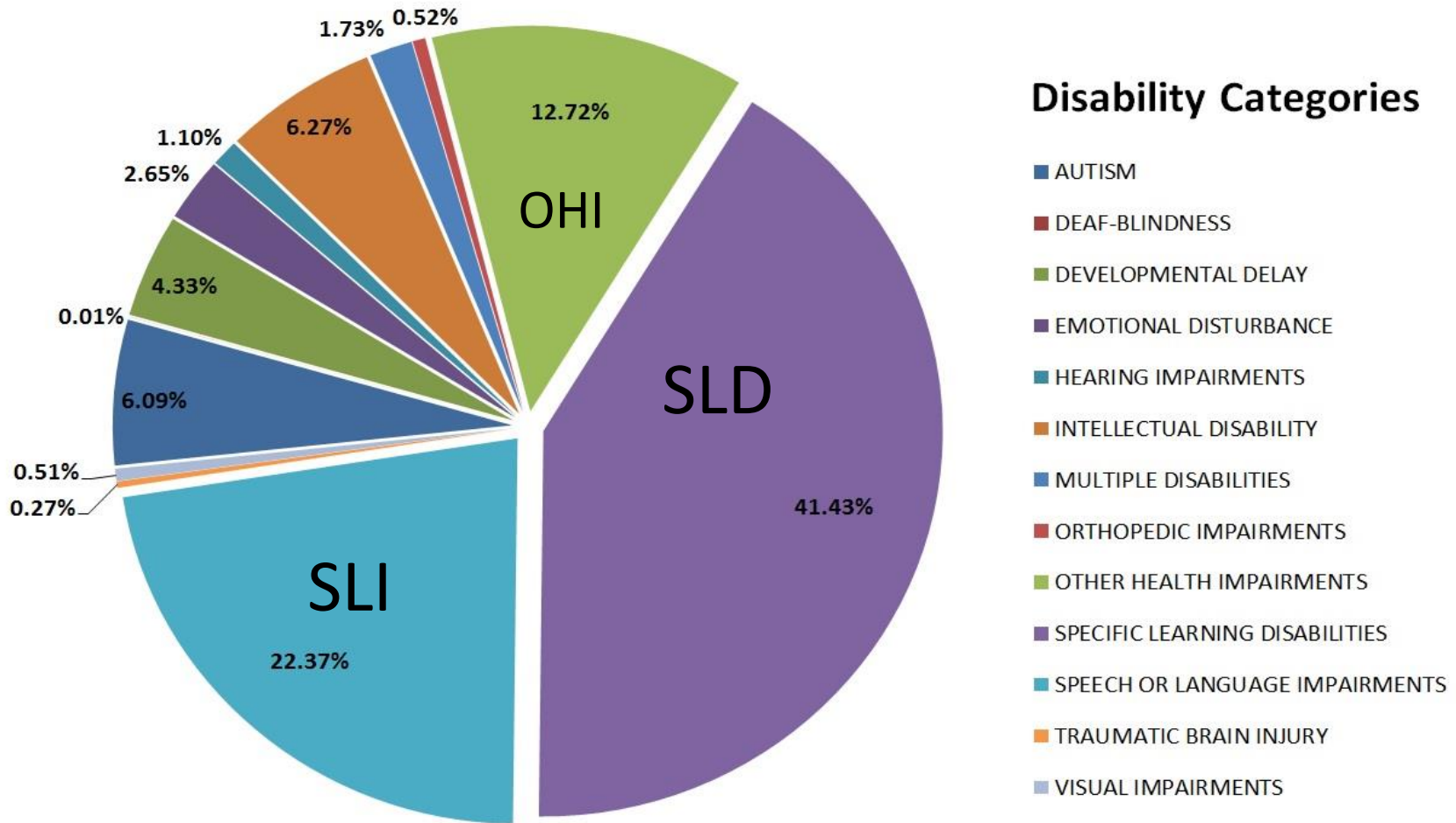




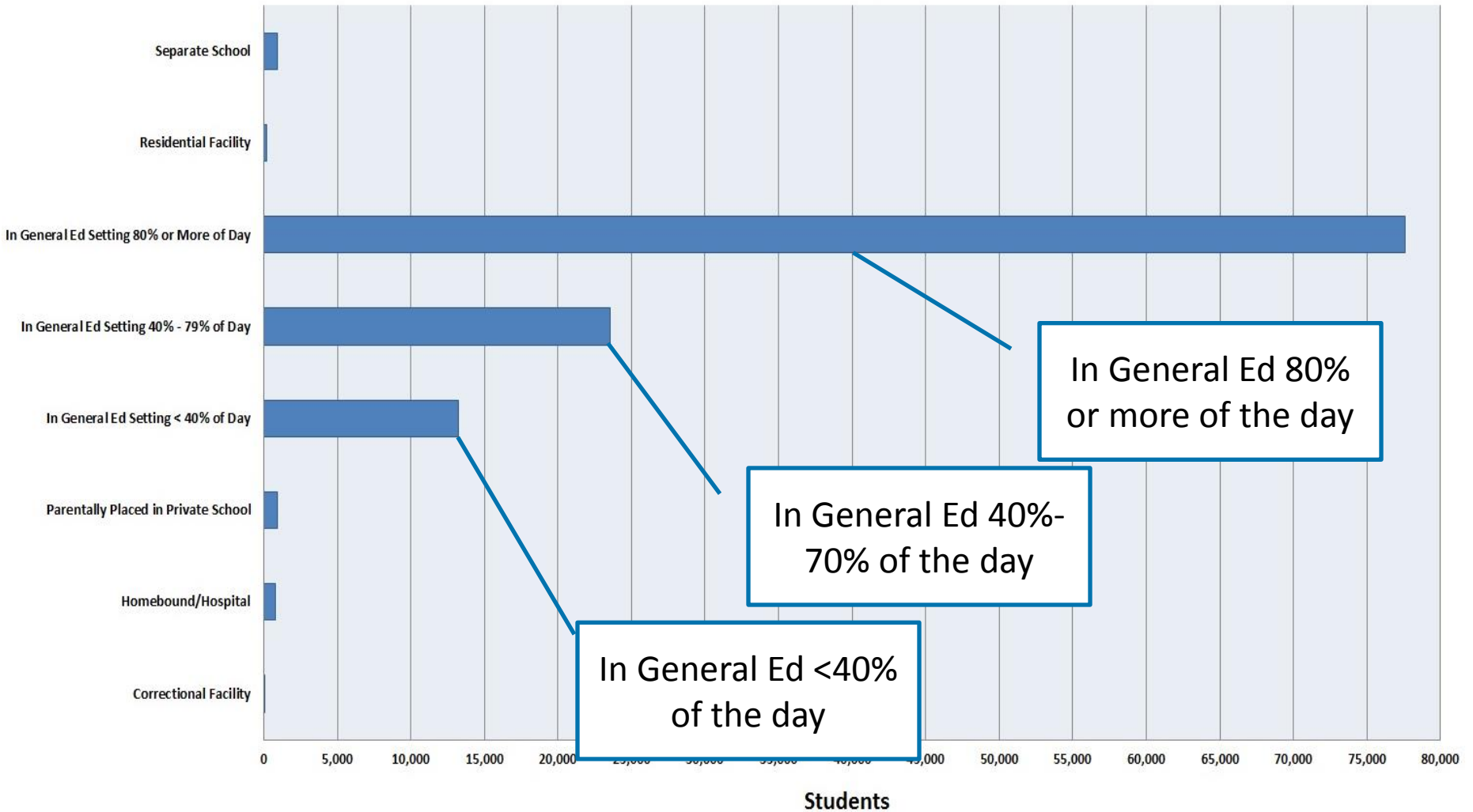
Scaffolding and Differentiation in Core Instruction for Students with a Disability

