

Universal Design for Learning: Transforming Theory Into Practice

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Overview

An examination of the effects of tiered instruction on the frequency of conversational turn taking across 13 children with and without disabilities in an inclusive preschool classroom was conducted. The following information describes the methods and procedures used to examine tier one of the tiered instructional model (Universal Design for Learning; UDL).

Research Questions

- Do child participants increase conversational turn taking as a result of UDL?
- Can the adult participant implement UDL with fidelity?

Setting

- Inclusive preschool classroom

Participants

- 9 preschoolers with and without disabilities
- 1 early childhood special education teacher

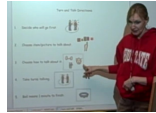


Measures

- The Language Environment Analysis System (LENA)
 - Used to count conversational turns and monitor progress over time
- AEPS social communication area
 - Used to measure social communication area growth to support phase change decisions
- UDL Fidelity Measure
 - Used to determine fidelity of implementation for tier one intervention (UDL for conversational turn taking)

Procedures

- Development of UDL activity plans (weekly)
- Daily implementation of UDL for conversational turn taking
- Weekly video monitoring for fidelity of implementation
- Daily self monitoring for fidelity of implementation



UDL Activity Plan
Outcome: Conversational Turn Taking
Activity: Turn and Talk

Representation	Engagement	Expression
<p>Differentiated complexity of models, pictures, directions, or supports.</p> <p>1. Verbally explain the activity</p> <p>2. Talk about each step using pictures on SmartBoard (see word document that will be put up on SmartBoard screen)</p> <p>Later to earlier development:</p> <p>1. ask open ended question</p> <p>2. ask yes/no question</p> <p>3. draw attention to object/picture and state what it is</p> <p>Least to most support:</p> <p>1. ask open ended question</p> <p>2. ask yes/no question</p> <p>3. state what is happening/what object is</p> <p>4. have student repeat word(s)</p> <p>Visuals of forms or mediums:</p> <p>Auditory:</p> <p>1. verbal modeling</p> <p>2. verbal conversational turn taking</p> <p>3. bell to signal start/stop (bell at end would signal 1 minute to finish)</p> <p>Visual:</p> <p>1. Monday – play center pictures</p> <p>2. Tuesday – two objects to choose from to talk about</p> <p>3. Wednesday – a picture scene to talk about</p> <p>4. No School</p> <p>5. Daily – conversational turn taking prompt cards available to use</p> <p>Tactile:</p> <p>1. Tuesday – two objects</p> <p>2. Wednesday – picture scene card</p> <p>3. Daily – puppets available to use</p> <p>Activity Topics</p> <p>Monday: where they had fun playing – use picture cards with each center represented</p> <p>Tuesday: object talk – students choose from two objects to discuss, describe or comment about</p> <p>Wednesday: picture talk – students are given a picture scene to discuss, describe or comment about</p> <p>Thursday: no school</p>	<p>Variety of learning opportunities:</p> <p>Choice:</p> <p>1. students choose who will talk first</p> <p>2. students choose how to take turns (prompt card, verbal, or point)</p> <p>3. students choose how to communicate (verbal, pictures/objects, puppets)</p> <p>4. when more than one object is present to talk about, students choose which ones to use</p> <p>Materials:</p> <p>Auditory:</p> <p>1. bell (to signal stop time)</p> <p>Visual:</p> <p>1. Monday – play center pictures</p> <p>2. Tuesday – two objects to choose from to talk about</p> <p>3. Wednesday – a picture scene to talk about</p> <p>4. No School</p> <p>5. Daily – conversational turn taking prompt cards available to use</p> <p>Tactile:</p> <p>1. Tuesday – two objects</p> <p>2. Wednesday – picture scene card</p> <p>3. Daily – puppets available to use</p>	<p>Flexibility in child expression:</p> <p>Child strengths, preferences, & abilities:</p> <p>1. praise students for any attempt to communicate</p> <p>2. acknowledge something they said or did by commenting on specific things or adding to the conversation</p> <p>Purposes:</p> <p>1. labeling</p> <p>2. asking questions</p> <p>3. answering questions</p> <p>4. describing</p> <p>5. discussing</p> <p>6. commenting</p>



