

Universal Design for Learning and Direct Instruction in a Special Education Practicum

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OVERVIEW

The Instructional Planning Project (IPP) assignment is set in an online practicum course for graduate students in a high incidence special education teacher preparation program. The IPP assignment is the culminating assignment in a sixteen-week long course. The course provides students with a lesson plan template, for a reading or math lesson, that integrates direct instruction and Universal Design for Learning. The template is used for the major IPP assignment as well as for prior lesson plan assignments. Detailed instructions and a rubric are provided on Canvas, the learning management system, for the IPP assignment, where practicum students infuse Universal Design for Learning principles into a direct instruction lesson.

Topics: Lesson Plans, Online Special Education, Practicum Course, Universal Design for Learning

Time: Two weeks, primarily asynchronous, with synchronous Zoom sessions

MATERIALS

- Learning Management System (e.g., Canvas)
- Computers with internet access
- Computer, tablet, or external camera with video capabilities
- [Detailed Instructions for the IPP](#)
- [DI/UDL Lesson Plan Reading Template](#)
- [DI/UDL Lesson Plan Mathematics Template](#)
- [IPP Rubric](#)
- [DI/UDL Lesson Plan Example](#)
- At least two or three K-12 learners (see The Pre-Lesson Plan IPP Steps section)
- Materials needed for the K-12 lesson (see The Lesson Plan IPP Steps section)
- Zoom or another synchronous meeting platform

CONTEXT-AT-A-GLANCE

Setting

An online high incidence special education graduate program located at a mid-sized Midwestern university in the United States.

Modality

Primarily online asynchronous with several scheduled synchronous Zoom sessions.

Class Structure

The class is a sixteen-week, 3 credit-hour practicum class.

Organizational Norms

This is the first of two practicum classes. Both practicum classes are required in the program.

Learner Characteristics

Graduate students are enrolled in the high incidence special education master's degree program or the licensure-only program.

Instructor Characteristics

Both instructors have a Ph.D. in special education. The instructors have a combined 22+ years of teaching online classes at the university level in special education teacher preparation programs.

Development Rationale

The Instructional Planning Project (IPP) was developed as the cumulative assignment in the first practicum class. It requires demonstrating competency with direct instruction and Universal Design for Learning principles for lesson plan development and implementation.

Design Framework

Practicum students must integrate Universal Design for Learning principles into a direct instruction lesson framework.

SETUP

This lesson occurs in an online environment. Access to a learning management system (e.g., Canvas) and synchronous meeting platform (e.g., Zoom) is needed. Students should have access to K-12 learners in a practicum situation, and the instructor should have the ability to observe the students implementing a lesson with K-12 learners (either synchronously (e.g., Zoom) or face-to-face).

STANDARDS

The Instructional Planning Project (IPP) assignment is based on the Kansas State Department of Education (KSDE) standards for special education teacher preparation programs in high incidence disabilities (Kansas State Department of Education, 2015). Specifically, the assignment aligned with the following standards: KSDE Standard 3, KSDE Function 3.2, 3.3, 3.2.2 CK, and KSDE Standard 6.

Lesson plans are a key component within the Instructional Planning Project (IPP) assignments. Practicum students are required to identify and list the relevant K through 12 curriculum state standards for the lesson plans they develop for their learners.

major components of direct instruction (I DO, WE DO, and YOU DO). Direct instruction is a structured, whole-class instructional approach which utilizes clear, concise language and a consistent learning routine (Caballero et al, 2022). Direct instruction gives students an opportunity to learn a new topic by seeing it done through modeling (I DO), then by practicing the procedure with a teacher (WE DO), and finally by practicing it independently (YOU DO). Direct instruction assures that students do not practice errors; instead, students practice correct and effective thinking and problem solving (Stephan & Smith, 2012). It is important for instructors to know the research behind the importance and implementation of the direct instruction model.

Instructors also need to understand the what, how, and why of UDL. UDL consists of three principles: Multiple Means of Representation, Multiple Means of Action and Expression, and Multiple Means of Engagement (Center for Applied Special Technology [CAST], 2018). Instructors not only need to know what is included under each guideline, but also the research behind how UDL helps students with disabilities. It can be very challenging for teachers to simultaneously implement direct instruction and UDL in the classroom, therefore it is important for university faculty to have a strong background and understanding in both practices.