TDOE Instructional Programming

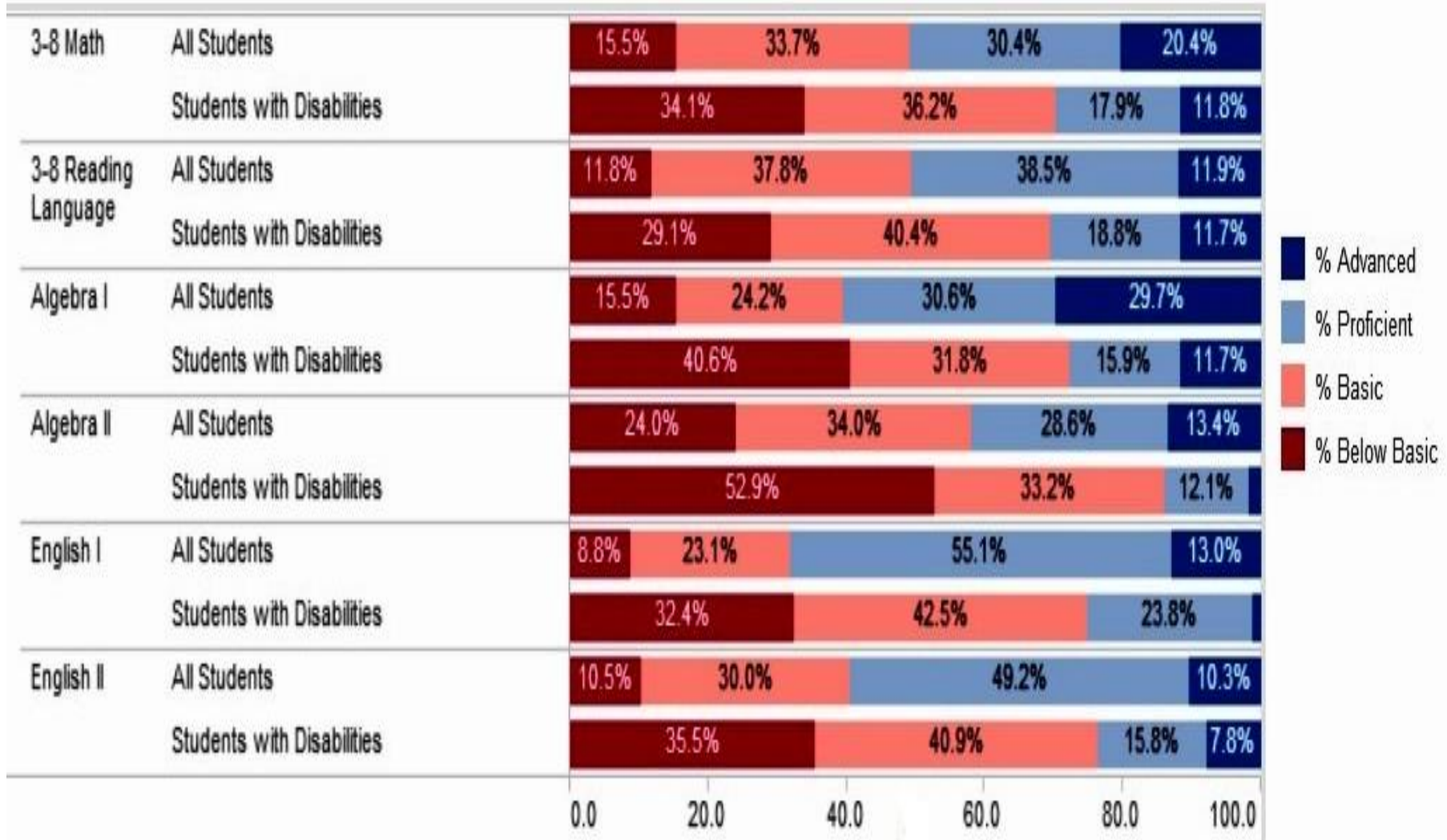
Number of Students Within Each Eligibility Category



