A Unit-Based Approach to Adaptations in Inclusive Classrooms

Jennifer A. Kurth
Adaptations is an umbrella term that includes accommodations and modifications. Instructional accommodations can be (a) access accommodations that provide access to the curriculum and do not affect the mastery level expected of students; (b) low-impact accommodations that alter how students are taught, but do not require significant adjustments in the structure or content of the curriculum; and (c) high-impact accommodations (also called modifications) that alter the content of the curriculum as well as the ways students are taught (Stough, 2002). All adaptations require adjustments in the structure and content of the educational program, as well as the level of curricular mastery expected of students.

Adaptations can be thought of as general or specific (Janney & Snell, 2006). A general adaptation can be used by many students and can address routine classroom activities. For example, providing students access to graphic organizers, text enlargement, calculators, and peer tutors are general adaptations that many students may access in a variety of routines and activities. On the other hand, specific adaptations apply to particular students and lessons or activities. For example, the worksheet and activities for a science lab may be adapted for individual students based on their unique physical, sensory, or cognitive needs. (See box, “What Does the Research Say About Adaptations?”)

Implementing general classroom adaptations (see box, “General Classroom Adaptations”; Janney & Snell, 2004) helps address the unique learning needs of many students—including those with identified special education needs. It also leaves more time for teachers to create specific adaptations for individual students who need them.

Adaptations and the Universal Design for Learning Framework

Universal design for learning (UDL) is an instructional approach in which teachers design instruction with the needs of diverse learners in mind, rather than making adjustments for individual students with specific special education needs (Pisha & Coyne, 2001). A hallmark of UDL is providing students with many different ways to represent knowledge (how content and directions are presented to students), express knowledge (how students demonstrate their knowledge), and engage in the classroom (how students stay motivated and involved in learning). UDL requires teachers to anticipate how their instruction supports...
General Classroom Adaptations

- Magnification or text enlargement
- Graphic organizers
- Slot notes/cloze notes
- Peer tutors or paired learning
- Audio books
- Colored overlays or rulers for keeping place while reading
- Visuals or pictures supplementing key ideas
- Examples embedded in assignments
- Color coding, highlighting, or bolding key words
- Manipulatives or counters
- Resource guide or toolkit
- Word banks
- Assignment check list
- Planner or organizational tool
- Alternate responses (e.g., oral, typewritten, pictorial)
- Assistive technology (e.g., calculator, word processor, dictation recorder, communication device)
- Alternate writing utensils (e.g., weighted pencils, pencil grips, “fat” markers, stamps)
- Alternate paper (e.g., paper with raised lines, paper with varied margins, paper with varied line width or length)

Creating Specific Adaptations

Step 1: Determine Student Learning Support Needs

The first step in creating a specific adaptation, determining the student’s unique learning support needs, is essential in avoiding over-adapting materials, which could lead to stigmatization or isolation of the student. Instead, tailored adaptations should be used only when necessary. A useful strategy for identifying needs is to complete an ecological assessment (Downing, 2010), identifying the activities in which the student participates, along with the skills required to be successful in these activities. This assessment highlights discrepancies between skills and needs, leading to the identification of appropriate specific individual adaptations. Ms. Lawson’s ecological assessment (see Table 1) highlighted for Mr. Jackson John and Amanda’s needs for support in English 8 (Downing, 2010).

When completing an ecological assessment, a series of questions guides observation and provides a framework for identifying student needs:

- What are peers without special education needs doing in this activity or setting? Completing a step-by-step task analysis of how a peer successfully completes the activity or lesson is often useful.
- What are the naturally occurring cues for performance? That is, how do peers know what to do, and when?
- What does the target student do at each step? In other words, how does this student complete (or fail to complete) each step?
- Is there a discrepancy between what a peer does and what the student with low-incidence disabilities does?

Step 2: Evaluate Classroom Routines

Understanding the routines and activities that are typical of the classroom helps identify the skills that are necessary for learning and participation, and therefore what adaptations may be required. This can be done through classroom observation, ecological assessment, and collaboration.