Universal Design for Learning Fidelity Measure: Conversational Turn Taking		
Element	Criteria	Evidence
<p>Element: Conversational complexity of actions, directions, prompts, processes, scaffolding, media supports</p>	<p><input type="checkbox"/> Within a single activity, conversational turn taking is represented and/or addressed through at least two of the following actions:</p> <ul style="list-style-type: none"> • Chose and prompt partner to take developmental role <ul style="list-style-type: none"> • Cues to babies • One word to multiple words • Responses to Initiations • Give ability to move difficult directions <ul style="list-style-type: none"> • Verbal directions paired with modeling "errorless teaching" • Verbal directions paired with visual cue/picture • Verbal directions paired with picture (e.g. pointing) • Verbal directions only • Model and prompt single to multiple components (one turn versus multiple turns, or one word versus multiple words) <ul style="list-style-type: none"> • First/Then (e.g. "the turn first, then it's your turn") • Picture schedules/sequences (e.g. a series of pictures or symbols depicting two individuals taking turns) • Provide least to most support for conversational turn taking <ul style="list-style-type: none"> • Modeling (e.g. open and loud verbalizations; having a conversation with another child or another adult) • Visual prompting (e.g. pointing to signal the child's turn to talk) • Verbal prompting (e.g. saying "your turn" or asking "what can you say?"; giving choices "is this or that?") • Time delay (starting the turn and waiting for the child to finish) • Match/Model (talking the child what to say – sometimes paired with physical, visual, or other prompts) 	
<p>Element: Variety of forms or mediums</p>	<p><input type="checkbox"/> Using 2 or more types of both auditory and visual means (i.e. two of each)</p> <ul style="list-style-type: none"> • Auditory (i.e. the children can "hear" conversational turn taking) <ul style="list-style-type: none"> • Books on tape • Computer/Internet • Poetry/Flap • Song (e.g. songs that allow for back and forth singing or singing) • Story (spoken) (e.g. at least two characters interact with each other) • Verbalizations (e.g. the teacher models conversational turns) • Video/CD/DVD • Visual (i.e. the children can "see" conversational turn taking) <ul style="list-style-type: none"> • Books (e.g. the book has pictures/sequences that show people taking conversational turns) • Bulletin board • Closed captioning • Diagram/Model • Digital Camera (e.g. pictures of the children taking conversational turns paired with written text or "talk bubbles") • Flip Board/Story • Document Camera • LCD Projector/Overhead • Multi-media presentation • Objects/Toys • Picture/Video/CD/DVD • Power Point/slides show • Sign Language/Gesture • Smartboard • Story Lines • Video/CD/DVD • Puppets 	
<p>Element: Variety of learning opportunities</p>	<p><input type="checkbox"/> Within a single activity, children's opportunities for engagement incorporate both of the following considerations:</p> <ul style="list-style-type: none"> • Child/Student choice (2 or more) <ul style="list-style-type: none"> • Choice of action/process • Choice of location/position • Choice of model • Choice of topic • Choice of temporal/object • Choice of play/work partners • Choice of starting time • Variety of Materials (2 or more) <ul style="list-style-type: none"> • Auditory • Visual • Tactile • Scented 	
<p>Element: Flexibility in child/student expression</p>	<p><input type="checkbox"/> Within a single activity, children are encouraged/asked/allowed to demonstrate what they know and are able to do related to conversational turn taking through a variety of flexible and individually appropriate expressions (both/or neither are observed)</p> <ul style="list-style-type: none"> • Children/students are encouraged to choose/use verbal expressions/conversational turns based on their strengths, preferences, and abilities (e.g. when a child chooses toys, teachers encourage their contribution) • Verbal expressions/conversational turns are used for a variety of purposes (2 or more) <ul style="list-style-type: none"> • Answering questions • Asking questions • Commenting • Describing 	

Results

- All children made progress across the duration of the study; however, intervention effects were variable across participants
- Procedural fidelity ranged from 83 to 100 percent and averaged at 94.9 percent

Implications

- Strong intervention effects may not be expected from a tier one intervention
- Quality tier one instruction implemented with fidelity can support progress for all children

Future Directions

- Further research of UDL theory transformed into practice
- Stronger research design: inclusion of a control group
- Different/various dependent variables

