

# If Up is Down and Down is Up, What the Up is UDL?

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## **Abstract**

This paper takes a critical look at progress made in the research and implementation of the Universal Design for Learning framework based on the propositions presented by Edyburn (2010).

## **Keywords**

Universal Design for Learning, Inclusion, Measurement.

## **INTRODUCTION**

Attention to the variability of individuals in American education increasingly has led toward conversations regarding use of the Universal Design for Learning (UDL) framework for inclusively reaching and teaching every learner including those with disabilities, (Chita-Tegmark, Gravel, De Lourdes, Serpa, Domingos, & Rose, 2011; Gallagher, 2005; Pisha & Coyne, 2003). Accordingly, educational researchers have sought to examine efforts en route for accomplishment of this goal (Basham, Israel, Graden, Poth, & Winston, 2010; King-Sears, 2014; Rappolt-Schlichtmann, Daley, Lim, Lapinski, Robinson, & Johnson, 2013). Subsequently, many issues have been identified in the process. The purpose of this paper is to critically examine where we are in the implementation of UDL as a field and identify questions that remain unanswered.

Discussions as to what constitutes UDL have appeared within professional literature for some time. Hitchcock, Meyer, Rose, & Jackson (2002) stated that the Center for Applied Special Technology (CAST) coined the term and began to apply UDL in the 1990s. As the original acronym for CAST might have implied, UDL was originally described as a set of principles that utilizes technological tools and strategies to address diversity and educational barriers in curricular goals, methods, materials, and assessments from planning and forward (Hitchcock, Meyer, Rose, & Jackson, 2002). Over time, that early definition has broadened to include the application of those principles to curriculum development (i.e., goals, materials, methods, assessment) focusing on providing opportunities for all students to become expert learners (National Center on Universal Design for Learning, 2012).

In 2010, Edyburn asked the question “Would you recognize Universal Design for Learning if you saw it?” (p.33 ). He recounted the historical context and policy foundations of UDL, along with ten propositions necessary for the field to consider during the next decade to prevent UDL from becoming another number in a long line of educational fads. Six years later, Edyburn’s question remains relevant.

Would we recognize Universal Design for Learning if we saw it today? Given the work of Rao, Ok, and Bryant (2014), Okolo and Diedrich (2015), and Vitelli (2015) it would seem the field’s answer is a resounding “maybe.” Most of the propositions suggested by Edyburn, still await a response from the field. Below, we look at some of the questions surrounding UDL and how the field has addressed these halfway through our second decade utilizing this model.

## **SO WHAT IS UDL?**

The broad definition of UDL seems simple enough, “a framework for instruction organized around three principles based on the learning sciences. These principles guide the design and development of curriculum that is effective and inclusive for all learners” (p. 1, Hall, Meyer, Rose, 2012). In this simplicity (e.g., 3 principles, effective, inclusive, for all) there is complexity. The field is struggling with this complexity. Universal Design for Learning framework is comprised of 3 principles, 9 guidelines, and 31 checkpoints (CAST, 2011).

UDL is described as “elusive” by Okolo & Diedrich (2015) who explain the lack of operational core features as a major hindrance in distinguishing outstanding work from trivial work thereby making it more difficult to identify UDL in practice. According to these researchers, “the framework remains under-defined,” (slide 27). Rao and colleagues point out that, fifteen years later, we are “still at a nascent stage of defining and describing what UD(L) models are and how they can be applied,” (p. 164). Even Basham and Gardner (2010) assert that UDL lacks a true operational definition. So is the issue that, as a field, we *have not* operationally defined UDL so that we know it when we see it OR is the issue that, as a field, we *cannot* operationally define UDL?

Edyburn asserted that UDL was much more complex than originally thought (2010). It would seem our inability to come together as a group to agree on the very essence of UDL validates that assertion.

## **HOW THEN DO WE ANSWER EDYBURN?**

UDL is a flexible framework allowing principles, guidelines, and checkpoints to be in play at any time but not requiring a certain weight or number. However, for the UDL framework to be replicated and scaled up, one must be able to say that it “is” being applied or it “isn’t.” To determine that, the application must be measured. To measure, we

must have some criteria for measurement. In this field, the application of practices supported by evidence of their effectiveness is not only necessary but is required. It is not enough to say something is a good idea. We must be able to measure the effectiveness of UDL in the completion of its goal “to give all individuals equal opportunity to learn,” (National Center on Universal Design for Learning, n.d.).

