

TEACHING THE ESSENTIAL ELEMENTS

to Students With
Significant
Cognitive Disabilities

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Teaching the Essential Elements to Students with Significant Cognitive Disabilities

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Foreword

Over the past few decades, expectations for students with significant cognitive disabilities have steadily increased. The Individuals with Disabilities Education Act calls for all students to be instructed in their grade level curriculum. To ensure access to the core curriculum for students with significant cognitive disabilities, Utah has adopted the Essential Elements, which are alternate standards that are fully aligned to the Utah Core Standards.

The purpose of this document is to provide guidance to parents, educators, school staff, and administrators on using the Essential Elements to provide students access to the general education curriculum. The desired outcome of this manual is to provide a rationale for why we need alternate standards, guide Individualized Education Program (IEP) teams to use the EEs to write IEPs, and show how the EEs can be used in conjunction with specialized instruction in various settings.

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COGNITIVE DISABILITIES

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Part I: What Are the Essential Elements and Why Should We Teach Them?

The Individuals with Disabilities Education Act (IDEA) aims to “prepare (students) for further education, employment and independent living (IDEA, 2004).” It requires that eligible students with disabilities have an Individualized Education Program (IEP) that includes goals that “meet the child’s needs that result from the child’s disability to enable the child to be involved in and make progress in the general education curriculum” ([Sec. 300.320\(a\)\(2\)\(i\)\(A\)](#)). In Utah, students with significant cognitive disabilities are found eligible for special education under many different classifications. According to data from the 2015-2016 school year, the most prevalent classifications for students eligible for the alternate assessment in grades K-12 included intellectual disability (39%), autism (24%), multiple disabilities (18%), and other health impairment (9%).

Education for students with significant cognitive disabilities (SCD) has undergone many positive changes in the last decade. This chart, developed by Browder and Spooner (2011), provides a brief history of how expectations for students with significant cognitive disabilities have transformed from a developmental focus in 1970 to a general curriculum access focus in 2010.

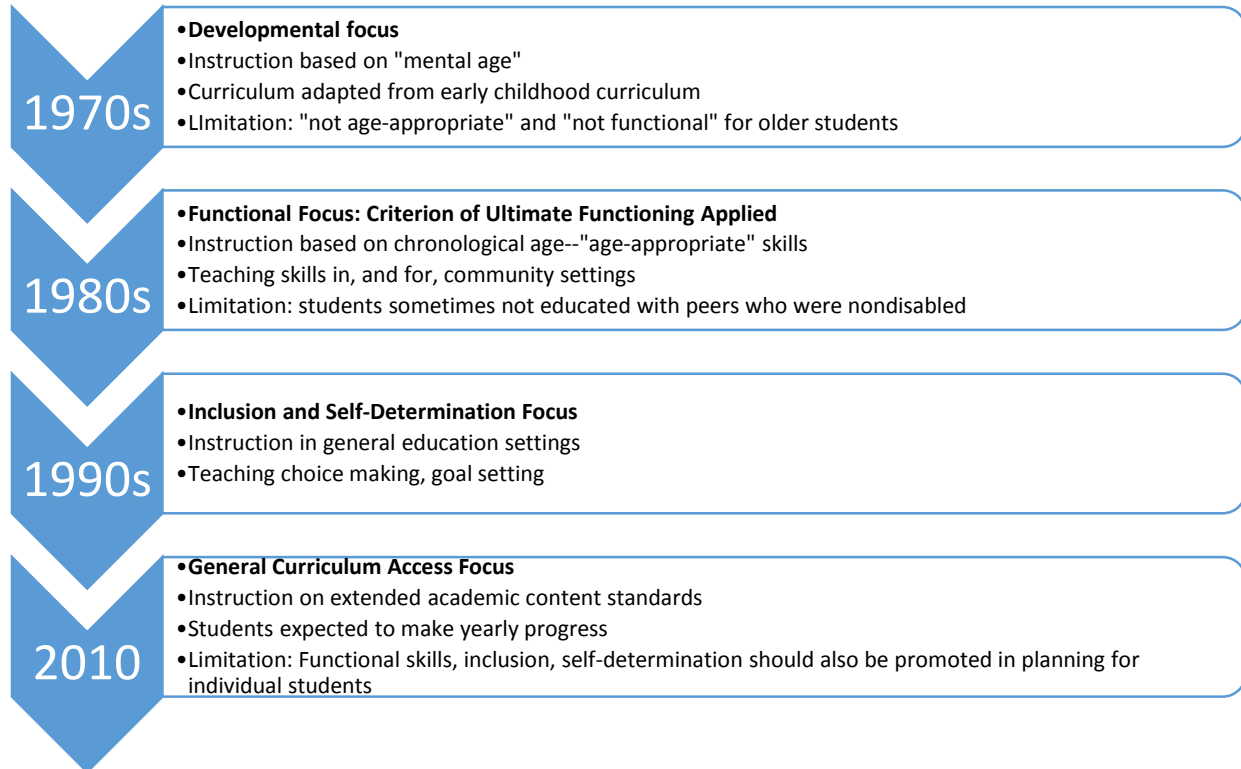


Figure 1 History of educating students with significant cognitive disabilities (Browder and Spooner, 2011)

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Inclusive education, alternative assessment in statewide accountability, transition to adult life, positive behavior supports, and a focus on yearly progress and data collection have all shifted our instructional programs and have promoted positive change in our educational systems for students with intellectual disabilities. Providing access to the general education curriculum to students with significant cognitive disabilities is among these positive changes. The IDEA provides educators with the rationale for giving students with significant cognitive disabilities access to the general education curriculum, while also providing them the supports that they need to make progress. In order to ensure general curriculum access for students with significant cognitive disabilities in Utah, a set of standards linked to the Utah Core Standards have been developed to set the bar for achievement. For English/language arts (ELA) and mathematics, these standards are called the Essential Elements (EEs); for science, they are called the Extended Core Standards.

Essential Elements	Extended Core
English/Language Arts Mathematics	Science

What Are the Essential Elements?

The Essential Elements (EEs) are “specific statements and skills linked to the grade-level expectations identified in college-and-career-readiness standards” (Dynamic Learning Maps [DLM]; <http://dynamiclearningmaps.org/content/essential-elements>). They are the “big rocks” of the Utah Core Standards. Each Essential Element has a respective learning map with linkage levels that identify basic skills within the standard to set an appropriate challenge for students with significant cognitive disabilities, no matter their ability level. The EEs should be used to plan and deliver the appropriate grade level academic instruction to students with significant cognitive disabilities when the IEP team has determined that the student will be instructed using alternate standards.

In order for the IEP team to decide if a student should be assessed on the alternate assessment (DLM), they must answer “Yes” to all of the following questions:

1. Is the student being instructed in the EEs?
2. Does the student have a significant cognitive disability?
3. Does the student’s disability significantly impact intellectual functioning and adaptive behavior?
4. Does the student require extensive individualized instruction and supports to achieve measurable gains?

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Once the team has determined that a student should be instructed in the EEs, they should ensure that the grade-level EEs are referenced when developing IEP goals to ensure that appropriate academic priorities are being made for the student.

What Are the Extended Core Standards for Science?

The Extended Core Standards are the alternate standards for science. They represent the essential skills embedded within the Utah Core Standards for Science.

Why Should We Teach Using the Essential Elements?

By using the EEs as a guide to develop a student's IEP and determine specially designed instruction, a teacher can ensure that the student is being given access to and making progress in the general education curriculum. In addition, by considering the adaptive and functional needs of a student, a teacher can easily embed functional skills throughout the day and within instruction in the EEs.

While raising expectations for students with significant cognitive disabilities does seem like a difficult task, teachers are not without support. In utilizing the idea of "least dangerous assumption" and promoting college and career readiness for students with significant cognitive disabilities, teachers can rely on the principles of Universal Design for Learning (UDL) to frame instruction to meet the needs of every learner.

Least Dangerous Assumption

The concept of least dangerous assumption provides educators with a challenging yet foundational guideline for educating students with disabilities. According to Anne Donnellan (1984),

...the criterion of least dangerous assumption holds that in the absence of conclusive data, educational decisions ought to be based on assumptions which, if incorrect, will have the least dangerous effect on the likelihood that students will be able to function independently as adults...we should assume that poor performance is due to instructional inadequacy rather than to student deficits.

Teachers, school psychologists, counselors, related service providers, and parents need to assume that, outside of conclusive evidence, students with significant cognitive disabilities are able to learn and attain not only their individual goals, but also make progress in their grade-level curriculum. Teachers and other school professionals must be flexible in their instruction, utilizing differentiated instruction to make their instruction fully accessible to all

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learners. Denying students access to the general education curriculum because a teacher or other educational professional thinks the student will be unable to learn it, or because the teacher is unwilling to be flexible with his/her teaching strategies, has serious implications for the student's future and does not uphold the core ideas of the IDEA.

