

*Effecting Positive Change in English Language Learning
with Universal Design for Learning*

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Abstract

Universal Design for Learning (UDL) is an instructional framework developed from education and neuroscience research. Based on the knowledge that there is no such thing as an “average” learner, the central claim of UDL is that the diverse learning needs of students are best addressed through curricula and lessons that provide multiple means of Representation, Engagement, and Action and Expression. The UDL framework applies to the whole curriculum and is used to create flexible goals, methods, materials, and assessments that address learner diversity and reduce learning barriers to provide effective learning opportunities for all learners, including English language learners and students with disabilities. This paper introduces the background and theoretical basis of UDL and discusses how it can be used to effect positive change in English language learning contexts. It describes the research basis and ongoing development of UDL and presents suggestions and examples of how it can be used to implement instruction that reduces learning barriers and provides effective learning opportunities for all English language learners. Finally, examples of UDL-based instruction implemented in English as a foreign language (EFL) classrooms in Japan are also discussed.

Keywords: Universal Design for Learning (UDL), learner diversity, learning barriers, English language learners

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Introduction

One of the effects of societal and global upheavals of recent years is that English language classrooms around the world are more diverse than ever before. Findings from neuroscience and educational research have also highlighted the learner diversity that exists in our classrooms. These findings have shown that as every individual learns differently there is no such thing as an “average” learner – variability is the norm. However, inflexible “one-size fits all” learning environments (which include goals, materials, instructional methods, assessments, and physical environments) fail to take account of the diversity in our classrooms, thus creating barriers to learning. This is in addition to the learning barriers that English language learners already face, such as the following:

- Language and cultural barriers
- Sensory and physical disabilities
- Lack of interest, motivation, or background knowledge
- Learning difficulties such as dyslexia and dysgraphia
- Social, behavioral, or emotional difficulties

The challenge confronting English language educators is how to remove or reduce these barriers and to provide effective learning opportunities for all learners. Although personalized accommodations addressing the needs of individual learners have become commonplace in most educational contexts, the need for a comprehensive pedagogical framework that provides high quality learning opportunities for all learners – regardless of socioeconomic, cultural, gender, language, cognitive, physical, and emotional background – has become more urgent.

One approach to emerge from research into creating accessible learning environments is Universal Design for Learning (UDL). UDL is an instructional framework designed to address learner diversity and to provide opportunities for deep learning for all learners. This paper aims to give an understanding of UDL and show how it can be used to reduce learning barriers and provide effective learning opportunities to all English language learners. First, it will define UDL and discuss its development. After that, it will provide a detailed description of the UDL framework. Finally, suggestions for using UDL in English language education will be presented, including descriptions of UDL-based instruction successfully implemented in EFL classrooms in Japan.

Defining Universal Design for Learning

UDL has been defined in the following ways, all of which emphasize the need for flexible approaches to reduce learning barriers and address the needs of all learners. In one widely cited definition, Rose and Gravel (2010) define UDL as “a framework for teaching and learning that often capitalizes on the power and flexibility of modern technologies to address the needs of the broadest possible range of students”. In her definition, Tokuhamma-Espinosa (2011, p. 312) states that

UDL provides a blueprint for creating flexible goals, methods, materials, and assessments that accommodate learner differences. Universal does not imply a single optimal solution for everyone. Instead, it is meant to

underscore the need for multiple approaches to meet the needs of diverse learners.

The statutory definition of the Higher Education Opportunity Act (HEOA; Public Law 110-315, August 14, 2008) in the US, which tied funding for teacher professional development and preservice education to UDL implementation, defines UDL as

a scientifically valid framework for guiding educational practice that:

(A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and

(B) reduces barriers in instruction, provides appropriate accommodations, supports and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient.

(Higher Education Opportunity Act, 2008)

Development of UDL

The history of UDL began more than 30 years ago when the Center for Applied Special Technology (CAST) began working with learners with significant learning needs. While the CAST researchers and educators saw these learners make significant gains in this clinical setting, they knew that the students would not have the same opportunities in traditional settings. And, as the learners had demonstrated their ability to succeed when given the appropriate tools, resources, and strategies, they also came to realize that the challenges facing the learners had little to do with their abilities and more to do with barriers to learning in the learning environment (Nelson, 2014).