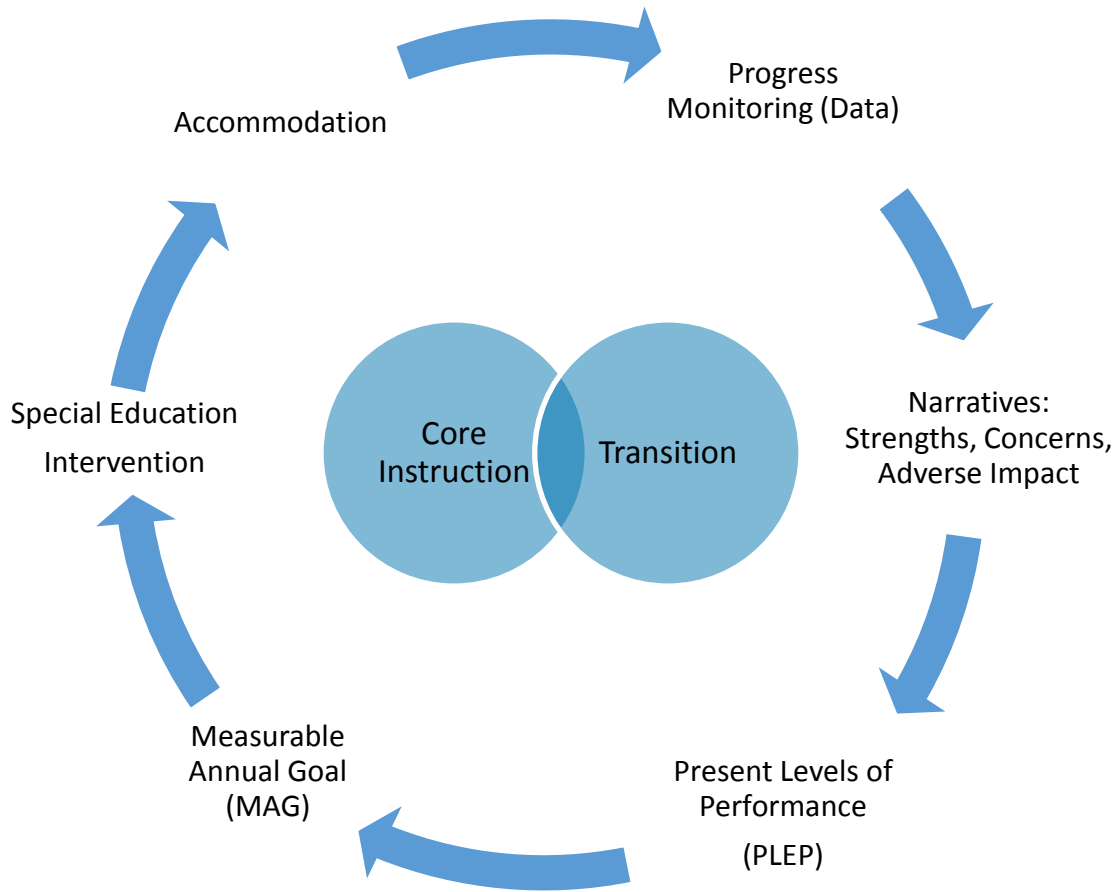
Students with Disabilities by Environment



Achievement Data



Core Instruction & Transition



Core Instruction & Transition

- ALL students are provided instruction based on CCSS
- The most intensive interventions (special education), are in addition to core instruction-not a replacement
- Intervention
 - Based on individual area of need
 - Content/Skill specific
 - Does not necessarily include all content areas or skills
- Transition
 - Begins in kindergarten
 - Focuses on career and college readiness
 - Uses current and previous data to inform and guide Transition planning

Common Core State Standards: Application to Students with Disabilities

- Students with disabilities are a heterogeneous group with one common characteristic:
 - the presence of disabling conditions that significantly hinder their abilities to benefit from general education
- Participate with success:
 - Instructional Supports
 - Instructional Accommodations
 - Assistive technology devices and supports

How Do We Successfully Include Students with Disabilities in Instruction?

- Universal Designs for Learning—available to everyone, everywhere
- Differentiation strategies in content, process, and product
- Scaffolding techniques for instruction

Specially Designed Instruction

Universal Design for Learning

- Does not mean working at a lower level; nor does it weaken the curriculum or change the standard
- Is not the same as an accommodation
- Is specific to **skills deficits**, not a particular subject or content area
- Focus on the importance of:
 - Multiple means of representation
 - Multiple means of action and expression
 - Multiple means of engagement
- www.cast.org
- www.udlcenter.org
- https://www.montgomeryschoolsmd.org/departments/hiat/udl/UDL_intro.pdf
- <http://www.gpb.org/education/common-core/udl-part-1>
- <http://www.gpb.org/education/common-core/udl-part-2>

Example of Universal Design for Learning

Grade: 3

Subject: Science

Standard: 6.23—Plants lifecycle

Goal: *Research and present information on a flower.*

Materials & Methods	Potential Barriers/ Missed Opportunities	UDL Solutions
Printed textbook	Kevin—Difficulty seeing small text Bill—Doesn't tap his graphics skills Brian—Difficulty decoding/understanding word meaning	Electronic text with text-to-speech to read aloud CD-ROM or online encyclopedia; Web page with collections of images Spanish CD-ROM on flowers; link to Spanish Web site
Lecture/whole class presentation	Jose—Difficulty comprehending meaning Helen—Distracted, may miss info Kiwa—Distracted, may miss info	Provide Spanish/English key terms translations with text-to-speech Provide Inspiration concept map of key ideas; eText outline with text to speech that students can access
Library research	Brian—May have trouble keeping track. Kiwa—May not be able to abstract the project's important content.	Partially filled-in outlines; Web page with attached resources; collection of online resources, online or CD-ROM encyclopedia, linked to Inspiration outline of key project parts
Create written report	Sarita—Mechanics-based difficulty expressing her ideas Jake—Format doesn't tap artistic talent	Word processor with spell check; talking word processor Graphics program—Kid Pix
Flower drawing	Phillip—Drawing will be physically difficult.	Word processing; selection of graphics to use in report
Oral report on flower	Jorge—Format doesn't tap musical talent Brian—May be intimidated	Provide option of live or recorded music as part of demonstration Pair Brian with James, who can support him while working
Independent project	James—Context won't draw on his leadership and collaboration skills. Helen—Could have difficulty working alone. Elizabeth—Deep knowledge of plants	Encourage James to support other students as they work Be sure to find aspect of project of particular interest to Helen and check in frequently. Support presentation with notes Pair Elizabeth with Jose to share her knowledge and enthusiasm