CONTEXT AND SETTING

The overall goal of the IPP is to demonstrate that the practicum students can plan, teach, and evaluate an integrated Universal Design for Learning (UDL) and direct instruction (DI) lesson for two or more K-12 learners with high incidence disabilities that is aligned with the students' IEP goals/objectives and that integrates appropriate content standards. The lesson must contain the appropriate UDL strategies, accommodations and/or modifications for students with disabilities (as specified on the students' IEPs). Moreover, the practicum students need to demonstrate their ability to incorporate multiple means of instruction by integrating UDL strategies from each UDL guideline, while being able to explain their rationale for choosing the strategies.

INSTRUCTOR EXPERTISE

The university instructors must understand direct instruction, as well as how to teach using the three

LEARNER CHARACTERISTICS

The graduate students in this class are practicum students in the high incidence, special education, graduate program who are currently teachers of record in an elementary or secondary K-12 classroom. They are in their first of two practicum experiences. They have taken at least two courses in the high incidence special education master's program prior to taking this first practicum course. During this 16-week practicum course, they have a mentor from their local school district, as well as a university faculty instructor working with them to complete all assignments. One of the instructors is the Practicum Director, and she is in charge of recruiting mentors from school districts. In most cases, the mentors have already been assigned to the practicum students by the local school districts. Both instructors meet with mentors through synchronous sessions via Zoom to provide training on the integrated DI/UDL lesson plan template (see attached DI/UDL Lesson Plan Reading Template and DI/UDL Lesson Plan Mathematics Template).

The practicum students are introduced to the lesson plan template in their previous classes and are expected to use it throughout their practicum experience with their K-12 learners. The mentors and the university instructor collaborate with the students, as needed, in writing the lesson plan and implementing it throughout the semester. After frequent feedback on lesson plan development and their teaching of initial lessons, students are ready to complete the culminating activity for the course: The IPP.

The practicum students learn about UDL throughout their graduate program. The initial introduction of UDL begins in their very first course of the program. Students learn that UDL is a framework developed to help teachers teach lessons to students with a variety of learning styles (Schwerdtfeger et al., 2022). Students learn the background of UDL and how it was adapted from the idea of universal design. They learn that with universal design, architects or developers create designs for buildings or surrounding areas that increase accessibility so a wide range of people can use the buildings. For instance, a ramp is a universal design that provides access for many people, including those who use wheelchairs, push strollers, and make deliveries (Caballero et al., 2019). Building upon the concepts from universal design, UDL helps teachers create lessons that can be accessible to all students. For training in UDL, the practicum students in the high incidence program learn the background of UDL and how to implement it in their lessons in several classes prior to this course.

In the first course of the high incidence program, the students work through a module entitled: “Universal Design for Learning: Creating a Learning Environment that Challenges and Engages all Learners” (IRIS Center, n.d.). In this module they learn about the 3 guidelines of UDL and how to incorporate these guidelines into their instruction and assessments (IRIS Center, n.d.). They also watch multiple videos, read various articles, and complete assignments where they connect their teaching with UDL.

In the second course of the high incidence program, the students use the DI/UDL lesson plan template that is used for the practicum course (see attached DI/UDL Lesson Plan Reading Template and DI/UDL Lesson Plan Mathematics Template). They create a mathematics lesson in a mathematics content area of their choice. They must use direct instruction and incorporate multiple UDL strategies within each guideline in the lesson. This lesson plan process

takes multiple weeks because they collaborate with other class members and receive feedback from the course instructor before they create the final lesson plan draft. Throughout this process, practicum students have a DI/UDL Lesson Plan Example (see attached PDF/DOCX), developed by one of the instructors, so that they can see what is expected of them and have a concrete reference as they are developing their lesson plans.

LEARNING REPRESENTATION

BEGINNING OF THE SEMESTER

The practicum students are provided with two DI/UDL lesson plan templates at the beginning of the semester. One of the templates is for mathematics (see attached DI/UDL Lesson Plan Mathematics Template). and the other is for reading (see attached DI/UDL Lesson Plan Reading Template). The templates look the same except the UDL Procedures in the third table vary based on the subject area.

UDL focuses on three guidelines to optimize learning (CAST, 2018):

- Provide Multiple Means of Representation
- Provide Multiple Means of Action and Expression
- Provide Multiple Means of Engagement

On the lesson plan template, in the UDL Procedures in the third table, many strategies within each UDL guideline are listed to give practicum students a variety of options and ideas for how to implement UDL in their classrooms. Practicum students are expected to pick two to three strategies under each guideline that they can utilize in their lesson. It is critical for them to understand that they need to incorporate strategies under each guideline to truly have multiple means of instruction. For example, if they just show a video, they are not implementing UDL. To implement UDL, practicum students need to incorporate strategies under each guideline in every lesson. Providing the practicum students with a list of strategies encourages them to use different strategies while not feeling overwhelmed by having to search for strategies within each guideline.

