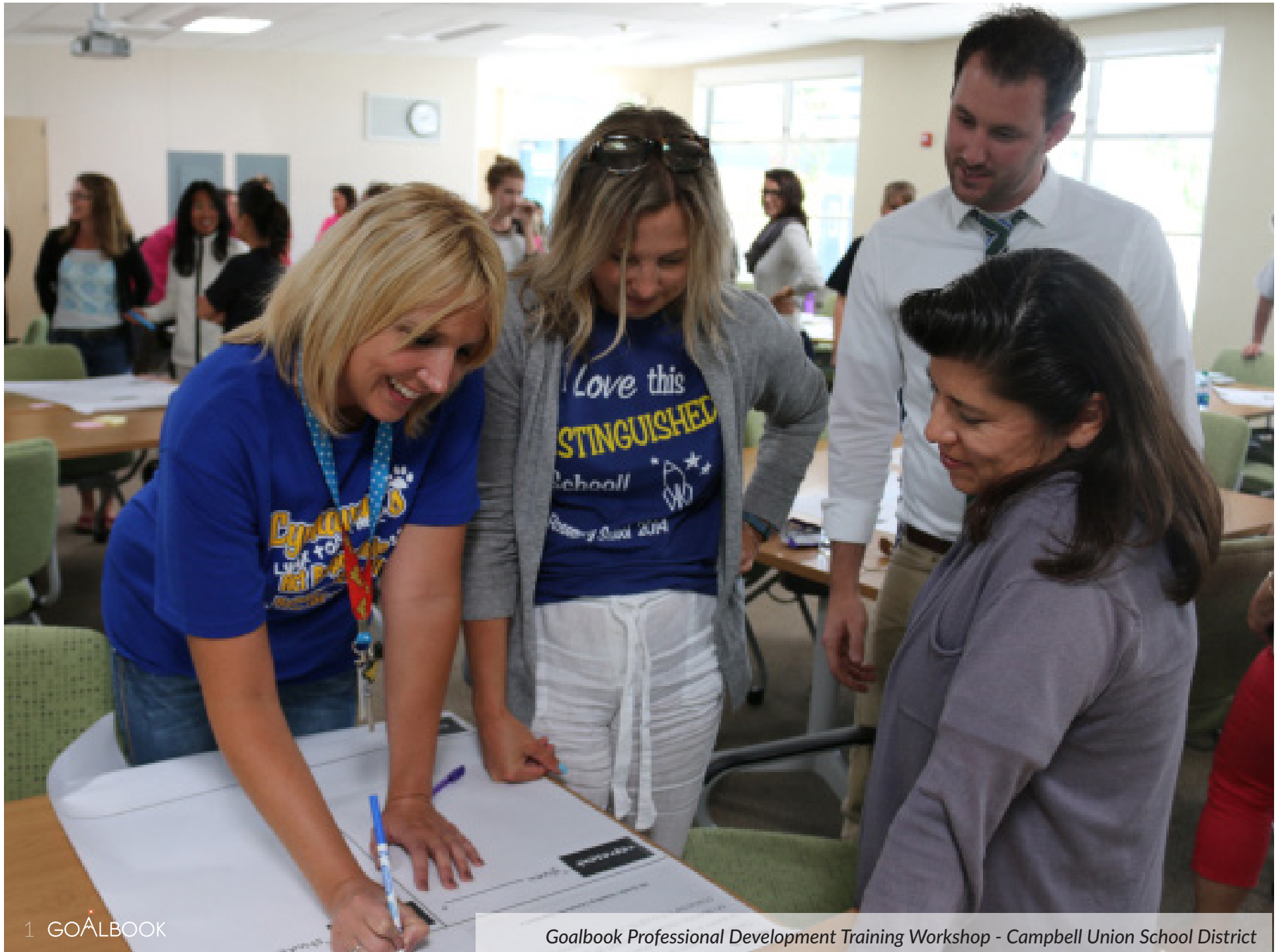




INSTRUCTIONAL IMPACT STUDY | 2016

Universal Design of Learning Framework in Instruction Design



EXECUTIVE SUMMARY

Goalbook, in conjunction with WestEd, conducted a research study to examine how the Universal Design for Learning (UDL) framework is used to design instruction and facilitate differentiated lesson planning through coaching. UDL is a framework that guides educators to differentiate instruction by designing instruction that offers multiple means of access to rigorous learning objectives. Developed by the Center for Applied Special Technology (CAST) in 1998, this framework uses scientific research about how humans learn to help educators improve and optimize instruction for diverse groups of learners. Today, many educators, including teachers, administrators, school districts, and university researchers, utilize the UDL framework to inform lesson planning, teaching, and coaching. Goalbook provides instructional resources that help teachers align their planning to rigorous learning standards and make academic research actionable.