In order to determine if the implementation of this framework actually does result in the “design and development of curriculum that is effective and inclusive for all learners”, we must operationalize it. Operationalizing a practice so that it can be studied is the first step in research (Campbell and Stanley, 1963). Is it observable? Is it measurable? In Universal Design for Learning 2.0, CAST offers the following on the arrangement of the framework: “arranged from *principle (least detail) → guideline → checkpoint (most detail)*” (National Center on Universal Design for Learning, n.d.). This is critically important in terms of developing a measurement system for UDL.

If we look at the three broad principles of UDL (engagement, representation, and expression), one could make the claim that most evidence based instructional changes or re-designed materials could fit under those broad umbrellas. As CAST puts forward above, these principles are the least detailed pieces of the framework.

Measuring the broad principles would yield broad, surface information about practice. For example, one form of measurement might be to count how many forms of representation are provided, how many types of expression are offered, how many choices or personalized interest areas are offered. This is one way to measure UDL but does it actually help us definitely state UDL is happening? I assert that it does not. In fact, I assert it further confuses the field by reinforcing the idea that you can be doing UDL without knowing you’re doing UDL. This is not possible if UDL really does create a definitive change in what we do. It may be that one is implementing components of UDL but not the framework. As Edyburn proposed in 2010, UDL is ultimately about design. The framework involves design and planning; it involves critical thinking about variability of learners; it involves selecting materials, methods, and assessments that reduce barriers in learning. In short, the application of a UDL framework involves an intentional process that encompasses much more than what we actually see in a lesson. Therefore, counting the number of items used to determine representation, engagement, and expression in their broadest form might help in the beginning stages for one to think about UDL as a conceptual framework but it is not discrete enough to measure whether or not the implementation of the framework results in the “design and development of curriculum that is effective and inclusive for all learners” (p. 1, Hall, Meyer, Rose, 2012). Examining the principles alone in practice is not enough.

The next step then in trying to dig deeper into UDL is to examine the guidelines. Is it possible to operationalize the guidelines? The three principles of UDL are followed by nine guidelines that offer an increased level of specificity over the principles. However, each of these principles remain somewhat broad. For example, if we examine the principle of engagement, the three guidelines are 7) provide options for recruiting interest, 8) provide options for sustaining effort and persistence, and 9) provide options for self-regulation (CAST, 2011). These guidelines are more specific than the previous principle of engagement “Provide Multiple Means of Engagement” yet as a researcher, yet there are multiple variables that play into each guideline and beg for clearer definition. “Provide” who provides? Teacher, text, peers, environment, all, none, some? “Options” what kinds of options? Does this mean choices (forced or free?), alternatives, other? And, finally “self-regulation.” What does it mean for a student to self-regulate? Each of these can be operationalized with some effort but if we move one level deeper into the framework, we find the checkpoints offer additional explanation.

The 31 checkpoints for UDL are the pieces of the framework that scientifically validate its use. CAST provides research exemplars for each checkpoint in UDL Guidelines 2.0. To paraphrase Dr. J. Gardner (UDL-IRN, 2015), ‘Is there a magic number of checkpoints necessary to implement for something to be considered implementation of UDL? Are there checkpoints that must be considered every time and others that may be more flexible?’ What tips the scales between what IS UDL implementation and what IS NOT UDL implementation? These are all critical questions. How does a framework, which in its very core promotes the idea of flexibility, operate flexibly with 31 checkpoints.

Examining tools that have been developed to begin a measurement process of UDL, it would seem the central essence of UDL lies within those 31 checkpoints. After all, those are the research based pieces put forward by CAST (National Center on Universal Design for Learning, 2012). However, many educators and researchers focus on the three broad principles without digging down into the actual guidelines and checkpoints (Rao, Ok, and Bryant, 2014; Vitelli, 2016). Do we accept that UDL is a theoretical framework or do we as a field accept the challenge and substantiate its application as challenged by Edyburn (2010) six years ago? Certainly, policy has already accepted the framework as a “scientifically valid” framework (Higher Education Opportunity Act, 2008; Every Student Succeeds Act, 2015) but even that is based on the science validating each checkpoint rather than the science validating the implementation of the framework. So, to move something from unsubstantiated (i.e., theory) to substantiated (i.e., proven), the field must endeavor to research the application of this framework as a unit. As of yet, no pub-

lished study effectively evaluates the application of the UDL framework as a whole in a K-12 system.