Promoting College and Career Readiness

The U.S. Department of Education defines academic standards, such as the Utah Core Standards and Essential Elements, as standards designed to build the knowledge and skills that students need to be successful in college and careers (Common Core State Standards Initiative, 2010). While there is currently no research about the effects of providing students with significant cognitive disabilities access to the general curriculum, it is sensible to assume that this access allows for increased participation in life in the students' homes and communities (Quenemoen, Kearns, Quenemoen, Flowers, & Kleinert, 2010). The National Center on Educational Outcomes asks these questions about access to grade-level curriculum:

Would skills like reading for enjoyment and information, understanding of mathematical tools, basic understanding of scientific principles, understanding of history and current events, and orientation to and appreciation of the arts contribute to a satisfying adult life in supported or independent settings? Do these skills enhance participation in the community, in recreation and leisure, or in work? (Quenemoen et al., 2010).

While research does not provide us an answer to these questions, it is least dangerous to assume that the answer is "yes." Providing students with access to high quality math and reading instruction should contribute to a satisfying adult life and enhance participation in their community and other environments. Preparing these individuals to be as independent as possible, and giving them the same tools as are given to all other students, only sets them up for more choice and opportunity upon completion of high school.

Universal Design for Learning

To support the idea of the least dangerous assumption, and to promote college and career readiness, all teachers can use the principles of Universal Design for Learning (UDL) to design instruction in a way that ensures that no student is excluded from instruction or from being able to demonstrate what he or she has learned. In the book *Six Successful Strategies for Teaching Common Core State Standards to Students with Moderate to Severe Disabilities*, the first strategy suggested is "Apply Universal Design for Learning for **all** students" (Jimenez, Courtade & Browder, 2013). By creating multiple means of representation, multiple means of expression, and multiple means of engagement, a teacher can design lessons that are taught in the exact way that students learn.

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The first step in the UDL framework is to provide multiple means of representation. This means that teachers should help learners gather and categorize information presented (National Center on Universal Design for Learning, 2014). To do this, teachers must change the way that information is presented. In their book, Jimenez, et al. (2013) suggest the following ideas to provide multiple means of representation in a lesson:

“Change the way you present the materials or information.

“Say it: Lecture, discuss, question, read aloud, verbal descriptions

“Show it: Pictures, graphics, transparency, white board, video, closed caption

“Model it: Demonstrate, think aloud, act out, build/construct, manipulatives

“Media: Video, audio, computer, SMART technology”

The second step of UDL, providing multiple means of expression, suggests students being given multiple options to express what they have learned (National Center on Universal Design for Learning, 2014). Teachers have many options to provide to students with significant cognitive disabilities, including the following:

“Low Tech Tools: Picture support, graphic organizers, choice boards, stencils, scribe, eye gaze response options, pencil grips

“High Tech Tools: Computer Writing Software (e.g., Co-Writer), Augmentative Communication Device (e.g., GoTalk, BigMach Switch), adapted keyboard, voice activated computer software (Jimenez, et. al. 2013)”

The last step in the UDL framework is providing multiple means of engagement. Unfortunately, students do not always naturally see every lesson as personally relevant and interesting. Providing multiple means of engagement allows students to remain occupied in the lesson. It can include a wide array of options, but the first to be embedded should include highly motivating content and student choice, as well as methods of reinforcement, error correction, and peer supports (Jimenez et. al., 2013).

While the concept of least dangerous assumption and promoting college and career readiness for students with significant disabilities gives educators the rationale to ensure that this population of students are taught based on state standards, the Universal Design for Learning principles provide a framework to design accessible curriculum for every student. In an article discussing advances and needs for educating students with disabilities, Spooner and Browder (2014) state, “Students with severe disabilities have made surprising gains each time educators have raised the bar for expected outcomes and then used effective methods to help students achieve these goals.” Teaching students with significant cognitive disabilities the Essential Elements using research-based methods within the UDL framework only helps to

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“raise the bar” even further for students with significant cognitive disabilities, while also providing the supports they need to achieve.

For more information on evidence-based practices for students with significant cognitive disabilities, please visit http://cedar.education.ufl.edu/wp-content/uploads/2014/09/IC-3_FINAL_03-03-15.pdf.

Part II: Developing an Essential Elements-Based IEP

The Utah Special Education Rules require that all students with a disability have an IEP (Utah State Board of Education [USBE] §III.B). The IEP designates the plan for the delivery of special education services. While the IEP is not itself a curriculum, it will state how a student will be given access to the curriculum with goals that will help bridge the gap between where the student is and where he/she should be (Courtade & Browder, 2011). Writing an EE-based IEP is different from the traditional approach to developing an IEP for a student with a significant cognitive disability. While a traditional IEP may focus on basic academic and/or functional skills and have little relationship to standards or grade-level expectations, an Essential Element-based IEP is directly tied to standards and has a PLAAFP and annual goals that are aligned with and based on the EEs. The National Association of State Directors of Special Education (NASDSE) has developed a seven-step process for developing standards-based IEPs. DLM has a similar process, with some additional considerations that are unique to the Essential Elements that will also be discussed. The table below shows both the NASDSE and DLM guidelines, which will be discussed further in this section.

NASDSE	DLM
Consider grade-level content standards.	Review the grade of record DLM EEs.
Examine classroom and student data—determine where the student is functioning in relation to the standards.	Examine data to determine where student is functioning relative to the DLM EEs.
	Use DLM Claims and Conceptual Areas to help set priorities.
Develop present levels of academic and functional performance (PLAAFP) statements.	Develop PLAAFP reflecting student strengths and needs relative to accessing the DLM EEs.
Develop annual goals.	Develop measurable annual goals aligned with selected DLM Claims and Conceptual Areas.

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	For each annual goal, develop benchmarks that align with the DLM EEs.
Assess and report student progress.	
Identify specially designed instruction.	
Determine the most appropriate assessment options.	

Figure 2 A comparison of approaches to developing a standards-based IEP (NASDSE and DLM)

In addition, in the book *Aligning IEPs to the Common Core State Standards for Students with Moderate and Severe Disabilities*, Browder and Courtade (2011) mention several other unique considerations for developing IEP goals for students with significant cognitive disabilities.

These are:

1. Consider both specific academic goals and broad access goals.
2. Ask the question, “Is it really academic?”
3. Do not “force fit” all IEP objectives into alignment with academic standards.

Utilizing the steps proposed by NASDSE and DLM, along with the unique considerations proposed by Courtade et al. (2011), an IEP team can ensure that students with significant cognitive disabilities have IEPs that are student-centered and aligned to the grade level curriculum. Each step is expanded on further below, with an example of how it could be applied using the NASDSE and DLM process to a student named Anna.

Consider Grade-Level Content Standards (USBE III.E.300.321)

When designing a student’s instructional program, each IEP team member has a vital role. Together with the parents and related services providers, the general and special education teachers work closely to determine how to best give the student access to the curriculum. The general education teacher is the expert on the grade-level content. He/she should give a broad overview of what is covered in the student’s specific grade level for math and ELA and help the team to determine priority areas with the help of the special educator, the parents, and related service providers.

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Anna's IEP team, including her parents, reviewed the 11th grade standards to learn what 11th grade students are expected to know and be able to do.

Examine Classroom and Student Data

Once the grade-level content standards have been considered, the team must determine where the student is currently functioning in relation to them. What is the student able to do well? Where does he/she fall short? The team must also determine whether or not the student has had the opportunity to learn the grade-level standard, and whether appropriate instruction (evidence-based) has been provided to the student in order for him/her to successfully attain the grade-level standard. Data examined could include Student Assessment of Growth and Excellence (SAGE)/DLM scores, IEP progress reports, classroom curriculum-based assessments, and individual student data or student work.

In reviewing the grade-level standards, the IEP team compared the standards to where Anna is currently performing. The team also discussed whether Anna has had the opportunity to learn the grade-level standards through evidence-based instructional practices. The team agreed that Anna has had access to grade-level standards throughout her education, and that teachers utilized evidence-based practices during instruction.

Use DLM Claims and Conceptual Areas to Help Set Priorities

Once student data is reviewed, the IEP team should use the DLM Claims and Conceptual Areas to help set priorities for academic instruction for the IEP year. The team may choose claims and conceptual areas where the student is falling furthest behind. The Claims and Conceptual Areas for math and ELA are listed below:

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Math

Major Claim	Conceptual Area	
Students demonstrate increasingly complex understanding of number sense	M.C1.1	Understand number structures (counting, place value, fraction)
	M.C1.2	Compare, compose, and decompose numbers and sets
	M.C1.3	Calculate accurately and efficiently using simple arithmetic operations
Students demonstrate increasingly complex spatial reasoning and understanding of geometric principles	M.C2.1	Understand and use geometric properties of two and three-dimensional shapes
	M.C2.2	Solve problems involving area, perimeter, and volume
Students demonstrate increasingly complex understanding of measurement, data, and analytic procedures	M.C3.1	Understand and use measurement principles and units of measure
	M.C3.2	Represent and interpret data displays
Students solve increasingly complex mathematical problems, making productive use of algebra and functions	M.C4.1	Use operations and models to solve problems.
	M.C4.2	Understand patterns and functional thinking

ELA

Major Claim	Conceptual Area	
Students can comprehend text in increasingly complex ways	ELA.C1.1	Determine critical elements of text
	ELA.C1.2	Construct understandings of text.
	ELA.C1.3	Integrate ideas and information from text
Students can produce writing for a range of purposes and audiences	ELA.C2.1	Use writing to communicate
	ELA.C2.2	Integrate ideas and information in writing
Students can communicate for a range of purposes and audiences	ELA.C3.1	Use language to communicate with others.
	ELA.C3.2	Clarify and contribute in discussion.
Students can investigate topics and present information	ELA.C4.1	Use sources and information
	ELA.C4.2	Collaborate and present ideas

Develop PLAAFP Statements

In designing an instructional program for a student with a disability, the PLAAFP based on classroom and student data, provides the foundation. While each local educational agency (LEA) may have stricter guidelines, PLAAFPs should always include:

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1. Descriptions of student academic achievement and functional performance in every area of need,
2. Baseline or current data, and
3. How the student's disability affects involvement/progress in the general curriculum (USBE SER III.J.2.a).