This study uses a mixed-methods approach to answer the following research questions:

- ◆ **What impact does the UDL framework have on classroom practice?**
- ◆ **How can districts support teachers' use of UDL in classrooms?**

STUDY DESIGN

Researchers designed a four-month study within a large urban school district. The study focused on applying the UDL framework to instructional practice and evaluating how UDL training and coaching impacts teacher practice. Researchers recruited three instructional coaches and ten teachers for the coaches to support within the school district.



The first aspect of this study involved training the three facilitators during a one-day professional development workshop on UDL, which they in turn delivered to the teachers they coach. Coaches also learned how to utilize the UDL framework within their coaching processes. They learned how to use UDL-aligned planning and lesson observation documents and discussed how they would use these documents within their coaching cycles.

Once all participants had received training, the instructional coaches met with each of their teachers individually to discuss plans for an upcoming lesson with a specific focus on one student with an upcoming IEP. During this conference, the coach and teacher utilized Goalbook to enhance their UDL-aligned planning.

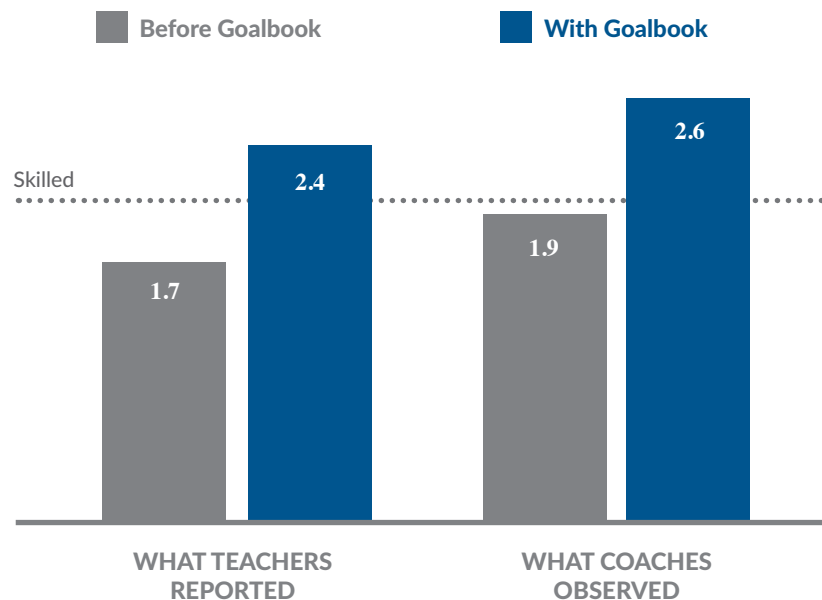
Coaches observed each teacher deliver the lesson and used a UDL-aligned rubric to rate its quality within terms of UDL. Coaches conferenced with the individual teachers following the lesson to reflect on the lesson and review student artifacts.

FINDINGS

Coaches concluded the study by conducting an evaluation that rated the lesson's effectiveness using the UDL-aligned rubric for each of their teachers. Researchers then conducted a pre and post survey to collect anecdotal information on teacher and coach growth. Researchers analyzed these surveys, rubrics, and final evaluation forms to develop study findings.