Measuring the implementation of the UDL framework is a critical area that must be addressed for this framework to persevere in the field of education. We must be able to show effect. Train and hope (Stokes and Baer, 1977) is not an effective strategy to sustain use. This is not a new idea. We must demonstrate that the application of the UDL framework results in what it purports to do—“design and development of curriculum that is effective and inclusive for all learners.”

### **BUT ISN'T UDL JUST GOOD TEACHING?**

If we begin by measuring the implementation of the UDL framework using the 31 checkpoints, many of those checkpoints may already happen in a well-organized, up-to-date classroom that does not include attention to the UDL framework. Thus the myth ‘UDL is just good teaching.’ The UDL framework is not built on unknowns. This has been the whole foundation necessary for it to be validated as a scientifically valid framework. Each checkpoint is validated as a stand-alone practice. Much of that body of science predates the development of the UDL framework. Ergo, many of the checkpoints were considered best practice *prior* to the UDL framework. Most assuredly you will find them in practice outside of the framework. And, most assuredly, if you use a tool to measure UDL based on the UDL checkpoints, you are likely to find teachers scoring in some positive range (emerging) on that checklist. But does that indicate that they are “doing” UDL or implementing the UDL framework? I would argue it does not.

The UDL framework is larger than the 31 checkpoints. Implementation of the UDL framework centers around, as Edyburn (2010) said, the design process. The consideration of learner variability and the *intentional* planning to reduce those barriers using effective, research based educational practices is UDL. Therefore, it is absolutely incorrect to tell a teacher in a professional development that they are “already doing UDL” because they are using specific tools like a promethean board or are offering options on assignments. *Why* are they doing those things? Did they consider learner variability extended to all learners when planning? Did they identify barriers and reduce those by making sure they addressed specific checkpoints matched to those barriers? By looking only at the three principles, nine guidelines, and 31 checkpoints as the framework, we miss the actual difference of UDL—the design process. We perpetuate the idea that teachers are “doing” UDL if they offer two different representations of materials (whether they did so to reduce barriers or they did so because it came that way in the curriculum). We must stop this as a field. The significant difference in the application of UDL is how we think about and plan for learning—how we design. No other framework invites us to design for all learners from the beginning. No other framework challenges us to identi-

fy barriers to learning and then to apply specific checkpoints to address those barriers. If we reduce UDL to observable checkpoints, it may be that we miss the most important variable in UDL, the planning process. In using only checkpoints to measure, it is possible for a very good teacher using evidence based practices to score as high as a teacher using the UDL framework. Yet, the planning approaches (traditional vs. UDL) for the design of those lessons would look very different indeed. We cannot yet say if outcomes for their students would look different. We have not answered this question through research yet. This must be done.

To summarize, UDL is much more than just good teaching. UDL is intentional design that addresses barriers to learning in an effort to develop curriculum that is effective and inclusive for all learners.

### **SO WHO ARE ALL LEARNERS?**

“The UDL framework values diversity through proactive design of an inclusive curriculum, thereby eliminating or reducing barriers to academic success. Initially proposed as a means for including students with disabilities in the general-education classroom, it is now better understood as a general-education initiative that improves outcomes for all learners.” (Ralabate, 2011, p. 2). *All* is a word repeatedly used in policy documents, textbooks, and research publications surrounding UDL. However, what does this mean in practice? Does all mean all under a UDL framework?

UDL is designed to reduce barriers and improve learning for all students. However, limited studies show application of a UDL framework involving students with ID and, even less in inclusive settings. It cannot be denied that the word “inclusive” is used proactively throughout the descriptions of UDL but little inclusion is seen in applied practice, particularly for students with more intensive support needs. Should inclusion increase based on the application of the UDL framework?

Hehir’s (2009) policy statement helped call attention to the reality that inclusion and access have become central themes in special education, and that governmental funding through discretionary programs and grants has helped to further advancements. Specifically, he cited the influence of predecessor legislation (e.g., Section 504 of the Rehabilitation Act of 1973; the Individuals with Disabilities Education Act of 1975; The No Child Left behind Act of 2001), evidence of several court cases filed on behalf of individuals with disabilities, technological advancements, the Assistive Technology Act, and the overall inclusive movement as foundational to the incorporation of UDL in policy. He has denoted the influence of these factors toward forward movement of UDL. With reflection upon this synergistic history and in anticipation of a greater emphasis on UDL in America, Hehir (2009) has accentuated the potential of UDL to provide teachers with knowledge, tools, and support for the difficult job of teaching every child effec-

tively and ensuring access to the curriculum for all thereby supporting the use of UDL as a framework that leads to inclusive practice.