Before this, educators and researchers alike considered that learning problems resided in the learners. For example, the inability to identify words on a page had been seen as a problem within the learner that had to be “fixed”. However, as CAST found, learners with dyslexia “could definitely learn and excel but would run into trouble if the only way to gain access to learning was through print-based materials. Thus, print-based materials are disabled; they don’t work for everyone” (Rappolt-Schlichtmann, Daley, & Rose, 2012, p. 4). Therefore, the development of UDL involved a conceptual shift from “fixing” the learner to designing curricula and learning environments accessible to all learners (Rabalate, 2010). Reflecting on this, CAST posed the following questions:

- What if educators removed barriers at the onset when designing a learning environment, curriculum, or lesson?
- What if teachers were provided with the latest information on brain research in a way that they could apply that information within the classroom?

(Nelson, 2014, p. 4)

From this point UDL became an actionable construct (Rappolt-Schlichtmann et al., 2012). The principles and guidelines of the UDL framework (CAST, 2011; National Center On Universal Design For Learning, 2014) were developed from a rigorous synthesis of relevant research from the learning sciences. The UDL principles and guidelines were created to assist instructional designers and educators to “systematically anticipate and reduce or eliminate barriers to learning by making curricula and assessments flexible” (Rappolt-Schlichtmann et al., 2012, p. 4).

However, UDL is an evolving framework. It continues to change as knowledge evolves and new tools and strategies are developed, put in practice, and researched. Dynamic systems theory, which assumes that learning is variable and context dependent (Fischer & Bidell, 2006; Thelen & Smith, 1994; van Geert, 1998) has reoriented theory, research and practice of the UDL framework (Rappolt-Schlichtmann et al., 2012). In assuming that the learner and curriculum are a dynamic system, UDL now holds that *neither* is disabled. Rather, they are two limits on the same system, where learning occurs in the interaction between the learner and the context (Rappolt-Schlichtmann et al., 2012). The following section will describe the UDL framework and its principles and guidelines.

The UDL Principles and Guidelines

The UDL framework is based on three principles developed from research in the learning sciences. The three principles are (1) Provide Multiple Means of Engagement, (2) Provide Multiple Means of Representation, and (3) Provide Multiple Means of Action and Expression. The three principles map onto the three learning networks: the affective networks (the “why” of learning), the recognition networks (the “what” of learning), and the strategic networks (the “how” of learning). The UDL guidelines (CAST, 2011; National Center On Universal Design For Learning, 2014) provide practical strategies for educators to implement UDL-based instruction. The UDL principles, guidelines, and checkpoints are represented in Figure 1.