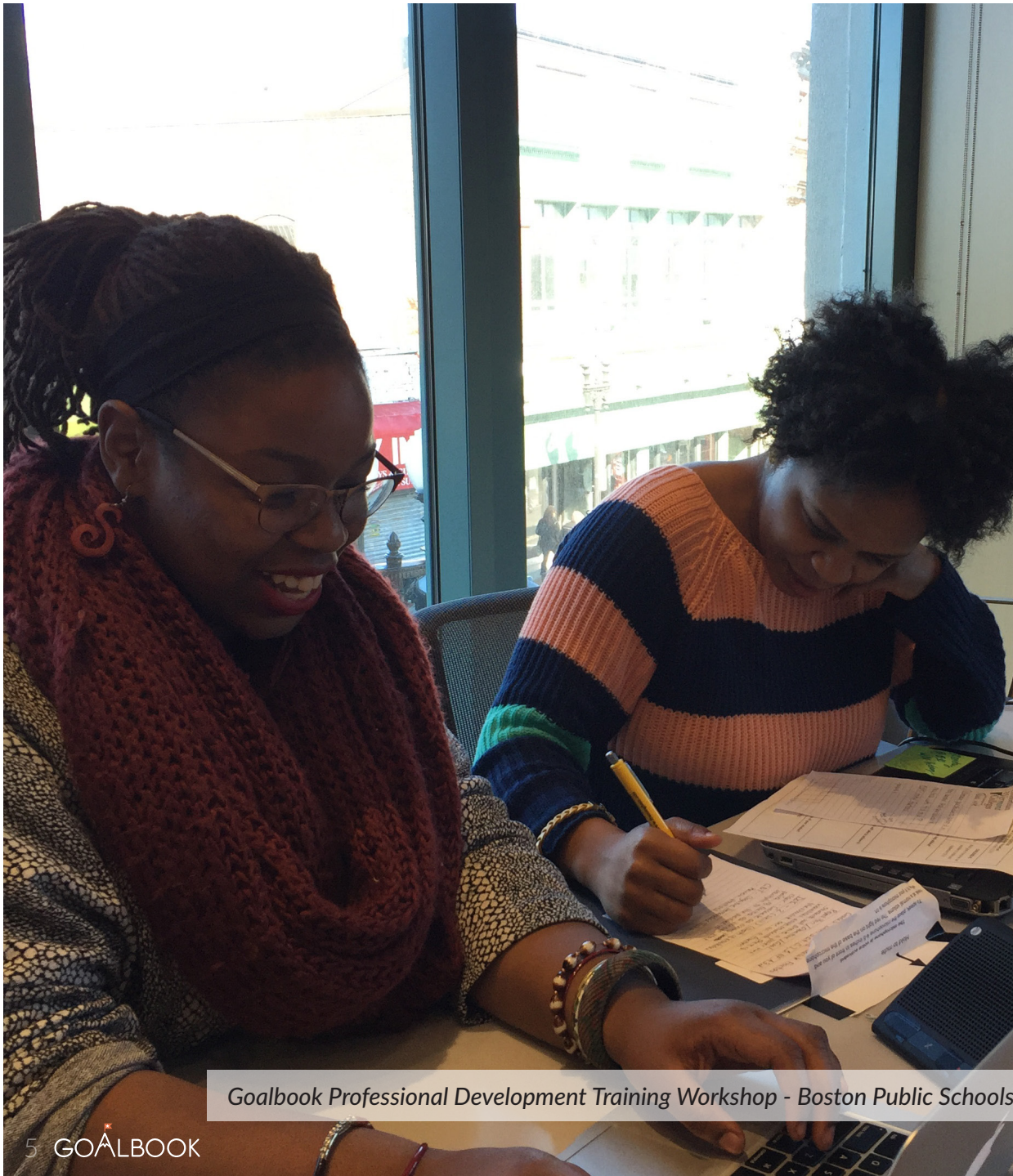
The findings suggest that applying the UDL framework provides numerous educational benefits to instructional practice. When educators receive UDL training through whole group professional development, as well as through one-on-one coaching, their ability to differentiate improves. Furthermore, when educators were pushed to consider the UDL framework in their instructional planning and delivery, both teachers and coaches showed growth as measured by rubrics as well as anecdotal reporting. The findings also establish that there are effective ways school districts can support UDL in classrooms, which include using a specific coaching model that consists of group and individual training, co-planning, lesson observation and feedback.

Teacher's Ability to Differentiate Instruction



Scored on a 0-3 point scale.