Present levels statements should be observable and measurable so that they can be widely understood by all members of the IEP team, and can also include a strength and need as well as the impact statement (how the student's disability affects progress in the general curriculum). When written objectively and including comparisons between grade-level expectations and current student performance, the PLAAFP provides a solid foundation to determine appropriate goal areas.

Anna is an 11th grade student with an intellectual disability. She is currently receiving instruction based in the Essential Elements in a special classroom setting. She communicates with those around her using an iPad with a communication app.

Mathematics

Mathematically, Anna is at an Abstract Symbolic level because she is able to identify pictures and use them to communicate symbolically. She can rote count to 20 using her communication device and identify numbers 1-50 with 80% accuracy, but can only meaningfully count 1-5 objects with 80% accuracy, which limits her ability to fully participate in math operations (adding, subtracting, multiplying, and dividing). Given a set of eight 2D and 3D geometric shapes, Anna is able to select the shape asked for with about 75% accuracy and can sort real-life objects into shape categories, but cannot yet use geometric shapes to describe objects. While she is able to classify objects, Anna is not yet able to recognize the structure of different types of graphs (20% accuracy) or use graphs to read data. Anna's difficulties with working memory affect her ability to demonstrate a wide range of math skills, which affects her participation in the general education curriculum.

English/Language Arts

In reading, Anna is also at an Abstract Symbolic Level and can identify some basic sight words, but is not yet able to use phonetic understanding to decode words. When a familiar, adapted literature book with visual supports is read to her, she will answer basic comprehension questions, demonstrating knowledge of key elements in a story by selecting pictures from a field of four with about 60% accuracy. Given a familiar, adapted informational book read aloud, Anna can answer questions, demonstrating her ability to identify concrete details (such as individuals, events or ideas) with 100% accuracy, and is working toward identifying details

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in an informational text that relate to the topic of the text based on their similarities (20% accuracy). Given a text read aloud with multiple-meaning words (such as sweet, picture, spring and point), Anna is able to demonstrate understanding that words can have multiple meanings by selecting a picture from a field of four indicating the correct meaning with 80% accuracy. She does not yet understand that words with multiple meanings can be used for humor (such as puns and other figurative language). Anna's inability to read any amount of text independently affects her access to the general education curriculum.

Transition

Anna is receiving transition services in her high school. The Woodcock-Johnson Tests of Achievement, administered 9-12-2014, indicate basic reading skills at the first grade level and overall math skills at the early first grade level. Anna is able to match community survival signs with symbols on her communication system, and is able to operate a microwave with minimal prompts (60% independence). Anna follows basic school and classroom rules and seems to be well-accepted in the general education classes in which she participates (PE, art, and drama). Anna especially enjoys art class, where she is able to paint, draw, and do some photography. Anna will earn a Certificate of Completion in 2019. Anna indicates that she wants to be a photographer. A functional vocational assessment administered over three months (October-December 2013) indicated that Anna enjoys working with her hands indoors with other people. She has also enjoyed working with children in her family and completing small tasks around the school (picking up classroom recycling, delivering school newspapers, etc.). She volunteers in the district developmental preschool three days a week, where she helps serve morning and afternoon snacks. Anna and her parents both expect that she will live at home and that she will be employed full-time in the community, receiving on-the-job training, after completion of her school program. Anna is currently on the Division of Services for People with Disabilities and Vocational Rehabilitation wait lists, and participates annually in a summer camp for teens with disabilities.

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Develop annual goals (aligned with selected DLM Claims and Conceptual Areas) and benchmarks that align with the DLM EEs.

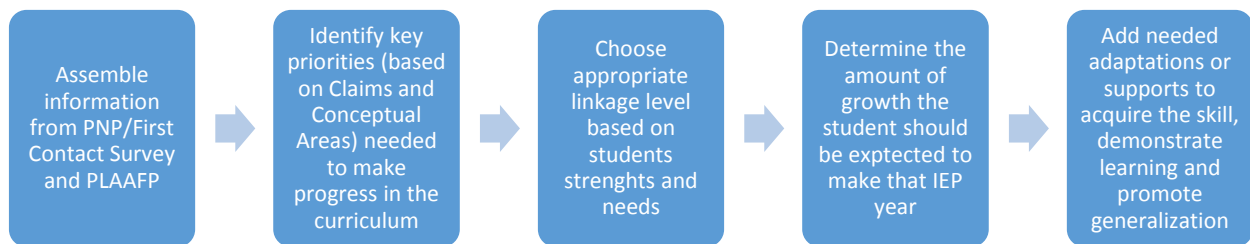


Figure 3 Steps to develop annual goals that align with the EEs

Once the PLAAFP has been developed, the IEP team will develop the student’s measurable annual goals. These goals must “meet the student’s needs that result from the student’s disability to enable the student to be involved in and make progress in the general education curriculum; and meet each of the student’s other educational needs that result from the student’s disability” (USBE SER III.J.2.b).

Utilizing the help of a general education teacher, the IEP team should consider main points and common themes of the curriculum for consideration in each subject area, then prioritize for the individual student. Using the Essential Elements, the team should look at the different Claims and Conceptual Areas to determine which gaps they want to focus on in the student’s IEP and which areas would benefit from a year of focused, specially designed instruction to close critical gaps and help the student be prepared for content that will be addressed in later grade levels (Dynamic Learning Maps Alternate Assessment Consortium). While it is important to include academic goals for students with significant cognitive disabilities, it is equally important to include goals that will increase their functional skills, behavior, communication, self-determination, and independence. These goals do not need to be tied to standards; however, some of these skills could also be embedded into academic goals. Either way, a functional curriculum is important and should be addressed for this population.

Claims and conceptual areas translate well into meaningful annual goals, while the benchmarks can reflect specific Essential Elements with regard to the skills required that the student may not have yet mastered, as well as the additional skills he/she needs to become

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proficient in that standard. **Goals need not be written for every Claim, Conceptual Area or EE—only those which are determined to be priorities.** Ideally, goals can include themes covered in multiple EEs and even embed Extended Core standards as well.

For students who take an alternate assessment, each annual goal must also include a description of benchmarks (USBE SER III.J.2. c). When writing benchmarks for each annual goal that aligns with the EEs, it is important to look at the linkage levels to guide development and make them as meaningful as possible. These can be found at <http://dynamiclearningmaps.org/content/educator-resource-page/ELA> or <http://dynamiclearningmaps.org/content/educator-resource-page/Math>.

While a student's IEP, including his/her goals, should indicate how he/she will be given access to the general curriculum, it is not exhaustive. Students with significant cognitive disabilities should be given the opportunity to access and make progress in the appropriate grade level general curriculum.

When academic goals are written, Browder and Courtade suggest these additional considerations:

1. Consider both specific academic goals and broad access goals.
2. Ask the question, "Is it really academic?"
3. Do not "force fit" all IEP objectives into alignment with academic standards.

When determining that academic goals pass the three guidelines set forth by Browder and Courtade, an IEP team can ensure that the student's IEP gives the student meaningful access to the grade-level curriculum.

Lastly, when developing annual goals, it is helpful to follow the SMART-C acronym to ensure IEP goals are:

- Specific
- Measureable
- Action-oriented/attainable
- Realistic and relevant
- Time bound
- Challenging

SMART-C goals are always clearly articulated, measureable statements of what the student is expected to learn. They should clearly state the observable action verb that reflects knowledge of the individual student and his/her strengths and needs.

In planning for her math goals for the year, the IEP team might determine that Anna, who is being instructed in the EEs, should make progress in making decisions and predictions based on numbers in context and data displays. The team decides to focus on the Math Essential

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Elements' Claim 3—Measurement Data and Analysis, and Conceptual Area 3.2 – Represent and interpret data displays. Under that particular Claim and Conceptual Area, there are three EEs:

Conceptual Area	EE	Description
M.C3.2	M.EE.S-ID.1-2	Given data, construct a simple graph (line, pie, bar or picture) or table, and interpret the data.
M.C3.2	M.EE.S-ID.3	Interpret general trends on a graph or chart.
M.C3.2	M.EE.S-ID.4	Calculate the mean of a given data set (limit the number of data points to fewer than five).

Figure 4 Essential Elements Mathematics Claim 3 Conceptual Areas

Educators may find information about which EEs fall under each Claim and Conceptual Area by visiting <http://dynamiclearningmaps.org/utah> and downloading the “Blueprint ELA IM” and “Blueprint Math IM.”

The team chooses to focus instruction on the first two EEs: M.EE.S-ID.1-2 and M.EE.S-ID.3.

