization of skills to learners with intellectual disabilities. For example, when we design curricula, we apply, a general case programming approach rather than apply the approach to us to the students with severe disabilities. Alberto & Troutman (2009) describe general case programming as a method of teaching sufficient exemplars of a skill to provide the student the ability to perform the skill on any members of that class. If we take this idea of sufficient exemplars and apply it to curricula design to ensure that sufficient methods, materials and

strategies are present to meet the general characteristics of students with severe disabilities, we have increased the likelihood that students with severe disabilities will be able to respond to these methods, materials, and strategies. To accomplish this, we must first identify common characteristics of students with severe disabilities. Then we must apply a process for incorporating them into the curriculum as we design and implement instruction.

We can identify many shared characteristics of students with disabilities by referencing texts commonly used to teach introductory teacher preparation classes in special education. Although each student is unique, we can plan proactively for common areas of need. For example, Turnbull, Turnbull, & Wehmeyer (2012) present five categories of shared characteristics: intellectual functioning, adaptive skills, motor development, sensory functioning, and communication skills. Hunt & Marshall (2012) reduce these to four categories: cognitive development, physical development and health, language development and communication, and social behaviors and emotional development. Heward (2012), perhaps, presents the most useful categories for practitioners, in the following list of characteristics: slow acquisition rates for learning new skills; poor generalization and maintenance of newly learned skills; limited communication skills; impaired physical and motor development; deficits in self-help skills; infrequent constructive behavior and interaction; stereotypic and challenging behavior.

Students with severe disabilities commonly master fewer skills, therefore, it is imperative that we target skills that will directly enhance their path to future skill acquisition, long term outcomes, and overall quality of life. When designing curricula and instruction for reaching students with slow acquisition rates for learning new skills, it is important that we build in curricular options that are less abstract and more concrete. We must design many opportunities for practice. We must identify the critical skills of each content piece—those that are absolutely necessary for a student to understand and master the current concept. Additionally, we must plan for curricula that provide options for minimizing text and adding pictorial representation, for auditory versions of text, for linkages to real world situations and skills, for controlled choices in assessments, for the incorporation of student preferences, and for implementation models using systematic instructional procedures that include errorless learning strategies and positive behavior supports.

Students with severe disabilities frequently struggle with the generalization and maintenance of new skills. We can proactively plan for this by building curricula with continuous application and assessment measures of previously learned concepts, and by looping previously learned content with new concepts and ideas to create continual practice opportunities. We also know that students with severe disabilities will regress if skills are not continually in use. Therefore, we can plan to design curricula that build in use

of previously covered core content. Instructional and assessment activities should incorporate the use of previously learned skills and, if students fall below predetermined marks of mastery, instruction on those concepts should be renewed. Instruction should relate directly to students' real world environment so that skills can be practiced outside of classroom situations.

Limited communication skills are another frequently shared attribute of students with severe disabilities. Communication impairments may exist in both expressive and receptive communication abilities and both should be considered when designing curricula. Multiple means of student response must be allowed for within the curriculum design. Discrete responses (i.e., yes/no, this one/that one) should be constructed so that they can be used with simple assistive technology (AT) devices or choice boards. Preferences should be built-in to increase engagement. Presentation of content, materials, and requests should be direct in nature, and should exhibit reduced verbiage and clear statements or requests. Students' responses using common picture symbols, voice output devices, gestures, nonverbal and simple verbal responses should be planned across all instructional activities and assessments.

Impaired physical and motor development should also be considered when designing curricula under a UDL framework. It is critical to design instructional activities or experiences for students with decreased motor function that allow for maximum participation. Incorporating ways for students with limited motor functioning to fully or partially participate in content-based activities such as word walls, instructional centers, experimentation, use of manipulatives, etc. are critical for the inclusion of students with severe disabilities.

Most daunting for many teachers in general education is the knowledge that students with severe disabilities frequently need instruction and support with self-help skills. Their need for support and instruction with self-help skills may not seem directly linked to designing curriculum using a UDL framework. However, I suggest that it definitely can be. Within any content lesson there should be links to real world environments and contexts. For example, the application of ecological assessment will identify the content and skills necessary to function within that environment. Building in opportunities for students with severe disabilities to practice or learn self-help skills in the context of learning general curricula can greatly enhance an individuals' ability to access, make progress, and maintain skills from the general curricula. Regardless of whether the skill is basic addition or restroom use, all students should have an opportunity to learn meaningful skills and every student may access those skills at different levels of performance.