All 10 participating teachers showed ***growth in their ability to differentiate*** within their instructional design/delivery, and all 3 participating coaches demonstrated growth in their ability to support teachers with differentiation




Goalbook Professional Development Training Workshop - Boston Public Schools

Teachers self-reported improvement in their ability to differentiate instruction. When asked to rate their ability to differentiate their instruction by using a numerical rating system from 0-3, the teachers rated their ability at a 1.7 before the study and at a 2.4 after the study.


Similarly, the instructional coaches reported that the teachers' ability to differentiate improved from an average of 1.9 to 2.6 (also using the same 0-3 rating scale).

All teachers stated that their ability to plan within the three principles of UDL increased through training.

Specifically, out of the three principles of UDL (representation, expression, and engagement), they reported the most growth within the principle of expression and engagement. When asked to rate their growth on a 3-point scale, they reported an increase of 0.5 in their ability to plan meaningful representation strategies, an increase of 0.9 in their ability to plan meaningful expression strategies, and an increase of 0.8 in their ability to plan meaningful engagement strategies.



17%
ability to plan
representation
strategies



30%
ability to plan
expression
strategies



27%
ability to plan
engagement
strategies

All participating teachers felt they received more effective coaching as a result of the study. Specifically, all 10 participating teachers said they learned something new and wanted to work with their coach more.

All participating coaches self-reported that they became more effective coaches and acquired more tools with which to support their teachers in ways to differentiate using the UDL framework.

Their surveys revealed that their ability to coach teachers to differentiate grew from a self-reported rating of 2.1 before the study to a rating of 3.0 after the study (on a 0-3 scale).

IMPLEMENTING THE UDL FRAMEWORK

There are specific measures districts can take to effectively implement the UDL framework within schools. We found that a highly effective method to reinforce the UDL framework was to construct an instructional coaching model that involves coaches who support teachers directly. Below is a list of certain aspects within these three coaching tools that were noted to be especially helpful:

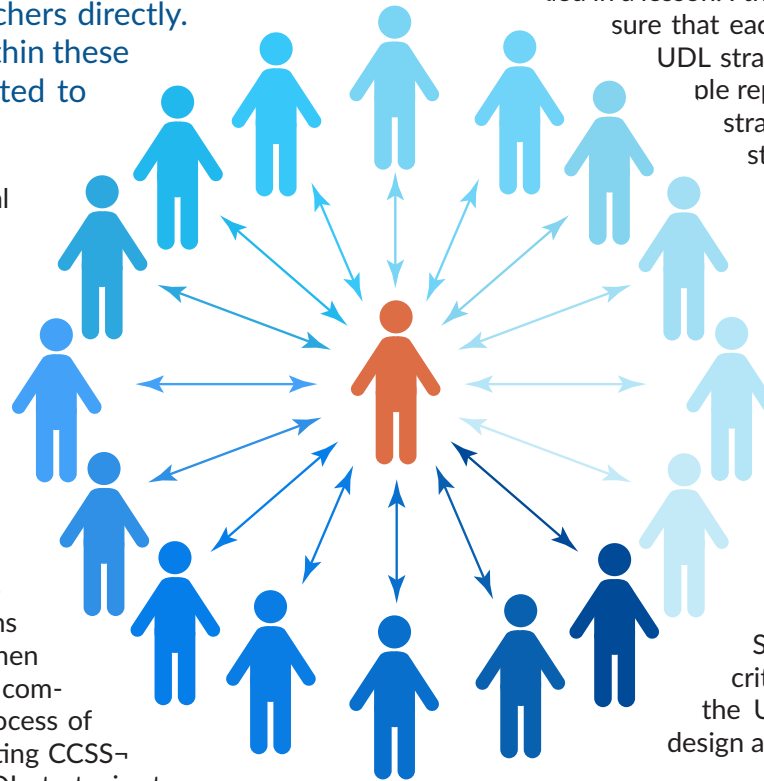
◆ All coaches reported that their initial training was very helpful to their development. The most beneficial aspects of the coaches' UDL training included watching a video of teaching and then analyzing the sample lesson using a UDL-aligned rubric to quantify the use of UDL strategies within a lesson. In other words, coaches appreciated the opportunity to practice the coaching process with sample lessons.