Educators should note general routines such as the typical daily schedule and which general adaptations may be needed for each part of the routine. For example, Mr. Jackson’s English class is beginning a 6-week lesson unit on Lois Lowry’s novel The Giver (1993). The general routine for each class period in this unit consists of warm-ups, editing, lecture, group work, and a wrap-up. Table 2 illustrates how Ms. Lawson helped Mr. Jackson adapt the class’s typical routine, implementing both general and specific adaptations (see Downing, 2010).

In addition to classroom routines, lessons and individual study units also need to be evaluated to identify specific adaptations students might need. Collaborating with general education teachers is essential; “teacher talk” sheets (see Figure 1) can assist in this collaboration, particularly in identifying in advance specific adaptations that need to be in place for the lesson. The talk sheets are used as a joint planning session, in which the general education teacher shares plans for the upcoming week, lesson, or unit, including worksheets or chapters that may need to be adapted as well as any tests or long-term assignments.
Step 3: Define Student Learning Outcomes

During the teacher talk collaboration discussion, learning outcomes for students receiving special education services should be determined. Sometimes, all students will have the same learning outcomes (e.g., reading a novel, learning vocabulary words, writing a five-paragraph essay). Other times, students with identified special education needs will have modified learning outcomes. Mr. Jackson has decided that most students will be responsible for reading the novel, learning key vocabulary, making inferences to demonstrate reading comprehension, and passing weekly tests. A long-term assignment includes writing a memoir of important events in the student’s own life, including a description of why these memories are important and should be shared with others.

Learning outcomes for Amanda and John, within this unit of study, will be based on their individualized education program (IEP) goals, curricular activities to facilitate meaningful participation, and Mr. Jackson’s content expertise. Through collaboration, Amanda’s teachers have decided that she will be responsible for reading the novel modified to her level (see Figure 2), which contains pictures with one-sentence statements, answering appropriate questions about the novel from which she can select when writing.

Similarly, John will be responsible for reading a version of the novel at a fourth-grade readability level (see Figure 2), with abstract concepts.

Table 1. Sample Ecological Assessment, English 8

<table>
<thead>
<tr>
<th>Student</th>
<th>Peers’ Activities</th>
<th>Student’s Performance</th>
<th>Skills or Support Needed</th>
<th>Adaptations</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td>Peers take out pencils and paper from backpacks.</td>
<td>John takes out pencil and paper from his backpack.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Peers listen to music</td>
<td>John places his fingers in his ears.</td>
<td>John may be sensitive to the loudness or intensity of the music; requires dimming of loudness.</td>
<td>Peer tutor will prompt John to use his earplugs while listening.</td>
</tr>
<tr>
<td></td>
<td>Peers “free write” about their feelings or thoughts while listening to the music selection.</td>
<td>John writes incomplete sentences, without any adjectives.</td>
<td>John needs assistance in identifying adjectives to add.</td>
<td>Provide John with a word bank of “emotion words” from which he can select when writing.</td>
</tr>
<tr>
<td></td>
<td>Amanda takes out her AlphaSmart, but does not turn it on.</td>
<td>Amanda writes in complete sentences, without any adjectives.</td>
<td>Amanda needs support in composing complete sentences.</td>
<td>Provide John a cloze (fill-in-the-blank) template for writing sentences (e.g., “This music makes me feel ____.”)</td>
</tr>
<tr>
<td>Amanda</td>
<td>Peers take out pencils and paper from backpacks.</td>
<td>Amanda sits quietly and does not type the sentence.</td>
<td>Amanda needs to be able to identify errors and type her responses.</td>
<td>Peer tutor will help Amanda navigate to blank page in English 8 file on AlphaSmart.</td>
</tr>
<tr>
<td></td>
<td>Peers identify and correct grammatical and spelling errors.</td>
<td>Amanda sits quietly and does not type the sentence.</td>
<td>Amanda needs to be able to identify errors and type her responses.</td>
<td>Provide Amanda with a sentence strip with most errors already corrected, and appropriate errors highlighted with choices provided (e.g., “i” or “I”).</td>
</tr>
</tbody>
</table>