Once this is determined, the teacher looks at the linkage levels to see the progression of learning to determine where Anna might be able to successfully reach the standard. Below are the linkage levels for M.EE.S-ID.1-2, which can also be found at

<http://dynamiclearningmaps.org/content/educator-resource-page/Math:>

Successor Node

- *Use graphs to read beyond the data.*

Target Nodes

- *Use graphs to read beyond the data.*
- *Represent data using bar graph.*
- *Represent data using picture graph.*
- *Represent data using line graph.*
- *Represent data using pie charts.*

Proximal Precursor

- *Use bar graphs to read the data.*
- *Use picture graphs to read the data.*
- *Use line graphs to read the data.*
- *Use pie charts to read the data.*

Distal Precursor

- *Recognize the structure of a bar graph.*
- *Recognize the structure of a picture graph.*
- *Recognize the structure of a line plot.*
- *Recognize the structure of a pie chart.*

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Initial Precursor

- *Arrange objects in pairs.*
- *Recognize attribute values.*

The teacher knows that Anna is able to arrange objects in pairs and recognize attribute values, and so decides to start her on the Distal Precursor level, with hopes that she might be able to move up to the Proximal Precursor level and even begin to master part of the Target Nodes.

- *Annual Goal: Given a Velcro bar graph and tasks to complete throughout the week (one Velcro square for each task completed) at school and in the community, Anna will construct a bar graph showing the number of tasks completed on each day of the week and answer questions based on the graph with 80% independence over three weeks (Claim/Conceptual Area 3.2).*
 - *Objective 1: Given a real-life graph (bar, picture, line or pie chart) related to weather or budgeting with visual supports, Anna will read the graph by indicating where the most money, least amount of money, hottest days or coldest days are demonstrated on the graph with 75% independence (M.EE.S-ID.1-2 and M.EE.S-ID.3).*
 - *Objective 2: Given a Velcro bar graph and tasks to complete throughout the week (one Velcro square for each task completed), Anna will construct a bar graph showing the number of tasks completed (including tasks in the community) on each day of the week and answer questions based on the graph (Which day did you complete the most tasks? Least? How many tasks did you complete on this day?) with 80% independence over three weeks (M.EE.S-ID.1-2 and M.EE.S-ID.3).*

After reviewing the goal in light of the reflection question, “Is it truly academic?” Anna’s teacher determines that it is, in fact, an academic goal because it is tied directly to the Essential Elements and the linkage level within the particular EE. Not only is the goal academic, but it is also truly functional. Being able to read graphs to determine weather or to analyze a budget are both very important functional skills that can allow a student to be increasingly independent as an adult. Because the teacher found a way to teach this standard in a way that applies to real life, she has made the goal truly meaningful for the student.

For more examples of IEP goals based on the EEs, please visit

<http://www.schools.utah.gov/sars/Programs-Areas/Significant-Cognitive/WritingGoals.aspx>.

Assess and Report Student Progress

Once the annual goals have been developed, the IEP team must determine how the student will be assessed and how student progress will be provided (and how often). For further

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guidance, please see the USBE Special Education Rules (USBE SER III.J.2.d. (2)). Using a variety of assessment options to measure progress is important to consider.

The IEP team decides that Anna will be assessed on her IEP goals using meaningful tasks that are varied enough to promote generalization over time. To assess Anna on her goals, her teacher will use student work samples as well as teacher-made data sheets and graphs to measure progress. Progress monitoring will also take place utilizing the DLM Integrated Model instructionally embedded assessments. Progress will be reported to parents in the form of a progress report, delivered along with Anna’s report card each quarter (four times per school year).

Identify Specially Designed Instruction

Once priority areas have been determined, the goals should be written to include any needed modifications, accommodations, and the unique way that the particular student will demonstrate his/her learning. While the general education teacher is considered the expert on grade level content, the special educator is the expert on how to provide specially designed instruction and access to the content given the student’s strengths and needs. The team should identify the evidence-based practices necessary for the student with a significant cognitive disability to access and make progress toward his/her annual goals. The team should also determine modifications and accommodations, including how the student will demonstrate acquisition of the skill or content.

Demonstrating acquisition of the skill or content almost entirely depends on the student’s use of symbols in the related subject area (Snell, M.E. & Brown, F., 2006). Students on the Presymbolic Level/Beginning Symbol Use may use objects or gestures to communicate and rely on immediate context to use an object symbolically (such as showing a fork to eat). In the Early/Concrete Symbolic level, students can recognize pictures and may also use a range of objects symbolically. At the Expanded/Abstract Symbolic level, students may be able to read sight words, picture cues, and count and recognize numbers and letters.

Typical	Expanded/Abstract Symbolic	Early/Concrete Symbolic	Presymbolic/Beginning Symbol Use
Reads/writes at or near grade level	Reads sight words/picture cues; may count and recognize numbers	Recognizes pictures; may also use a range of objects symbolically	Uses objects or gestures to communicate; relies on immediate context to use object symbolically (e.g., showing a fork to eat)

Figure 5 Student symbol use and access to the curriculum (Snell, M.E. & Brown, F., 2006)

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Another source of information on communication development for students with SCD is the Communication Matrix. The Communication Matrix can be found at <http://communicationmatrix.org>.

Due to Anna's inconsistent communication, her teacher knows that the best way for Anna to demonstrate what she has learned is to indicate it nonverbally by selecting from choices. In addition, she knows that Anna, who has an intellectual disability, benefits from systematic instruction and struggles to generalize and maintain the information that she learns. Because of this, she decides to embed personally relevant aspects to the goal so that it is as meaningful as possible for Anna and take note to ensure that Anna has an opportunity to demonstrate her learning across environments and people. In the DLM Integrated Model, Anna's teacher will select related EEs for assessment which will also allow Anna the opportunity to practice demonstrating her knowledge on a computer-based program as well. Lastly, since Anna is still on an Early Symbolic level in math, her teacher decides to embed counting into the goal as well, so that Anna can have access to her grade level curriculum and also work on a more broad access/foundational math goal as well (counting).

Determine the Most Appropriate Assessment Options

In Utah, if the IEP team has determined that a student should be instructed in the EEs for ELA and mathematics, he/she will participate in the Dynamic Learning Maps (DLM) statewide alternate assessment and the Utah Alternate Assessment (UAA) for Science. The IEP should document why the student cannot participate in the regular assessment and why the particular alternate assessment selected is appropriate for the student (USBE SER III.J.2.G. (2)). Simultaneously, the team must determine whether additional available accommodations are required on the assessment through the Personal Needs Profile and how these accommodations will also be provided to the student during classroom instruction (USBE SER III.J.2.G. (1)).

Since Anna is going to be instructed in the Essential Elements, she is eligible for the Dynamic Learning Maps assessment. This assessment is computer-based and will allow Anna the accommodations she needs. Accommodations that Anna will receive include:

- *Administration via iPad,*
- *Human read aloud, and*
- *Individualized manipulatives.*

Given Anna's individual characteristics and learning needs, it has been determined that Anna will be able to demonstrate what she knows related to her grade-level academic standards using the Dynamic Learning Maps assessment. A description of allowed accommodations for the DLM can be found at:

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http://dynamiclearningmaps.org/sites/default/files/documents/dlm_accessibility_tools_and_supports.pdf.

Conclusion

While it often seems that the IEP process can be time-consuming, it is the vehicle that assists the IEP team in determining the best course of action to take to prepare students with disabilities to be college and career ready. An Essential Element linked-IEP provides positive academic goals for instruction and encourages higher expectations for students with significant cognitive disabilities.

Part III: Planning for Classroom Instruction in the Essential Elements

Depending on the individual student’s placement, access to the general education curriculum will look different. This section will provide guidance on how a teacher might plan for instruction in the Essential Elements utilizing the linkage levels in a special class or resource setting as well as a general education setting.

Planning for EE Instruction in a Special Class Context

A special class is unique because it can often have multiple grade levels, which makes it complicated to plan whole-class academic lessons. Because the EEs are so linear in their progression and because each EE has an extensive description of linkage levels, it is possible to teach academic lessons to a whole class, despite the difference in ability or age. Below is a graphic describing the steps that can be taken in planning for classroom instruction in the EEs in a special class.

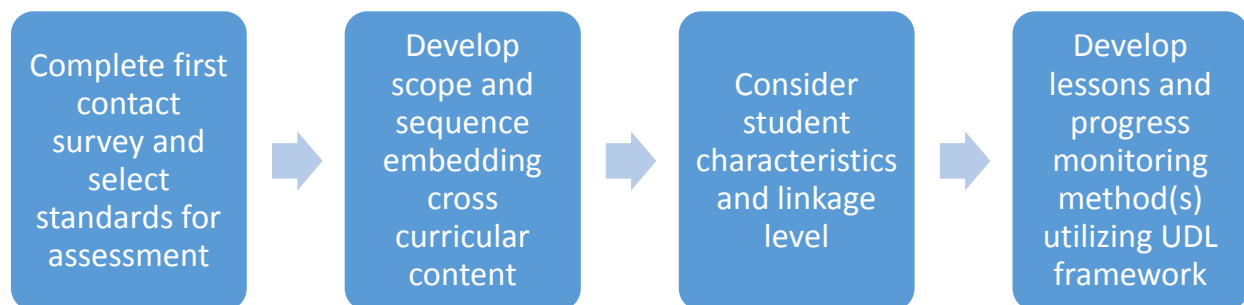


Figure 6 Planning for classroom instruction in the EEs in a special class

Example of Planning in a Special Class

Step 1: Complete First Contact Survey and Select Standards for Assessment

The first thing a teacher needs to do is to complete the First Contact Survey, which gives the testing system information about what linkage level the student will begin testing. Next, the teacher will complete the DLM Personal Needs Profile and indicate accommodations needed

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for assessment, and ensure that these are provided during instruction as well. He/she will also use the student’s grade-level Blueprint to select the Essential Elements that will be assessed for that school year. A teacher should thoughtfully consider the given linkage level suggested for each standard and use a variety of other tools to determine where the student should be given entry to the standard and the progress he/she should be expected to make over the course of the school year. If a teacher feels that a student should be on a different linkage level, the teacher has the ability to override the DLM assignment.

