



Understanding the Benefits of Universal Design for Learning (UDL) in Low-resourced Classrooms

What is Universal Design for Learning?

UDL is based on the architectural concept that when you make an environment accessible and inclusive for persons with disabilities, everyone benefits. This concept is then applied to learning, where UDL recognizes that everyone receives, interprets, and expresses information differently. UDL is an instructional approach that can be applied to all subjects and across the curriculum. The focus on instruction moves away from disability (and focusing on an individual's differences and challenges) to variability (Meyer et al., 2014)

UDL has three basic principles:

Table 1 - Basic Principles of UDL

Multiple means of engagement	Multiple means of representation	Multiple means of expression
Students are motivated to learn in various ways.	Students understand what is taught to them differently.	Students express themselves in different ways.
Strategies include visual schedules, connecting content to students' personal experiences, playing games to learn new concepts, providing student choice.	Strategies include allowing both large group and small group instruction, presenting information verbally while also writing information on the chalkboard, using music and song to reinforce learning.	Strategies include allowing students to write down or verbally answer questions, thumbs up/and down, providing wait time before asking students to respond, allowing students to act out new concepts or produce drawings.

Is UDL Effective in the classroom?

UDL is an evidence-based approach that has been found to significantly improve learning outcomes for students with and without disabilities. UDL approaches also have the potential to support learners encountering crisis and conflict in their education (Basham et al., 2020). Furthermore:

- Applying UDL principles in the classroom can promote teacher engagement and reduce overall workload (Kumar & Wideman, 2014).
- Students with intellectual disability who received instruction using UDL principles made significant gains in reading (Coyne et al., 2012).
- UDL has been proven to improve learning across a variety of subjects including literacy and math (Rao, Ok, Bryant, 2014), chemistry (King-Sears et al, 2015), and psychology (Davies et al, 2012).
- When utilized thoughtfully, UDL can also support the delivery of culturally-responsive pedagogy (Kieran & Anderson, 2018), multicultural education (Pearson, 2015), and embracing human diversity (Waitoller & Thorius, 2019).



Figure 1 - Students practice mathematics concepts using the UDL principle of multiple means of action and expression. Learners were permitted to write their answer, count their answer with bottle caps, draw the answer on the chalkboard, or whisper to the teacher.

Can UDL be applied to low-resourced classrooms?

While countries with significant material resourcing link UDL with assistive and digital technologies, in countries with limited resources, UDL can still promote inclusive teaching and learning practices. For example:

- UDL has been introduced in several countries, including Armenia (Tichá et al., 2018), Singapore, Brunei, and South Africa (Al-Azawei et al., 2016). Inclusive Development Partners (IDP) has also piloted UDL programming in Ghana, Rwanda, Tanzania, and Tajikistan.
- IDP piloted a UDL program with the support of the United Nations Children’s Fund (UNICEF) in rural Ghana in the 2019/2020 school year which found that:
 - 100% of participating teachers, headteachers and district-level officials found the UDL pilot program to be useful or very useful in providing instruction to early-grade students in math and literacy.
 - As a result of the UDL training and intervention, 100% of participating classroom teachers stated their attitudes towards persons with disabilities in their class and the community improved.
- IDP piloted a UDL activity in Rwanda under USAID’s Soma Umenye’s project implemented by Chemonics International. In this project, 25 teachers were trained in UDL and received ongoing coaching and classroom monitoring visits.¹ The training on UDL found that 100% of participants found the UDL approach to be very useful or useful for their jobs. Participants also indicated their confidence in educating diverse learners in the classroom increased to 100%.

Who is supporting using UDL in low-resourced settings?

- **USAID:** USAID through the Global Reading Network created the Universal Design for Learning to help All Children Read Toolkit: Promoting Literacy for Learners with Disabilities. This document is referenced as a core resource in USAID Education Policy: Program Cycle Implementation and Operational Guidance, and in many USAID education solicitations globally.

¹ The implementation of the project was not fully completed due to the disruption of schools caused by COVID-19 in 2020.

- **Governments:** Several governments are proactively supporting introducing UDL principles in the classroom. UDL is mentioned in several countries' inclusive policies and strategic documents including Ghana, Rwanda, the Philippines, and Timor-Leste.
- **Other donors:** Other donors and international agencies have also supported the use of UDL in its programs including UNICEF, World Bank and UNESCO.

For more information about Inclusive Development Partners please visit the links below:

- [IDP Website](#)
- [IDP LinkedIn](#)
- [IDP Facebook](#)
- [IDP Twitter](#)

Resources

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Waitoller, F., & Thorius, K. (2019). Cross-pollinating culturally sustaining pedagogy and universal design for learning: toward an inclusive pedagogy that accounts for dis/ability. In M. J. Schuelka, C. J. Johnstone, & G. Thomas (Eds.), *The Sage handbook of inclusion and diversity in education* (pp. 173-192). SAGE Publications Ltd. <https://doi.org/10.4135/9781526470430.n17>
<https://www.inclusivedevpartners.com/>