Step 3: Define Student Learning Outcomes

Talk sheets are used as a joint planning session, in which the general education teacher shares plans for the upcoming week, lesson, or unit, including worksheets or chapters that may need to be adapted as well as any tests or long-term assignments.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Typical Routine and Adaptations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Writing</strong></td>
<td><strong>Typical routine:</strong> Students take turns bringing in a musical selection on CD. While listening to music, students write their thoughts, impressions, and ideas generated by the music selection (“free write”).</td>
</tr>
</tbody>
</table>
| **warm-up**       | **General adaptations (for all students):**  
|                   | • Word bank of “impression” words (e.g., happy, scared, sad, angry)  
|                   | • Adapted writing utensils  
|                   | • Adapted paper  
|                   | • Voice recorder  
|                   | • Magazine pictures  
|                   | • Word processor  
|                   | **Specific adaptations for Amanda:**  
|                   | • Cloze sentences  
|                   | • Tailored word bank  
|                   | • Assistive technology (Alphasmart)  
|                   | *These adaptations address Amanda’s individualized education program (IEP) goals for dictating and writing sentences.*  
|                   | **Specific adaptations for John:**  
|                   | • Sentence starters  
|                   | • Word bank with adjectives  
|                   | *These adaptations address John’s IEP goals for writing complete sentences with adjectives and combining sentences into a paragraph.*  
| **Grammar**       | **Typical routine:** All students have 3 minutes to complete a grammar exercise of editing a passage that is projected in the front of the classroom.                                                                                                                                                                                                                                                                                                                                 |
|                   | **General adaptations (for all students):**  
|                   | • Adapted writing utensils  
|                   | • Adapted paper  
|                   | • Voice recorder  
|                   | • Magazine pictures  
|                   | • Word processor  
|                   | • Highlighters  
|                   | • Peer tutors/paired learning  
|                   | **Specific adaptations for Amanda:**  
|                   | • Provide correct sentence  
|                   | • Amanda will type the sentence on her Alphasmart (and share, as needed)  
|                   | *These adaptations address Amanda’s IEP goals for writing her name and typing a sentence.*  
|                   | **Specific adaptations for John:**  
|                   | • Provide John with specific number of errors to locate  
|                   | • Tell John what type of errors exist (e.g., spelling, capitalization, punctuation)  
|                   | • Highlight words that are incorrect  
|                   | *These adaptations address John’s IEP goals for writing complete sentences and identifying and adding adjectives.*  

continues
<table>
<thead>
<tr>
<th>Activity</th>
<th>Typical Routine and Adaptations</th>
</tr>
</thead>
</table>
| **In-class lecture and notetaking** | **Typical routine:**  
The teacher describes assignments, lectures the class about the novel, or teaches new concepts to the class. Students take notes.  
**General adaptations (for all students):**  
• Copies of notes provided to students  
• Adapted paper and writing utensils  
• Word processor  
• Whiteboard presenting key words and events  
**Specific adaptations for Amanda:**  
• Slot notes (fill in the blanks)  
• Draw a picture—what is the teacher talking about?  
• Select a picture (e.g., characters, places) from an array to demonstrate listening comprehension  
• Copy what teacher writes on the board  
These adaptations address Amanda’s IEP goals for answering literal comprehension questions.  
**Specific adaptations for John:**  
• Slot notes (fill in the blanks)  
• Story squares (draw picture sequences while listening)  
• Copy what teacher writes on the board  
• Select emotion—how do you/character feel after reading this passage?  
These adaptations address John’s IEP goals for answering comprehension questions. |
| **In-class reading**           | **Typical routine:**  
The teacher reads aloud to the class, or calls on students to read aloud sections of the novel.  
**General adaptations (for all students):**  
• Colored overlays or rulers  
• Whiteboard presenting key words and events  
• Enlarged text  
• Paper to draw key events  
**Specific adaptations for Amanda:**  
• Priming—prepare ahead of time a passage Amanda will read by playing a digital recording  
• Find and highlight sight words in the novel  
• Create a dictionary of sight words  
• Book box (collection of items related to text)  
These adaptations address Amanda’s IEP goals for reading high-frequency words.  
**Specific adaptations for John:**  
• Story squares (draw picture sequences while listening)  
• Copy what teacher writes on the board  
• Select emotion—how do you/character feel after reading this passage?  
• Follow text using magnifying bar or ruler  
• Create story envelopes (draw a picture or write a note of major events)  
These adaptations address John’s IEP goals for answering comprehension questions and reading at fourth-grade level. |
highlighted and defined (e.g., “they acted like animals” means the people were messy and rude, not that they growled or walked on four legs). John will write his memoir using photographs, word banks, and word-processing software.