Step 2: Develop Scope and Sequence Plan, Embedding Cross-Curricular Content

A teacher may also want to develop a scope and sequence plan, or adapt the LEA or school’s curriculum map using the EEs as well as the selected tested standards in the DLM Integrated Model. Using the DLM Testing Blueprint, along with the Claims and Conceptual Areas for the EEs, the teacher can plan for instruction on multiple grade levels, if necessary, to allow more flexibility in lesson planning for a special class. To guide students in generalizing and maintaining the knowledge and skills that they gain, a teacher may also consider cross-curricular content, such as other EEs or Extended Core standards, to embed into the lesson.

When planning for the scope and sequence of instruction, teachers may consider the individual needs of the students in his or her class, as well as the priorities of the class as a whole.

As an example, if a teacher decided to teach the Claims in order, he or she might start with ELA instruction on Claim 1 (“Students can comprehend text in increasingly complex ways”)

Claim 1	<p>Students can comprehend text in increasingly complex ways.</p> <p>Conceptual Areas in the Dynamic Learning Map:</p> <p>C1.1 Determining Critical Elements of Text <i>Essential Elements Included: RL*1, RL*3, RL*5, RI*1, RI*2, RI*5</i></p> <p>C1.2 Constructing Understandings of Text <i>Essential Elements Included: RL*2, RL*4, RI*4, RI*8, L*5</i></p> <p>C1.3 Integrating Ideas and Information from Text <i>Essential Elements Included: RL*6, RL*7, RL*9, RI*3, RI*6, RI*7, RI*9, W*9a, W*9b</i></p>
Claim 2	<p>Students can produce writing for a range of purposes and audiences.</p> <p>Conceptual Areas in the Dynamic Learning Map:</p> <p>C2.1 Using Writing to Communicate <i>Essential Elements Included: W*2a, W*2b, W*2c, W*2d, W*2f, W*3a, W*3e, W*4, W*5, L*1a (grades K-2) L*2a, L*2b</i></p> <p>C2.2 Integrating Ideas and Information in Writing <i>Essential Elements Included: W*1a, W*1b, W*3b, W*3c, W*3d, W*8 (grades K-4)</i></p>
Claim 3	<p>Students can communicate for a range of purposes and audiences.</p> <p>Conceptual Areas in the Dynamic Learning Map:</p> <p>C3.1 Using Language to Communicate with Others <i>Essential Elements Included: SL*6, L*1a (grades 3-8), L*1b, L*1c, L*1d, L*1e, L*1f, L*1g, L*1i, L*1j, L*3, L*4a, L*4b, L*6</i></p> <p>C3.2 Clarifying and Contributing in Discussion <i>Essential Elements Included: SL*1a, SL*1b, SL*1c, SL*1d, SL*2, SL*3, SL*4</i></p>
Claim 4	<p>Students can engage in research/inquiry to investigate topics and present information.</p> <p>Conceptual Areas in the Dynamic Learning Map:</p> <p>C4.1 Using Sources and Information <i>Essential Elements Included: W*7, W*8 (grades 5-12)</i></p> <p>C4.2 Collaborating and Presenting Ideas <i>Essential Elements Included: W*6, SL*5</i></p>

L = language; RL = reading literature; RI = reading information text; SL = speaking and listening; W = writing

Figure 7 Essential Elements Claims and Conceptual Areas

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and Conceptual Area 1 (Determining Critical Elements of Text). The EEs included in ELA Claim 1, Conceptual Area 1 include RL-1, 3 and 5, RI- 1, 2, and 5. These EEs go across grade levels, becoming increasingly more complex.

If a class had already covered RL.1, the teacher might move on to RL.3 (the second listed Essential Element under Claim 1, Conceptual Area 1 for ELA). The EEs related to RL.3 are listed below for grades K-5. Take note of how these are similar and how they progress to become more complex from grade to grade:

EE.RL.K.3 With guidance and support, identify characters and settings in a familiar story.
EE.RL.1.3 Identify characters and settings in a familiar story.
EE.RL.2.3 Identify the actions of characters in a story.
EE.RL.3.3 Identify the feelings of characters in a story.
EE.RL.4.3 Use details from the text to describe characters in the story.
EE.RL.5.3 Compare two characters in a familiar story.

Figure 8 Vertical alignment of EE.RL.3

While this standard definitely increases in complexity from grade to grade, there are certainly overarching themes that could easily be tied together within one lesson.

Step 3: Consider Student Characteristics and Linkage Level

Once a teacher is familiar with the EE(s) that he/she is teaching, he/she should then consider the needs of his/her student(s). To assist a teacher in considering the students' current academic level, he/she may look at the linkage levels for each EE, located on the DLM Website under Learning Maps (<http://dynamiclearningmaps.org/content/educator-resource-page/ELA> or <http://dynamiclearningmaps.org/content/educator-resource-page/Math>). Using the level given for each student after inputting his/her First Contact Survey and considering individual student data, a teacher can then use these linkage levels to assist in writing goals for individual students (as described in Section 2), as well as plan for differentiated lessons and classroom assessments (as described in this section).

Examples of Student Characteristics

Ben is a first grade student whose classification is Autism. He uses picture exchange to communicate, but is only on Phase One, since he is not yet able to discriminate between pictures. Ben will use his fingers to point and indicate an answer for assignments and assessments, but requires frequent breaks and reinforcement to complete tasks. Ben is working on completing one-step tasks. He does not yet identify numbers or letters consistently, but he is able to turn the page of a book and use a switch and pictures to participate in story-based lessons. Since Ben is not yet in a tested course or grade, he does not

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have an assigned linkage level. Since Ben does not have an assigned linkage level, the teacher may look to an aligned EE at a third grade level to get ideas of how Ben could be given access to the standard.

Jack is a third grade student whose classification is Intellectual Disability. He communicates verbally with limited vocabulary. He is an emerging reader who knows all of his letter names and sounds, and can identify the first 50 Fry words with 90% accuracy. Mathematically, Jack is able to count to 15 and add and subtract numbers with manipulatives up to 15. According to Jack's PNP, he should begin access to the EEs at the Distal Precursor level.

Maddy is a fifth grade student whose classification is Multiple Disabilities. She communicates using eye gaze and through facial expressions which her teachers are trying to shape into using a switch. Maddy enjoys reading activities, as evidenced by her smiling and tracking the book with her eyes every time she is read to. According to Maddy's PNP, she should begin access to the EEs at the Initial Precursor level.

In order to plan for instruction based on the unique needs of these three students, a teacher would consider individual student characteristics and look at each student's assigned linkage level to see where the students will each access the standard, then determine where each student might be able to progress by the end of the unit. The linkage levels for Jack and Maddy are highlighted. Note that because Ben is not in a tested grade level, the first grade standard does not yet have its own linkage level.

Linkage Level Comparisons for EE.RL.3		
Ben EE.RL.1.3	Jack EE.RL.3.3	Maddy EE.RL.5.3
Identify characters and settings in a familiar story.	Identify the feelings of characters in a story.	Compare two characters in a familiar story.
Linkage Levels have not yet been identified for K-2 EEs.	<p>Successor Node:</p> <ul style="list-style-type: none"> Can identify how a character's actions make him/her feel, OR can identify how the character's desires or feelings lead to an action. <p>Target Node:</p> <ul style="list-style-type: none"> Can identify the feelings of specific characters in narratives. 	<p>Successor Node:</p> <ul style="list-style-type: none"> Can contrast different characters in a familiar story using specific key details. <p>Target Node:</p> <ul style="list-style-type: none"> Can compare different characters in a familiar story. <p>Proximal Precursor:</p> <ul style="list-style-type: none"> Can use illustrations and/or details of a text to describe the events. <p>Distal Precursor:</p> <ul style="list-style-type: none"> Can identify character(s) and setting in a familiar story. <p>Initial Precursor:</p>

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	<p>Proximal Precursor</p> <ul style="list-style-type: none"> • Can identify the feelings of characters when explicitly stated in familiar stories. <p>Distal Precursor:</p> <ul style="list-style-type: none"> • Can identify words in a familiar text that are associated with feelings. <p>Initial Precursor:</p> <ul style="list-style-type: none"> • Is able to use or identify feeling words related to self, such as <i>happy, sad, tired, worried</i> or <i>angry</i>. 	<ul style="list-style-type: none"> • Child can look at, show, or get an object as directed, or can demonstrate understanding that objects or persons have names by responding to stimulus cues (verbal, signed, Brailled, or graphic images) by saying, signing, or keyboarding the name or when asked the location of an object or person; can respond by pointing, looking/gazing, verbalizing, signing, or writing a correct response; and can look at or point to a person indicated through speech or gesture.
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Step 4: Lesson Development and Progress Monitoring Method

After becoming familiar with the EEs and where each student will begin access to the standards, a teacher can then begin to plan the lesson and design his/her method of monitoring progress. It is important to consider how to incorporate UDL principles to ensure accessibility for each student as well as how to embed standards from the Extended Core to promote generalization of content.