◆ The coaching documents that supported the conference and co-planning sessions were found to be helpful, especially when used alongside Goalbook. One coach commented: "I think that the three-part process of identifying student present levels, creating CCSS-aligned IEP goals, and then identifying UDL strategies to help students achieve their goals has been very useful. Though teachers are used to these steps, Goalbook allows them to implement them more seamlessly. I think that guiding teachers through this process, and showing them how Goalbook can be used as a resource, helps teachers to remember and implement these best practices."

◆ Out of all the UDL materials provided, the instructional coaches found the UDL rubric and Goalbook to be the most helpful tools to provide UDL support. One coach commented: "I think that now I am able to use the rubric to show how many different strategies can be embedded in a lesson. I think a lot of times I would just look to make sure that each lesson component had a differentiated UDL strategy, but not that the student had multiple representation, expression, and engagement strategies. It's not enough to just provide one strategy per category, per lesson...I do feel that the rubric and Goalbook showed me how many different strategies could be incorporated into a lesson, and that was very helpful."

◆ All participants found Goalbook to be a helpful resource to support their work. Specifically, all participants (13 out of 13) stated that the Goal Wizard function, which assists educators to develop learning goals based on a student's current levels, was one of the most helpful features of the tool. Furthermore, participants cited that the UDL Strategy Wizard and repository were also critical tools in aiding their work in utilizing the UDL framework within their instructional design and instructional coaching.

◆ Teachers agreed that their work with their coaches was instrumental in supporting their professional development. They found working individually with their coaches was the most effective aspect of the coaching cycle. Specifically, teachers found their coach's feedback, co-planning, and use of Goalbook to be the most powerful part of their work together.



CONCLUSIONS & RECOMMENDATIONS

The findings from this study suggest the following conclusion to increase the effectiveness of a UDL implementation within a school district: Provide structured support for teachers when implementing the UDL framework. This conclusion and related recommendations are explained below.

CONCLUSION

Provide structured support for teachers when implementing the UDL framework.

Providing structured support affords clear expectations and guidelines for all participants. In this study, a structured coaching model was used to support teachers in their development of using UDL. Both coaches and teachers were given explicit training and clear guidelines on how they would use UDL. Teachers received consistent support from their coach throughout the study, which was instrumental in achieving the positive gains in performance.

RECOMMENDATION

Provide tools that relate to and support the use of UDL, such as UDL-aligned rubrics and Goalbook.

Participating coaches and teachers received various tools and resources to support their work with UDL, including group trainings, individual trainings, planning documents, a UDL-rubric, and Goalbook (see appendix to view these resources). Coaches reported that one of the most helpful resources they used to assess a teacher's ability to differentiate was the UDL-aligned rubric created for this study. Goalbook was also found to be a highly effective tool. All 13 participants reported that Goalbook strongly impacted their ability to learn about and integrate UDL within their planning in a meaningful way.

RECOMMENDATION

Train coaches and teachers on how to use these UDL resources and technologies to coaches and teachers.

The UDL rubric was new to all participating coaches and was, at first, challenging for them to utilize as it differed from the typical running record and lesson evaluation form they had previously used. However, after participating in training, they all found the rubric to be highly effective in helping them to evaluate a lesson within the context of UDL. Furthermore, all coaches agreed that the practice within their training helped support their use of the rubric. Specifically, they found that watching sample lessons and practicing using the rubric within a group and then individually helped increase their familiarity and comfort with using the rubric. Coaches and teachers also received training on how to use Goalbook. Although some participating teachers had access to Goalbook prior to this study, they reported more engaged and informed use after training. Coaches also used Goalbook during their co-planning conferences, which teachers found to be a helpful and authentic application.

About this Study

Conducted in conjunction with WestEd, this study revealed the positive effects on instruction when the UDL framework is applied through an instructional coaching model that involves group and individual training, focused observation and coaching, and instructional resources. The findings support the body of research that suggests that the UDL framework aids educators in designing learning experiences that are differentiated and accessible to all learners. Although a school district's specific support plans for implementing UDL may differ, this study suggests the need for a structured support plan for educators, as well as adequate training in all UDL-related resources and technological tools.



We empower educators to design rigorous instruction so that ALL students succeed.

www.goalbookapp.com