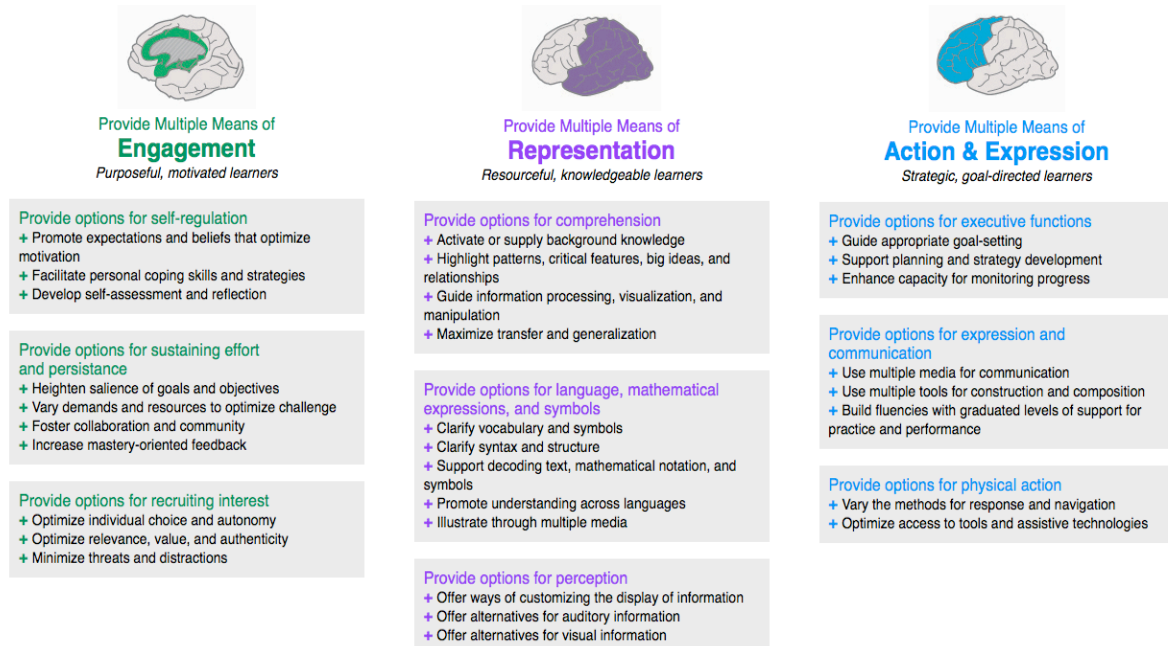


Figure 1: Universal Design for Learning Guidelines.
(National Center On Universal Design For Learning, 2014)

As UDL is a framework and not a curriculum, its guidelines are designed to be used in any subject area and to be adapted by educators to address the specific needs of learners in their educational context. Suggestions for using the UDL guidelines in this broad sense are presented in the following section.

Using the UDL Guidelines

The main purpose of the UDL guidelines is to guide educators in the use of evidence-based means of addressing the wide range of individual differences experienced in any typical classroom (Rose & Gravel, 2010). Hall, Meyer, and Rose (2012) propose that the guidelines and checkpoints are most useful as (a) tools to support the design of lessons or units, (b) tools to assess instructional methods or materials, and (c) tools for facilitating discussion about the curriculum. Suggestions from Hall et al. (2012) for utilizing the UDL guidelines and checkpoints for each of these purposes are now presented.

Tools for lesson development

According to Hall et al. (2012), the UDL guidelines and checkpoints:

- can support the design and development of lessons considering the broadest range of learners from the outset
- can prompt educators to consider ways to design multiple means of Engagement, Representation, and Action and Expression directly into their instruction
- should be applied according to the specific goals of each lesson or unit
- are flexible suggestions to be applied as the teacher deems appropriate

Tools to assess instructional methods or materials

Hall et al. (2012) also suggest that the UDL guidelines and checkpoints:

- can be used to determine whether any barriers exist in the curriculum or learning environment
- provide a framework for reflecting on a lesson that may have been ineffective for some learners
- offer strategies that may provide insight into ways to improve the lesson so that it is accessible to all learners

Tools for facilitating discussion about the curriculum

Finally, Hall et al. (2012) propose that the UDL guidelines and checkpoints can be used to:

- start conversations in curriculum planning meetings about all aspects of the curriculum
- reflect upon ways to design lesson plans that are more inclusive of all learners
- reflect upon the effectiveness of past lessons that may not have drawn from the UDL framework

Narrowing the focus to English language learning, the following section presents examples of how UDL can be used to reduce learning barriers and provide effective learning opportunities in the English language classroom.

UDL in the English Language Learning Classroom

This section will present some suggestions of how English language educators can use the UDL framework to design and implement instruction that reduces barriers to learning and delivers high quality learning opportunities to their learners. It provides practical examples based on each of the three UDL principles and their goals of how this can be implemented.

Principle: Provide Multiple Means of Engagement

Goal: Purposeful, motivated learners

Examples:

- Choice of topics, tools, and means of expression (as appropriate to learning goals)
- Learner portfolios or personal journals
- Project-based learning
- Flexible groupings (e.g., by skill, by interest or passion, for collaboration)
- Near peer role modeling

Principle: Provide Multiple Means of Representation

Goal: Resourceful, knowledgeable learners

Examples:

- Visual representations of new vocabulary and concepts
- Auditory and visual support of text-based materials (e.g., listen to CD while reading, read aloud, text-to-speech software, video, graphics, picture books)
- Textual support of auditory information (e.g., transcripts, Automatic Speech Recognition speech-to-text software)
- Scaffolded digital reading environments (SDRs). Create own SDRs or use e-books and resources with auditory and translation support, and multimedia glossaries
- Supply, activate, or provide sources or links to background knowledge to support comprehension of texts

Principle: Provide Multiple Means of Action and Expression

Goal: Strategic, goal-directed learners

Examples:

- Set well-defined and challenging learning goals
- Provide guides and checklists to support appropriate goal setting and planning
- Use graphic organizers and templates to support organization of ideas
- Audio and video recordings (e.g., created using smartphones)
- Movies, manga, posters, dramatic, musical or other responses
- Digital platforms that provide multiple tools, media, and expressive options

In the next section, examples of the successful implementation of some of the options described above in Japanese university EFL classrooms are summarized.