As previously stated, the practicum students have used these templates in previous classes, therefore they have prior knowledge and training on how to use

them. During this practicum experience, the graduate students write lesson plans and implement the lessons with their K-12 learners.

At the beginning of the semester, the university instructor meets with the practicum students in a synchronous Zoom session to go over class requirements and to review the lesson plan formats provided. In a different Zoom session, the university instructor meets with the students' mentors to provide a brief introduction to the lesson plan templates, direct instruction, and UDL.

FIRST OR SECOND MONTH OF SEMESTER

During the first or second month of the semester, the practicum students teach a DI/UDL lesson to a group of their K-12 learners and the university instructor observes the lesson via Zoom. The practicum students must turn in a lesson plan prior to the observation, using one of the templates (reading or math). The university instructor provides feedback to the practicum students on the written lesson plan and the implementation. The mentor of each practicum student also observes at least one lesson during the first or second month of the semester and provides feedback on the written lesson plan and implementation. Both the mentor and university instructor work with the practicum students to help them incorporate and implement UDL in their lessons.

THIRD MONTH OF THE SEMESTER

During the third month of the semester, the practicum students complete the same process as the first or second month but with a second lesson.

FOURTH OR FIFTH MONTHS OF SEMESTER

During the fourth and/or fifth months of the semester, the practicum students work on their IPP assignments. Prior to beginning this culminating project, the practicum students received feedback on the written lesson plan and implementation procedures from the university faculty and the mentors on at least four separate occasions, twice from the university instructor and twice from their mentor.

IPP REQUIREMENTS

The IPP consists of many requirements (see attached Detailed Instructions for the IPP for student directions).

THE PRE-LESSON PLAN IPP STEPS

The practicum students choose a minimum of two to three K-12 learners who are working on a similar learning objective in either mathematics or reading. The practicum students then give one informal pre-assessment (e.g., reading fluency, reading comprehension, mathematics calculation, mathematics problem solving) related to the specific lesson they will teach.

For example, if focusing on reading fluency, a one-minute oral reading assessment could be used. If focusing on reading comprehension, the practicum student could read aloud and then retell what he or she has read using a grading rubric to assess performance OR an informal reading inventory could be used to assess reading comprehension. If focusing on mathematics computation fluency, a one-minute mathematics computation assessment could be used.

THE LESSON PLAN IPP STEPS

Based on the pre-assessment results, the practicum students write one measurable goal related to their lessons.

Practicum students then develop a DI/UDL lesson plan for the content area that they selected, which includes one measurable goal or objective related to their lessons (see attached DI/UDL Lesson Plan Reading Template and DI/UDL Lesson Plan Mathematics Template). The practicum students then teach the lesson to their K-12 learners. The practicum student is expected to either plan the lesson with existing materials or obtain all learning materials needed for the lesson. This lesson will be observed by two people (i.e., mentor and university professor). This lesson will be videotaped so the practicum students can watch and evaluate their teaching after the lesson is implemented. Practicum students decide the best way to videotape their lessons. At the end of the lesson or in the following days, a post-assessment must be administered to

determine if the goal or objective for the lesson was achieved. The practicum students then meet with their mentor and university instructor to solicit feedback on the DI/UDL lesson plan and the implementation.

THE IPP REFLECTION PAPER

The practicum students watch the video recording and write a one-to-two-page reflection paper. The paper should include a discussion of individual learner characteristics, why the UDL strategies were chosen for the lesson, and how UDL strategies were selected to support the K-12 learners. The paper must also cover how the lesson aligned with state or common core content standards, how the direct instruction procedure worked throughout the lesson, including modeling, guided practice, and independent practice (I do, We do, and You do), and how the lesson was tied to the pre-assessment. Last, the paper includes a discussion of the post-assessment results regarding how the lesson worked for the K-12 learners, including what went well and what could be improved (see attached IPP Rubric, Reflection section).

The entire IPP project is based on the KSDE state standards for special education teacher preparation that the practicum students must meet in accordance with the program requirements.