Differentiation vs. Scaffolding

Differentiation is a framework or philosophy for effective teaching that involves providing different students with different avenues to learning

Scaffolding is breaking up the learning into chunks and then providing a tool, or structure, with each chunk.

Differentiation of Instruction

- Differentiated instruction is an instructional approach that simultaneously encompasses several learning strategies
- Differentiated instruction addresses the individual need and helps the student access core instruction
- Three ways to differentiate are: content, process, product

Differentiated Content

Changing the material, the order in which content is presented, and the quantity of information being learned by a student.

Ex.

- Reduce amount of print on layout
- Reduce number of tasks/ problems

Differentiated Process

Changing the activities in which the student engages in order to make sense of or master the content

Ex.

- Format presentation of material if needed
- Change the manner in which students access information: PPT, Software Curriculum Support, audio books/ read aloud
- Break up long lessons into smaller meaningful sections

Differentiated End Product

Changing the way students demonstrate what they've learned

Ex.

- Student responds to a set of questions
- Create a visual response with key details outlined around
- Orally produce responses
- Record their responses
- Use class responders to input understanding

Student Need(s) and Area(s) of Deficit:

Successful differentiation is based on individual student need(s) and area(s) of deficit. First, determine what the student requires to access core instruction then effectively plan to meet their need(s).

Ex.

- Reading mastery
- Mathematical mastery
- Extent of background knowledge
- English language proficiency
- Learning disabilities or other disabilities impacting learning

How To Determine Student Need(s)

- Utilize diagnostic instruments to assess skill level (Inquire: “what do my students know?”)
 - Universal Screening and Progress monitoring data
 - Pre-tests
 - Survey Background Knowledge: KWL Charts
 - Student self assessments/ checklists
 - Formal and/or informal

- Be aware of student previous data/schooling background (student cum files, student data profiles, language levels, levels of intervention, school supports provided)

- Determine student interest, preferred way of learning, and environmental comfort (interest in insects, small group setting, partner work, visual instruction, interactive learning boards)

Example K-W-L Pre-Assessment

K

**What the student
already knows**

Prior experiences,
knowledge, and skills

W

**What the student
wants to know**

Student interests,
questions, ideas for
exploring/investigation

L

**What the student
needs to know**

Student self-rating of
current understanding
about learning
objective

Benefits of Differentiation

- Identifying student need to access core curriculum
- Provide instruction on essential skills at different levels of complexity
- Identify need for tiered assignments and/or scaffolds

Results in higher rates of achievement for all students

Differentiated Instruction May Include:

- Tiered Assignments: Scaffold to students need/ understanding
- Compacting material: Big Idea
- Collaborative Learning Centers
- Collaborative Learning Groups/ Student seating
- Flexible Grouping
- Learning Contracts/ student goal setting
- Choice of Academic Boards/ Classroom Print
- Themed Units/ Word Walls
- Sentence Frames
- Explicit Outlined Steps to Procedures

Scaffolding Examples

- Pre-teaching vocabulary for a unit or lesson
- Chunking information into a smaller or single concept lesson
- Visual aids, including graphic organizers
- I Do, We Do, You Do
- Exemplar models
- Start with a simple lesson or concept and build complexity as understanding increases

Scaffolding Techniques

Scaffold	Ways to use Scaffolds in an Instructional Setting
Advance organizers	Tools used to introduce new content and tasks to help students learn about the topic: Venn diagrams to compare and contrast information; flow charts to illustrate processes; organizational charts to illustrate hierarchies; outlines that represent content; mnemonics to assist recall; statements to situate the task or content; rubrics that provide task expectations.
Cue Cards	Prepared cards given to individual or groups of students to assist in their discussion about a particular topic or content area: Vocabulary words to prepare for exams; content-specific stem sentences to complete; formulae to associate with a problem; concepts to define.
Concept and mind maps	Maps that show relationships: Prepare partially completed maps for students to complete or have students create their own maps based on their current knowledge of the task or concept.