When designing a lesson as a part of a unit for literacy, it is important to ensure that students with significant disabilities are able to have access to age-appropriate literature. Giving students cognitive access is essential and easily achieved by decreasing the amount of text and simplifying vocabulary. A great resource for simplified texts is www.tarheelreader.org. It is also important to teach literature content to students using a method that is based in research. One method is the story-based lesson, which is very similar to a common and research-based general education strategy, known as interactive shared book reading (U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, What Works Clearinghouse, 2007). Utilizing the story-based lesson template developed by Browder, Gibbs, Ahlgrim-Delzell, Courtade and Lee (2007), a literacy lesson focusing on EE.RL.3 is shown as an example below. The story-based lesson template incorporates differentiation strategies covering the Initial, Distal and Proximal Precursors for third and fifth grade EE.RL.3.

This template below can be used to teach the EEs from across content and is in no way limited to ELA standards. The steps to the story-based lesson are listed at the left, with a description in the middle. On the right is how each step of the story-based lesson will be applied to a particular book and EE-based outcomes.

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ELA Lesson Plan – Identify Characters and Settings in a Story

Standards:

- EE.RL.1.3 Identify characters and settings** in a familiar story.
- EE.RL.3.3 Identify the feelings of characters** in a story.
- EE.RL.4.3** Use details from the text to **describe characters** in the story.

Extended Core Science Extension:

- III. 1a. Observe animals at different stages of their lifecycle. This can be, but does not have to be, a metamorphic lifecycle.
- Content Vb. Identify a living organism as an animal.

Three Pillars of UDL

Multiple Means of Representation: Adapted story will be read aloud and text with pictures will be displayed on the interactive whiteboard. Vocabulary and symbols are pretaught (text, symbols, photos, and/or objects).

Multiple Means of Action and Expression: Students can communicate verbally, using a communication device, or by selecting picture or word choices. Prompts and scaffolds are provided to ensure errorless learning and high rates of success for the students.

Multiple Means of Engagement: Students will be asked a prediction question to predict what they think the story might be about. Students can respond to the prediction question and comprehension questions by selecting objects, pictures or words of related concepts in the story. The degree of difficulty of the tasks is differentiated between students.

Step	Description	Application
Anticipatory set	Pictures or objects related to book theme or characters, other connection to previously known information. Allow each student to interact with materials.	<p>This story is about Henry and his dog. Let’s watch a video about Henry and Mudge. (http://www.watchknowlearn.org/Video.aspx?VideoID=39835&CategoryID=10471)</p> <p>Ben & Jack—Present pictures of the two main characters paired with each student’s written name.</p> <p>Jack – Present pictures of feelings that he may see in the story, match to words (RL-4.3 Distal Precursor).</p> <p>Maddy—Provide objects to represent Henry and Mudge, and identify them as the main characters of the book. Present</p>

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		<p>them with sound to make sure she looks at them (RL.5.3 Initial Precursor).</p> <p>To all students: Use errorless learning to have each student identify the picture of a dog as an animal or plant.</p>
Title of the book	Read and show the title by pointing, highlighting, color coding. Have students repeat.	<i>Henry and Mudge: Friends Forever</i> (http://tarheelreader.org/2013/05/30/henry-and-mudge-friends-forever/).
Author of the book	Read and show the author's name by pointing, highlighting, color coding. Have students repeat. Tell students the author is the person who wrote the book.	<p>Ben and Maddy—Provide a stimulus cue to help Ben and Maddy distinguish between the title and the author. Help them to touch and move their fingers under the title as you say it.</p> <p>Jack—Model pointing and saying the title/author and prompt Jack to imitate; ask Jack how the characters might feel by looking at the picture of them on the cover.</p>
Ask prediction question	Have students look at the front cover of the book and scan some pictures within the book. Ask students what they think the book is about. Provide two to four options for them to select from.	<p>Ben and Jack—Ensure that the book is in their line of vision and ask, "What do you think this story will be about?" Present one of the character pictures and a distractor to respond (or Jack can respond verbally if preferred).</p> <p>Maddy—Ensure that the book is in her field of vision and ask, "What do you think this story will be about?" Present one of the character objects and a distractor for her to respond using eye gaze.</p>
Open the book	Model opening the book. Have one student open the book to get the story started.	<p>Ben and Jack—Make sure to place the book in their field of vision and draw their attention to the book. Ask, "How do we get the story started?"</p> <p>Maddy—Same as above. Add handles to the pages for her to grasp.</p>
Text pointing	Students take turns throughout the book at pointing to the words as the teacher reads	Ben and Jack—Use sentences as they appear in the story to point to text as it is read by the teacher.

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	<p>them. Start by sweeping from left to right, and build to word-by-word pointing.</p>	<p>Maddy—Provide an enlarged repeated line so Maddy can move her eyes along the line from left to right as the teacher points to and reads the words.</p>
<p>Identify key vocabulary</p>	<p>Preselect up to five key vocabulary words/pictures/objects. Identify them as they are read. Have students find key vocabulary.</p>	<p>Vocabulary words discussed will be words related to feelings and will include visual supports: sad, excited, happy, dog (RL3.3 Initial & Distal precursor).</p> <p>Ben and Jack—After reading the words in a sentence, ask Ben and Jack to point to the word in the text. Present the word and ask them to read it (RL-4.3 Distal Precursor).</p> <p>Maddy—Pair words and pictures in the book with the objects. When the word “dog” is read, point to the picture and ask Maddy to look at the corresponding object (RL-3.3 Initial Precursor).</p>
<p>Read repeated story line</p>	<p>Upon reading the repeated story line throughout the book, have students read the line (if verbal), place the line on augmentative or alternative communication (AAC) device, or point to a picture/word to finish the line.</p>	<p>“Henry and Mudge are friends.”</p> <p>Jack—After reading the line several times, the teacher will ask Jack to read it aloud.</p> <p>Ben and Maddy—A switch with the line recorded on it is placed in front of Ben or Maddy. Whenever the line is read, the teacher will guide his/her hand to the switch and say, “Your turn to say it.”</p>
<p>Turn page of the book</p>	<p>Each student should have the opportunity to turn the page of the book. Pose the question, “What do we need to do to keep the story going?” instead of directly telling the student to turn the page.</p>	<p>Click next on interactive whiteboard, or print, if needed.</p> <p>Ben and Jack—Teacher will ask “What do we need to do to keep the story going?” The book is presented so that each student can turn the page.</p> <p>Maddy—Same as above, but ensure that each page she is asked to turn has a handle to assist her.</p>

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<p>Answer comprehension questions, review prediction</p>	<p>Either during the reading or after the book is read, ask students questions regarding the book. Pose a variety of questions—some literal, such as naming characters, and some not literal, such as how the characters felt or what might happen next. Review the predictions of what the book was about and correct if necessary.</p>	<p>After reading page 1: Who is a character? (Henry); How does Henry feel? (sad)</p> <p>After reading page 7: How did Mudge feel? (happy)</p> <p>RL.3.3 Proximal precursor, RL.4.3 Distal & Proximal precursor</p> <p>Ben—Provide him with object choices to answer questions.</p> <p>Jack—Provide him with picture choices to answer the questions.</p> <p>Maddy—Provide her with object choices to answer questions.</p>
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When teaching new academic content, it is crucial to ensure that students’ progress is being monitored frequently. When progress is measured frequently, a teacher can see exactly what his/her students are understanding and what misconceptions they might have, which can then inform the planning of future lessons and/or whether or not the teacher might need to change teaching strategies.

The DLM Integrated Model provides an informative framework from which to monitor student progress in the EEs. By administering a Fall, Winter, and Spring assessment (required) in conjunction with instructionally embedded assessments (not required), teachers can access a great wealth of student information about where each student is, how much each student has progressed, and what next steps might be to promote even more growth.

Planning for EE instruction in the General Education Context

According to research, students with significant cognitive disabilities can learn mathematics (Browder, Spooner, Ahlgrim-Delzell, Harris & Wakeman, 2008), reading (Browder, Wakeman, Spooner, Ahlgrim-Delzell, & Algozzine, 2006), as well as communication (Foremen, Arthur-Kelly, Pascoe, & King, 2004), social (Carter & Hughes, 2005 and Fisher & Meyer, 2002), and employment skills in a general education setting (Benz, Lindstrom, & Yovanoff, 2000). Further, inclusive opportunities are a reliable predictor of school and post school success (particularly in education, employment and independent living) for students across disability categories (Baer et al., 2003; Blackorby et. al., 1993; Heal & Rusch, 1995; Heal, et. al., 1997; Leonard et.

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al., 1999; and White & Weiner, 2004) (Division on Career Development and Transition, & National Secondary Transition Technical Assistance Center, 2009).