However, we see application of UDL in segregated settings. This leads to ambiguity not yet clarified by the field. Under the Individuals with Disabilities Education Act (IDEA, 2006), eligible individuals may receive their individualized education plans in a variety of settings (general, itinerant, more than 180 minutes in special education, less than 180 minutes in special education, alternate schools, hospital or homebound). Settings are flexible. What is not flexible is the requirement that students must have an individualized education plan. Least Restrictive Environment (LRE) must be justified under IDEA (2006). A student's IEP requires that there be some individualized reason that a student must receive their educational services in a segregated setting as opposed to a general education setting. If UDL planning truly looks at the universe of all learners in order to create access for all, why would it be best applied in a classroom specific to individual learners where individualized learning plans are required? Where does the concept of LRE fit in with UDL? These are all questions the field must explore.

Although educational goals and objectives might certainly be based on a UDL designed general education curriculum, wouldn't the actual instruction and measurement be more individualized than designed for all? In other words, why would a special education teacher design instruction for one or more students using a UDL framework that requires instruction be designed for the entire range of learners? This confuses the field. Is the UDL framework helpful for special education teachers to consider and be able to apply? Yes. Why? Because it serves as a comprehensive reminder of what kinds of supports and strategies should be considered when designing good instruction. However, if you are designing instruction only for one learner or a small group of learners, all who have significant individual needs, is that creating a universally designed for learning classroom? I would argue no.

The flip side of this argument is that if a general education setting is designed using the UDL framework, students with more significant needs should be able to access and make progress in those settings where barriers have been reduced or eliminated. However, research doesn't support that. Thus far, Dymond et al., (2006) is the only study demonstrating the application of UDL in a setting inclusive of a student with significant cognitive needs. Where are the students with the most intensive support needs and why can't we find them in studies? As Rao et al., 2014 point out, it is critical that we list information about participants in our studies.

### **STILL SPINNING?**

As a proponent of UDL, we need agreement on this point and we must adjust our practice and professional develop-

ment to reflect this. Many questions remain that we must discuss and explore in authentic settings to determine authentic answers. Educators and researchers must work together across educational environments to clarify questions surrounding the emerging implementation of this framework. We seem to understand the basic definition of UDL as provided earlier by Hall, Meyer, and Rose (2012) but digging deeper into what that means in practice, how that is applied in practice and with whom that actually applies to causes the 'elusive' nature referred to by Okolo & Diedrich (2015).

Ralabate puts forward UDL as a general education initiative (2011). Zabala claims this as a myth (2015). Should UDL be defined as a broad educational framework where setting is not important? If so, why are we struggling to move UDL publications, research, and policy into general education environments? Why, as Okolo & Diedrich denote, is this still predominately a movement in special education (2015)?

Do we identify the UDL framework as a framework for design that can be applied individually in specially designed settings or with the larger group in generally designed settings? Isn't specially designed the antithesis of universally designed? If UDL creates classrooms that addresses the universe of students, why do we need special education?

What is the "universe" in Universal Design for Learning? Are UDL and Inclusive Practice Synonymous? Is there an inherent inclusive educational element to the application of the UDL framework as touted by Hehir (2009), Ryndak, Jackson, & White, (2013), Sailor & McCart, (2014), and Shogren & Wehmeyer (2014)? Can we agree that the UDL framework is ideally applied in inclusive environments because it maximizes opportunities for all in those settings while in segregated settings, the checkpoints serve to enhance a student's experiences by provoking more comprehensive design on the part of the teacher?

And finally, does all mean all under a UDL framework? Where are the students with the most intensive support needs? Why can't we find them in "UDL classrooms?"

So many questions remain as we move forward with Universal Design for Learning. As Edyburn stated six years ago, "UDL is much more complex than we originally thought" (p. 40, 2010). What will you do to clarify the direction of UDL in your classroom, school, district, state, university or business to help us determine which way is up with this practice?

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