CRITICAL REFLECTION

The integrated direct instruction/UDL lesson plan templates have been used in the online special education graduate program for five years, and in the IPP assignment for four years (see attached DI/UDL Lesson Plan Reading Template and DI/UDL Lesson Plan Mathematics Template).

The lesson plan templates used in the IPP assignment provides the practicum students with one activity to combine direct instruction and UDL. The templates give practicum students easy access to many different UDL strategies under each guideline so they can immediately implement them in their specific lessons, thus making them more accessible to the practicum students and their K-12 learners. The listing of the UDL strategies on the templates, however, are not an exhaustive list. Practicum students could introduce and use other

UDL strategies. The key requirement for this assignment is that strategies had to be used within each of the UDL guidelines.

What the instructors found in the initial practicum lesson plan assignments is that some practicum students still struggled with the concept of “multiple means” for the three core UDL principles (Representation, Action and Expression, and Engagement; CAST, 2018) despite UDL instruction in previous courses. While it was required, some practicum students would not list multiple means of action and expression for the final assessment. Instead, it was common to see practicum students listing only one means of action and expression. For example, in a reading comprehension lesson over short stories, practicum students would list only one assessment and it would commonly require written short answers. This required correction by the instructors in the form of verbal feedback following synchronous lessons and written feedback over the initial lesson plan assignments so other means of action and expression were included. For instance, other assessments could be student recordings, videos, or storyboards with illustrations. The matter of offering multiple means for assessments is an area that continues to require corrections for some practicum students.

In the IPP reflection, practicum students share their reasoning behind why specific UDL strategies were selected, as well as how the three UDL principles and the direct instruction components were implemented in their lessons. This allowed instructors to determine if practicum students truly understood the concept of “multiple means” and how to implement these strategies while using direct instruction.

The direct instruction and UDL integrated lesson plan template has been used for five years in the high incidence special education practicum classes. Instructors have continuously fine-tuned the lesson plan template, as well as how to help practicum students learn to implement UDL in their direct instruction lessons. One area to be implemented in the immediate future is to incorporate more university-instructor-based UDL strategies when teaching about the IPP assignment and when supporting practicum students who are developing the assignment to model UDL application. For example:

- Instructors could provide both written and verbal feedback to the practicum students for all lesson

plan assignments leading up to the IPP including the use of immediate corrective feedback (Multiple Means of Representation and Multiple Means of Engagement; CAST, 2018).

- A lecture captured using PowerPoint could be provided to the practicum students that explains the IPP assignment and gives examples on how to incorporate UDL and direct instruction, as well as how to use pre-assessment results to create a lesson. This will help practicum students by providing them with a resource to review prior to beginning the IPP project as well as a resource to use throughout the development of the project (Multiple Means of Representation; CAST, 2018).
- Practicum students could record their reflections on Zoom or another technology of their choosing, thus providing another option beyond a written reflection paper. They could also create a PowerPoint or Prezi or another graphic presentation to share their reflection with the instructors (Multiple Means of Action and Expression; CAST, 2018).
- Following the completion of the reflections by the practicum students, the instructors could provide written and recorded feedback over the entire IPP assignment (Multiple Means of Representation; CAST, 2018).
- Practicum students could collect and share their pre- and post-assessment data in a variety of formats. They could use a spreadsheet, a graph, written explanation, a chart, etc. There would be no specific requirement on how they share and represent their data beyond it being understandable (Multiple Means of Action and Expression; CAST, 2018).

The IPP project is already relevant to what the practicum students are currently doing in their K-12 classrooms. The IPP assignment thus increases their effectiveness and confidence as special education teachers, building on Multiple Means of Engagement (CAST, 2018).

Beyond the course, practicum students continued to utilize the DI/UDL lesson plan templates in their classrooms and other courses. Their ability to create and teach lessons with direct instruction and UDL has greatly improved as a result of the IPP project. Practicum students take the second practicum course after they complete this course. In the second practicum course they continue to use the DI/UDL lesson plan templates. Since the IPP was introduced, practicum students have shown improvement in their ability to bring UDL into their direct instruction

lessons. Therefore, the IPP will continue to be used with practicum students in this course.

As Foxworth et al. (2021) argued, educational approaches such as UDL and explicit instruction do not have to be “practiced in isolation” but, instead, “in concert with each other” (p. 269). Combining educational approaches will make “instruction accessible to the broadest range of stakeholders and in the most impactful manner possible” (p. 269). This is exactly what the authors of this article have seen when asking practicum students to integrate the UDL and direct instruction frameworks in the online practicum courses over the past five years.

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