**Table 2. Continued.**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Typical Routine and Adaptations</th>
</tr>
</thead>
</table>
| **In-class writing** | Typical routine:  
The teacher provides a writing prompt for students to respond to, or time to practice new literary techniques or editing.  

**General adaptations (for all students):**  
- Adapted paper and writing utensils  
- Word processor  
- Magazine pictures  
- Word bank  

**Specific adaptations for Amanda:**  
- Use of tailored word bank  
- Use of assistive technology  
- Peer tutor  
- Cloze writing procedures  
- Dictate and copy  
- Use of modified book  
- Label makers with preprinted words to fill in worksheets  
*These adaptations address Amanda’s IEP goals for dictating and typing sentences and reading sight words.*

**Specific adaptations for John:**  
- Use story envelopes to sort characters, problems, solutions, and settings  
- Make chapter summaries (with pictures)  
- Use modified novel  
- Provide topic and/or length supports (e.g., visual representation of how much to write)  
- Use of prepared graphic organizers (for John to fill in)  
*These adaptations address John’s IEP goals for writing complete sentences.*

| **Wrap-up** | Typical routine:  
The teacher describes homework, long-term projects, and upcoming exams.  

**General adaptations (for all students):**  
- Planner or calendar  

**Specific adaptations for Amanda:**  
- Large-print planner  
- Label makers to fill in homework  
*These adaptations address Amanda’s IEP goals for writing her name and reading sight words.*

**Specific adaptations for John:**  
- Copy homework from board  
- Teacher signs off homework is copied correctly  
*These adaptations address John’s IEP social and communication goals.*

**Step 4: Gather Materials and Create Specific Adaptations**

As Amanda’s and John’s case manager, Ms. Lawson needs to create or obtain any supplementary materials to support them in completing Mr. Jackson’s assignments and quizzes. Although it may seem time consuming to create modified versions of novels such as *The Giver* (Lowry, 1993), major changes to core curriculum (e.g., novels read in a class) are relatively uncommon. Modifications can be
### Figure 1. Sample “Teacher Talk” Sheet

**TEACHER/SUPPORT STAFF TALK SHEET**

<table>
<thead>
<tr>
<th>Teacher: ___________________________</th>
<th>Week of: ___________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class: _____________________________</td>
<td>Student(s): ________________________</td>
</tr>
</tbody>
</table>

Subject/skills you will be covering next week (include chapters, topic, and any worksheets you will be using)

Tests you will be having next week:
- Date:
- Chapter or skills:
- Study guide/worksheets:

Long-term reports/projects
- Due date:

Schedule changes next week (Field trips, assemblies, etc.):__________

Concerns? Comments?

### Figure 2. Sample Text Modifications

<table>
<thead>
<tr>
<th>Picture-based adaptation (for Amanda)</th>
<th>Lower readability version (for John)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonas rode his bike very fast.</td>
<td>“They acted like animals.” This means that they were rude and messy.</td>
</tr>
<tr>
<td></td>
<td>Father asked, “Where were the visitors from?”</td>
</tr>
<tr>
<td></td>
<td>Lily said, “I can’t remember. They were from another community. They had to leave early, and they had lunch on the bus.”</td>
</tr>
<tr>
<td></td>
<td>Mother nodded in agreement. “Do you think they had different rules in their community? And so they didn’t know what your rules were?”</td>
</tr>
</tbody>
</table>
created and maintained in an online storage bank (e.g., as Word or PowerPoint documents), and then modified as needed for other students in the class or for use in the future.