Effecting positive change with UDL: Success stories from the classroom

Although the goal of UDL proponents is that it be implemented, at the very least, on an institution-wide basis – as its prominence in legislation such as the 2008 Higher Education Opportunity Act indicates – this is not always possible. It is quite common for UDL to be implemented “one classroom at a time” as educators become aware of it and trial it in their own contexts. In this section, I will summarize some examples of how I have implemented UDL-based instruction in university EFL classes in Japan.

First, I will briefly describe two successful examples of instruction based on the principle of Engagement. The first involved learners creating a self-directed learning portfolio. Based on the idea that giving options for self-regulation and for recruiting interest through, for example, optimizing individual choice, autonomy, relevance, value, and authenticity, can improve learner engagement, over fifteen weeks learners created a portfolio of expressive works in English. Among the types of expressive works that learners chose to create were short stories, personal journals, and reviews of books and movies. Another activity based on the principle of providing multiple means of Engagement was a self-directed listening portfolio. In order to maximize the amount of English input received through listening, students in a communicative English course were asked to regularly listen to (and watch, if applicable) something in English of their own choosing and to produce some evidence of learning, such as a summary, a review or a vocabulary log. Although guidance was provided on the types of resources and learning tasks that might be suitable, learners had autonomy over what they listened to as well as what type of learning activity they completed. Weekly feedback and advice from the instructor ensured that learners also had sufficient support and guidance in addition to their own self-regulation.

Next, I will summarize two successful examples of instruction based on the principle of Representation. One activity in an extensive reading program involved playing the audio of graded stories while learners simultaneously read and listened. This helped develop reading and speaking skills and was evaluated highly by learners (Dickinson, 2017). This activity is especially helpful for less proficient readers for decoding new words and learning pronunciation. Another activity employing multiple means of Representation involved having students read a story and watch a movie version of the same story. The multimodal representations (textual, visual, aural) of the stories and the L1 support provided in the movies reduce learning barriers by providing options for learners to perceive and comprehend the content. The contrasting interpretations offered by the book and movie representations also offer opportunities for deeper learning as learners not only receive increased language input with multimodal support, but are also able to develop their critical thinking and analytical skills through considering the different perspectives and interpretations provided in the two versions of the story.

Finally, I will describe two examples of instruction successfully implemented in my EFL classes based on the principle of providing multiple means of Action and Expression. One involved a collaborative multimodal storytelling activity where small groups of learners created and performed a narrative using comic-style drawings and language. After learning about narrative structure and the linguistic forms used in narratives, small groups of learners collaborated to create their own narratives in both visual and linguistic formats. The final stage involved each group of learners

performing their stories orally using the comic strip style pictures they had drawn as a visual support. The collaborative nature of this activity enabled learners to use their different strengths and interests, for example, with drawing pictures or writing, to produce the final expression of their learning. The other example involved providing learners with options in how they gave presentations in an EFL class. After researching their self-chosen topic learners were able to present on it in a format of their choosing. Learners could use a poster, PowerPoint, or use video, props and realia in their presentations. For example, one group presenting on the buildings on New York created and used a 3D scale model of the Empire State Building in their presentation. Learners indicated that they enjoyed the option of choosing a presentation format that best suited their topics, skills, and communication styles.

Conclusion

The challenges posed by learner diversity in English language classrooms today are significant. At the same time, with the knowledge we have about learning and the affordances of digital technology there are more opportunities than ever before to address the needs of our diverse learners. Universal Design for Learning has been presented as a promising framework to guide educators in harnessing the available knowledge and tools to create effective learning environments that help all learners meet high learning expectations. This paper has described the UDL framework and shared some suggestions for using it to provide the appropriate goals, instruction, materials, and assessments to help enable this outcome. It has also presented some examples of UDL-based instruction that achieved positive outcomes in EFL classrooms. However, there is a need for much more classroom-based research of UDL, not only to provide evidence of its claimed scientific validity (Edyburn, 2010), but also to evaluate its effectiveness in improving English language learning outcomes for all learners. Only then will UDL become better known and accepted as a valid framework for addressing learner diversity and improving learning outcomes in English language learning education.

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