If a student being instructed in the EEs is placed in the general education classroom as his/her least restrictive environment, it is essential to plan for how that student is going to be provided access using UDL strategies, embedded instruction and assessments that measure his/her progress. The four steps of planning in a special class, described above, are still important. In addition, Hudson, Browder and Wood (2013) suggest that a planning team “identify the most salient content of the instructional unit that students with moderate/severe disabilities should learn.” Once that has been determined, the team should decide what the target response will be for the student with a disability as well as who will deliver the prompt and in what part of the lesson.

Because planning is a lengthy and ongoing process, it can be difficult for a planning team to ensure that a student with a significant cognitive disability has true access to the general curriculum. The flowcharts below indicate an example of how this planning process between the general education teacher and the special education teacher can look and what the responsibilities of each might be.

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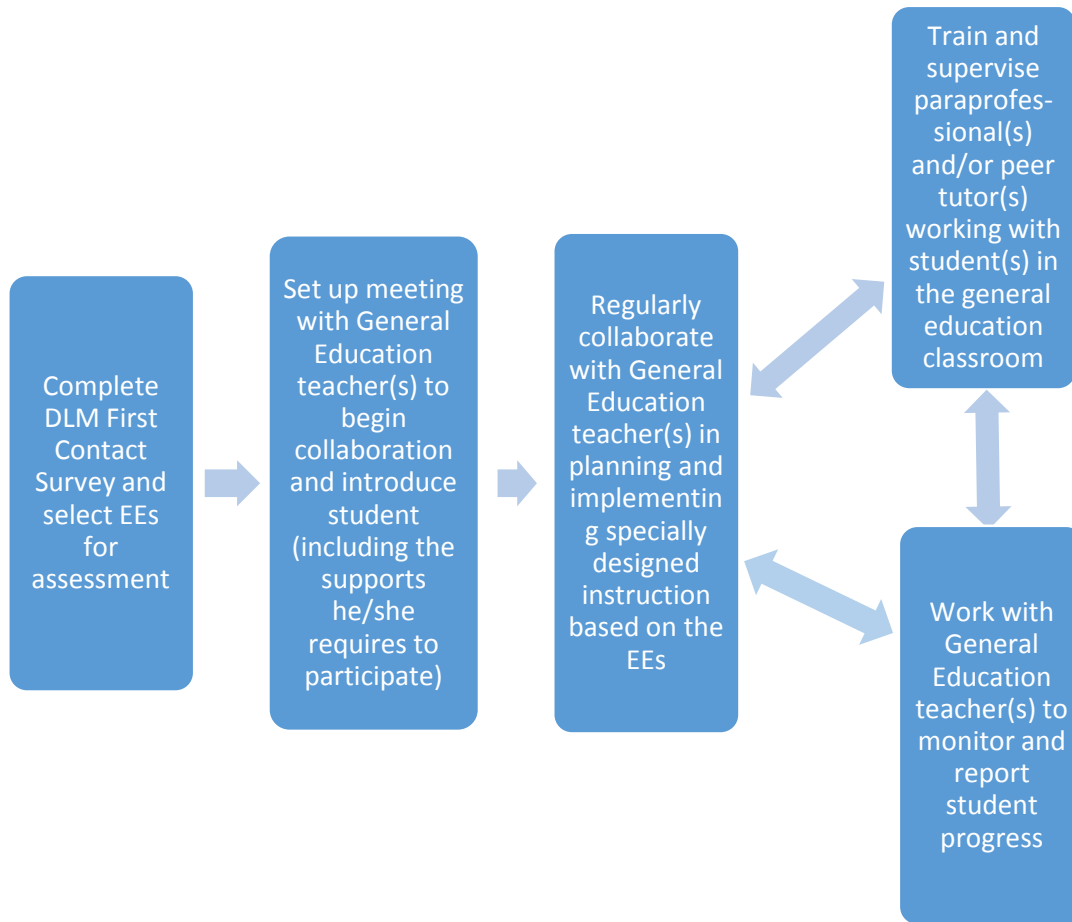


Figure 9 Responsibilities of a special education teacher in an inclusive classroom setting

TEACHING THE ESSENTIAL ELEMENTS TO STUDENTS WITH SIGNIFICANT COGNITIVE DISABILITIES

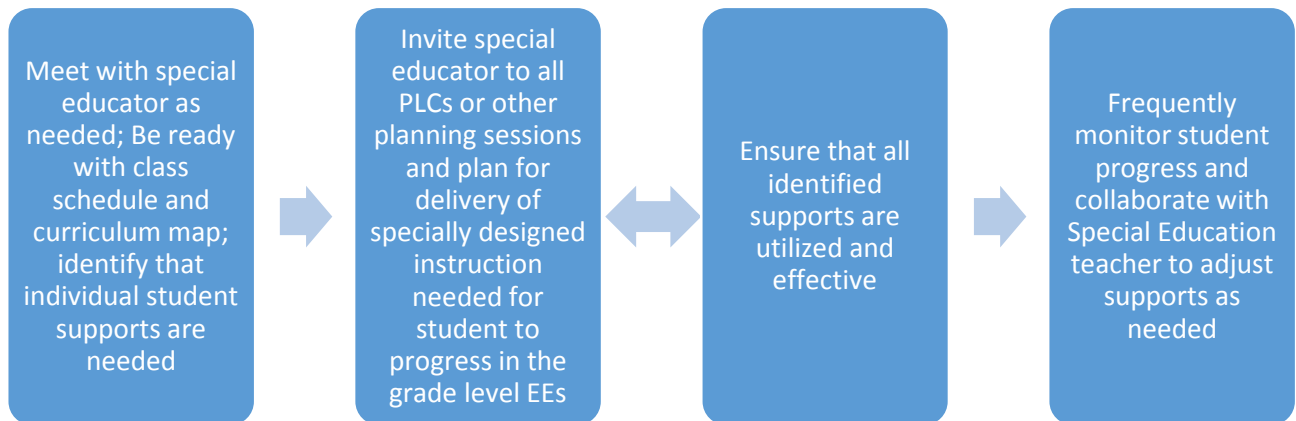


Figure 10 Responsibilities of a general education teacher in an inclusive classroom setting

With effective collaboration, a general and special education teacher can ensure that all students have access to the curriculum. By utilizing the UDL framework, small adjustments can be made to ensure access for a student with a significant cognitive disability and have benefit for all learners, even those without disabilities.

To illustrate the lesson planning process, examples of general education lessons with UDL considerations as well as specific adaptations for a student with a significant disability are provided below. The examples include an elementary level ELA lesson and a secondary math lesson.

Elementary Level ELA Lesson Example

Mr. Jones' third grade elementary class is working on RL-3.3 (the same EE discussed earlier). The grade level standard and the correlating EE and linkage levels are shown in the table below:

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Grade-Level Standard	DLM Essential Element	Linkage Level Progression
ELA.RL.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.	ELA.EE.RL.3.3 Identify the feelings of characters in a story.	<p>Successor Node:</p> <ul style="list-style-type: none"> • Can identify how a character's actions make him/her feel OR can identify how the character's desires or feelings lead to an action. <p>Target Node:</p> <ul style="list-style-type: none"> • Can identify the feelings of specific characters in narratives. <p>Proximal Precursor:</p> <ul style="list-style-type: none"> • Can identify the feelings of characters when explicitly stated in familiar stories. <p>Distal Precursor:</p> <ul style="list-style-type: none"> • Can identify words in a familiar text that are associated with feelings. <p>Initial Precursor:</p> <ul style="list-style-type: none"> • Is able to use or identify feeling words related to self, such as <i>happy, sad, tired, worried, or angry</i>.

The team, including Mr. Jones (the general educator) and Ms. Smith (the special educator) might decide that Ben should work on identifying words in a familiar text that are associated with feelings, and then to identify feelings of characters in a story in order to access and make progress in the related EE (EE.RL.3.3). Hudson, Browder, and Wood (2013) then suggest that a team determine the specific target response for the student, who will deliver the prompt and in what part of the lesson the instruction could be embedded without altering the flow of the lesson. In this case, Ben’s team might plan for Ben to learn to read feeling words, match them to their corresponding picture, and learn to label a character’s feelings using the feelings picture symbols. Ben’s embedded instruction could be delivered by the paraprofessional or by Ms. Smith (depending on who is supporting Ben on that day). The embedded instruction will be delivered during times in the lesson that are least disruptive. The team decides that Ben

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will demonstrate identifying feeling words and matching to their corresponding pictures immediately prior to the ELA lesson regarding character’s feelings. Labeling characters with feeling words and symbols will happen throughout and at the end of the story.