Although Heward's (2012) category of "infrequent constructive behavior and interaction" seems harsh, it is important that developers and educators attend to the need for behavior and social supports for students with severe disa-

bilities. Play and social interaction comes quite naturally for many students without disabilities. However, for students with disabilities (including those with severe disabilities), direct social supports with peers may be necessary. Social interaction content and exemplars can be linked and embedded in academic content. Students may not know how to interact in large group and small group settings or with instructional partners. Those expectations and responses must be taught and/or supported. Same age peers must be taught how to interact with students whose behavior and communication is different from theirs.

Finally, stereotypes and challenging behaviors are characteristic of students with severe disabilities. To address the needs of these students when developing a curriculum designed under a UDL framework, it is critical to build in highly engaging material, options for student preferences, and linkages to students' immediate and future environments. Engagement in meaningful learning activities is the most effective way to reduce challenging behavior (Horner & Carr, 1997). Content and activities that are implemented at a student's instructional level will decrease the likelihood of academic frustration (Gettinger & Seibert, 2002). This is no different for any student, disabled or not. Designing curriculum with clear options of leveled content, engaging and useful contexts, multiple means of response and participation, that are presented with student preferences and experiences in mind, will reduce challenging behavior.

Students with severe disabilities share significant impairments in learning, behavior, emotional and social development, communication, and physical/motor development. While every student should be assessed independently to determine their current level of performance as required by IDEA, we know that students with severe disabilities will be significantly below their peers in all of these areas. This means their ability to read, write, calculate, and respond may be well below that of their peers. However, this does not mean students with severe disabilities are incapable of participating, rather fully or partially, in any of this content. Designing a curriculum using a UDL framework while considering these general needs of students with severe disabilities increases the likelihood that all students can access, participate, and make progress in the general curricula. Yet, this still does not ensure that every student's needs will be included in the curriculum design. Curriculum must be designed to be flexible and fluid. This brings us to the second way to design curriculum using a UDL framework.

An Infinity Approach

Currently, standard curriculum practice retrofits curriculum to allow for accommodations or modifications after we have identified a student with special needs. We alter the curriculum to fit the student. However, UDL promotes anticipating student needs and designing curriculum accordingly *prior* to student use. The General Case Approach mentioned earlier discusses how to do that for students with severe disabilities. Nevertheless, there will always be stu-

dents for which we did not plan deeply enough or who have such unique needs that they did not get included under the general case approach. These students should still receive accommodations and modifications as needed. However, in order to be true to the principles of Universal Design for Learning, we should not leave accommodations and modification by the wayside to begin again the next year. Curriculum should be designed to be flexible and fluid. Each time a curriculum is taught, any accommodations and modifications should be added into the existing materials, methods, and strategy options so that the next iteration of that curriculum includes all the pre-existing options that were originally presented as accommodations and modifications. This creates an infinity approach to curricula design (see Figure 1).

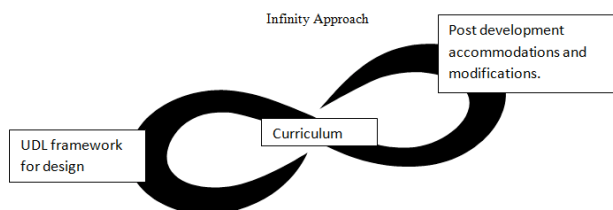


Figure 1. An Infinity Approach

The infinity approach presumes a curriculum is never finished, but remains fluid. A curriculum can be redesigned, updated, or altered to better address the content it presents, the tools and technologies it uses to approach content, and the addition of new strategies and materials that better address student needs. At the point accommodations and modifications become part of the pre-existing options for content, materials, assessments, and strategies; we can include them as part of a universally designed curriculum.

Conclusion

Students with severe disabilities are indeed a part of ‘all!’ As CAST suggests, *all* students deserve an equal opportunity to learn. The application of a UDL framework to design curriculum while considering the needs of students with severe disabilities moves us forward towards meeting the needs of *every* student. Two approaches have been presented here that are helpful in designing curriculum that meet the needs of all students, particularly those with severe disabilities: the General Case Approach and the Infinity Approach. Universal Design for Learning does not equate to universal outcomes. The application of a UDL framework to curriculum design allows us to create content and experiences that include and challenge all students. Every student will experience that content with somewhat different outcomes. The sooner we accept that paradigm shift, the more likely students with severe disabilities will remain a part of the UDL conversation.

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