Because Amanda is a kinesthetic and visual learner, Ms. Lawson creates a book box that contains key elements from the novel, including a representation of “release” (a food jar with a small plastic animal inside), an airplane, a bicycle, a photo album containing photographs from Amanda’s life to represent “memories,” and a wooden massager to represent soothing stress (See Figure 3). While reading the novel, or listening to the novel being read in class, Amanda can refer to her book box to aid her comprehension.

Step 5: Implement Adaptations
General adaptations, based on UDL principles, will assist all students in Mr. Jackson’s English 8 class. As indicated in Table 2, all students may choose to draw pictures to supplement their reading comprehension and have access to various forms of the novel, including audio books and adapted books. When adaptations are created with the idea that anyone may use them, it is often easier to keep age and cultural appropriateness in mind.

Specific adaptations need to support both students’ learning needs and their IEP goals. Table 2, which presents adaptations for John and Amanda within the class’s regular routines, illustrates how IEP goals can be naturally addressed (Downing, 2005).

Step 6: Evaluate Adaptations
Finally, the effectiveness of general and specific adaptations should be evaluated during and following instruction. Guiding questions can support teachers in evaluating adaptations, ensuring that they meet students’ needs, and making any necessary changes or modifications.

Was the student actively engaged in the lesson, passively engaged, or distracted? For example, Ms. Lawson and Mr. Jackson ensure that Amanda and John have accessible materials and supports in place so that they can answer questions, engage in discussions with classmates, take notes, write responses, and read the novel in class to facilitate their on-task engagement.

Was the student meaningfully involved in the lesson, or was he or she doing work that was substantially different from peers? Ms. Lawson and Mr. Jackson will continue to complete ecological assessments to make sure that any discrepancies between skills required and student support needs are addressed. Ms. Lawson will be able to use information gathered from the teacher talk sheets to prepare any necessary adaptations (such as modified novels) in advance of study units.

Did the lesson address IEP goals, and did the student make progress on those IEP goals (based on data collected)? Ms. Lawson collects progress-monitoring data to determine if Amanda and John are making progress on IEP goals. This type of frequent, ongoing data collection is essen-
tial to making sure that instructional time is maximized and that students are making adequate progress. Both summative and formative data assessment should be completed to determine the effectiveness of adaptations.

Was the student a true member of the lesson, with similar activities and work products as peers? For example, the use of a modified novel could isolate John and Amanda if they are sequestered in a corner reading their modified books with a paraeducator. Instead, their teachers plan their supports and adaptations in advance to ensure that both students can meaningfully participate in class.

Did the lesson facilitate student relationship development, or was the student primarily working alone or with an adult? Often, adult supports act as an inadvertent barrier to social participation and interaction; by assigning the adult paraeducator to walk around and assist all students, and assigning peer buddies who happen to be sitting near John or Amanda to assist as needed, the lessons in the general education classroom become much more facilitating of social relationship development.

Did the lesson facilitate student independence, self-advocacy, and problem-solving skills? Ms. Lawson facilitates independence by assigning paraeducator support on a roving basis, and teaches Amanda and John the classroom rule “ask three then me,” so that they learn to problem solve by first asking three peers for assistance, then to raise a hand for adult assistance if still needed.

Is the adaptation acceptable to the student, peers, families, and teachers? Ms. Lawson collaborates with peers and families to make sure that the adaptation is age and culturally appropriate. She avoids using child-like pictures and activities, and general adaptations are widely available in the classroom.

Final Thoughts
A wide range of strategies can be employed to facilitate the meaningful participation of all students in general education classrooms. Adaptations are often essential to meaningful participation, but these tools should be used with caution. To avoid “islands in the mainstream” (Biklen, 1992, p. 148), educators must be careful to create adaptations that do not isolate students. Adaptations based on UDL principles will help ensure that the curriculum is age and culturally appropriate for and available to all students. Last, educators must be careful not to over-adapt, and instead develop a rich array of general adaptations in all classrooms so that all students have the supports in place to promote their participation and learning (Janney & Snell, 2004).

References
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