ELA Lesson Plan—Describe characters in a story	
<p>Standards: ELA.RL.3.3 Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events. ELA.EE.RL.3.3 Identify the feelings of characters in a story.</p> <p>Three Pillars of UDL <u>Multiple Means of Representation:</u> Story will be read aloud and text with pictures will be displayed on the interactive whiteboard. Vocabulary and symbols are pre-taught (text, symbols, photos, and/or objects). <u>Multiple Means of Action and Expression:</u> Students can communicate verbally, using a communication device, or by selecting picture or word choices. Prompts and scaffolds are provided to ensure errorless learning and high rates of success for the students. <u>Multiple Means of Engagement:</u> Students can respond to prediction question and comprehension questions by selecting objects, pictures or words of related concepts in the story. The degree of difficulty of the tasks is differentiated between students. For student(s) unable to write or type their responses, an alternate pencil is provided. For more information on alternate pencils, visit the DLM Professional Development page at http://dlmpd.com.</p> <p>Materials:</p> <ul style="list-style-type: none"> • Character Change Continuum http://www.readwritethink.org/files/resources/lesson_images/lesson826/continuum.pdf • <u>Thank You, Mr. Falker</u> by Patricia Polacco 	
General Education Lesson	Adaptations for Students with SCD
<p>1. Gather students. Have the Character Change Continuum chart available. Begin to read <i>Thank You, Mr. Falker</i> aloud again. Stop at the teacher’s predetermined points to elicit student responses.</p>	<p>1. Embed visual supports on the Character Change Continuum chart; provide picture choices for student responses.</p>

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<p>2. At each page where you stop, ask students to help you record where and why they think Trisha is on the Character Change Continuum chart.</p> <p>3. When the teacher is finished, read the completed Character Change Continuum with students. Ask them to think of one or two words that describe Trisha at various stages throughout the story. Examples include:</p> <p style="padding-left: 40px;">At the beginning of the story: hopeful, eager, excited</p> <p style="padding-left: 40px;">At the middle of the story: sad, insecure, a failure, no confidence</p> <p style="padding-left: 40px;">At the end of the story: happy, confident, proud, intelligent</p> <p>4. Tell students that they have been studying character development. Tell them that good readers do this to help them understand the text better.</p> <p>5. Display the chart in the classroom and have students use it independently as they read additional books. Examples of appropriate books include <i>A Bad Case of Stripes</i> by David Shannon (Blue Sky Press, 1998), <i>Wings of Change</i> by Franklin Hill (Illumination Arts Publishing Co., 2000), <i>Chrysanthemum</i> by Kevin Henkes (Harper Trophy, 1996), and <i>The Dot</i> by Peter H. Reynolds (Candlewick Press, 2003). The teacher might also give students sticky notes and their own copies of the chart to record their responses as they listen to a story or read it on their own.</p>	<p>2. Use adapted Character Continuum chart and give special attention to the student’s engagement. Highlight parts of the book in which he/she seems particularly interested.</p> <p style="padding-left: 40px;">Embed visual supports as picture choices for all feeling words identified in the left column.</p> <p>3. No adaptations.</p> <p>4. Include visual supports in the chart displayed in class. Provide student with an alternate pencil to respond to writing task.</p>
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Secondary Example

Ms. Thomas’s seventh grade math class is in a unit about fractions. The teacher is covering standard M.7.NS.1.a.b.c.d., which states: “Apply and extend previous understandings of

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addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.” The correlating EE and linkage levels are shown in the table below:

Grade-Level Standard	DLM Essential Element	Linkage Levels
<p>M.7.NS.1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</p>	<p>M.EE.7.NS.1 Add fractions with like denominators (halves, thirds, fourths, and tenths) with sum less than or equal to one.</p>	<p>Successor Node:</p> <ul style="list-style-type: none"> • Add or subtract fractions with denominators of 10 and 100. <p>Target Nodes:</p> <ul style="list-style-type: none"> • Add fractions with common denominators. <p>Proximal Precursor:</p> <ul style="list-style-type: none"> • Explain the concept of addition and subtraction of fractions. <ul style="list-style-type: none"> • Decompose a fraction into a sum of unit fractions with the same denominator. <p>Distal Precursor:</p> <ul style="list-style-type: none"> • Recognize parts of a given whole or a unit. <p>Initial Precursor:</p> <ul style="list-style-type: none"> • Recognize separateness. • Recognize subset.

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Math Lesson Plan—Adding and Subtracting Fractions

Standards:

M.7.NS.1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

M.EE.7.NS.1 Add fractions with like denominators (halves, thirds, fourths, and tenths) with sum less than or equal to one.

Three Pillars of UDL

Multiple Means of Representation: Math concepts are demonstrated in a Concrete/Representational/Abstract format. Vocabulary and symbols are pre-taught (text, symbols, photos, and/or objects).

Multiple Means of Action and Expression: Students can communicate verbally, using a communication device, or by selecting picture or word choices. Prompts and scaffolds are provided to ensure errorless learning and high rates of success for the students.

Multiple Means of Engagement: Students can demonstrate their learning by using paper/pencil, virtual manipulatives, or concrete manipulatives. The degree of difficulty of the tasks is differentiated between students. For student(s) unable to write or type their responses, an alternate pencil is provided.

General Education Lesson	Adaptations for Students with SCD
Bell Ringer (5 minutes)	
<ol style="list-style-type: none"> 1. $27 / (3 + 6) \times 5 - 12$ 2. Evaluate $3ab - 2c$ if $a = 2$, $b = -4$, $c = 4$ 3. Find the next term in the pattern: 5, 8, 11, 14 ... 	<p>Work on division using manipulatives (blocks with bowls)</p> <ol style="list-style-type: none"> 1. $4/2$ 2. $10/5$ <p>Complete the pattern:</p> <p>2, 4, 6, 8...</p>
Direct Instruction: (20 minutes)	
<p><i>What is a fraction? (Shows part of a whole, group)</i></p> <p><i>What do we remember about working with fractions from last year?</i></p> <p><i>If you had a younger sibling, cousin, etc., and he/she were learning to add fractions for the first time, what are some of the big steps that you would want them to remember?</i></p>	<p>Allow student to select a part and a whole from fractional parts.</p>

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<p>—<i>Denominators need to be the same?</i> —<i>Add the numerators, the denominator needs to stay the same.</i></p> <p><i>Let's solve some examples together to help us remember what we should do.</i></p> <p><i>Solve the following problems with students:</i> Ex. $3/4 + 11/12$ Ex. $1/6 + 12/15$ Ex. $6/7 - 1/2$</p> <p><i>Now that we have had a chance to practice with fractions, let's make a list of all of the steps that we have to remember.</i></p> <p>To add and subtract fractions: 1) Rename the fractions to have the same denominator.</p> <p>2) Add the numerators. The denominators stay the same.</p> <p>3) Change any improper fractions to mixed numbers.</p>	
<p><i>Now let's take what we remember about fractions and practice adding and subtracting mixed numbers.</i></p> <p><i>Go through the examples with students, having them give the steps as they remember them.</i></p> <p>Example: $4 \frac{4}{5} + 3 \frac{3}{4}$</p> <p>Example: $2 \frac{1}{3} + 1 \frac{1}{4}$</p> <p>To add mixed numbers: 1) Rename the fractions to have the same denominator. 2) Add the fractions. 3) Add the whole numbers. 4) Convert improper fractions to mixed numbers. 5) Add the whole numbers, keep the fraction.</p> <p><i>Now let's take a look at subtracting mixed numbers. Let's pay attention to see if there are any</i></p>	<p>Model adding fractional parts together in real-life contexts.</p> <p>Give student a task analysis for adding fractions with like denominators with visual supports. After reviewing, ask the student to put the steps in order.</p>

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<p><i>steps that we need to remember for subtraction that we did not need for addition.</i></p> <p><i>Work through the examples with students.</i></p> <p>Example: $4 \frac{3}{4} - 2 \frac{1}{5}$</p> <p>Example: $6 \frac{1}{6} - 2 \frac{1}{2}$</p> <p><i>What extra step do we need to add to this problem that we did not have to worry about in the first one?</i></p> <p>To subtract mixed numbers:</p> <ol style="list-style-type: none"> 1) Rename the fractions to have the same denominator. 2) If the top fraction is smaller than the bottom fraction, regroup. 3) To regroup, take one whole from the whole number, add its fraction equivalent to the fraction. 4) Subtract the fractions. 5) Subtract the whole numbers. 	
<p>Guided Practice: (10 minutes)</p>	
<p>Have students solve the following problems on white boards:</p> <p>$6 \frac{1}{8} - 3 \frac{1}{5}$</p> <p>$5 \frac{4}{7} + 6 \frac{3}{8}$</p> <p>$6 \frac{1}{3} - 2 \frac{3}{4}$</p> <p>$5 \frac{2}{3} + 5 \frac{3}{5}$</p> <p>$6 \frac{3}{4} - 2 \frac{1}{3}$</p>	<p>At the beginning, review and model addition with like denominators in context to allow student to participate.</p> <p>Example: $\frac{1}{4} + \frac{3}{4}$ (can use fractional parts in shape of pizza, pie, brownies, etc.)</p> <p>Student can continue to practice the same problem with different manipulatives to promote generalization.</p> <p>To participate in class problems, peers can find like denominators and then allow the student to solve the remaining part of the problem (with a calculator, if needed).</p>

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Assessment: (10 minutes)	
Adding and subtracting fractions and mixed numbers workout Adapted from: http://betterlesson.com/community/lesson/14876/adding-and-subtracing-fractions-and-mixed-numbers	Student will complete three fraction addition problems as independently as possible.

Conclusion

The EEs are a great foundation for teachers to provide students access to grade level standards and curriculum. Utilizing the strategies in this document, teachers can expect to see academic growth for all students. By establishing high expectations for students with SCD, developing IEPs aligned with the EEs and planning for instruction utilizing the UDL framework, teachers can ensure that they supporting student achievement and inclusion that can lead to students who are better prepared for college and career.

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