Scaffolding Techniques, cont.

Scaffold	Ways to use Scaffolds in an Instructional Setting
Examples	Samples, specimens, illustrations, problems: Real objects; illustrative problems used to represent something.
Explanations	More detailed information to move students along on a task or in their thinking of a concept: Written instructions for a task; verbal explanation of how a process works.
Handouts	Prepared handouts that contain task- and content-related information, but with less detail and room for student note taking.
Hints	Suggestions and clues to move students along: “place your foot in front of the other,” “use the escape key,” “find the subject of the verb,” “add the water first and then the acid.”

Scaffolding Techniques, cont.

Prompts	A physical or verbal cue to remind—to aid in recall of prior or assumed knowledge. Physical: Body movements such as pointing, nodding the head, eye blinking, foot tapping. Verbal: Words, statements and questions such as “Go,” “Stop,” “It’s right there,” “Tell me now,” “What toolbar menu item would you press to insert an image?”, “ Tell me why the character acted that way.”
Question Cards	Prepared cards with content- and task-specific questions given to individuals or groups of students to ask each other pertinent questions about a particular topic or content area.
Question Stems	Incomplete sentences which students complete: Encourages deep thinking by using higher order “What if” questions.
Stories	Stories relate complex and abstract material to situations more familiar with students. Recite stories to inspire and motivate learners.
Visual Scaffolds (Alibali, 2006)	Pointing (call attention to an object); representational gestures (holding curved hands apart to illustrate roundness; moving rigid hands diagonally upward to illustrate steps or process), diagrams such as charts and graphs; methods of highlighting visual information.

Example Scaffold Based on Learner Differences

Prior Knowledge

Concept	Skills Needed	Application Piece

Area of Interest

Writing	Oral Discussion	Project Based

Preferred Environment

Small group	Alone with visual supports	Adult Support/ Guided

Lesson Plan in a Differentiated Classroom

- Lesson objective: Students will... given... to...
- Assessment: pre-test, KWL Chart, student self checklist
- Introduction: Concept map, demonstrate relevance
- Teaching Strategies: modeling, feedback, observe, and adjust
- Learning activities: graphic organizers, reflection opportunities, scaffold support, provide anchors or rubrics, change instruction based on learning)
- Resources: instructional level for independent work, alter formats, and provide alternatives

Lesson Plan, cont.

- Products: use rubrics to activate self-evaluation, offer options for presenting mastery, and allow opportunity to readjust
- Grouping: teach in small group with rich conversation, provide small group practice with clear objective, extension activities (themed units), peer support/facilitation, and individual options.
- Extension activities: use student interests, consider practical applications, and share student work.

Differentiated Classroom	NOT Differentiated
Data drives instruction: student readiness and learning profiles	Data is collected to assign grades at the end of a segment. Single form of assessment is used to gather student data.
Excellence is defined by individual student growth	Learning profiles are rarely considered, student levels and needs are unknown
Key concepts and principles are the focus and are outlined for student support	Text curriculum drives instruction
Multiple materials and options for assignments are available for student need	Single option tasks and assignments; One text available to student
Teacher and students solve problems collaboratively/teacher explicitly models expectations and provides examples of outcomes	Teacher leads all discussions and solves all problems

Do Not Stress

- Be realistic and start differentiating a little at a time. Teachers cannot differentiate 100% of the time. Mastery comes with practice.
- Seek all support available such as, examples from the Internet. (Universal Design for Learning)
- Collaboration between general education teachers and special education teachers is key.
- Archive lessons and instructional practices for future use if needed

Reflect

Think about the learners you have in your class and list their needs below.

What would you need to make these learners successful in your classroom?

How have you gathered information about the student's learning needs?

Are there obstacles getting in the way of differentiating instruction for these learners? List them and tell why.

Helpful Links

Universal Design for Learning

- <http://www.cast.org/>
- <http://www.udlcenter.org/>

Content Modules and Support

- <http://tncore.org/>

References

Universal Design for Learning

<http://www.udlcenter.org/>

Northern Illinois University

<http://www.niu.edu/spectrum/2008/fall/scaffolding.shtml>

How to Differentiate Instruction in Mixed Ability Classrooms

Tomlinson, C. A. (2001). *How to Differentiate Instruction in Mixed-Ability Classrooms* (2nd ed.). Alexandria, Virginia: Association for Supervision and Curriculum Development (ASCD).

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